Shower Screen Installation

We provide a comprehensive range of accessories produced to give architects and decorators complete freedom of design when using toughened glass in showers.

Designed and manufactured to the highest standard the EUROGLASS range of fittings provide a slim and neat appearance so that the glass remains the central feature.

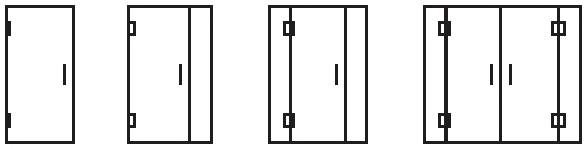
All hinges and handles are a combination of brass and stainless steel.

Available in the following finishes:

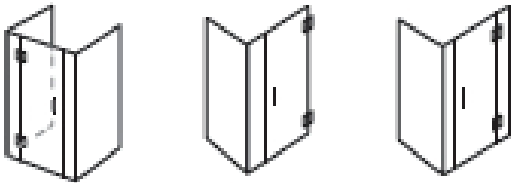
- Polished Stainless Steel
- Polished Chrome
- Satin Chrome
- Satin Stainless Steel
- Matte Black
- Special finishes upon request, lead times apply.

TYPICAL SHOWER DESIGNS

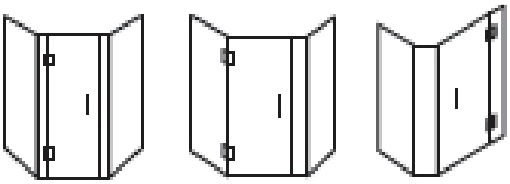
Inline Showers



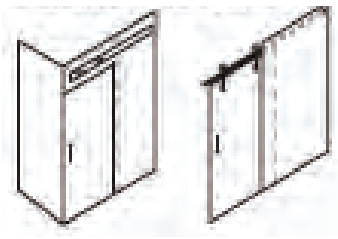
Square Showers



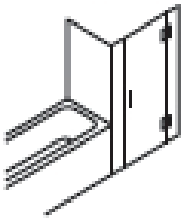
Quadrant Showers



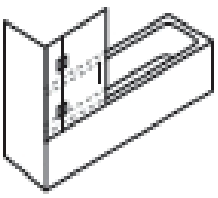
Sliding Showers



Bath-end Shower



Bi-fold Bath Screen



GLASS

All glass used in frameless glass shower assemblies must be approved 8mm or 10mm toughed float safety glass.

GLASS THICKNESS

10mm glass thickness is recommended in most assemblies, especially in glass to glass situations. 8mm glass thickness can be used when panels/doors are relatively narrow or especially when wall fixing (for door hanging) is subject.

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DOORS

All doors are standard double action opening both inwards and outwards. A single action stop may be provided if required.

Standard door widths are generally between 600mm to 700mm for wall hung doors and 550mm to 650mm for glass to glass doors.

Maximum recommended width/weight for two hinge doors:

8mm: 800mm width, 35kg (1.75m^2)
10mm: 800mm width, 35kg (1.4m^2) glass-to-glass
10mm: 800mm width, 37.5kg (1.50m^2) wall hung

For doors outside either of the above maximums three hinges should be fitted. Standard door heights are generally between 1850mm and 2100mm.

WALL FIXING

For doors hinged directly from the wall adequate stud fixing is required – generally either a double stud or an approx. 90mm width of timber fitted between noggins at hinge levels.

Where inadequate wall fixing is suspected, it is recommended that the door be hung from a glass side panel.

SPECIAL BRACING REQUIREMENTS

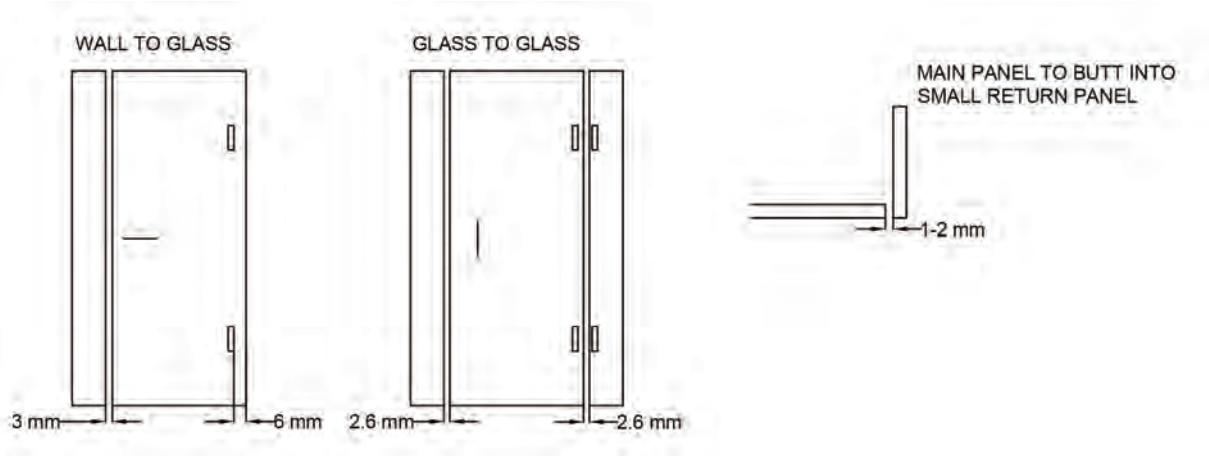
Head support is recommended (in the form of either a top channel or a glass over panel) for glass to glass assemblies as follows:

- Where the combined width of the door and side panel/s is hung from exceed 900mm
- On all quadrant and curved showers.

Where a side panel (fixed only to the base and wall) exceeds 900mm in width a return panel of minimum 150mm width would be required to stabilse the side panel.

INSTALLATION DIMENSIONS

Recommended gap under door 6mm above the highest point of the upstand.



MITRE JOINTS – 135°

Glass to glass panels – we recommend each panel has a 22.5° polished mitre edge to proide a quality finished look and prevent a visible ‘thick’ silicone joint.

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WATERPROOF

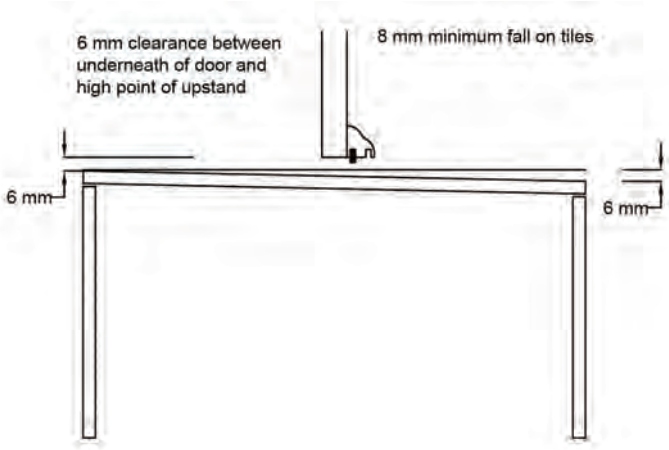
For wall hung doors it is recommended to hang the door from the wall on which the shower rose is fitted. It is not a good design to have the shower rose directly facing the door.

In a situation where there is a risk of water leaking through the gap between the back edge of the door and the wall it is recommended to use a glass to glass door design.

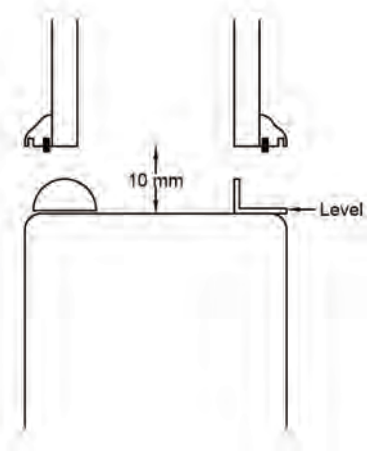
Suggestions to avoid leaking under the door:

1. It is recommended that our WS1 waterseal be fitted to the inside bottom edge of all doors:
    - ensure where possible that there is an adequate slope on the shower upstand
    - recommended minimum fall of 5mm
2. Our HR1 half round section (4.8mm high) AS1 angle section (6mm high) or AS18 angle section (18mm high – 22mm gap under door) fitted onto the base under the door can be used where there is a high risk of leaking
3. Position of shower door/panel line is generally centre of upstand but we recommend bringing this glass line towards the inside edge in cases where there is a greater risk of leakage, ie. rose pointing at door, no fall on upstand, special body jets etc.

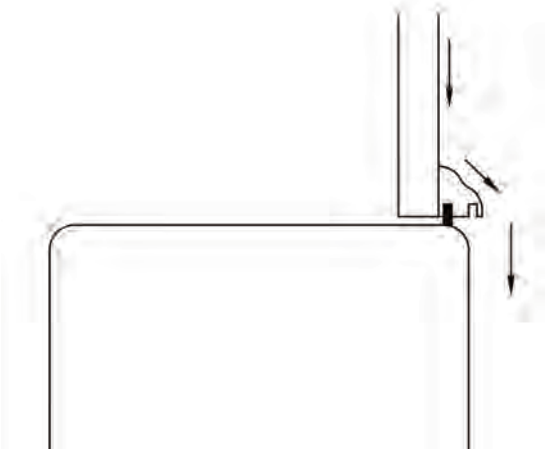
1. FALL ON TOP OF UPSTAND



2. WATERSEAL/HALF ROUND SECTION OR ANGLE SECTION

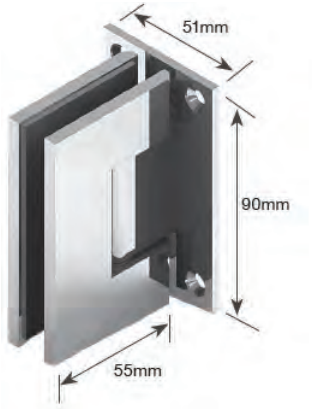


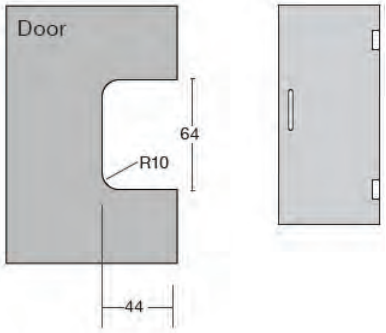
3. WATERSEAL **(Glass line lose to inside of upstand)**

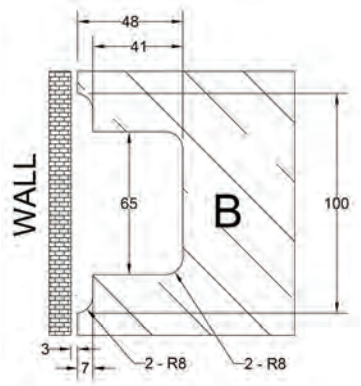


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ES1 Wall Hung Hinge







Alternative wall cut out

AVAILABLE FINISHES

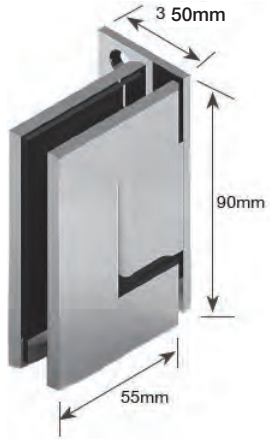
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

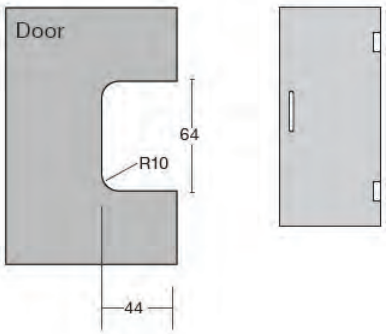
TECHNICAL DETAILS

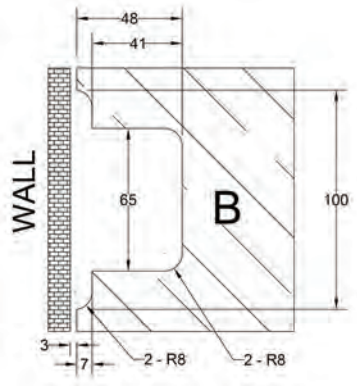
- Manufactured in Brass
- Dual Action, opening inwards and outwards
- Self Closing from approximately 45⁰
- Standard for 10mm glass
- Can be adapted for 8mm and 12mm glass

Fixing screws not included, specify if required

ES1L Wall Hung Hinge – Single Side







Alternative wall cut out

AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

TECHNICAL DETAILS

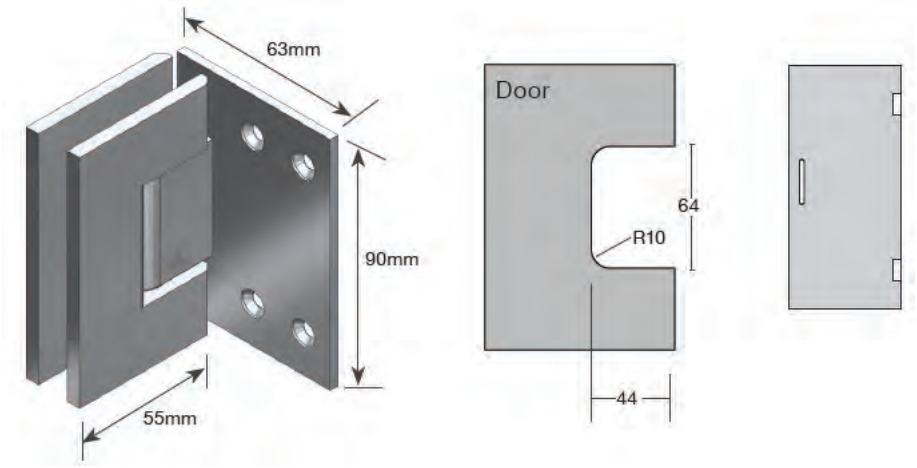
- Manufactured in Brass
- Dual Action, opening inwards and outwards
- Self Closing from approximately 45⁰
- Standard for 10mm glass
- Can be adapted for 8mm and 12mm glass

BLACK

Fixing screws not included, specify if required

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ES1L-EXT Wall Hung Hinge-Single Side with Extended Back Plate



AVAILABLE FINISHES

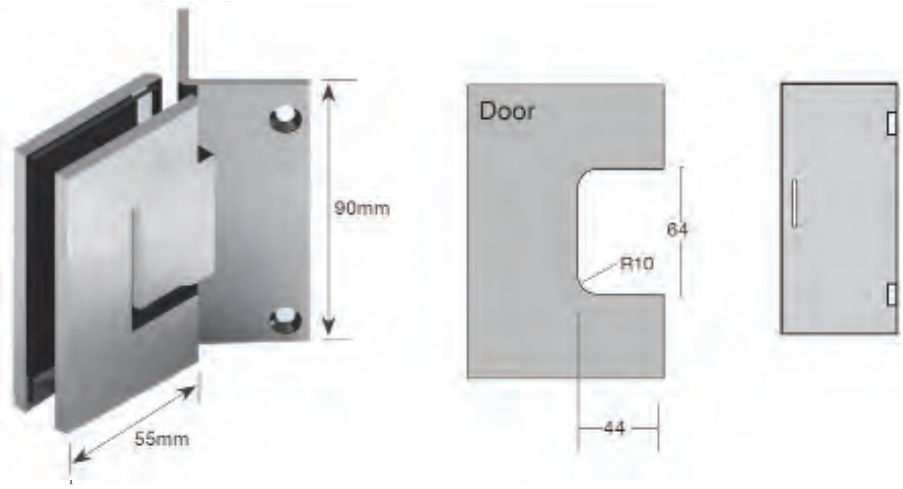
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- Dual Action, opening inwards and outwards
- Self Closing from approximately 45^0
- Standard for 10mm glass
- Can be adapted for 8mm and 12mm glass

Fixing screws not included, specify if required

ES1-90° Wall Hung Hinge – 90° Fixing



AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

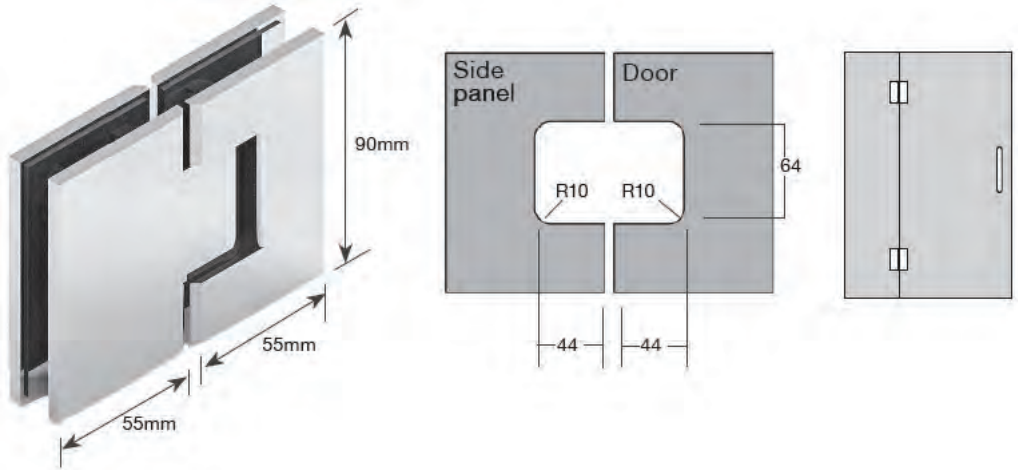
TECHNICAL DETAILS

- Manufactured in Brass
- Dual Action, opening inwards and outwards
- Self Closing from approximately 45^0
- Standard for 10mm glass
- Can be adapted for 8mm and 12mm glass

Fixing screws not included, specify if required

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ES2 Glass to Glass Hinge



BLACK

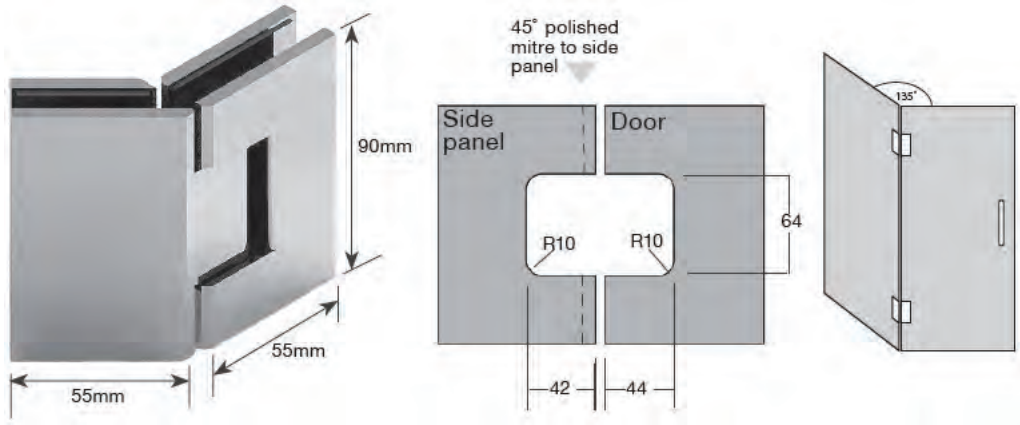
AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- Dual Action, opening inwards and outwards
- Self Closing from approximately 45^0
- Standard for 10mm glass
- Can be adapted for 8mm and 12mm glass

ES2-135° Glass to Glass – 135° Hinge



BLACK

AVAILABLE FINISHES

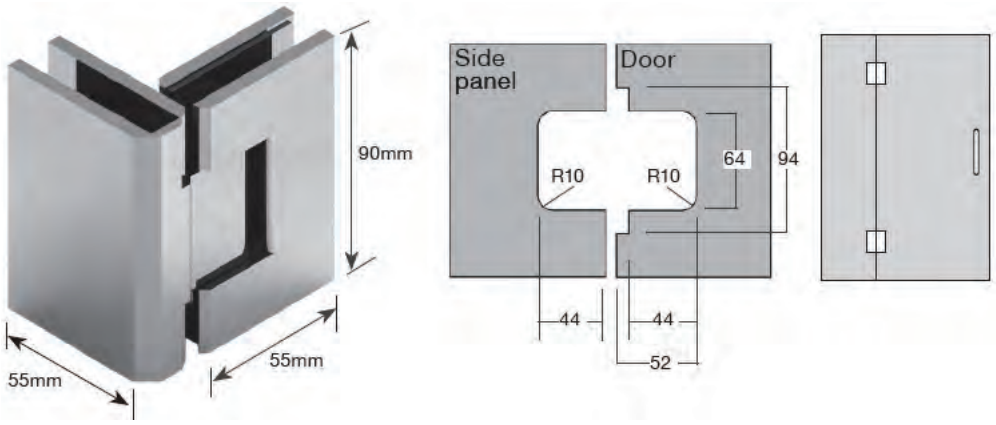
- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- Dual Action, opening inwards and outwards
- Self Closing from approximately 45^0
- Standard for 10mm glass
- Can be adapted for 8mm and 12mm glass

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ES2-90° Glass to Glass – 90° Hinge



BLACK

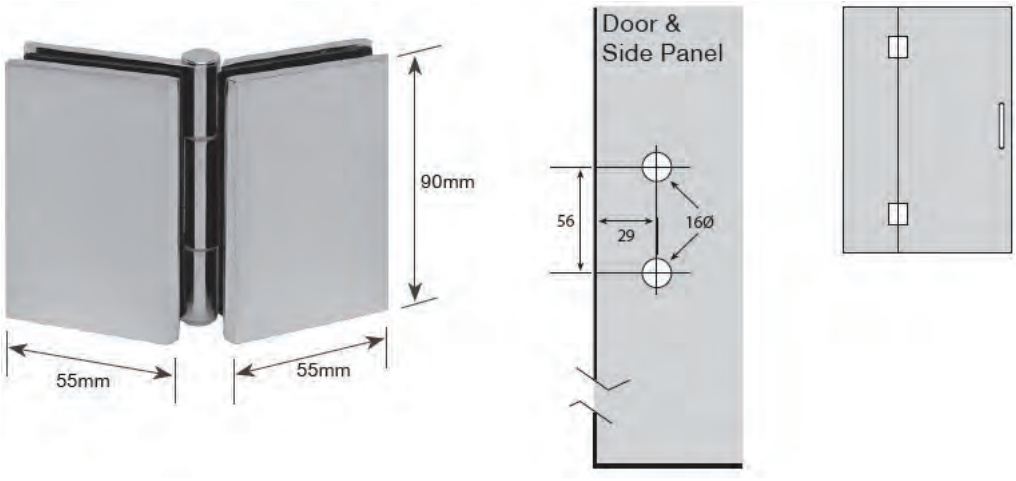
AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- Dual Action, opening inwards and outwards
- Self Closing from approximately 45^0
- Standard for 10mm glass
- Can be adapted for 8mm and 12mm glass

ES2-BF Glass to Glass Bifold Hinge



BLACK

AVAILABLE FINISHES

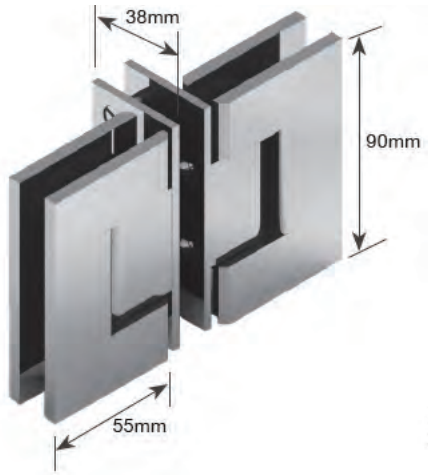
- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

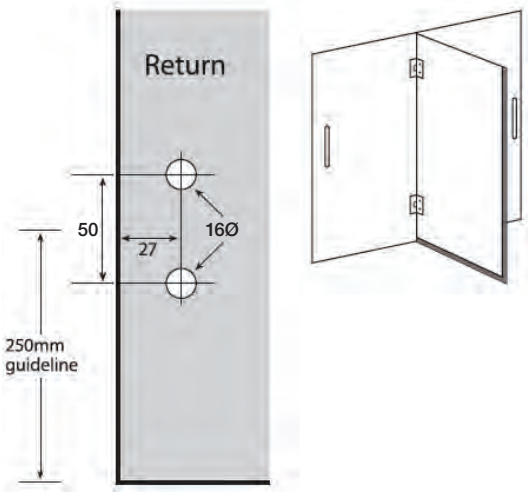
TECHNICAL DETAILS

- Manufactured in Brass
- Dual Action, opening inwards and outwards
- Self Closing from approximately 45^0
- Standard for 10mm glass
- Can be adapted for 8mm and 12mm glass

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ES1LB2B Glass to Glass 90° Hinge





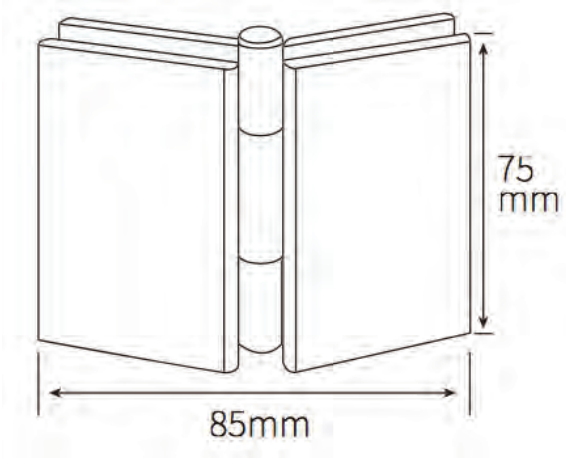
AVAILABLE FINISHES

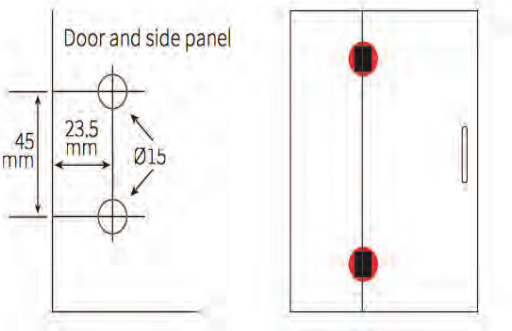
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- Dual Action, opening inwards and outwards
- Self Closing from approximately 45^0
- Standard for 10mm glass
- Can be adapted for 8mm and 12mm glass

CMES2BF Bifold glass to glass for 6mm glass





AVAILABLE FINISHES

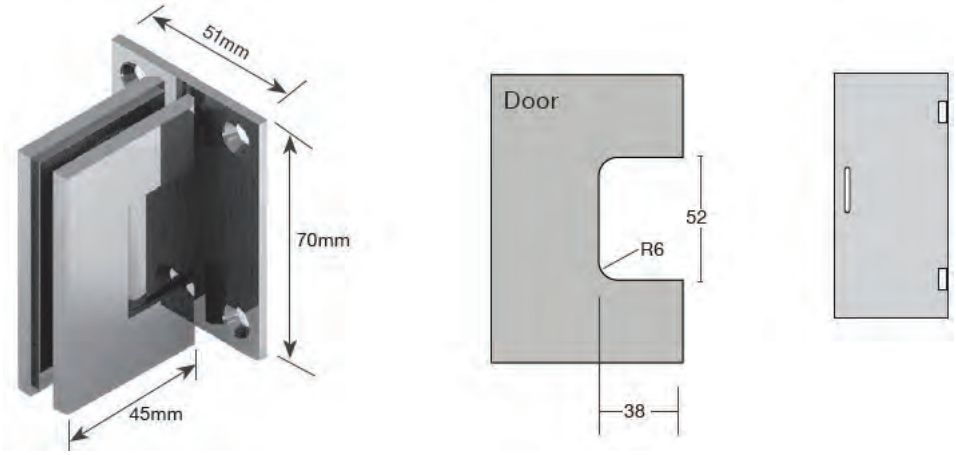
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Shower hinge bifold glass to glass suitable for 6mm glass thickness
- Manufactured in brass
- Hinge folds back 180^0
- Maximum door weight 20kg and door width 550mm

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CMES1 Wall Hung Hinge



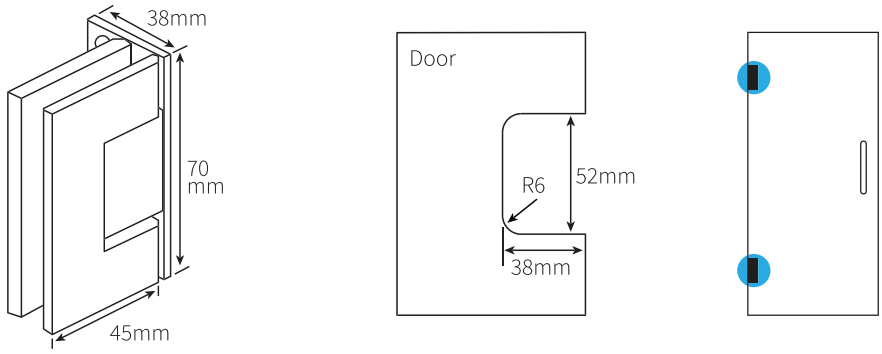
AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- 180° single action, opening inwards and outwards
- Self Closing from approximately 45^0
- Standard for 6mm glass

CMES1L Wall Hung Hinge – Single Side



AVAILABLE FINISHES

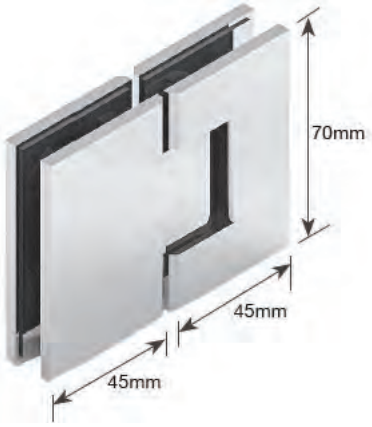
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

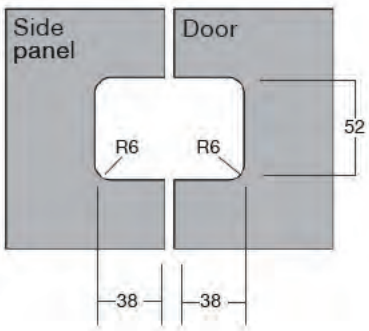
TECHNICAL DETAILS

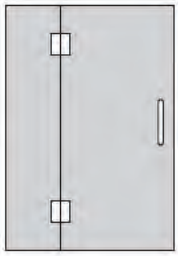
- Shower hinge wall mount single side suitable for 6mm glass thickness
- Manufactured in brass
- Dual action hinge, opening inwards and outwards
- Self closing from approximately 25˚
- Maximum door weight 28kg – maximum door width 710mm
- Stud fixing recommended for all glass to wall applications

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CMES2 Glass to Glass







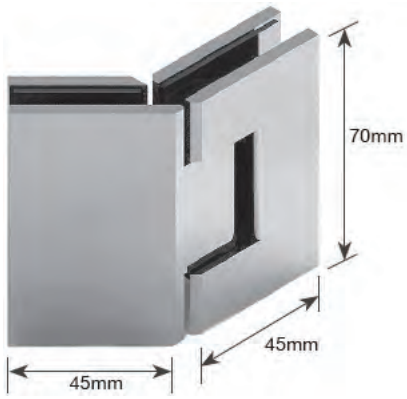
AVAILABLE FINISHES

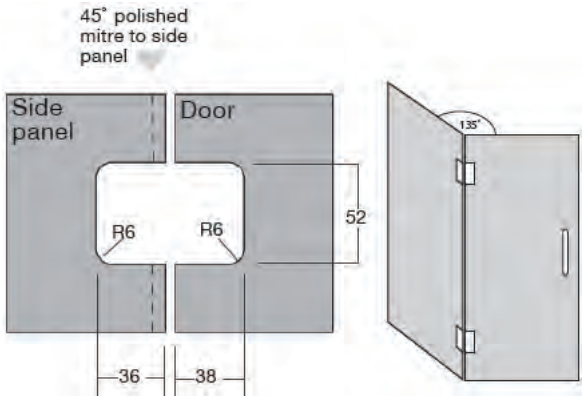
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- 180° single action, opening inwards and outwards
- Self Closing from approximately 45⁰
- Standard for 6mm glass

CMES2-135° Glass to Glass 135° Hinge





AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

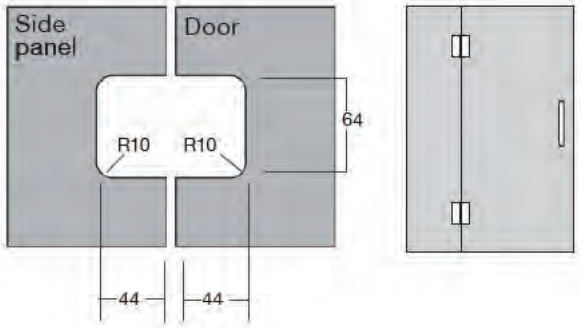
TECHNICAL DETAILS

- Manufactured in Brass
- Dual Action, opening inwards and outwards
- Standard for 6mm glass

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ES1L (U-SET) Wall Hung Hinge – Single Side





AVAILABLE FINISHES

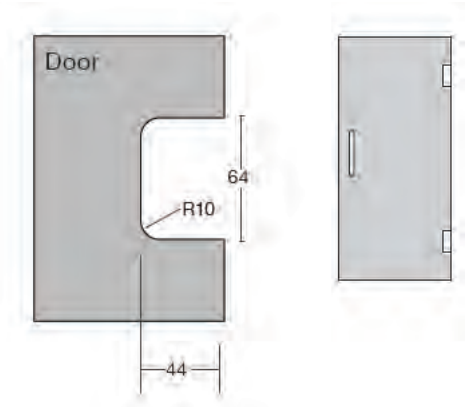
- Polished Chrome
- Satin Chrome
- PVD

TECHNICAL DETAILS

- U-Set hinges are adjustable in all directions, meaning you no longer need custom hinges for those non-standard installations
- They have the weight rating as non-adjustable installations
- A simple turn of the allen keys creates a perfect fit off angles walls
- The range of adjustment makes aligning custom angle installations simple

ES2 (U-SET) Glass to Glass Hinge





AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- PVD

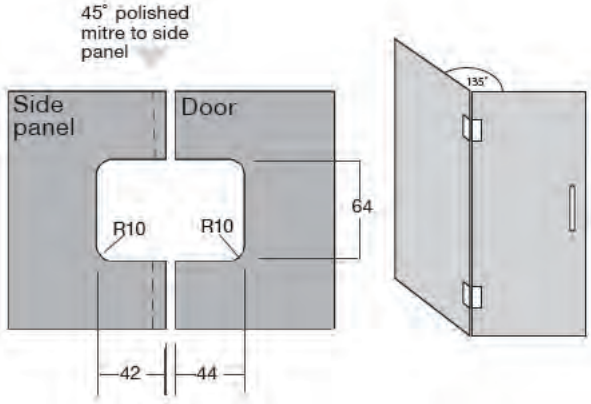
TECHNICAL DETAILS

- U-Set hinges are adjustable in all directions, meaning you no longer need custom hinges for those non-standard installations
- They have the weight rating as non-adjustable installations
- A simple turn of the allen keys creates a perfect fit off angles walls
- The range of adjustment makes aligning custom angle installations simple

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ES2-135 (U-Set) Glass to Glass – 135° Hinge





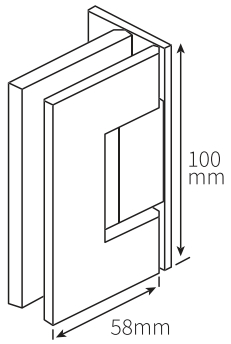
AVAILABLE FINISHES

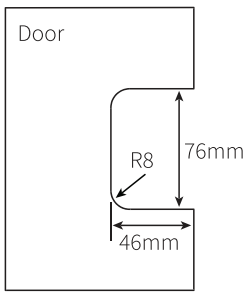
- Polished Chrome
- Satin Chrome
- PVD

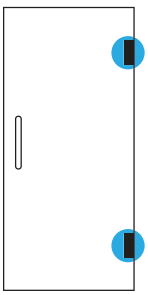
TECHNICAL DETAILS

- U-Set hinges are adjustable in all directions, meaning you no longer need custom hinges for those non-standard installations
- They have the weight rating as non-adjustable installations
- A simple turn of the allen keys creates a perfect fit off angles walls
- The range of adjustment makes aligning custom angle installations simple

HD.ES1L3 Wall Mount – Single Side SUITABLE FOR 10/12MM GLASS THICKNESS







AVAILABLE FINISHES

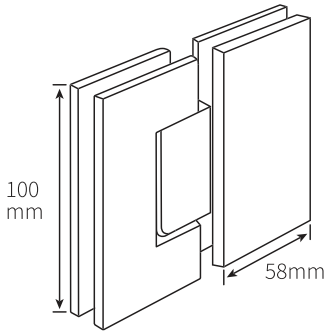
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

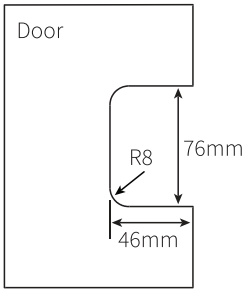
TECHNICAL DETAILS

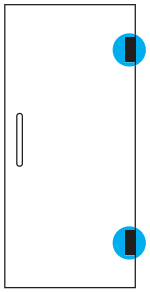
- Shower hinge wall mount – single side – heavy duty
- Manufactured in brass
- Dual action hinge, opening inwards and outwards
- Self-closing from approximately 15°
- Using two hinges: maximum door weight 50kg – maximum door width 900mm
- Using three hinges: maximum door weight 60kg – maximum door width 900mm
- Suitable for 10mm and 12mm glass thickness

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HD.ES2 180° Glass to Glass SUITABLE FOR 10/12MM GLASS THICKNESS







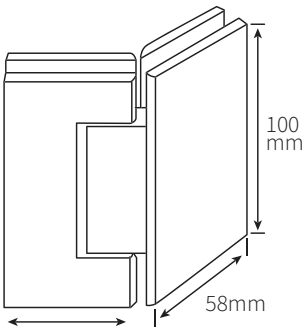
AVAILABLE FINISHES

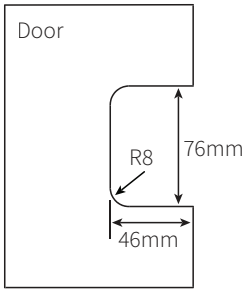
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

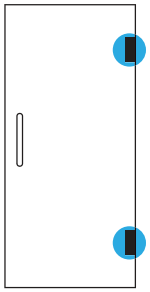
TECHNICAL DETAILS

- Shower hinge 180° glass to glass – heavy duty
- Manufactured in brass
- Dual action hinge, opening inwards and outwards
- Self-closing from approximately 15°
- Using two hinges: maximum door weight 50kg – maximum door width 900mm
- Using three hinges: maximum door weight 60kg – maximum door width 900mm
- Suitable for 10mm and 12mm glass thickness

HD.ES2.135 135° Glass to Glass SUITABLE FOR 10/12MM GLASS THICKNESS







AVAILABLE FINISHES

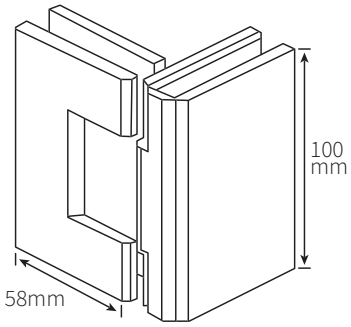
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

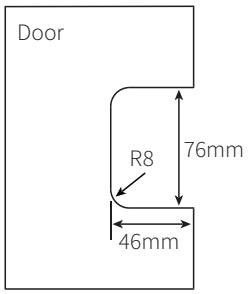
TECHNICAL DETAILS

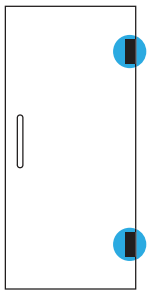
- Shower hinge 135° glass to glass
- Manufactured in brass
- Dual action hinge, opening inwards and outwards
- Self-closing from approximately 15°
- Using two hinges: maximum door weight 50kg – maximum door width 900mm
- Using three hinges: maximum door weight 60kg – maximum door width 900mm
- Suitable for 10mm and 12mm glass thickness

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HD.ES2.90 90° Glass to Glass SUITABLE FOR 10/12MM GLASS THICKNESS







AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Shower hinge 90° glass to glass
- Manufactured in brass
- Dual action hinge, opening inwards and outwards
- Self-closing from approximately 15°
- Using two hinges: maximum door weight 50kg – maximum door width 900mm
- Using three hinges: maximum door weight 60kg – maximum door width 900mm
- Suitable for 10mm and 12mm glass thickness

GHA-SCSH Soft Close Shower Hinge



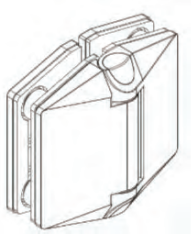
AVAILABLE FINISHES

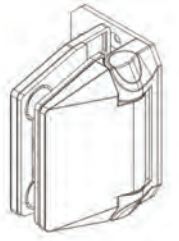
- Polished Chrome
- Satin Chrome

POLARIS
SOFT CLOSE HINGE

TECHNICAL DETAILS

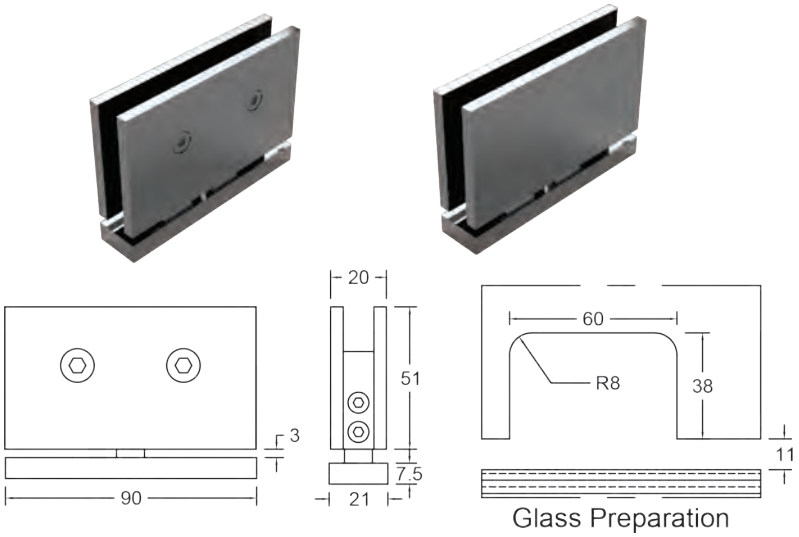
- The mose innovative shower door hinge for the last 20 years
- Patented soft close hinge designed for shower doors
- The only hinge designed specifically for soft close operation
- Brass construction – Polished or Satin chrome finishes
- Unique ‘Tri-Action’ closing system consisting of a spring, rare earth magnets and hydraulic shock absorbers resulting in a premium self-closing hinge
- State-of-the-art product unrivalled in design, style and safety
- Awarded a prestigious Australian International Design Mark Award™
- Suitable for 10mm and 12mm toughened glass





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Boston 100



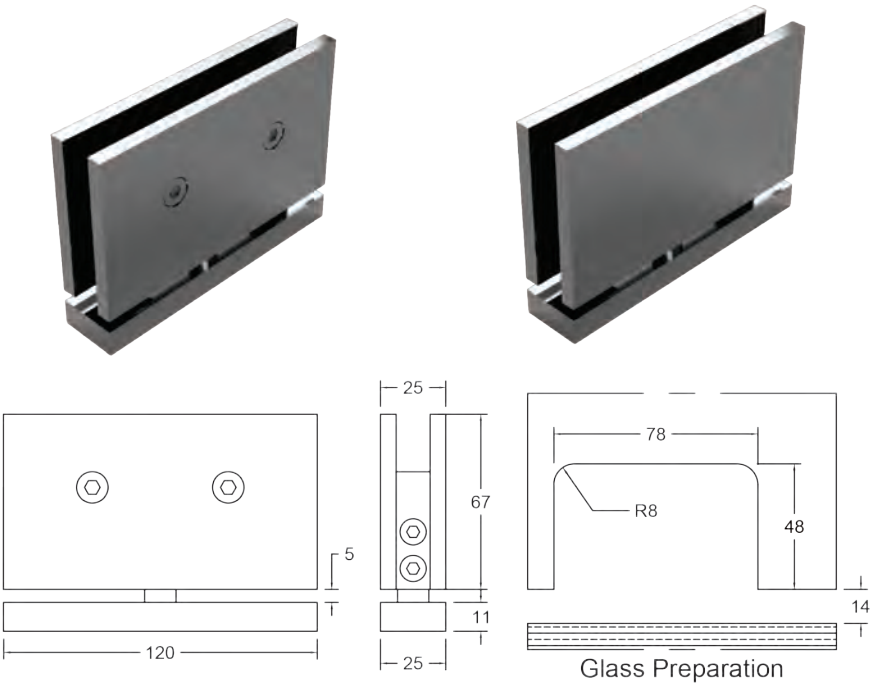
AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Suitable for 8 mm , 10mm & 12mm glass
- 45kg per set with 787mm maximum door width
- Supplied with Hex head machine screws & Phillips Head fixing screws/plugs
- Door pivot opens in & out. Self closing from approximately 30°

Boston 300



AVAILABLE FINISHES

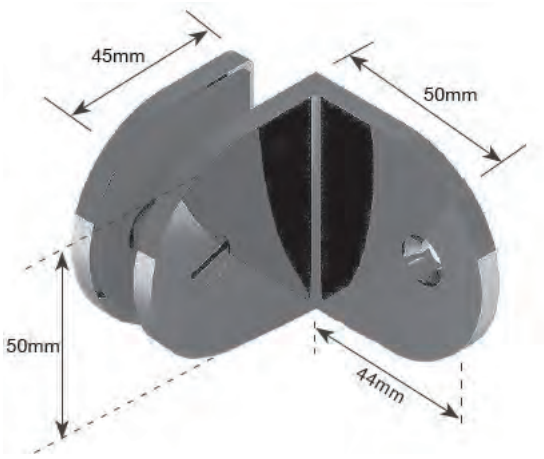
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

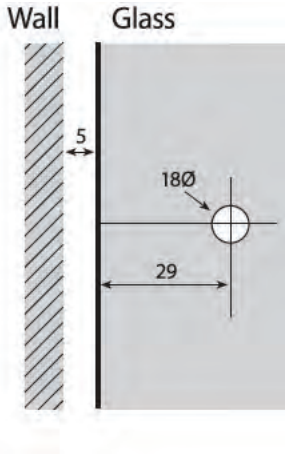
TECHNICAL DETAILS

- Dual action hinge opening inwards and outwards
- Self Closing from approx 25 degrees
- Suitable for 8mm / 10mm / 12mm glass
- Maximum door width for 10mm glass is 914mm
- Maximum door weight = 66kgs

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SB50 Wall Fix Shower Bracket





AVAILABLE FINISHES

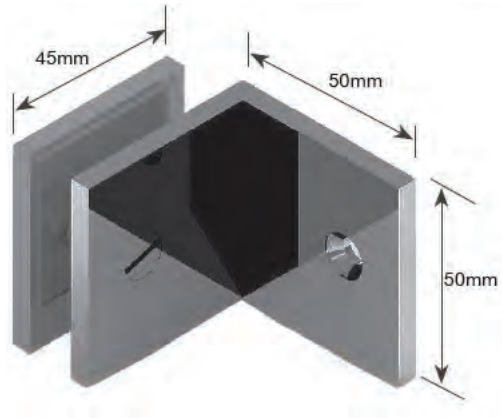
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

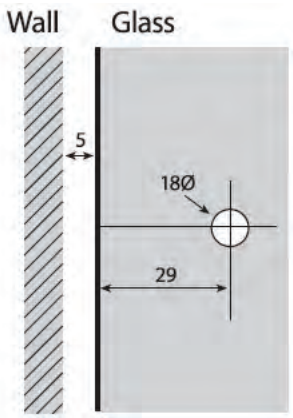
TECHNICAL DETAILS

- Manufactured in Brass
- 90° glass panel to wall fixing
- Standard for 10mm glass
- Suitable for 8mm, 10mm and 12mm glass

Specify glass thickness when ordering

SB50SQ Square Wall Fix Shower Bracket





AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

TECHNICAL DETAILS

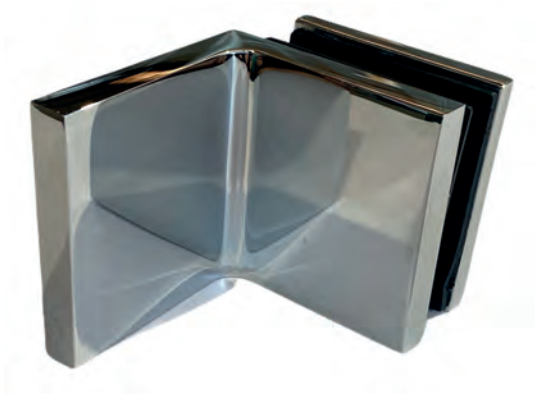
- Manufactured in Brass
- 90° glass panel to wall fixing
- Standard for 10mm glass
- Suitable for 8mm, 10mm and 12mm glass

Specify glass thickness when ordering

BLACK

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SB50N SQ Square Wall Fix Shower Bracket with cover plate



BLACK

AVAILABLE FINISHES

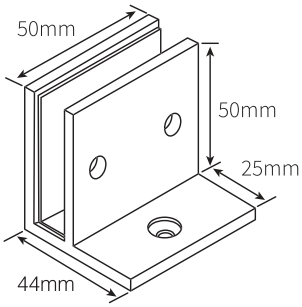
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

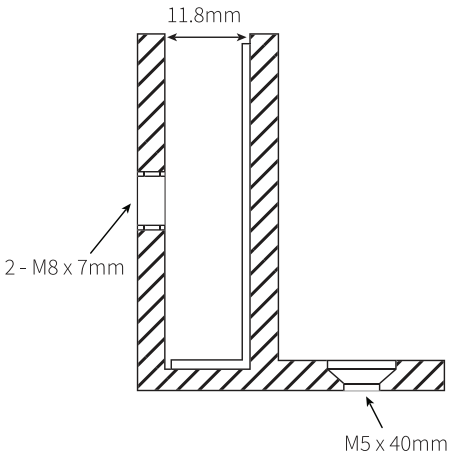
TECHNICAL DETAILS

- Manufactured in Brass – cover plate hides screw fixings
- 90° glass panel to wall fixing – adjustable
- Standard for 10mm glass
- Suitable for 8mm, 10mm and 12mm glass
- Side to side adjustment on wall

Specify glass thickness when ordering

SB50-NH-SQ Square Wall Fix Shower Bracket





AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

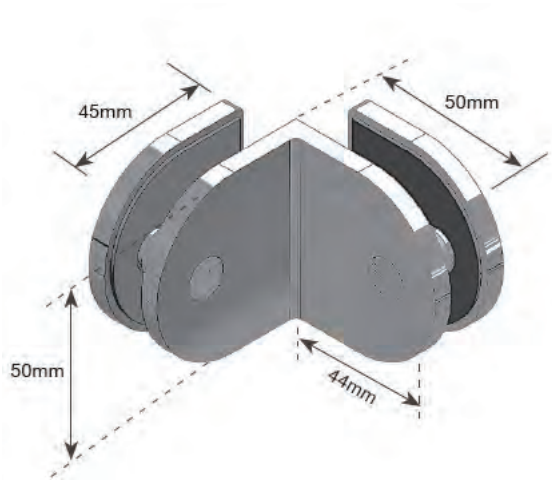
TECHNICAL DETAILS

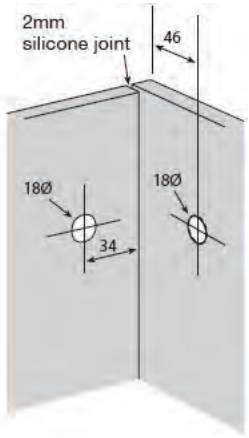
- Manufactured in Brass
- 90° glass panel to wall fixing
- Standard for 10mm glass
- Suitable for 8mm, 10mm and 12mm glass

Specify glass thickness when ordering

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SBD50 Glass to Glass Fix Shower Bracket – Double Sided





AVAILABLE FINISHES

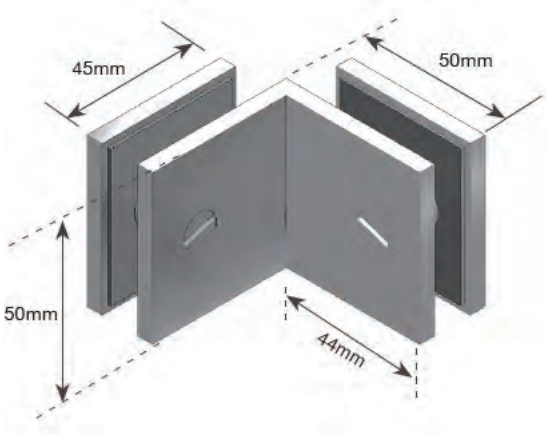
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

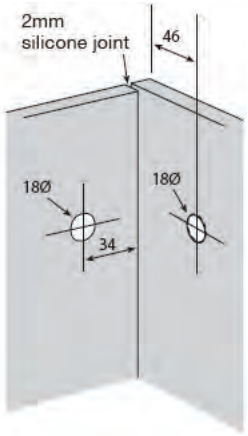
TECHNICAL DETAILS

- Manufactured in Brass
- 90° glass panel to wall fixing
- Standard for 10mm glass
- Suitable for 8mm, 10mm and 12mm glass

Specify glass thickness when ordering

SBD50SQ Square Glass to Glass Fix Shower Bracket – Double Sided





AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

TECHNICAL DETAILS

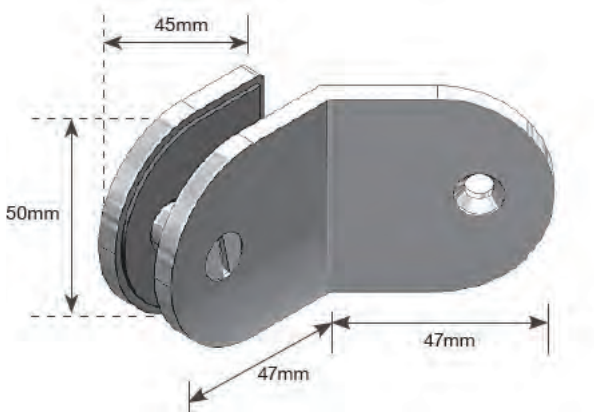
- Manufactured in Brass
- 90° glass panel to wall fixing
- Standard for 10mm glass
- Suitable for 8mm, 10mm and 12mm glass

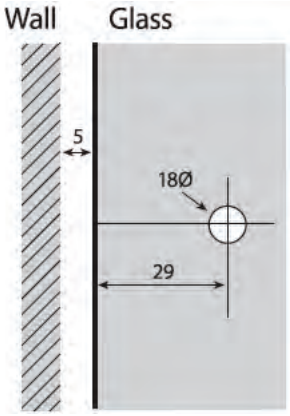
Specify glass thickness when ordering

BLACK

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SB135 Wall Fix Shower Bracket





AVAILABLE FINISHES

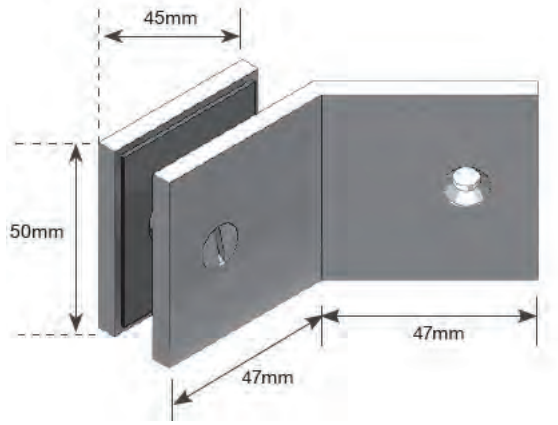
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

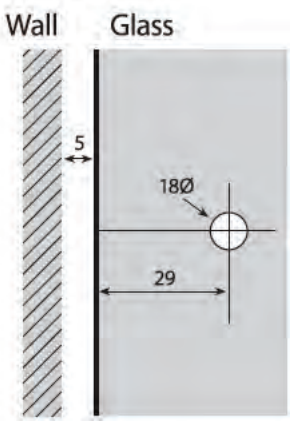
TECHNICAL DETAILS

- Manufactured in Brass
- 135° glass panel to wall fixing
- Standard for 10mm glass
- Suitable for 8mm, 10mm and 12mm glass

Specify glass thickness when ordering

SB135SQ Square Wall Fix Shower Bracket





AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

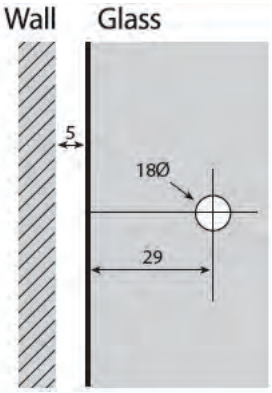
- Manufactured in Brass
- 135° glass panel to wall fixing
- Standard for 10mm glass
- Suitable for 8mm, 10mm and 12mm glass

Specify glass thickness when ordering

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SB180 Wall Fix Shower Bracket





AVAILABLE FINISHES

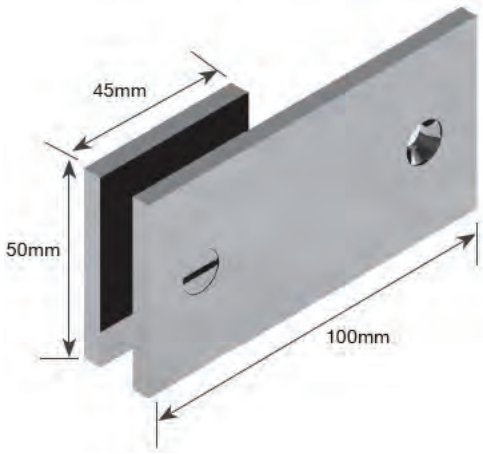
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

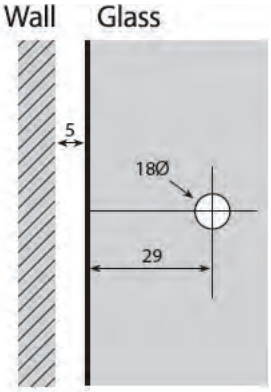
TECHNICAL DETAILS

- Manufactured in Brass
- 180° glass panel to wall fixing
- Standard for 10mm glass
- Suitable for 8mm, 10mm and 12mm glass

Specify glass thickness when ordering

SB180SQ Square Wall Fix Shower Bracket





AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

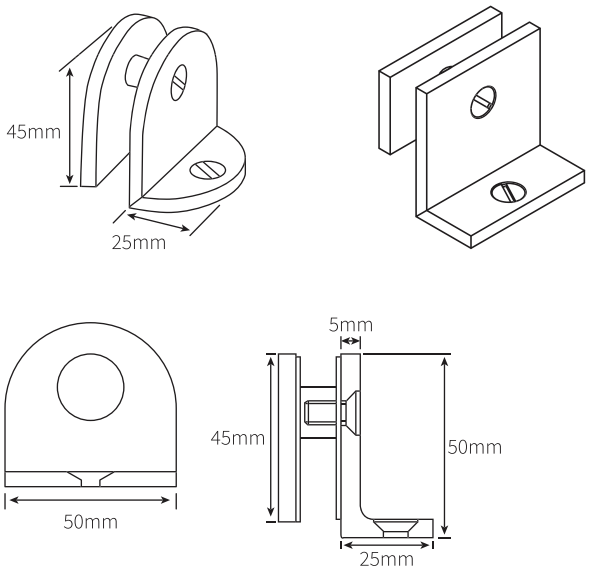
TECHNICAL DETAILS

- Manufactured in Brass
- 180° glass panel to wall fixing
- Standard for 10mm glass
- Suitable for 8mm, 10mm and 12mm glass

Specify glass thickness when ordering

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SB50.C2 (ROUND) / SB50.C2.SQ (SQUARE) / SB50.C2.B (BUTTON)
Glass to Wall Fixed Custom 2 Shower Bracket



Specify glass thickness, material finish and bracket type when ordering

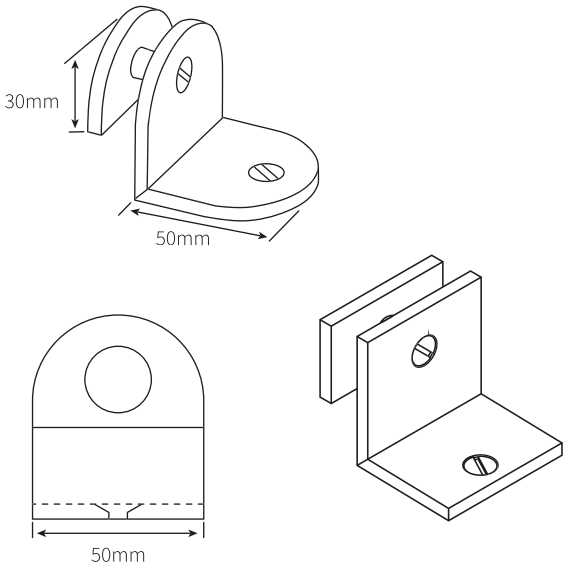
AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Shower bracket glass to wall fixed custom 2
- Manufactured in solid brass
- Provides mechanical fixing of glass panel to wall at 90˚ to floor or wall
- Suits 10mm glass thickness
- Adaptable for 6mm, 8mm and 12mm glass thickness on request
- Suitable when fixing area is restricted

SB50.C3 (ROUND) / SB50.C3.SQ (SQUARE) / SB50.C3.B (BUTTON)
Glass to Wall Fixed Shower Bracket



Specify glass thickness, material finish and bracket type when ordering

AVAILABLE FINISHES

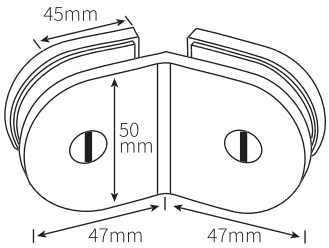
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

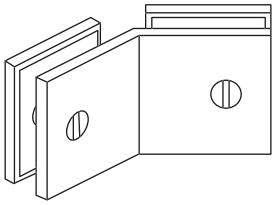
TECHNICAL DETAILS

- Shower bracket glass to wall fixed custom 3
- Manufactured in solid brass
- Provides mechanical fixing of glass panel to wall at 90˚ to floor or wall
- Suits 10mm glass thickness
- Adaptable for 6mm, 8mm and 12mm glass thickness on request
- Suitable when the bracket fixing point is lower than the glass edge

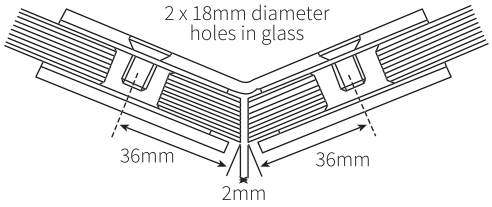
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SBD135 (ROUND) / SBD135.SQ (SQUARE) / SBD135.B (BUTTON)
135° Glass to Glass Fixed Shower Bracket





GLASS CUT-OUT DETAIL



AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

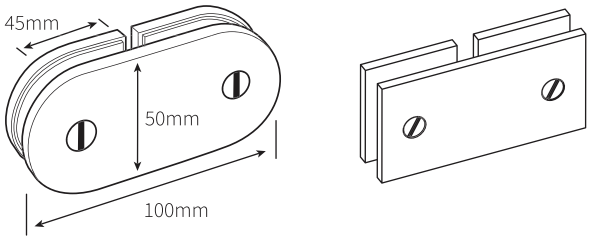
TECHNICAL DETAILS

- Shower bracket 135° glass to glass fixed
- Manufactured in solid brass
- 135°glass panel to glass panel
- Suits 10mm glass thickness
- Adaptable for 6mm, 8mm and 12mm glass thickness on request

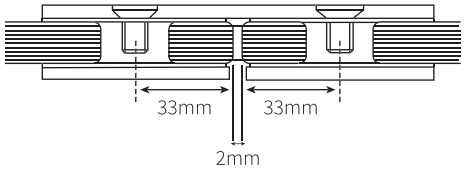
Specify glass thickness, material finish and bracket type when ordering

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SBD180 (ROUND) / SBD180.SQ (SQUARE)
180° Glass to Glass Double Sided Flat Fixed Shower Bracket



GLASS CUT-OUT DETAIL



AVAILABLE FINISHES

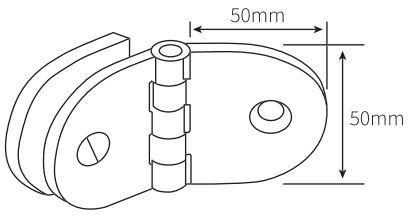
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

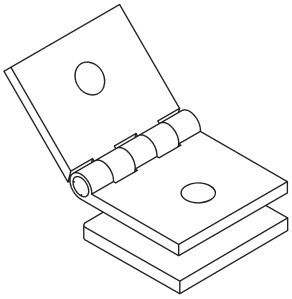
TECHNICAL DETAILS

- Shower bracket 180° glass to glass double sided flat fixed
- Manufactured in solid brass
- Fixing of two glass panels at 180°
- Suits 10mm glass thickness
- Adaptable for 6mm, 8mm and 12mm glass thickness on request

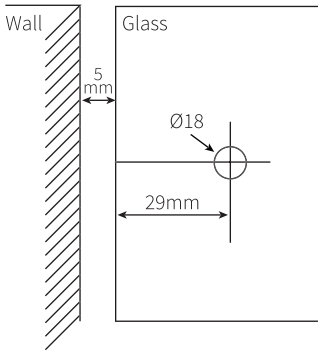
Specify glass thickness, material finish and bracket type when ordering

SB50.CAB (ROUND) / SB50.CAB.SQ (SQUARE) / SB50.CAB.B (BUTTON)
Adjustable Wall Fix Shower Bracket





GLASS CUT-OUT DETAIL



AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Shower bracket adjustable wall fix
- Manufactured in solid brass
- 240˚glass panel to wall fixing
- Adaptable to suit any non-square walls by loosening allen key screw
- Suits 10mm glass thickness
- Adaptable for 6mm, 8mm and 12mm glass thickness on request

Specify glass thickness, material finish and bracket type when ordering

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SB50NL Shower Support Bracket



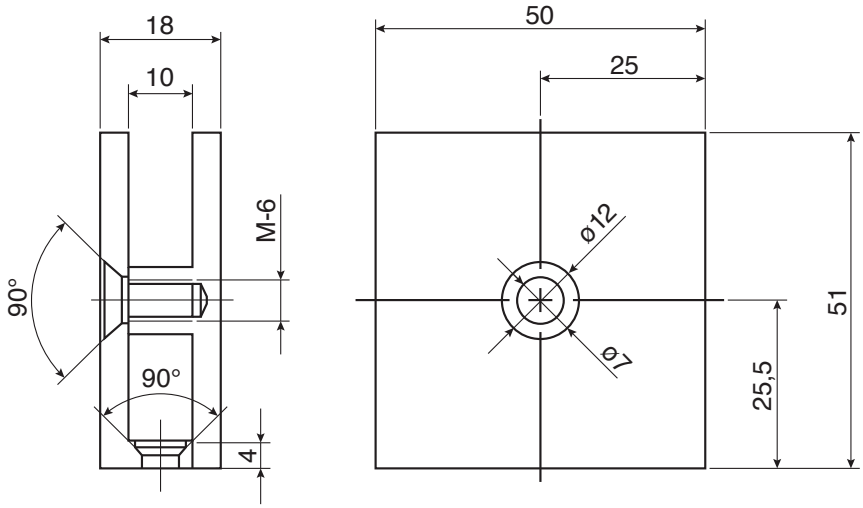
AVAILABLE FINISHES

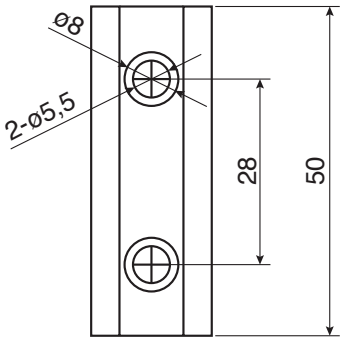
- Polished Stainless
- Satin Chrome

TECHNICAL DETAILS

- 50mm x 50mm size
- No hole necessary

SB50NL (with Hole in Glass) Shower Support Bracket





AVAILABLE FINISHES

- Polished Stainless
- Satin Chrome

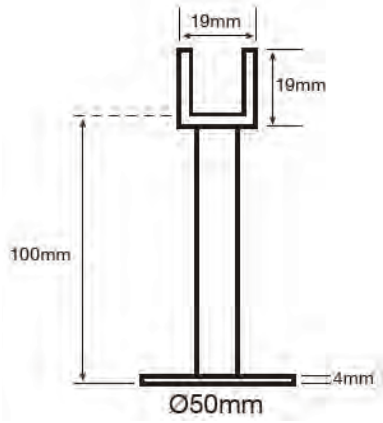
TECHNICAL DETAILS

- 50mm x 50mm size
- Hole in glass 18mm diameter, 25mm from edge of glass

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SSB100 Shower Support Bracket





AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

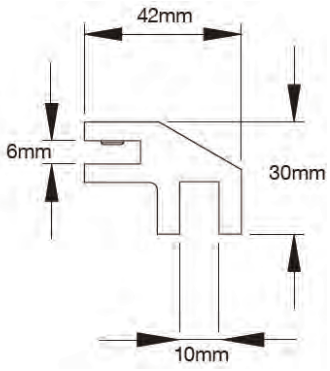
TECHNICAL DETAILS

- Manufactured in solid Brass
- 50mm diameter base and 19mm diameter leg
- 19 x 19 U channel

N.B. Standard 100mm height
Custom sizes up to 500mm height

OPF2 Overpanel Fitting





AVAILABLE FINISHES

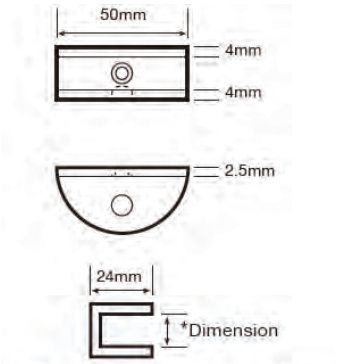
- Polished Stainless
- Satin Chrome

TECHNICAL DETAILS

- Suits 10mm glass shower with 6mm glass overpanel
- Fixing to glass by teflon tipped grub screw

SB6 / SB8 / SB10 / SB12 Glass Shelf Brackets





* SB6 = 6.2mm SB8 = 8.2mm
SB10 = 10.2mm SB12 = 12.2mm

AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

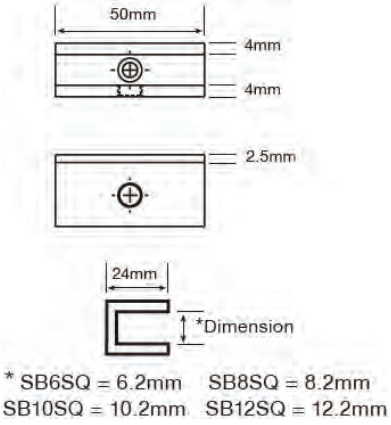
- Manufactured in Brass
- Fixing to glass by teflon tipped grub screw
- Fixing to wall by counter sunk hole through bracket

Dimensions to suit 6mm, 8mm, 10mm and 12mm glass

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SB6SQ / SB8SQ / SB10SQ / SB12SQ Square Glass Shelf Brackets





* SB6SQ = 6.2mm SB8SQ = 8.2mm
SB10SQ = 10.2mm SB12SQ = 12.2mm

BLACK

AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- Fixing to glass by teflon tipped grub screw
- Fixing to wall by counter sunk hole through bracket

Dimensions to suit 6mm, 8mm, 10mm and 12mm glass

SB10HL



AVAILABLE FINISHES

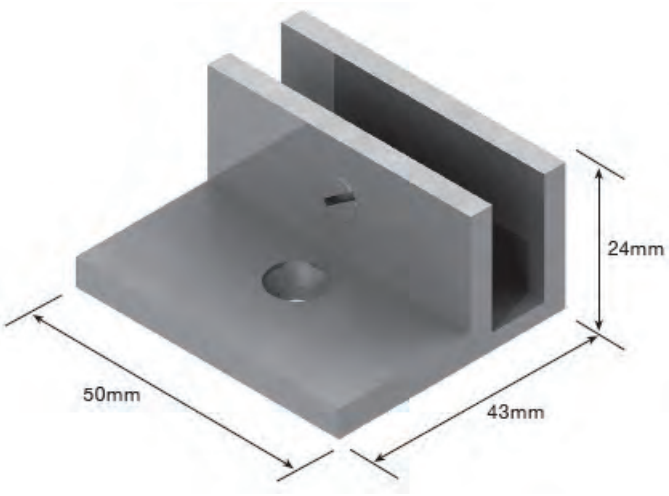
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- Fixing to glass by teflon tipped grub screw
- Fixing to wall by counter sunk hole through bracket
- Suits 10mm glass

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SB10HLSQ Square Glass Shelf Bracket



BLACK

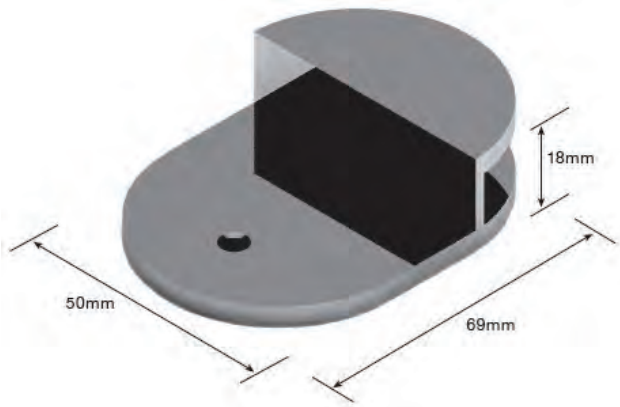
AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- Fixing to glass by teflon tipped grub screw
- Fixing to wall by counter sunk hole through bracket
- Suits 10mm glass

SB10VL Glass Shelf Bracket



AVAILABLE FINISHES

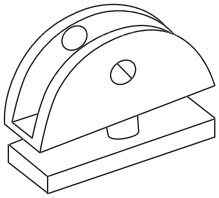
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

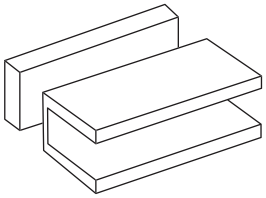
TECHNICAL DETAILS

- Manufactured in Brass
- Fixing to glass by teflon tipped grub screw
- Fixing to wall by counter sunk hole through bracket
- Suits 10mm glass

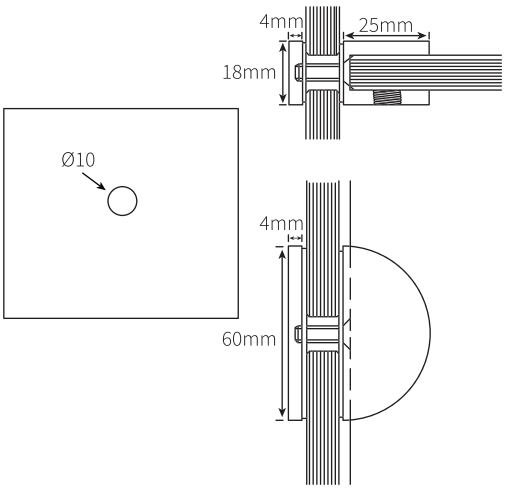
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SB10.GF (ROUND) / SB10.GF.SQ (SQUARE)
Shower Glass Shelf Bracket with Grub Screw





GLASS PREPARATION

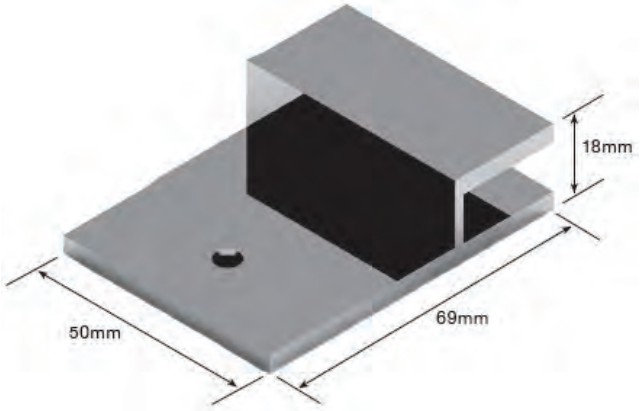


AVAILABLE FINISHES
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS
- Glass shelf bracket with grub screw
- Manufactured in solid brass
- Facilitates fixing of glass shelves through glass panels
- Suits 10mm glass thickness

Specify glass thickness, material finish and bracket type when ordering

SB10VLSQ Square Glass Shelf Bracket



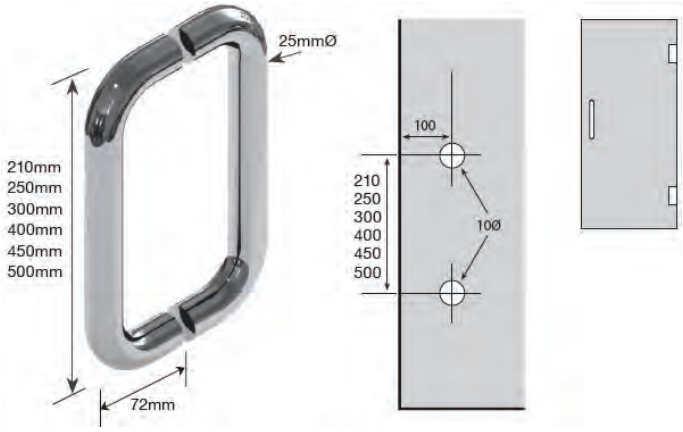
AVAILABLE FINISHES
- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

TECHNICAL DETAILS
- Manufactured in Brass
- Fixing to glass by teflon tipped grub screw
- Fixing to wall by counter sunk hole through bracket
- Suits 10mm glass

BLACK

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SH210 / 250 / 300 / 400 / 450 / 500 Double D Pull Handle



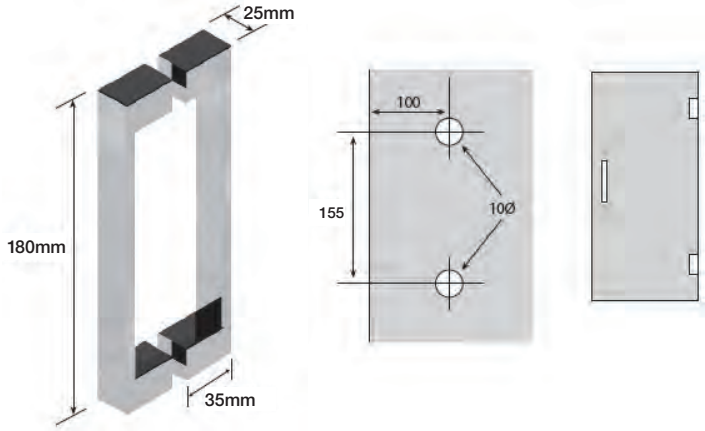
AVAILABLE FINISHES

- Polished Stainless
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Stainless tube, 25mm diameter
- Suitable for 6mm, 8mm, 10mm and 12mm glass
- Hole centres 210mm, 250mm, 300mm, 400mm, 450mm, 500mm
- Hole diameter 10mm
- Supplied as a pair

CUBIX 15 Double Pull Handle



AVAILABLE FINISHES

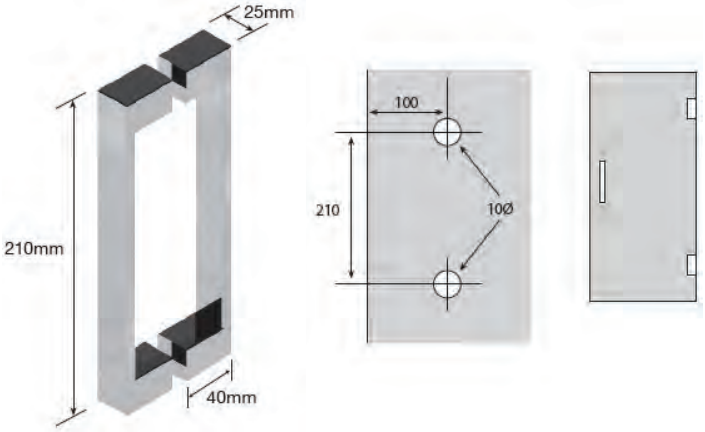
BLACK

- Polished Stainless
- Matte Black

TECHNICAL DETAILS

- Rail 25mm width
- Hole centres 155mm
- Hole diameter 10mm
- Supplied as a pair

CUBIX 25 Double Pull Handle



AVAILABLE FINISHES

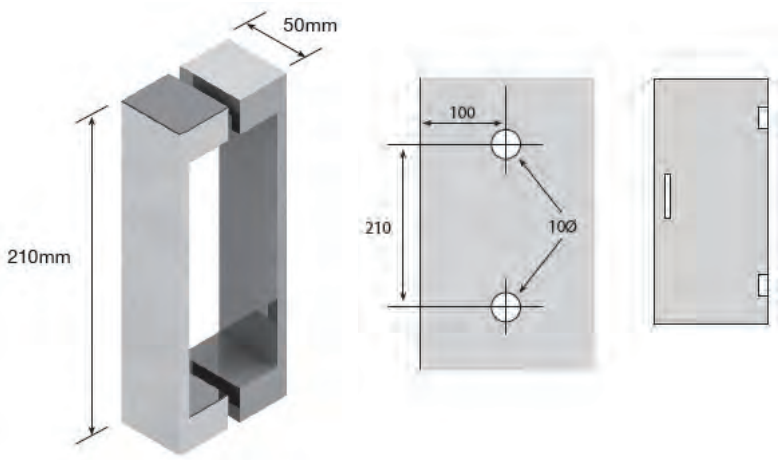
- Polished Stainless
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Rail 25mm width
- Hole centres 210mm
- Hole diameter 10mm
- Supplied as a pair

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CUBIX 50 Double Pull Handle



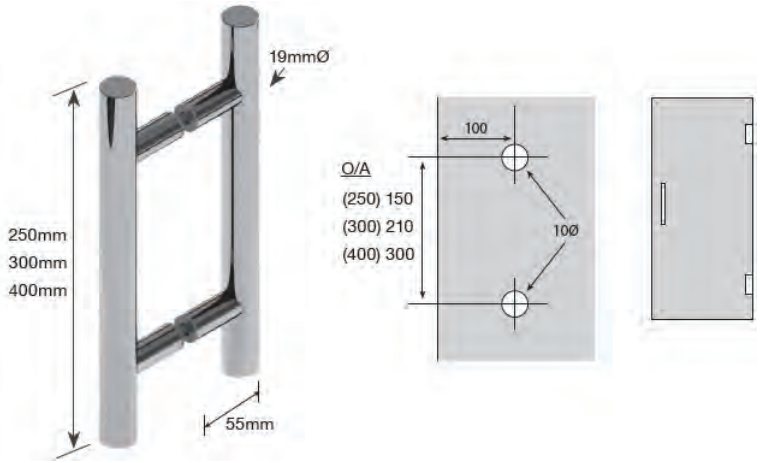
AVAILABLE FINISHES

- Polished Stainless
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Rail 25mm width
- Hole centres 210mm
- Hole diameter 20mm
- Supplied as a pair

HM 150 / 210 / 300 Marsh Handle



AVAILABLE FINISHES

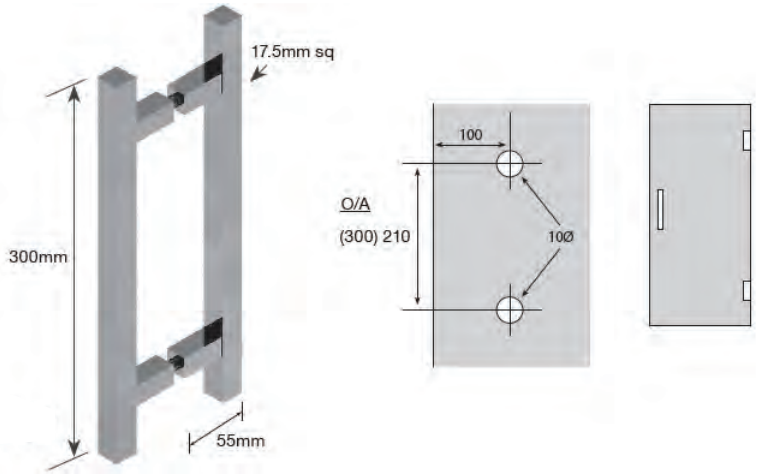
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Solid Brass, 19mm diameter
- Suitable for 6mm, 8mm, 10mm and 12mm glass
- Hole centres 150mm, 210mm, 300mm
- Hole diameter 10mm
- Supplied as a pair

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HM210SQ Square Marsh Handle



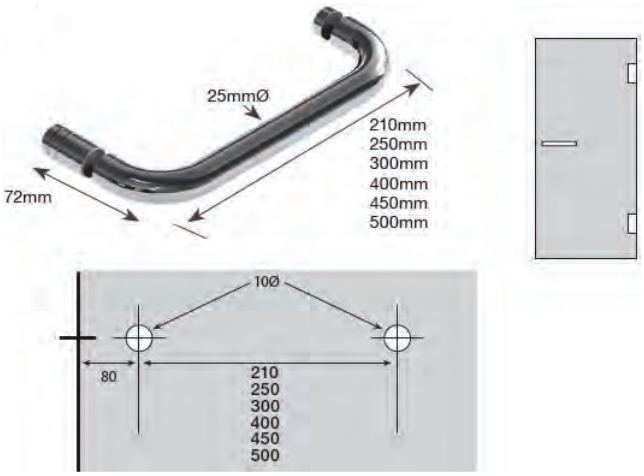
AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Solid Brass, 17.5mm diameter
- Suitable for 6mm, 8mm, 10mm and 12mm glass
- Hole centres 210mm
- Hole diameter 10mm
- Supplied as a pair
- Other sizes as per round Marsh can be custom ordered

TRK210 / 250 / 300 / 400 / 450 / 500 Towel Handle/Pull Knob



AVAILABLE FINISHES

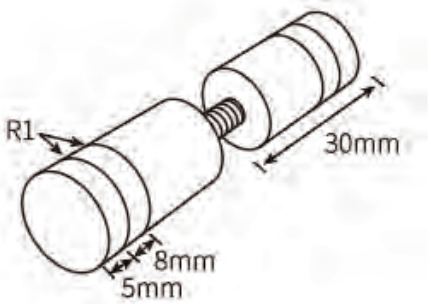
- Polished Stainless
- Satin Chrome
- Special finishes on request, lead time applies

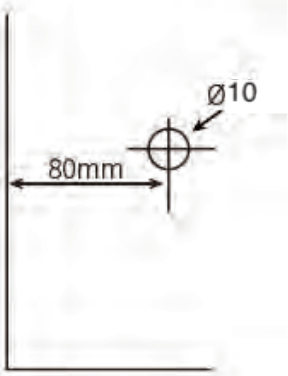
TECHNICAL DETAILS

- Stainless tube, 25mm diameter
- Suitable for 6mm, 8mm, 10mm and 12mm glass
- Hole centres 210mm, 250mm, 300mm, 400mm, 450mm, 500mm
- Hole diameter 10mm

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MSK40 Double Pull Knob







AVAILABLE FINISHES

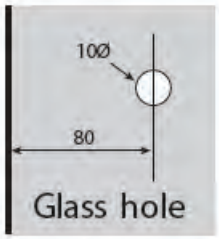
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Pull knob double 25mm diameter
- Solid brass
- Supplied as a pair

SK40 Double Pull Knob







AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

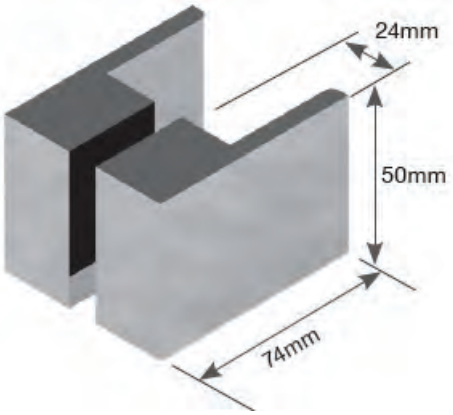
TECHNICAL DETAILS

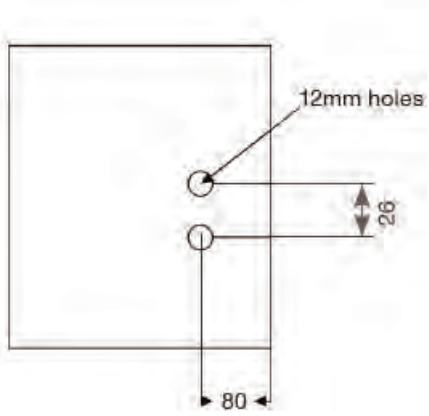
- Solid Brass, 25mm diameter
- Hole diameter 10mm
- Supplied as a pair
- Also available as a single knob with button

BLACK

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SK50 Square Double Pull Knob





AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Matte Black
- Special finishes on request, lead time applies

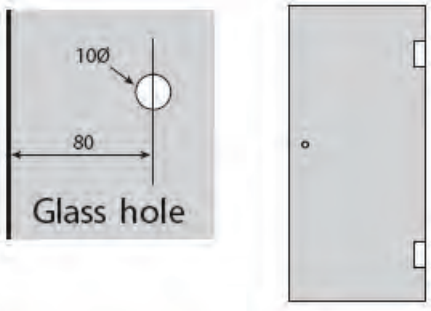
TECHNICAL DETALS

- Solid Brass, 50mm x 74mm
- Glass hole configuration needs to be slotted
- Supplied as a pair

BLACK

SK60 Double Pull Knob





AVAILABLE FINISHES

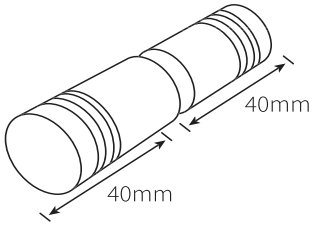
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

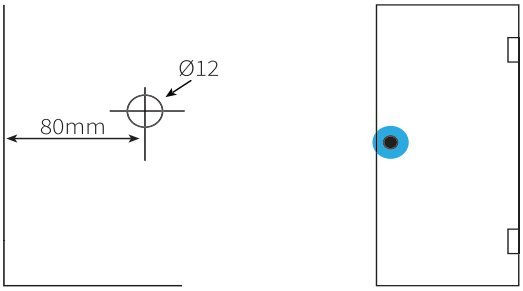
TECHNICAL DETAILS

- Solid Brass, 38mm diameter
- Hole diameter 10mm
- Supplied as a pair

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SK30 Double Pull Knob





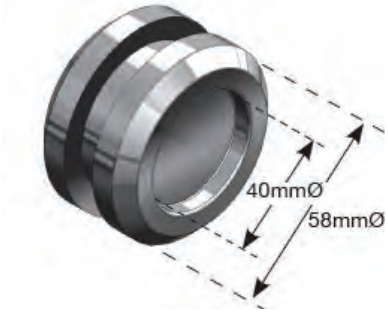
AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Pull knob double 32mm diameter
- Solid brass
- Supplied as a pair

SK90 Single Door Finger Pull



AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome

TECHNICAL DETAILS

- Glass hole diameter 48mm
- Supplied as a pair
- Suits 8mm and 10mm glass

SK35 Double Pull Knob



AVAILABLE FINISHES

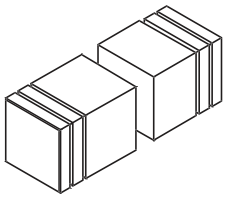
- Polished Chrome
- Satin Chrome

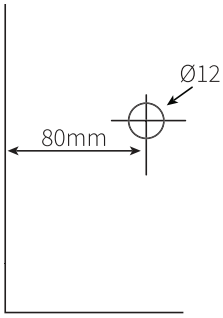
TECHNICAL DETAILS

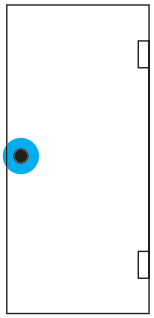
- Glass hole diameter 12mm
- Supplied as a pair
- Suits 8mm and 10mm glass

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SK40-SQ Square Double Pull Knob







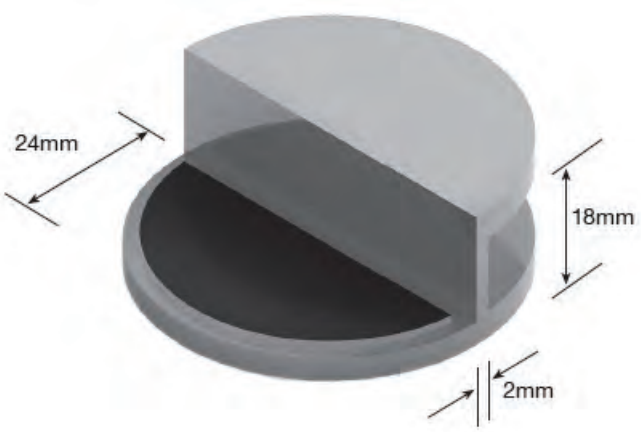
AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Glass hole diameter 12mm
- Supplied as a pair

SB10STOP Shower Door Stop



AVAILABLE FINISHES

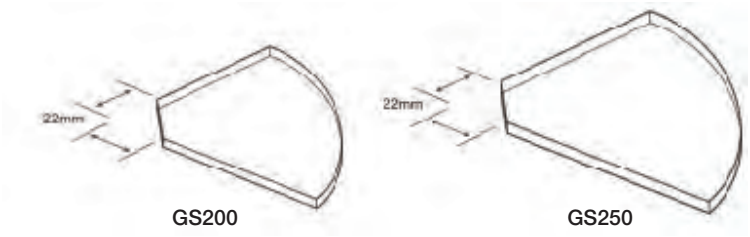
- Polished Chrome
- Satin Chrome
- Special finishes on request, lead time applies

TECHNICAL DETAILS

- Manufactured in Brass
- Fixing to glass by teflon tipped grub screw
- Fixing to wall by counter sunk hole through bracket
- Suits 10mm glass

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GS200 / GS250 Corner Glass Shelf



GS200 GS250

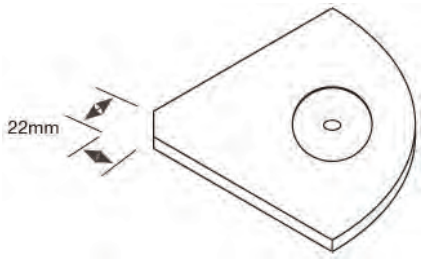
CORNER GLASS SHELVES

- GS200 with 200mm radius
- GS250 with 250mm radius

TECHNICAL DETAILS

- Available in either 10mm toughened clear glass or 10mm toughened low iron glass

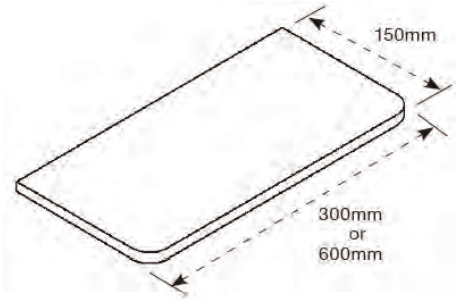
GS200S Corner Glass Shelf with Soap Recess



TECHNICAL DETAILS

- 10mm toughened glass
- Soap recess
- 20mm radius

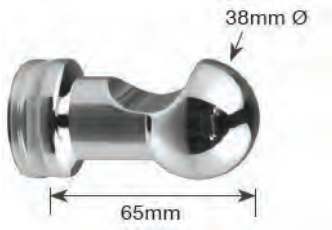
GSRECT03 / GSRECT04 Rectangular Glass Shelf

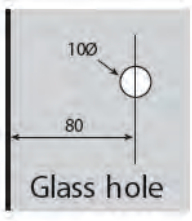


TECHNICAL DETAILS

- 10mm toughed glass
- Radius corners
- GSRECT03: 300mm x 150mm
- GSRECT04: 600mm x 150mm

RH1 Robe Hook





AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome

TECHNICAL DETAILS

- Manufactured in solid Brass
- 38mm diameter

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GHASBGG Glass to Glass Shower Bracing Bar



AVAILABLE FINISHES

- Chrome
- Satin Chrome available on request

TECHNICAL DETAILS

- Adjusts from 725mm to 1180mm
- Attaches to fixed panels
- Fits 6mm, 8mm, 10mm glass

GHASBGW Glass to Wall Shower Bracing Bar



AVAILABLE FINISHES

BLACK

- Chrome
- Matte Black
- Satin Chrome available on request

TECHNICAL DETAILS

- Adjusts from 725mm to 1180mm
- Attaches to fixed panels
- Fits 6mm, 8mm, 10mm glass

GHASBGW45 Glass to Wall Shower Bracing Bar



AVAILABLE FINISHES

- Chrome
- Satin Chrome available on request

TECHNICAL DETAILS

- Adjusts from 725mm to 995mm
- 45° option
- Attaches to fixed panels
- Fits 6mm, 8mm, 10mm glass

GHA B Glass to Wall Shower Bracing Bar



AVAILABLE FINISHES

- Chrome
- Satin Chrome available on request

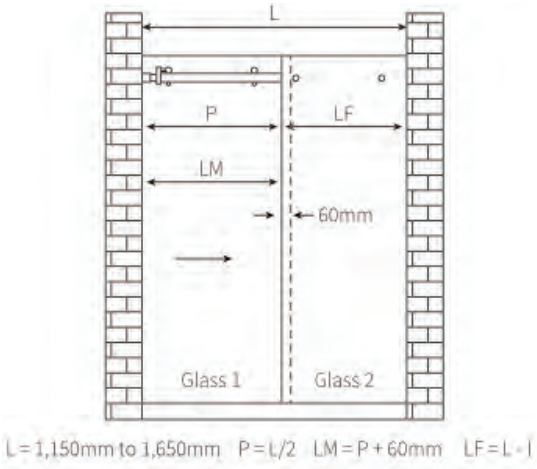
TECHNICAL DETAILS

- Cut to size to maximum length of 1200mm
- Attaches to fixed panels
- Fits 6mm, 8mm, 10mm glass

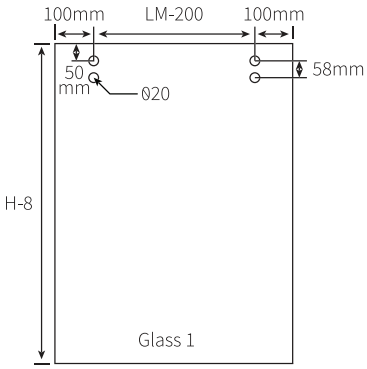
© COPYRIGHT 2017 GHA SOLUTIONS

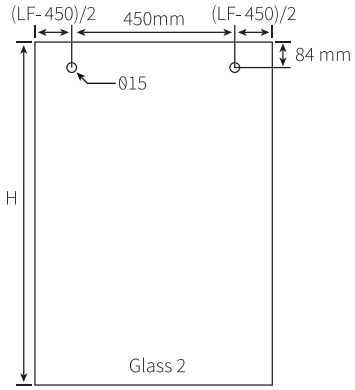
OPTO F001 Shower Kit – Slider Inline





L = 1,150mm to 1,650mm P = L/2 LM = P + 60mm LF = L - I





AVAILABLE FINISHES

BLACK

- Polished Stainless Steel
- Satin Stainless Steel
- Matte Black

TECHNICAL DETAILS

- Manfactured in Stainless steel
- Designed for 10mm toughened glass
- Suitable for both inline and square showers
- Able to be fixed to glass or solid walls
- Maximum hanger load 45kg per door
- Standard rail length – 2000mm

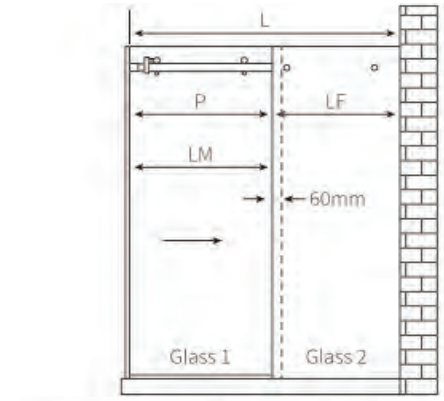
INSTALLATION GUIDE

1. Install fixed panel using your preferred method (brackets, channel, etc.)
2. Install the centre of the mounting blocks from the ST01 wall brackets 12mm inside the fixed panel and inline with the centre of the holes on the fixed panel
3. Cut the rail to length allowing clearance either end for the mounting blocks inside the ST01 wall brackets
4. Slide 2 x ST02 door stops onto the rail, one at either end, followed by the ST01 wall bracket sleeves
5. Install the rail onto the fixed panel and wall using the 2 x ST05 button fixings (remove extra nylon washer for 10mm glass) and slide the ST01 wall bracket sleeves over the mounting blocks and tighten grub screws
6. Install the ST04 rollers to the door and hang door on the rail
7. Install the ST04 guides to the door and adjust in conjunction with the rollers
8. Slide the ST02 door stops into position and tighten grub screws
9. Install ST03 floor guide onto bottom of fixed panel and under door.

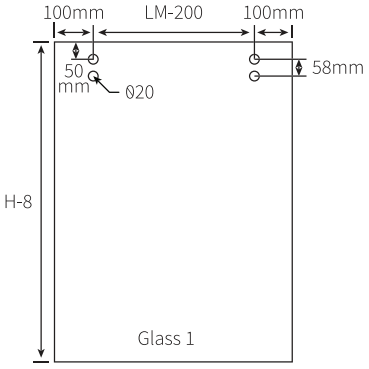
© COPYRIGHT 2017 GHA SOLUTIONS

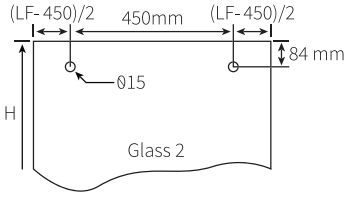
OPTO F002 Shower Kit – Slider Square

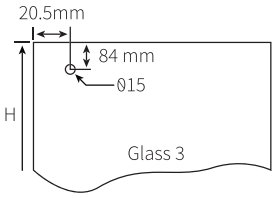




L = 1,150mm to 1,650mm P = L/2 LM = P + 60mm LF = L - P







AVAILABLE FINISHES

BLACK

- Polished Stainless Steel
- Satin Stainless Steel
- Matte Black

TECHNICAL DETAILS

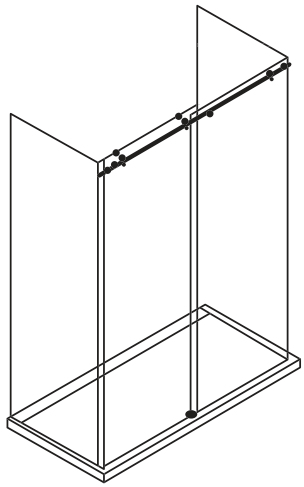
- Manfactured in Stainless steel
- Designed for 10mm toughened glass
- Suitable for both inline and square showers
- Able to be fixed to glass or solid walls
- Maximum hanger load 45kg per door
- Standard rail length – 2000mm

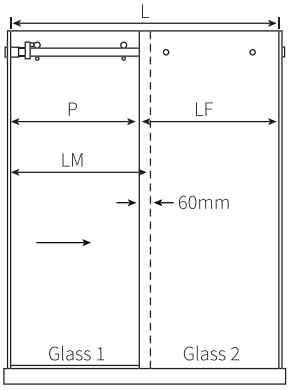
INSTALLATION GUIDE

1. Install fixed and side panel using your preferred method (brackets, channel, etc.).
2. Install the mounting block from the ST07 bracket on the side panel.
3. Install the centre of the mounting block from the ST01 wall bracket 12mm inside the fixed panel and inline with the centre of the holes on the fixed panel.
4. Cut the rail to length allowing clearance either end for the mounting blocks inside the ST01 wall bracket and ST07 side panel bracket.
5. Slide 2 x ST02 door stops onto the rail, one at either end, followed by the ST01 wall bracket sleeve and ST07 side panel bracket sleeve.
6. Install the rail onto the fixed panel using the 2 x ST05 button fixings (remove extra nylon washer for 10mm glass). Slide the ST01 wall bracket sleeve and ST07 side panel bracket sleeve over the mounting blocks and tighten grubscrews.
7. Install the ST04 rollers to the door and hang door on the rail.
8. Install the ST04 guides to the door and adjust in conjunction with the rollers.
9. Slide the ST02 door stops into position and tighten grub screws.
10. Install ST03 floor guide onto bottom of fixed panel and under door.

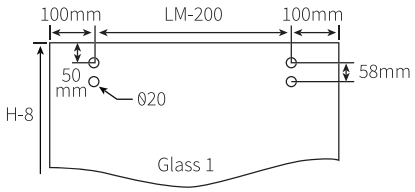
© COPYRIGHT 2017 GHA SOLUTIONS

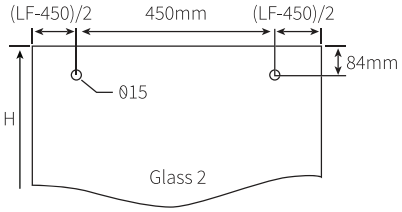
OPTO F003 Shower Kit – Slider Trio

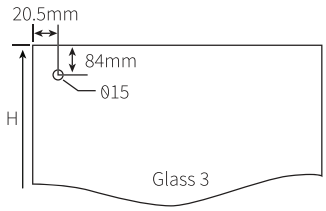


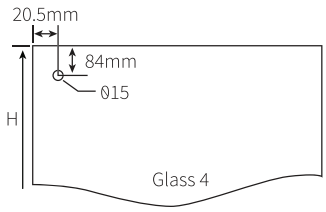


L = 1,150mm to 1,650mm P = L/2 LM = P + 60mm LF = L - P









AVAILABLE FINISHES

BLACK

- Polished Stainless Steel
- Satin Stainless Steel
- Matte Black

TECHNICAL DETAILS

- Manfactured in Stainless steel
- Designed for 10mm toughened glass
- Suitable for both inline and square showers
- Able to be fixed to glass or solid walls
- Maximum hanger load 45kg per door
- Standard rail length – 2000mm

INSTALLATION GUIDE

1. Install fixed and side panels using your preferred method (brackets, channel, etc.).
2. Install the mounting blocks from the ST07 bracket on the side panels.
3. Cut the rail to length allowing clearance either end for the mounting blocks inside the ST07 side panel brackets.
4. Slide 2 x ST02 door stops onto the rail, one at either end, followed by the ST07 side panel bracket sleeves.
5. Install the rail onto the fixed panel using the 2 x ST05 button fixings (remove extra nylon washer for 10mm glass). Slide the ST07 side panel bracket sleeves over the mounting blocks and tighten the grubscrews.
6. Install the ST04 rollers to the door and hang door on the rail.
7. Install the ST04 guides to the door and adjust in conjunction with the rollers.
8. Slide the ST02 door stops into position and tighten grub screws.
9. Install ST03 floor guide onto bottom of fixed panel and under door.

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SLY-001 / SLY-002 / SLY-003 Sliding 3-Door Screen



AVAILABLE FINISHES

- Natural Anodised
- Special finishes upon request

TECHNICAL DETAILS

- Suitable for 6mm and 8mm toughened glass
- Return can be 10mm toughened glass

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HSS HydroSlider



AVAILABLE FINISHES

- Chrome
- Satin Chrome

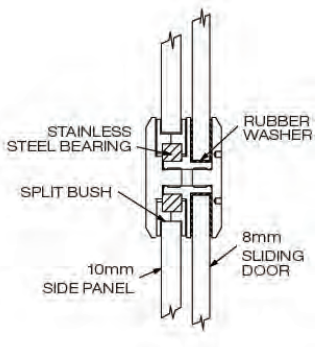
TECHNICAL DETAILS

- Versatile design – wall-to-wall, corner or three sided configurations
- Fixed panels can be fitted either side or above the sliding door
- Safe and secure door fastening. NO derailment problems
- Recommended use of 8mm or 10mm thick grade A, toughened safety glass



SS21 Euroglide Rollers





AVAILABLE FINISHES

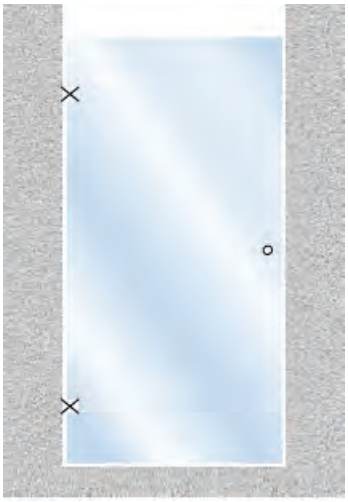
- Polished Stainless
- Satin Chrome

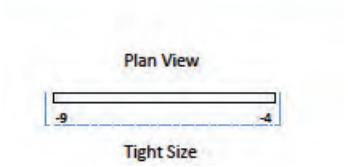
TECHNICAL DETAILS

- 50mm s/s discs with s/s bearings and black acetyl bush (two required per door)
- Designed to fit with 8mm glass door and 10mm glass side panel featuring glass cut-out, as supplied by Viridian Glass

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GHA-FSA Frameless Shower Layout – Type A





AVAILABLE FINISHES

- Chrome
- Satin Chrome

TECHNICAL DETAILS

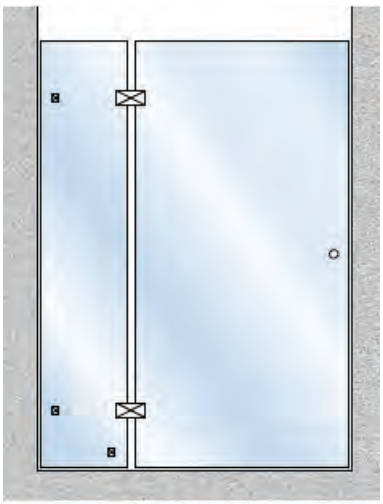
Hardware Required:

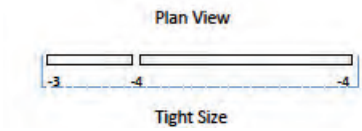
- 2 x ES1 Hinges
- 1 x SK40 Knob
- 1 x Type A Water Seal
- 1 x Water Bar – HR1

Door Clearance

- No water seal or waterbar – 4mm
- Type A water seal only – 10mm
- Waterbar only – 9mm
- Type A water seal and waterbar – 15mm

GHA-FSB Frameless Shower Layout – Type B





AVAILABLE FINISHES

- Chrome
- Satin Chrome

TECHNICAL DETAILS

Hardware Required:

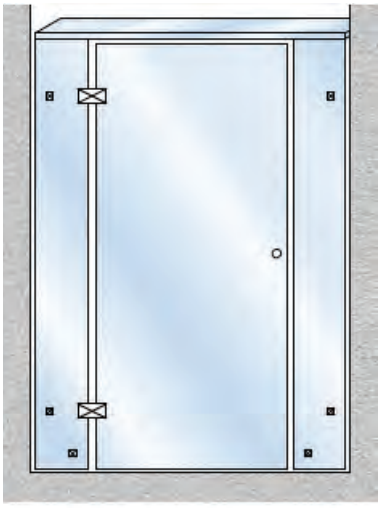
- 2 x ES2 Hinges
- 1 x SK40 Knob
- 2 x SB50SQ Brackets
- 1 x Type A Water Seal
- 1 x Water Bar – HR1

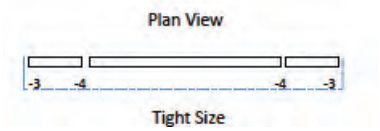
Door Clearance

- No water seal or waterbar – 4mm
- Type A water seal only – 10mm
- Waterbar only – 9mm
- Type A water seal and waterbar – 15mm

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GHA-FSC Frameless Shower Layout – Type C





AVAILABLE FINISHES

- Chrome
- Satin Chrome

TECHNICAL DETAILS

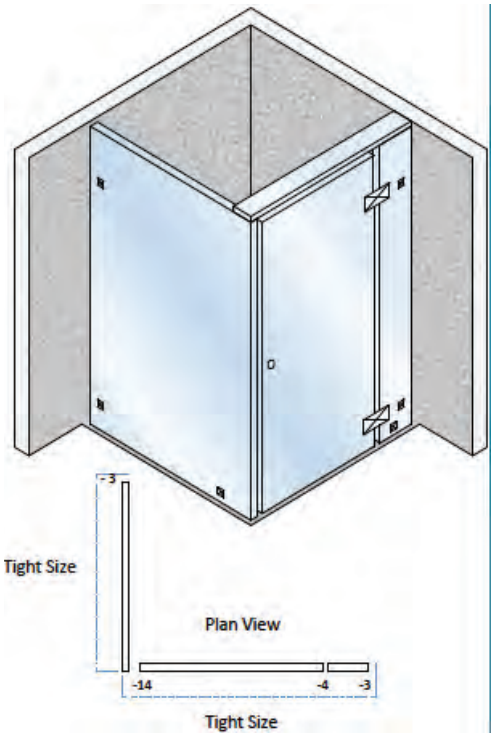
Hardware Required:

- 2 x ES2 Hinges
- 1 x SK40 Knob
- 4 x SB50SQ Brackets
- 1 x Type A Water Seal
- 1 x Water Bar – HR1

Door Clearance

- No water seal or waterbar – 4mm
- Type A water seal only – 10mm
- Waterbar only – 9mm
- Type A water seal and waterbar – 15mm
- Glass header bar – 3mm

GHA-FSD Frameless Shower Layout – Type D



AVAILABLE FINISHES

- Chrome
- Satin Chrome

TECHNICAL DETAILS

Hardware Required:

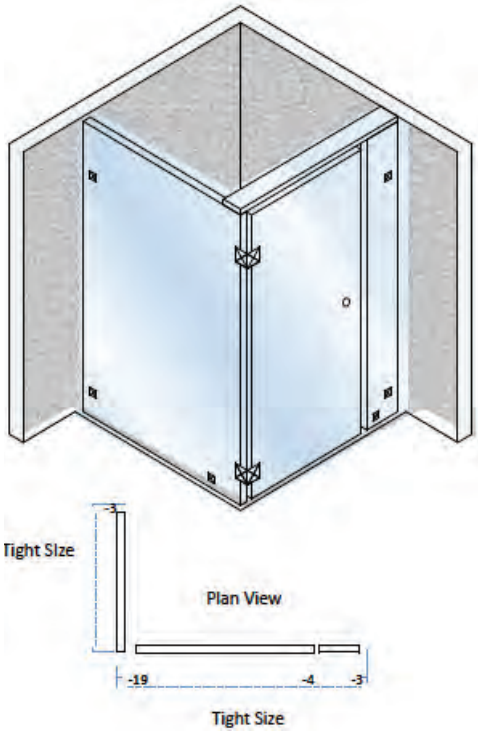
- 2 x ES2 Hinges
- 1 x SK40 Knob
- 4 x SB50SQ Brackets
- 1 x Type A Water Seal
- 1 x Water Bar – HR1

Door Clearance

- No water seal or waterbar – 4mm
- Type A water seal only – 10mm
- Waterbar only – 9mm
- Type A water seal and waterbar – 15mm
- Glass header bar – 3mm

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GHA-FSE Frameless Shower Layout – Type E



AVAILABLE FINISHES

- Chrome
- Satin Chrome

TECHNICAL DETAILS

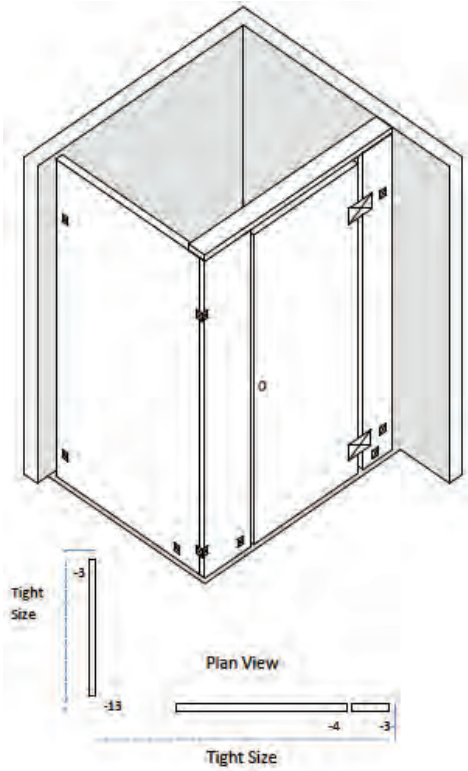
Hardware Required:

- 2 x ES2-90 Hinges
- 1 x SK40 Knob
- 4 x SB50SQ Brackets
- 1 x Type A Water Seal
- 1 x Water Bar – HR1

Door Clearance

- No water seal or waterbar – 4mm
- Type A water seal only – 10mm
- Waterbar only – 9mm
- Type A water seal and waterbar – 15mm
- Glass header bar – 3mm

GHA-FSF Frameless Shower Layout – Type F



AVAILABLE FINISHES

- Chrome
- Satin Chrome

TECHNICAL DETAILS

Hardware Required:

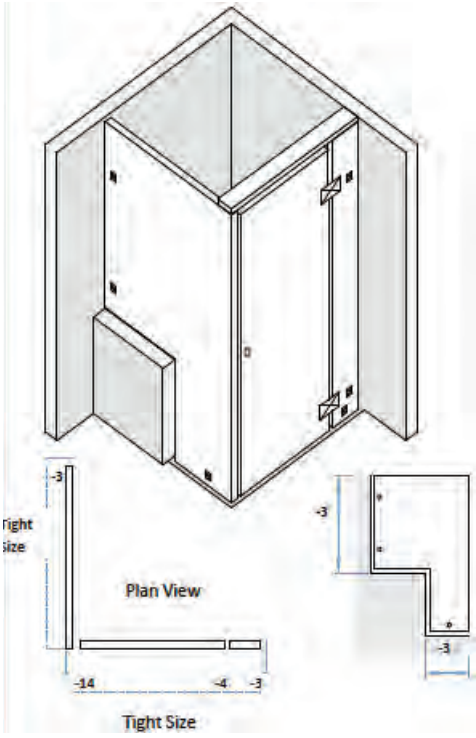
- 2 x ES2 Hinges
- 1 x SK40 Knob
- 2 x SB50SQ Brackets
- 1 x Type A Water Seal
- 1 x Water Bar – HR1

Door Clearance

- No water seal or waterbar – 4mm
- Type A water seal only – 10mm
- Waterbar only – 9mm
- Type A water seal and waterbar – 15mm
- Glass header bar – 3mm

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GHA-FSG Frameless Shower Layout – Type G



AVAILABLE FINISHES

- Chrome
- Satin Chrome

TECHNICAL DETAILS

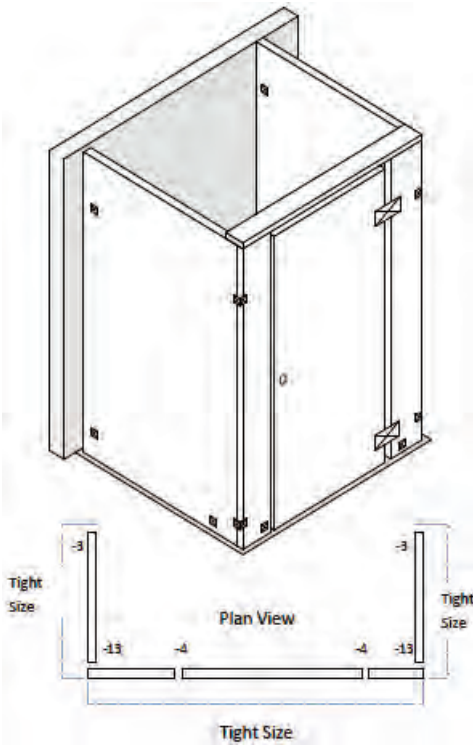
Hardware Required:

- 2 x ES2 Hinges
- 1 x SK40 Knob
- 4 x SB50SQ Brackets
- 1 x Type A Water Seal
- 1 x Water Bar – HR1

Door Clearance

- No water seal or waterbar – 4mm
- Type A water seal only – 10mm
- Waterbar only – 9mm
- Type A water seal and waterbar – 15mm
- Glass header bar – 3mm

GHA-FSH Frameless Shower Layout – Type H



AVAILABLE FINISHES

- Chrome
- Satin Chrome

TECHNICAL DETAILS

Hardware Required:

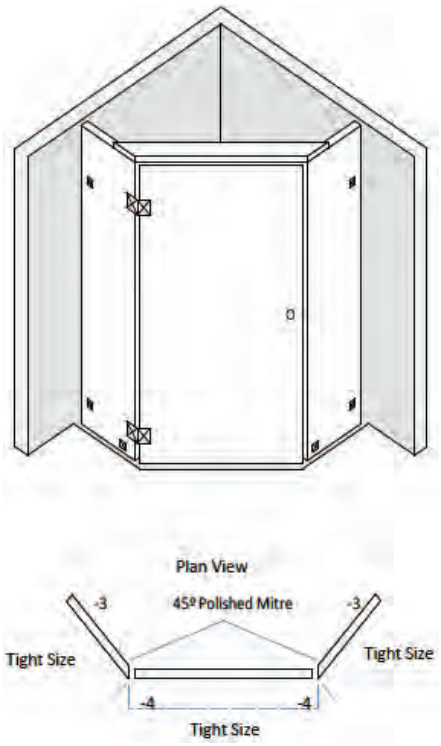
- 2 x ES2 Hinges
- 1 x SK40 Knob
- 4 x SB50SQ Brackets
- 1 x Type A Water Seal
- 1 x Water Bar – HR1

Door Clearance

- No water seal or waterbar – 4mm
- Type A water seal only – 10mm
- Waterbar only – 9mm
- Type A water seal and waterbar – 15mm
- Glass header bar – 3mm

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GHA-FSI Frameless Shower Layout – Type I



AVAILABLE FINISHES

- Chrome
- Satin Chrome

TECHNICAL DETAILS

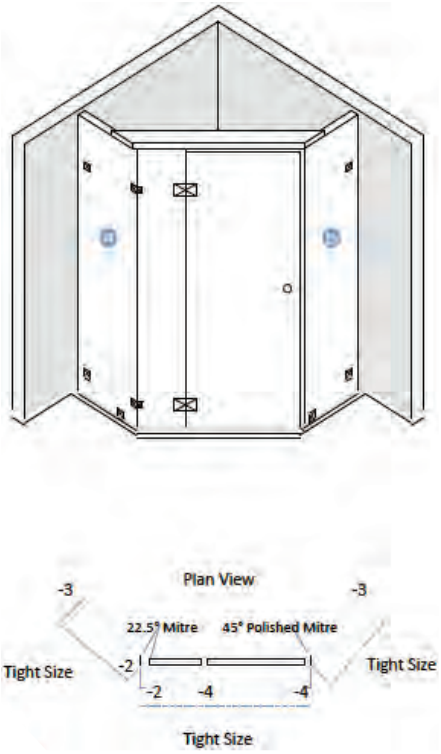
Hardware Required:

- 2 x ES2-135 Hinges
- 1 x SK40 Knob
- 4 x SB50SQ Brackets
- 1 x Type A Water Seal
- 1 x Water Bar – HR1

Door Clearance

- No water seal or waterbar – 4mm
- Type A water seal only – 10mm
- Waterbar only – 9mm
- Type A water seal and waterbar – 15mm
- Glass header bar – 3mm

GHA-FSJ Frameless Shower Layout – Type J



AVAILABLE FINISHES

- Chrome
- Satin Chrome

TECHNICAL DETAILS

Hardware Required:

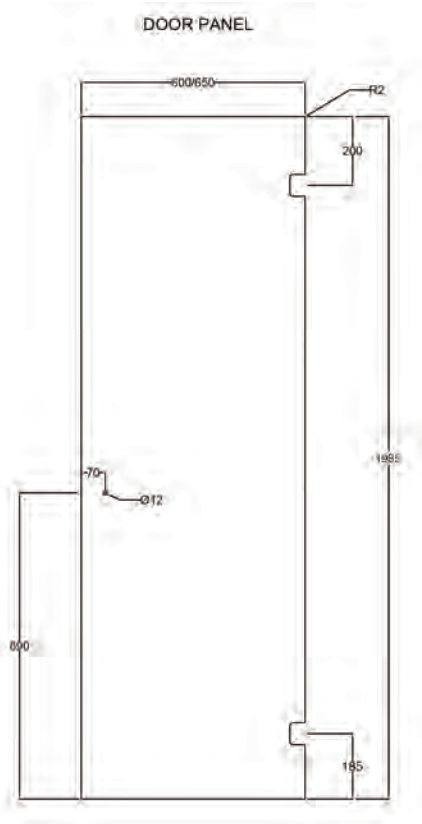
- 2 x ES2-135 Hinges
- 1 x SK40 Knob
- 4 x SB50SQ Brackets
- 1 x Type A Water Seal
- 1 x Water Bar – HR1

Door Clearance

- No water seal or waterbar – 4mm
- Type A water seal only – 10mm
- Waterbar only – 9mm
- Type A water seal and waterbar – 15mm
- Glass header bar – 3mm

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GHA-SSSP-01 Standard Shower Screen Glass



TECHNICAL DETAILS

10mm toughened glass

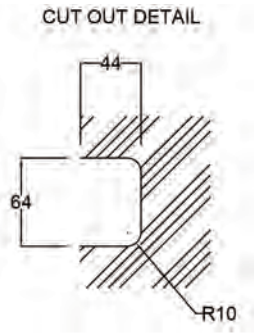
AVAILABLE SIZES

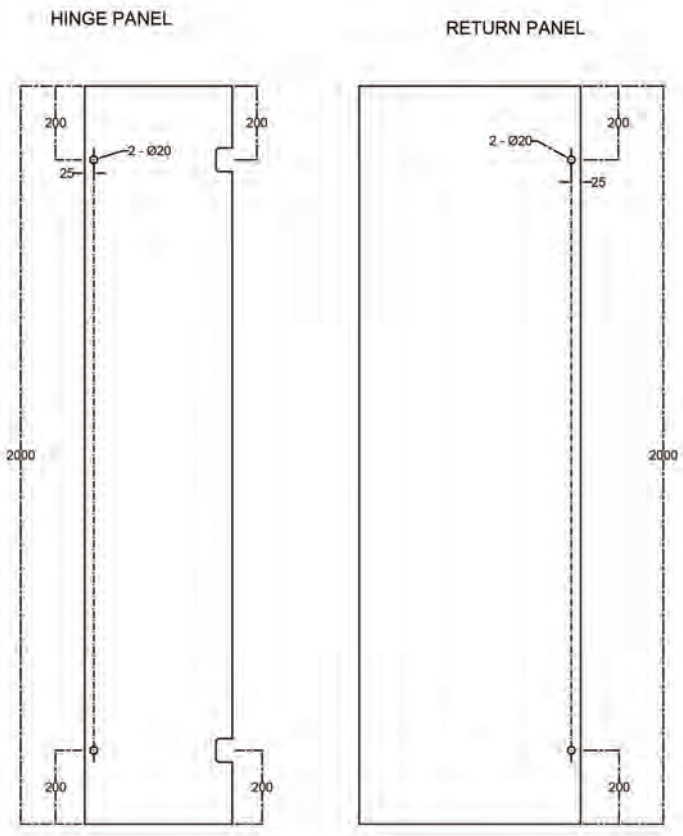
Hinge Panels with Holes:
180, 185, 190, 200, 205, 210, 215, 220, 225, 230, 235, 240, 245, 250, 255, 260, 265, 270, 275, 280, 285, 290, 295, 300, 305, 310, 315, 320, 325, 330, 335, 340, 345, 350, 355, 360, 365, 370, 375, 380, 385, 390, 395, 400, 450, 500, 550 and 600mm

Door Panel:
(1985mm high)
600, 610, 620, 630, 640 and 650mm wide

Return Panels with Holes:
600, 650, 700, 750, 800, 825, 830, 835, 840, 845, 850, 855, 860, 865, 870, 875, 880, 885, 890, 895, 900, 905, 910, 915, 920, 925, 930, 935, 940, 945, 950, 955, 960, 965, 970, 975, 980, 985, 990, 995, 1000, 1005, 1010, 1015, 1020, 1025, 1030, 1035, 1040, 1045, 1050, 1055, 1060, 1065, 1070, 1075, 1080, 1085, 1090, 1095, 1100, 1150 and 1200mm

Return Panel:
(No holes and 2000mm high)
595mm, 695mm, 795mm, 850mm, 895mm, 995mm, 1095mm, 1195mm

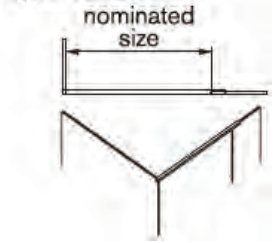




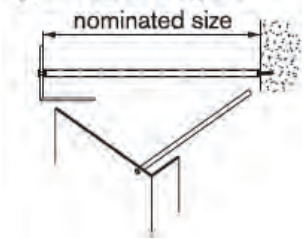
© COPYRIGHT 2017 GHA SOLUTIONS

Headers

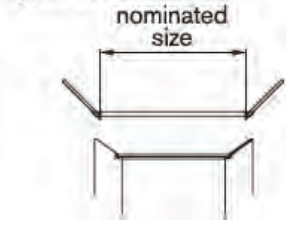
Type A



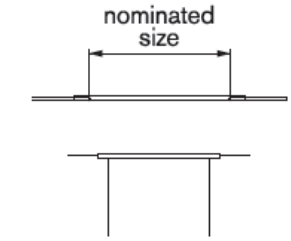
Type B (hole in glass)



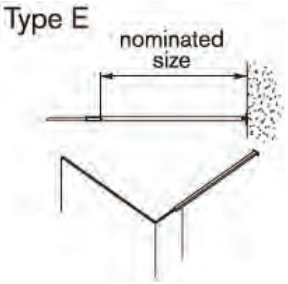
Type C



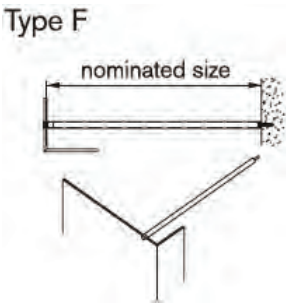
Type D



Type E



Type F



When extra bracing is required for a frameless shower, we provide a number of solutions. A header across the top of the enclosure can stabilise an oversized panel.

AVAILABLE FINISHES

- Polished Chrome
- Satin Chrome
- Special Finishes on request, lead time applies

TECHNICAL DETAILS

Custom lengths and angles available on request

Header A

- Side Panel to return
- 16mm square pole
- Mounted on glass

Header B

- Wall to return
- 25mm round pole
- 12mm hole in glass
- Mounted through glass

Header C

- Side panel to side panel, quad
- 16mm square pole
- Mounted on glass

Header D

- Side panel to side panel
- 16mm square pole
- Mounted on glass

Header E

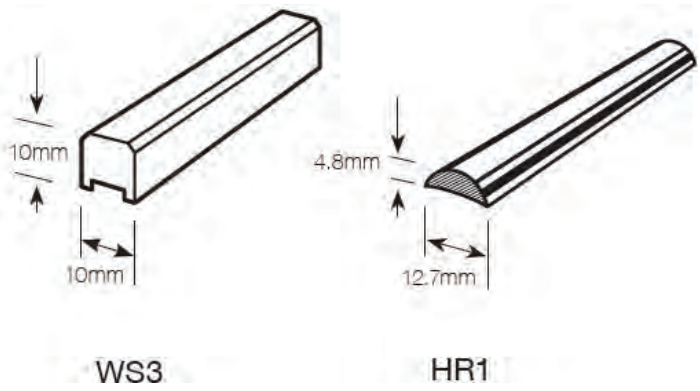
- Wall to Side Panel
- 16mm square pole
- Mounted on glass

Header F

- Wall to return panel
- 25mm round hole
- Mounted to glass

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WS1 / WS3 / HR1 Water Bars



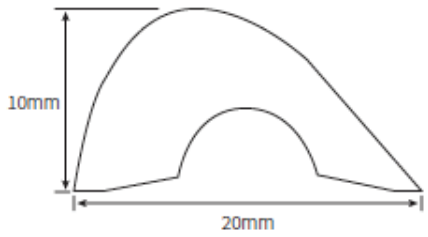
TECHNICAL DETAILS

- Extruded aluminium
- Cut lengths available

STOCK LENGTHS

- WS1 – 2m
- WS3 – 3m
- HR1 – 1.5m

GHAB10 Water Bar



AVAILABLE FINISHES

- Polished anodised
- Satin anodised
- Special Finishes on request, lead time applies

TECHNICAL DETAILS

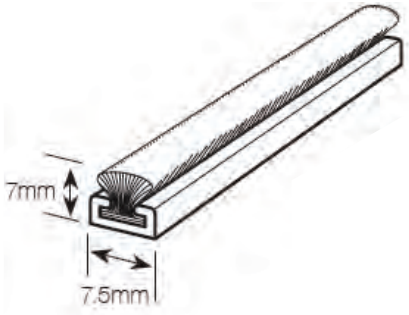
- Extruded aluminium
- Cut lengths available

STOCK LENGTHS

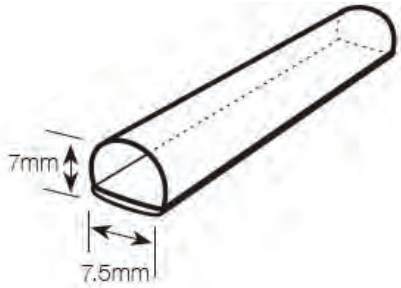
- 2.1m

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DS2 / DS4 / DS5 Door Seals



DS2



DS4

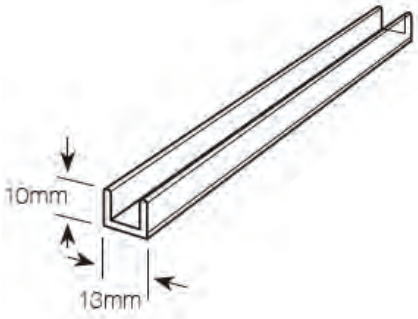
DS2 SECTION

- Felt in silver anodised exgtrusion (satin/polished)
- 2m length

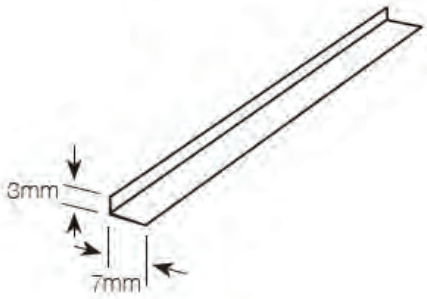
DS4 D SHAPED SEAL

- Rigid back PVC with flexible PVC seal
- 2m length

DS10 / LS1 / TS1 Door Seals



DS10



LS1

DS10 SECTION

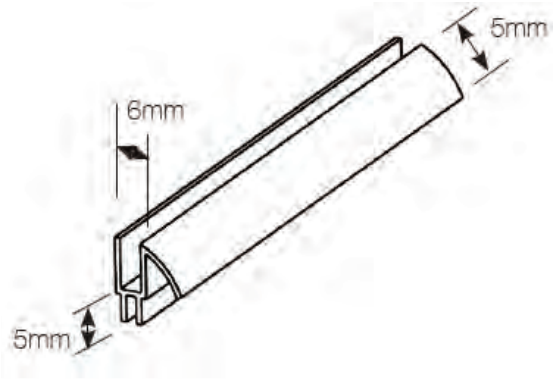
- Clear plastic U channel
- Suit 10mm glass
- 2m length

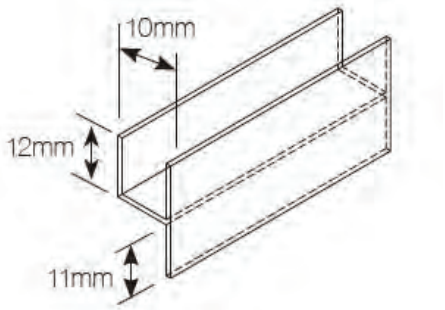
LS1 L SHAPED SEAL

- Rigid back PVC with flexible PVC seal
- 2m length

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GHA-W506-10 / GHA-WS06 Clear PVC Water Seals





TECHNICAL DETAILS

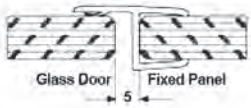
- 2m and 2.2m stock lengths

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GHA-WS10 / GHA-WS06 Clear PVC Water Seals

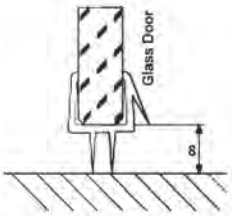
GHA-WS-10-03





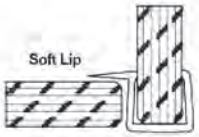
GHA-WS-10-10





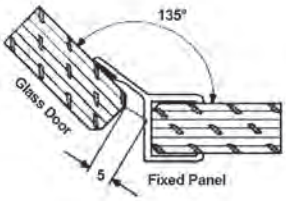
GHA-WS-10-04





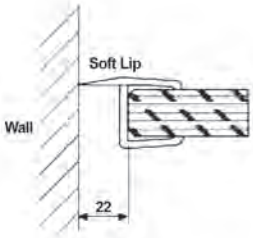
GHA-WS-10-135





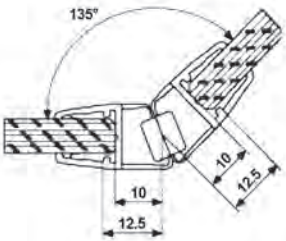
GHA-WS-10-05





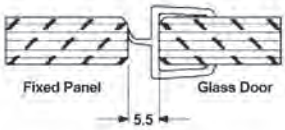
GHA-WS-10-135M





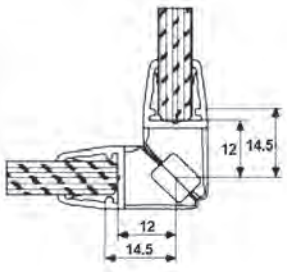
GHA-WS-10-06





GHA-WS-10-90M





AVAILABLE FINISHES

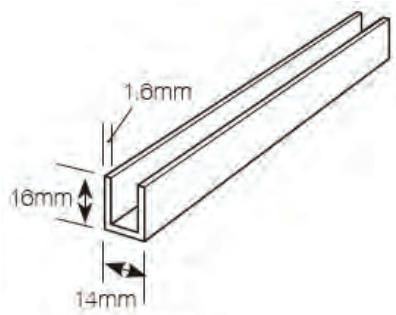
- Clear Plastic

TECHNICAL DETAILS

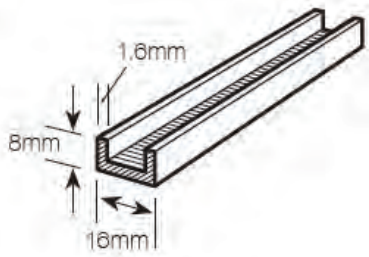
- Suits 8mm, 10mm and 12mm glass
- Stock lengths of 2.2m
- Magnetic strips available for GHA-WS-10-135M and GHA-WS-10-90M

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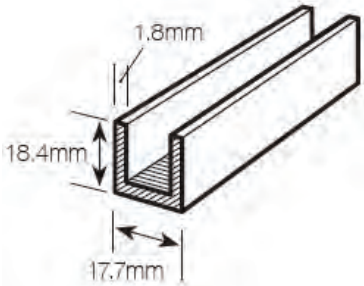
CH15 / CH16 / CH18 / CH25 / HS18 Channels



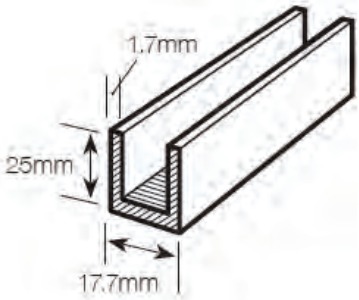
CH15



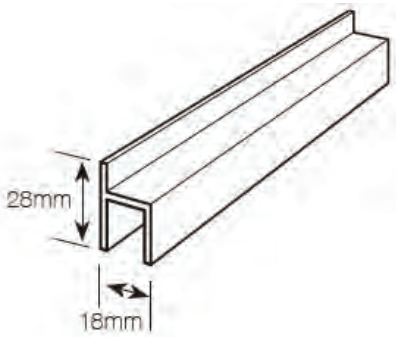
CH16



CH18



CH25



HS18

AVAILABLE FINISHES

- Polished anodised
- Satin anodised (except for CH25)
- Special Finishes on request, lead time applies

TECHNICAL DETAILS

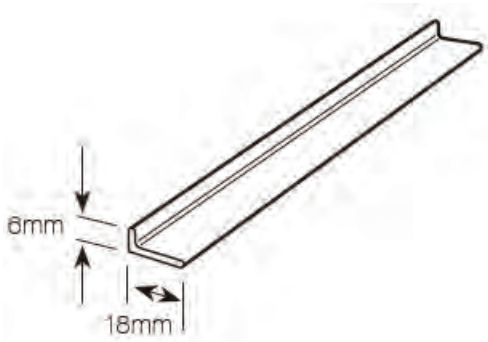
- Extruded aluminium

STOCK LENGTHS

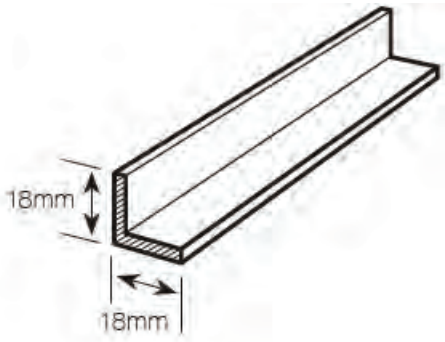
- CH15 - 3m
- CH16 - 2.5m
- CH18 - 2.1 or 3m
- CH25 - 2.1 or 3m
- HS18 - 3m

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AS1 / AS18 Angles



AS1



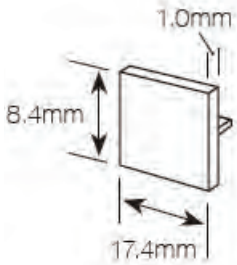
AS18

AVAILABLE FINISHES
- Polished anodised
- Satin anodised
- Special Finishes on request, lead time applies

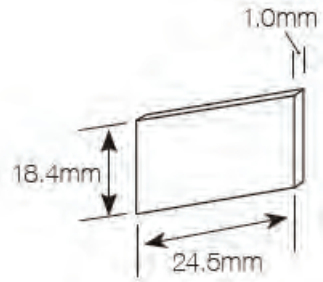
TECHNICAL DETAILS
- Extruded aluminium
- Cut lengths available

STOCK LENGTHS
- AS1 – 2m
- AS18 – 3m

EC1 / EC45 End Caps



EC1



EC45

AVAILABLE FINISHES
- Polished anodised
- Satin anodised
- Special Finishes on request, lead time applies

TECHNICAL DETAILS
- Extruded aluminium

STOCK LENGTHS
- EC1 to suit CH18
- EC45 to suit 45^0 mitre CH18/CH25

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GHA Solutions Warranty Information (DATED: 01 JULY 2017)

SHOWER HARDWARE

GHA Solutions guarantee our product against faulty workmanship or defective materials for a period of ten (10) years from the date of purchase.

Products will be replaced at no charge to the purchaser once the defect has been thoroughly inspected and confirmed.

This warranty does NOT apply if defects are found to be caused by the following:

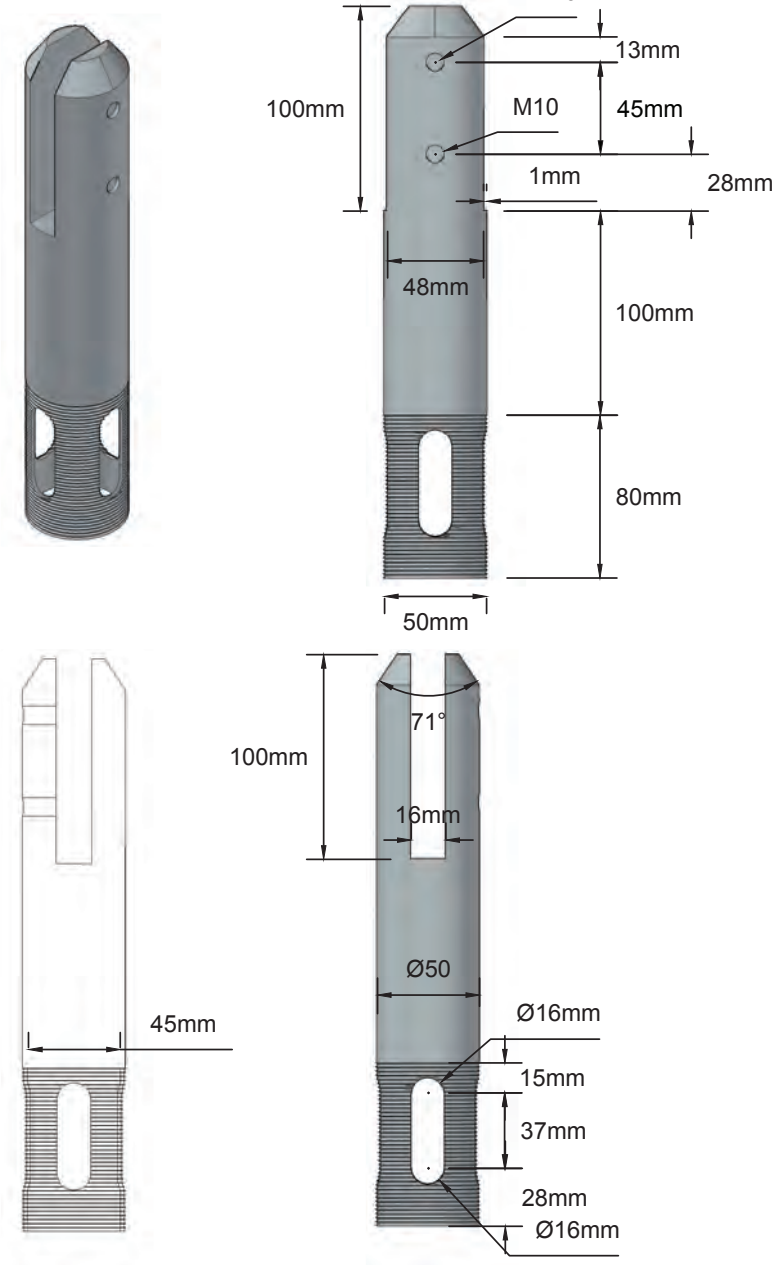
1. If the product has been altered in any way
2. The product has been subject to incorrect mechanical fixing techniques
3. The product has been installed outside of the specifications of its use
4. The product has been subject to abnormal stresses from loading, heat, building or foundation movement
5. Faulty workmanship of any person in the installation of the product
6. Defect in any framework or substrate to which the product has been installed supporting the product.

The replacement is solely for the product only. GHA Solutions will not be liable for the dismantling, return or reassembly of the product at site or to any structure to which it is affixed.

Repairs or replacement under this warranty do not extend the warranty period and do not initiate a new warranty period. The warranty period for any replacement parts ends together with the warranty for the entire product.

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FSCDRDM/FSCDRDS Core Drill Round Spigot



AVAILABLE FINISHES

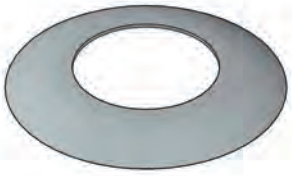
- Mirror
- Satin

TECHNICAL DETAILS

- Duplex 2205 Stainless Steel
- Friction fit
- Diameter 50 x 280mm
- Available in round with hole in glass

Spigot Round Cover

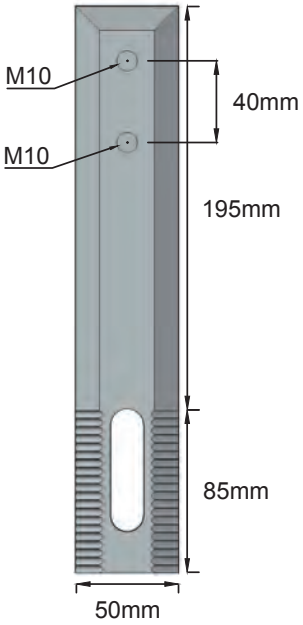
Diameter 100mm

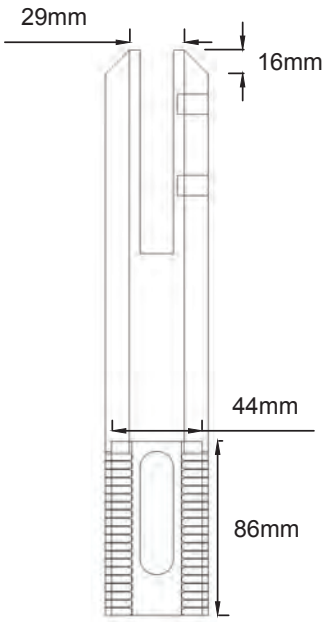


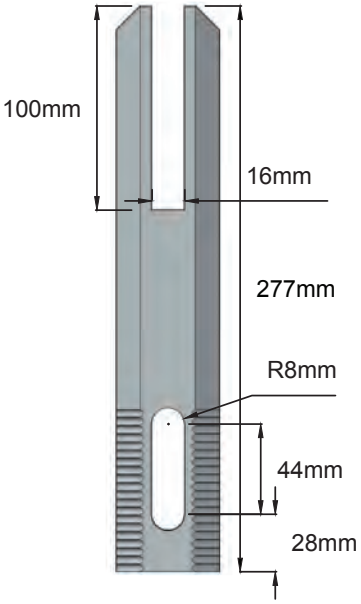
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FSSQCDM/FSSQCDS Core Drill Square Spigot









AVAILABLE FINISHES

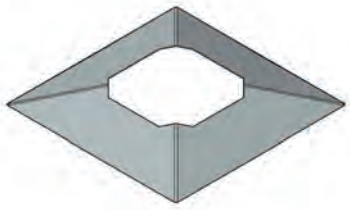
- Mirror
- Satin
- Black
- Non Conductive Silver
- Non Conductive Black

TECHNICAL DETAILS

- Duplex 2205 Stainless Steel
- Friction fit
- 50 x 48 x 280mm
- Available in round with hole in glass

Spigot Square Cover

Dimensions: 100mm x 100mm



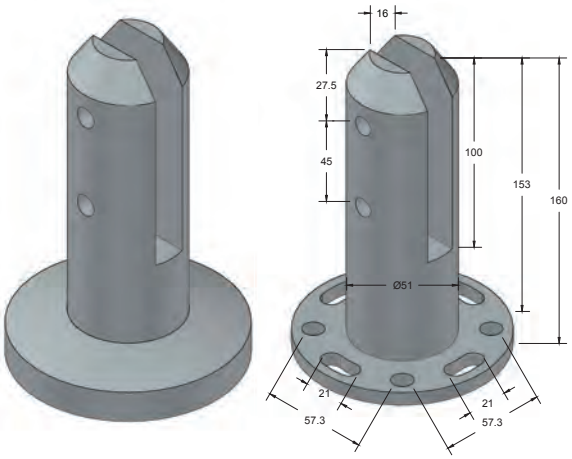
ALL NEW

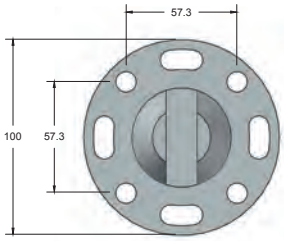
NON-CONDUCTIVE POWDER COATING POOL FENCING SPIGOT

Certified compliant with AS3000 by NATA accredited lab.

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FSBMRDM/FSBMRDS Base Mount Round Spigot





AVAILABLE FINISHES

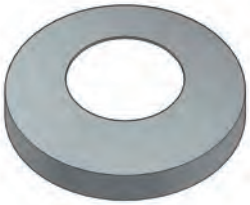
- Mirror
- Satin

TECHNICAL DETAILS

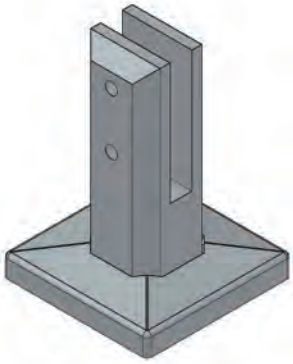
- Duplex 2205 Stainless Steel
- Friction fit
- Diameter 50 x 180mm
- Available in round with hole in glass

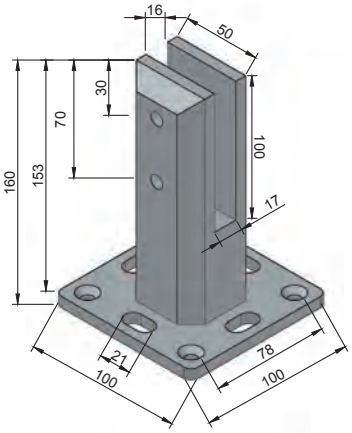
Spigot Round Cover

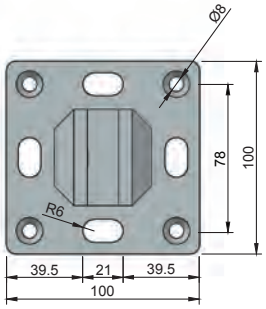
Diameter 105mm



FSBMSQM/FSBMSQS Base Mount Square Spigot







AVAILABLE FINISHES

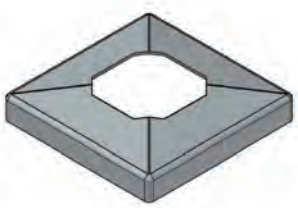
- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Duplex 2205 Stainless Steel
- Friction fit
- 50 x 48 x 180mm
- Available in round with hole in glass

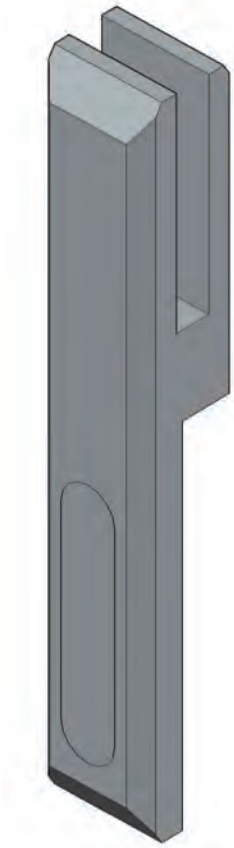
Spigot Square Cover

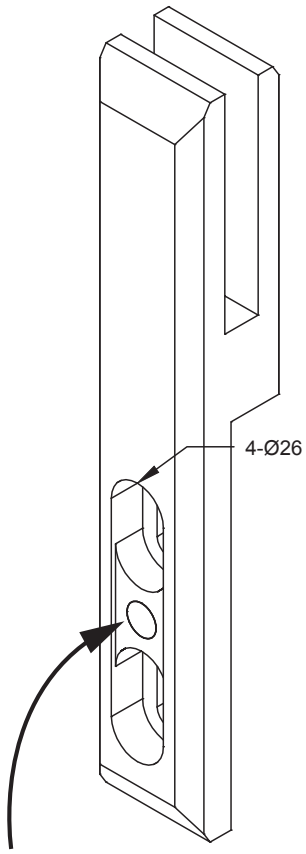
105 x 105mm



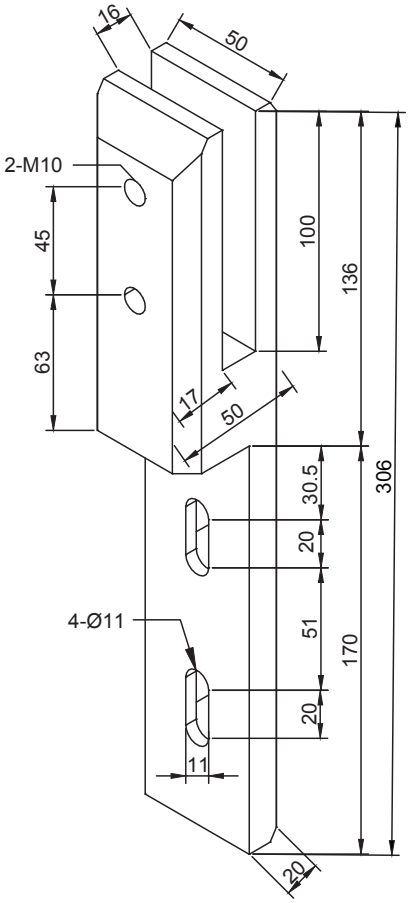
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GHA Corner Fix – Friction Fit





STRONG MAGNET USED TO HOLD COVER PLATE



AVAILABLE FINISHES

- Mirror
- Satin
- Black

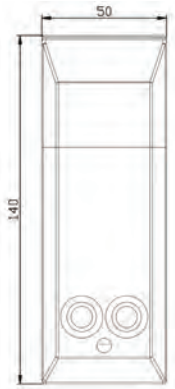
TECHNICAL DETAILS

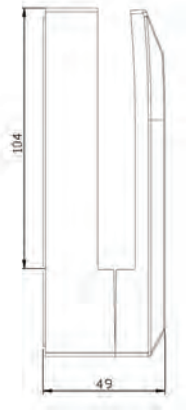
- 12mm glass
- Duplex 2205 Stainless Steel

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GHA Side Mount – Adjustable







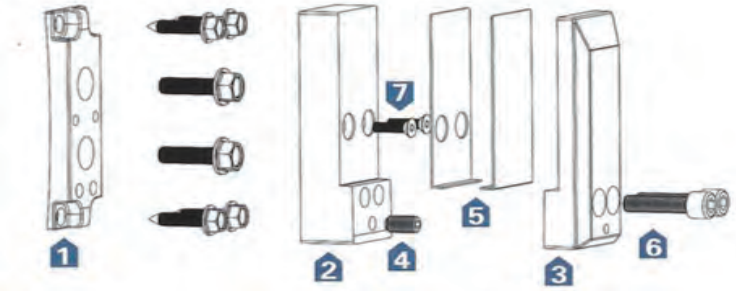
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Adjustable body
- Friction fit
- NO holes needed in glass

1. Wall bracket
2. Adjustable body
3. Surface cover
4. Adjustment grub screw
5. Spacers
6. Threaded bolts
7. Countersunk screws



INSTALLATION INSTRUCTIONS

Step1. Drill and fix the wall bracket

Using the wall bracket to mark out the hole positions, and drill holes accordingly. Then fix the Wall Bracket on the wall and tighten firmly.

Step 2. Fix the adjustable body

Using countersunk screws to fix the adjustable body to wall bracket, and tighten with Allen Key.

Step3. Fix the surface cover on wall bracket.

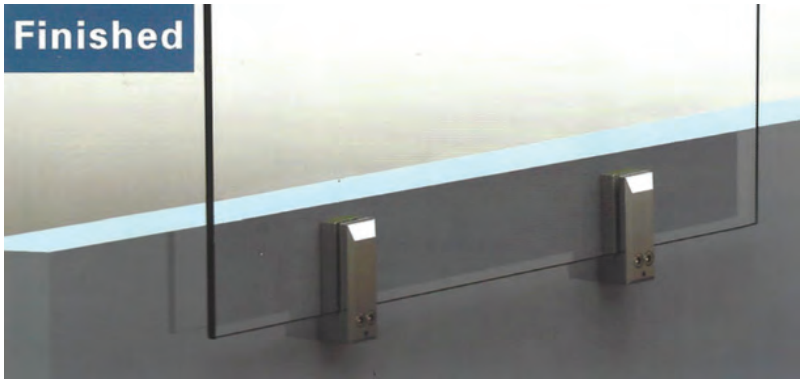
Put surface cover on wall bracket. Don't tighten too firmly as glass needs room to be inserted.

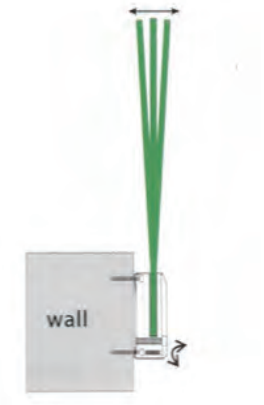
Step 4. Install the glass panel

Insert glass panel inside GHA Side Mount Spigot, and adjust the glass panel to make it plumb.

A. To deflect inward, turn clockwise the adjustment grub screw to secure glass panel in place then tighten firmly the threded bolts.

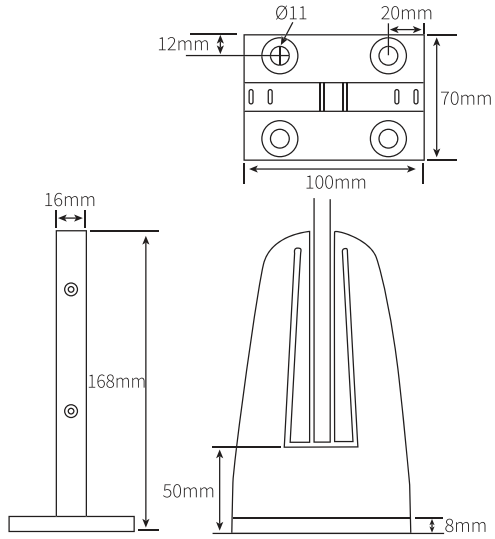
B. To deflect outward, turn anti-clockwise the adjustment grub screw to secure glass panel in place then tighten firmly the threaded bolts.

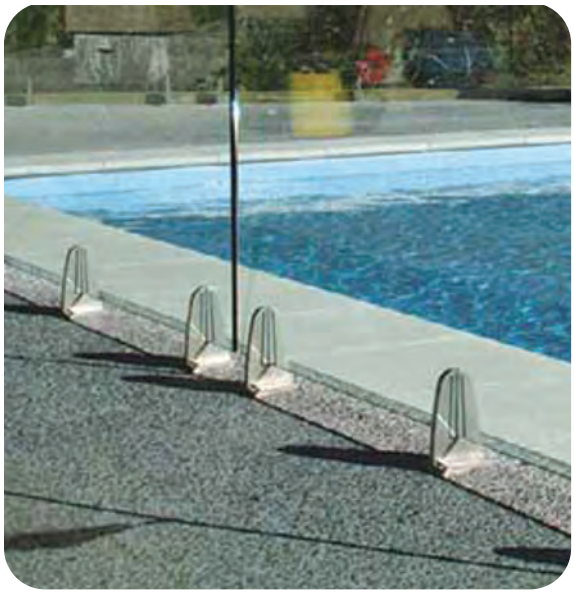




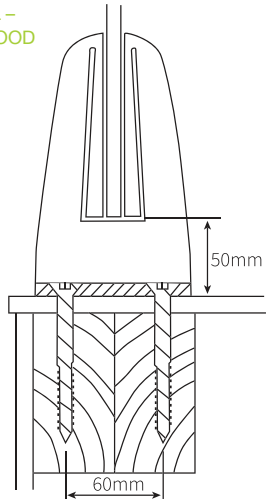
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NBF168 Nautech Strut Post Base Fix

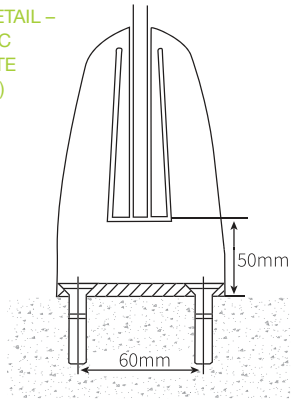




FIXING DETAIL – DOMESTIC WOOD FIX (CSW100)



FIXING DETAIL – DOMESTIC CONCRETE FIX (MF43)



AVAILABLE FINISHES

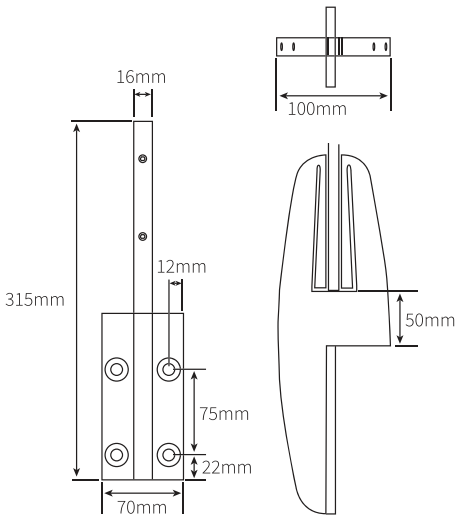
- Polished Stainless
- Satin Stainless

TECHNICAL DETAILS

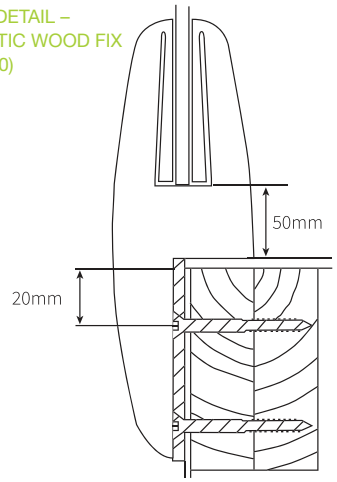
- The system is a unique strut post design which is unobtrusive, strong and durable
- The system features horizontal and vertical adjustment for the glass
- The vertical adjustment is attained by the use of a patented clamping and adjustment technique which is the heart of the fitting, it clamps the glass without the need for holes and this saves on glass processing costs and installation time
- The strut post is 168mm high and provides a 50mm clearance between the top of the deck and underside of the glass pane
- The NauTech system has been tested in NZ to AS/NZS 1170 barrier loadings in accordance with B1/VM1 Amendment
- Suits 12mm glass thickness (no holes or cutouts required)
- Domestic and commercial balustrades and pool fences
- Base fixing to masonry, timber and steel structures
- 16mm thick 316 grade stainless steel

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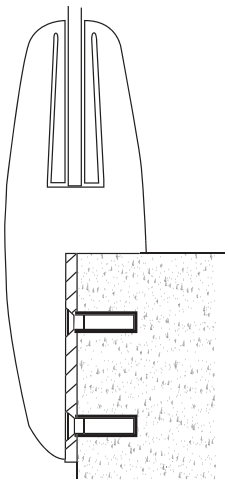
NSF315 Nautech Strut Post Face Fix



FIXING DETAIL – DOMESTIC WOOD FIX (CSW100)



FIXING DETAIL – DOMESTIC CONCRETE FIX (MF43)





AVAILABLE FINISHES

- Polished Stainless
- Satin Stainless

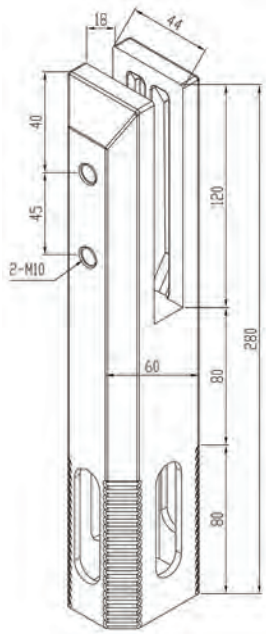
TECHNICAL DETAILS

- The system is a unique strut post design which is unobtrusive, strong and durable
- The system features horizontal and vertical adjustment for the glass
- The vertical adjustment is attained by the use of a patented clamping and adjustment technique which is the heart of the fitting, it clamps the glass without the need for holes and this saves on glass processing costs and installation time
- The strut post is 168mm high and provides a 50mm clearance between the top of the deck and underside of the glass panel
- The NauTech system has been tested in NZ to AS/NZS 1170 barrier loadings in accordance with B1/VM1 Amendment
- Suits 12mm glass thickness (no holes or cutouts required)
- Domestic and commercial balustrades and pool fences
- Base fixing to masonry, timber and steel structures
- 16mm thick 316 grade stainless steel

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FS-15SC Heavy Duty Core Drill Spigot





AVAILABLE FINISHES

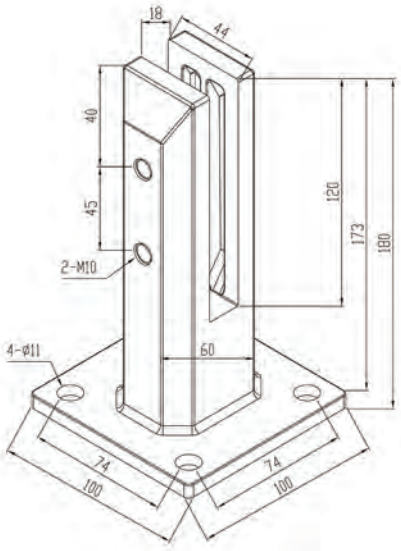
- Mirror
- Satin

TECHNICAL DETAILS

- Suits 15mm glass

FS-15SD Heavy Duty Square Deck Mount Spigot





AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suits 15mm glass

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12mm Frameless Pool Glass Fencing
No holes with 2mm radius corners

CODE	WIDE (mm)	HEIGHT (mm)	AREA (sqm)
PG12-100	100	1170	0.12
PG12-150	150	1170	0.18
PG12-200	200	1170	0.23
PG12-250	250	1170	0.29
PG12-300	300	1170	0.35
PG12-350	350	1170	0.41
PG12-400	400	1170	0.47
PG12-450	450	1170	0.53
PG12-500	500	1170	0.59
PG12-550	550	1170	0.64
PG12-600	600	1170	0.70
PG12-650	650	1170	0.76
PG12-700	700	1170	0.82
PG12-750	750	1170	0.88
PG12-800	800	1170	0.94
PG12-850	850	1170	0.99
PG12-900	900	1170	1.05
PG12-950	950	1170	1.11
PG12-1000	1000	1170	1.17
PG12-1050	1050	1170	1.23
PG12-1100	1100	1170	1.29
PG12-1150	1150	1170	1.35
PG12-1200	1200	1170	1.4
PG12-1250	1250	1170	1.46
PG12-1300	1300	1170	1.52
PG12-1350	1350	1170	1.58
PG12-1400	1400	1170	1.64
PG12-1450	1450	1170	1.7
PG12-1500	1500	1170	1.76
PG12-1550	1550	1170	1.81
PG12-1600	1600	1170	1.87
PG12-1650	1650	1170	1.93
PG12-1700	1700	1170	1.99
PG12-1750	1750	1170	2.05
PG12-1800	1800	1170	2.11
PG12-1850	1850	1170	2.16
PG12-1900	1900	1170	2.22
PG12-1950	1950	1170	2.28
PG12-2000	2000	1170	2.34

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12mm Hinge Panels for Polaris
Spring Hinge

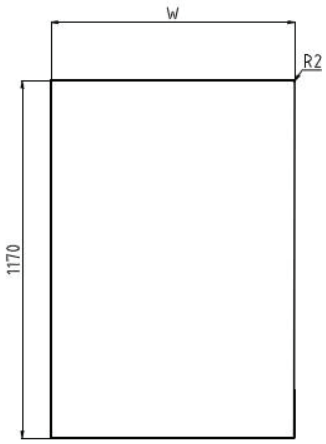
CODE	WIDE (mm)	HEIGHT (mm)	AREA (sqm)
PGH12-800	800	1170	0.93
PGH12-1000	1000	1170	1.17
PGH12-1100	1100	1170	1.32
PGH12-1200	1200	1170	1.41
PGH12-1300	1300	1170	1.56
PGH12-1400	1400	1170	1.64
PGH12-1500	1500	1170	1.80
PGH12-1600	1600	1170	1.87
PGH12-1700	1700	1170	2.04
PGH12-1800	1800	1170	2.16
PGH12-1900	1900	1170	2.28
PGH12-2000	2000	1170	2.40

12mm Polaris Hinge Gate Panel

CODE	WIDE (mm)	HEIGHT (mm)	AREA (sqm)
PGHG12-800	800	1170	0.93
PGHG12-850	850	1170	1.05
PGHG12-900	900	1170	1.05

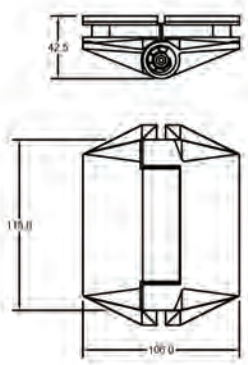
10mm Spring Hinge Gate Panel

CODE	WIDE (mm)	HEIGHT (mm)	AREA (sqm)
PGSG8-800	800	1170	0.93
PGHG8-850	850	1170	1.05
PGHG8-900	900	1170	1.05



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Polaris Hinge Glass to Glass and Polaris Latch

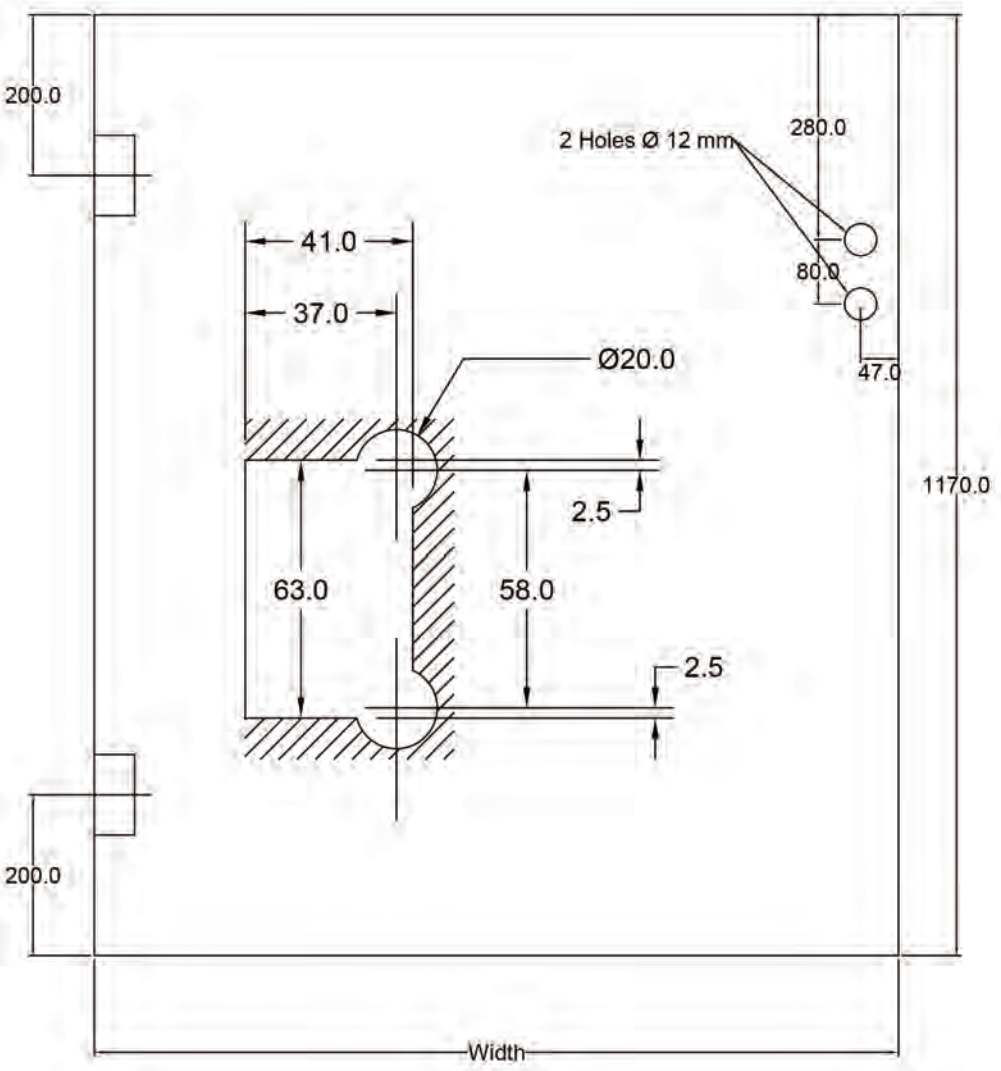


AVAILABLE FINISHES

- Polish
- Satin
- Black

TECHNICAL DETAILS

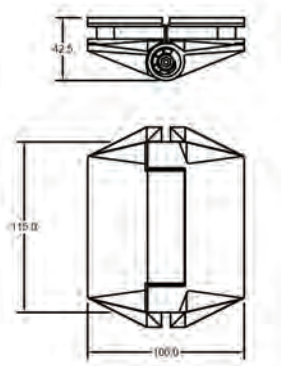
- 12mm clear toughened glass
- 4 x 2mm polish radius corner
- Glass to glass



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POLARIS
SOFT CLOSE HINGE

Polaris Glass to Glass Cut Out Standard Latch

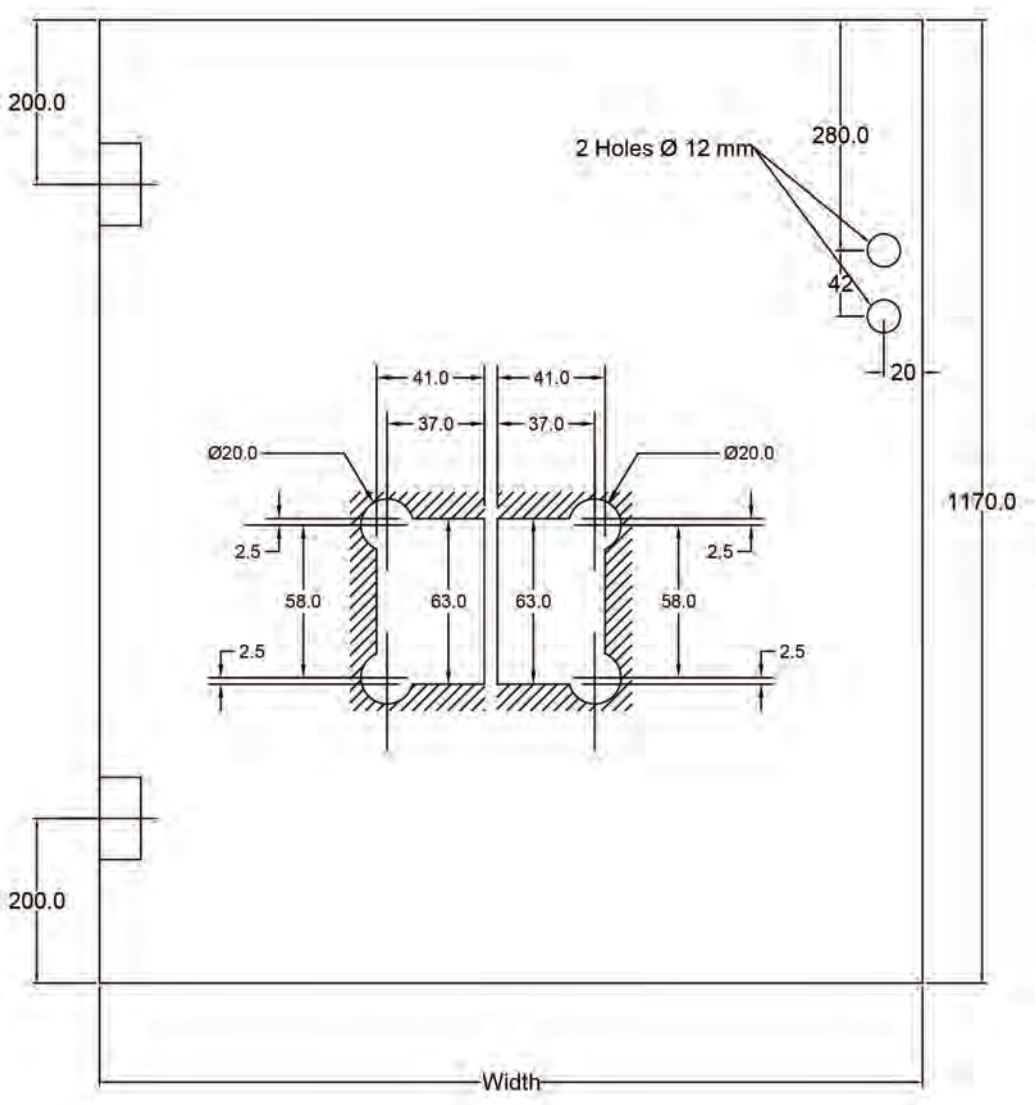


AVAILABLE FINISHES

- Polish
- Satin
- Black

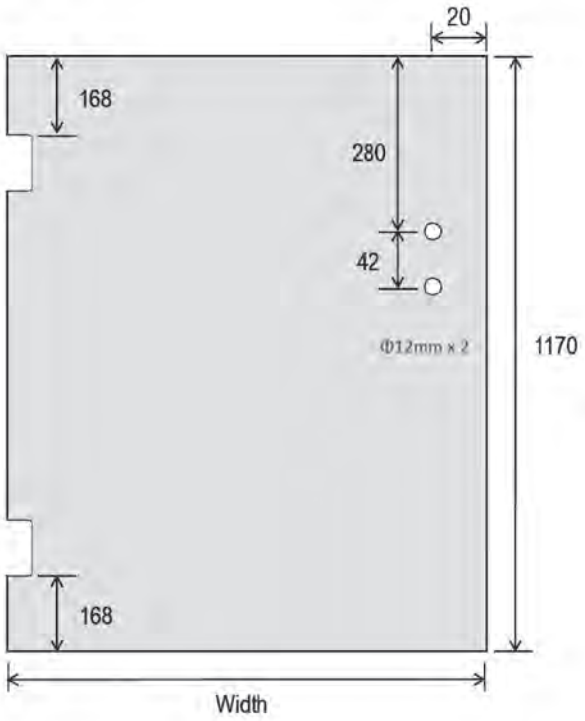
TECHNICAL DETAILS

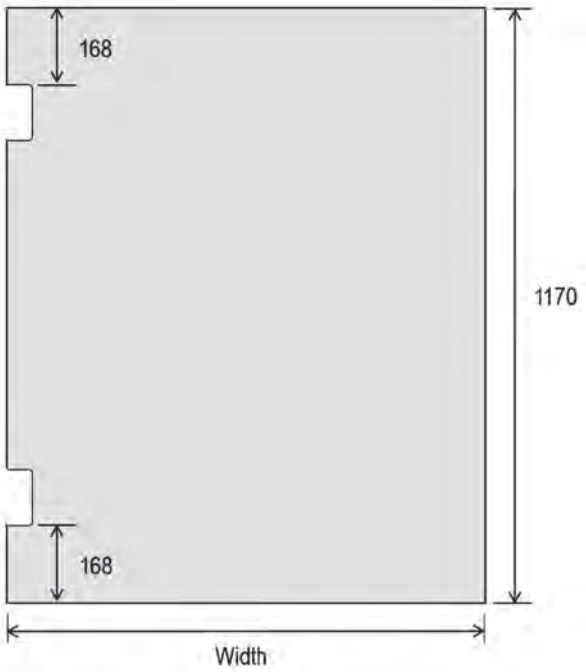
- 12mm clear toughened glass
- 4 x 2mm polish radius corner
- Glass to glass



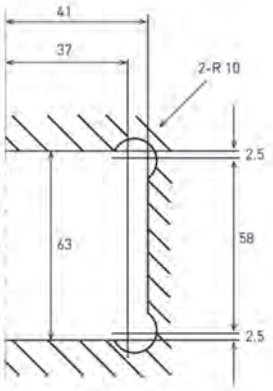
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12mm Clear Toughened Polaris Pool Gate, Hinge Panel and Standard Latch

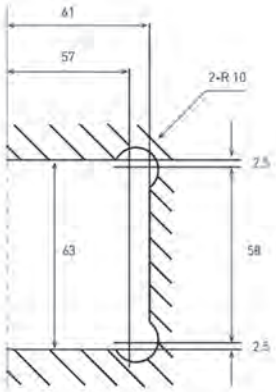




Glass to Glass



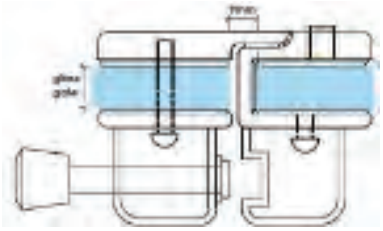
Glass to Wall / Post



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GHA Solutions
GLASS • HARDWARE • ALUMINIUM

POLARIS SOFT CLOSE HINGE

GLGGM/GLGGS Glass to Glass Latch



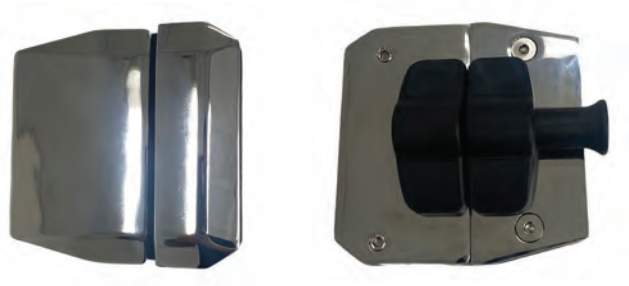
AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Suits 10mm and 12mm glass
- 316 Stainless Steel

PL-GGM/PL-GGS Polaris Latch



AVAILABLE FINISHES

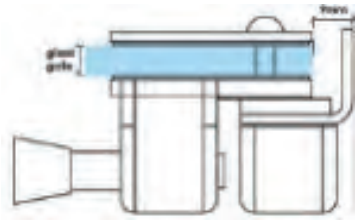
- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Suits 10mm and 12mm glass
- 316 Stainless Steel

* Note hole positions for Polaris Latch

GLGPM/GLGPS Glass to Square Post Latch



AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Suits 10mm and 12mm glass
- 316 Stainless Steel

PL-GWM/PL-GWS Polaris Latch



AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Suits 10mm and 12mm glass
- 316 Stainless Steel

* Note hole positions for Polaris Latch

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GLRDM/GLRDS Glass to Round Post Latch



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suits 10mm and 12mm glass
- 316 Stainless Steel

PGL-L D&D Key Lock



AVAILABLE FINISHES

- Mirror
- Satin

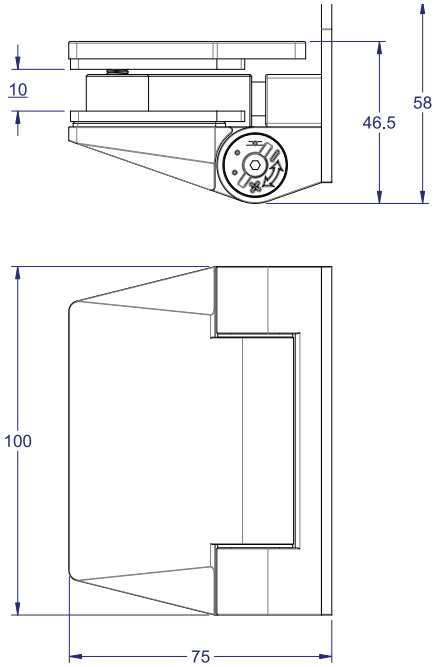
TECHNICAL DETAILS

- Retro fit all latches

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Polaris Glass to Wall





AVAILABLE FINISHES

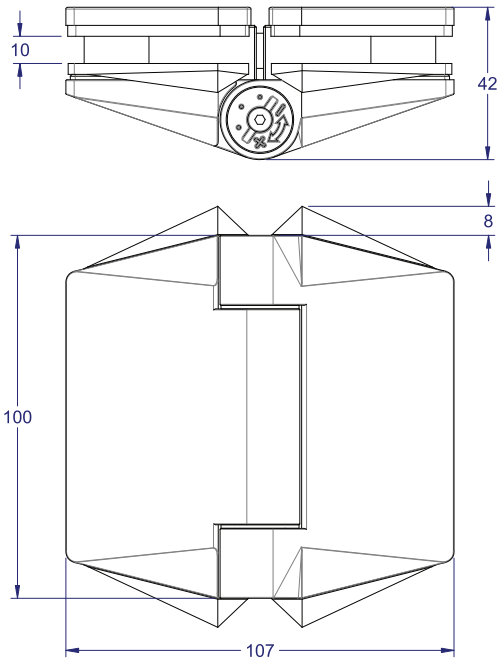
- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Magnets and Hydraulic Dampner
- Suits 10mm and 12mm glass

Polaris Glass to Glass





AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Magnets and Hydraulic Dampner
- Suits 10mm and 12mm glass

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GLOM/GLOS Glass to Glass External Applications



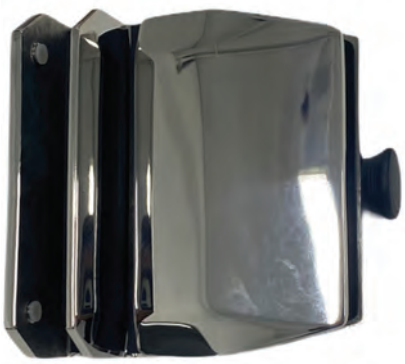
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Poolgate latch and keeper
- Suitable for 10mm and 12mm glass
- Suits holes in standard door

PL-GLOM/PL-GLOS Polaris Latch





AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Poolgate latch and keeper
- Suitable for 10mm and 12mm glass
- Suits holes in standard door

* Note hole positions for Polaris Latch

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POLARIS SOFT CLOSE HINGE

GLIM/GLIS Glass to Glass Internal Applications



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Poolgate latch and keeper
- Suitable for 10mm and 12mm glass
- Suits holes in standard door

PL-GLIM/PL-GLIS Polaris Latch





AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Poolgate latch and keeper
- Suitable for 10mm and 12mm glass
- Suits holes in standard door

* Note hole positions for Polaris Latch

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PGH-180A Glass to Glass Spring Hinge - Heavy Duty



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 10mm and 12mm glass

PGH-SA Glass to Square Post Spring Hinge - Heavy Duty



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 10mm and 12mm glass

PGH-RA Glass to Round Post Spring Hinge - Heavy Duty



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 10mm and 12mm glass

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SLH Heavy Duty Spring Hinge



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suits 10mm and 12mm glass

SHGGM Spring Hinges



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 10mm glass
- 316 Stainless Steel

SHGRDM/SHGSQM Spring Hinges



AVAILABLE FINISHES

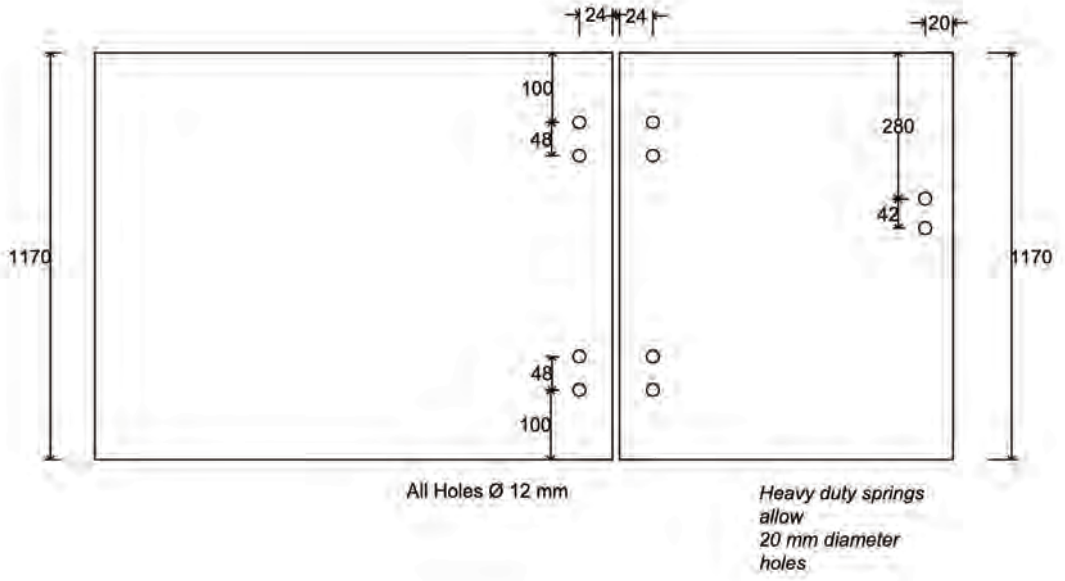
- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 10mm glass
- 316 Grade Stainless Steel

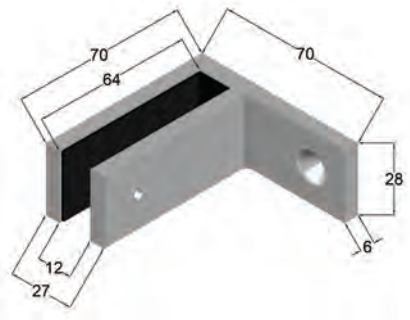
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Spring Hinge Panel and Gate Cut Out Details



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LP Wall Fixing Glass Clamp



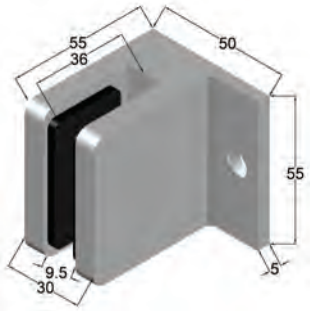
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 12mm glass

LPW Wall Fixing Glass Clamp



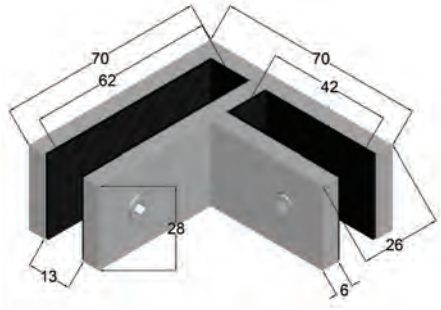
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 12mm glass

LP-90M/S 90° Glass to Glass Clamp



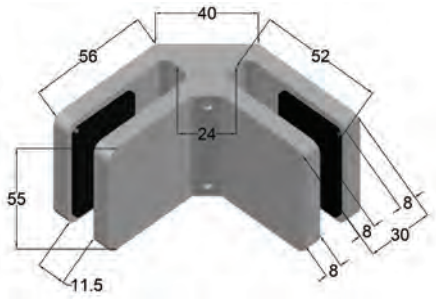
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 12mm glass

LP-90MW/S 90° Glass to Glass Clamp



AVAILABLE FINISHES

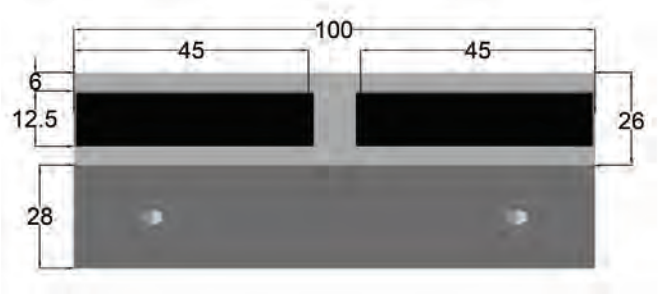
- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 12mm glass

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LP-180M/S 180° Glass to Glass Clamp



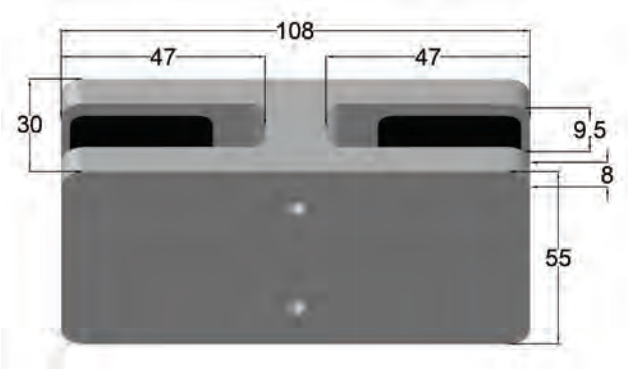
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 12mm glass

LP-180WM/S 180° Glass to Glass Clamp



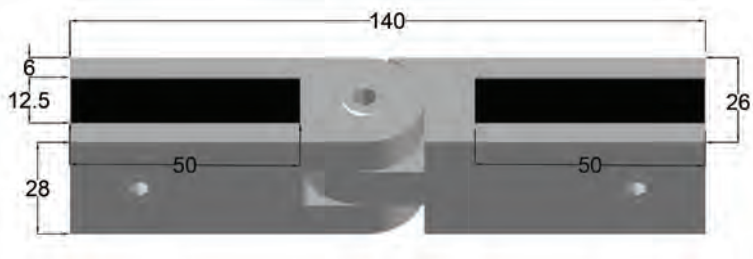
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Suitable for 12mm glass

LP-ADJ Adjustable Glass to Glass Clamp



AVAILABLE FINISHES

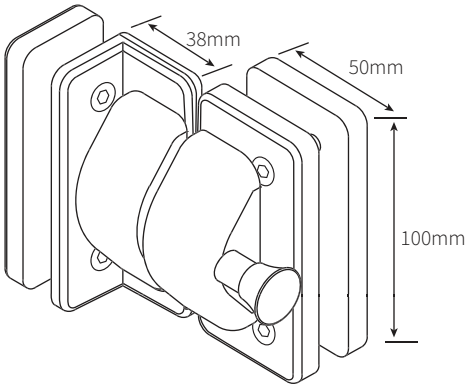
- Mirror
- Satin

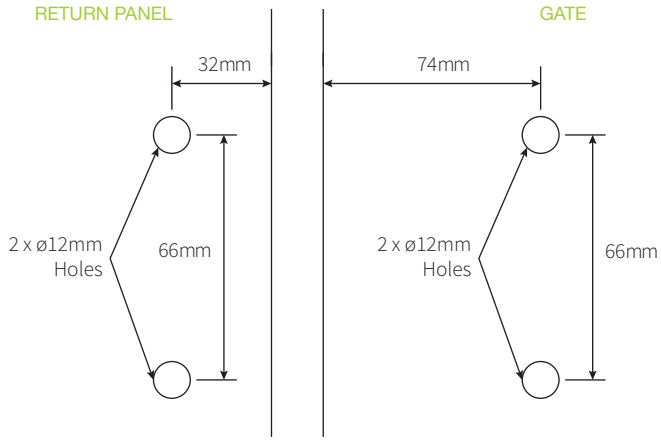
TECHNICAL DETAILS

- Suitable for 12mm glass

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PL290 Pool Gate Latch and Keeper – Glass to Glass 90°





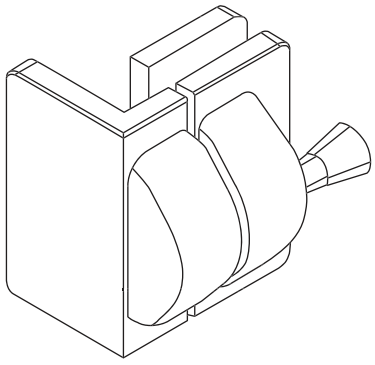
AVAILABLE FINISHES

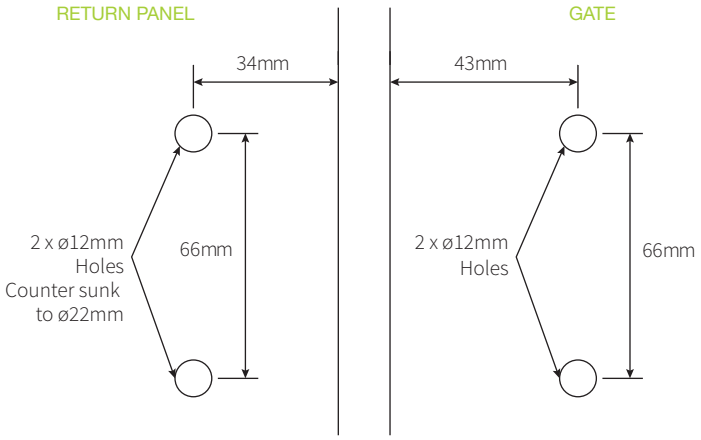
- Polished Stainless Steel
- Satin Stainless Steel

TECHNICAL DETAILS

- Designed for a frameless glass pool gate that closes to a post or wall
- Self latching using “Magna” latch
- Minimum door height 1.2 metres
- Suitable for 10mm and 12mm glass thickness, can be adapted for other sizes
- 316 stainless steel

PL290.R Pool Gate Latch and Keeper – Glass to Glass 90°





AVAILABLE FINISHES

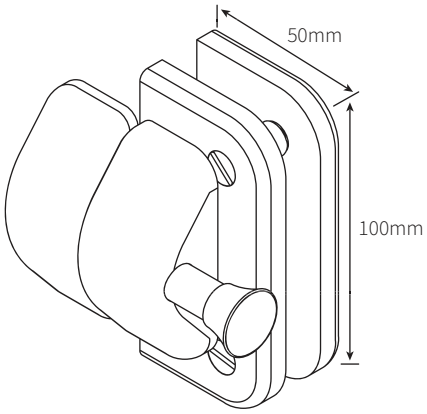
- Polished Stainless Steel
- Satin Stainless Steel

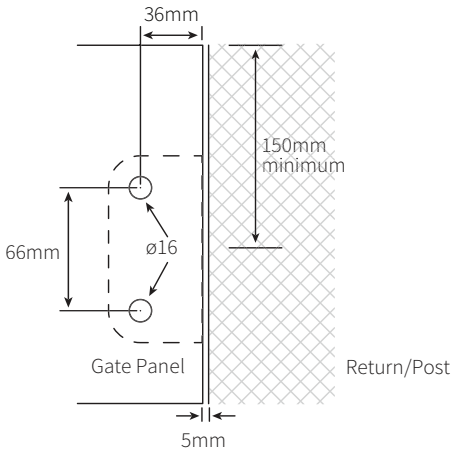
TECHNICAL DETAILS

- Designed for a frameless glass pool gate that closes to a post or wall
- Self latching using “Magna” latch
- Minimum door height 1.2 metres
- Suitable for 10mm and 12mm glass thickness, can be adapted for other sizes
- 316 stainless steel

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PL1 Pool Gate Latch and Strike – Glass to Post





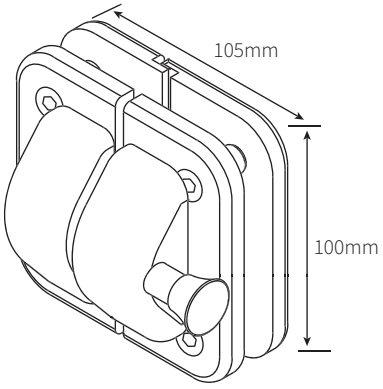
AVAILABLE FINISHES

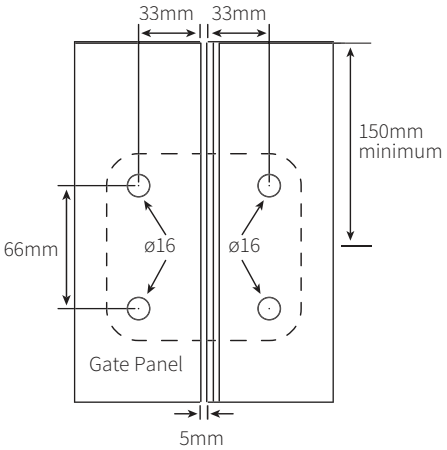
- Polished Stainless Steel
- Satin Stainless Steel

TECHNICAL DETAILS

- Designed for a frameless glass pool gate that closes to a post or wall
- Self latching using “Magna” latch
- Minimum door height 1.2 metres
- Suitable for 10mm and 12mm glass thickness, can be adapted for other sizes
- 316 stainless steel

PL2 Pool Gate Latch and Keeper Glass to Glass





AVAILABLE FINISHES

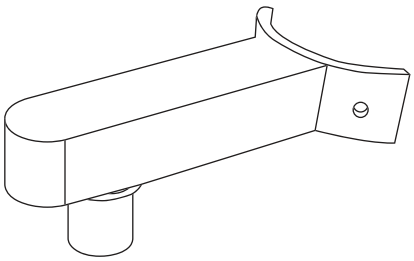
- Polished Stainless Steel
- Satin Stainless Steel

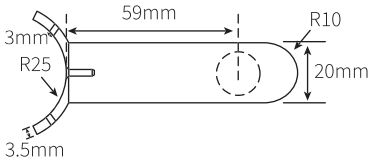
TECHNICAL DETAILS

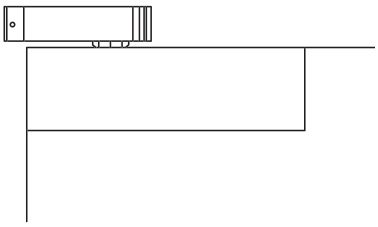
- Designed for a frameless glass pool gate and side panel
- Self latching using “Magna” latch
- Minimum door height 1.2 metres
- Suitable for 10mm and 12mm glass thickness, can be adapted for other sizes
- 316 stainless steel

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FPF5.P Pivot Top Arm – Glass to Round Post







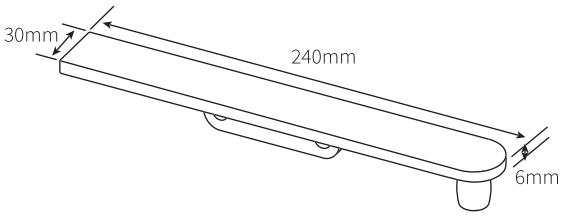
AVAILABLE FINISHES

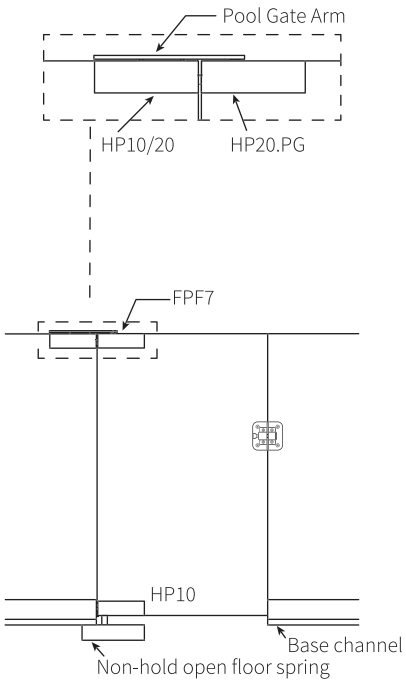
- Polished Stainless Steel
- Satin Stainless Steel

TECHNICAL DETAILS

- Use in conjunction with SBC42400 top patch to allow the gate to pivot from 50mm diameter post
- Suitable for 50mm diameter posts
- 316 grade stainless steel

FPF7 Pivot Top – Bracket





AVAILABLE FINISHES

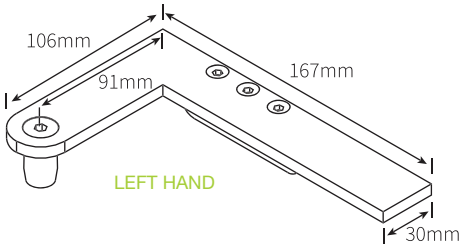
- Polished Stainless Steel
- Satin Stainless Steel

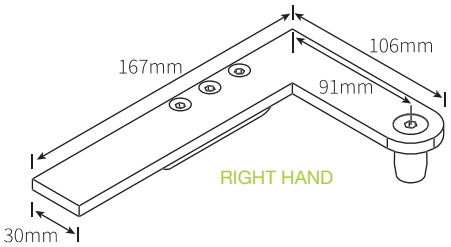
TECHNICAL DETAILS

- Use in conjunction with HP20/HP10 top patch fittings that allow them to work as a top pivot set
- Suitable for mounting a glass gate to a glass balustrade
- 316 grade stainless steel

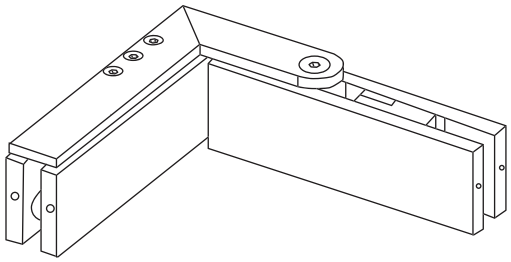
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FPF790.L (LEFT) / FPF790.R (RIGHT) Pivot Arm – Top 90°

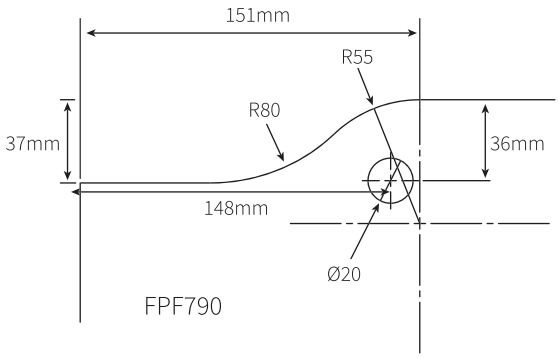




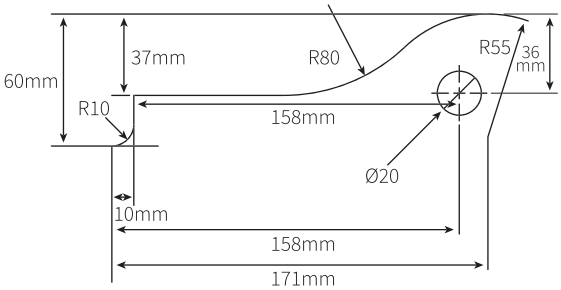
ASSEMBLY (RIGHT HAND SIDE)



GLASS DETAIL – RETURN PANEL



GLASS DETAIL – DOOR



AVAILABLE FINISHES

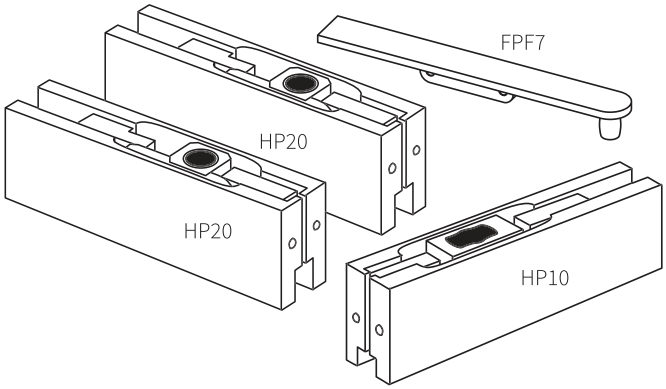
- Polished Stainless Steel
- Satin Stainless Steel

TECHNICAL DETAILS

- Use in conjunction with HP20/HP10 top patch fittings that allow them to work as a top pivot set
- Suitable for mounting a glass gate to a glass balustrade
- 316 grade stainless steel

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FPF7.KIT Pivot Top – Set Kit



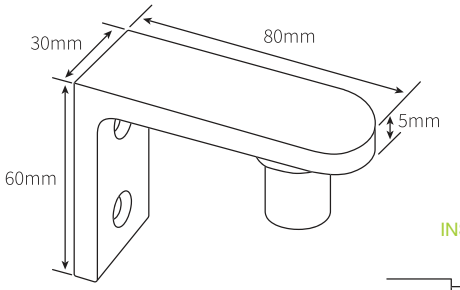
AVAILABLE FINISHES

- Polished Stainless Steel
- Satin Stainless Steel

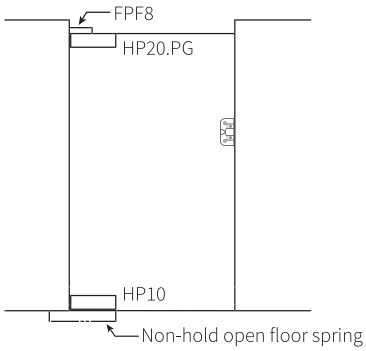
TECHNICAL DETAILS

- Kit includes:
  - Two HP20
  - One HP10
  - One FPFT
- 316 grade stainless steel

FPF8 Pivot Arm Top – Glass to Solid Wall



INSITU APPLICATION



AVAILABLE FINISHES

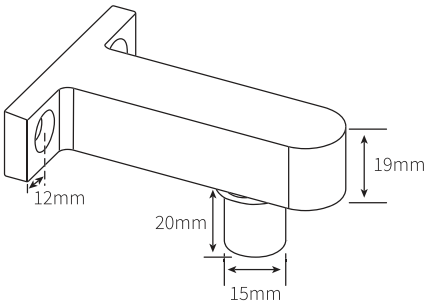
- Polished Stainless Steel
- Satin Stainless Steel

TECHNICAL DETAILS

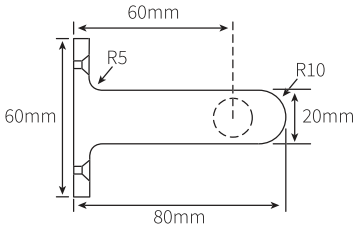
- Kit includes:
  - Two HP20
  - One HP10
  - One FPFT
- 316 grade stainless steel

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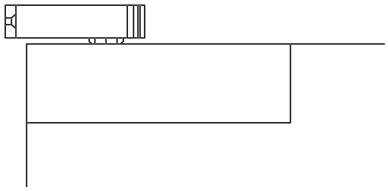
FPF5 Pivot Arm – Glass to Wall



GLASS CUT OUT DETAIL



INSITU APPLICATION



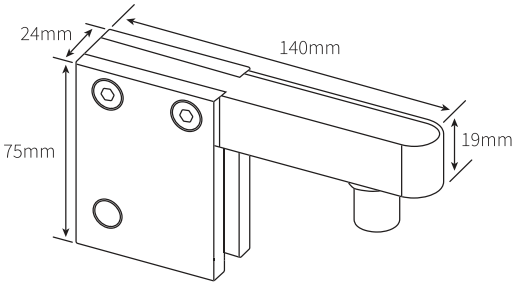
AVAILABLE FINISHES

- Polished Stainless Steel
- Satin Stainless Steel

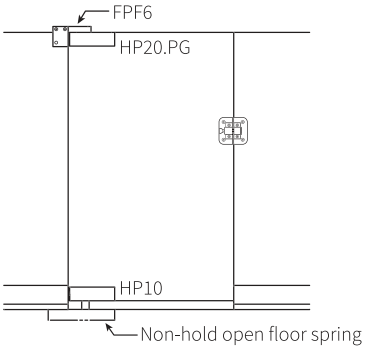
TECHNICAL DETAILS

- Kit includes:
  - Two HP20
  - One HP10
  - One FPFT
- 316 grade stainless steel

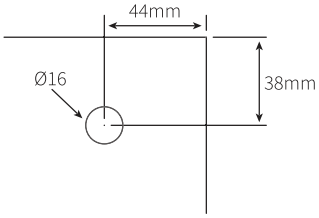
FPF6 Pivot Arm Top – Glass to Glass



INSITU APPLICATION



GLASS CUT OUT DETAIL



AVAILABLE FINISHES

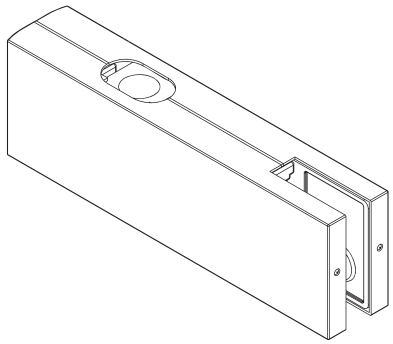
- Polished Stainless Steel
- Satin Stainless Steel

TECHNICAL DETAILS

- Use in conjunction with elite glass standard patch fittings and floor springs
- Suitable for mounting a glass gate to a glass balustrade
- 316 grade stainless steel

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HP20.PG Top Patch Fitting – Suitable for Pool Gate Pivots



AVAILABLE FINISHES

- Polished Stainless Steel
- Satin Stainless Steel

TECHNICAL DETAILS

- Adjustable pivot insert
- Features concealing cover plates
- Suitable for Eliteglass pool gate fittings - FPF5/ FPF6/FPF7 and FPF8

TEA STAINING

WHAT IS TEA STAINING?

Tea staining can be described as: discoloration of the surafce of stainless steel that does not affect the structural integrity or the longevity of the material. Visually it is a discoloration of the metal surface, which tends to follow the ‘grain’ of any surface finish. Although unpleasant to look at, it is not a serious form of corrosion. Aesthetically it is unacceptable so the following information is designed to help you understand its causes and institute a plan to keep your hardware looking better for longer.

WHERE AND WHY DOES TEA STAINING OCCUR?

Tea staining of stainless steels occurs most commonly in coastal areas and becomes progressively worse the closer you get to water. Other factors such as pollution, higher temperatures and humidity can also increase the effect. Tea staining occurs when particles gather in surface troughs of the metal and oxidase or corrode. For this reason, rougher surfaces promote tea staining. Smoother surface finishes are cleaner between washes and dont have surface grooves where chlorides (salt) and other contaminants can collect, concentrate and cause problems.

HOW TO MINIMISE TEA STAINING?

Specify and insist on the right grade - Grade 316 should be selected as a minimum within 5km of the coast, especially outside.

Surface finish - The rule of thumb for surface finish is the smoother the finish, the better the resistance to tea staining.

Perform regular maintenance - Wash regularly with clean fresh water, mild detergent and a cloth or soft brush. After washing rince in clean water and wipe the surface dry with a soft absorbant cloth remembering to go with the grain on brushed stainless steel. Generally, you should wash your stainless steel every time you wash your windows or every three months. Do not use abrasive cleaners or a scouring pad of any type as they may cause excessive wear and dull the finish. Even smooth stainless steel finishes in coastal environments may show tea staining if not washed regularly.

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TEA STAINING CONT.

With a little bit of care, you can radically minimise, if not prevent tea staining and get years of visual enjoment from your stainless steel. It must be recognised that keeping a pristine finish requires understanding, additional effort and usually extra cost in the first instance. It is all about determining your expectations of the hardware and planning to achieve and maintain the visual appeal.

TEA STAINING REMOVAL

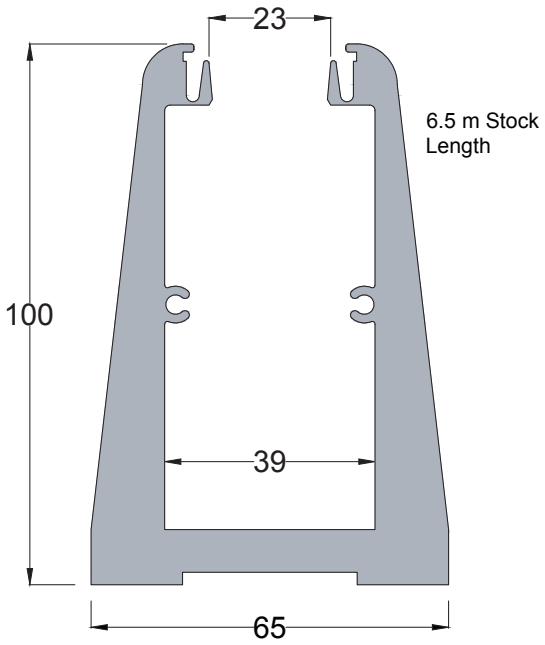
Brown discoloration or tea staining of stainless steel in coastal environments is a common problem, but luckily it is one that can be prevented. If you have tea staining there are a few steps to take to bring your stainless-steel back to “as new” condition.

Get a specialist cleaning product such as the 3M Stainless Steel cleaner and a non-scratch cleaning sponge, both readily available from your supermarket.

Apply clean water with the cleaning sponge and rub gently. If the mark won’t shift, it may be necessary to use a stainless-steel cleaner, in which case apply the cleaner and rub gently. An old toothbrush can be used to get into any nooks and crannies. After cleaning it is important to rinse the stainless steel with clean fresh water and buff with a soft cloth. Remember to always rub with the grain, NEVER across as you will spoil the finish and the stainless can lose its shine. Also, NEVER use steel wool to clean stainless steel. It is usually made of carbon steel and the fragments left behind as well as scratching the surface will rust onto the stainless-steel surface. If you must use a scourer, use stainless steel wool or a Scotch rite plastic scourer. This will scratch the surface, but will not leave fragments behind to go rusty. On polished stainless steel surfaces this will damage the surface and is not recommended.

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GHAT Balustrade Glazing Channel



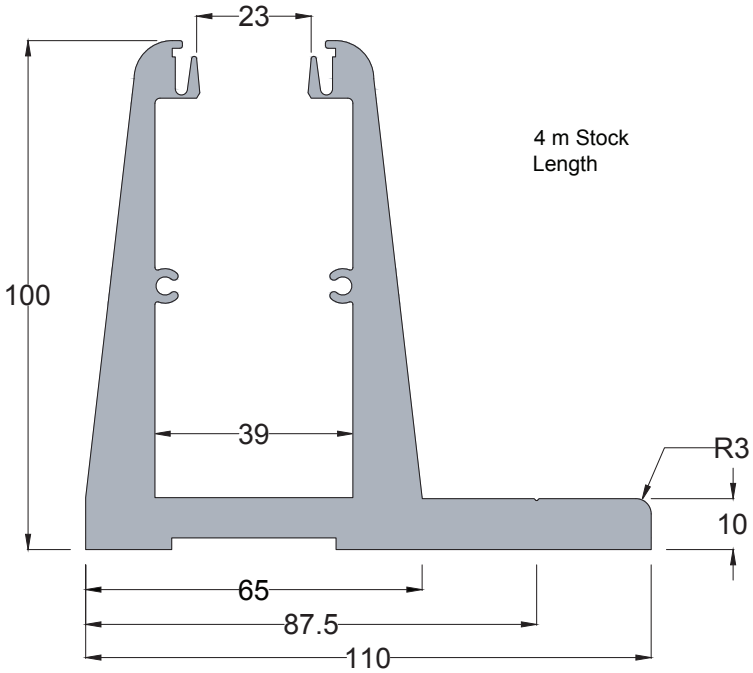
AVAILABLE FINISHES

- Mill finish
- Special colours on request

TECHNICAL DETAILS

- 6.5m stock length
- Suitable for 12mm glass

GHAT-LEG Balustrade Glazing Channel



AVAILABLE FINISHES

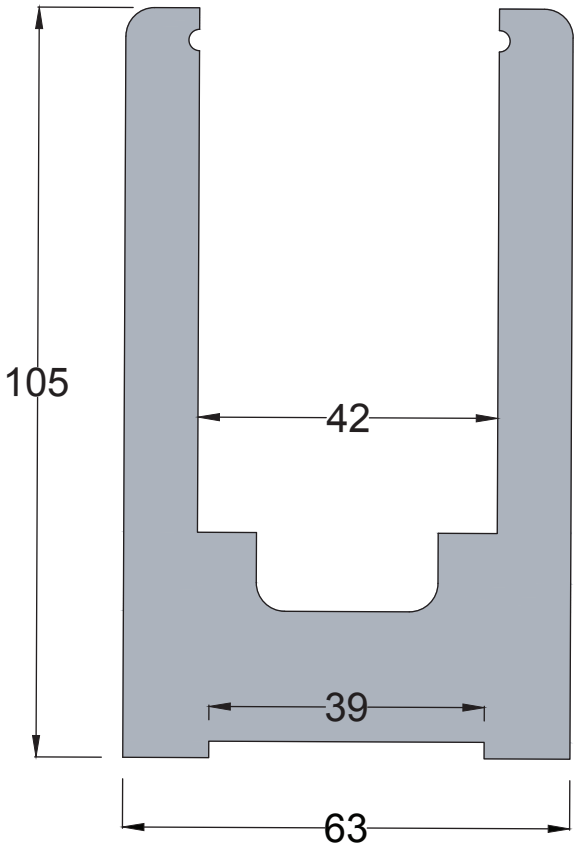
- Mill finish
- Special colours on request

TECHNICAL DETAILS

- 4m stock length
- Suitable for 12mm glass

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GHAL Balustrade Glazing Channel



Predrilled

AVAILABLE FINISHES

- Mill finish
- Special colours on request

TECHNICAL DETAILS

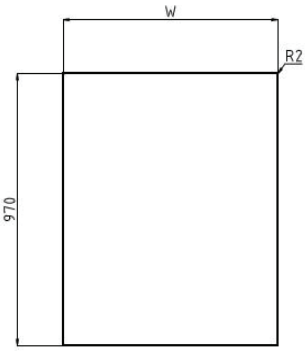
- 6m stock length
- Suitable for 12 and 15mm glass

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GLASS BALUSTRADE PANELS 12mm Standard Panels

12mm Standard Panels with Polished Edges & 2mm Polished Radius

CODE	WIDE (mm)	HEIGHT (mm)	AREA (sqm)
BG12-100	100	970	0.10
BG12-150	150	970	0.15
BG12-200	200	970	0.19
BG12-250	250	970	0.24
BG12-300	300	970	0.29
BG12-350	400	970	0.34
BG12-400	400	970	0.38
BG12-450	450	970	0.44
BG12-500	500	970	0.48
BG12-550	550	970	0.53
BG12-600	600	970	0.58
BG12-650	650	970	0.63
BG12-700	700	970	0.67
BG12-750	750	970	0.73
BG12-800	800	970	0.77
BG12-850	850	970	0.82
BG12-900	900	970	0.87
BG12-950	950	970	0.92
BG12-1000	1000	970	0.97
BG12-1050	1050	970	1.01
BG12-1100	1100	970	1.06
BG12-1150	1150	970	1.11
BG12-1200	1200	970	1.16
BG12-1250	1250	970	1.21
BG12-1300	1300	970	1.26
BG12-1350	1350	970	1.3
BG12-1400	1400	970	1.36
BG12-1450	1450	970	1.4
BG12-1500	1500	970	1.45
BG12-1550	1550	970	1.5
BG12-1600	1600	970	1.55
BG12-1650	1650	970	1.6
BG12-1700	1700	970	1.65
BG12-1750	1750	970	1.7
BG12-1800	1800	970	1.75
BG12-1850	1850	970	1.79
BG12-1900	1900	970	1.85
BG12-1950	1950	970	1.89
BG12-2000	2000	970	1.94



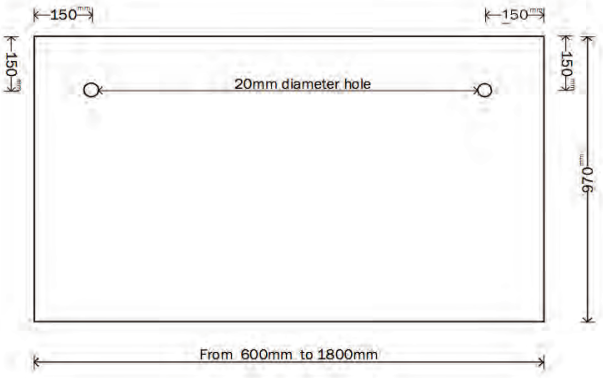
© GHA SOLUTIONS

GLASS BALUSTRADE PANELS With 2 Holes

Balustrade Panels with 2 Holes

CODE	WIDE (mm)	HEIGHT (mm)	AREA (sqm)
BGHG12-600	600	970	0.58
BGHG12-650	650	970	0.63
BGHG12-700	700	970	0.68
BGHG12-750	750	970	0.73
BGHG12-800	800	970	0.78
BGHG12-850	850	970	0.82
BGHG12-900	900	970	0.87
BGHG12-950	950	970	0.92
BGHG12-1000	1000	970	0.97
BGHG12-1050	1050	970	1.02
BGHG12-1100	1100	970	1.07
BGHG12-1150	1150	970	1.12
BGHG12-1200	1200	970	1.16
BGHG12-1250	1250	970	1.21
BGHG12-1300	1300	970	1.26
BGHG12-1350	1350	970	1.31
BGHG12-1400	1400	970	1.36
BGHG12-1450	1450	970	1.41
BGHG12-1500	1500	970	1.46
BGHG12-1550	1550	970	1.5
BGHG12-1600	1600	970	1.55
BGHG12-1650	1650	970	1.6
BGHG12-1700	1700	970	1.65
BGHG12-1750	1750	970	1.7
BGHG12-1800	1800	970	1.75

Balustrade Glass with Holes for Handrail





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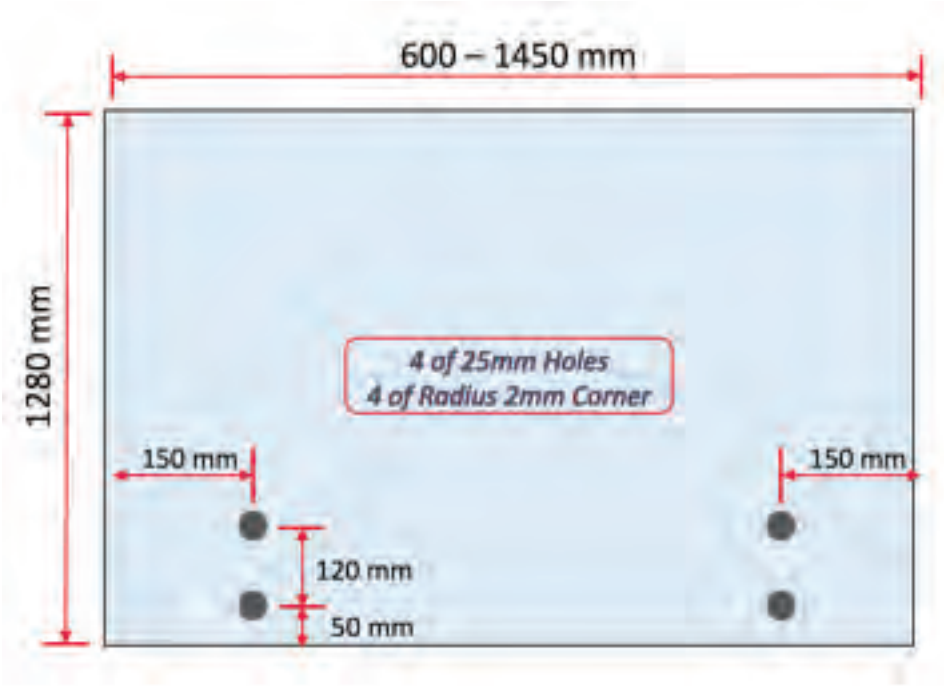
GLASS BALUSTRADE PANELS 4 / 6 Holes

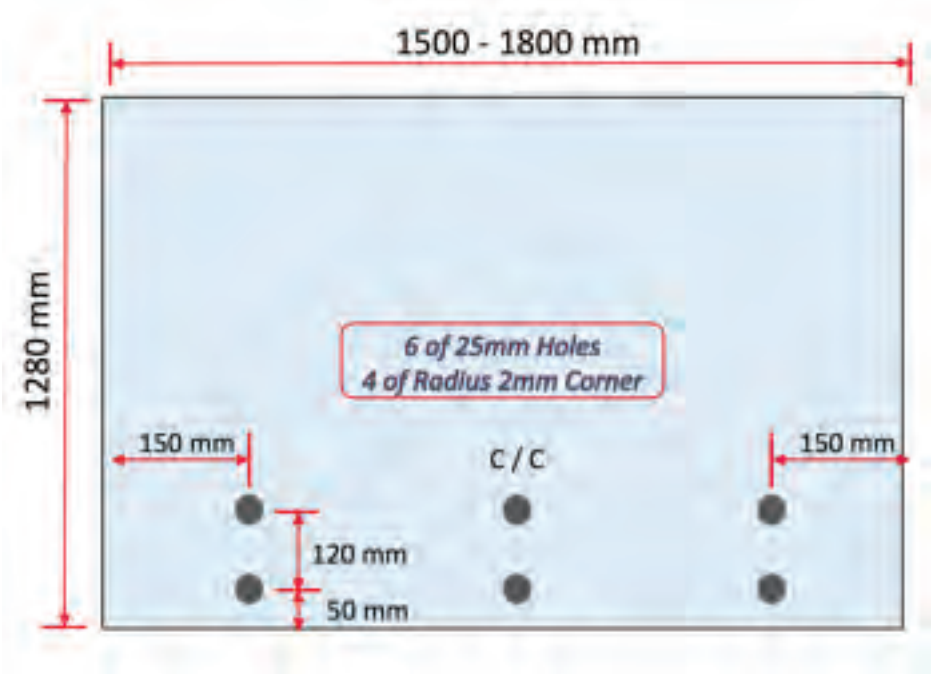
Balustrade Panels with 4/6 Holes

CODE	WIDE (mm)	HEIGHT (mm)	AREA (sqm)	HOLES
BGHG12-600	600	1280	0.77	4 Holes
BGHG12-650	650	1280	0.83	4 Holes
BGHG12-700	700	1280	0.90	4 Holes
BGHG12-750	750	1280	0.96	4 Holes
BGHG12-800	800	1280	1.02	4 Holes
BGHG12-850	850	1280	1.09	4 Holes
BGHG12-900	900	1280	1.15	4 Holes
BGHG12-950	950	1280	1.22	4 Holes
BGHG12-1000	1000	1280	1.28	4 Holes
BGHG12-1050	1050	1280	1.34	4 Holes
BGHG12-1100	1100	1280	1.41	4 Holes
BGHG12-1150	1150	1280	1.47	4 Holes
BGHG12-1200	1200	1280	1.54	4 Holes
BGHG12-1250	1250	1280	1.60	4 Holes
BGHG12-1300	1300	1280	1.66	4 Holes
BGHG12-1350	1350	1280	1.73	4 Holes
BGHG12-1400	1400	1280	1.79	4 Holes
BGHG12-1450	1450	1280	1.86	4 Holes
BGHG12-1500	1500	1280	1.92	6 Holes
BGHG12-1550	1550	1280	1.98	6 Holes
BGHG12-1600	1600	1280	2.05	6 Holes
BGHG12-1650	1650	1280	2.11	6 Holes
BGHG12-1700	1700	1280	2.18	6 Holes
BGHG12-1750	1750	1280	2.24	6 Holes
BGHG12-1800	1800	1280	2.30	6 Holes

© GHA SOLUTIONS

12MM TOUGHENED GLASS Side Fixing Standard Size Panel





AVAILABLE FINISHES

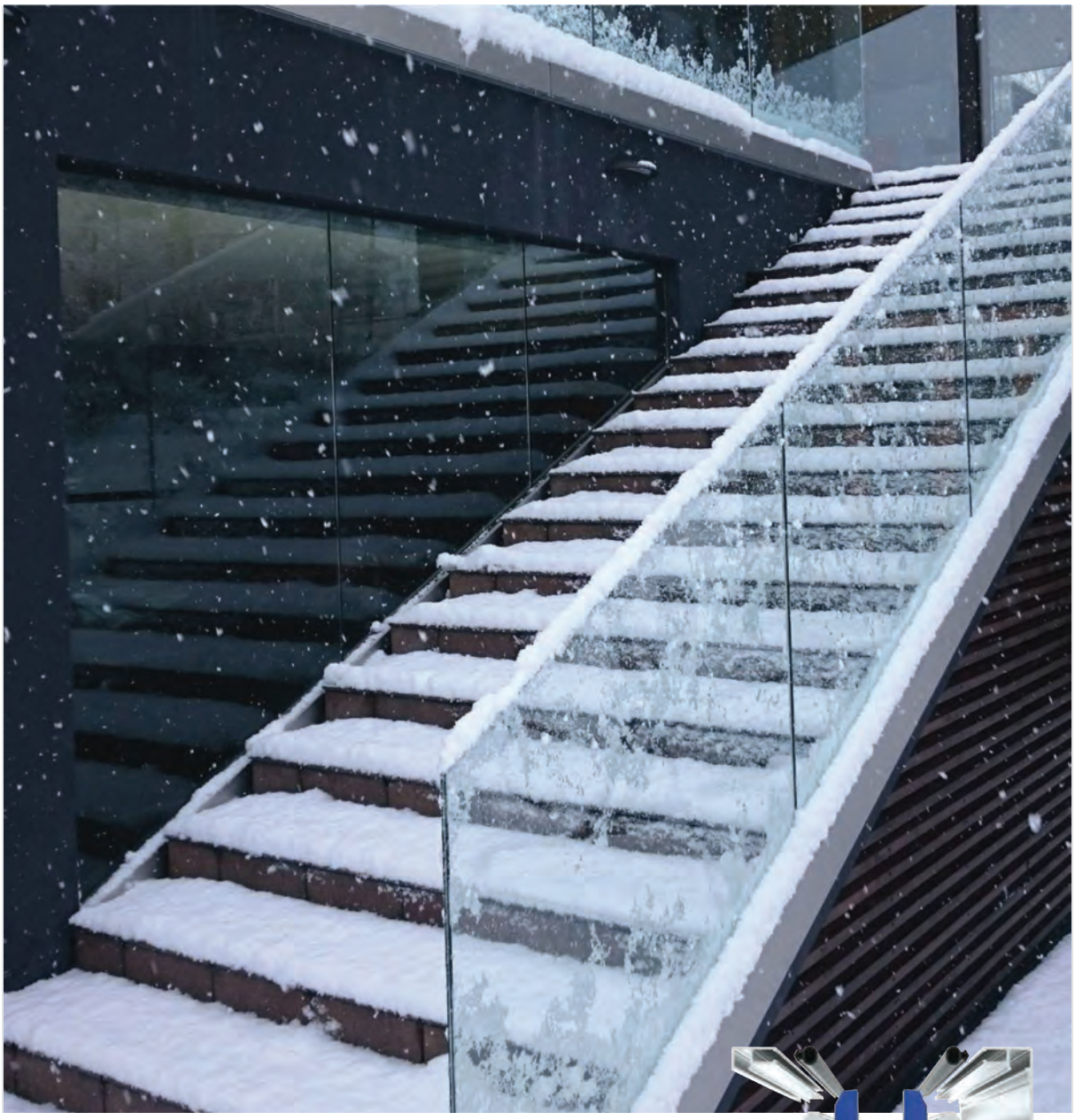
- 12mm Clear Toughened Glass

TECHNICAL DETAILS

- Side fixing standard size panel

© GHA SOLUTIONS

Posiglaze Basemount and Side Fix





posiglaze

Frameless Glass Balustrade Solutions

© GHA SOLUTIONS

GHA Solutions
GLASS • HARDWARE • ALUMINIUM

Posiglaze Basemount and Side Fix

Posiglaze is our innovative aluminium railing system

FAST INSTALLATION
Designed to be installed without the need of ensuring the fitting surface is totally level.

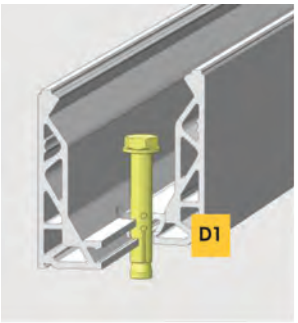
FULLY ADJUSTABLE AFTER INSTALLATION
Posiglaze uses a unique, simple adjustment system allowing horizontal alignment of each glass panel.

LIGHT WEIGHT AND EXTREMELY STRONG
Cleverly designed out of extruded aluminium, saving weight yet keeping strength. For added protection we anodise our system increasing protection against the elements.

EXCELLENTLY ENGINEERED
Our system is tested & engineered to meet the strictest building regulations (with the appropriate fixing and glass thickness) in both domestic and commercial installations. It can be installed in a wide variety of applications.

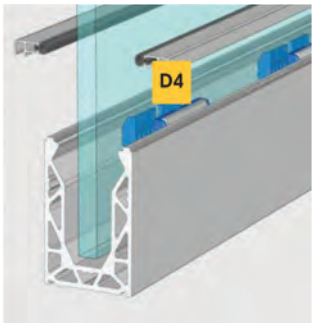
GLASS THICKNESSES
- 12mm (toughened glass)
- 13.5mm (toughened laminate)
- 15mm (toughened glass)
- 17.5mm (toughened laminate)
- 19mm (toughened glass)
- 21.5mm (toughened laminate)

NOTE: ALL GLASS CLAMPS HAVE A 1MM TOLERANCE TO ACCEPT VARYING INTERLAYER THICKNESSES







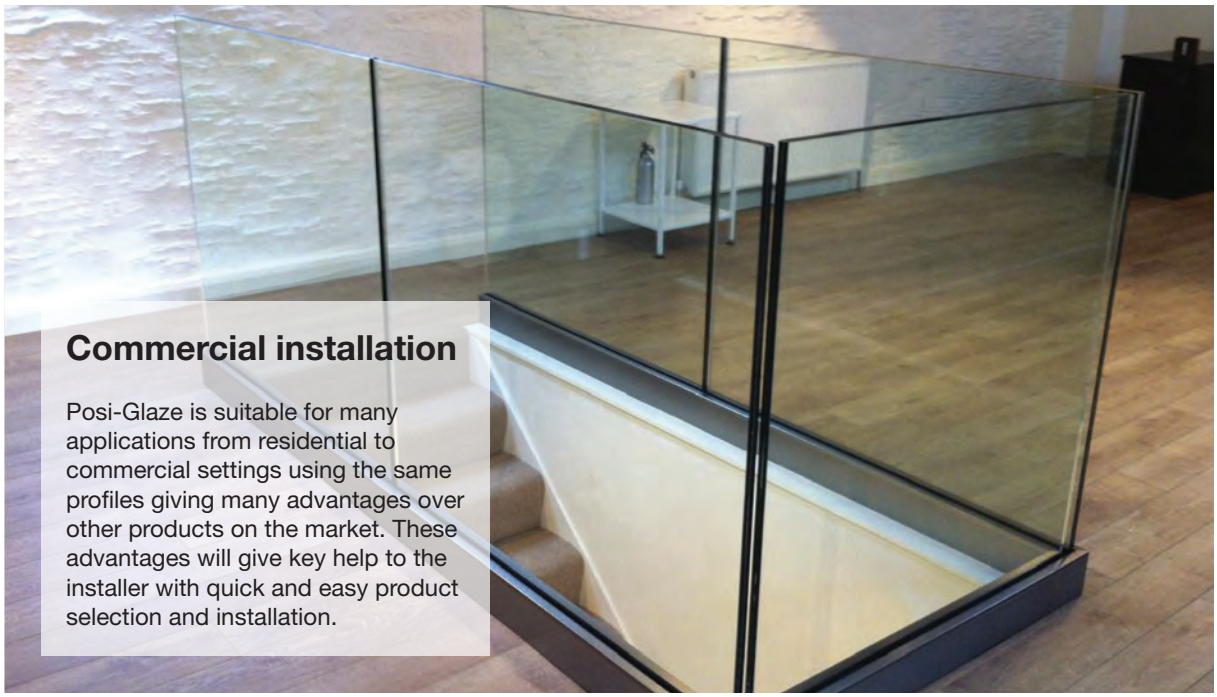


Posiglaze is so easy to install

1. Fit the base channel (D1) to the substructure (Details on suitable fixing can be found on our website).
2. Clip the glass slip clamps (D2) to the bottom edge of the glass panel (We produce different sized clamps for different glass thicknesses).
3. Place the bolt screws in the pivot clamp (D3).
4. Position the glass in the channel.
5. Using the adjustment bolts; loosening one side and tightening the other. This will allow the alignment of the glass with the next panel and enable vertical alignment of the glass.
6. Attaching the cover strip (D4) and bead gasket.

© GHA SOLUTIONS

Posiglaze Basemount and Side Fix



Commercial installation

Posi-Glaze is suitable for many applications from residential to commercial settings using the same profiles giving many advantages over other products on the market. These advantages will give key help to the installer with quick and easy product selection and installation.



3 metre of base drilled kit

POSIGLAZE BASE DRILLED KIT COMPRISES OF:

1 x 3m Base Drilled Channel
2 x 3m Top Clip Bead
1 x Clamp kit to suit specified glass thickness
1 x Spanner



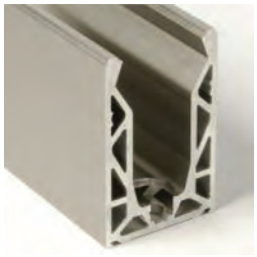
3 metre of side drilled kit

POSIGLAZE SIDE DRILLED KIT COMPRISES OF::

1 x 3m Side Drilled Channel
1 x 3m Top Clip Bead
1 x 3m Side Cladding
1 x Clamp kit to suit specified glass thickness
1 x Spanner

© GHA SOLUTIONS

PGC-010 Base Drilled Posi-Glaze



DESCRIPTION

Base Drilled Posi-Glaze channel. This is the main section that hold the glass. It is predrilled at 100mm from the ends and then 200mm there after. The hole is to suit a 12mm fixing bolt and is counter bored to sink the bolt head. Natural anodised channel is a matt silver finish used when the channel is below floor level, such as with decking or tiling when the channel is in line with the finished floor level.

AVAILABLE FINISHES

- 3m S/S Brushed
- 3m Natural Anodised

PGC-020 Side Drilled Posi-Glaze



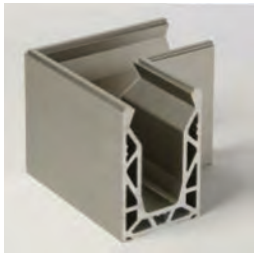
DESCRIPTION

Sided Drilled Posi-Glaze channel. This is the main section that hold the glass. It is predrilled at 100mm from the ends and then 200mm thereafter. The hole is to suit a 12mm fixing bolt and is counter bored to sink the bolt head. Drilled through both walls, one side to allow socket through.

AVAILABLE FINISHES

- 3m Natural Anodised

PGA-090-SBV 90° Corner



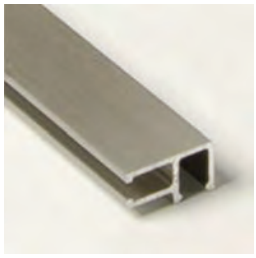
DESCRIPTION

A Pre-fabricated 90° corner. Supplied with four dowels for easier fitting. Does not include extra top seal strip or side cladding.

AVAILABLE FINISHES

- S/S Brushed

PGA-030 Top Seal Strip



DESCRIPTION

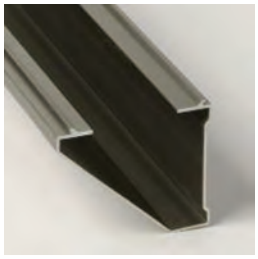
The top seal strip holds the gasket and is pressed onto the channel at the end of the installation. Covers the clamps from and prevents debris from entering the channel.

AVAILABLE FINISHES

- 3m S/S Brushed

© GHA SOLUTIONS

PGA-020 Bottom Cladding



DESCRIPTION

To be used with side fixed channel if required, gives an angled finish to the bottom of the channel. Clips into the grooves under the channel, will require adhesive for securing in place.

AVAILABLE FINISHES

- 3m S/S Brushed

PGA-010 Side Cladding



DESCRIPTION

As with the top seal strip it holds the gasket in place and covers the clamps from view. To be used with side drilled channel to cover the drill holes from view. Requires adhesive to hold flat surface against channel. Also used with natural anodised channel to give stainless steel finish.

AVAILABLE FINISHES

- 3m S/S Brushed

PGB-0012 (12mm) / PGB-0013 (13.52mm) / PGB-0015 (15mm) Clamp Kits (Inc. Clamps, gasket, bars, bolts)



DESCRIPTION

Clamp kits have enough components to suit a 3m length of channel. The clamps can fit glass thicknesses 1mm either way of said glass thickness i.e. 15mm glass clamps will suit 14 - 16mm glass. Included are the clamp bars, which sit into the top mould of the clamps and the clamp bolts, which screw into the bars and are then undone to hold the glass in place. These are undone and tightened each side allowing the glass allignment. 6m gasket to suit glass thickness.

GLASS THICKNESS

- 12mm Glass
- 13.5mm Glass
- 15mm Glass
- 17.5mm Glass
- 19mm Glass
- 21.5mm Glass

PGA-002 (12-17.52mm) / PGA-001 (19-21mm) Gasket



DESCRIPTION

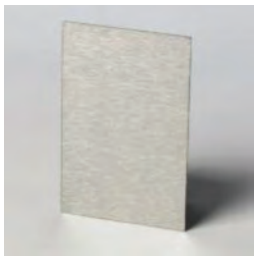
Extra gasket can be supplied in any length. The small gasket suits 19 - 21mm glass, the large gasket suits 12 - 17.5mm glass.

AVAILABLE SIZES

- 1m Large Gasket
- 1m Small Gasket

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PGA-060 End Caps



DESCRIPTION

Stainless steel end caps cut to suit each option. An adhesive will need to be used to hold them in place.

- End Cap Base Drilled
- End Cap One Side-Clad
- End Cap Two Side-Clad
- End Cap Shaped Right
- End Cap Shaped Left
- End Cap Knock-in Base Drilled

PGA-070 Dowel



DESCRIPTION

The dowels are used to allow for better alligning when joining channel sections together. There are three slots in the channel to hold dowels although two would be enough.

PGA-050 Spanner



DESCRIPTION

Steel spanner with angle to reach the clamp bolts to tighten/loosen the glass.

PV08DB Drain Block

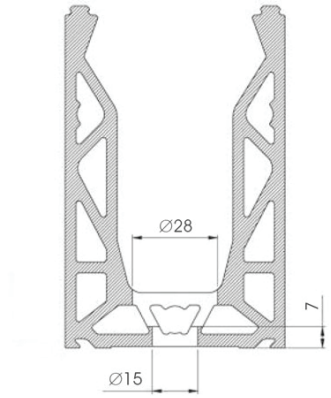


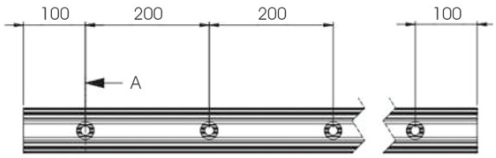
DESCRIPTION

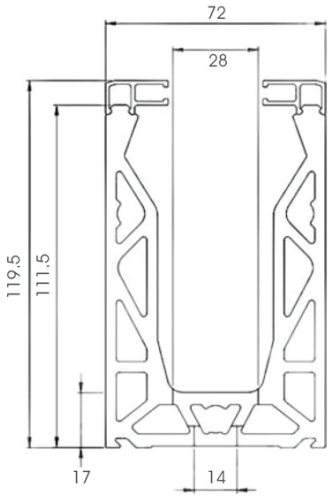
Anodised aluminium drain block. Fitted between the substrate and channel behind each hole to allow water to escape.

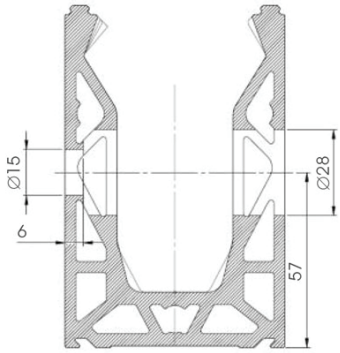
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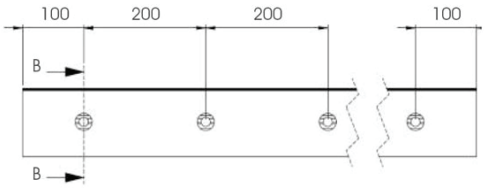
Profile Dimensions

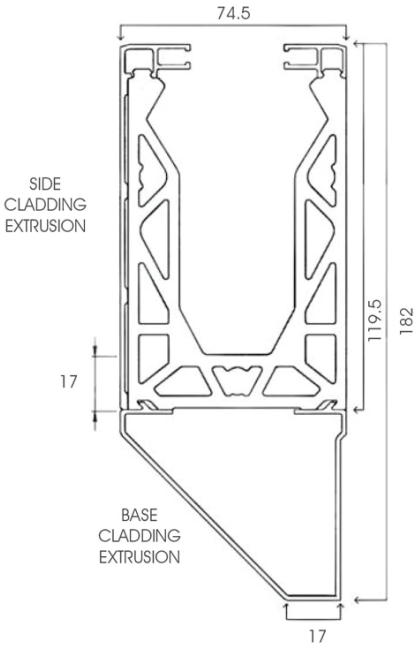












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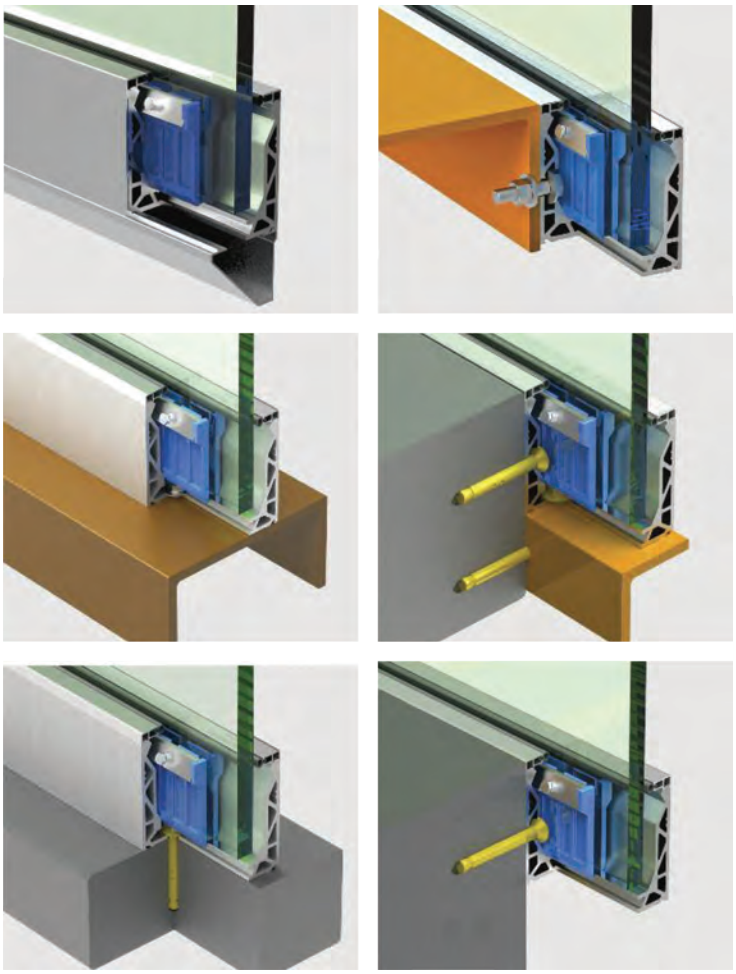
Fitting Applications



BSI WITH 6180:2011

Meets BSI standard 6180:2011. We've designed Posiglaze to meet BSi 6180:2011, 1.5kN loading. Visit our website for a dedicated guide to what glass thickness should be used and further fitting instructions.

Please note these are only fitting suggestions, Posiglaze should always be fitted to a suitable sub structure, if in doubt contact a qualified professional.



Our PosiGlaze channel has passed the CSTB 5 test. This was completed by our French/Italian distributor Logli Massimo under their product name DEFENDER 450

© GHA SOLUTIONS

POSlone Introduction

POSlone our most technically advanced aluminium balustrade systems, benefiting you with single sided adjustment.

POSlone is able to achieve up to 1.50kN line load resistance when used with glass panels up to 1200mm high, making it a highly adaptable balustrade system suitable for use as edge protection in both domestic and commercial installations.

Learning from our POSIglaze product and from extensive market research, this system adjusts using an easy sliding method and utilising our patented screw-clamp technology, whereby one screw against the side of the glass clamp locks the glass into position. This combination enables up to a 20mm tilt in the glass from one side to the other. This means that when fitting the channel to an uneven surface, the angle of the channel can be countered by the adjustment of the glass.

POSlone has been designed with installers in mind. This means that it is simple to change the glass at any time, if required.

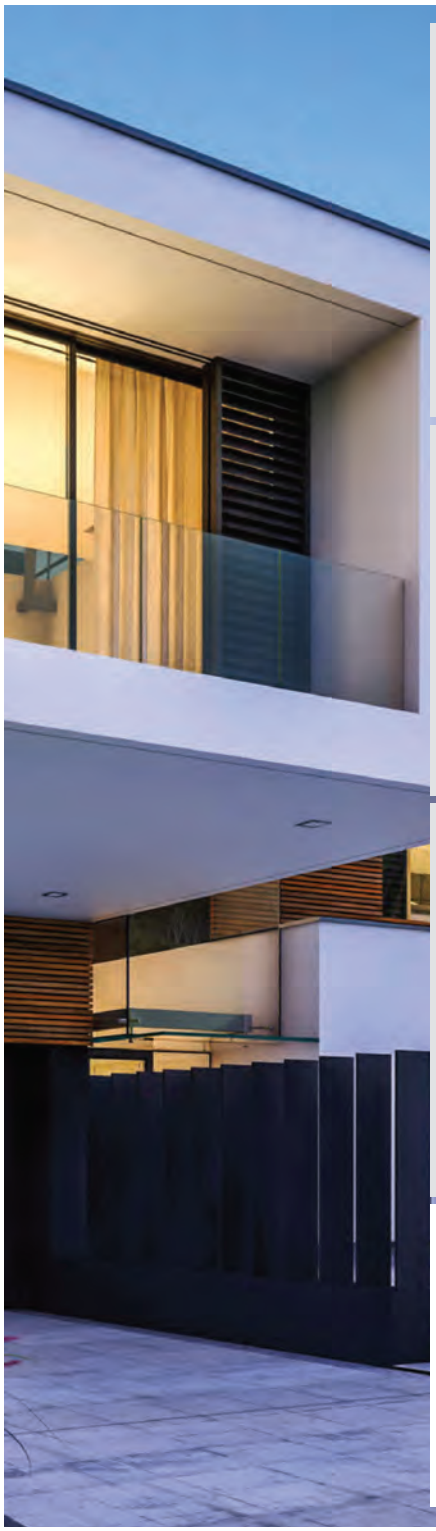
The one-side-fit version of our popular balustrade systems, POSlone is compatible with a wide range of finishing accessories including 90 and 135-degree pre-fabricated corners and Balcony Seal®. The POSlone channel is available in silver brushed and black brushed Aluminium in Base-Fix and Side-Fix.





© GHA SOLUTIONS

POSIone Product Details



ONE-SIDE-FIT

One of the most simple balustrade systems to fit and adjust thanks to its patented screw-clamp technology. One-sidefit reducing cost, safety equipment and Glass can easily be removed and replaced if required.

ACCREDITED TO 1.50KN TO BS 6180:2011

POSIone is accredited and approved by multiple organisations to verify that it meets national and international building regulations for use as edge protection, where up to 1.50kN force loading is required.

LIGHTWEIGHT AND STRONG

Precision engineered using extruded aluminum with a geometrically hollowed out core; providing an incredible strength to weight ratio. For added protection POSIone is anodised to 25 microns.

APPROPRIATE FOR DOMESTIC AND COMMERCIAL

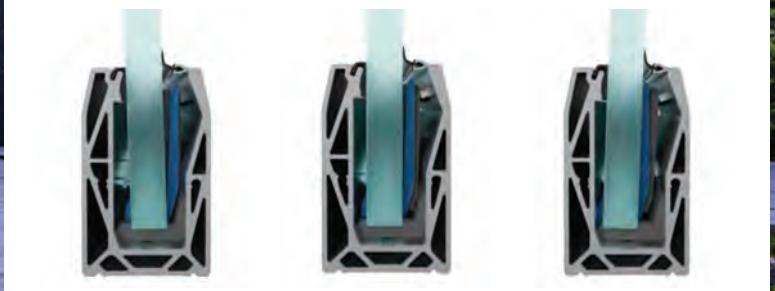
With 0.36kN to 1.50kN force loading capability, POSIone is a domestic to commercial crossover product, making it an appropriate choice for a wide range of installations.

CAN BE USED WITH A WIDE RANGE OF GLASS TYPES

POSIone is a highly versatile product which can be used with glass thicknesses ranging from 12mm - 21.5mm, using either toughened glass, toughened laminate glass or SentryGlas.

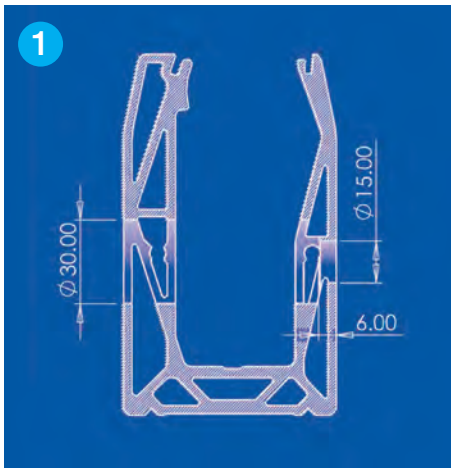
SUITABLE FOR USE ON UNEVEN SURFACES

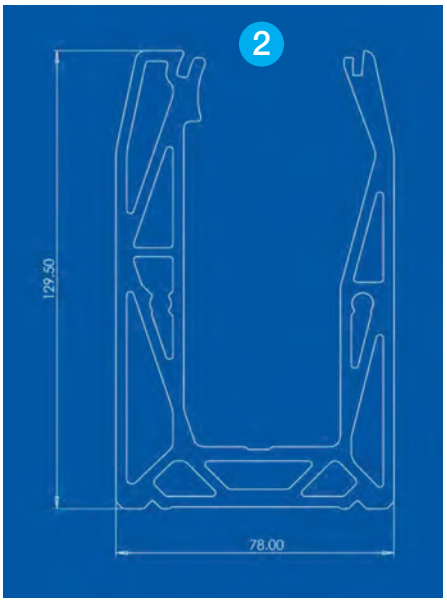
POSIone benefits from one-side-fit screwclamp technology that provides a 20mm adjustment angle on the glass, enabling perfect alignment of each glass panel. This adjustment capability is illustrated in the diagrams below.



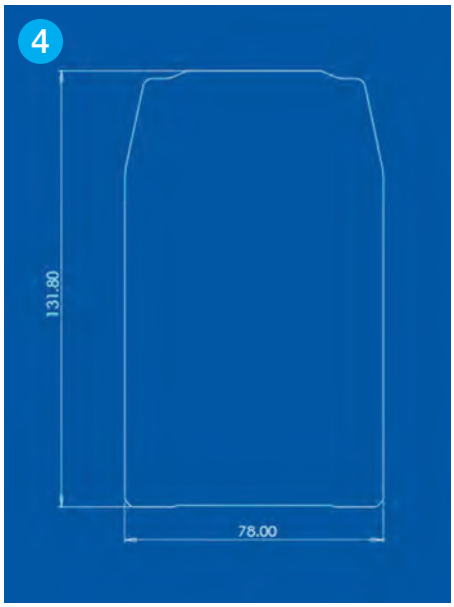
© GHA SOLUTIONS

POSlone Technical Drawings









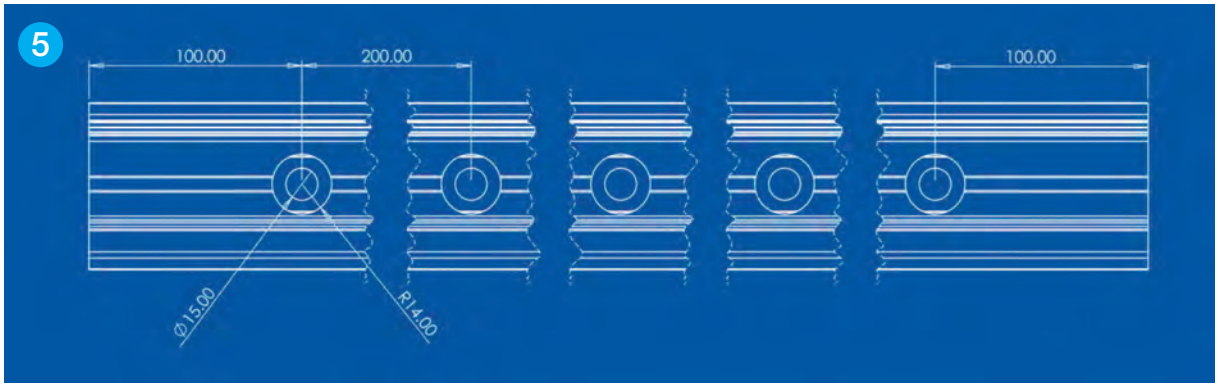
1 POSlone side channel hole dimensions

2 POSlone base channel dimensions

3 POSlone exploded diagram

4 End Cap

5 POSlone bolt hole centres



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GLASS • HARDWARE • ALUMINIUM

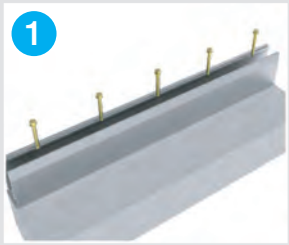
POSIone Installation Guide



© GHA SOLUTIONS

POSlone Base Installation Guide

These step by step instructions guide you through the installation process.



FIT THE CHANNEL

Drill bolt holes into your substrate starting at 100mm from the first edge and then at 200mm intervals thereafter. Lay the channel on top aligning the channel holes with your drilled holes. Fix in place with an appropriate screw or bolt.



ADJUSTMENT BEAD

Attach the ridged adjustment bead to outer edge.



ISOLATOR AND SLIDER

Place the isolator and slider into the channel with the wings on the inside and the slider positioned to the right side of the isolator.



FIT THE GLASS

Place the glass into the channel.



INSERT CLAMPS

Insert one wedge tool at each end of the glass and push the clamps down until they reach the clip. Ensure the clamps are within the slider wings.



ADJUST THE GLASS

Manoeuvre the glass into position by hand. Next, slide the clamps to the left so the slider is tight in the required position.



SECURE THE GLASS

Push the clamps down into the channel.



BOLTS & BARS

Insert the clamp bars and bolts and tighten them against the channel by unwinding the bolt.

9 **FINISH THE INSTALLATION**

Add the top bead, gasket and end caps to finish the installation.

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POSIone Side Installation Guide

These step by step instructions guide you through the installation process.



FIT THE CHANNEL

Drill bolt holes into your substrate starting at 100mm from the first edge and then at 200mm intervals thereafter. Lay the channel on top aligning the channel holes with your drilled holes. Fix in place with an appropriate screw or bolt.



ADJUSTMENT BEAD

Attach the ridged adjustment bead to outer edge and place the wedge spacer.



ISOLATOR AND SLIDER

Place the isolator and slider into the channel with the wings on the inside and the slider positioned to the right side of the isolator.



FIT THE GLASS

Lower the glass into the channel.



INSERT CLAMPS

Insert one wedge tool at each end of the glass and push the clamps down until they reach the clip. Ensure the clamps are within the slider wings.



ADJUST THE GLASS

Manoeuvre the glass into position by hand. Next, slide the clamps to the left so the slider is tight in the required position.



SECURE THE GLASS

Push the clamps down into the channel.



BOLTS & BARS

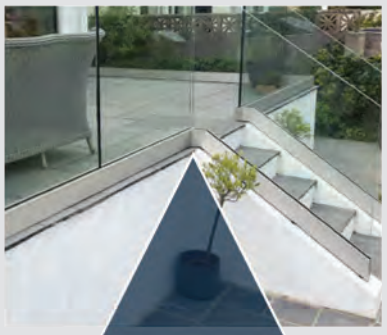
Insert the clamp bars and bolts and tighten them against the channel by unwinding the bolt.

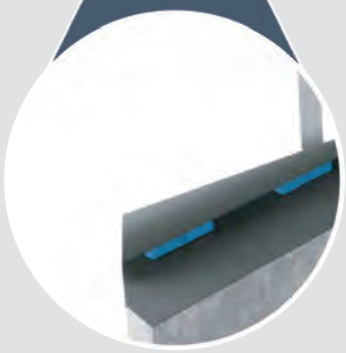
9 **FINISH THE INSTALLATION**

Add the top bead, gasket and end caps to finish the installation.

© GHA SOLUTIONS

POSlone Product Range





POSlone is compatible with BalconySeal in base mount channel.

SILVER BRUSHED

A silver brushed stainless steel effect aluminum channel with matching accessories. Available in side or base mount; the side mounted channel comes in a natural finish.

BASE MOUNT

The most popular fixing choice is a base-mounted channel, fixed to your concrete or steel substrate through drill holes in the base of the channel.





Available in both black brushed and silver brushed finishes.

COMING SOON

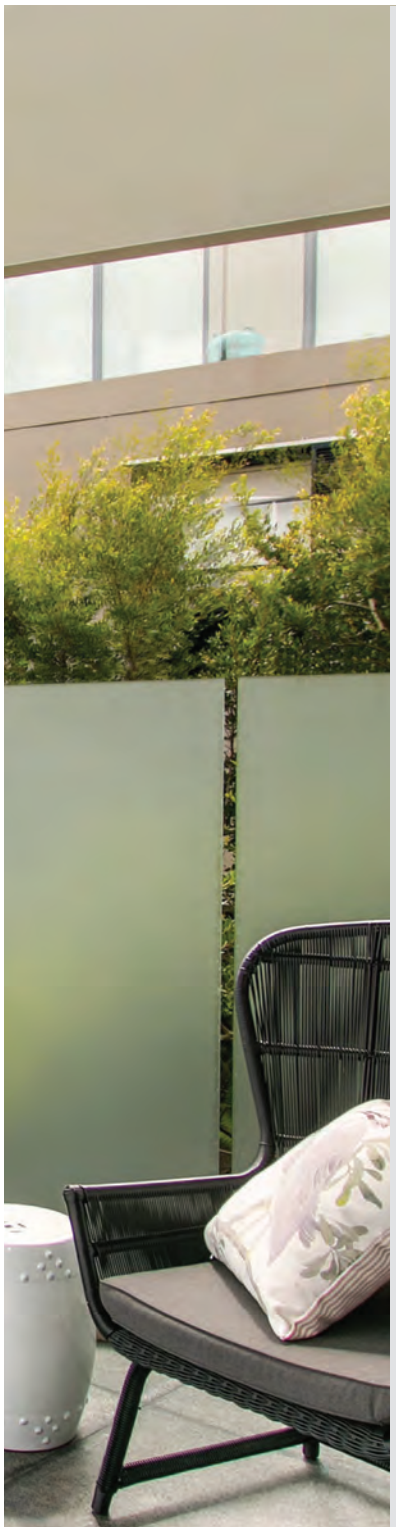
Side-fixed POSlone has already been developed and is going through testing.

POSlone base fix will be available in Black brushed.

POSlone base fix will also be tested for use with the Timber Fixing Plate in 2023.

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POSIone Product Range





1 Balcony Seal Kit



2 Silver brushed end cap



3 Slider & isolator



4 Co-extruded gasket



5 Channel joining dowels



6 Timber Fixing Plate



7 Drain block



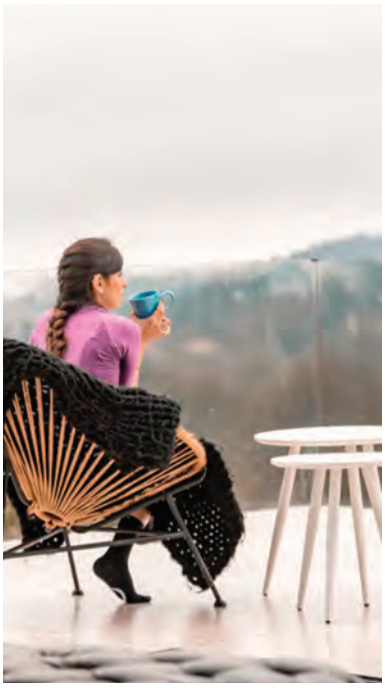
8 Silver brushed insert top bead

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POSIone Applications







POSIone is one-side-fit, achieving force load resistance from 0.36kN to 1.50kN, making it suitable for domestic to light commercial installations.

Since no posts or handrail are required with POSIone (depending on local building regulations), the fully installed product looks amazing and provides a completely uninterrupted view. This makes POSIone a popular choice for homeowners looking for a decking or balcony balustrade, and it is growing in popularity for indoor use around staircases and mezzanines. Other domestic applications of POSIone include garden privacy screening, partitions and balcony windbreaks.

In a light-commercial environment, such as a bar, restaurant, retail environment, offices or other venues which aren't susceptible to overcrowding, POSIone can be installed internally or externally as a room divider, defined walkway, edge protection or windbreak. The biggest benefit to this channel is the ability to install from one side making it very installer friendly.

When balustrade is needed for a public space that is susceptible to overcrowding, a heavy-commercial balustrade system is required to meet the 3.00kN loading requirement. Page 35 gives details of a product called MEGAgrip, which is suitable for this purpose.

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MEGAgrip Introduction



MEGAgrip is Pure Vista's answer to a heavy-duty and fully adjustable 3kN commercial balustrade system, designed as a highly-durable public safety barrier for large commercial constructs.

MEGAgrip uses a variation of our popular POSIglaze screw-clamp technology to secure the glass in place. The system uses a 13mm Hex Bolt and ¼ inch torque wrench and extension arm to tighten the bolts, for a quick and simple installation. Internal glass clamps allow for easy alignment of the glass within the channel, and are compatible with a wide range of glass thicknesses, making MEGAgrip one of the most adaptable balustrade systems on the market today. It can easily be further fortified with a simple conversion kit, to become a bomb-resistant or bullet-proof balustrade system. MEGAgrip is ideal for use as a public space barrier in busy locations such as transport hubs and venues, where there is a risk of overcrowding. MEGAgrip can be either base-fixed or side-fixed.

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MEGAgrip Key Benefits



FAST AND EASY TO INSTALL AND ADJUST

One of the most simple balustrade systems to fit and adjust thanks to its patented screw-clamp technology. Dry glazed where no specialist tools are required. Glass can easily be removed and replaced if required.

FULLY ACCREDITED UP TO 3.00KN

MEGAgrip is accredited and approved by multiple organisations to verify that it meets national and international building regulations for use as edge protection, where up to 3.00kN force loading is required.

LIGHTWEIGHT AND STRONG

Precision engineered using extruded aluminum with a geometrically hollowed out core, providing an incredible strength to weight ratio. For added protection MEGAgrip is anodised to 25 microns.

APPROPRIATE FOR COMMERCIAL AND ANTI-TERROR USES

With 3.00kN force loading capability, MEGAgrip is a commercially appropriate product which can be fortified using conversion kits into bomb-resistant or bullet-proof balustrade systems.

CAN BE USED WITH A WIDE RANGE OF GLASS TYPES

MEGAgrip is a highly versatile product which can be used with glass thicknesses ranging from 25mm - 33mm, using either toughened glass, toughened PVB laminate glass or SentryGlas.

GLASS IS EASY TO REMOVE AND CHANGE POST USE

MEGAgrip is as easy to assemble as it is to disassemble, making it simple to install replacement glass panels following use as a bomb-resistant or bullet-proof barrier.

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MEGAgrip Applications



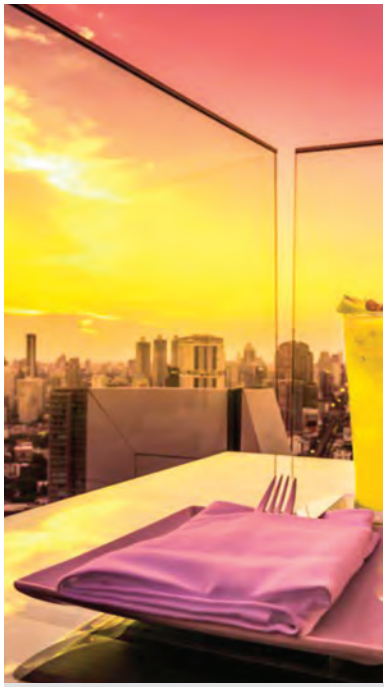
PUBLIC BUILDINGS

- Offices
- Government buildings
- Music Venues
- Sports Stadiums
- Shopping Centres



TRANSPORT HUBS

- Airports
- Railway Stations
- Service Stations
- Metro Stations



TALL GLASS SCREENS

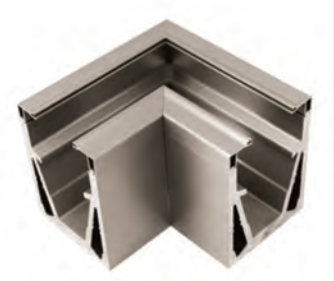
- Privacy Screens
- High Rise Balconies
- Penthouses
- Restaurant Terraces
- Roof Terraces

© GHA SOLUTIONS

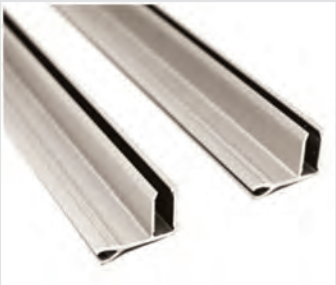
MEGAgrip Accessories

MEGAgrip benefits from a complete accessory range designed to complement your installation.

The MEGAgrip accessory range includes everything you need to complete your installation, such as end caps to create a tidy finish when your balustrade doesn't finish against a fixed point, side cladding, top bead and 90-degree pre-fabricated corners to make installing a corner extremely simple.



1 Silver brushed base fix pre-fabricated corner



2 Silver brushed knock-in end cap



3 Silver brushed aluminum top bead

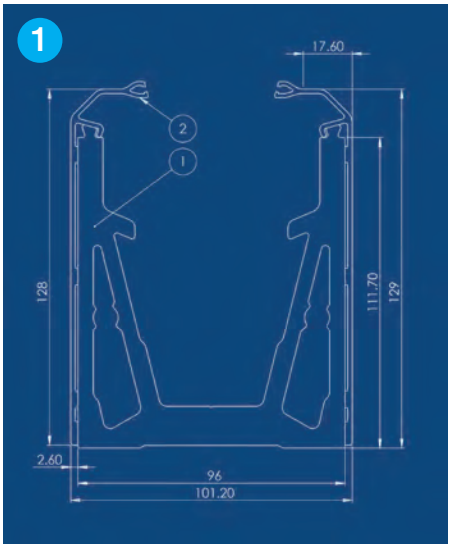


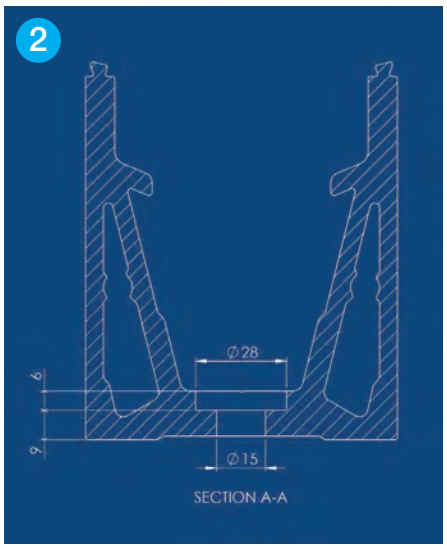
4 Silver brushed side cladding

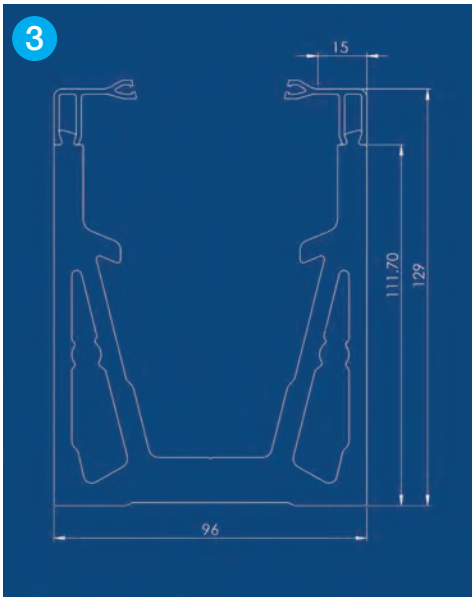


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MEGAgrip Technical Drawings

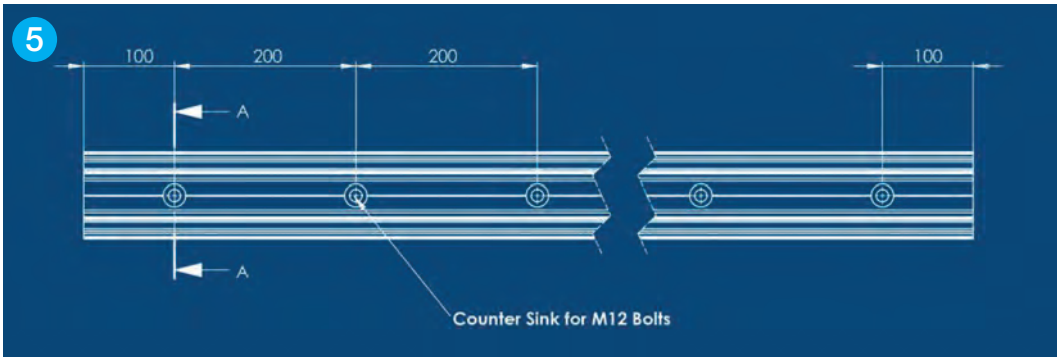








1. MEGAgrip channel with top bead and side cladding
2. MEGAgrip hole dimensions
3. MEGAgrip channel with top bead
4. MEGAgrip exploded diagram
5. MEGAgrip hole centres



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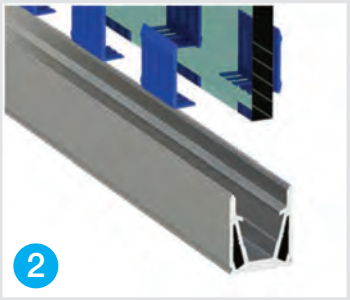
MEGAgrip Installation Guide

MEGAgrip is one of the most simple balustrade channel systems to install and adjust with its screw-clamp technology. These step by step instructions guide you through the installation process.



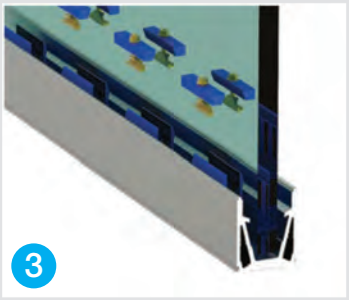
FIT THE CHANNEL

Drill bolt holes into your substrate starting at 100mm from the edge and then at 200mm intervals thereafter. Lay the channel on top aligning it with your drilled holes. Fix the channel using an appropriate bolt.



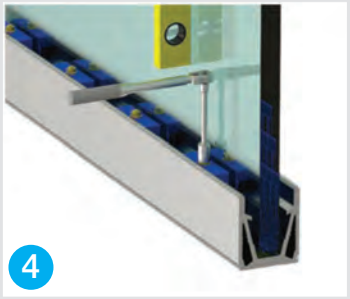
CLAMP THE GLASS

Make up the clamps by loosely slotting the left and right hand sides together. Clamp these to the bottom edge of the glass at 250mm intervals, starting at 125mm from the first side edge. Squeeze the clamps tight around the glass and place the glass into the channel.



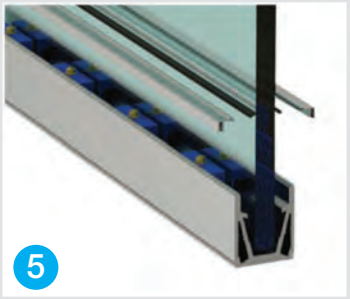
FIT THE BARS

Assemble the MEGAhooks, nuts and bars so that the wide side of the bar is at the top next to the nut, with the MEGAhook below. Drop these, MEGAhooks down, either side of each glass clamp so that the lip on the MEGAhook hooks into the wall of the channel.



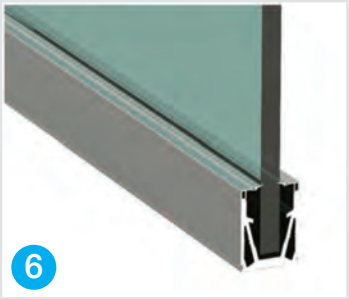
ADJUST THE GLASS

With the bolts loosely in place, the glass panel can tilt in either direction. Align the panel as required, then tighten the nuts using a torque wrench. A threadlocker can provide added security.



ADD TOP BEAD

Top bead and gasket simply slides or clips onto the top edge of the channel.



FINISH INSTALLATION

Your installation is complete!

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MEGAgrip Side Fix Installation Guide

MEGAgrip is one of the most simple balustrade channel systems to install and adjust. These step by step instructions guide you through the installation process.



FIT THE CHANNEL

Drill bolt holes into your substrate starting at 100mm from the edge and then at 200mm intervals thereafter. Lay the channel on top aligning it with your drilled holes. Fix the channel using an appropriate bolt.



CLAMP THE GLASS

Make up the clamps by loosely slotting the left and right hand sides together. Clamp these to the bottom edge of the glass at 250mm intervals, starting at 125mm from the first side edge. Squeeze the clamps tight around the glass and place the glass into the channel.



FIT THE BARS

Assemble the MEGAhooks, nuts and bars so that the wide side of the bar is at the top next to the nut, with the MEGAhook below. Drop these, MEGAhooks down, either side of each glass clamp so that the lip on the MEGAhook hooks into the wall of the channel.



ADJUST THE GLASS

With the bolts loosely in place, the glass panel can tilt in either direction. Align the panel as required, then tighten the nuts using a torque wrench. A threadlocker can provide added security.



ADD TOP BEAD

Top bead, cladding and gasket simply slides or clips onto the top edge of the channel.

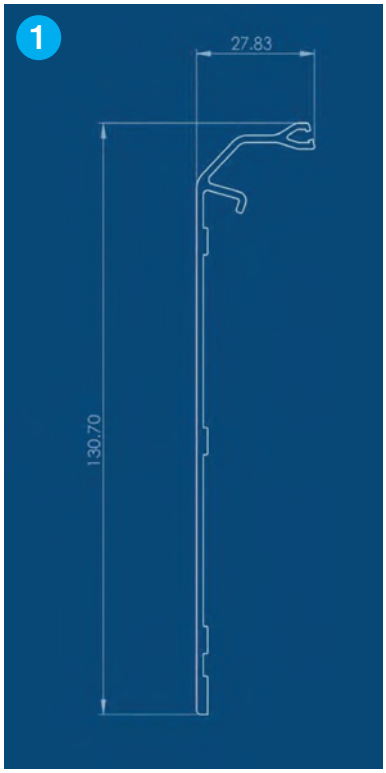


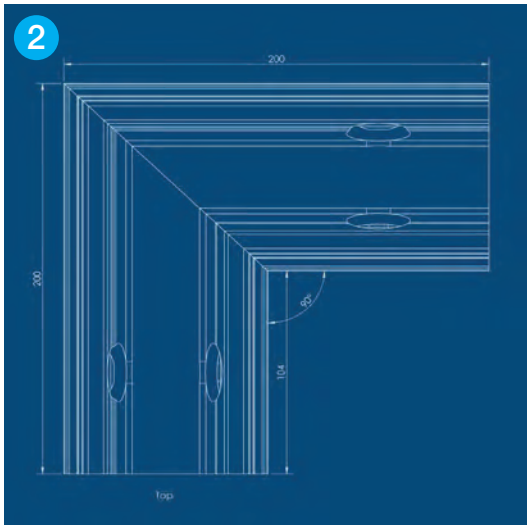
FINISH INSTALLATION

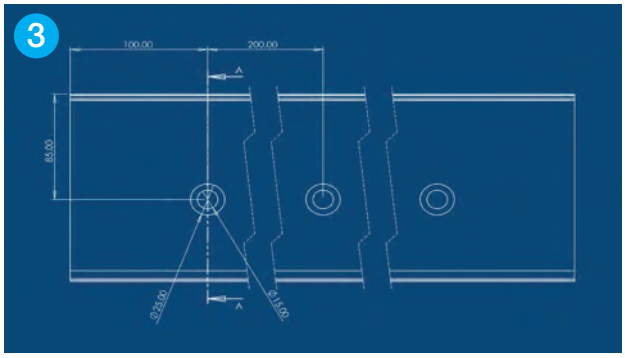
Your installation is complete!

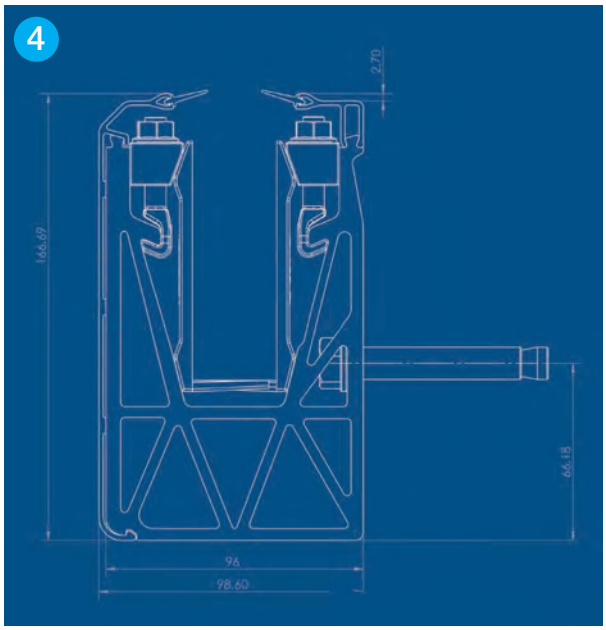
© GHA SOLUTIONS

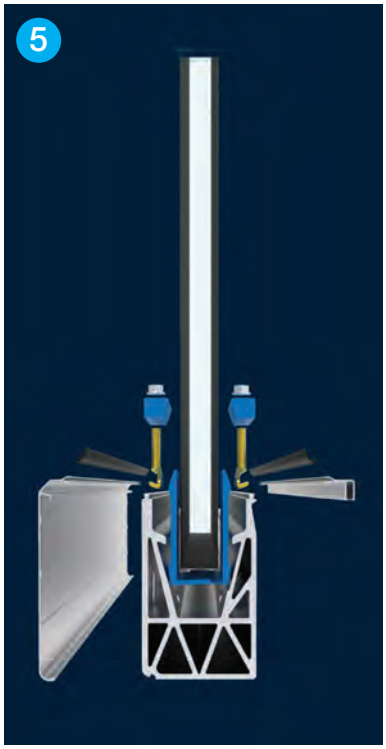
MEGAgrip Side Fix Technical Drawings











1 MEGAgrip side cladding

2 MEGAgrip side 90° corner

3 MEGAgrip side hole centres

4 MEGAgrip side channel with cladding, top bead, gasket and bolt

5 MEGAgrip side exploded diagram

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MEGAgrip Accreditations

The table below shows the line loading MEGAgrip Side Fix is certified to achieve.

These tests have been conducted in accordance with BS6180:2011 to certify that MEGAgrip side fix meets the force loading requirement under British standards for a range of glass height and thickness configurations. The logos indicate other standard bodies who have certified that MEGAgrip side fix meets building regulations in their regions or countries.

EUROCODES BUILDING THE FUTURE · INTERNATIONAL CODE COUNCIL · NEN · NBC · CSTB le futur en construction · CTE

Glass Type		25.5mm Toughened PVB		25.5mm SentryGlas					31.5mm Toughened PVB	
Glass Height (mm)		1100	1200	1100	1200	1500	1700	1900	1100	1800
1.50kN Line Load	STEEL	✔	✔	✔	✔	✔	✔	✔		
	CONCRETE	✔	✔	✔	✔	✔	✔		✔	✔
3.00kN Line Load	STEEL	✔		✔	✔					
	CONCRETE	✔		✔					✔	

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Model 6020 | 6021 1.5KN Top and Side Mount



DESCRIPTION

- Quick and simple mounting
- Different finishes
- For glass thicknesses between 12 - 21,52 mm
- Drainage holes
- Increased stability with the same looks
- For applications requiring 0.74Kn the mounting distance can be 600mm
- Private, commercial and public areas

© GHA SOLUTIONS

TL-6020 1.5 kN Top Mount

LEVEL UP

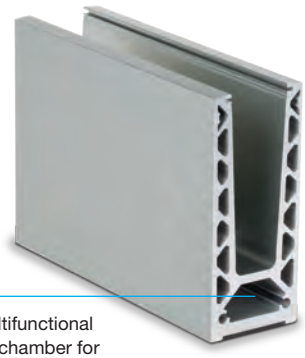
The Profile TL-6020 is the intelligent onward development of the TL-6010 Profile. Here the outstanding feature consists in the increase of mounting distances, which now enables the use of the profile also on an anchor bolt without countersunk head. Therefore, mounting the product is not only faster and more cost efficient, but also statics have improved considerably.

It can be used in exterior applications, withstands a linear load of 1.5 kN and is appropriate for glass thicknesses between 12 mm and 21.52 mm.

riba product selector CAD IN EVERY FORMAT TESTED according to BS6180

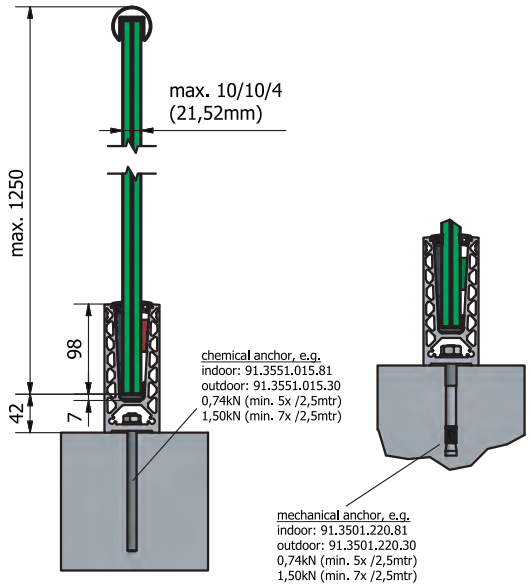
ESSENTIAL FEATURES

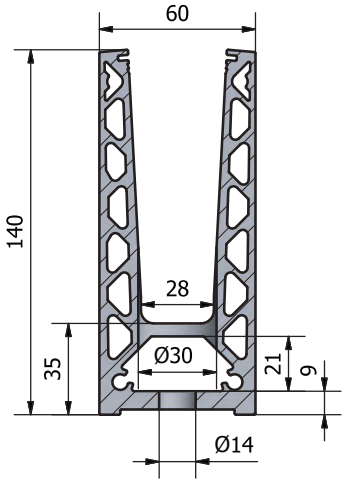
- Slimline, elegant design and low-maintenance
- ONLEVEL Flex-Fit Glass Adjustment Tool
- Extension pin holes
- Drainage holes
- For use with Top Cover 3.0 kN
- For glass thicknesses between 12 - 21.52 mm
- For applications of 0.74kN in private areas, the mounting distance amounts to 60 cm

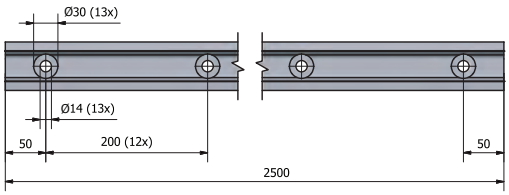


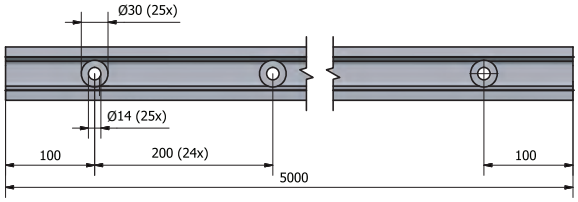
Increased stability with the same looks

Integrated multifunctional sophisticated chamber for enabling larger drilling distances









© GHA SOLUTIONS

TL-6020 Glass Profile



TECHNICAL DETAILS

- Height: 140 mm
- Width: 60 mm
- Sales unit: 1 piece

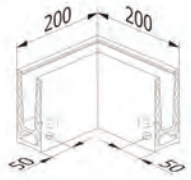
Model 6020	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
Length	Art no.	Art no.	Art no.	Art no.
2500	–	10.6020.002.11	10.6020.002.12	–
5000	10.60.20.005.10	10.6020.005.11	10.6020.005.12	10.6020.005.13/16

TL-6020 Inside Corner / Outside Corner 90°



TECHNICAL DETAILS

- Side length inside 140 mm
- Side length outside 200 mm
- Sales unit: 1 piece



Model 6020	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
	Art no.	Art no.	Art no.	Art no.
	10.6020.390.10	10.6020.390.11	0.6020.390.12	10.6020.390.13/16

TL-6020 End Cap, Left/Right

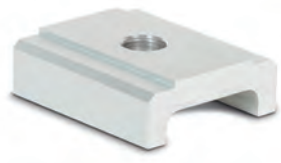


TECHNICAL DETAILS

- For use on the left and right
- Sales unit: 1 piece

Model 6020	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
Application	Art no.	Art no.	Art no.	Art no.
Left/Right	10.6020.490.10	0.6020.490.11	10.6020.490.12	10.6020.490.13/16

TL-6020 Spacer



You do not have any drainage options on your balcony?!
So that you do not need to install a dam on your balcony, you can simply mount the spacers beneath your profile.

TECHNICAL DETAILS

- Inner drill hole Ø 14 mm
- Sales unit: 1 piece

Model 6020	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
	Art no.	Art no.	Art no.	Art no.
	10.6020.500.10	10.6020.500.11	10.6020.500.12	10.6020.500.13/16

© GHA SOLUTIONS

TL-6020 Extension pin



TECHNICAL DETAILS

- Length 40 mm
- Diameter Ø 6 mm
- Sales unit: 8 piece

Model 3511	V4A (interior & exterior)
	Art no.
	90.7001.640.31

TL-6020 Fischer fixing anchor FIS AM M10x150



fischer

TECHNICAL DETAILS

- Finish interior application: zinc-plated steel (interior)
- Finish exterior application: V4A (exterior)
- Required number per 2500 mm: 13 pieces
- Sales unit: 25 pieces

Model 3511	Zinc-plated steel (interior)	V4A (exterior)
	Art no.	Art no.
	91.3551.015.81	91.3551.015.30

TL-6020 Fixing anchor steel



TECHNICAL DETAILS

- Finish interior application: zinc-plated steel (interior)
- Finish exterior application: V4A (exterior)
- |Required number per 2500 mm: 13 pieces
- Sales unit: 13 pieces

Model 6020	Zinc-plated steel (interior)	V4A (exterior)
	Art no.	Art no.
	91.6020.060.81	91.6020.060.30

© GHA SOLUTIONS

TL-6020 Flex-Fit 1.0 kN



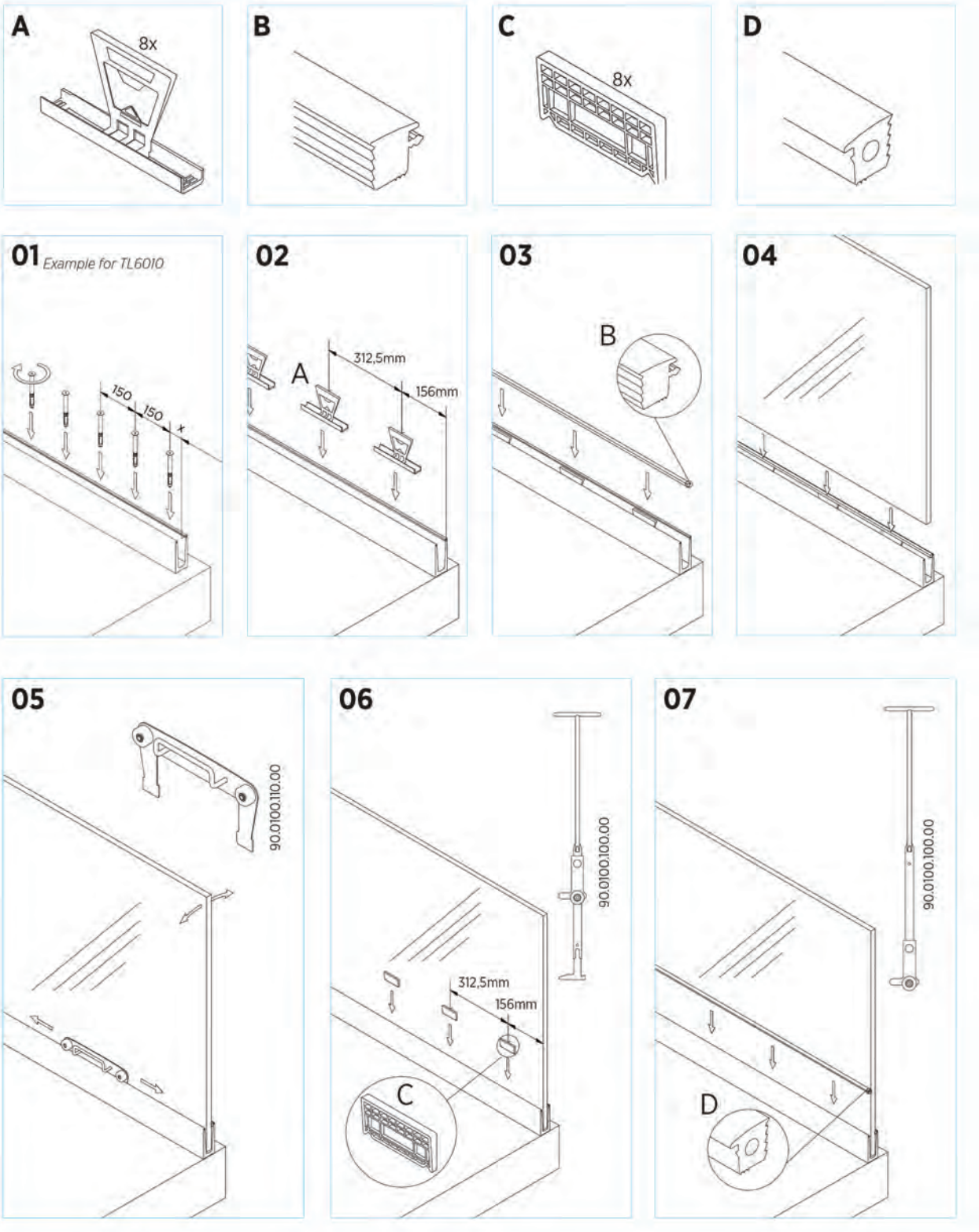
TECHNICAL DETAILS

- Fine adjustment of glass panes
- For glass thicknesses between 12 - 21.52 mm
- Adjustment of up to 34 mm in relation to the vertical axis
- Pay attention to the right glass thickness!

Length		2500 mm	5000 mm	25 mtr
Glass thickness	Wedge colour	Art no.	Art no.	Art no.
12 mm	Black	90.0502.112.00	90.0505.112.00	90.0525.112.00
6/6/2 (12.76 mm)	Red	90.0502.113.00	90.0505.113.00	90.0525.113.00
6/6/4 (13.52 mm)	Grey	90.0502.114.00	90.0505.114.00	90.0525.114.00
15 mm	Yellow	90.0502.115.00	90.0505.115.00	90.0525.115.00
8/8/2 (16,76 mm)	Brown	90.0502.117.00	90.0505.117.00	90.0525.117.00
8/8/4 (17,52 mm)	Green	90.0502.118.00	90.0505.118.00	90.0525.118.00
19 mm	Blue	90.0502.119.00	90.0505.119.00	90.0525.119.00
10/10/2 (20,76 mm)	Red	90.0502.121.00	90.0505.121.00	90.0525.121.00
10/10/4 (21,52 mm)	Green	90.0502.122.00	90.0505.122.00	90.0525.122.00

© GHA SOLUTIONS

Mounting Instruction FLEXFIT



© GHA SOLUTIONS

TL-6021 1.5 kN Side Mount

THE EVOLUTION GOES ON

The Profile TL-6021 is the intelligent onward development of the TL-6011 Profile. Here the outstanding feature consists in the increase of mounting distances, which now enables the use of the profile also on an anchor bolt without countersunk head. This makes mounting the product not only much quicker and more cost efficient, also statics have improved significantly.

The Profile TL-6021 can be used for exterior applications. It can withstand a linear load of 1.5 kN and is appropriate for glass thicknesses between 12 mm and 21.52 mm.

riba product selector

CAD IN EVERY FORMAT

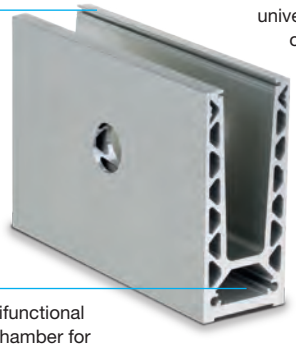
TESTED according to BS6180

ESSENTIAL FEATURES

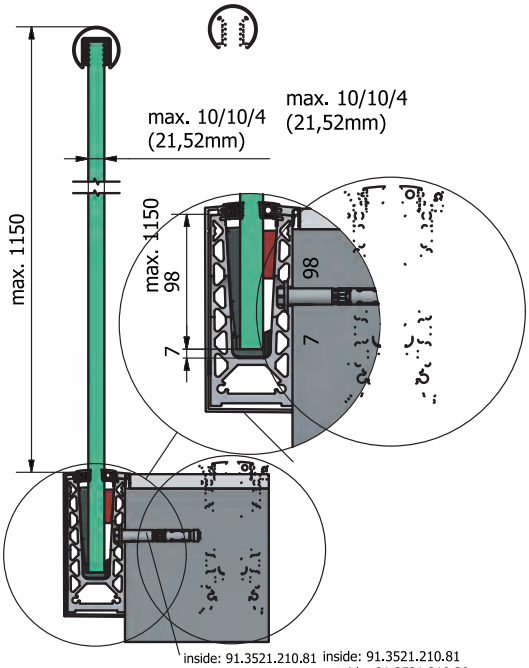
- Slimline, elegant design and low-maintenance
- ONLEVEL Flex-Fit Glass Adjustment Tool
- Drainage holes
- Cover (optional)
- For use with Top Cover 3.0 kN
- For glass thicknesses between 12 mm and 21.52 mm
- For applications of 0.74kN in private areas, the mounting distance amounts to 40 cm

Improved statics

Can be anchored universally depending on the application

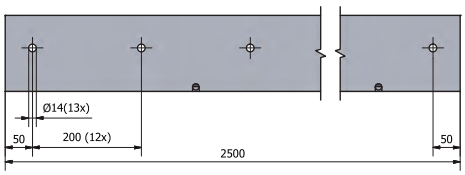


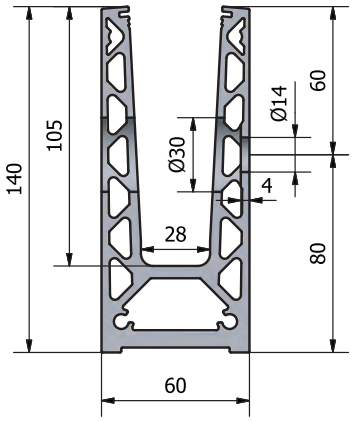
Integrated multifunctional sophisticated chamber for enabling larger drilling distances

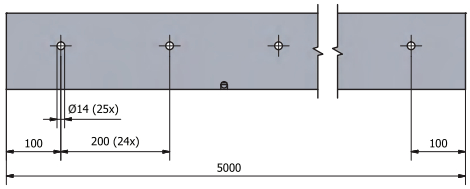


inside: 91.3521.210.81
outside: 91.3521.210.30
0.74 kN (7x/2.5mtr)
1.5 kN (13x/2.5mtr)

inside: 91.3521.210.81
outside: 91.3521.210.30
0.74 kN (7x/2.5mtr)
1.5 kN (13x/2.5mtr)







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GHA Solutions
GLASS • HARDWARE • ALUMINIUM

TL-6021 Glass Profile



TECHNICAL DETAILS

- Height: 140 mm
- Width: 60 mm
- Sales unit: 1 piece

Model 6021	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
Length	Art no.	Art no.	Art no.	Art no.
2500	–	10.6021.002.11	10.6021.002.12	–
5000	10.6021.005.10	10.6021.005.11	10.6021.005.12	10.6021.005.13/16

TL-6021 Inside Corner 90°



TECHNICAL DETAILS

- Side length inside 140 mm
- Side length outside 200 mm
- Sales unit: 1 piece

Model 6021	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
	Art no.	Art no.	Art no.	Art no.
	10.6021.300.10	10.6021.300.11	10.6021.300.12	10.6021.300.13/16

TL-6021 Outside Corner 90°



TECHNICAL DETAILS

- Side length inside 140 mm
- Side length outside 200 mm
- Sales unit: 1 piece

Model 6021	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
	Art no.	Art no.	Art no.	Art no.
	10.6021.350.10	10.6021.350.11	10.6021.350.12	10.6021.350.13/16

TL-6021 End Cap, Left



TECHNICAL DETAILS

- For use on the left
- Sales unit: 1 piece

Model 6021	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
Application	Art no.	Art no.	Art no.	Art no.
Left	10.6021.400.10	10.6021.400.11	10.6021.400.12	10.6021.400.13/16

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TL-6021 End Cap, Left, with Cover Cap



TECHNICAL DETAILS

- For use on the left
- Sales unit: 1 piece

Model 6021	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
Application	Art no.	Art no.	Art no.	Art no.
Left	10.6021.410.10	10.6021.410.11	10.6021.410.12	10.6021.410.13/16

TL-6021 End Cap, Right



TECHNICAL DETAILS

- For use on the right
- Sales unit: 1 piece

Model 6021	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
Application	Art no.	Art no.	Art no.	Art no.
Right	10.6021.450.10	10.6021.450.11	10.6021.450.12	10.6021.450.13/16

TL-6021 End Cap, Right, with Cover Cap



TECHNICAL DETAILS

- For use on the right
- Sales unit: 1 piece

Model 6021	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
Application	Art no.	Art no.	Art no.	Art no.
Right	10.6021.460.10	10.6021.460.11	10.6021.460.12	10.6021.460.13/16

TL-6021 End Cap for Staircase with Cover Strip, Left



TECHNICAL DETAILS

- For use on the left
- Can be cut to size
- Sales unit: 1 piece

Model 6021	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
Application	Art no.	Art no.	Art no.	Art no.
Left	10.6021.411.10	10.6021.411.11	10.6021.411.12	10.6021.411.13/16

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TL-6021 End Cap for Staircase with Cover Strip, Right



TECHNICAL DETAILS

- For use on the right
- Can be cut to size
- Sales unit: 1 piece

Model 6021	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
Application	Art no.	Art no.	Art no.	Art no.
Right	10.6021.461.10	10.6021.461.11	10.6021.461.12	10.6021.461.13/16

TL-6021 Cover Strip



TECHNICAL DETAILS

- With mounting strips
- For use with a cover cap, end caps must be ordered separately
- Sales unit: 1 piece

Model 6021	Mill Finish	Plain Aluminium	Stainless Steel Look	Coloured
Length	Art no.	Art no.	Art no.	Art no.
2500	–	10.6021.202.11	–	–
5000	10.6021.205.10	10.6021.205.11	10.6021.205.12	10.6021.205.13/16

TL-6021 Blanking Plug



TECHNICAL DETAILS

- Required number per 2500 mm: 17 pieces
- Sales unit: 10 pieces

Model 7000		Plastic
Colour	Diameter	Art no.
White	30 mm	90.7000.030.40
Black	30 mm	90.7000.030.41
Grey	30 mm	90.7000.030.45

TL-6021 Extension Pin





TECHNICAL DETAILS

- Length 40 mm
- Diameter Ø 6 mm
- Sales unit: 8 piece

Model 7001	V4A (interior & exterior)
	Art no.
	90.7001.640.31

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TL-6021 Fischer Fixing Anchor FH II 12/10



TECHNICAL DETAILS

- Finish interior application: zinc-plated steel (interior)
- Finish exterior application: V4A (exterior)
- Required number per 2500 mm: 13 pieces
- Sales unit: 50 pieces

Model 3521	Zinc-plated steel (interior)	V4A (exterior)
	Art no.	Art no.
	91.3521.210.81	91.3521.210.30

TL-6021 Fixing Anchor Steel



TECHNICAL DETAILS

- Finish interior application: zinc-plated steel (interior)
- Finish exterior application: V4A (exterior)
- Required number per 2500 mm: 13 pieces
- Sales unit: 13 pieces

Model 6021	Zinc-plated steel (interior)	V4A (exterior)
	Art no.	Art no.
	91.6021.060.81	91.6021.060.30

TL-6021 Befestigungsanker Rampa Holz



TECHNICAL DETAILS

- Finish interior application: zinc-plated steel (interior)
- Required number per 2500 mm: 13 pieces
- Sales unit: 13 pieces

Model 3011	Zinc-plated steel (interior)
	Art no.
	91.6021.800.81

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TL-6021 Flex-Fit 1.0 kN



TECHNICAL DETAILS

- Fine adjustment of glass panes
- For glass thicknesses between 12 - 21.52 mm
- Adjustment of up to 34 mm in relation to the vertical axis
- Pay attention to the right glass thickness!

Length		2500 mm	5000 mm	25 mtr
Glass thickness	Wedge colour	Art no.	Art no.	Art no.
12 mm	Black	90.0502.112.00	90.0505.112.00	90.0525.112.00
6/6/2 (12.76 mm)	Red	90.0502.113.00	90.0505.113.00	90.0525.113.00
6/6/4 (13.52 mm)	Grey	90.0502.114.00	90.0505.114.00	90.0525.114.00
15 mm	Yellow	90.0502.115.00	90.0505.115.00	90.0525.115.00
8/8/2 (16,76 mm)	Brown	90.0502.117.00	90.0505.117.00	90.0525.117.00
8/8/4 (17,52 mm)	Green	90.0502.118.00	90.0505.118.00	90.0525.118.00
19 mm	Blue	90.0502.119.00	90.0505.119.00	90.0525.119.00
10/10/2 (20,76 mm)	Red	90.0502.121.00	90.0505.121.00	90.0525.121.00
10/10/4 (21,52 mm)	Green	90.0502.122.00	90.0505.122.00	90.0525.122.00



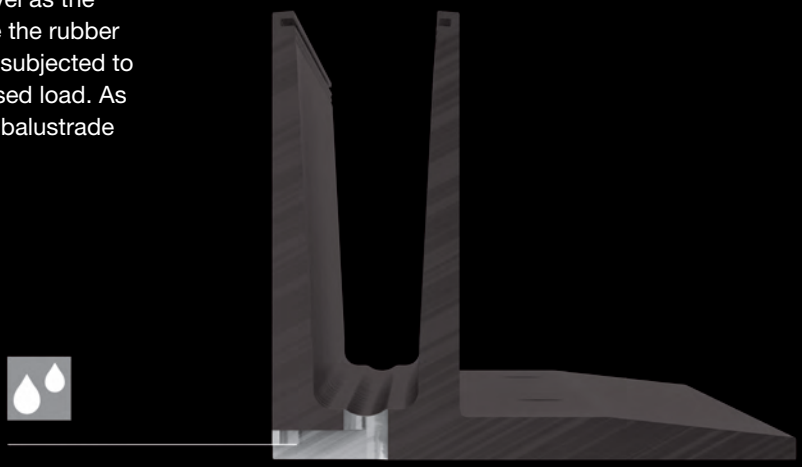
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DRAINAGE –
BUT NOT A RAIN GUTTER.

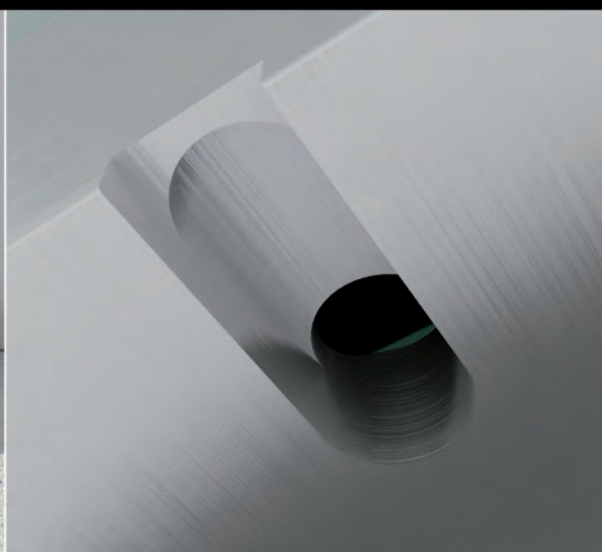
If water and cold combine, this can lead to problems when using all-glass balustrades. For this purpose, all ON**LEVEL** glass support profiles are equipped with drainage holes with a distance of 1000 mm between each of them. And we wouldn´t be ON**LEVEL**, if we hadn´t thought of all sorts of situations. Depending on the season, the balustrade can be subject to the most different influences (e.g.: leaves, sand, dirt).

We offer the only profile of this kind on the market.

ON**LEVEL** has paid special attention to ensure that the pivot point of the glass is on the same level as the rubber seals – therefore the rubber seals are never directly subjected to an increased or decreased load. As a result, dirt affects the balustrade much less.







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RDTR M/S Round Top Rail



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm
- 6 metre

RDEC M/S Round End Cap



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm

RDWB M/S Round Wall Bracket - Bottom Fix



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm

RD-180 M/S Round Straight Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm

© GHA SOLUTIONS

RD-90 M/S Round Corner Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm

RDT M/S Round T Section Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm

RDUP/DOWN M/S Round Adjustable Vertical Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm

RDS/S M/S Round Adjustable Horizontal Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm

© GHA SOLUTIONS

RDUP/DOWN M/S Round Internal Adjustable Vertical Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm
- Internal

RDS/S M/S Round Internal Adjustable Horizontal Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm
- Internal

© GHA SOLUTIONS

SQTR M/S Square Top Rail



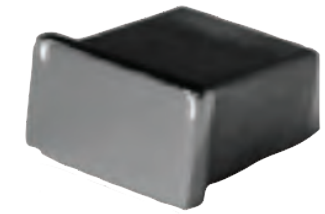
AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- 25mm x 21mm
- 6 metre

SQEC M/S Square End Cap



AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- 25mm x 21mm

SQWB M/S Square Wall Bracket - Bottom Fix



AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- 25mm x 21mm

SQ-180 M/S Square Straight Joiner



AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- 25mm x 21mm

© GHA SOLUTIONS

SQ-90 M/S Square Corner Joiner



AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- 25mm x 21mm

SQT M/S Square T Section Joiner



AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- 25mm x 21mm

SQUP/DOWN M/S Square Adjustable Vertical Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm x 21mm

SQS/S M/S Sqaure Adjustable Horizontal Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm x 21mm

© GHA SOLUTIONS

SQUP/DOWN M/S Square Internal Adjustable Verticle Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 25mm x 21mm
- Internal

SQS/S M/S Square Internal Adjustable Horizontal Joiner



AVAILABLE FINISHES

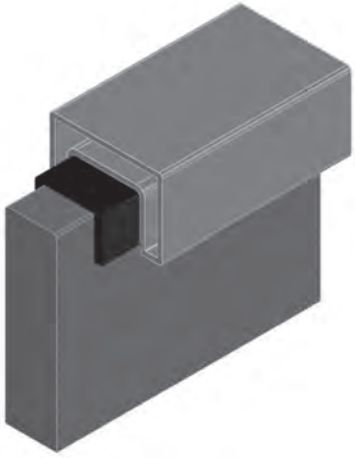
- Mirror
- Satin

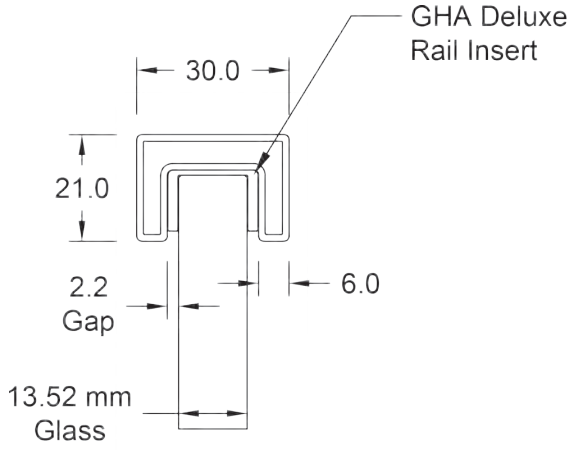
TECHNICAL DETAILS

- 25mm x 21mm
- Internal

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TRSQ (13.52) Rail Assembly





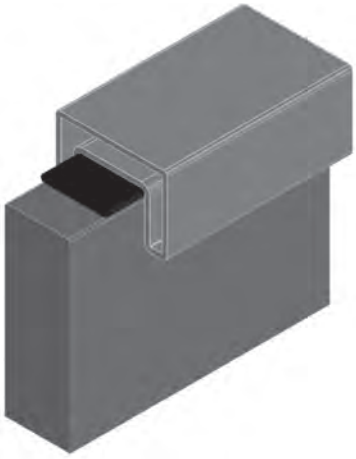
AVAILABLE FINISHES

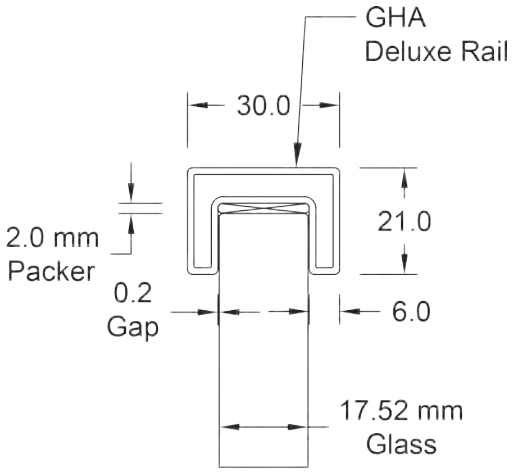
- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Length- 5800 mm
- Material - Low Carbon 316L
- Thickness Glass 13.52 – 17.52 mm

TRSQ (17.52) Rail Assembly





AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

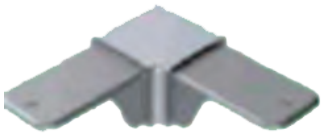
- Length- 5800 mm
- Material - Low Carbon 316L
- Thickness Glass 13.52 – 17.52 mm

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SQ-180 / SQ-90 (13.52-17.52) Inline Joiner & 90 Degree Joiner



INLINE JOINER



90 DEGREE JOINER

AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Material - Low Carbon 316L
- Thickness Glass 13.52 – 17.52 mm

SQ WB (13.52-17.52) Wall Bracket



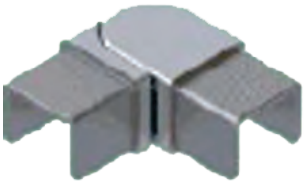
AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Material - Low Carbon 316L
- Thickness Glass 13.52 – 17.52 mm

SQ S/S (13.52-17.52) Horizontal Adjustable



AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Material - Low Carbon 316L
- Thickness Glass 13.52 – 17.52 mm

SQ Up/Down (13.52-17.52) Vertical Adjustable



AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Material - Low Carbon 316L
- Thickness Glass 13.52 – 17.52 mm

SQ EC (13.52-17.52) End Cap



AVAILABLE FINISHES

- Mirror
- Satin
- Black

TECHNICAL DETAILS

- Material - Low Carbon 316L
- Thickness Glass 13.52 – 17.52 mm

© GHA SOLUTIONS

RD38TR M/S Round Top Rail



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 38mm
- 6 metre
- Slotted

RD38EC M/S Round End Cap



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 38mm

RD38WB M/S Round Wall Bracket - Bottom Fix



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 38mm

RD38-180 M/S Round Straight Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 38mm

© GHA SOLUTIONS

RD38-90 M/S Round Corner Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 38mm

RD38-90V M/S Round Vertical Corner Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 38mm

RD38UP/DOWN M/S Round Adjustable Vertical Joiner Downwards



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 38mm

RD38S/S M/S Round Adjustable Vertical Joiner Upwards



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 38mm

© GHA SOLUTIONS

RD50TR M/S Round Top Rail



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm
- 6 metre
- Slotted

RD50EC M/S Round End Cap



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RD50WB M/S Round Wall Bracket - Bottom Fix



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RD50-180 M/S Round Straight Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

© GHA SOLUTIONS

RD50-90 M/S Round Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RD50-90V M/S Round Vertical Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RD50UP/DOWN M/S Round Adjustable Vertical Joiner Downwards



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RD50S/S M/S Round Adjustable Vertical Joiner Upwards



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

© GHA SOLUTIONS

SQ50x25 M/S Square Top Rail



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 25mm
- 6 metre

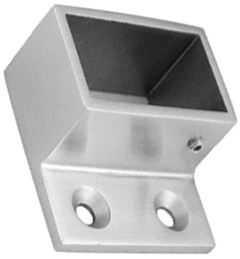
SQ50x25EC M/S Square End Cap



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 25mm

SQ50x25WB M/S Square Wall Bracket - Bottom Fix



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 25mm

SQ50x25-180 M/S Square Straight Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 25mm

© GHA SOLUTIONS

SQ50x25-90 M/S Square Corner Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm x 25mm

SQ50x25UP/DOWN M/S Square Adjustable Vertical Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm x 25mm

SQ50x25S/S M/S Sqaure Adjustable Horizontal Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm x 25mm

© GHA SOLUTIONS

RD-38 Handrail M/S



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm
- 6 metre

RDEC M/S Round Tube End Cap



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

RDWB M/S Round Tube Wall Bracket - Bottom Fix



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

RD180 M/S Round Tube Straight Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

© GHA SOLUTIONS

RD90 M/S Round Hand Rail Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

RD90-1 M/S Round Hand Rail Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

RD90-2 M/S Round Hand Rail Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

RD180 M/S Round Hand Rail 180 Degree Bend



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

© GHA SOLUTIONS

RD M/S End Elbow



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

RDADJ M/S Adjustable Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

RDADJ-1 M/S Adjustable Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

RDADJ-2 M/S Adjustable Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

© GHA SOLUTIONS

RDADJ-3 M/S Round Hand Rail Adjustable Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

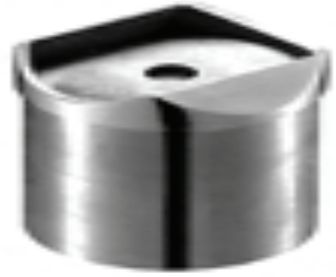
RDHRA M/S Round Hand Rail Adapter



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

RDHRA1 M/S Round Hand Rail Adapter



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

RDHRCB M/S Round Hand Rail Cover & Base



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 38mm

© GHA SOLUTIONS

RD-50 HANDRAIL M/S Round Hand Rail Top Rail - 50MM DIAM



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm
- 6 metre

RDHR50EC M/S Round Hand Rail End Cap



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDHR50WB M/S Round Hand Rail Wall Bracket - Bottom Fix



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDHR50SJ M/S Round Hand Rail Straight Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

© GHA SOLUTIONS

RDHR50CJ M/S Round Hand Rail Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDHR50CJ1 M/S Round Hand Rail Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDHR50CJ2 M/S Round Hand Rail Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDHR50DB M/S Round Hand Rail 180 Degree Bend



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

© GHA SOLUTIONS

RD M/S Round Hand Rail End Elbow



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDADJM/S Round Hand Rail Adjustable Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDADJ-1 M/S Round Hand Rail Adjustable Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDADH-2 M/S Round Hand Rail Adjustable Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

© GHA SOLUTIONS

RDADJ-3 M/S Round Hand Rail Adjustable Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDHR50A M/S Round Hand Rail Adaptor



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDHR50A1 M/S Round Hand Rail Adaptor



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

RDHR50CB M/S Round Hand Rail Cover and Base



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm

© GHA SOLUTIONS

SQ50x10 M/S Square Hand Rail Top Rail - 50 X 10MM



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 10mm
- 6 metre

SQ50x10EC M/S Square Hand Rail End Cap



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 10mm

SQ50x10WB M/S Square Hand Rail Wall Bracket - Bottom Fix



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 10mm

SQ50x10-180 M/S Square Hand Rail Straight Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 10mm

© GHA SOLUTIONS

SQ50x10GB M/S Hand Rail Bracket



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 10mm

SQ50x10-90 M/S Square Hand Rail Corner Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 10mm

SQ50x10UP/DOWN M/S Square Adjustable Vertical Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 10mm

SQ50x10S/S M/S Square Adjustable Horizontal Joiner



AVAILABLE FINISHES
- Mirror
- Satin

TECHNICAL DETAILS
- 50mm x 10mm

© GHA SOLUTIONS

SQ50x25 M/S Square Hand Rail Top Rail 50 X 25MM



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm x 25mm

SQ50x25EC M/S Square Hand Rail End Cap



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm x 25mm

SQ50x25WB M/S Square Hand Rail Wall Bracket - Bottom Fix



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm x 25mm

SQ50x25-180 M/S Square Hand Rail Straight Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm x 25mm

© GHA SOLUTIONS

SQ50x25-90 M/S Square Hand Rail Corner Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm x 25mm

SQ50x25UP/DOWN M/S Square Adjustable Vertical Joiner



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm x 25mm

SQ50x25S/S M/S Square Adjustable Horizontal Joiner



AVAILABLE FINISHES

- Mirror
- Satin

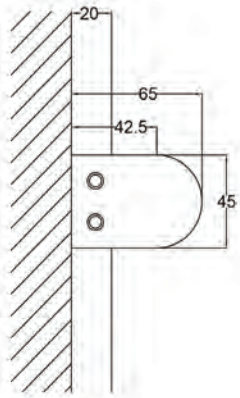
TECHNICAL DETAILS

- 50mm x 25mm

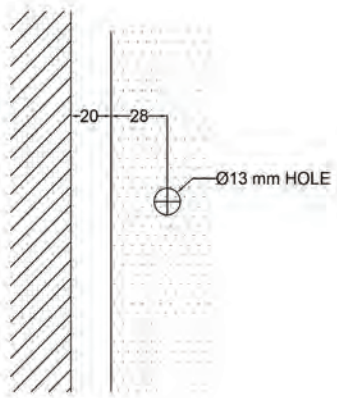
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BCD 316 Stainless Steel





Flat Back
and Curved Back



AVAILABLE FINISHES

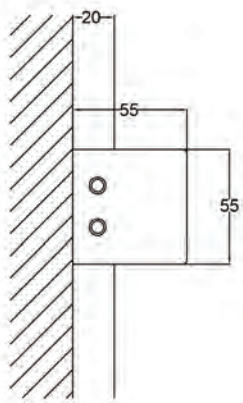
- Mirror
- Satin

TECHNICAL DETAILS

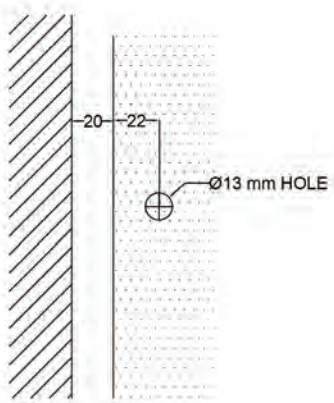
- For 8mm, 10mm & 12mm Glass
- Duplex 2205

BCSQ 316 Stainless Steel





Flat Back
and Curved Back



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- For 8mm, 10mm & 12mm Glass
- Duplex 2205

SADDLE-FLAT/CURVED 316 Stainless Steel





AVAILABLE FINISHES

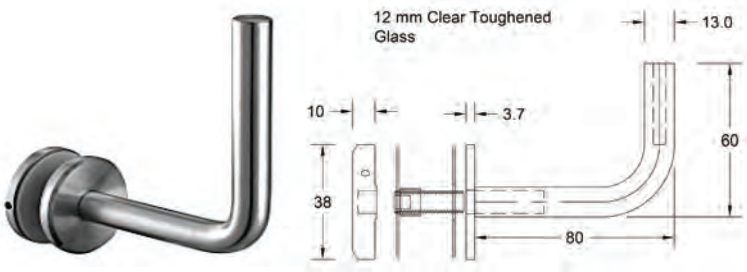
- Mirror
- Satin

TECHNICAL DETAILS

- For 8mm, 10mm & 12mm Glass
- Duplex 2205

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BCG38 Handrail Bracket



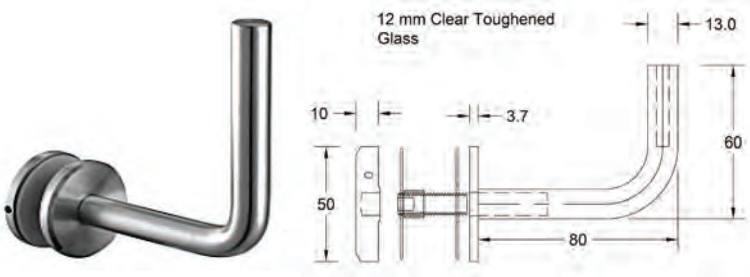
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 38mm Diameter x 80mm x 80mm Glass Fixing
- 38mm Diameter x 80mm x 40mm Glass Fixing

BCG50 Handrail Bracket



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm Diameter x 80mm x 80mm Glass Fixing
- 50mm Diameter x 80mm x 40mm Glass Fixing

BCADJ Handrail Bracket



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm Diameter x 60mm x 60mm Glass Fixing
- Adhustable up/dowb

BC W 50 Handrail Bracket



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm Diameter x 60mm x 60mm Glass Fixing

© GHA SOLUTIONS

STANDOFFS



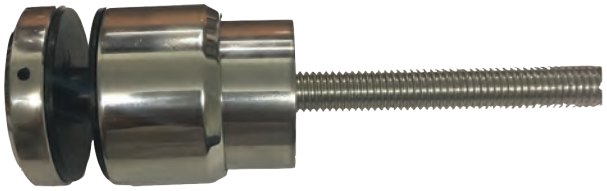
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm Diameter
- Adjustable 30-45mm range

STANDOFFS



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- 50mm Diameter
- Adjustable 30-45mm range

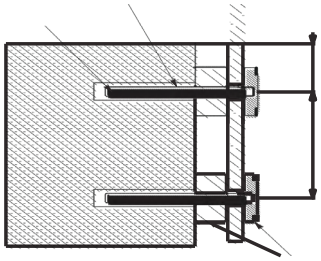
Spacers

	DIAMETER				
	19	25	30	38	50
5mm	N/A	N/A	N/A	5mm	5mm
10mm	10mm	10mm	10mm	10mm	10mm
20mm	20mm	20mm	20mm	20mm	20mm
30mm	30mm	30mm	30mm	30mm	30mm
40mm	40mm	40mm	40mm	40mm	40mm
50mm	50mm	50mm	50mm	50mm	50mm

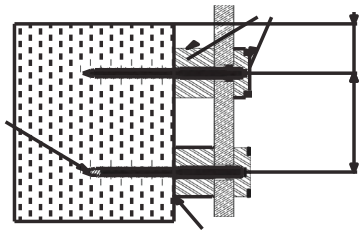
	SUPPLIED WITH THREAD ROADS				
	M6	M6	M10	M12	M12
	30	–	30	–	–
	60	60	60	60	60
	90	90	90	90	90
	120	120	120	120	120
	150	150	150	150	150

© GHA SOLUTIONS

CHEMSET FIXING



LAG SCREW FIXING



TLS60/TLS90/TLS120 Timber Lag Screw



AVAILABLE FINISHES

- SSS

TECHNICAL DETAILS

- 304 SSS
- TLS60 – M12 x 50
- TLS90 – M12 x 80
- TLS120 – M12 x 120

BHA Blind Hole Anchor



AVAILABLE FINISHES

- SSS

TECHNICAL DETAILS

- BHA

T1-15 Timber Inserts



AVAILABLE FINISHES

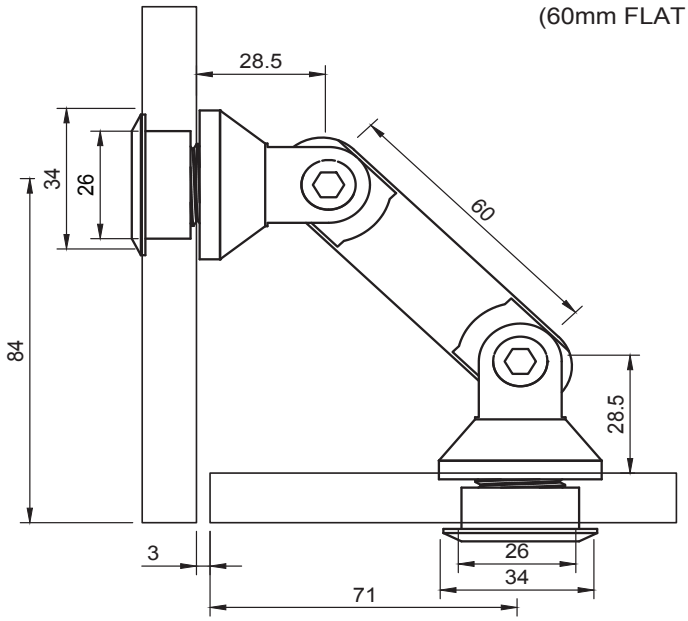
- Satin

TECHNICAL DETAILS

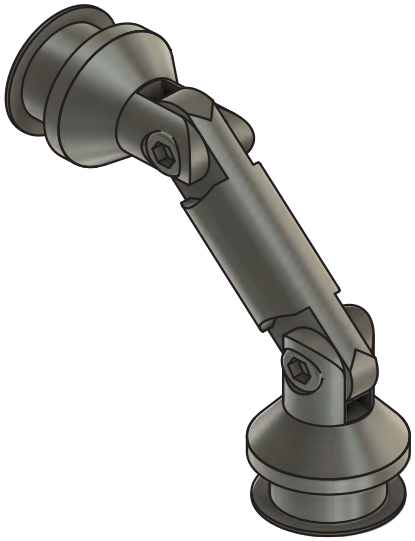
- Drill a 15mm Hole Screw into timber

© GHA SOLUTIONS

SA8000A-1(60mm) 90° Adjustable Glass to Glass Connector



(60mm FLAT HOLE 90° ADJUSTABLE GLASS TO GLASS CONNECTOR)



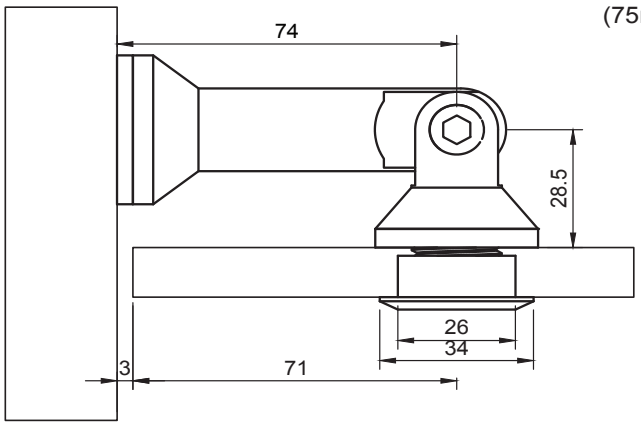
AVAILABLE FINISHES

- Satin

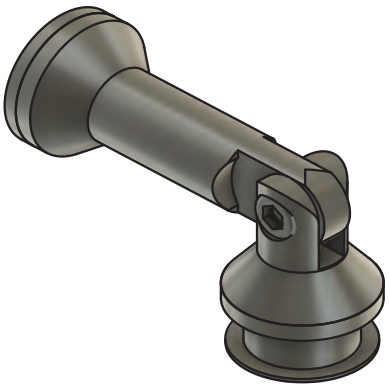
TECHNICAL DETAILS

- 316 SS

SA8000A-3(75mm) Flat Hole Glass to Wall Adjustable Connector



(75mm FLAT HOLE GLASS TO WALL AJUSTABLE CONNECTOR)



AVAILABLE FINISHES

- Satin

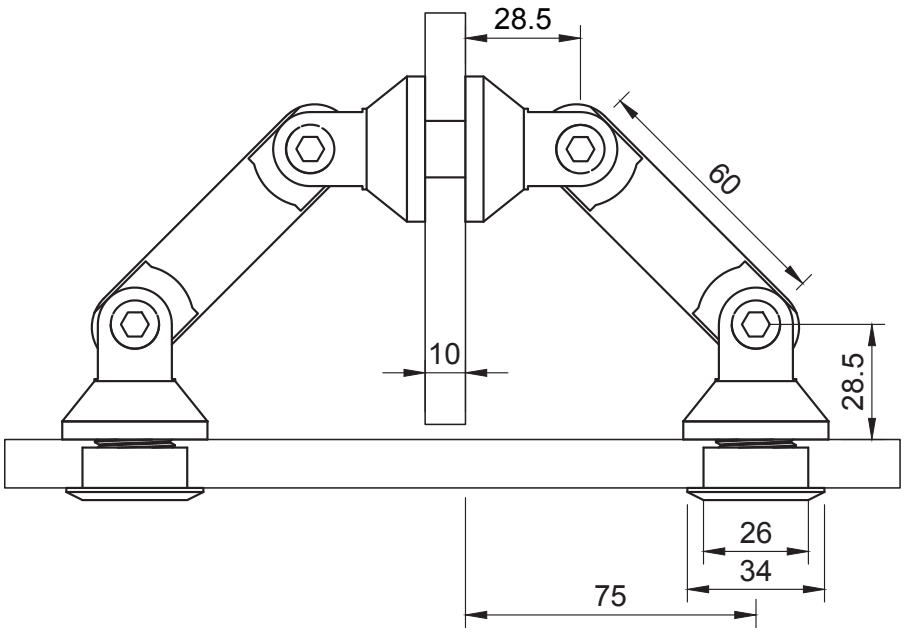
TECHNICAL DETAILS

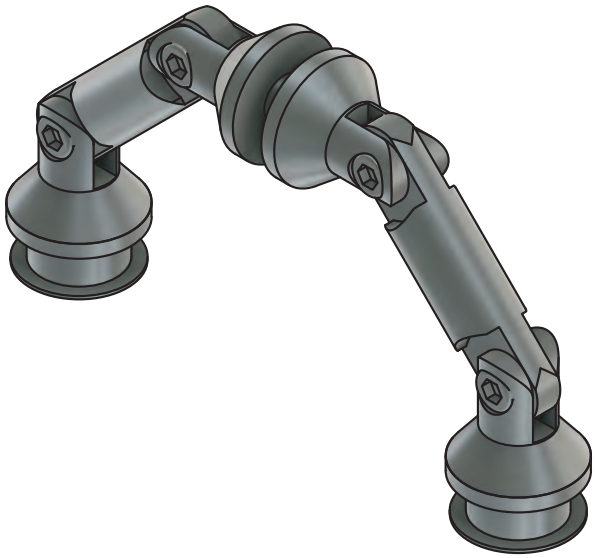
- 316 SS

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SA8000A-4(60mm) 90° Adjustable Double Glass Connector

(60mm FLAT HOLE 90° ADJUSTABLE DOUBLE GLASS CONNECTOR)





AVAILABLE FINISHES

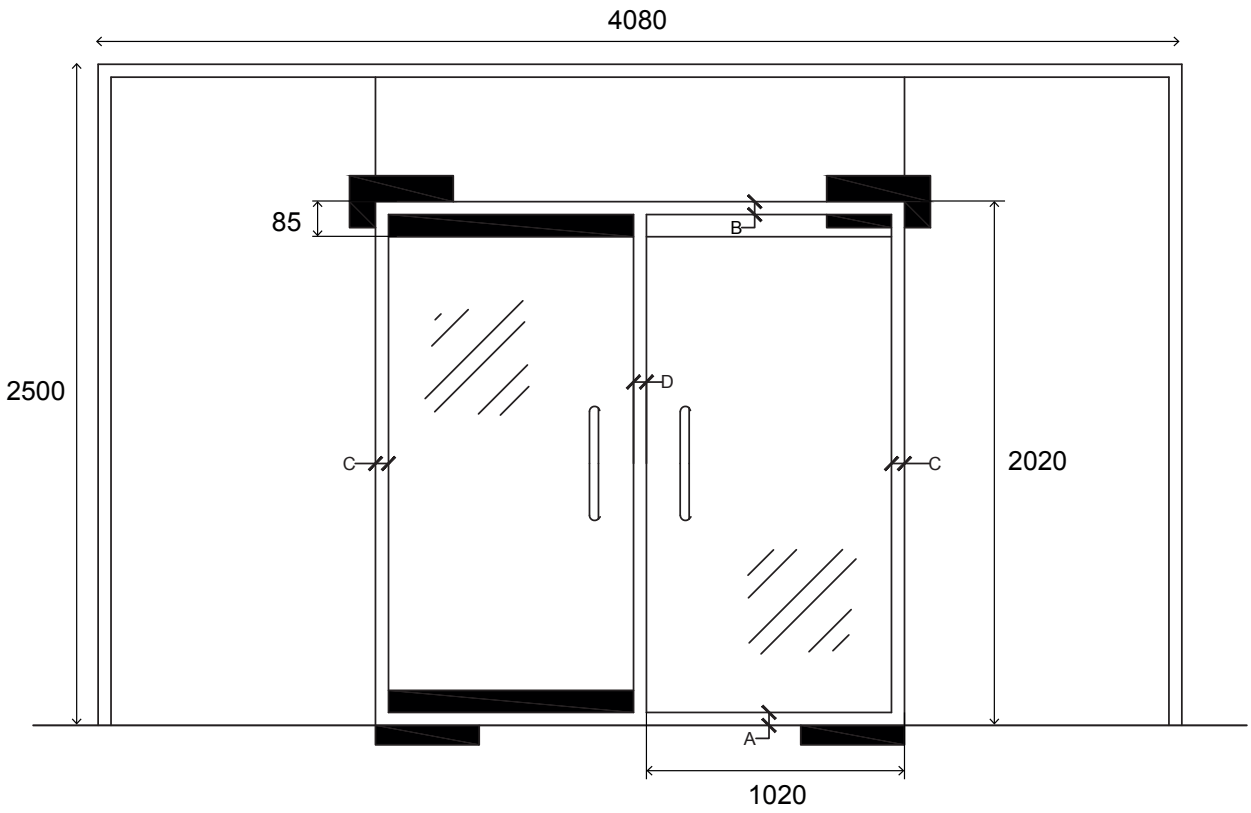
- Satin

TECHNICAL DETAILS

- 316 SS

© GHA SOLUTIONS

Clearances



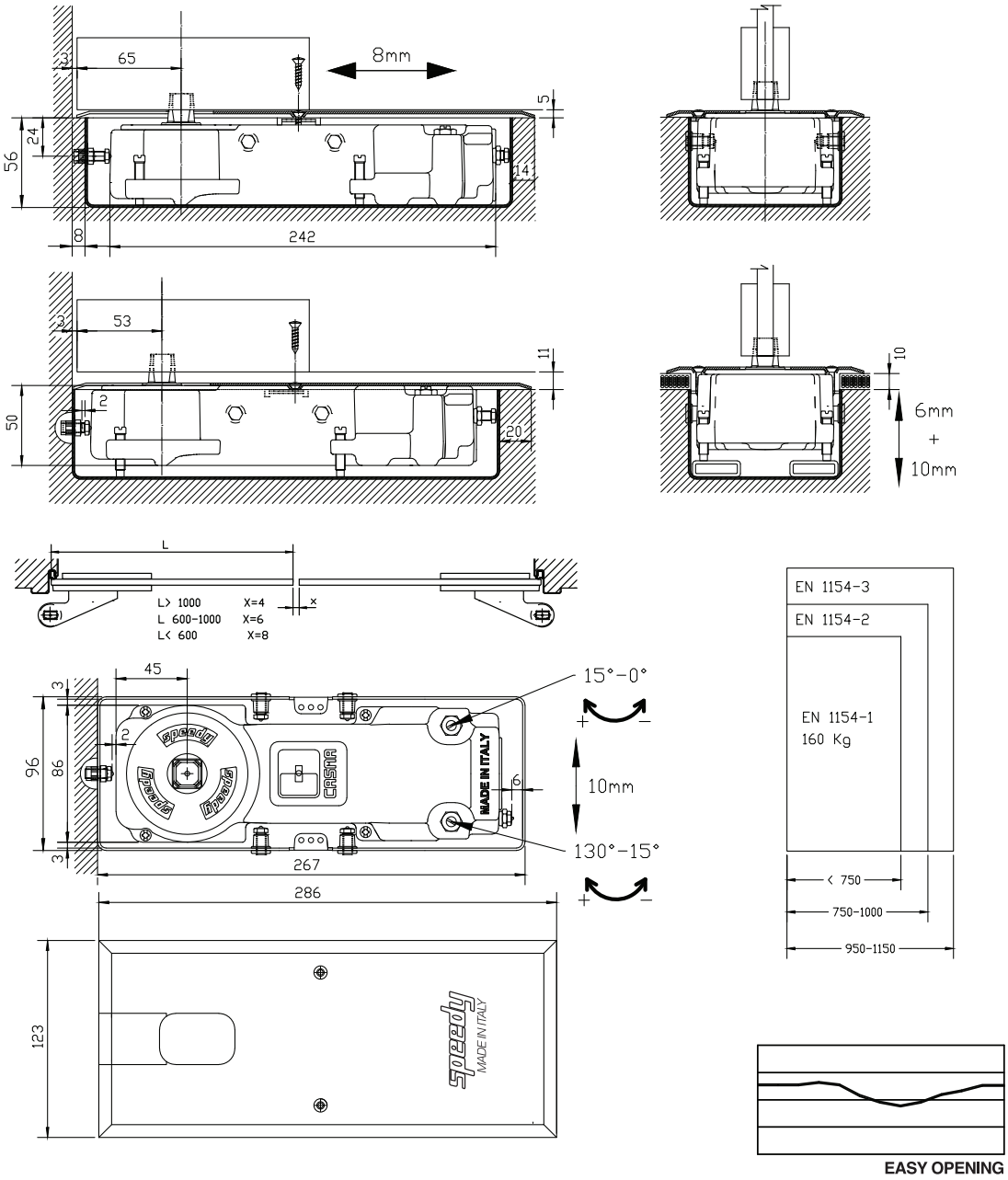
A	Bottom Clearance	10mm
B	Top Clearance	4mm-5mm
C	Side Clearance	4mm
D	Centre Clearance	3mm-5mm

EXTENDED SPINDLES

	Clearance under door	Increase to clearance A or F
0mm	10mm	Nil
5mm	15mm	5
10mm	20mm	10
15mm	25mm	15
20mm	30mm	20
25mm	35mm	25
30mm	40mm	30

© GHA SOLUTIONS

M60 Speedy Floor Spring



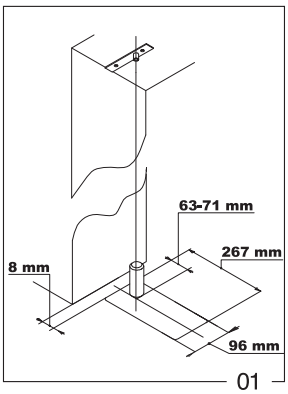
AVAILABLE FINISHES

- Mirror
- Satin

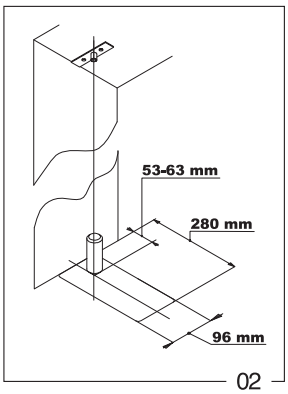
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M60 Speedy Floor Spring

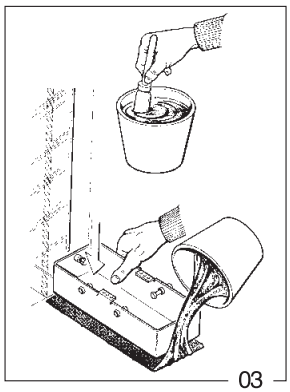
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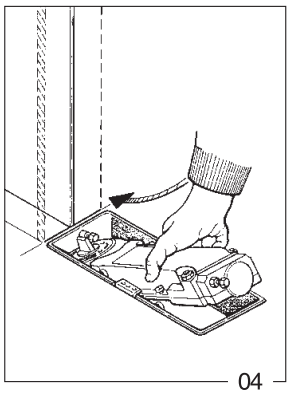


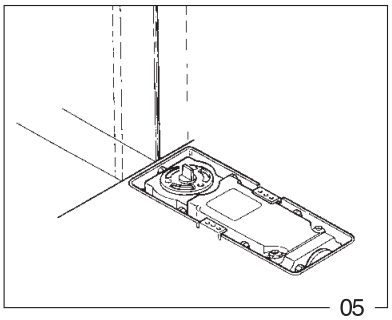
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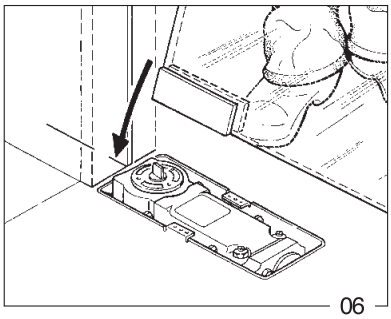


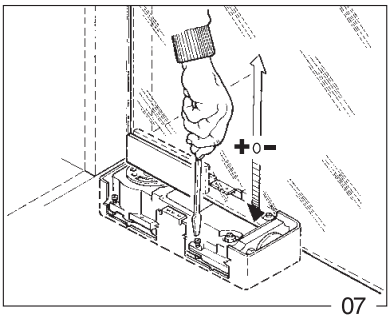
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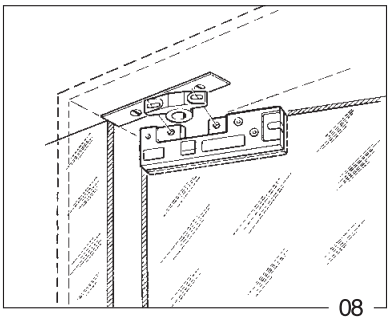

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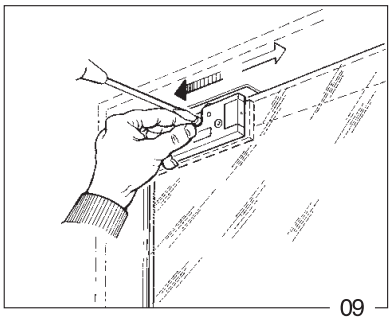

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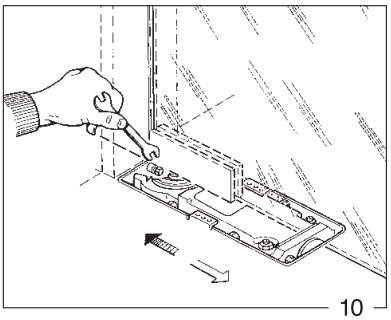

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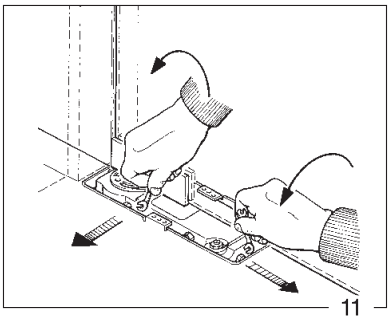

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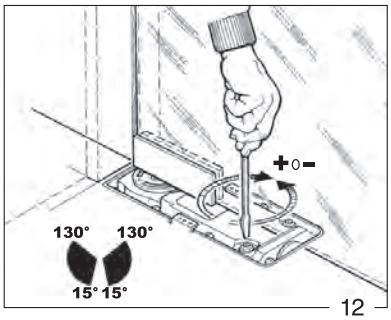

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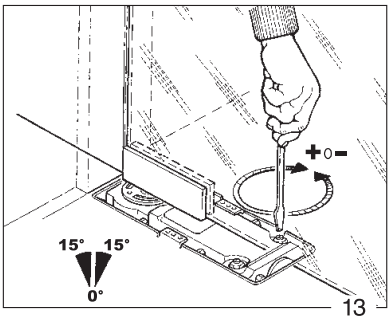

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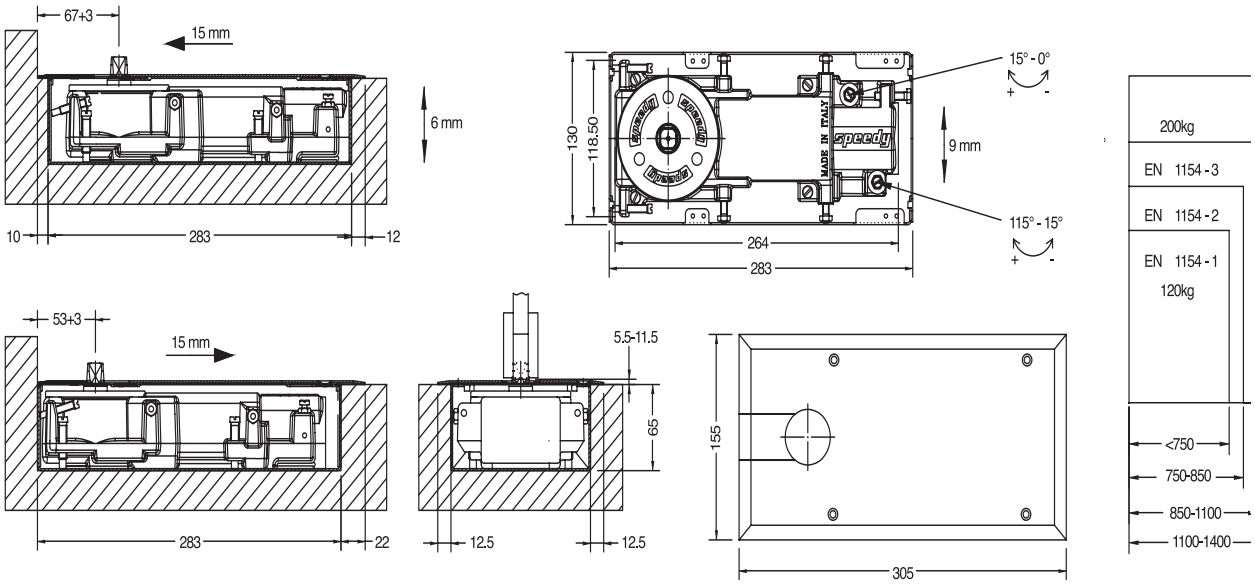
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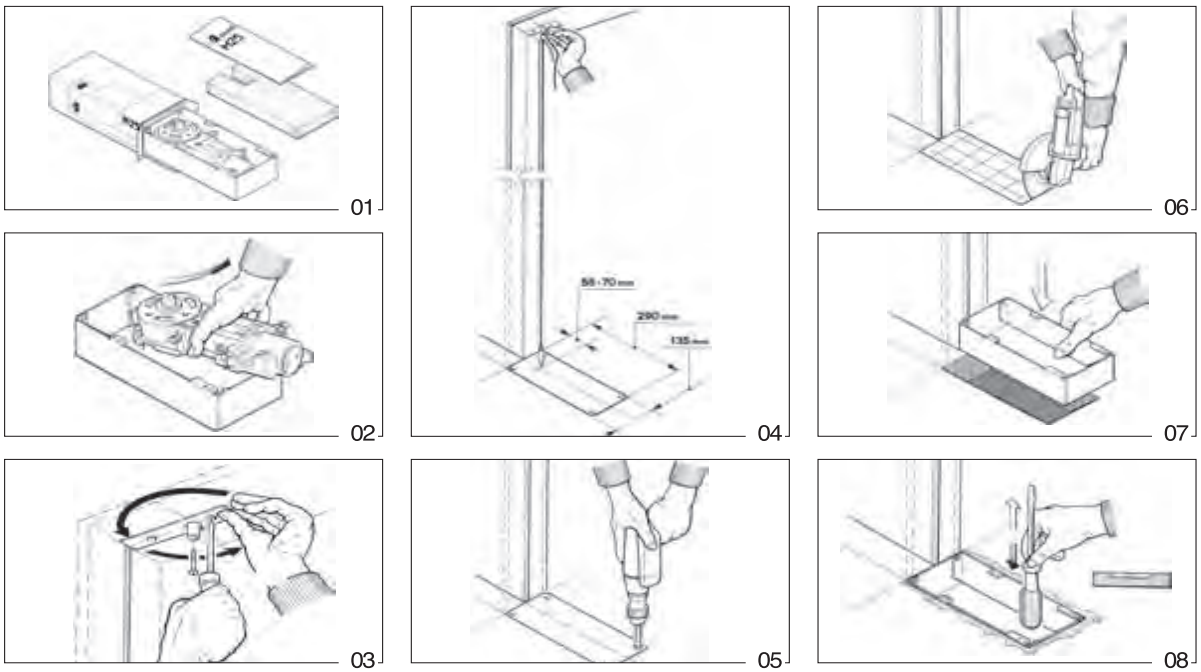
M25 Speedy Floor Spring



AVAILABLE FINISHES

- Mirror
- Satin

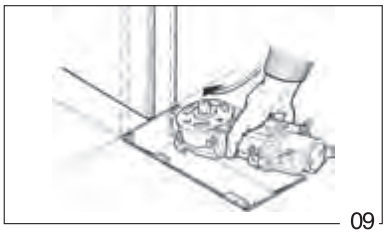
INSTALLATION INSTRUCTIONS

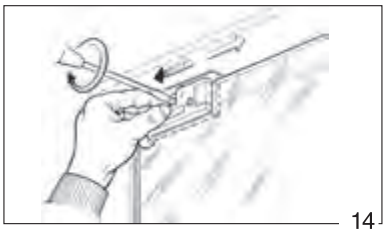


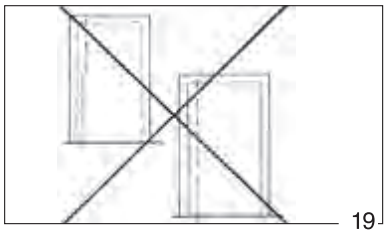
© GHA SOLUTIONS

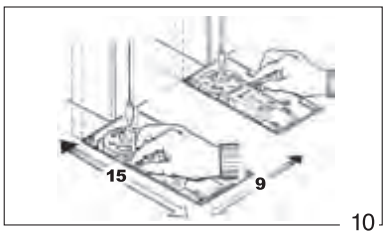
M25

INSTALLATION INSTRUCTIONS (CONT'D)


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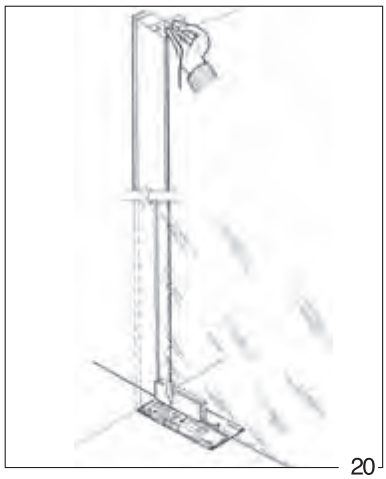

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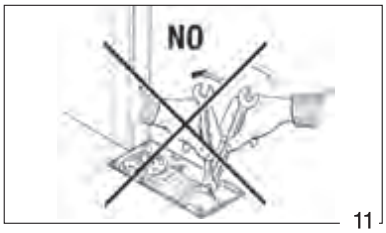

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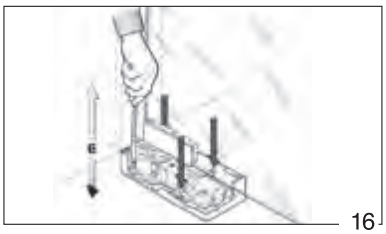
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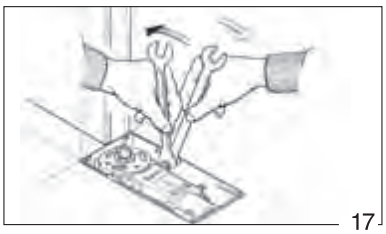

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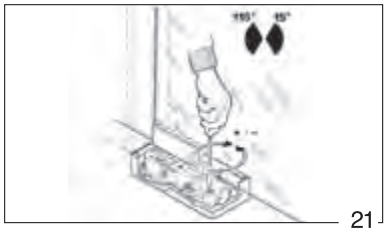


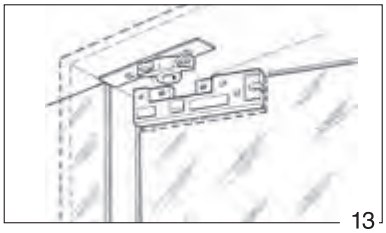
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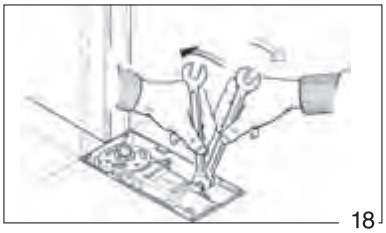

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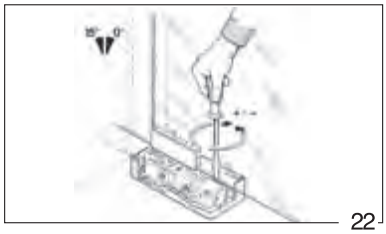

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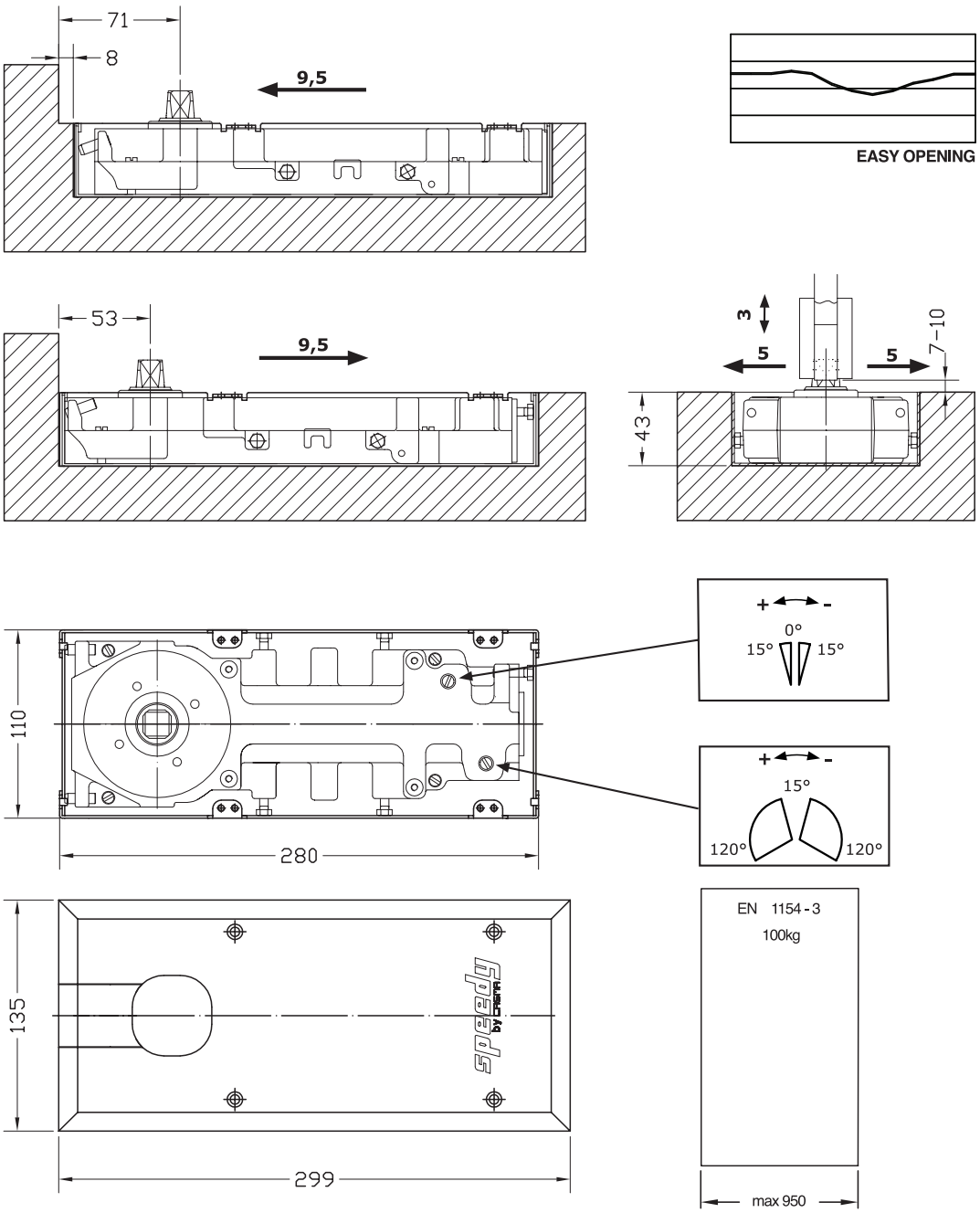

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M68 Speedy Floor Spring



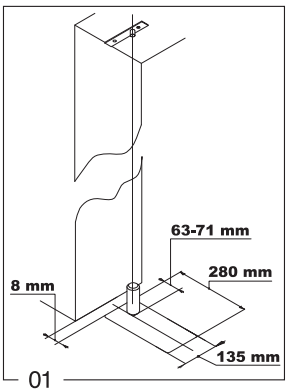
AVAILABLE FINISHES

- Mirror
- Satin

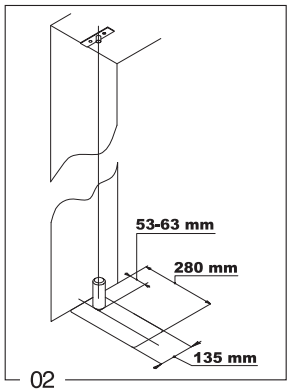
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M68

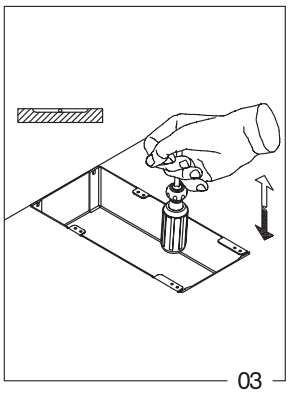
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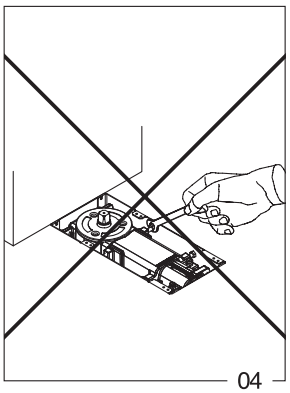


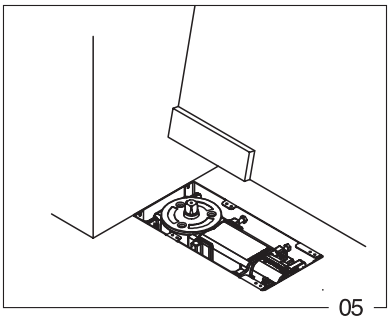
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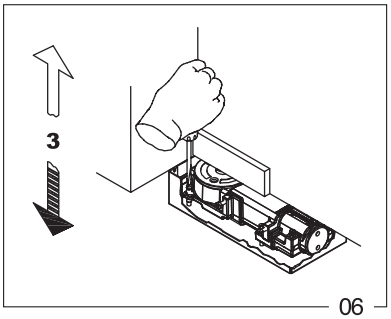


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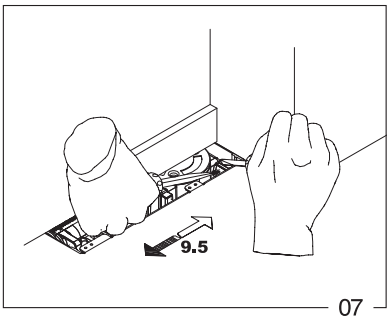

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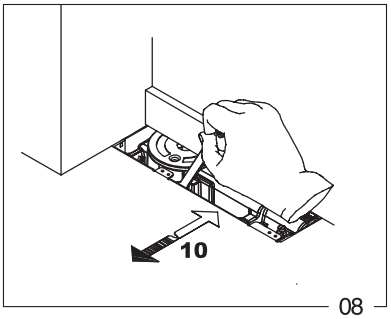

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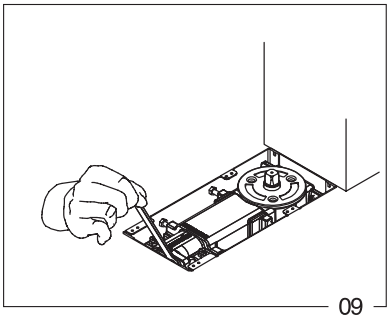
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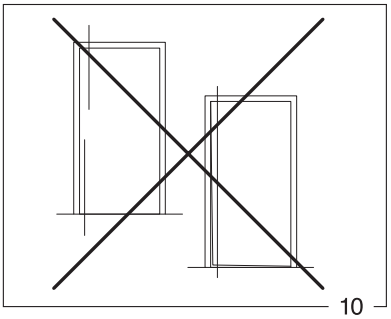


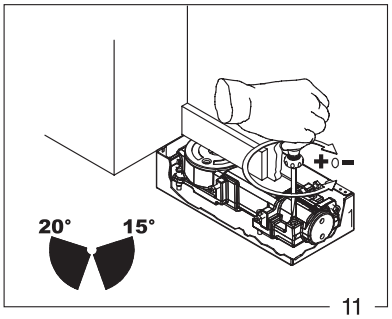
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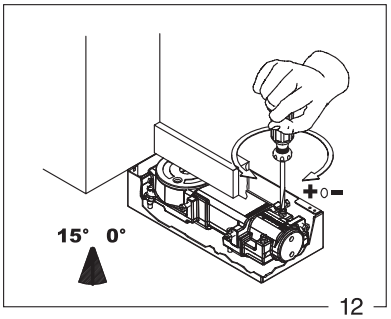
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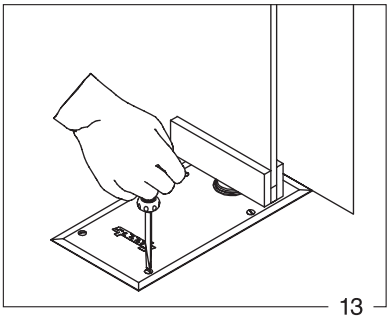

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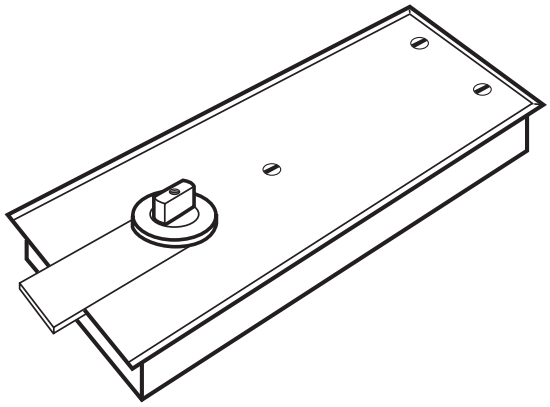


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BTS84 Standard Floor Spring

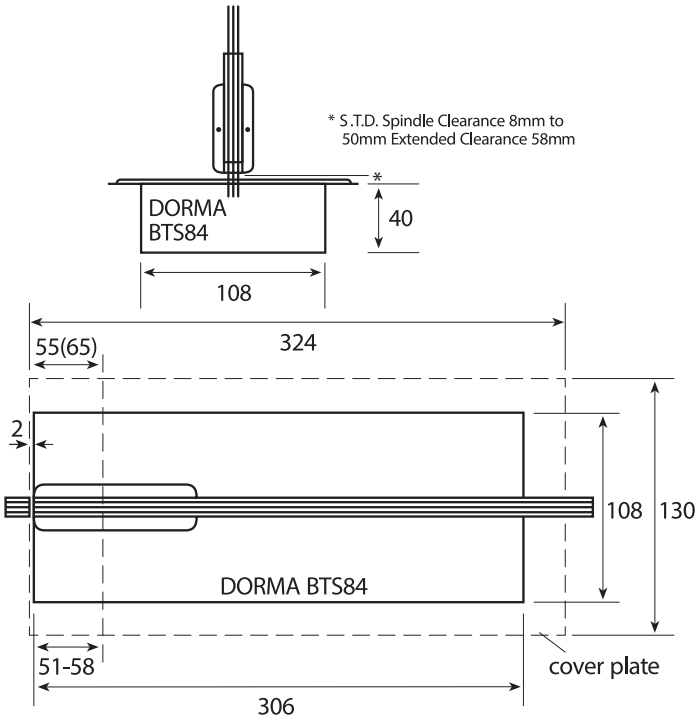


TECHNICAL DETAILS

- Low profile 40mm depth
- Double action
- 90˚ hold open
- Stainless steel coverplate
- Maximum door weight: 100kg
- Maximum door width: 1100mm
- Maximum opening angle: 130˚
- Variable closing force from 25 Nm

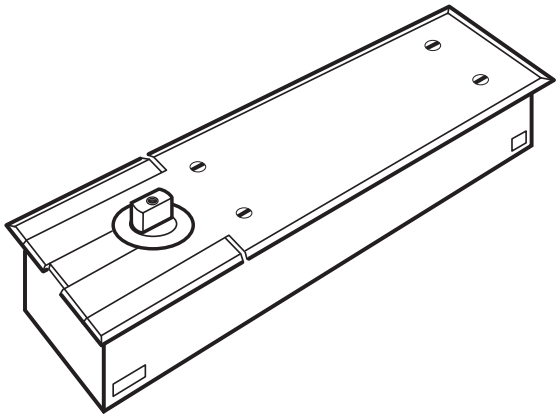
OPTIONS

- Brass coverplate
- Non hold open
- 5, 10, 15 mm extended spindles
- 15Nm weak spring force



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BTS80 Heavy Duty Spring

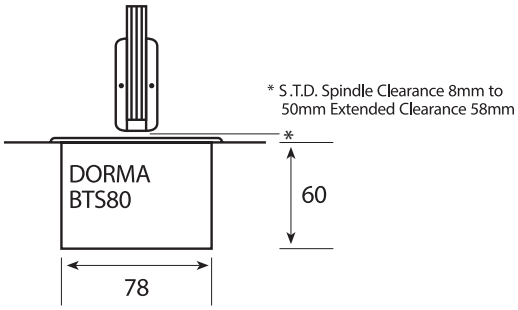


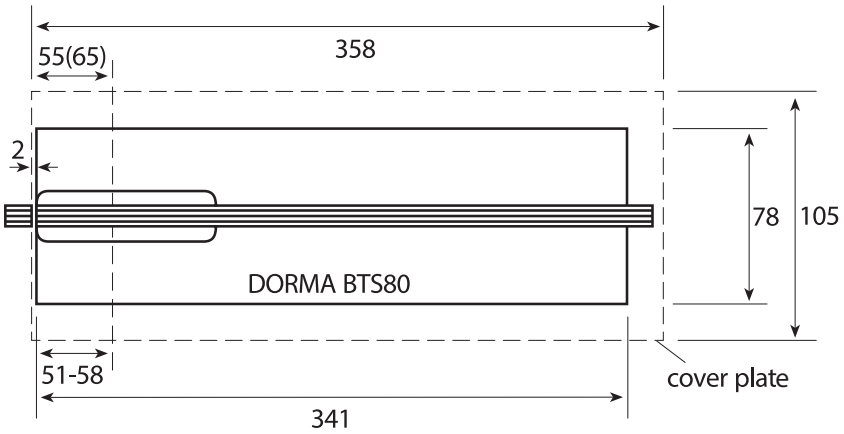
TECHNICAL DETAILS

- Double action
- Selective multi-point hold open adjustable
- between approximately 75˚ and 175˚
- Mechanical backcheck at approximately
- 85˚ and 165˚
- Stainless steel coverplate
- Maximum door weight: 300kg
- Maximum door width: 1400mm
- Maximum opening angle: 180˚
- Variable closing force 53 Nm

OPTIONS

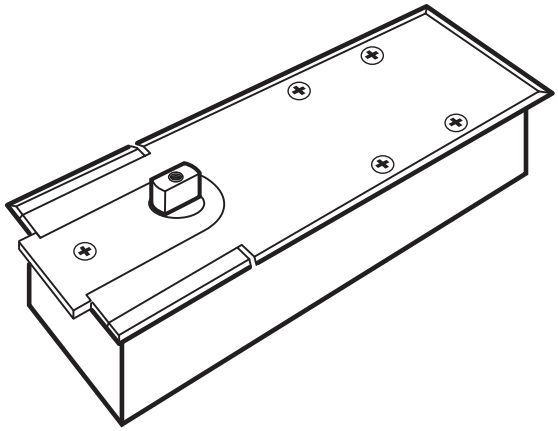
- Brass coverplate
- 5, 10, 15 mm extended spindles
- 35Nm spring force





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BTS75V Medium Duty Floor Spring

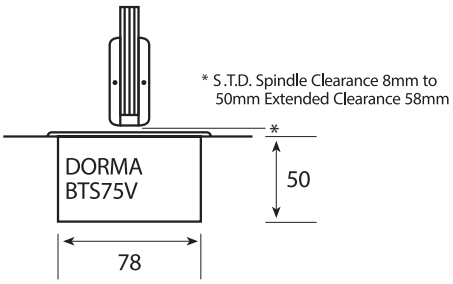


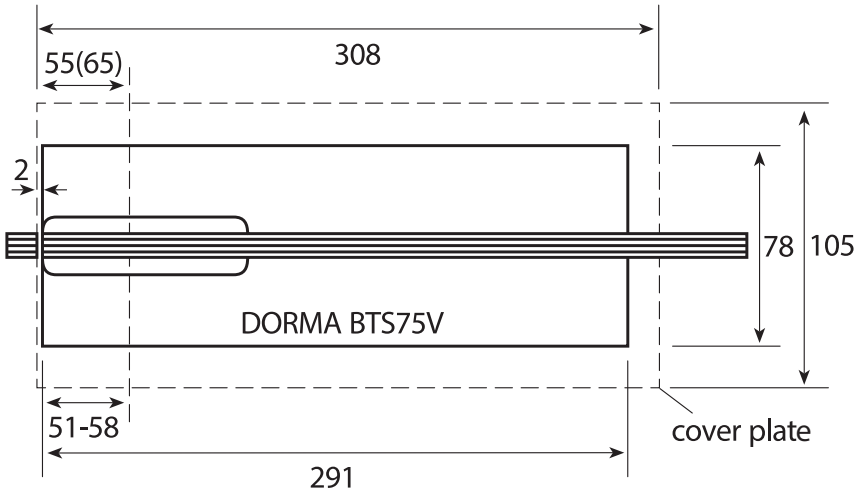
TECHNICAL DETAILS

- Double action
- 90˚ hold open
- Stainless steel coverplate
- Maximum door weight: 120kg
- Maximum door width: 1100mm
- Maximum opening angle: 175˚
- Variable closing force from 10 - 30 Nm

OPTIONS

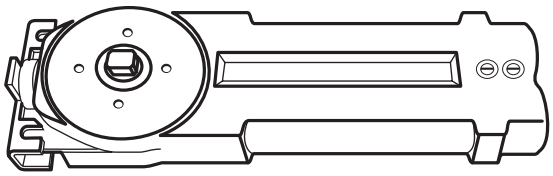
- Brass coverplate
- Non hold open
- 5, 10, 15 mm extended spindles





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RTS85 Overhead Door Closer

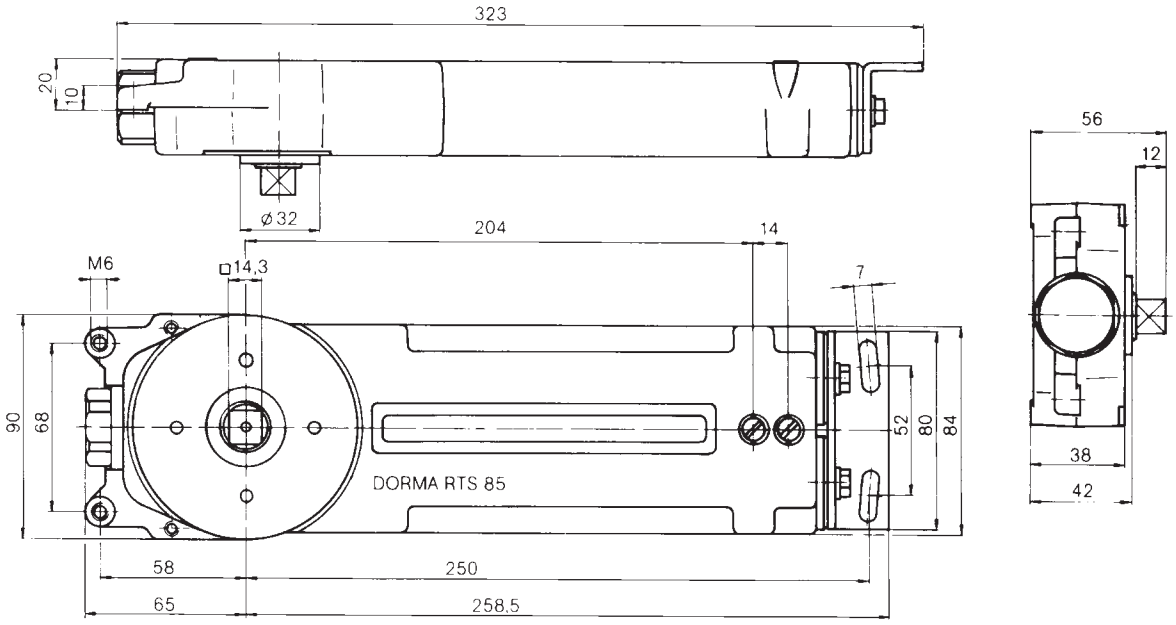


TECHNICAL DETAILS

- Double action
- 90˚ hold open
- Aluminium / wood fix silver pearl coverplate
- Maximum door width: 1000mm

OPTIONS

- Non hold open

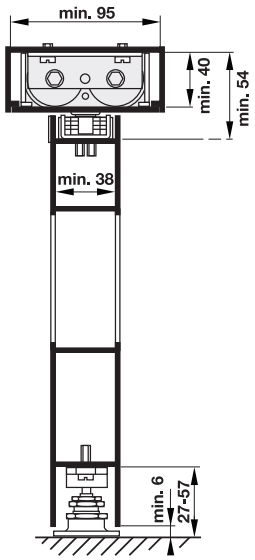


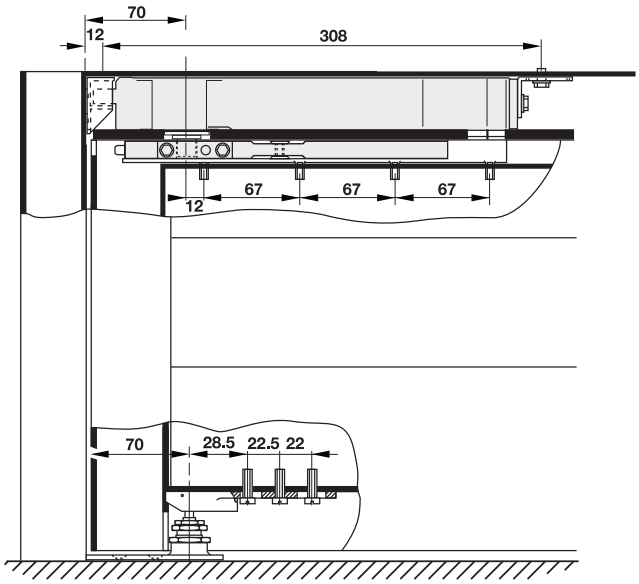
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DCL701 / DCL704 Transom Door Closer









AVAILABLE FINISHES

- Polished stainless steel
- Satin stainless steel

TECHNICAL DETAILS

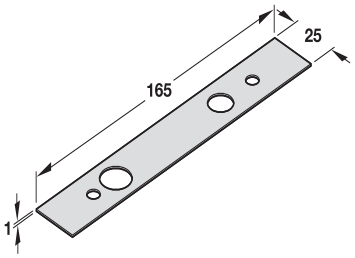
- Adjustable closing and latching speed
- Laterally adjustable
- Maximum door opening angle approx. 130°
- Closing force: size 2/3/4 complying with EN 1154

APPLICATION

- For single or double action aluminium framed doors

© GHA SOLUTIONS

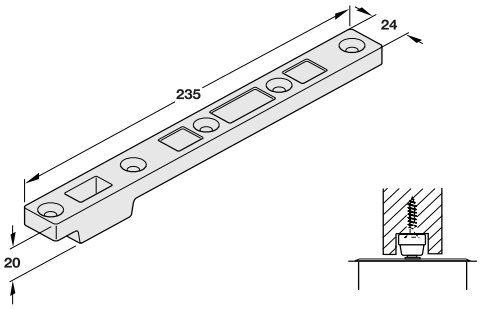
Floor Spring Accessories – Cover Plate - Top Pivot



AVAILABLE FINISHES

- Satin
- Mirror

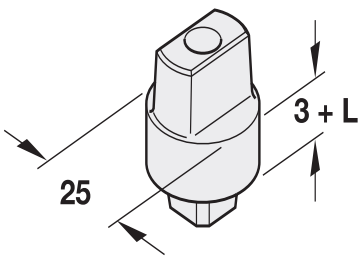
Floor Spring Accessories – Door Strap



AVAILABLE FINISHES

- Galvanised

Floor Spring Accessories – Extended Spindle FOR BTS 75 V / 80 / 84



AVAILABLE FINISHES

- Galvanised

TECHNICAL DETAILS

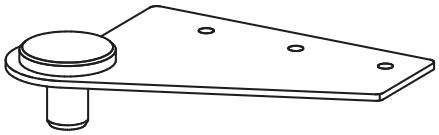
- Flat conical
- Optional for left or right hand applications
- With 3° offset
- Available sizes: 5mm - up to 50mm

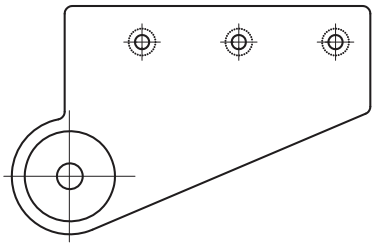
APPLICATION

- To increase the floor clearance (i.e. for doors with thresholds or floors fitted with carpets)

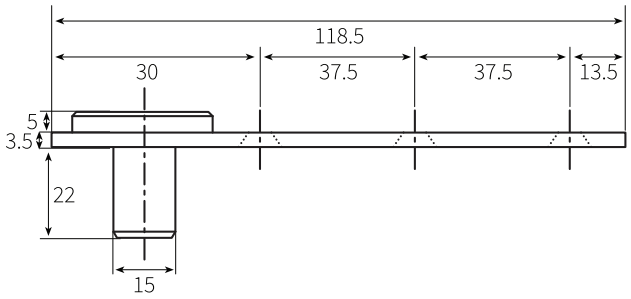
© GHA SOLUTIONS

10481 / 10482 Right and Left Hand Pivot

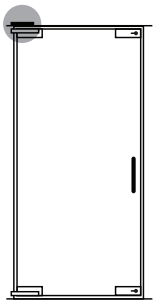




DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

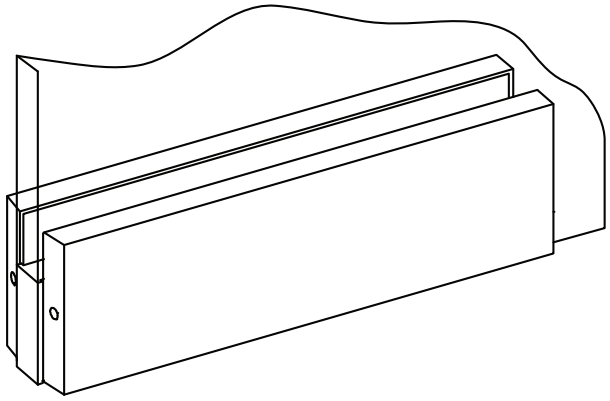
- Natural anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

- Maximum door weight 100kg
- Maximum door width 1,100mm

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41020 Patch Fitting - 19mm Glass



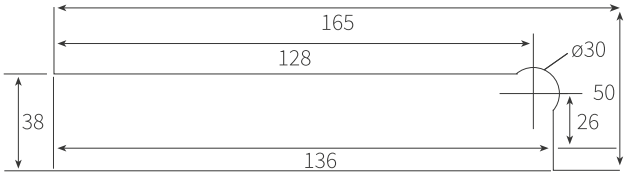
AVAILABLE FINISHES

- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

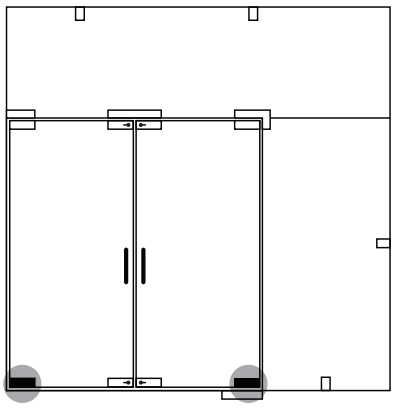
TECHNICAL DETAILS

- Bottom patch fitting
- Maximum door weight 100kg
- Maximum glass hold 300kg
- Pivot set at 55mm or 65mm
- 19mm glass thickness

DETAIL

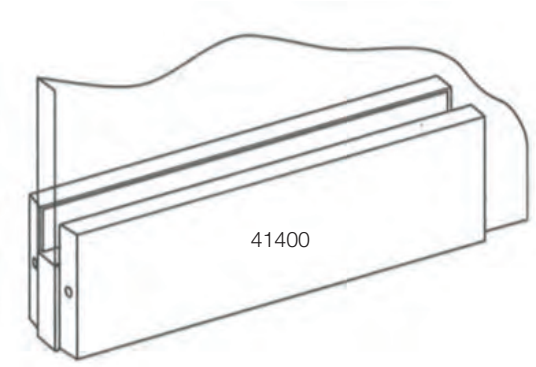


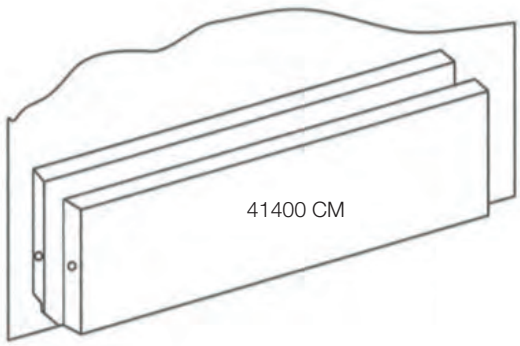
INSITU APPLICATION



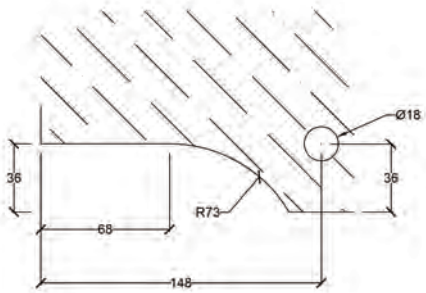
© GHA SOLUTIONS

41400 / 41400CM Pivot Patch Fitting / Centre Mount

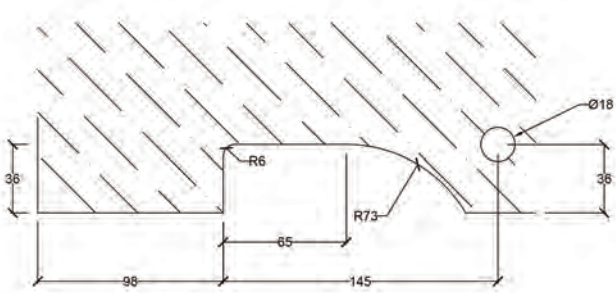




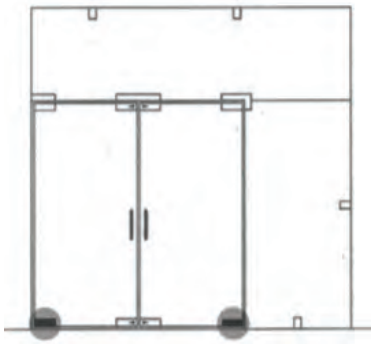
DETAIL - 41400



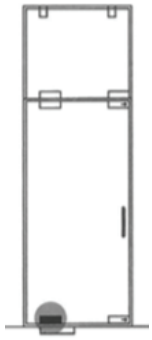
DETAIL - 41400CM



INSITU APPLICATION



INSITU APPLICATION



AVAILABLE FINISHES

- Satin stainless steel

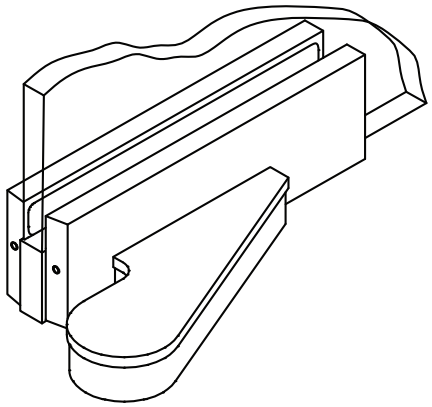
TECHNICAL DETAILS

- To be used in flooring or structure with pin locks
- Elongated hole for adjustment with lock on site
- Suitable for eurostyle pin locks in floor

GLASS PREPARATION
To suit 150mm pivot point

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41881 Offset Patch - Bottom Left Hand Side



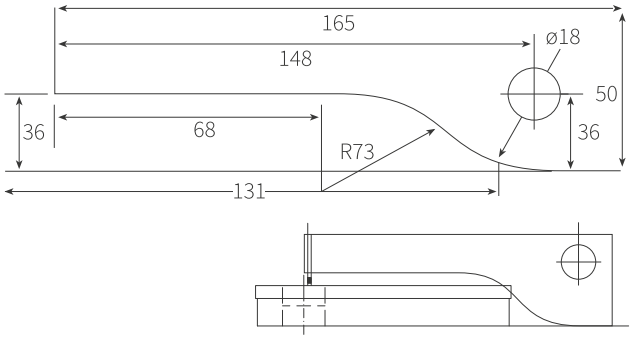
AVAILABLE FINISHES

- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

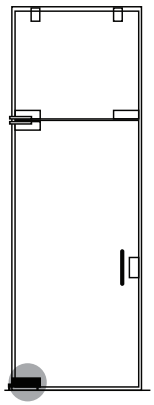
TECHNICAL DETAILS

- Maximum door weight 100kg
- Maximum glass hold 150kg
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit

DETAIL

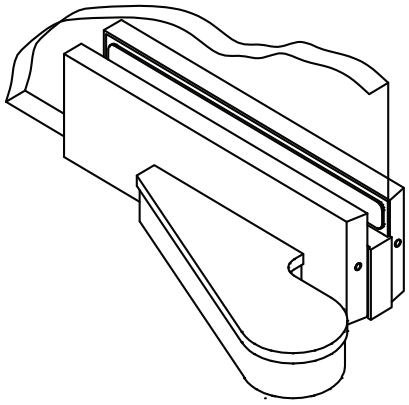


INSITU APPLICATION



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41882 Offset Patch - Bottom Right Hand



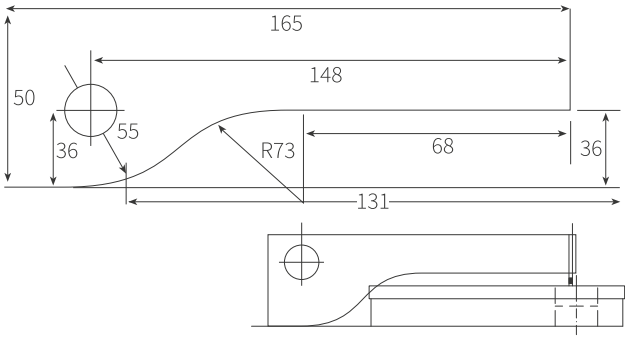
AVAILABLE FINISHES

- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

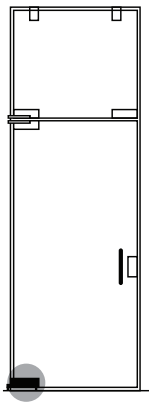
TECHNICAL DETAILS

- Maximum door weight 100kg
- Maximum glass hold 150kg
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit

DETAIL

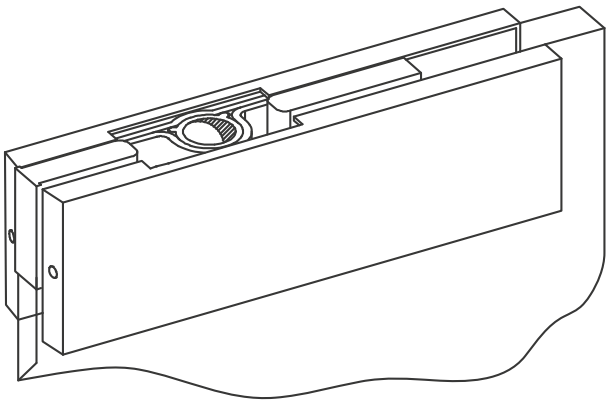


INSITU APPLICATION



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42020 Top Pivot Patch Fitting



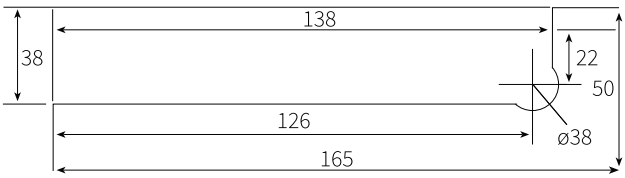
AVAILABLE FINISHES

- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

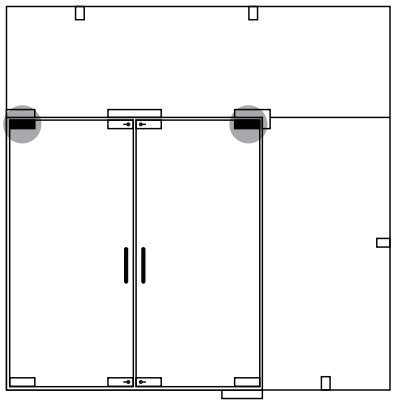
TECHNICAL DETAILS

- Top patch fitting
- Maximum door weight 100kg
- Maximum glass hold 300kg
- Pivot set at 55mm or 65mm
- Adjustable +/- 3mm
- 19mm glass thickness

DETAIL

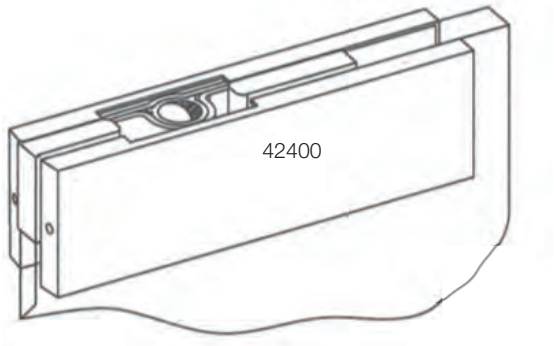


INSITU APPLICATION

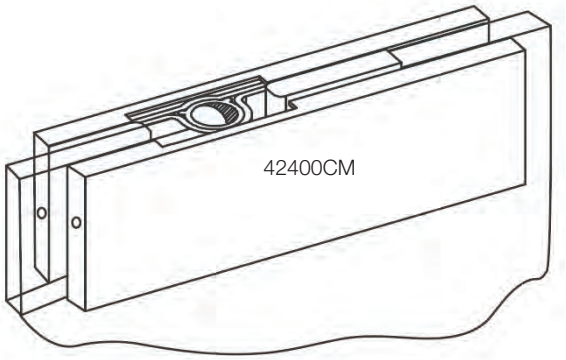


© GHA SOLUTIONS

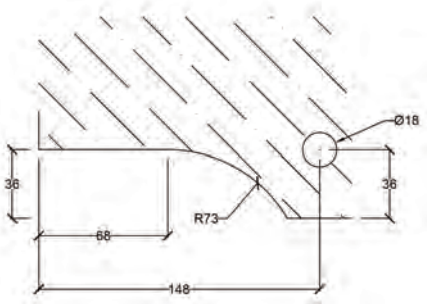
42400 / 42400CM Top Pivot Patch Fitting / Centre Mount



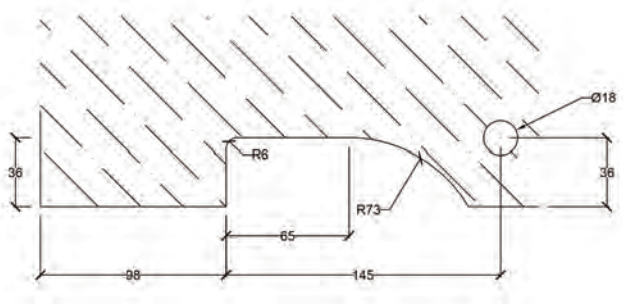
DETAIL - 42400



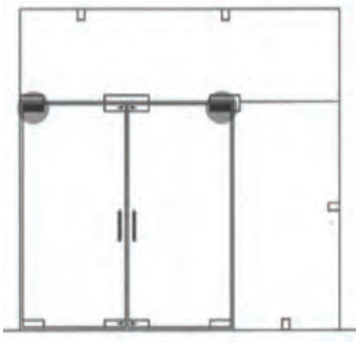
DETAIL - 42400CM

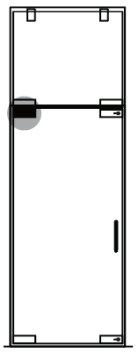


INSITU APPLICATION



INSITU APPLICATION





GLASS PREPARATION
To suit 150mm pivot point

AVAILABLE FINISHES

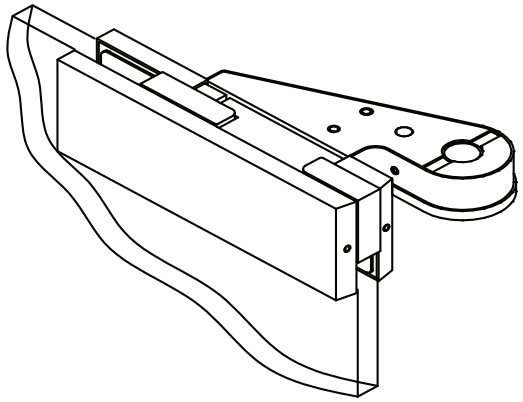
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

- Maximum door weight 100kg
- Maximum glass hold 300kg
- Pivot set at 55mm or 65mm
- Adjustable +/- 3mm
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit

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42881 Offset Patch Top Left Hand Side



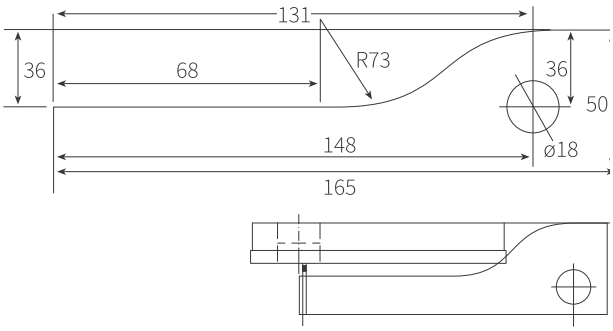
AVAILABLE FINISHES

- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

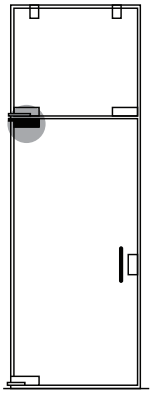
TECHNICAL DETAILS

- Maximum door weight 100kg
- Maximum glass hold 150kg
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit

DETAIL

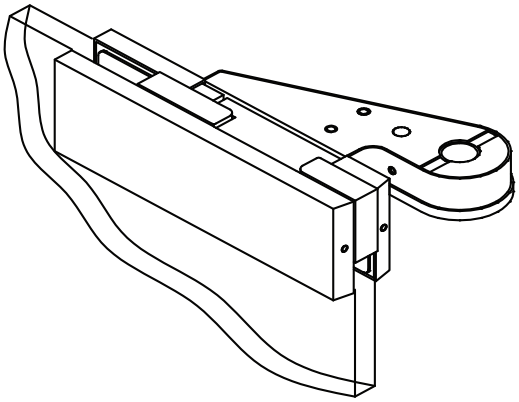


INSITU APPLICATION



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42882 Offset Patch Top Right Hand Side



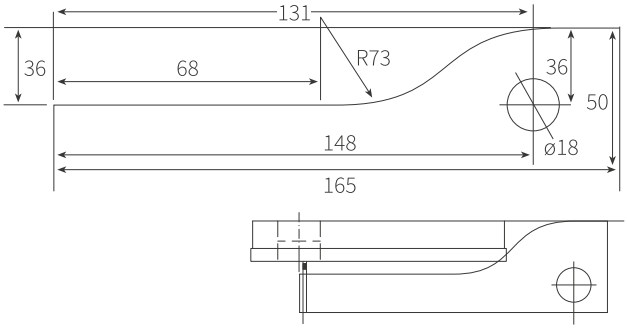
AVAILABLE FINISHES

- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

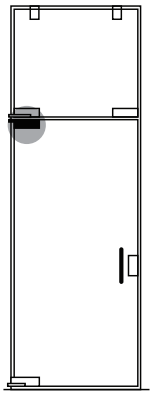
TECHNICAL DETAILS

- Maximum door weight 100kg
- Maximum glass hold 150kg
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit

DETAIL

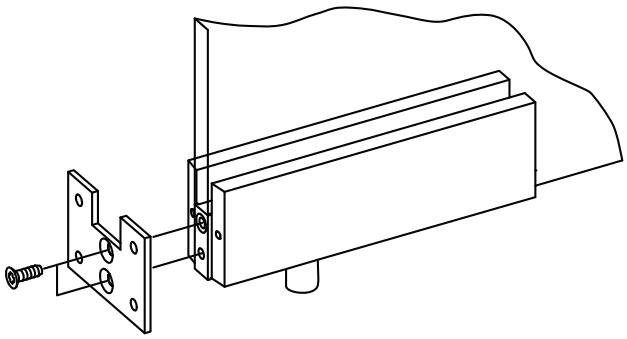


INSITU APPLICATION



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43020 Overpanel Transom Patch with Pivot - 19mm Glass



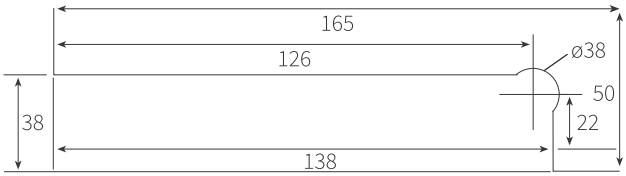
AVAILABLE FINISHES

- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

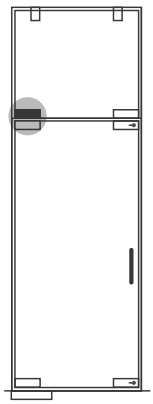
TECHNICAL DETAILS

- Overpanel transom patch with pivot
- Maximum door weight 125kg
- Maximum glass hold 200kg
- Pivot set at 55mm or 65mm
- Suitable for SBC42400
- 19mm glass thickness
- Side fixing to masonry, timber or aluminium jamb

DETAIL

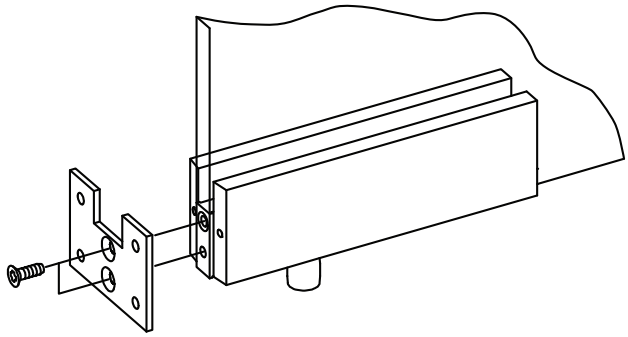


INSITU APPLICATION

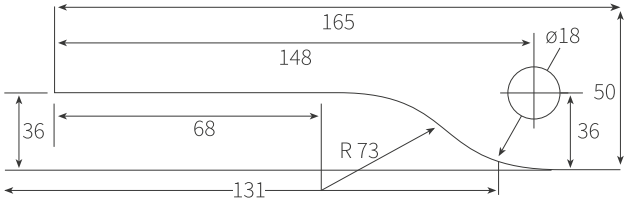


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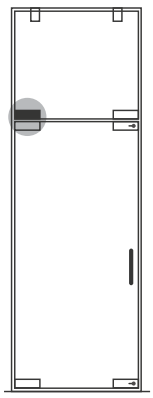
43400 Overpanel Transom Patch with Pivot



DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

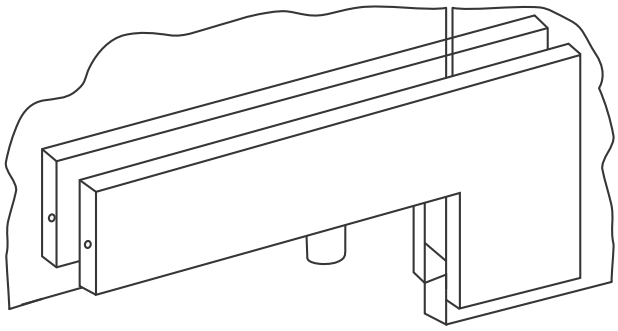
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

- Overpanel transom patch with pivot
- Maximum door weight 100kg
- Maximum glass hold 300kg
- Pivot set at 55mm or 65mm
- Suitable for SBC42400
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit
- Side fixing to masonry, timber or aluminium jamb

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44020 / 44400 Overpanel to Side Panel Patch with Pivot



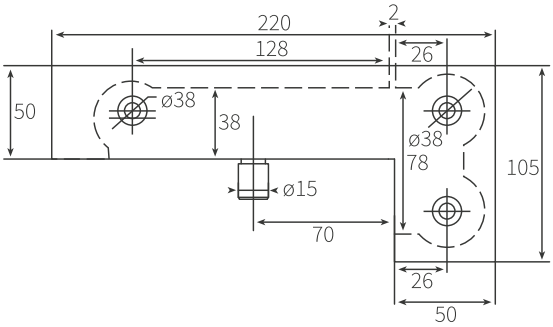
AVAILABLE FINISHES

- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

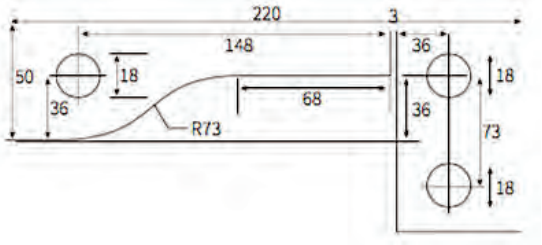
TECHNICAL DETAILS

- Maximum door weight 125kg
- Maximum glass hold 300kg
- Pivot can be set at 55mm or 65mm
- Suitable for SBC42400 (provides pivot point)
- 19mm glass thickness

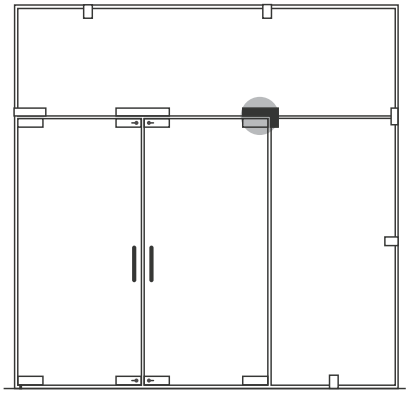
19mm DETAIL / 44020



12/15mm DETAIL / 44400

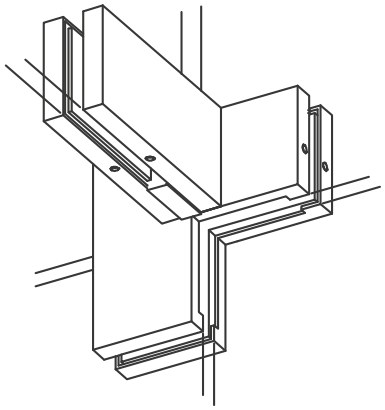


INSITU APPLICATION

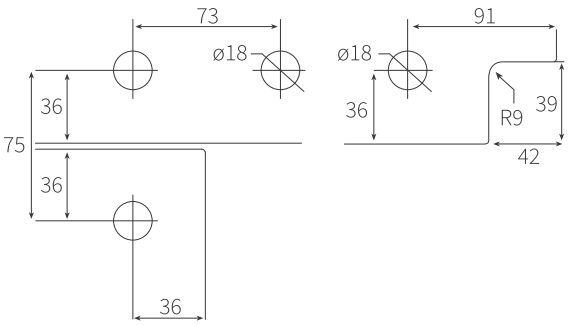


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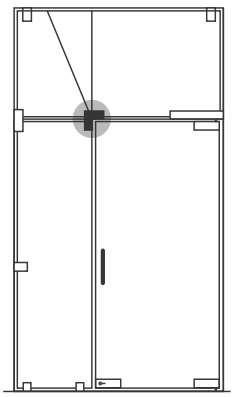
44706 / 44707 Overpanel to Side Panel Patch Fitting with Fin



DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

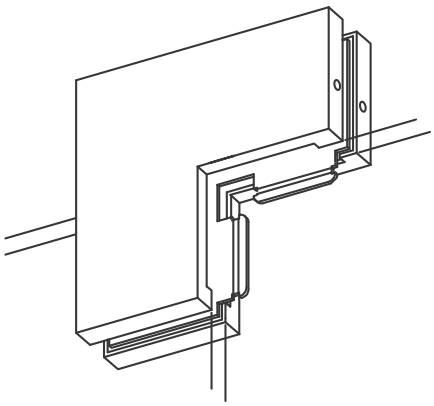
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

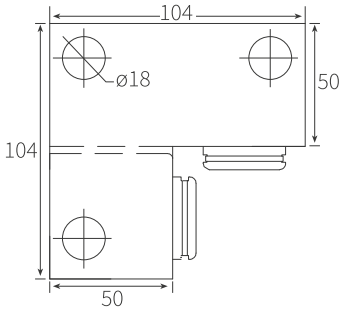
- Overpanel to side panel patch with pivot and fin
- Maximum glass hold 200kg
- To connect two or four glass panels
- Optional door stop can be fitted
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit
- 12mm or 15mm glass fin

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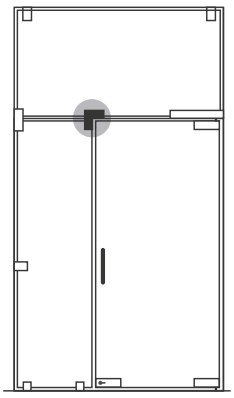
44710 Overpanel to Side Panel Patch Fitting with Door Stop



DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

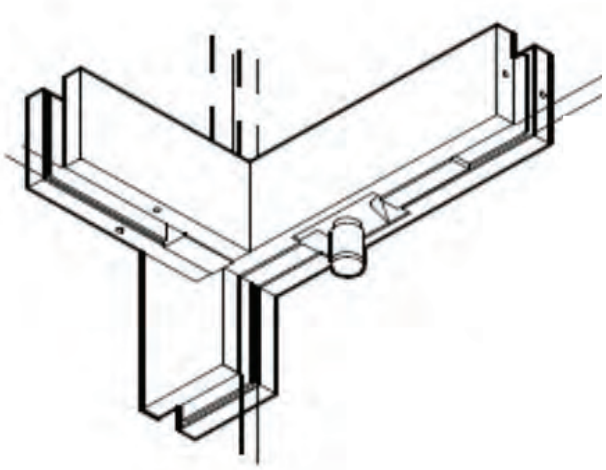
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

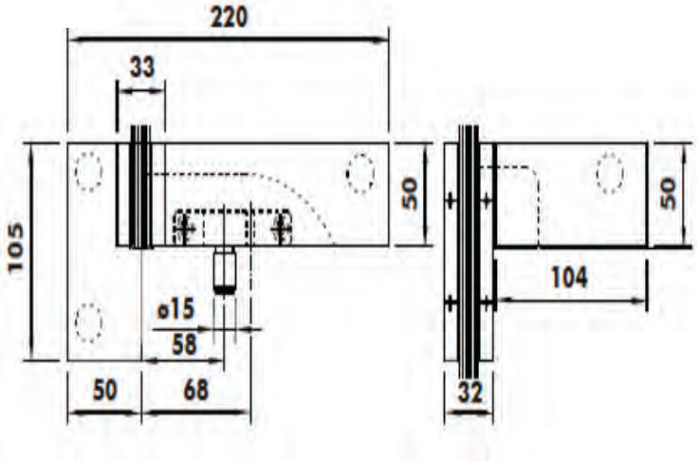
- Maximum glass hold 200kg
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit

© GHA SOLUTIONS

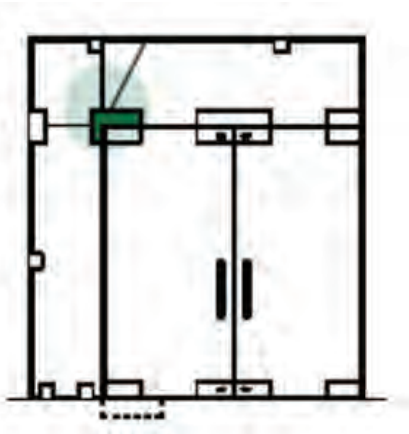
45051 / 45052 Transom/ Side Fin Patch (LH/RH)



DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

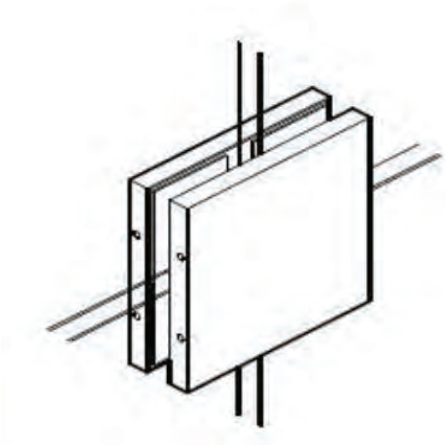
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

- Maximum glass hold 100kg
- 1100mm door width
- 8mm, 10mm or 15mm glass thickness can be adjusted to fit

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46500 Four Corner Connecting Patch

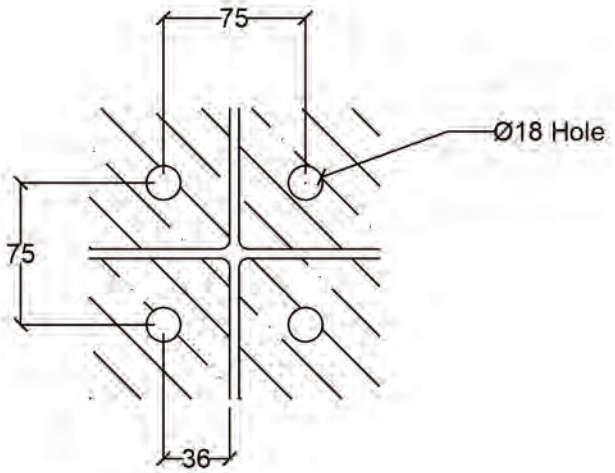


AVAILABLE FINISHES

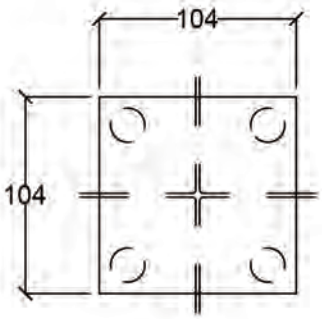
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

- Maximum glass hold 300kg
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit
- 12mm or 15mm glass



GLASS DETAIL



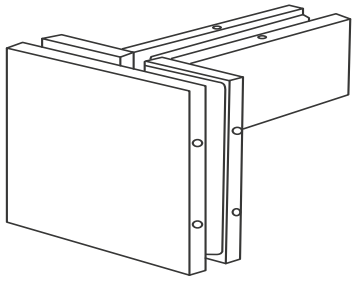
ELEVATION



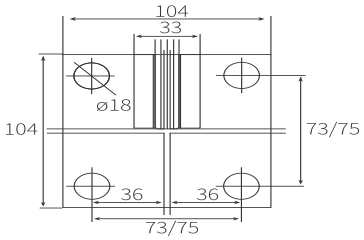
END VIEW

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46550 Four Corner Connecting Patch with Fin



DETAIL



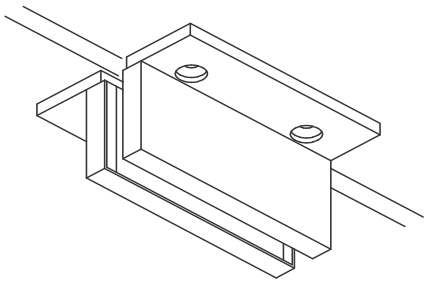
AVAILABLE FINISHES

- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

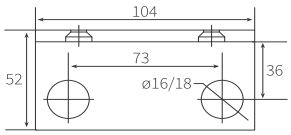
TECHNICAL DETAILS

- Maximum glass hold 300kg
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit
- 12mm or 15mm glass fin

46700 Head/Jamb Fitting Angle



DETAIL



AVAILABLE FINISHES

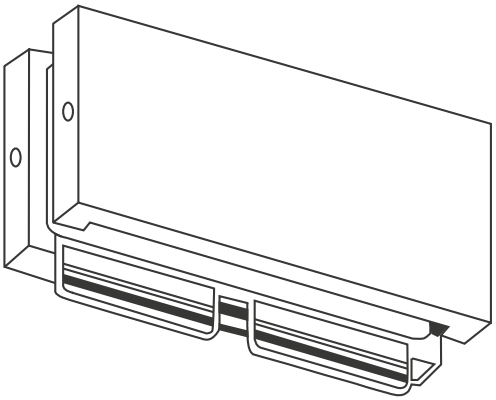
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

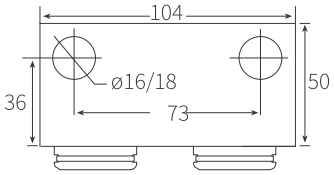
- Maximum glass hold 300kg
- Recommended torque 14 - 16
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit

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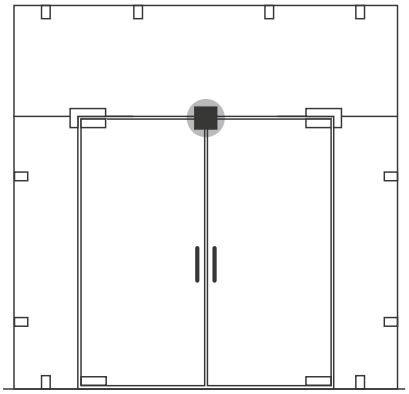
47210 Overpanel Patch Fitting with Door Stop



DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

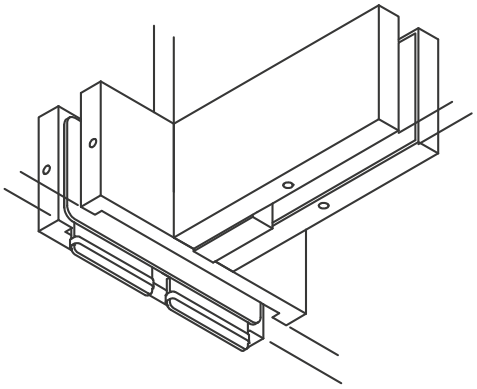
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

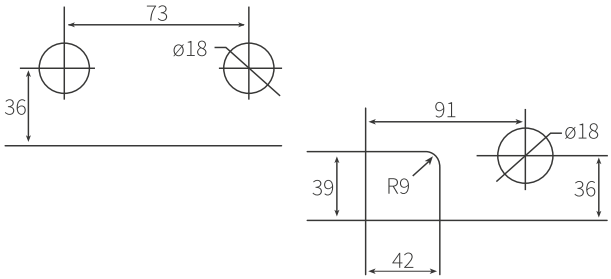
- Maximum glass hold 150kg
- Comes with door stop plate
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit

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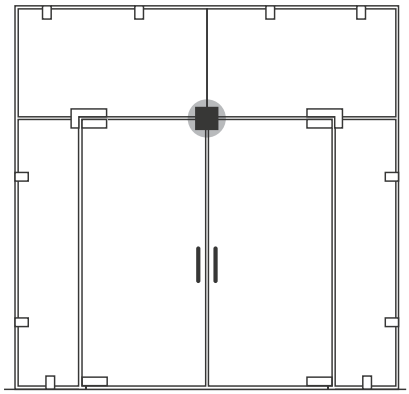
47260 Double Door Fin with Bracket and Door Stops



DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

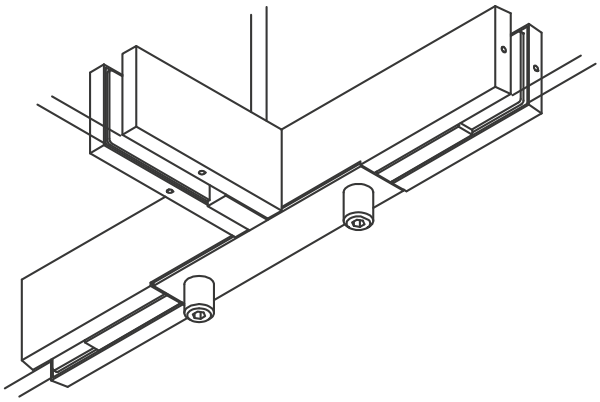
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

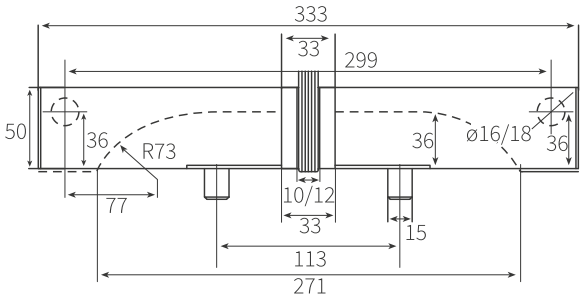
- Maximum glass hold 150kg
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit
- 12mm or 15mm glass fin

© GHA SOLUTIONS

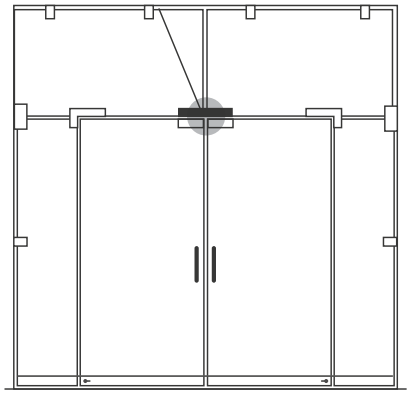
47750 Transom Fin with Double Pivot



DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

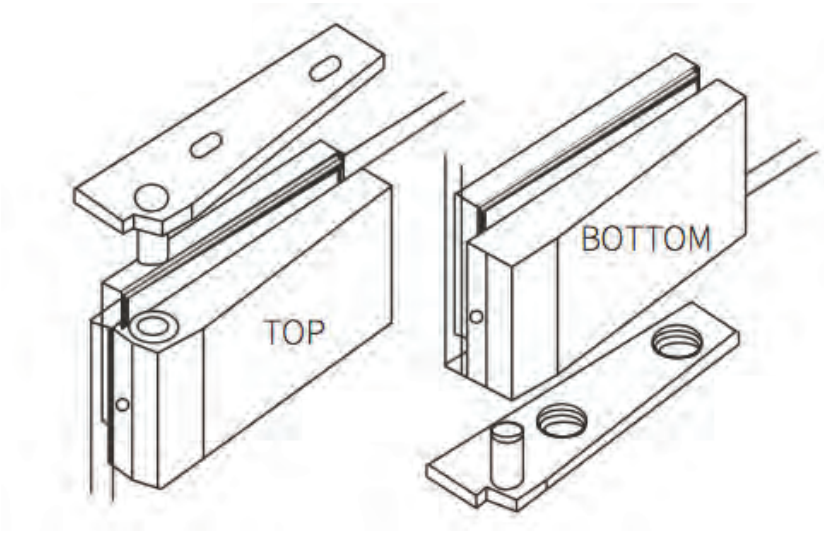
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

- Maximum glass hold 350kg
- Pivot point set at 55mm or 65mm
- Comes with door stop plate
- Suitable for SBC42400 (provides pivot point)
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit
- 12mm or 15mm glass fin

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12790 Pair Offset Patch + Pivot



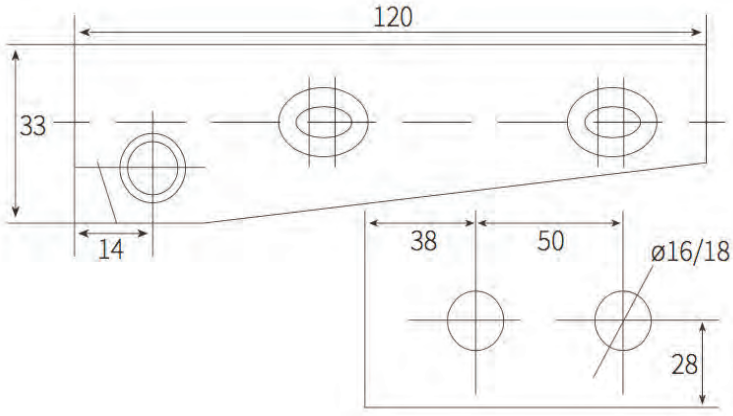
AVAILABLE FINISHES

- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

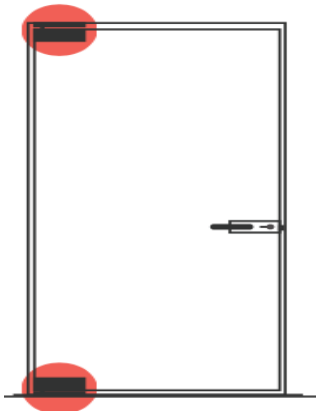
TECHNICAL DETAILS

- Maximum glass hold 350kg
- Pivot point set at 55mm or 65mm
- Comes with door stop plate
- Suitable for SBC42400 (provides pivot point)
- 12mm glass thickness
- 10mm or 15mm glass thickness can be adjusted to fit
- 12mm or 15mm glass fin

DETAIL



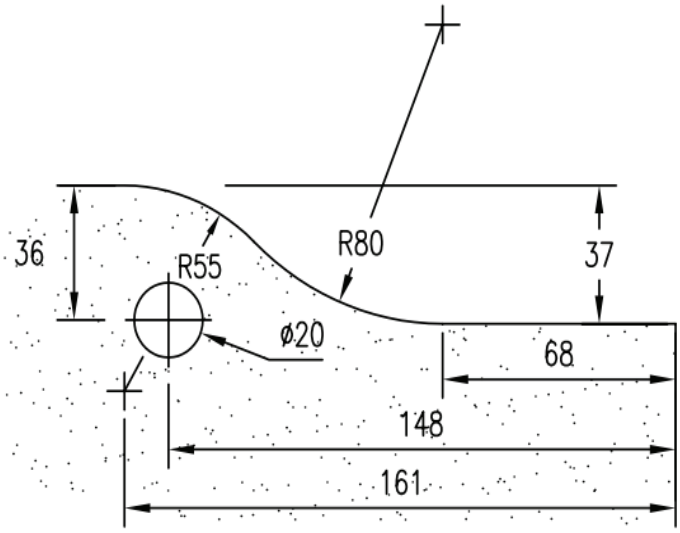
INSITU APPLICATION



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PT10/20 Top/Bottom Patch

DETAIL



PT 10/20 GLASS PREPARATION

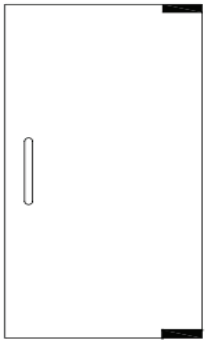
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

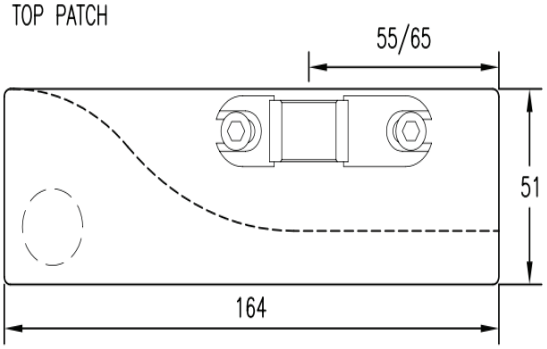
- Universal 51mm x 164mm bottom and top patch
- Fitting with covers to suit BTS floor springs or free pivots
- Pivot point set at 55mm or 65mm
- Specify glass thickness 10, 12 or 15mm

INSITU APPLICATION

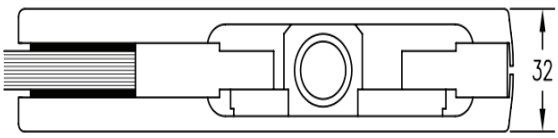


PT 20

TOP PATCH



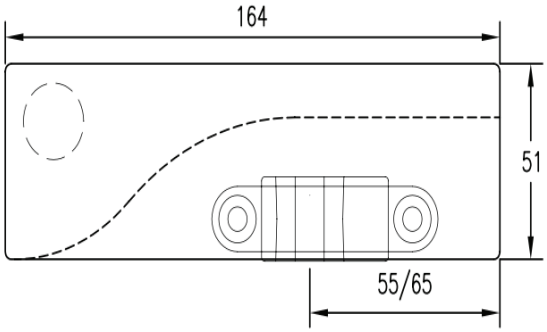
ELEVATION



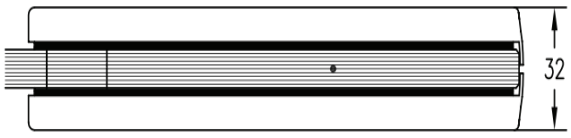
PLAN

PT 10

BOTTOM PATCH



ELEVATION

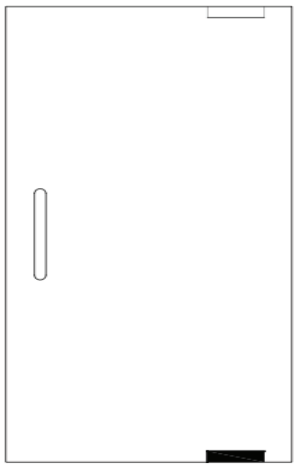


PLAN

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PT10C/F Bottom Patch

INSITU APPLICATION



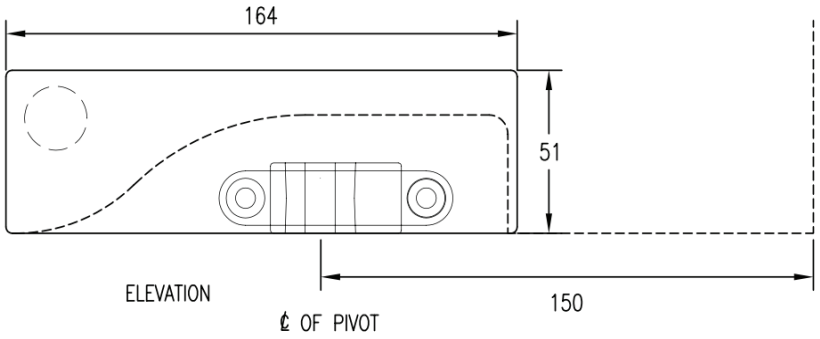
AVAILABLE FINISHES

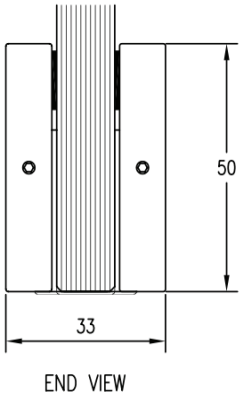
- Aluminium: MILL, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

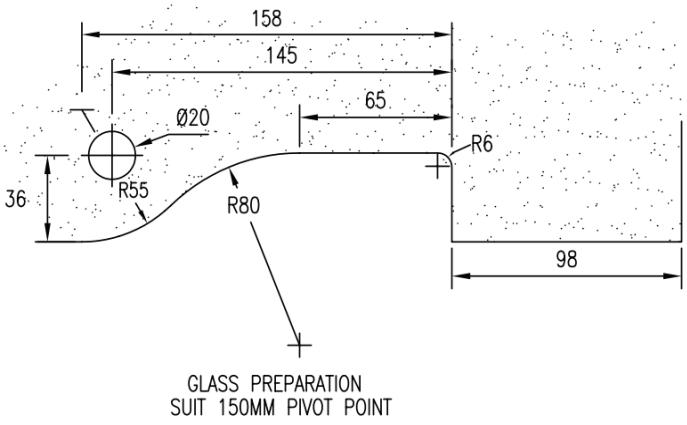
- Universal 51mm x 164mm bottom patch
- Fitting with covers to suit BTS floor springs or free pivots
- Patch is modified to be centre fixed on glass providing pivot point of 150mm or greater
- Specify glass thickness 10, 12 or 15mm

DETAIL

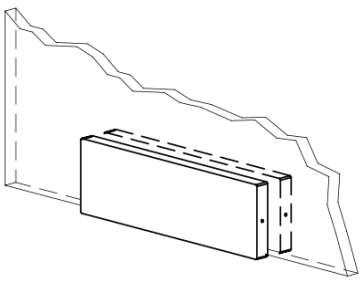




DETAIL



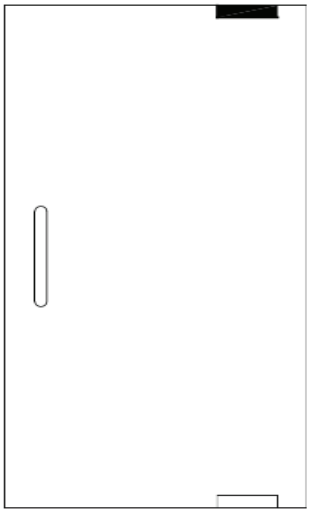
GLASS PREPARATION
SUIT 150MM PIVOT POINT



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PT20C/F Top Patch

INSITU APPLICATION



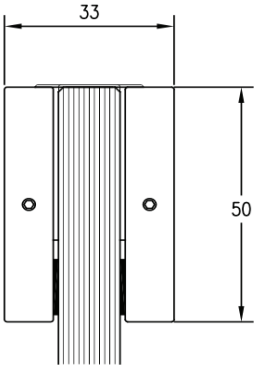
DETAIL

AVAILABLE FINISHES

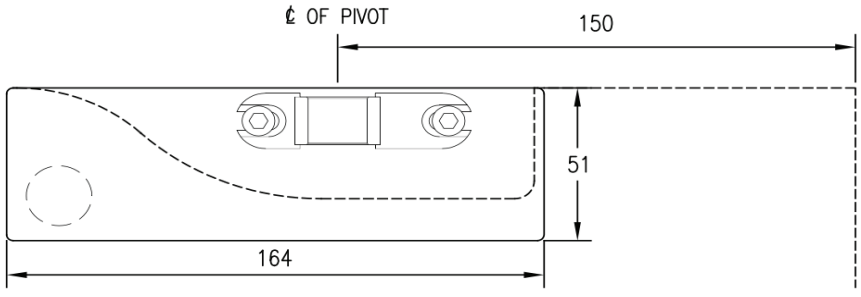
- Aluminium: MILL, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

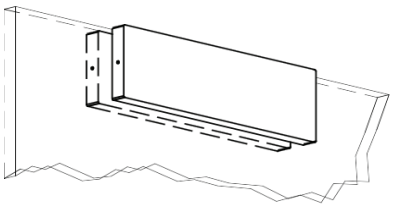
- Universal 51mm x 164mm top patch
- Fitting with covers to suit 15mm diameter top pivots
- Patch is modified to be centre fixed on glass providing pivot point of 150mm or greater
- Specify glass thickness 10, 12 or 15mm

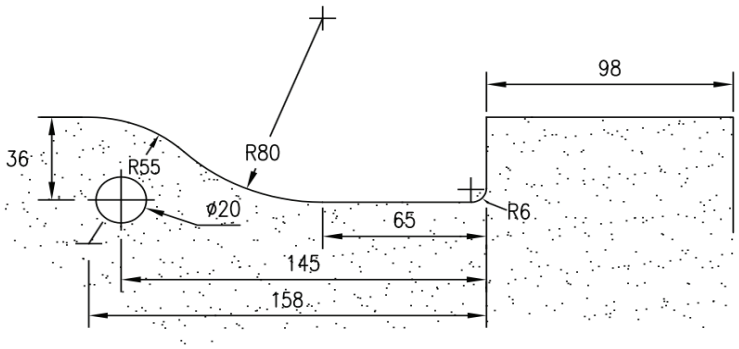


END VIEW



ELEVATION



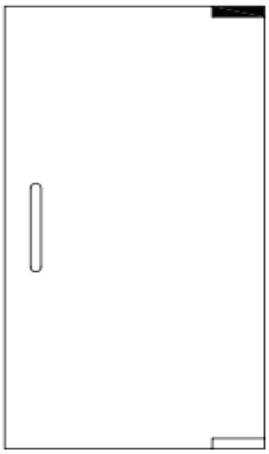


GLASS PREPARATION
SUIT 150MM PIVOT POINT

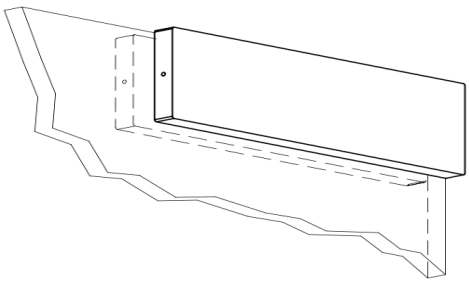
© GHA SOLUTIONS

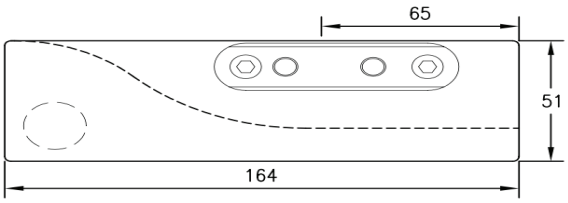
PT22 Top Patch

INSITU APPLICATION

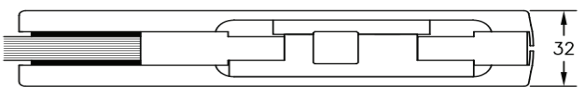


DETAIL

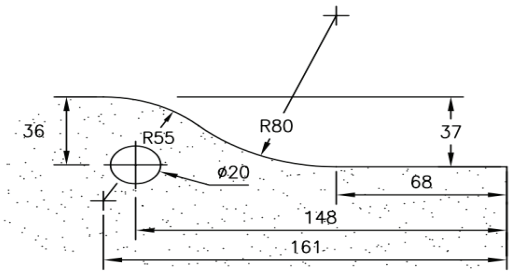




ELEVATION



PLAN



GLASS PREPARATION

AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS

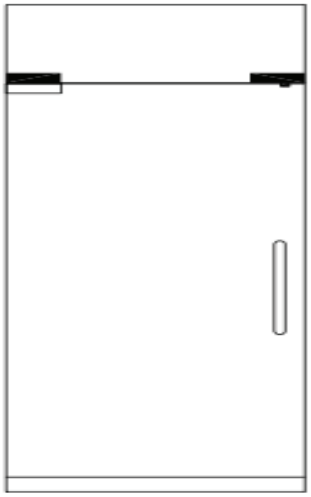
TECHNICAL DETAILS

- Universal 51mm x 164mm top patch
- Fitting with covers to suit RTS85 transom closers
- Pivot point set at 65mm
- Specify glass thickness 10, 12 or 15mm

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PT30/30S Over Panel Patch Fitting

INSITU APPLICATION



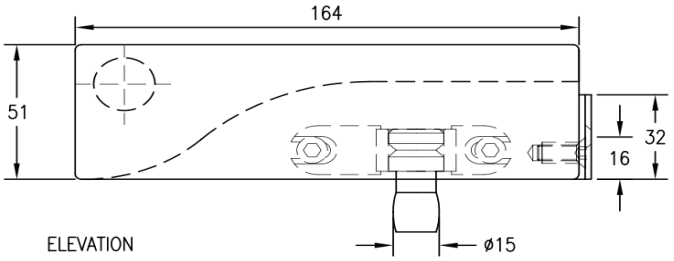
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS

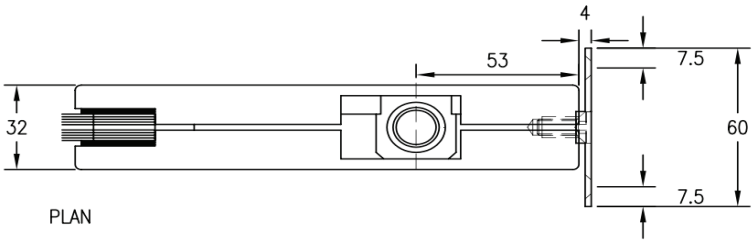
TECHNICAL DETAILS

- Universal 51mm x 164mm PT30 over panel
- Patch fitting with backing plate and pivot to suit PT20 upper patch fitting and PT30S over panel patch fitting with backing plate and stop insert
- Specify glass thickness 10, 12 or 15mm

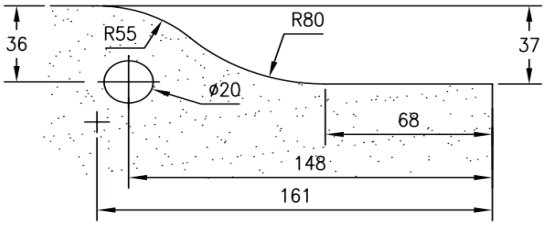
DETAIL



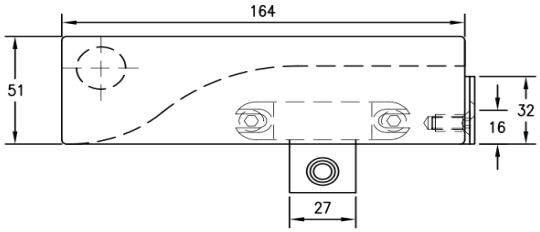
ELEVATION



PLAN



GLASS PREPARATION

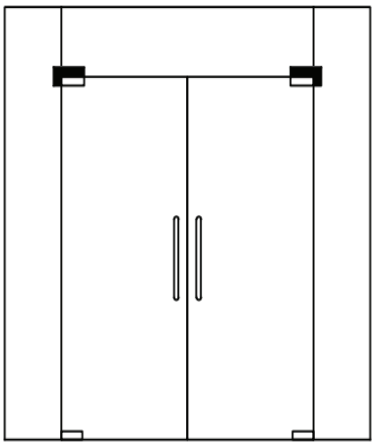


PT 30S STOP PATCH

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PT40/40S Corner Link Patch

INSITU APPLICATION



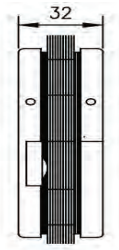
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS

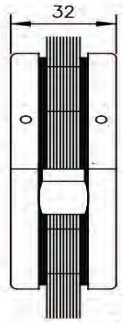
TECHNICAL DETAILS

- Universal 218mm x 106mm t
- PT40 highlight to sidelight corner link patch with pivot
- PT40S highlight to sidelight corner link patch with stop insert
- Pivot point set at 55mm
- Specify glass thickness 10, 12 or 15mm
- Specify: PT40 highlight to sidelight corner pivot patch
- Specify: PT40S highlight to sidelight corner stop patch

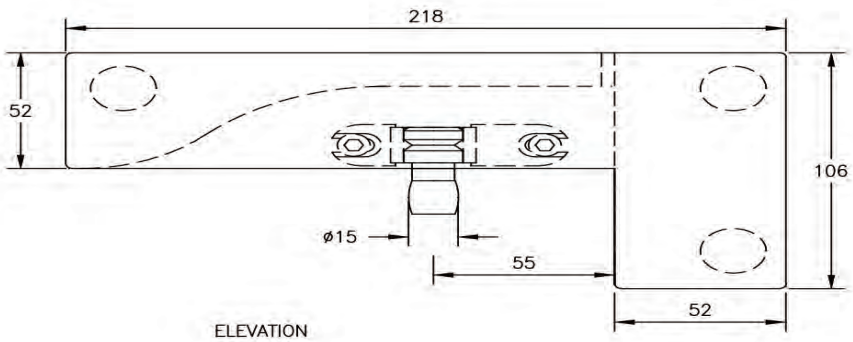
DETAIL



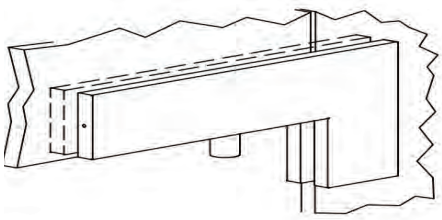
PT 40S STOP PATCH

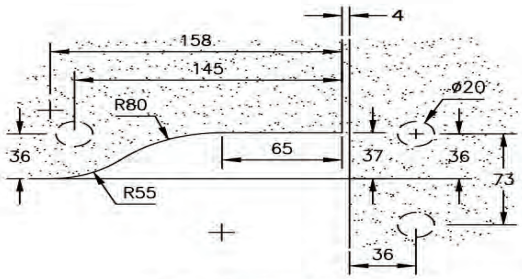


END VIEW



ELEVATION



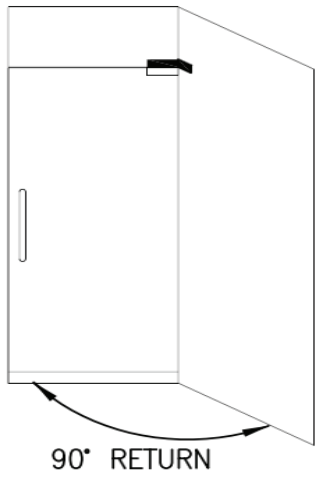


GLASS PREPARATION

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PT40/90 Corner Link Patch with Return at 90 Degrees

INSITU APPLICATION



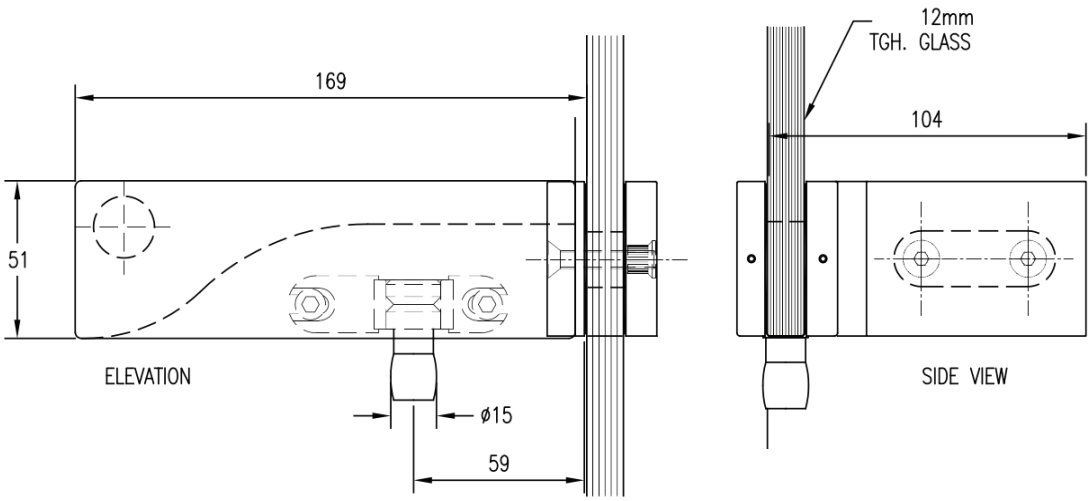
DETAIL

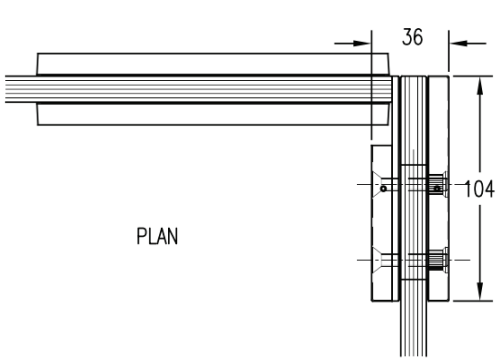
AVAILABLE FINISHES

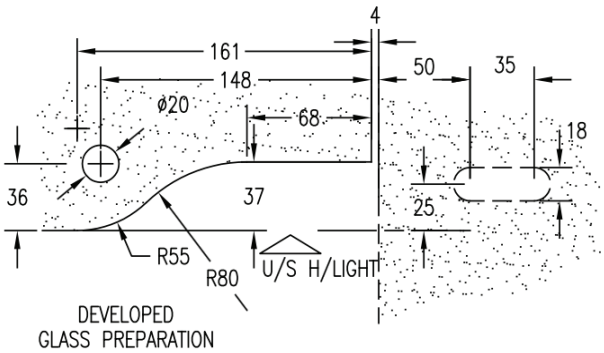
- Aluminium: MILL, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

- Universal 51mm x 192mm high light to side light corner link patch with return at 90 degrees, fitted with PT30.1 adaptor set at 55mm to suit PT20 top patch
- Specify glass thickness 10, 12 or 15mm
- Specify handing LH / RH
- Specify PT30.1S stop insert if required
- Illustrated: PT40/90 RH



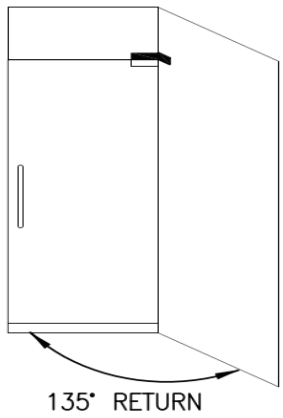




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PT40/135 Corner Link Patch with Return at 135 Degrees

INSITU APPLICATION



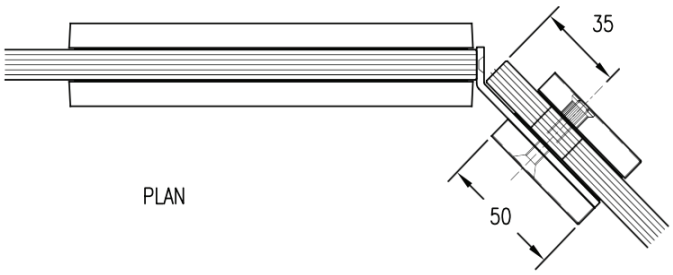
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS

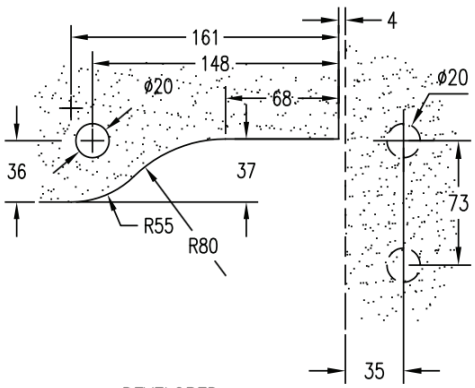
TECHNICAL DETAILS

- Universal 104mm x 192mm x 50mm
- High light to side light corner link patch with return at 135 degrees, fitted with PT30.1 adaptor set at 55mm to suit PT20 top patch
- Specify glass thickness 10, 12 or 15mm
- Specify handing LH / RH
- Specify PT30.1S stop insert if required
- Illustrated: PT40/135 RH
- Note: maufactured to suit all angles of return, specify angle if required

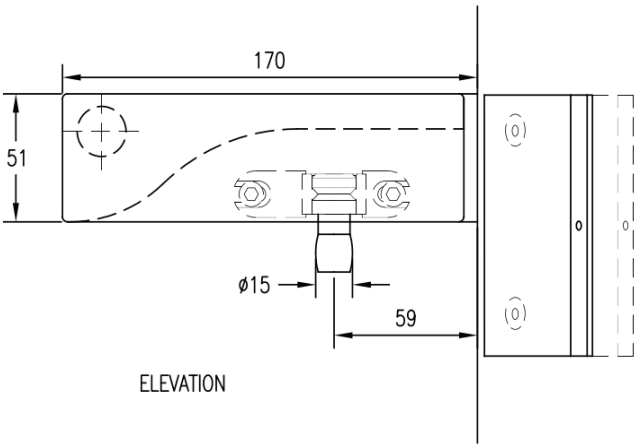
DETAIL



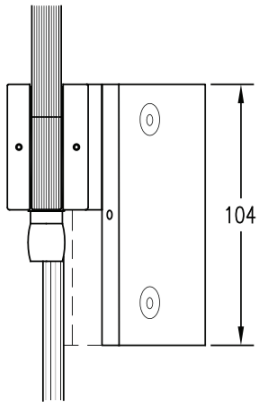
PLAN



DEVELOPED
GLASS PREPARATION



ELEVATION

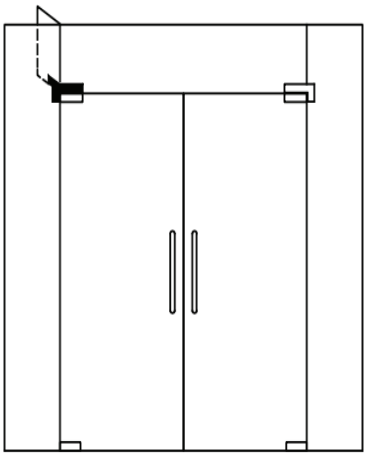


END VIEW

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PT41/41S Corner Link Patch with Fin Portion and Pivot

INSITU APPLICATION



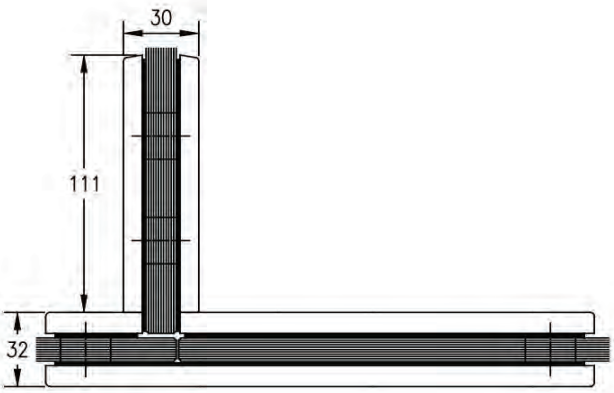
DETAIL

AVAILABLE FINISHES

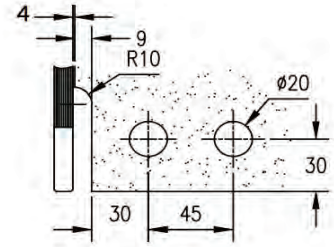
- Aluminium: MILL, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

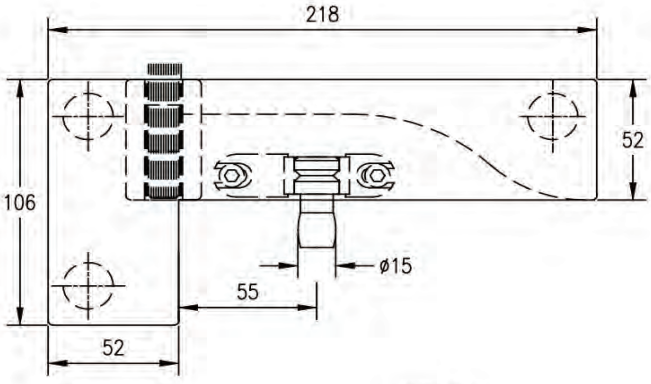
- Universal 218mm x 106mm
- PT41 highlight to sidelight corner link patch with fin portion and pivot
- PT41S highlight ot sidelight corner link patch with fin portion and stop insert
- Pivot point set at 55mm
- Specify glass thickness 10, 12 or 15mm
- Specify fin glass thickness 12 or 15mm
- Sepcify PT41S stop insert if required
- Specify handing LH / RH
- Illustrated: PT41 LH



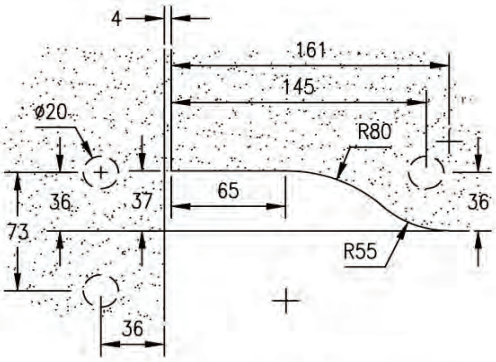
PLAN



FIN GLASS PREPARATION



ELEVATION

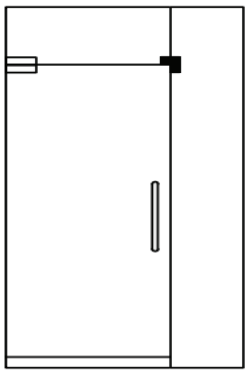


GLASS PREPARATION

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PT60/60S Corner Link Patch

INSITU APPLICATION



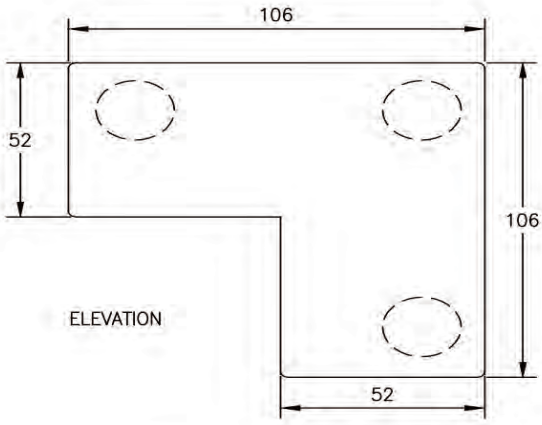
DETAIL

AVAILABLE FINISHES

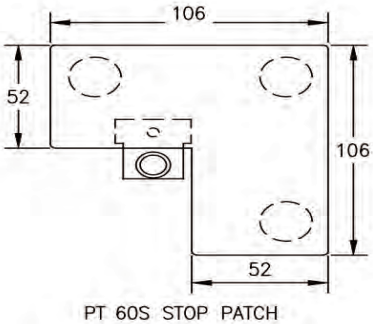
- Aluminium: MILL, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

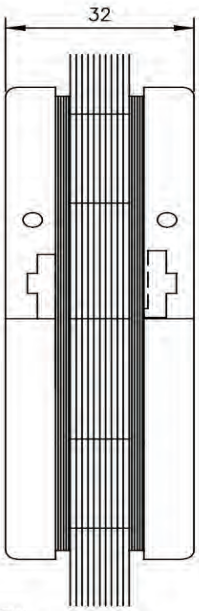
- Universal 106mm x 106mm
- PT60 highlight to sidelight corner link patch
- PT60S highlight to sidelight corner link patch with stop insert
- Specify glass thickness 10, 12 or 15mm
- Specify CD60 highlight to sideltght corner link patch
- Specify CD60S highlight to sidelight corner stop patch



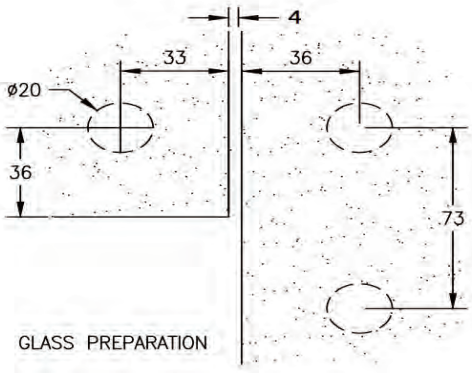
ELEVATION



PT 60S STOP PATCH



END VIEW

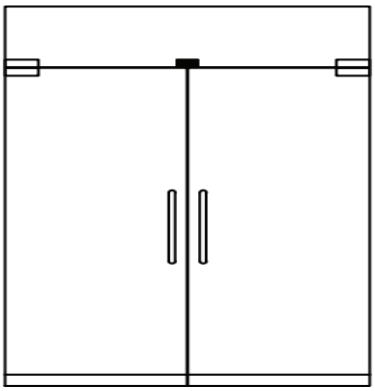


GLASS PREPARATION

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PT70/70S Over Panel Connecting Patch

INSITU APPLICATION



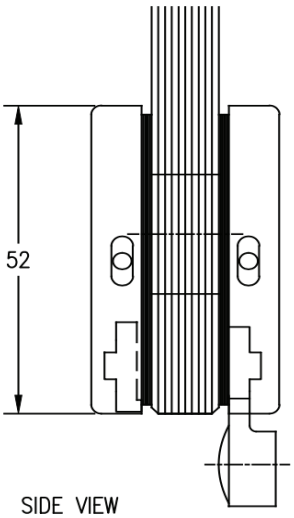
DETAIL

AVAILABLE FINISHES

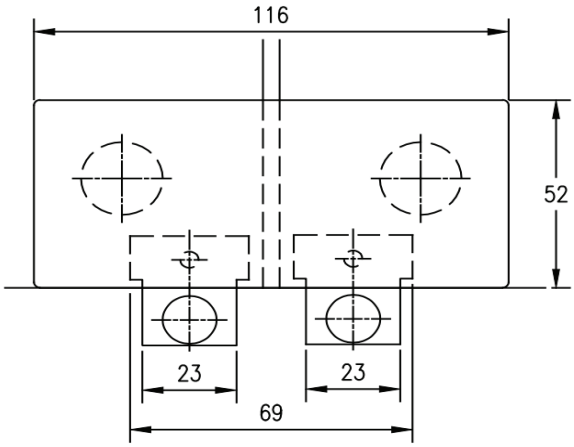
- Aluminium: MILL, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

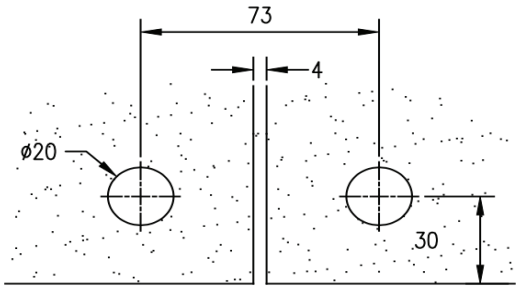
- Universal 116mm x 52mm
- PT70 over panel connecting patch for connecting 2 panels of glass
- PT70S over panel connecting patch with 2 x stop inserts
- Specify glass thickness 10, 12 or 15mm
- Note: PT70S illustrated



SIDE VIEW



ELEVATION

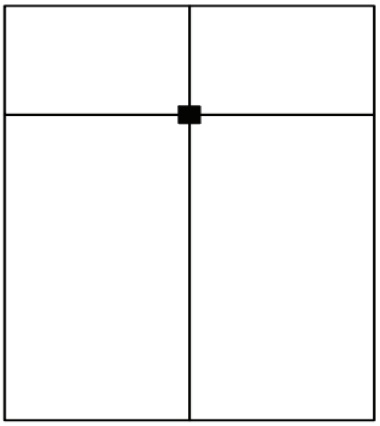


GLASS PREPARATION

© GHA SOLUTIONS

PT80 Patch for Connecting 2 or 4 Panels

INSITU APPLICATION



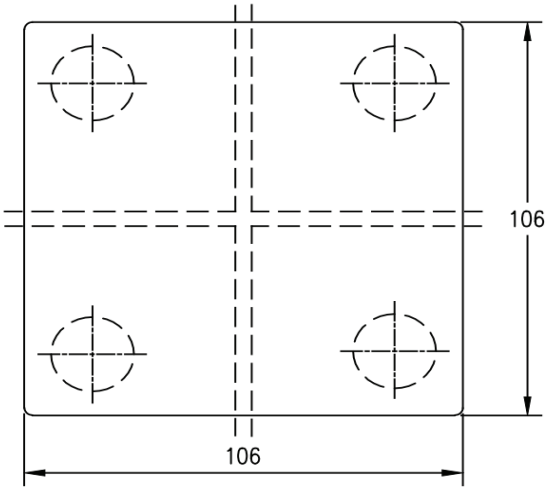
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS

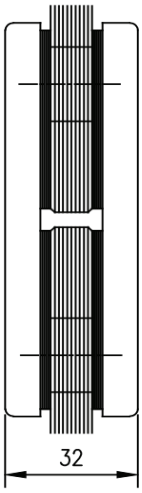
TECHNICAL DETAILS

- Universal 106mm x 106mm
- PT80 connecting link patch for connecting 2 or 4 panels of glass
- Specify glass thickness 10, 12 or 15mm

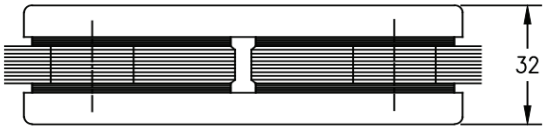
DETAIL



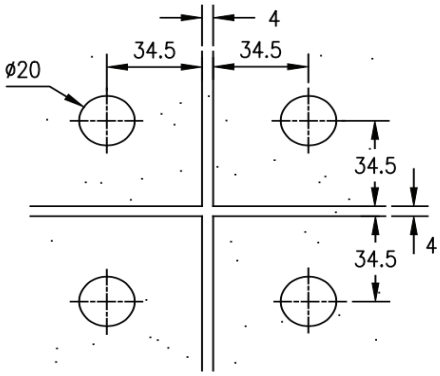
ELEVATION



END VIEW



PLAN

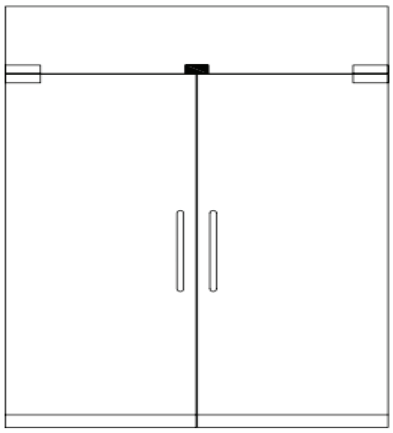


GLASS PREPARATION

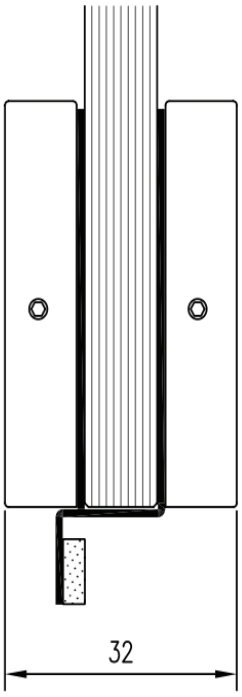
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CD87 S/0 High Light Slide Over Stop Patch

INSITU APPLICATION



DETAIL



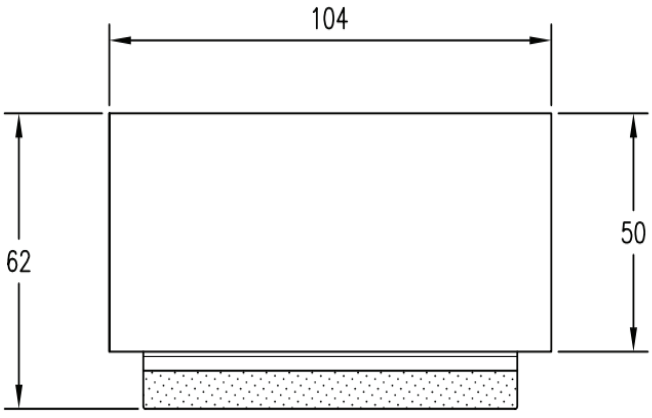
SIDE VIEW

AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

- On-eazi 50mm x 104mm high light slide over stop patch for retro fitting where high light is installed without hole preparation
- Specify glass thickness 10, 12 or 15mm
- Note: Patch to be adhered to glass with silicone

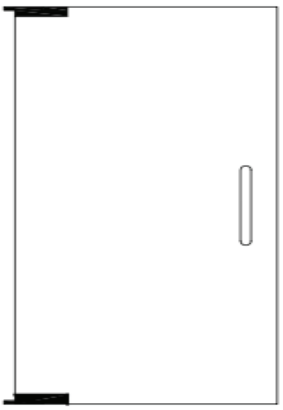


ELEVATION

© GHA SOLUTIONS

311.1 / 312.1 Lower and Upper Offset Patch Fitting

INSITU APPLICATION



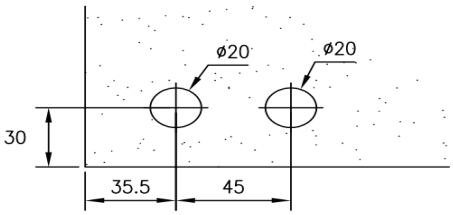
DETAIL

AVAILABLE FINISHES

- Aluminium: SAA

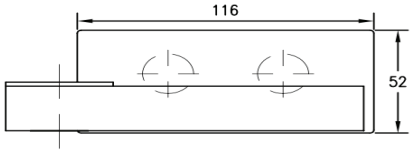
TECHNICAL DETAILS

- Universal 52mm x 116mm
- 311.1 lower offset patch fitting
- 312.1 upper offset patch fitting to suit BTS floor springs, pivot bearing and upper pivots
- Specify glass thickness 10 or 12mm
- Specify handing LH / RH (Left hand drawn)
- Max door weight: 90kgs
- Max door width: 1000mm

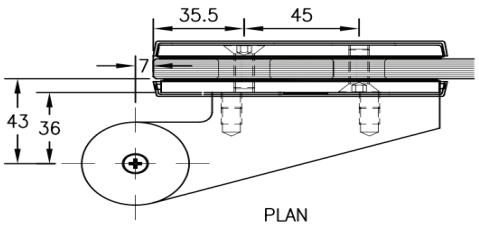


311.2 & 312.1 GLASS PREPARATION

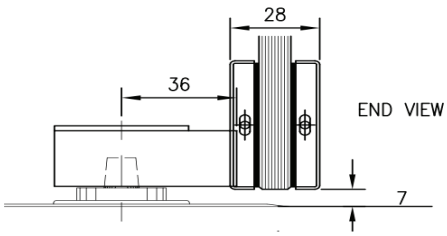
311.1
LOWER OFFSET PATCH FITTING



ELEVATION

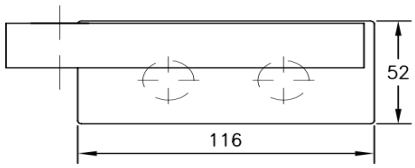


PLAN

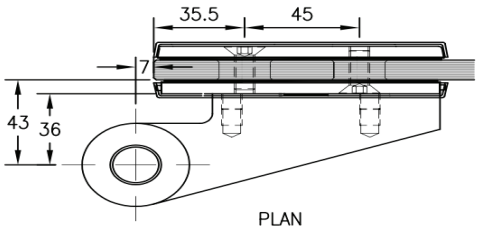


END VIEW

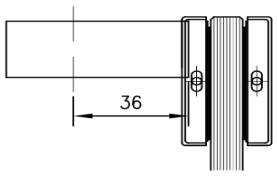
312.1
UPPER OFFSET PATCH FITTING



ELEVATION



PLAN

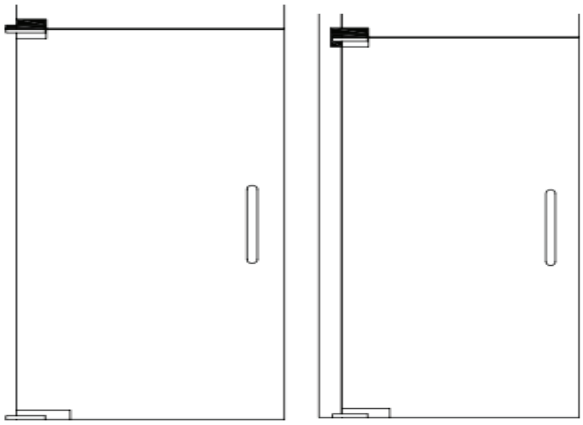


END VIEW

© GHA SOLUTIONS

326.1 / 327.1 Overpannel Offset Patch Fitting

INSITU APPLICATION



DETAIL

AVAILABLE FINISHES

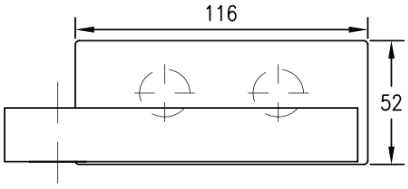
- Aluminium: SAA

TECHNICAL DETAILS

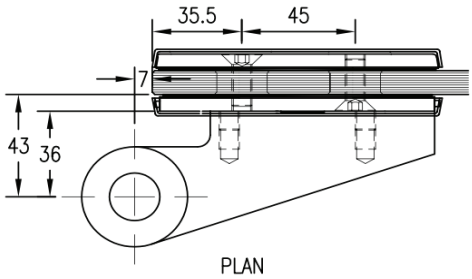
- Universal 326.1 over panel
- 327.1 over panel / sidelight offset patch fitting to suit 312.1 upper offset patch fitting
- Specify glass thickness 10 or 12mm
- Specify handing LH / RH (Left hand drawn)
- Max door weight: 90kgs
- Max door width: 1000mm

326.1

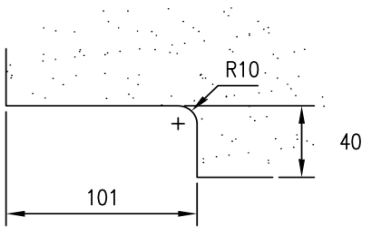
OVERPANEL OFFSET PATCH FITTING



ELEVATION



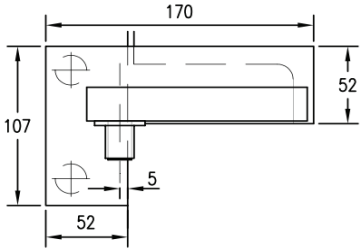
PLAN



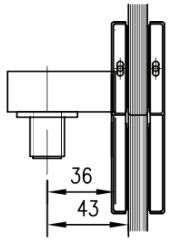
326.1 GLASS PREPARATION

327.1

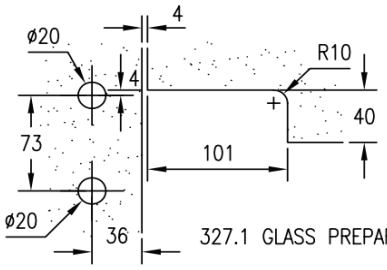
OVERPANEL/SIDELIGHT OFFSET PATCH FITTING



ELEVATION



END VIEW

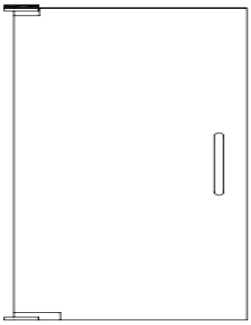


327.1 GLASS PREPARATION

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33.9.1/2/3 Upper Offset Frame Portions

INSITU APPLICATION



DETAIL

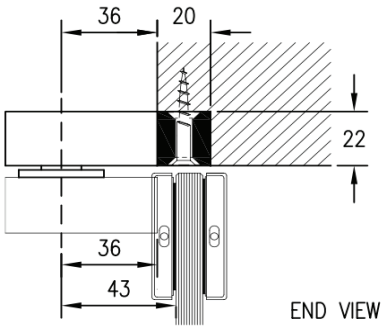
AVAILABLE FINISHES

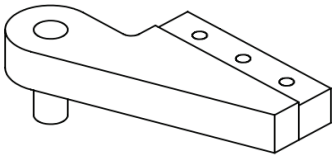
- Aluminium: SAA

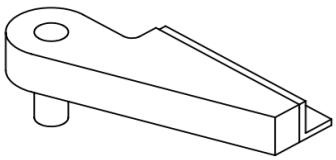
TECHNICAL DETAILS

- Universal 339.1/2/3 upper offset frame portions to suit 312.1 upper offset patch fitting
- Specify handing LH / RH (Left hand drawn)
- Max door weight: 90kgs
- Max door width: 1000mm

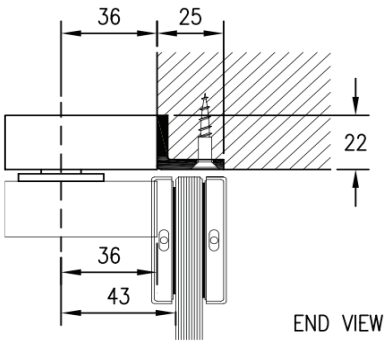
339.1



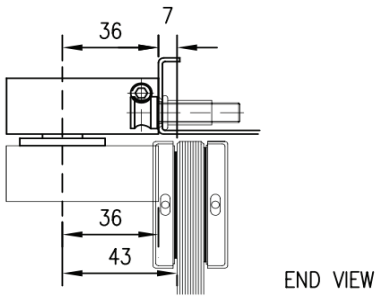


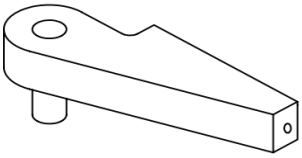


339.2



339.3

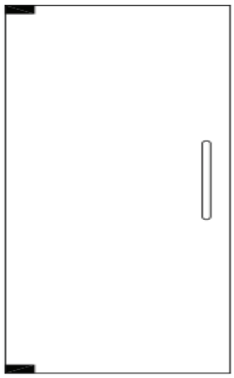




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12.009 Small Door Pivot Set

INSITU APPLICATION



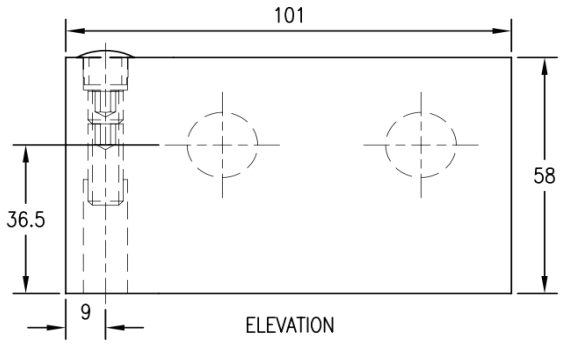
AVAILABLE FINISHES

- Aluminium: SAA
- Stainless: SSS, PSS

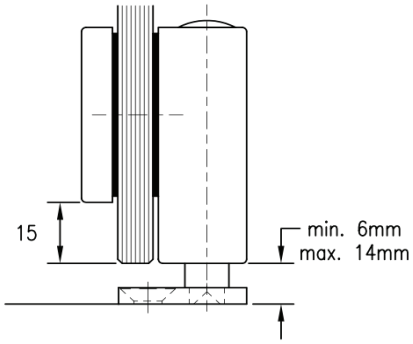
TECHNICAL DETAILS

- Universal small door pivot set comprising of top and bottom patches with pivot bearing plates
- Specify glass thickness 8 or 10mm
- Specify 12.009.1 for floor pivot set
- Specify 12.009.2 for wall pivot set
- Max door weight: 35kgs
- Note: sold as a single door set

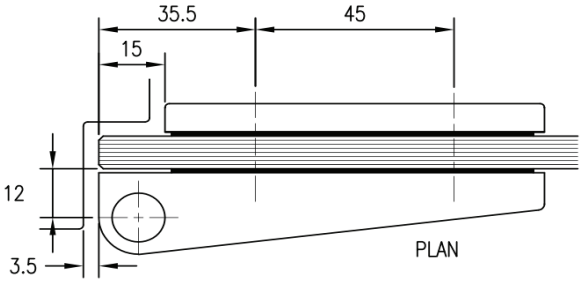
DETAIL



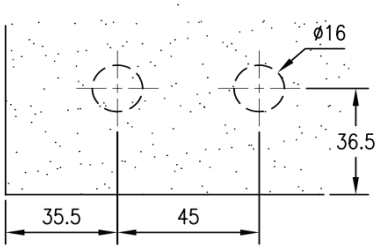
ELEVATION



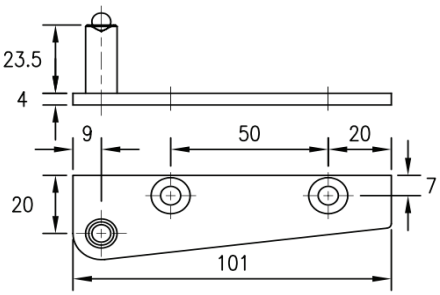
END VIEW



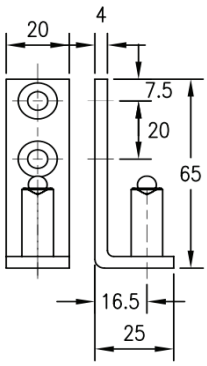
PLAN



GLASS PREPARATION



12.009.1 FLOOR PIVOT



12.009.2 WALL PIVOT

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CD33 Angle Door Stop

INSITU APPLICATION



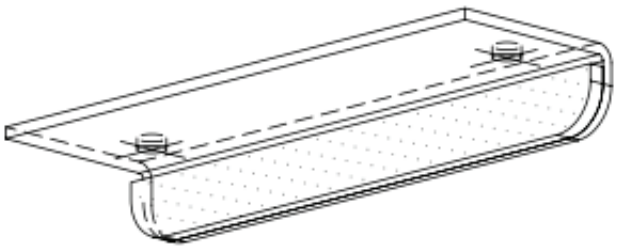
DETAIL

AVAILABLE FINISHES

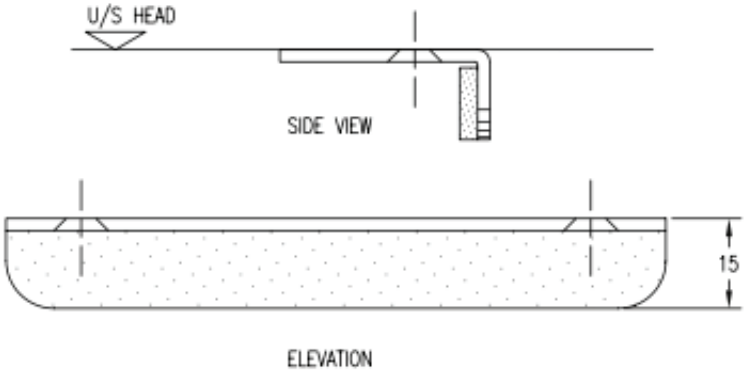
- Aluminium: MILL, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

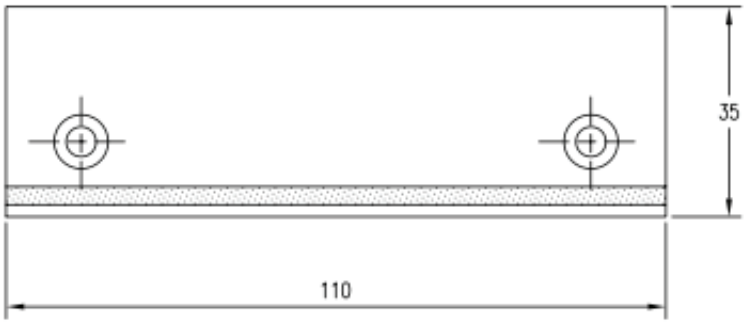
- 35mm x 15mm x 110mm
- Angle door stop with rubber buffer for head or side fixing



DOOR HEAD STOP



ELEVATION

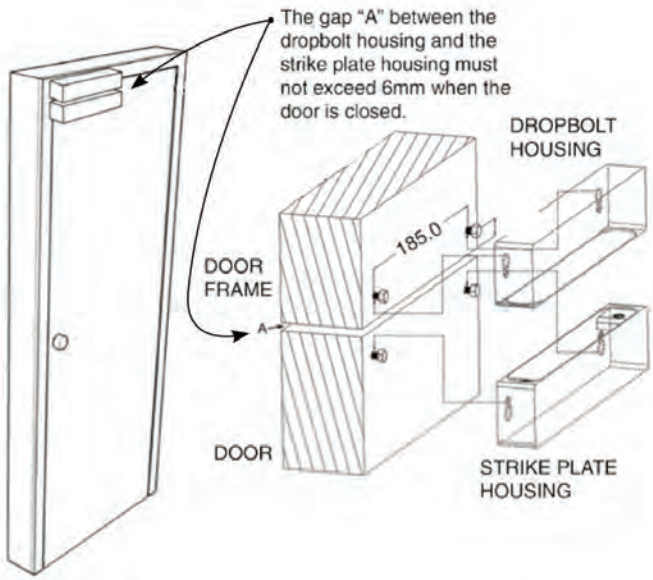


REFLECTED PLAN

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DB1260 Standard Electric Drop Bolt Mortice Mount





PRODUCT DESCRIPTION

The DB1260 is designed for installation on narrow frame swing doors, and/or glass door mounting. The drop bolt body depth of 35mm will fit into a 44mm depth door frame. The drop bolt is available in either "Power To Lock" or "Power To Release" format.

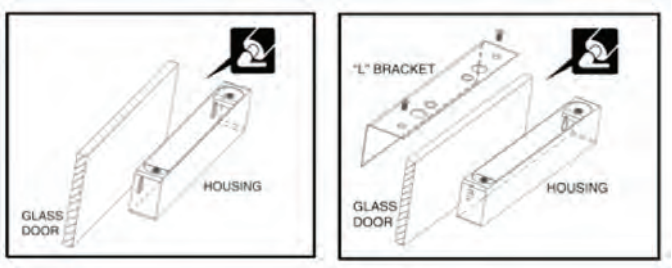
TECHNICAL DETAILS

- Slimline mortise mount drop bolt
- Maximum glass hold up to 300kg
- 12VDC 1.15A(in-rush) 250mA holding
- Door sensor, Remote release, Bi-coloured LED & Audible tone
- L= 210 x W= 25 x D= 35mm

PRODUCT FEATURES

- Internal control circuits protect drop bolt pin from damage
- Power To Lock or Power To Release (to be specified)
- Auto lock function
- Built-in varistor (MOV) for surge protection
- Time delay setting at 0/3/6/10 secs
- 1 year warranty

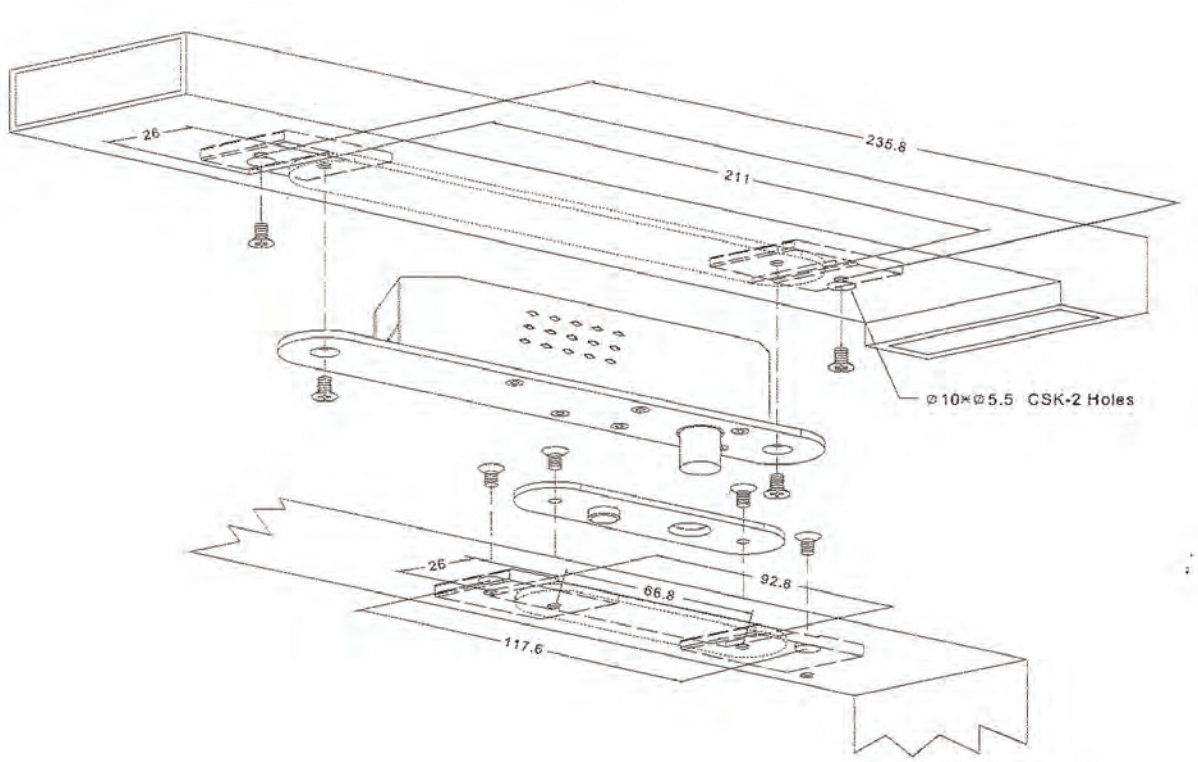
GLASS DOOR INSTALLATION



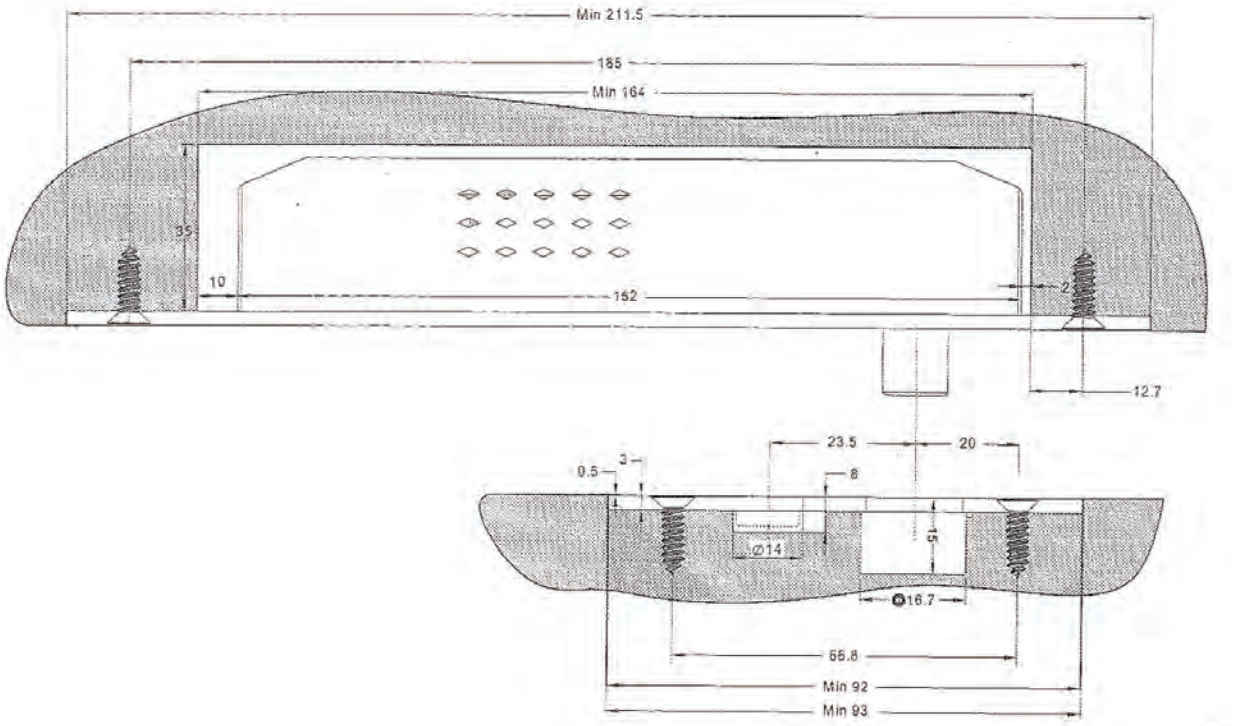
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DOOR INSTALLATION Aluminium and Wooden

ALUMINIUM



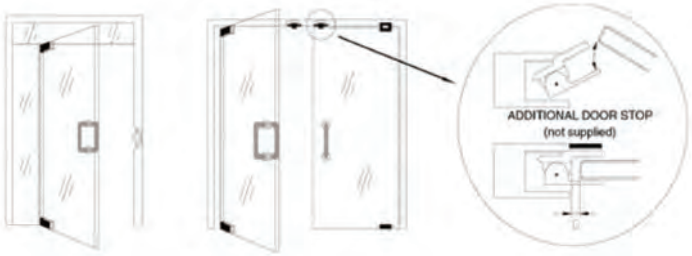
WOODEN

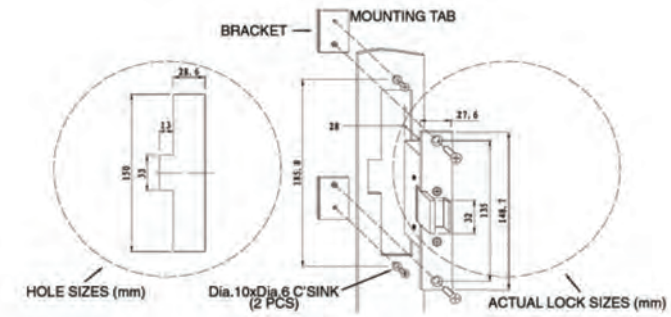


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FES4012 Glass Door Strike







PRODUCT DESCRIPTION

The FES4012 is suitable for single action 90°+ degree hinged glass door installations. The device is not suitable for double action 180° degree swing through doors.

TECHNICAL DETAILS

- Mortise mount, Power to lock glass door electric strike
- Maximum glass hold up to 300kg
- 12VDC/240mA
- Non monitored
- L= 148.7 x W= 27.6 x D= 30.1mm

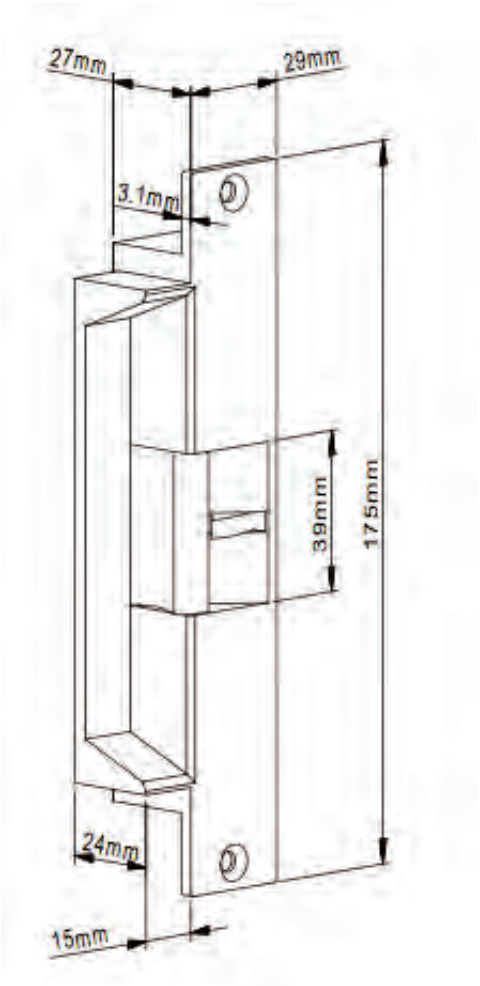
PRODUCT FEATURES

- Power To Lock
- 304 stainless steel faceplate
- 304 stainless steel lock body
- Easy installation
- Low power consumption and low temperature
- Continuous operation
- Used on glass thickness from 10 to 12mm

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KES2200 Fully Monitored Electric Strike





PRODUCT DESCRIPTION

The KES2200 Series is a high security electric strike, offering a single model including switch monitoring of latch, strike and solenoid, variable boltage from 12VDC/AC to 28VDC/AC, a fast and convinient interchangeable fail safe/fail secure function (changeable on site).

The construction of housing and keeper are of stainless steel and include pre-drilled holes for optional extension lips.

TECHNICAL DETAILS

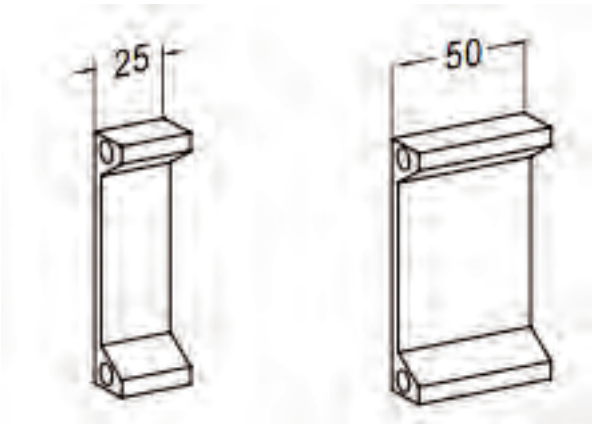
- Operating voltage variable 12-24VDC
- Voltage tolerance +/- 15%
- Current draw: 12VDC/190mA, 24VDC/130mA (at temperature 20 degrees)
- Latch/Keeper micro switch rating: 1A/125VAC
- Operating temperature: -10-45 degrees
- Humidity 0-95%
- Cycle test to 1 million cycles
- 2 hour fire rating
- CE Certified
- C-Tick

PRODUCT FEATURES

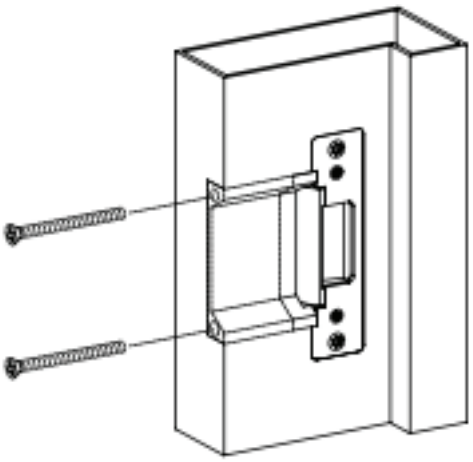
- Fail safe / fail secure interchangeable
- Variable voltage 12-24VDC
- Suits latch depth up to 15mm
- Monitored latch, strike and solenoid
- Pre-drilled for optional extension lips
- Includes mounting tabs for metal frame
- Solid stainless steel construction

© GHA SOLUTIONS

KESLP2225 / KESLP2250 Optional accessories for KES2200



KESLP2225 KESLP2250

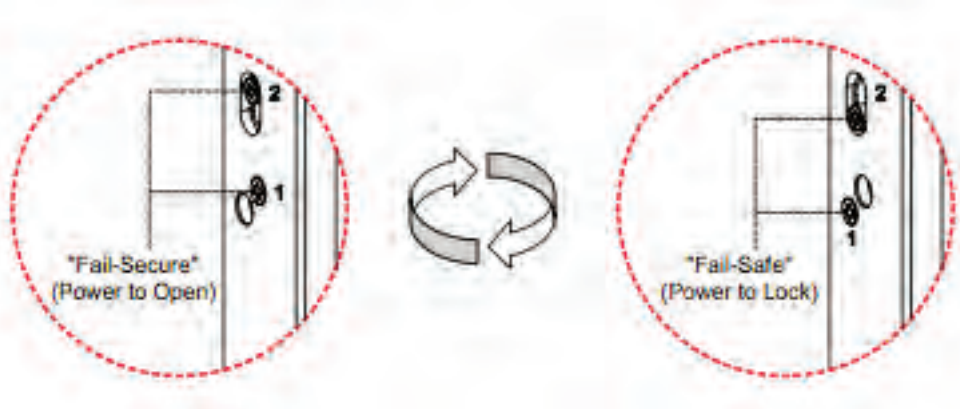


TECHNICAL DETAILS

- KESLP22H - Lip extension 25mm, suit KES2200
- KESLP2250 - Lip extension 50mm, suit KES2200

VERSION CHANGEABLE

- The KES2200 Series Electric Strike can easily be changed between fail safe and fail secure modes



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KML-6 Electromagnetic Lock



PRODUCT DESCRIPTION

The KML-6 is a surface mounted electromagnetic lock which can be used on single doors.

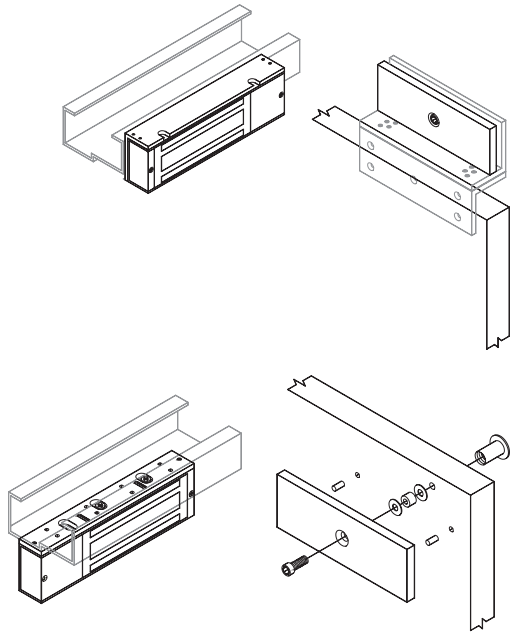
It has a holding force 540KGS and dual voltage with both lock and door sensor. It also features a built-in voltage spike suppressor and is C-Tick, UL Listed, CE approved and has a 2 hour fire rating.

PRODUCT FEATURES

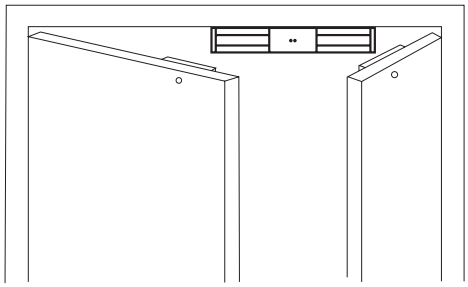
- Surface mounted – Single doors
- LED monitor
- Built-in voltage spike suppressor
- Lock sensor (hall effect IC)
- Door status sensor (reed switch)
- Anti residual magnetism device (ARM)

TECHNICAL DETAILS

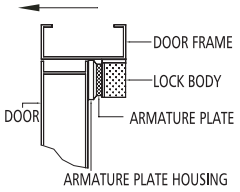
- Lock: *266L x 73W x 40D(mm)
  *including mounting plate
- Armature Plate: 185L x 61W x 16T(mm)
- Holding Force: 5,400N (540kg)
- Voltage: 12/24VDC
- Current Draw: 500mA/12VDC, 250mA/24VDC
- Material: Brushed anodized aluminium housing / Zinc plated steel armature



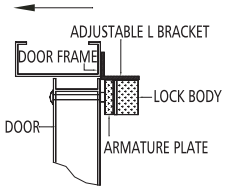
TYPICAL INSTALLATION



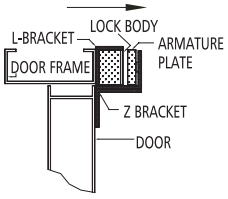
INSTALLATION POSITIONS – DOUBLE DOORS



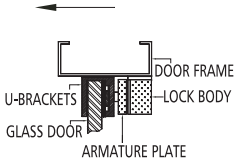
USE B0001
Armature Plate Housing



USE B1001
L Adjustable Bracket



USE B1002
L & Z Bracket



USE U185
U Bracket for Glass Door

© GHA SOLUTIONS

KML-10 Electromagnetic Lock



PRODUCT DESCRIPTION

The KML-10 is a surface mounted double electro-magnetic lock which can be used for double doors.

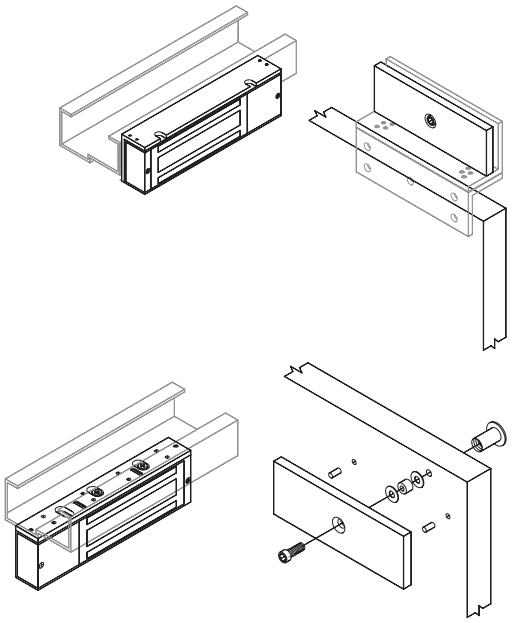
It has a holding force 540KGS and dual voltage with both lock and door sensor. It also features a built-in voltage spike suppressor and is C-Tick, UL Listed, CE approved and has a 2 hour fire rating.

PRODUCT FEATURES

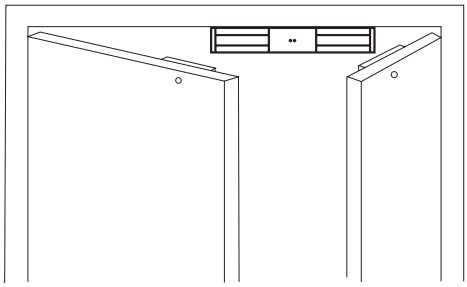
- Surface mounted – Double doors
- LED monitor
- Built-in voltage spike suppressor
- Hall effect monitoring
- Lock sensor (hall effect IC)
- Door status sensor (reed switch)
- Anti residual magnetism device (ARM)

TECHNICAL DETAILS

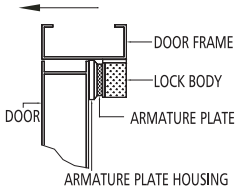
- Lock: *532L x 73W x 40D(mm)
  *including mounting plate
- Armature Plate: 185L x 61W x 16T(mm)
- Holding Force: 5,400N (540kg)
- Voltage: 12/24VDC
- Current Draw: 500mA/12VDC, 250mA/24VDC
- Material: Brushed anodized aluminium housing / Zinc plated steel armature



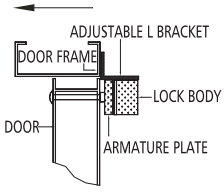
TYPICAL INSTALLATION



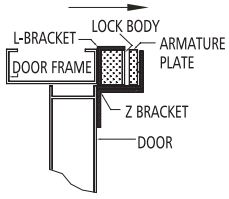
INSTALLATION POSITIONS – DOUBLE DOORS



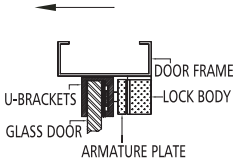
USE B0001
Armature Plate Housing



USE B1001
L Adjustable Bracket



USE B1002
L & Z Bracket



USE U185
U Bracket for Glass Door

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B0001 Armature Plate Housing for KML-6 & KML-10 (x2)



TECHNICAL DETAILS

- 200L x 76W x 15D(mm)

B0011 Armature Plate Housing for KML-2H



TECHNICAL DETAILS

- 200L x 55W x 15D(mm)

B1001 L Adjustable Bracket for KML-6 & KML-10 (x2)



TECHNICAL DETAILS

- 266L x 76W x 38D(mm)

B1002 L & Z Bracket for KML-6 & KML-10 (x2)



TECHNICAL DETAILS

- L Bracket 266L x 76W x 46D(mm)
- Z Bracket 185L x 63.5W x 63.5D (mm)

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B1011 L Adjustable Bracket for KML-2H



TECHNICAL DETAILS

- 250L x 48W x 30D(mm)

B1012 L & Z Bracket for KML-2H



TECHNICAL DETAILS

- 250L x 48W x 30D(mm)

B1022 L & Z Bracket for KML-CCW30



TECHNICAL DETAILS

- L Bracket 166L x 42W x 30D(mm)
- Z Bracket 166L x 38W x 38D

U-185 U Bracket Glass Door for KML-6, KML-10 (x2) & KML-2H

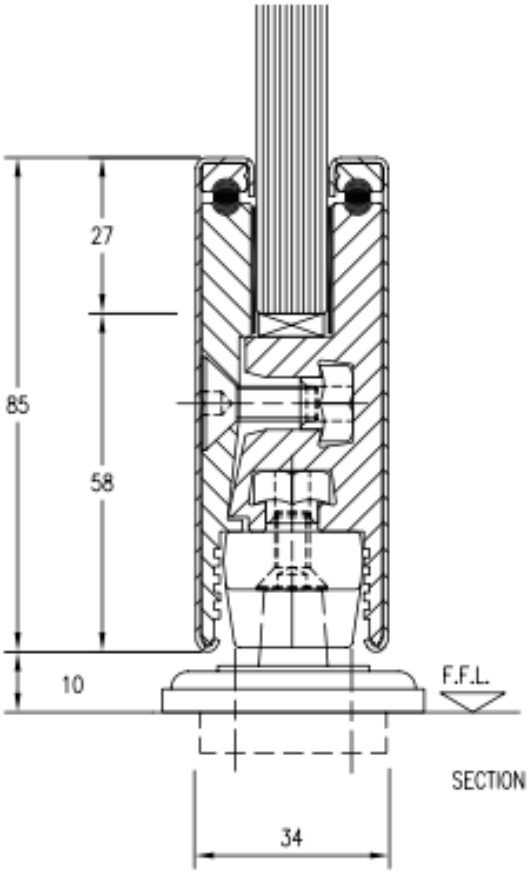


TECHNICAL DETAILS

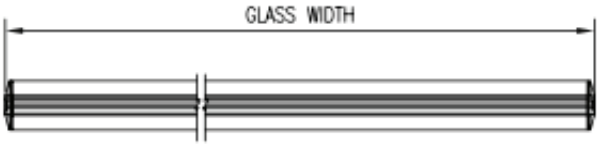
- Suits 10-12mm thick glass
- 185L x 62W x 33D (mm)

© GHA SOLUTIONS

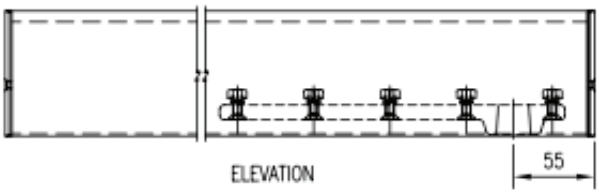
CDS41 Door Rail



DETAIL



PLAN



ELEVATION

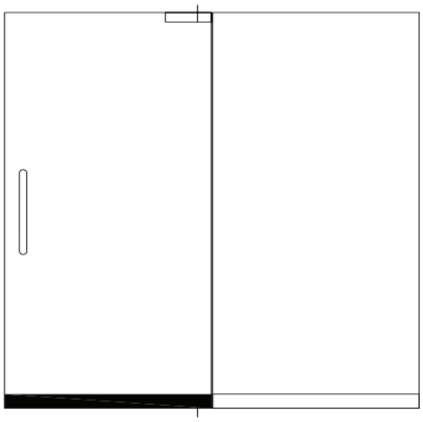
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

TECHNICAL DETAILS

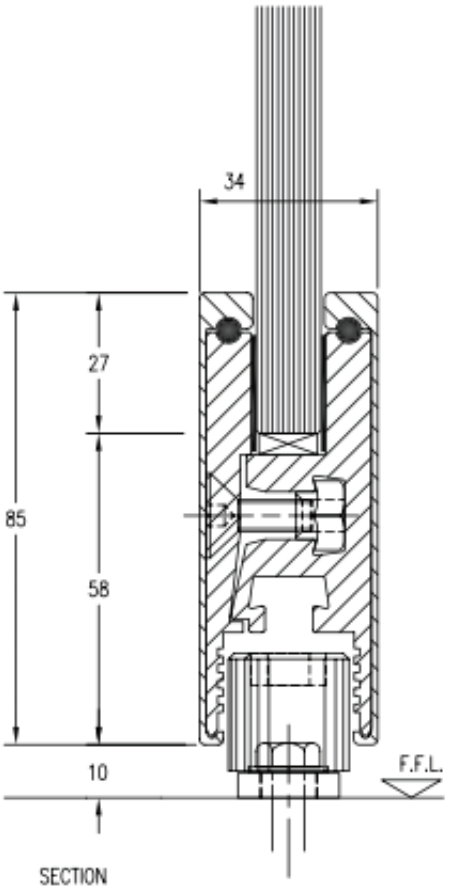
- On-Eazi 85mm high bottom door rail complete with bottom adaptor to suit BTS floor springs and floor pivots
- Adjustable pivot point set at 55mm or specify as required
- Specify glass thickness 10, 12, 15 or 19mm
- Alternative rail cover heights on application
- Max door weight: 150kgs
- Illustrated with CD355 floor pivot

INSITU APPLICATION

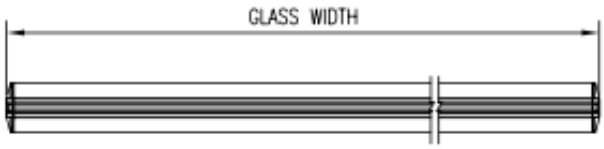


© GHA SOLUTIONS

CDS41S Door Rail



DETAIL



PLAN



ELEVATION

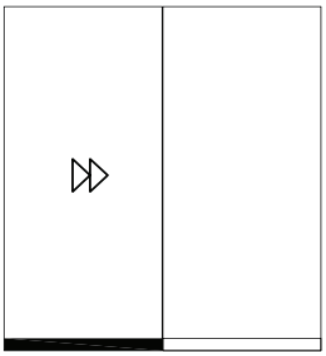
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

TECHNICAL DETAILS

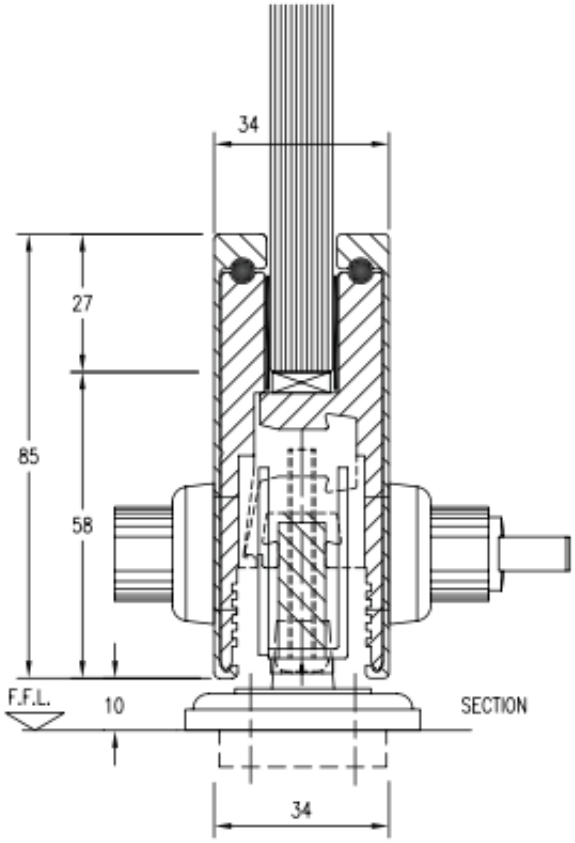
- On-Eazi 85mm high bottom door rail to suit automatic or manual sliding doors
- Specify glass thickness 10, 12, 15 or 19mm
- Alternative rail cover heights on application
- Illustrated with CD03 internal roller guide

INSITU APPLICATION

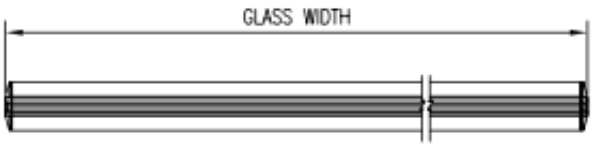


© GHA SOLUTIONS

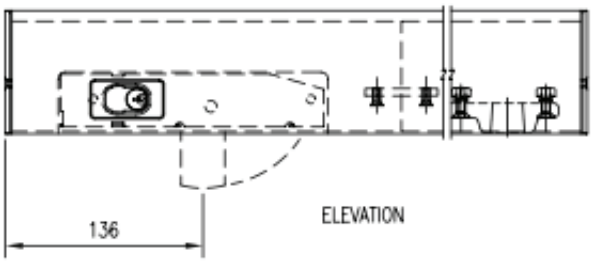
CDS42 Door Rail



DETAIL



PLAN



ELEVATION

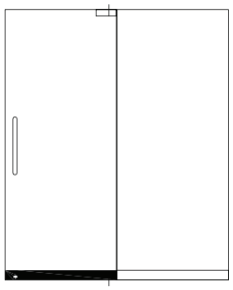
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

TECHNICAL DETAILS

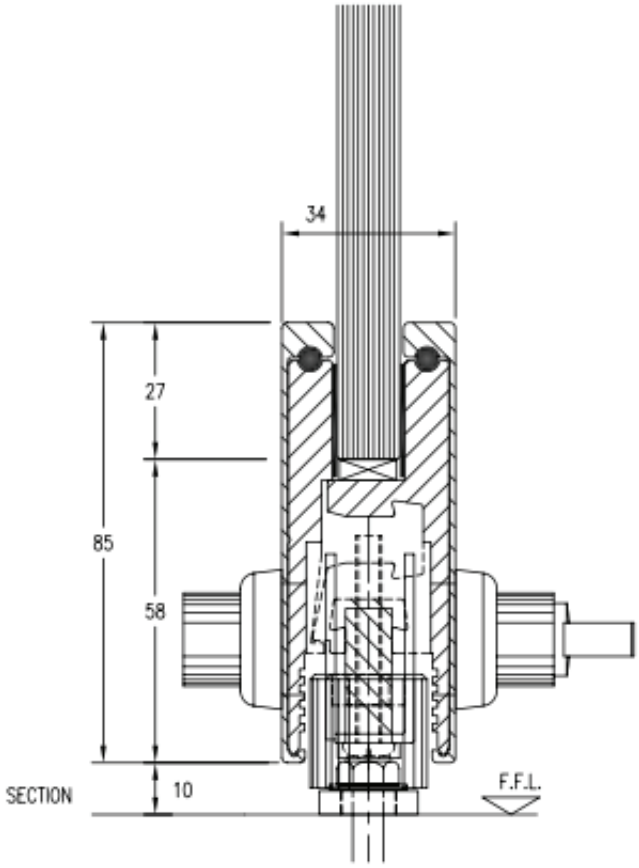
- On-Eazi 85mm high bottom door rail complete with bottom adaptor and door lock (DC590) to suit BTS floor springsnand flood pivots
- Adjustable pivot point set at 55mm or specify as required
- Specify glass thickness 10, 12, 15 or 19mm
- Specify lock operation either single cylinder, double cylinder or cylinder and turn
- Alternate rail cover heights on application
- Max door weight: 150kgs
- Illustrated with CD355 floor pivot

INSITU APPLICATION

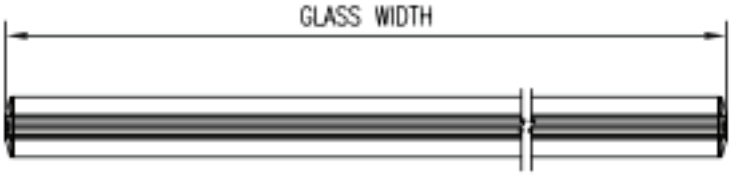


© GHA SOLUTIONS

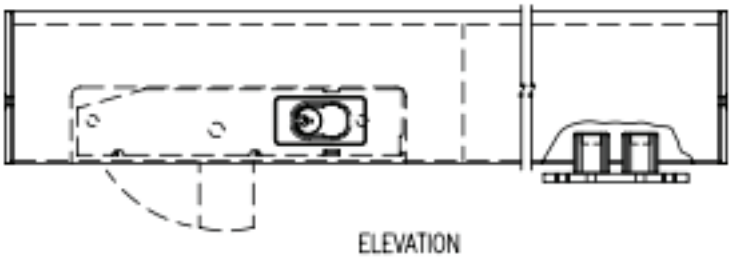
CDS42S Door Rail



DETAIL



PLAN



ELEVATION

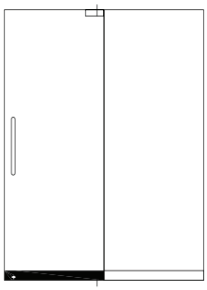
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

TECHNICAL DETAILS

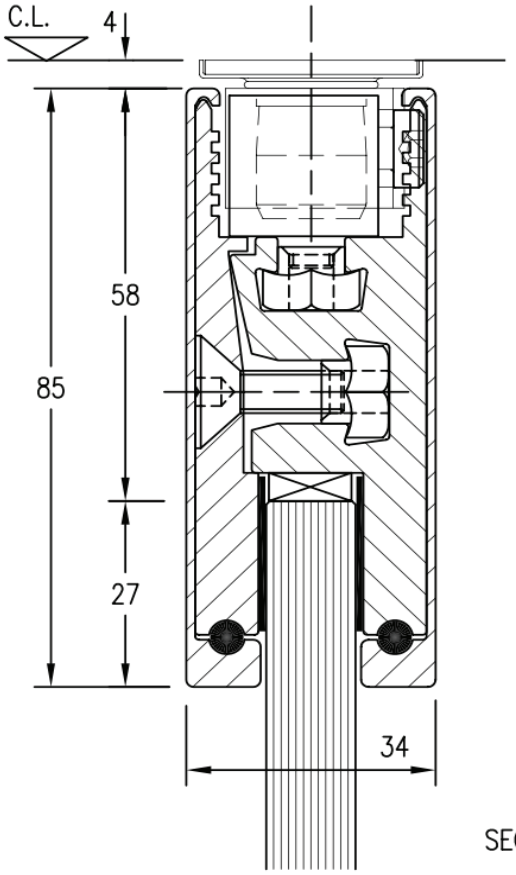
- On-Eazi 85mm high bottom door rail complete with door lock (DC590) to suit automatic or manual sliding doors.
- Specify lock operation either single cylinder, double cylinder or cylinder and turn
- Specify glass thickness 10, 12, 15 or 19mm
- Alternative rail cover heights on application
- Illustrated with CD03 internal roller guide

INSITU APPLICATION



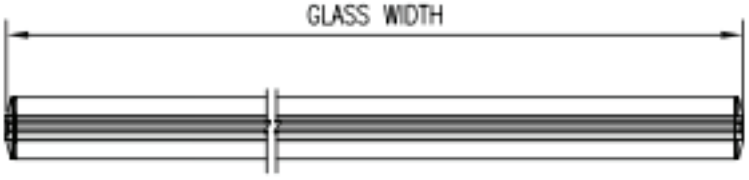
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CDS43 Door Rail

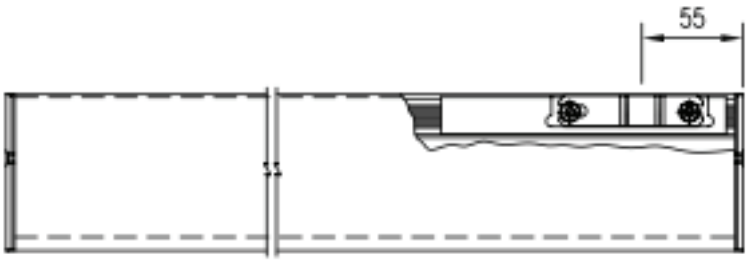


SECTION

DETAIL



PLAN



ELEVATION

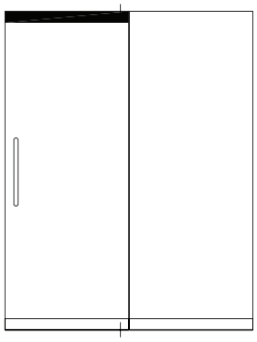
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

TECHNICAL DETAILS

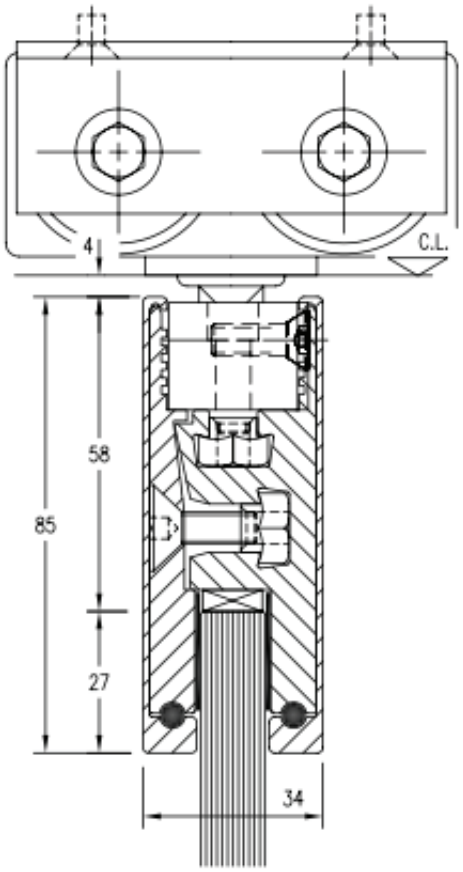
- On-Eazi 85mm high top door rail complete with side load adaptor to suit CD58 15mm diameter top pivot
- Adjustable pivot point set at 55mm or specify as required
- Specify glass thickness 10, 12, 15 or 19mm
- Alternative rail cover heights on application
- Illustrated with CD58 top pivot

INSITU APPLICATION



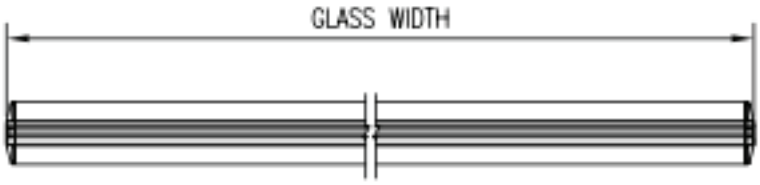
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CDS43RTS Door Rail

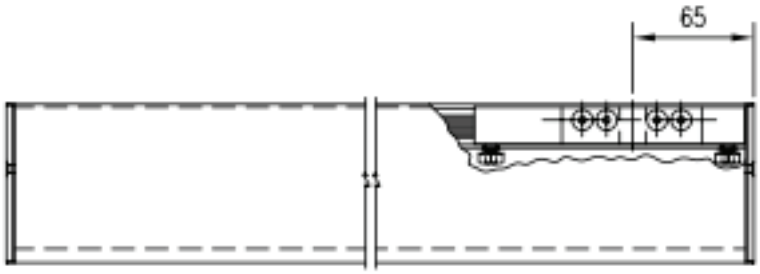


SECTION

DETAIL



PLAN



ELEVATION

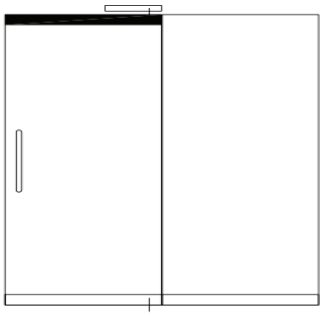
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

TECHNICAL DETAILS

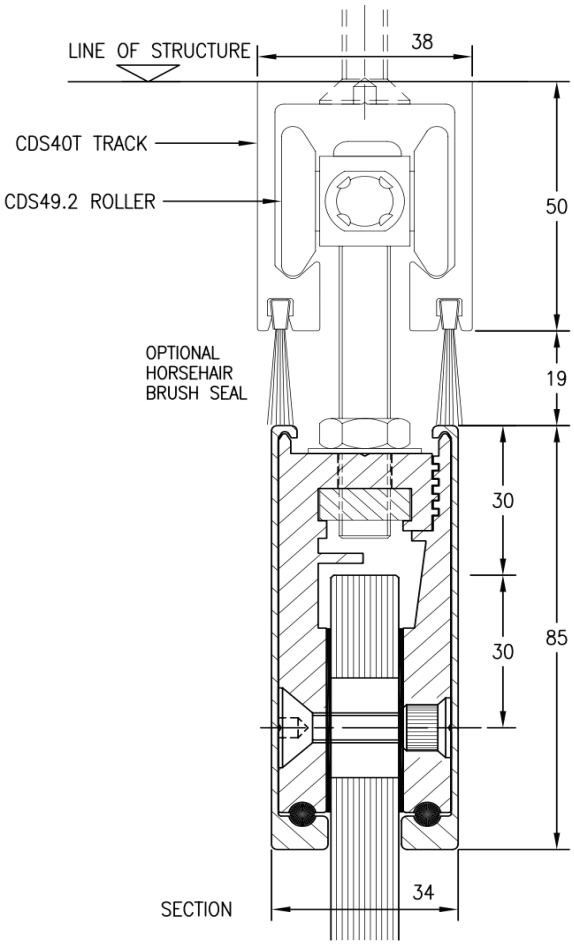
- On-Eazi 85mm tap door rail complete with side load RTS top adaptor to suit RTS85 transom closers
- Adjustable pivot point set at 65mm or specify as required
- Specify glass thickness 10, 12, 15 or 19mm
- Alternative rail cover heights on application
- Illustrated with RTS85 transom closer
- NOTE: when ordering bottom rail to suit specify 65mm pivot point

INSITU APPLICATION



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CDS43S Door Rail

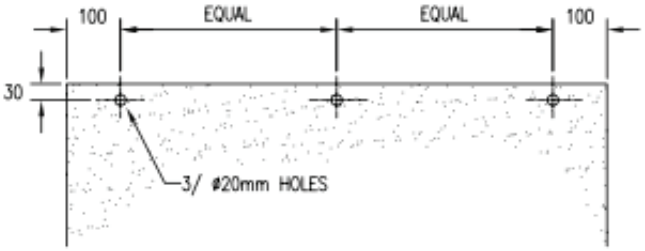


AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

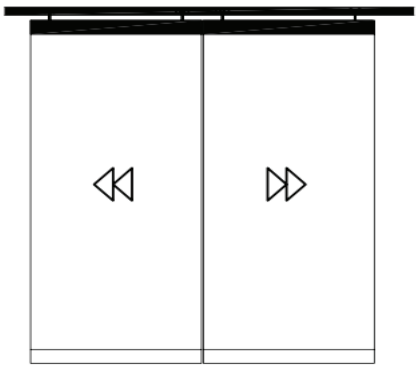
TECHNICAL DETAILS

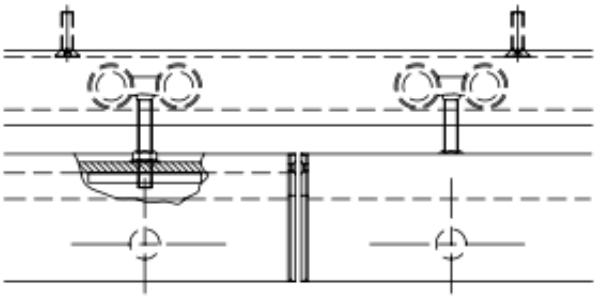
- On-Eazi 85mm high bolt through top door rail to suit most automatic or manual sliding door systems
- Specify glass thickness 10, 12, 15 or 19mm
- Alternative rail cover heights on application
- Illustrated with CDS40T and CDS49.2 roller



GLASS PREPARATION

INSITU APPLICATION

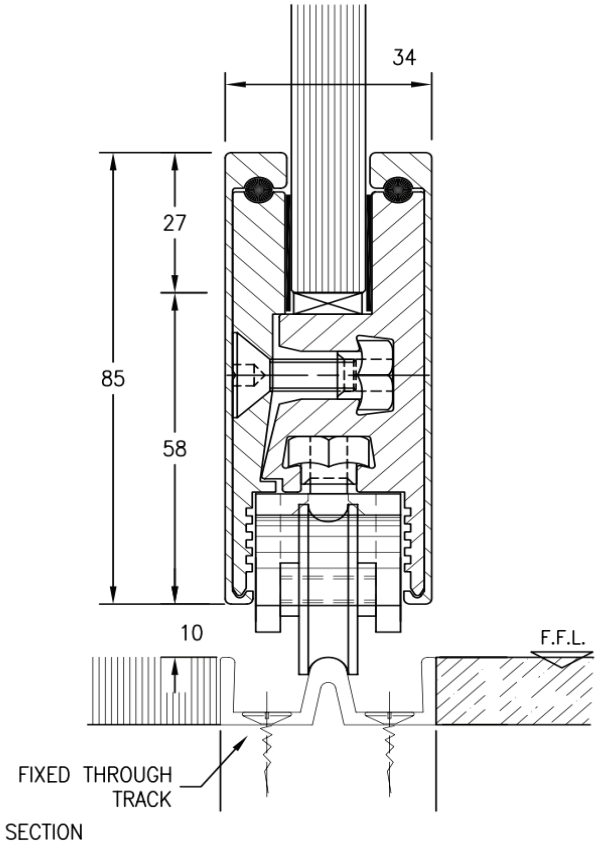




ELEVATION

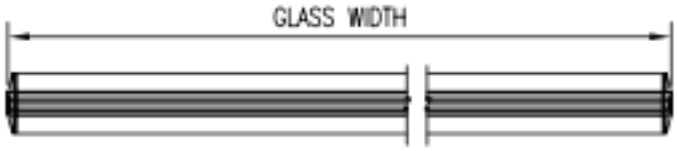
© GHA SOLUTIONS

CDS41B/S Door Rail

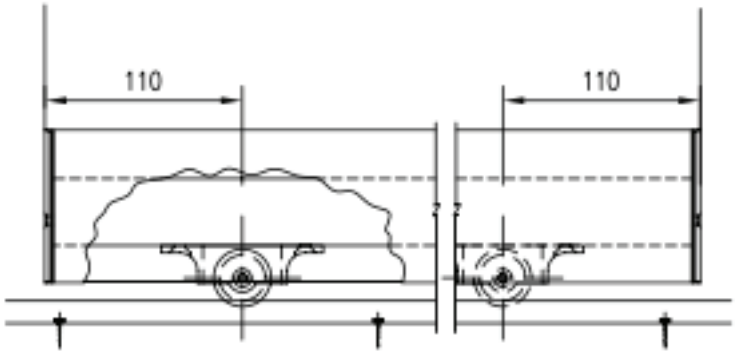


SECTION

DETAIL



PLAN



ELEVATION

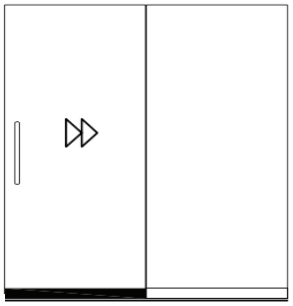
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

TECHNICAL DETAILS

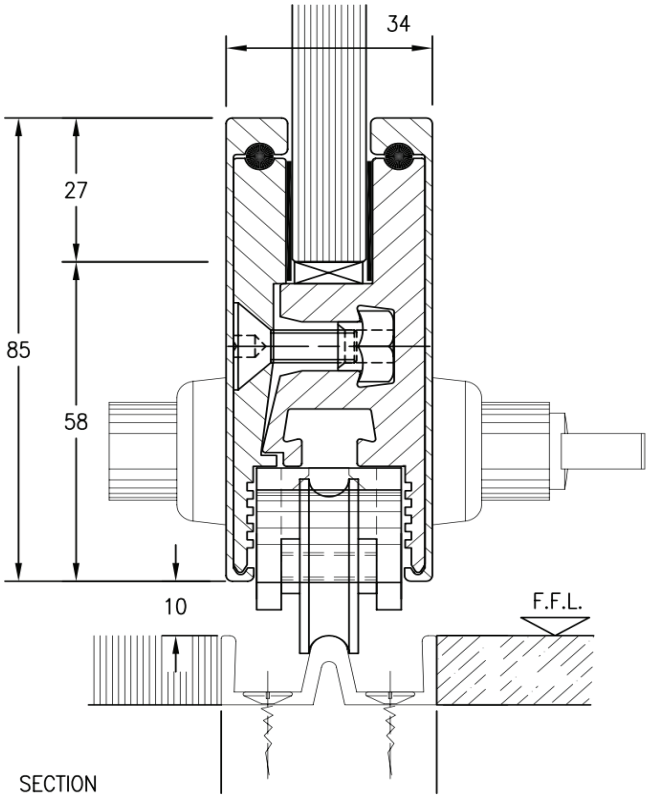
- On-Eazi 85mm high bottom door rail complete with heavy duty rollers to suit CDS50 floor mounted sliding brass track, ILLUSTRATED
- Specify glass thickness 10, 12, 15 or 19mm
- Alternative rail cover heights on application
- Max door weight: 150kgs

INSITU APPLICATION



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CDS42B/S Door Rail



SECTION

DETAIL

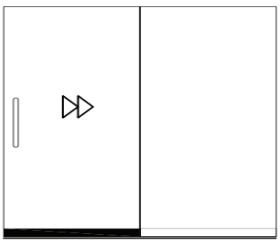
AVAILABLE FINISHES

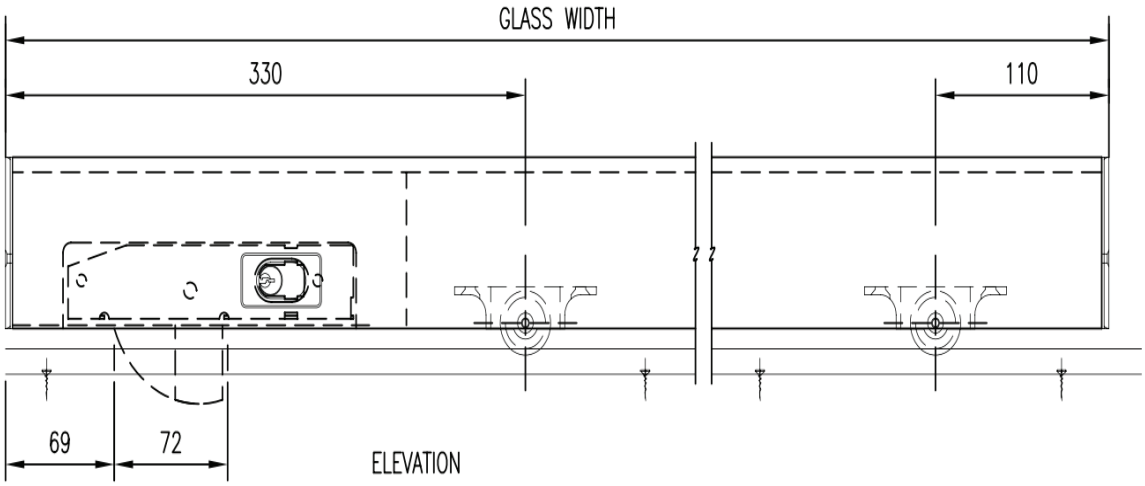
- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

TECHNICAL DETAILS

- On-Eazi 85mm high bottom door rail complete with heavy duty rollers and door lock (DC590) to suit CDS50 floor mounted sliding brass track, ILLUSTRATED
- Specify glass thickness 10, 12, 15 or 19mm
- Alternative rail cover heights on application
- NOTE: minimum door width recommended 1000mm
- Max door weight: 150kgs

INSITU APPLICATION

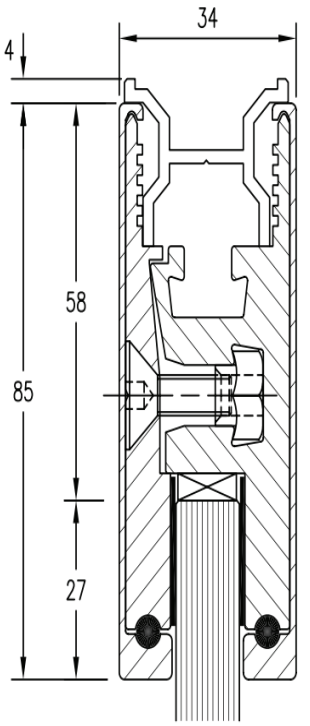




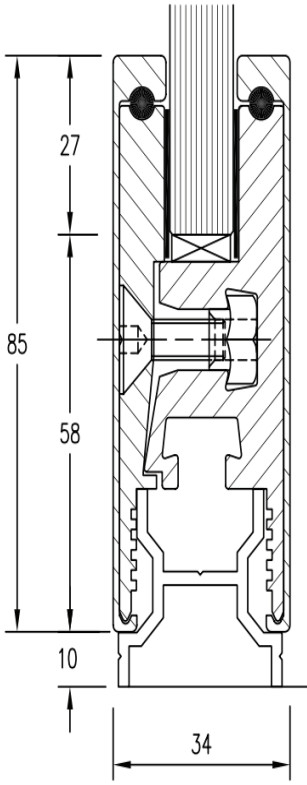
ELEVATION

© GHA SOLUTIONS

CDS47/48 Door Rail



CDS48 TOP



CDS47 BOTTOM

SECTION

AVAILABLE FINISHES

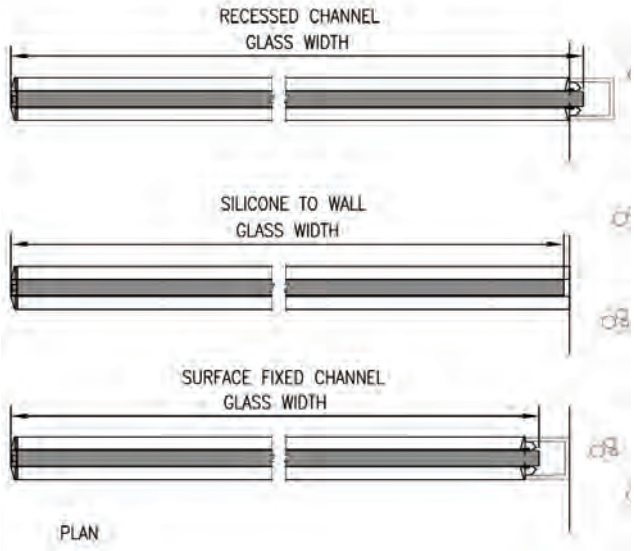
- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

TECHNICAL DETAILS

- On-Eazi 85mm high side light rail complete with 4/10mm filler section to suit side light installation, ILLUSTRATED
- Specify glass thickness 10, 12, 15 or 19mm
- Alternative rail cover heights on application
- Specify one or two end caps as required
- Specify CDS47 for bottom side light rail
- Specify CDS48 for top side light rail

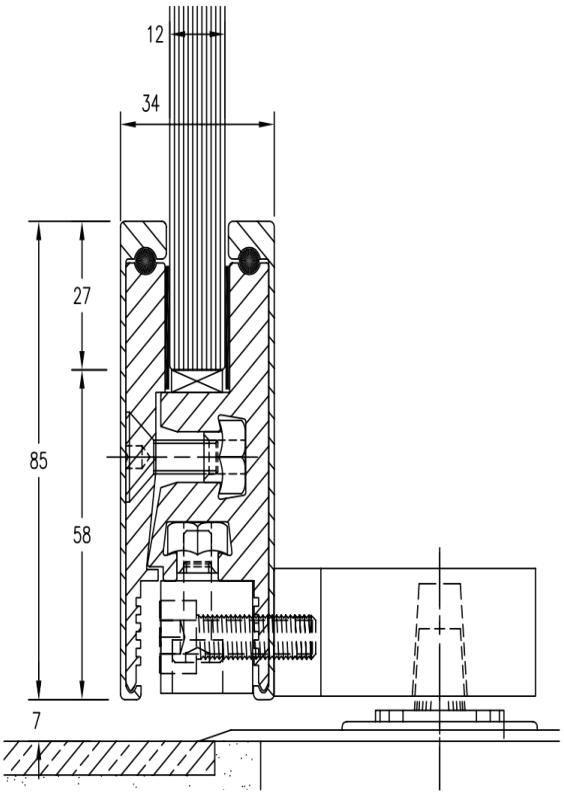
INSITU APPLICATION





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CDS41DL/R Door Rail



SECTION

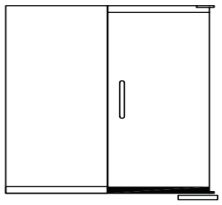
AVAILABLE FINISHES

- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

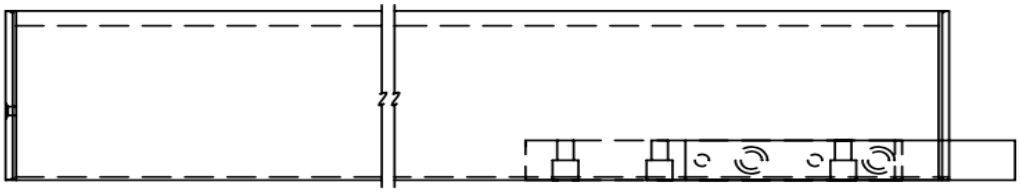
TECHNICAL DETAILS

- On-Eazi 85mm high bottom door rail complete with offset pivot assembly to suit BTS floor springs and floor pivots
- Specify glass thickness 10, 12, 15 or 19mm. NB 12mm illustrated
- Alternative rail cover heights on application
- Specify L/R for handing (RIGHT HAND DRAWN)
- Max door weight: 100kgs
- NOTE: Offset pivot assembly finished in SAA and SSS
- Illustrated with a BTS floor spring

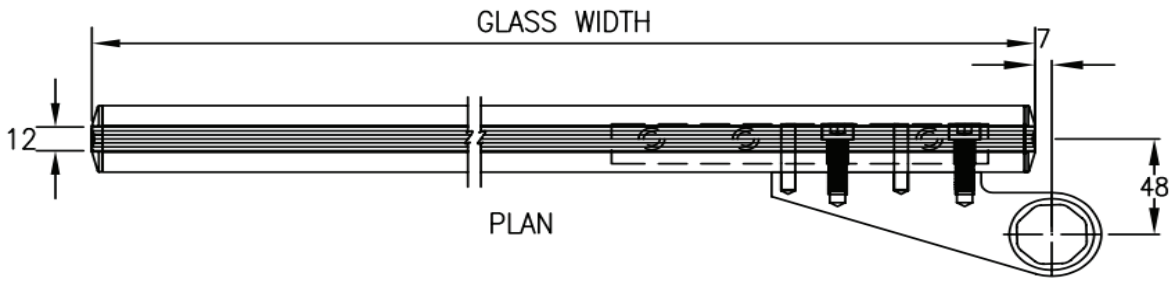
INSITU APPLICATION



DETAIL



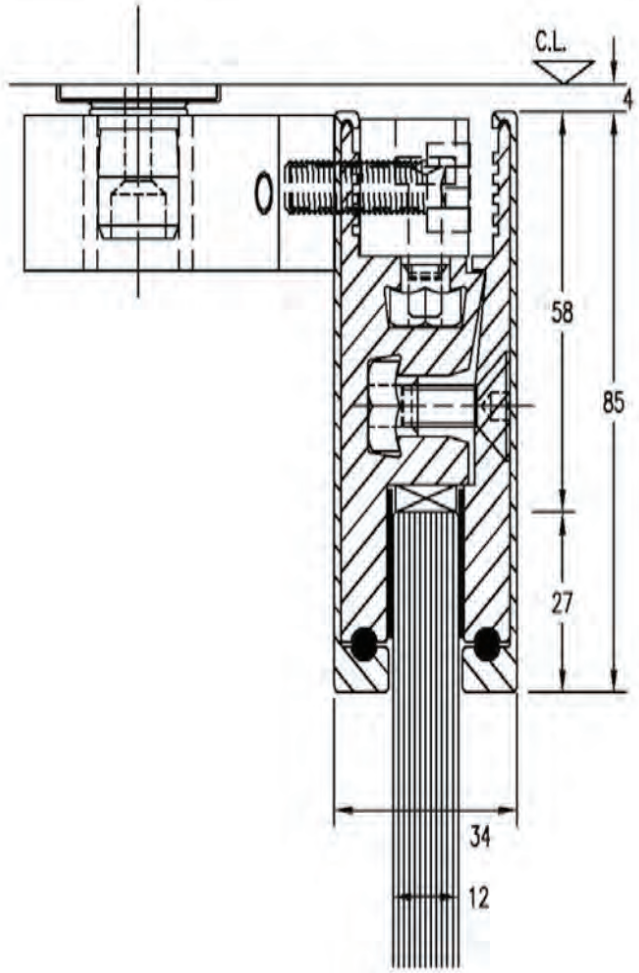
ELEVATION



PLAN

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CDS43DL/R Door Rail



DETAIL

AVAILABLE FINISHES

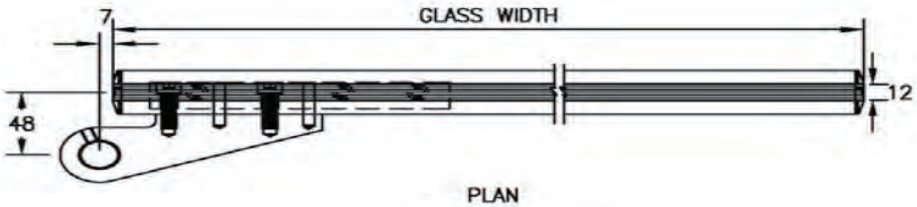
- Aluminium: MILL, SAA
- Stainless: SSS, PSS
- Special finishes on request

TECHNICAL DETAILS

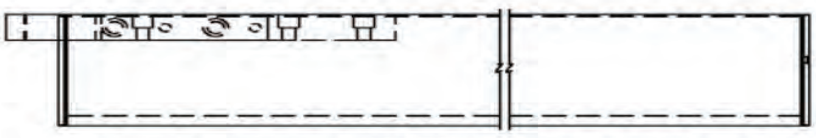
- On-Eazi 85mm high tap door rail complete with offset pivot assembly to suit CD58 offset top pivot, ILLUSTRATED
- Alternate frame portion pivots refer 339.1,2 and 3
- Specify glass thickness 10, 12, 15 or 19mm. NB 12mm illustrated
- Alternative rail cover heights on application
- Specify L/R for handing (LEFT HAND DRAWN)
- Max door weight: 100kgs
- NOTE: Offset pivot assembly finished in SAA and SSS

INSITU APPLICATION





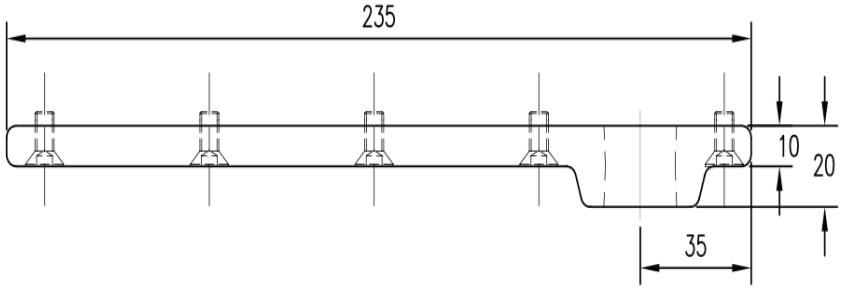
PLAN



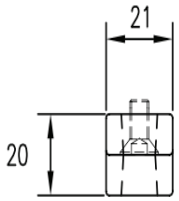
ELEVATION

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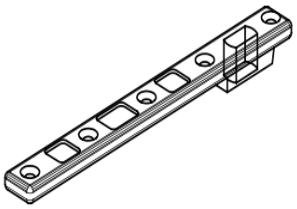
7421.4 Univeral Bottom Strap Pack



SIDE VIEW



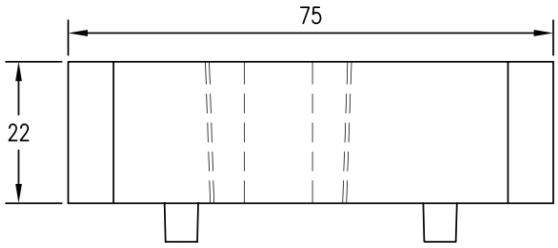
END VIEW



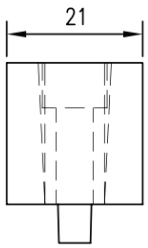
TECHNICAL DETAILS

- Universal bottom strap pack to suit universal rail and floor spring or pivot bearing

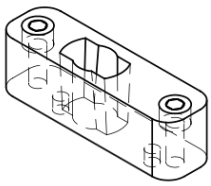
355.1 Univeral Bottom Rail Pivot Insert



SIDE VIEW



END VIEW

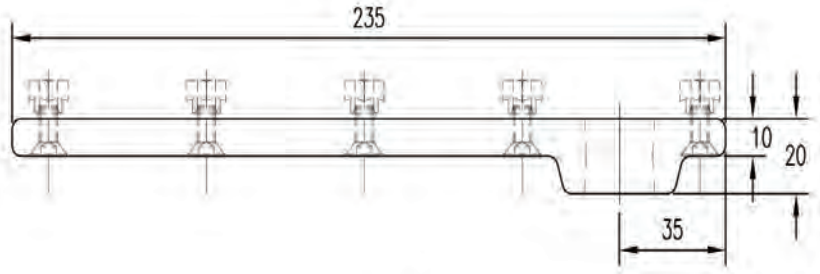


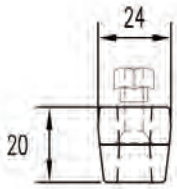
TECHNICAL DETAILS

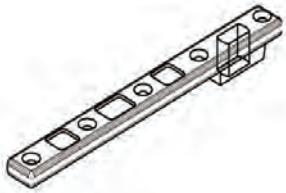
- Universal bottom rail pivot insert to suit floor spring or floor pivot bearing

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7421 Bottom Rail Strap



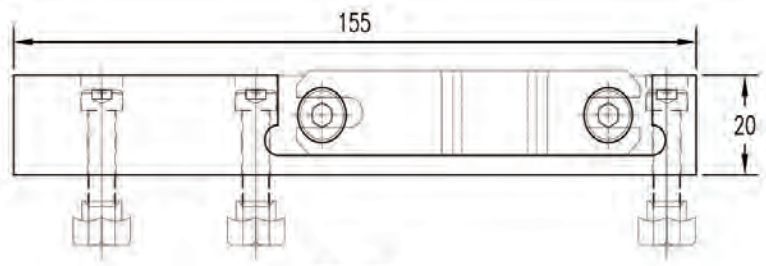


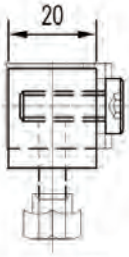


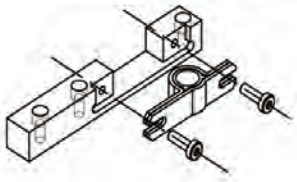
TECHNICAL DETAILS

- On-Eazi bottom rail strap to suit floor spring or pivot bearing

CDS40.4 Bottom Rail Strap





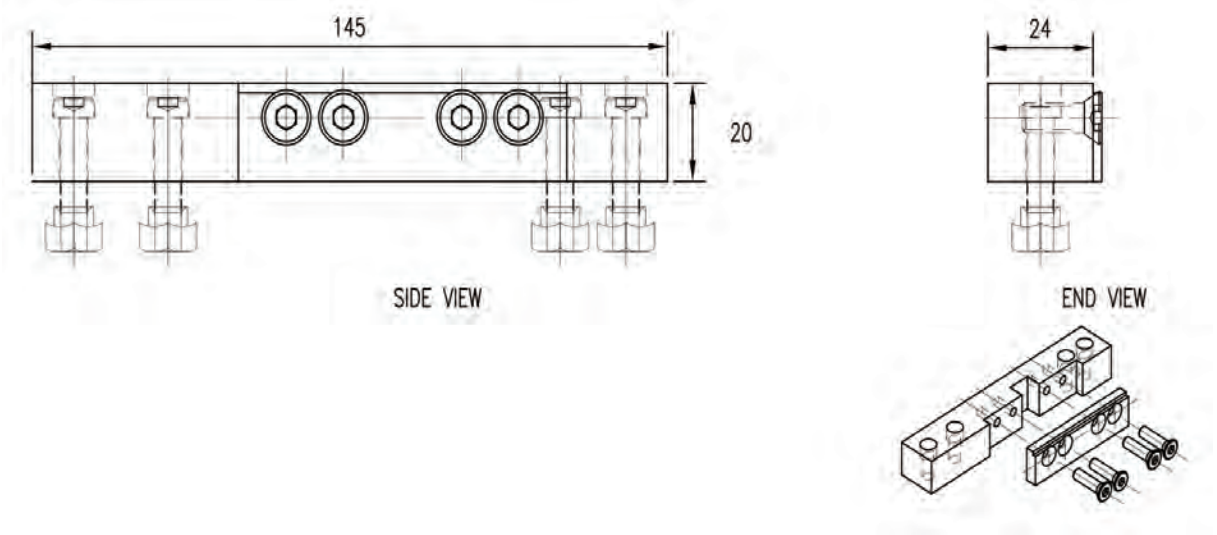


TECHNICAL DETAILS

- On-Eazi bottom rail strap to suit floor spring or pivot bearing

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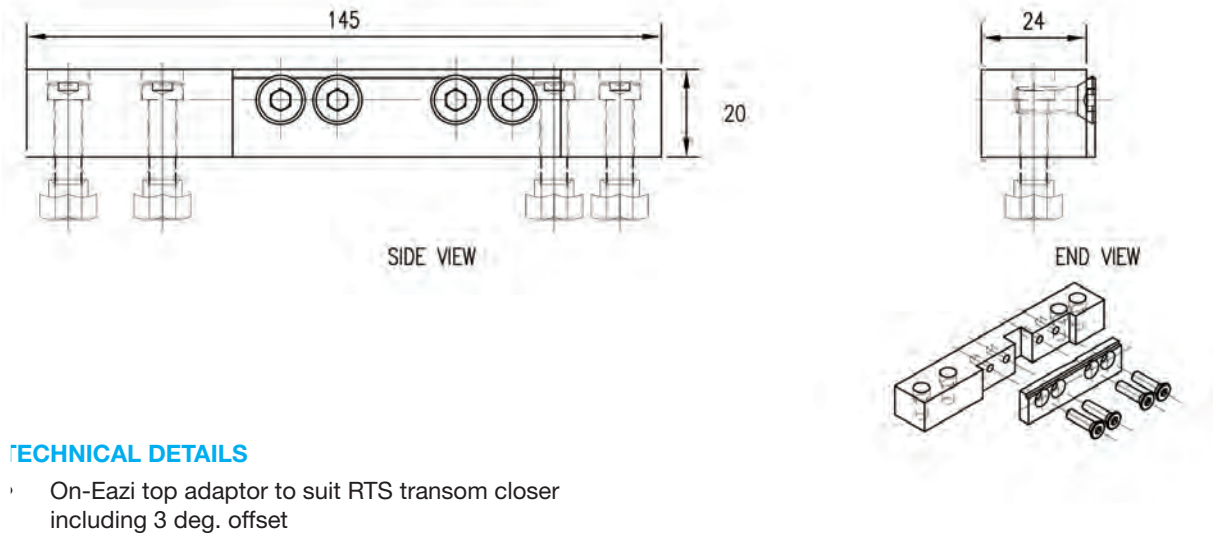
CDS40.6RTS Top Adaptor



TECHNICAL DETAILS

- On-Eazi top adaptor to suit RTS transom closer

CDS40.6RTS L/R Top Adaptor L/R

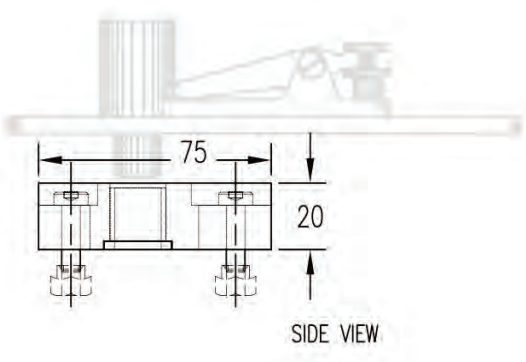


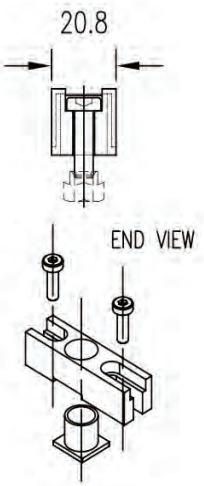
TECHNICAL DETAILS

- On-Eazi top adaptor to suit RTS transom closer including 3 deg. offset
- Specify LH or RH

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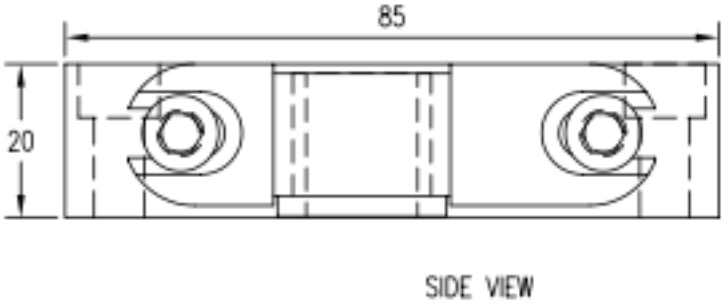
355.0 Universal Top Rail Pivot Insert

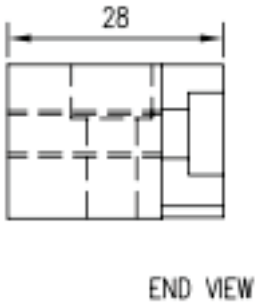




- Universal top rail pivot insert to suit walking beam pivot (Illustrated)

355.9 Universal Top Rail Side Load Pivot Insert



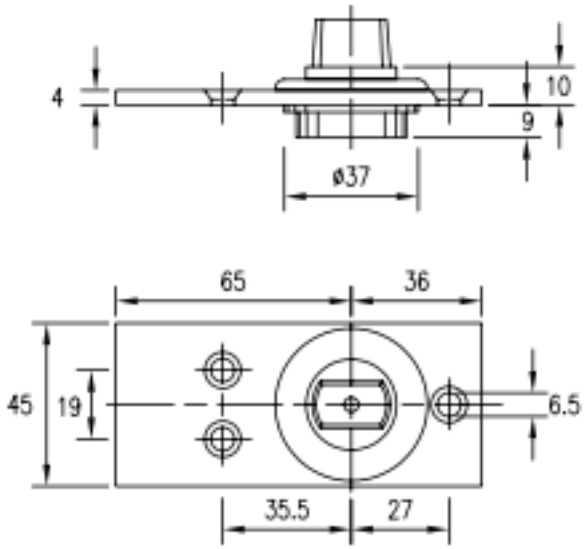


TECHNICAL DETAILS

- Universal top rail side load pivot insert to suit CD58

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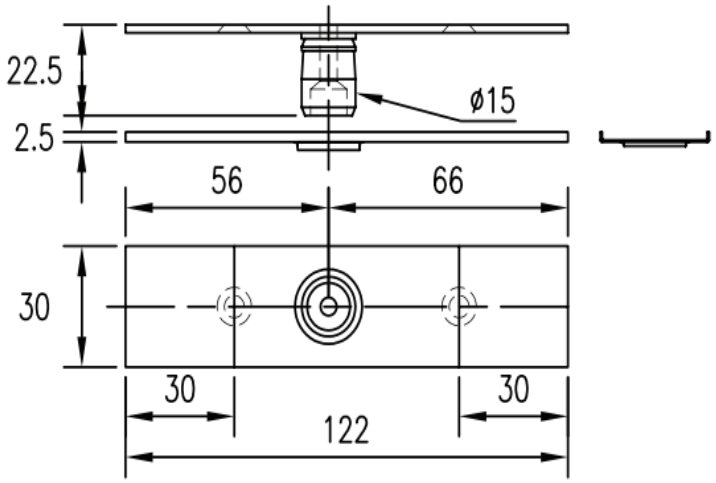
CD355/MP26 Floor Pivot Bearing with 2.5mm Extension



TECHNICAL DETAILS

- Floor pivot bearing with 2.5mm extension
- Door weight - 110kg with RTS Closer
- Door weight - 200kg with free pivot

CD58 15mm Uper Pivot Assembly with Cover

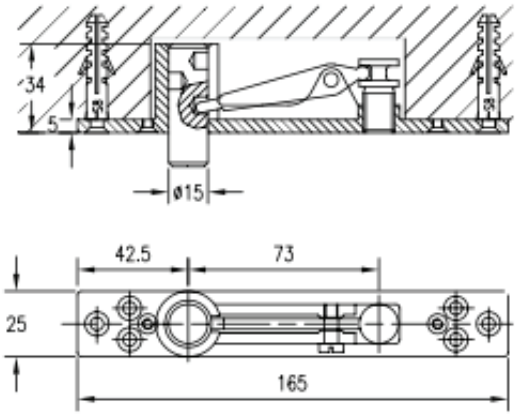


TECHNICAL DETAILS

- 15mm upper pivot assembly with cover

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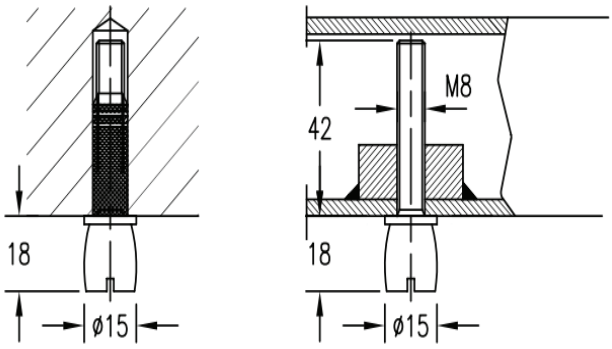
8066U Wind down 15mm Upper Pivot Assembly



TECHNICAL DETAILS

- Wind down 15mm upper pivot assembly

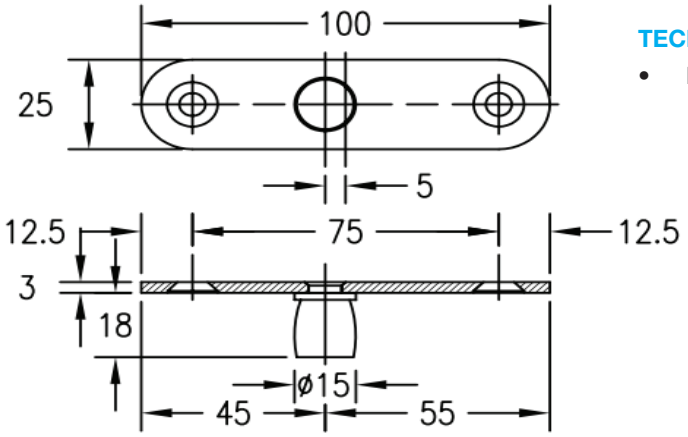
PT25 M8 Threaded 15mm Upper Pivot



TECHNICAL DETAILS

- M8 threaded 15mm upper pivot

PT24 Fixed Plate 15mm Top Pivot

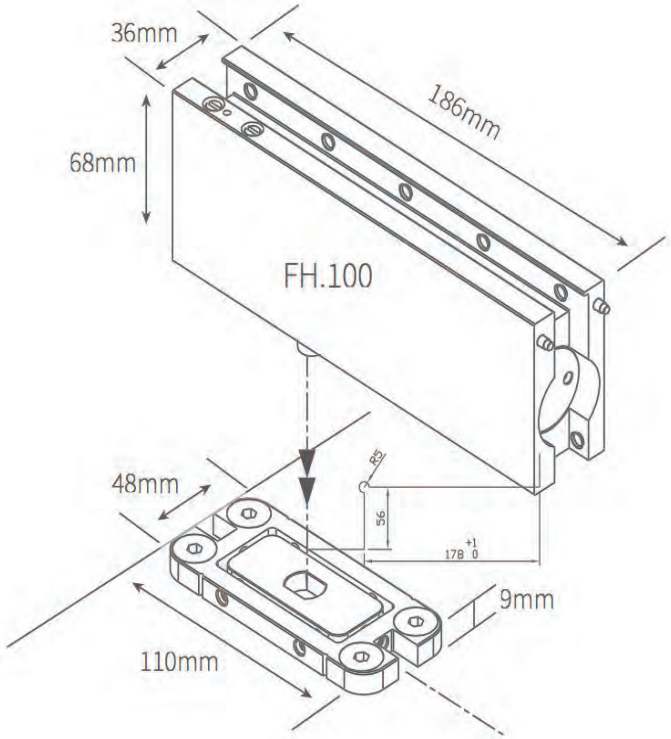


TECHNICAL DETAILS

- Fixed plate 15mm upper pivot assembly

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FH100.HO / FH100.NH0 Ozone Hydraulic Patch Fitting Self Closing



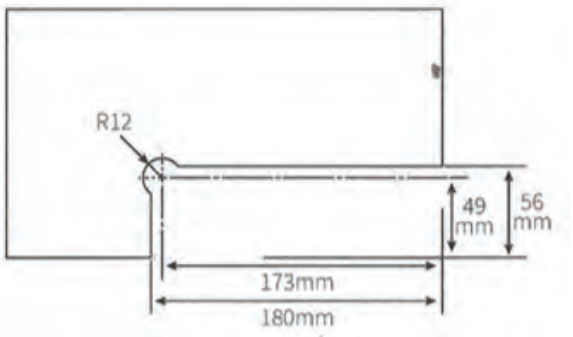
AVAILABLE FINISHES

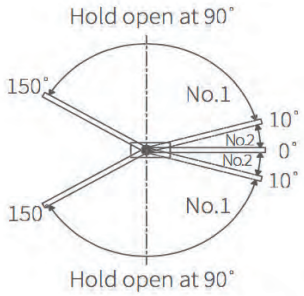
- 316 polished or satin stainless steel

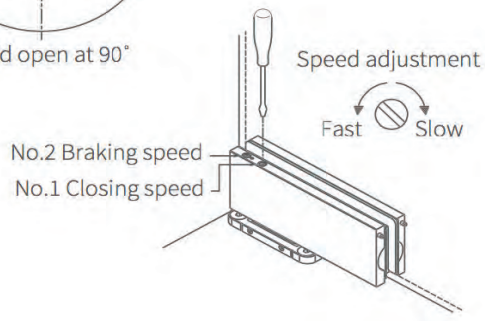
TECHNICAL DETAILS

- FH100.H0 (90 degree hold open)
- FH100.NH0 (non-hold open)
- Ozone hydrolic patch fitting self closing 90 degree hold open
- Floor rmounted patch fitting for internal frameless glass doors up to 1 metre wide
- Maximum door width 1 metre (12mm clearance to floor)
- Maximum door weight 100kg
- Simple installation with four screw fixings into any floor
- Adjustable base plate for easy alignment of the door in either direction (as shown in diagram)
- Use in conjunction with standard HP20 top patch fitting (two speed closing adjustment as shown)
- Single or double action doors
- Toughened frameless glass doors from 8mm-12mm glass thickness

GLASS CUT OUT DETAIL

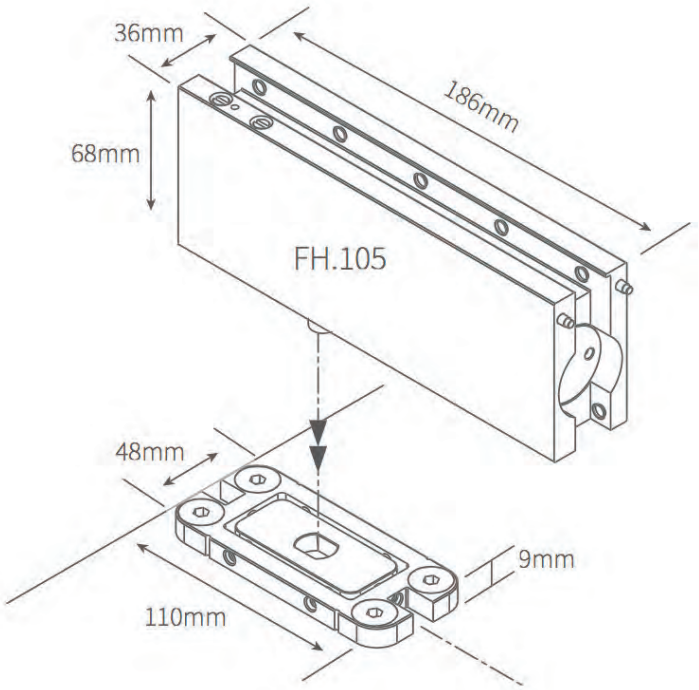






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FH105.HO / FH105.NHO Ozone Hydraulic Patch Fitting High Strength Self Closing

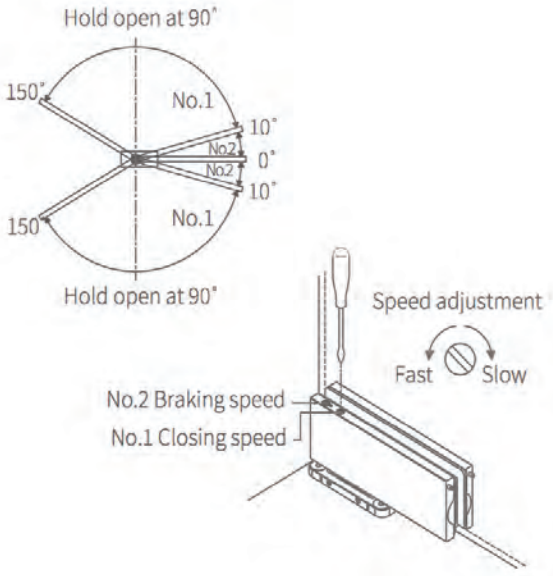


AVAILABLE FINISHES

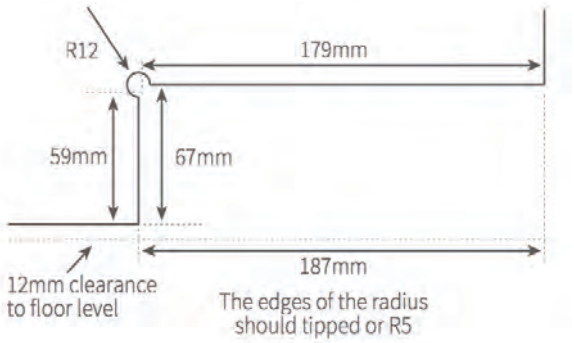
- 316 polished or satin stainless steel

TECHNICAL DETAILS

- FH100.H0 (90 degree hold open)
- FH100.NH0 (non-hold open)
- Ozone hydrolic patch fitting high strength self closing
- Maximum door width: internal 1.25 metres, external 1 metre (12mm clearance to floor)
- Maximum door weight 100kg
- Simple installation with four screw fixings into any floor
- Adjustable base plate for easy alignment of the door in either direction
- Used in conjunction with standard HP20 top patch fitting (two speed closing adjustment as shown)
- Suitable for internal and external
- Single or double action doors
- Toughened frameless glass doors from 10mm-15mm thick

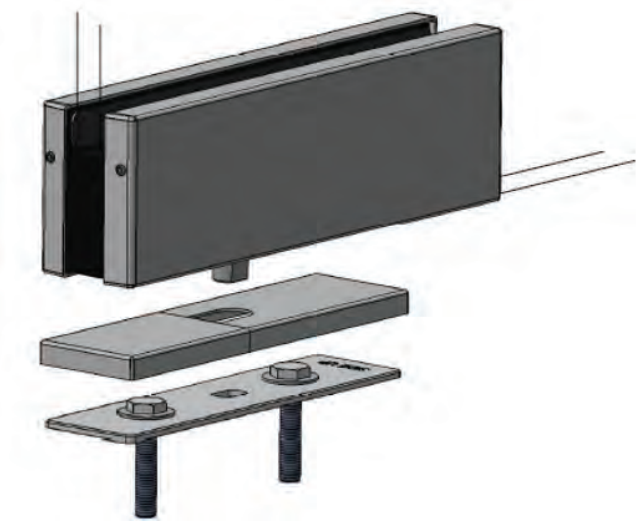


GLASS CUT OUT DETAIL

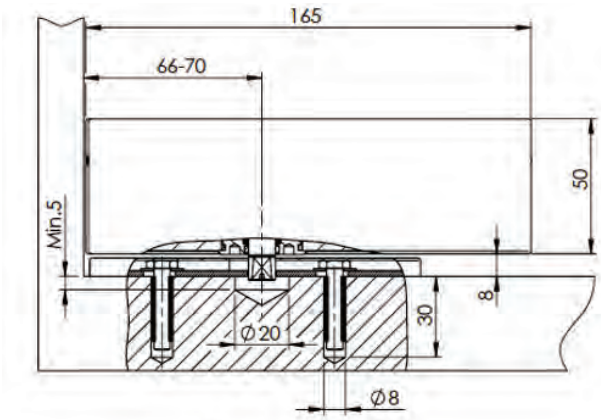


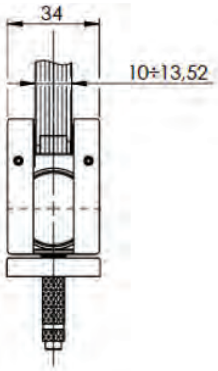
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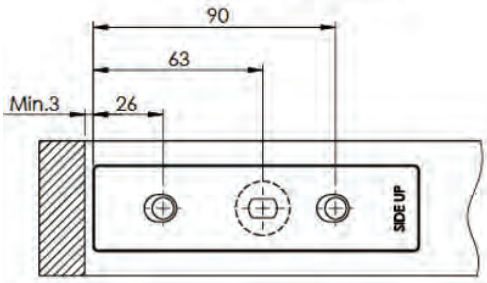
Casma Frenum Patch Closer

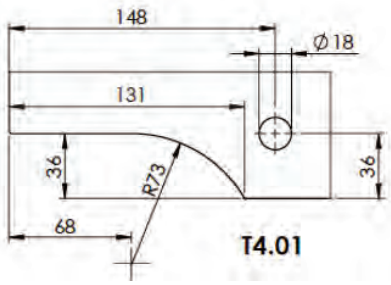












AVAILABLE FINISHES

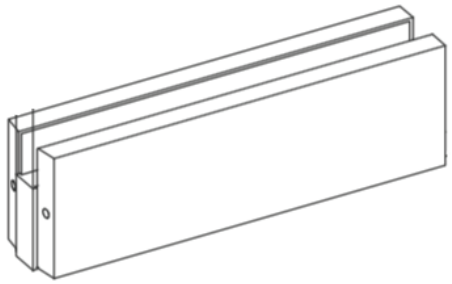
- Mirror
- Satin

TECHNICAL DETAILS

- Hold Open
- Non Hold Open
- Max Width 900mm
- Max – 100 Kgs

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KT-10 / KT-10C / KT-12 Bottom Patch Corner Fix



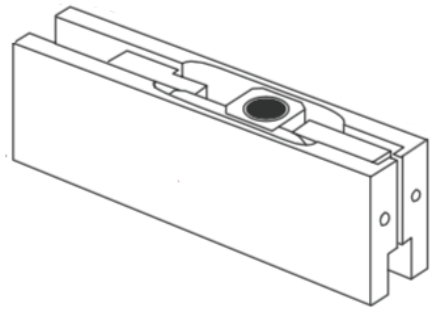
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- KT-10: Bottom patch - corner fix - accepts standard tapared floor spring spindle
- KT-10C: Botton patch - centre fix - accepts standard tapared floor spring spindle
- KT-12: Bottom patch -corner fix - accepts tapered spindle 65mm offset. Use with KT-22
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify

KT-20 / KT-20C Top Patch Corner Fix



AVAILABLE FINISHES

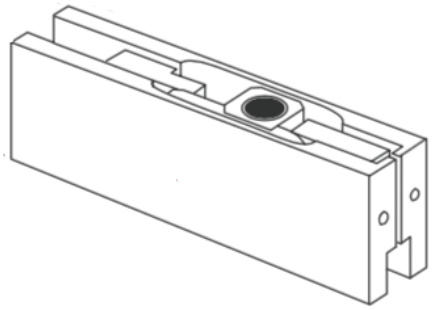
- Mirror
- Satin

TECHNICAL DETAILS

- KT-20: Top patch - corner fix - accepts standard 15mm pivot
- KT-20C: Top patch - centre fix - accepts standard 15mm pivot
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify

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KT-22 / KT-22C Top Patch for Concealed Overhead Door Closer



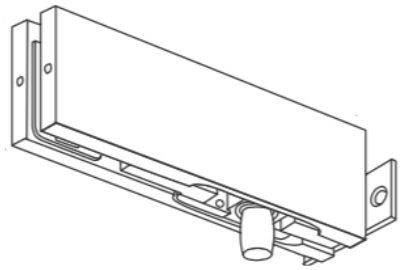
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- KT-22: Top patch fitting for concealed overhead door closer - corner fix
- KT-22C: Top patch fitting for concealed overhead door closer - centre mount
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify

KT-30 / KT-30C / KT-30P / KT30PB Overpanel Pivot Patch



AVAILABLE FINISHES

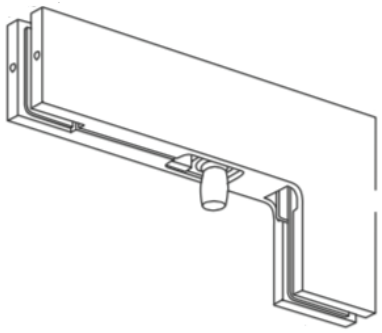
- Mirror
- Satin

TECHNICAL DETAILS

- KT-30: Overpanel 15mm pivot patch fitting - corner fix
- KT-30C: Overpannel 15mm pivot patch fitting - centre mount
- KT-30P: Overpannel 15mm pivot patch fitting - plate fix
- KT-30PB: Overpael patch fitting - plate fix - blanked off
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify

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KT-40 / KT-40B / KT-40K / KT40S Overpanel to Sidepanel



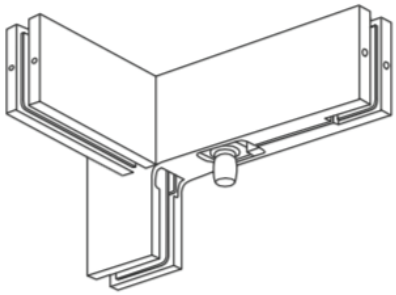
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- KT-40: Overpanel to side panel patch fitting - 15mm pivot
- KT-40B: Overpannel to side panel patch fitting - blanked off
- KT-40K: Overpanel to side panel patch fitting with keeper for FL50
- KT-40S: Overpanel to side panel patch fitting - heavy duty stop
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify

KT-41L / KT41R Overpanel to Side Panel Patch Fitting



AVAILABLE FINISHES

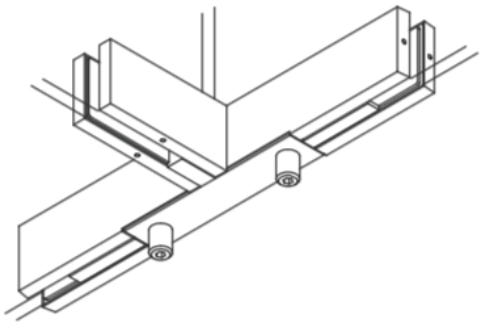
- Mirror
- Satin

TECHNICAL DETAILS

- KT-41L: Overpanel to side panel patch fitting - 15mm pivot c/w fin fitting
- KT-41R: Overpanel to side panel patch fitting - 15mm pivot c/w fin fitting
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify
- Patch fittings and patch locks not suitable for laminated glass
- Locks available as lock / lock or lock / tum
- Locks should be ordered as keyed alike or keyed randomly

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KT-51 Twin 15mm Pivot Transom Patch with Fin Fitting



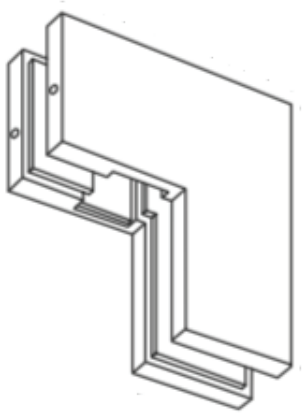
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- KT-51: Twin 15mm pivot transom patch with fin fitting
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify
- Patch fittings and patch locks not suitable for laminated glass
- Locks available as lock / lock or lock / tum
- Locks should be ordered as keyed alike or keyed randomly

KT-60 / KT60S Overpanel to Side Panel Corner Patch



AVAILABLE FINISHES

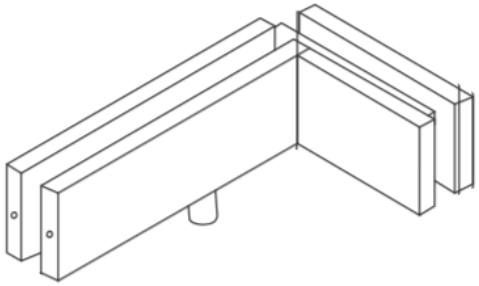
- Mirror
- Satin

TECHNICAL DETAILS

- KT-60: Overpanel to side panel corner patch
- KT-60S: Overpanel to side panel corner patch with light duty stop
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify
- Patch fittings and patch locks not suitable for laminated glass
- Locks available as lock / lock or lock / tum
- Locks should be ordered as keyed alike or keyed randomly

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KT-61L / KT-61R Transom to 90 degree Sidelight Patch



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- KT-61L: Transom to 90 degree sidelightpatch - 15mml pivot
- KT-61R: Transom to 90 degree sidelightpatch - 15mml pivot
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify
- Patch fittings and patch locks not suitable for laminated glass
- Locks available as lock / lock or lock / tum
- Locks should be ordered as keyed alike or keyed randomly

KT-67 Wall Connection Bracing Patch



AVAILABLE FINISHES

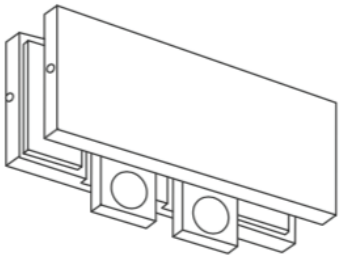
- Mirror
- Satin

TECHNICAL DETAILS

- KT-67: Wall connection bracing patch 70 x 50mm
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify
- Patch fittings and patch locks not suitable for laminated glass
- Locks available as lock / lock or lock / tum
- Locks should be ordered as keyed alike or keyed randomly

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KT-70S Highlight Light Duty Stop Patch



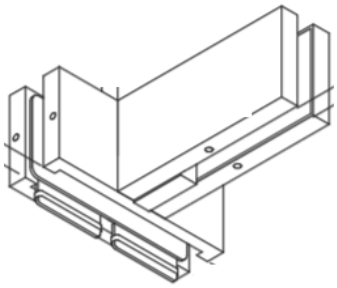
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- KT-70S: Highlight light duty stop patch
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify
- Patch fittings and patch locks not suitable for laminated glass
- Locks available as lock / lock or lock / tum
- Locks should be ordered as keyed alike or keyed randomly

KT-71 2 Panel Link Patch with Bracket for Fin



AVAILABLE FINISHES

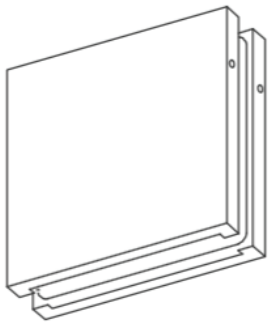
- Mirror
- Satin

TECHNICAL DETAILS

- KT-71: 2 panel link patch with bracket for fin
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify
- Patch fittings and patch locks not suitable for laminated glass
- Locks available as lock / lock or lock / tum
- Locks should be ordered as keyed alike or keyed randomly

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KT-80 4 Panel Link Patch



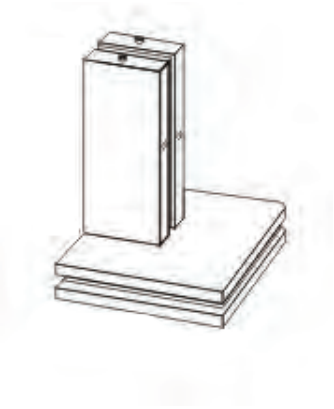
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- KT-80: 4 panel link patch
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify
- Patch fittings and patch locks not suitable for laminated glass
- Locks available as lock / lock or lock / tum
- Locks should be ordered as keyed alike or keyed randomly

KT-81 4 Panel Link Patch with Bracket for Fin



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- KT-81 4 panel link patch with bracket for fin
- All patch fittings are available as standard for 10 or 12mm thick glass - Please specify
- Patch fittings and patch locks not suitable for laminated glass
- Locks available as lock / lock or lock / tum
- Locks should be ordered as keyed alike or keyed randomly

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OZ-FGL-BL-G2G Black Glass to Glass
OZ-FGL-BL-G2W Black Glass to Wall



Fingerprint digital glass door lock with 4-in-1 access.

ACCESS MODES

- Finger print
- RFID card
- User PIN code
- Remote control (optional)

USER ACCESS RIGHTS

- Admin
- User

ALARMS

- Low battery notifcation
- Auto secure

SMART FEATURES

- Dual combination mode
- Anti-theft password
- Audit trail
- Smart freeze
- Door bell
- USB for power supply

DOOR THICKNESS

- 10-12mm

FINISH

- Silver

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Optional Accessory – Remote Control to Unlock

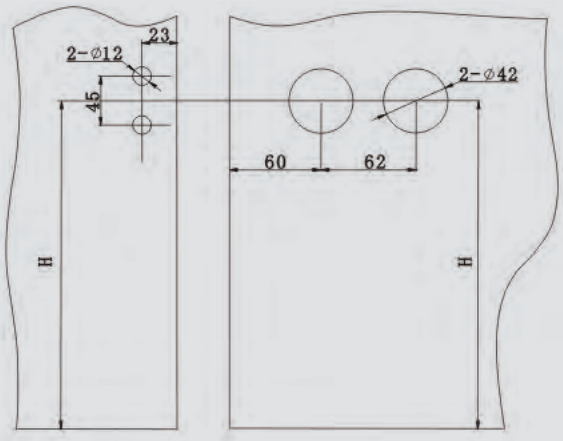


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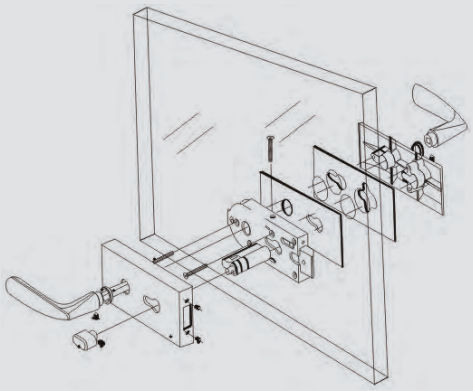
A stylish range of latching lever handles with locks



GLASS CUT-OUT FOR ALL LEVER HANDLE STYLES



LEVER HANDLE TECHNICAL DIAGRAM



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LL-01K / LL-01-R2-CC



AVAILABLE FINISHES

- Satin

LL-19K / LL-19-S1



AVAILABLE FINISHES

- Satin

LL-21SP / LL-19-S1-CC



AVAILABLE FINISHES

- Satin

LL-05K / LL-05-R1



AVAILABLE FINISHES

- Satin

LL-05-R1-CC



AVAILABLE FINISHES

- Satin

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LA-301 / LA-312K Patch Lock and Patch Keeper



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- LA-301: Patch lock, 210 x 64 series 590 mortice lock with 36mm throw c/w oval cylinders
- LA-312k: Patch keeper, 210 x 64 for LA-301

FT-40 Overpanel to Side Panel Patch Fitting



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Overpannel to side panel patch fitting
- 15mm pivot

LT-25 / LT-26K Patch Lock and Patch Keeper



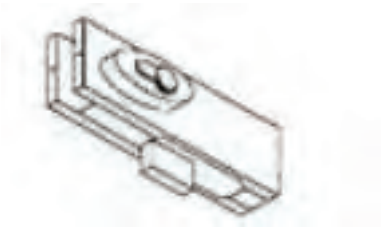
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch lock series T-25
- Patch keeper for LT-25

LT-50 Patch Lock - Corner Fix



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch lock - corner fix, euro cylinder.
- Rectangular bolt and keeper

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LT-51 Patch Lock - Corner Fix



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch lock - corner fix series Tc51
- Euro cylinder
- 15mm bolt

LT-52 / LT-53K Patch Lock and Patch Keeper



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- LT-52: Patch lock, centre fix, c/w euro style cylinder
- LT-53K: Keeper for LT-52 centre fix

LT-54 / LT-54K Patch Lock and Patch Keeper



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch turn bolt lock series T-54
- Patch Keeper for LT-54

LT-55 / LT-55k Patch Lock and Patch Keeper



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch Lock series T-55
- Patch Keeper for LT-55

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LT-56 / LT-57K Patch Lock and Patch Keeper



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch lock series T-56
- Patch keeper for LT-56 & 57

LT-58 Patch Lock



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch lock series T-58

LT-70 / LT-70K Patch Lock and Patch Keeper



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch lock series T-70
- Patch keeper for LT-70

LT-81 / LT-81K Slide On Patch Lock and Patch Keeper



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Slide on patch lock, single sided LT-81
- Slide on patch keeper for LT-81

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LT-82 / LT-82K Slide On Patch Lock and Patch Keeper





AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Slide on patch lock, double sided LT-82
- Slide on patch keeper for LT-82

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LR-20 / LR-20L / LR-21K Patch Lock and Patch Keeper - Series R



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch lock series R-10
- Patch keeper series R-20
- Patch keeper series R-21

LR-25 Patch lock - Series R



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch lock series R-25

LR-51 / LR-53K Patch Lock and Patch Keeper - Series R



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch lock series R-51
- Patch keeper series R-53

LR-54 Patch lock - Series R



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch lock series R-54

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LS-13 / LS-13K Sliding Patch Lock and Patch Keeper



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Sliding patch lock S-13
- Sliding patch keeper S-13

LS-14K Patch Keeper - S



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch keeper S-14

LS-15K Sliding Patch Keeper



AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Patch keeper sliding S-15

LS-20 / LS-21 Sliding Patch Lock and Patch Keeper



AVAILABLE FINISHES

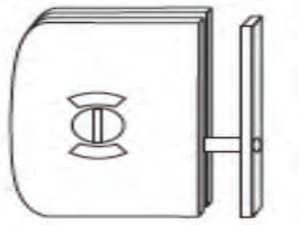
- Mirror
- Satin

TECHNICAL DETAILS

- Sliding lock, S-10, c/w cylinder, glass to glass
- Sliding lock, S-21, c/w cylinder, glass to wall

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IL700C Indicator Lock - Door to Wall



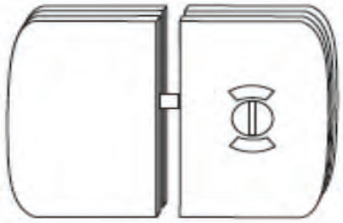
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Indicator lock
- Door to wall
- Glass cut out required

IL701C Indicator Lock - Door to Sidepanel



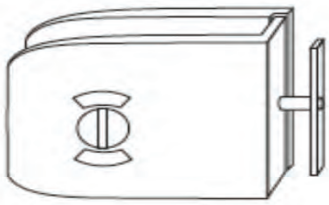
AVAILABLE FINISHES

- Mirror
- Satin

TECHNICAL DETAILS

- Indicator lock
- Door to sidepanel
- Glass cut out required

IL600C Indicator Lock - Door to Wall



AVAILABLE FINISHES

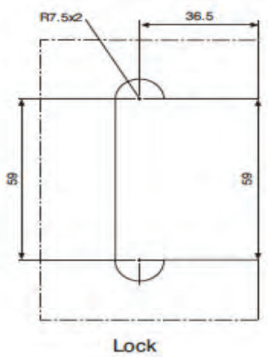
- Mirror
- Satin

TECHNICAL DETAILS

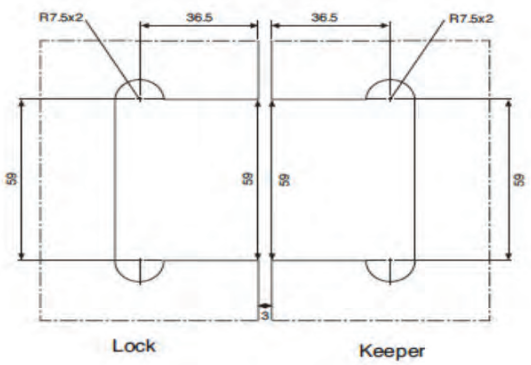
- Indicator lock
- Door to wall
- NO glass cut out required

GLASS PREPARATION

IL-700C

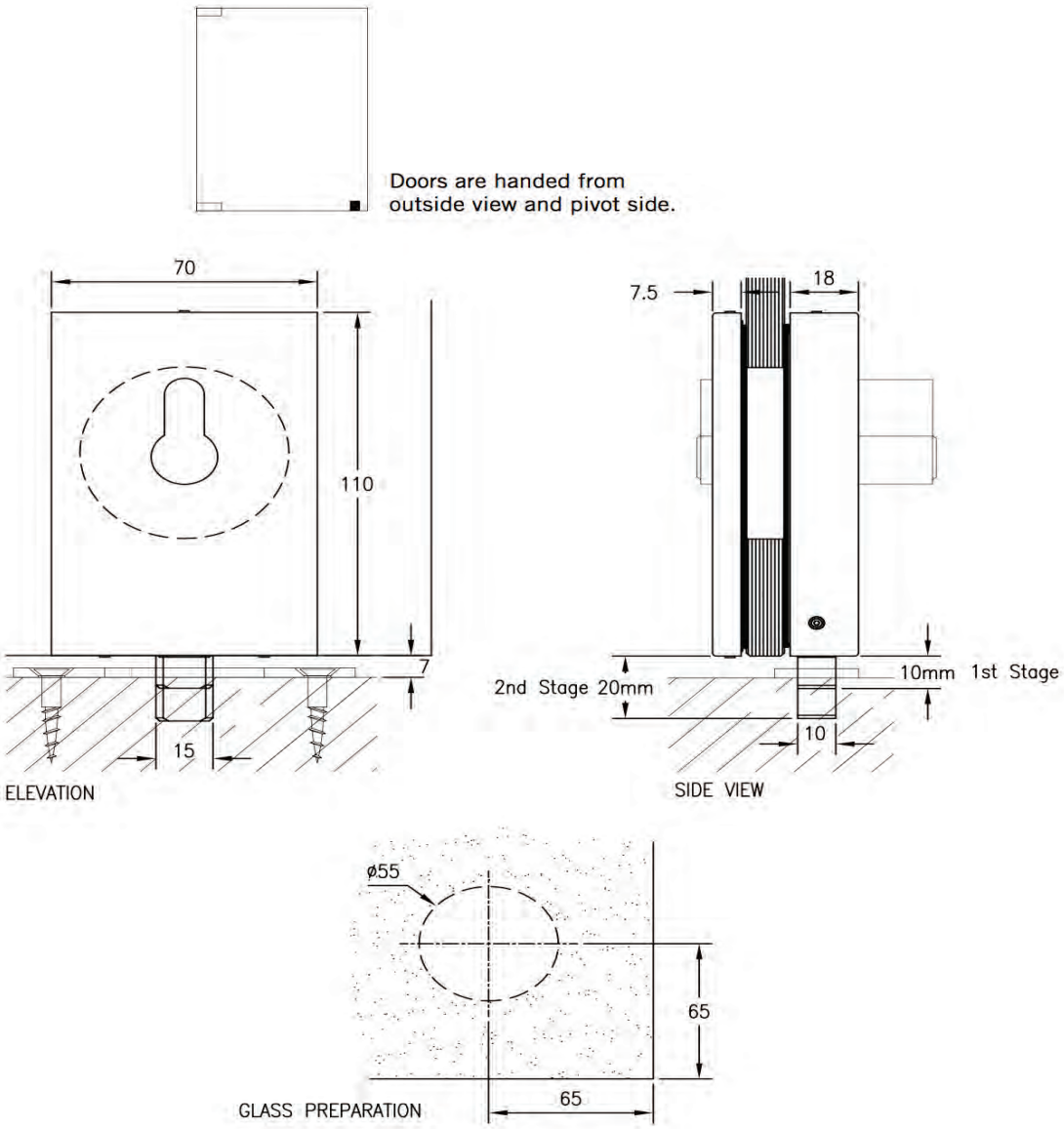


IL-701C



© GHA SOLUTIONS

342.1 Patch Lock with Covers



AVAILABLE FINISHES

- Aluminium: Mill, SAA
- Stainless

TECHNICAL DETAILS

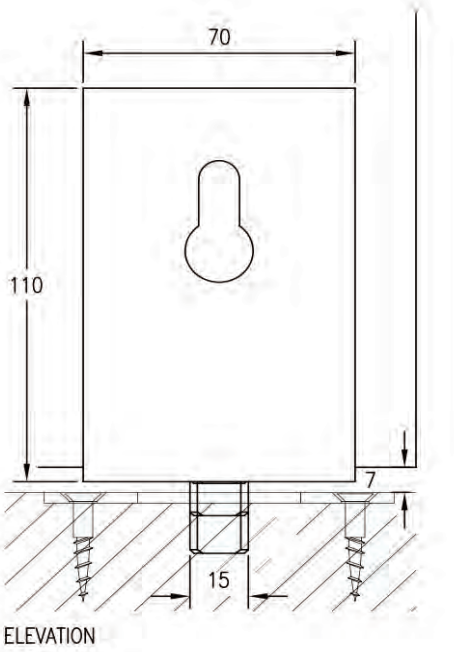
- Universal 110mm x 70mm
- Lower pin throw patch lock with covers
- Specify glass thickness 10, 12 or 15mm
- Illustrated with 345 Keeper Plate
- Optional: CD 68 Cylinder

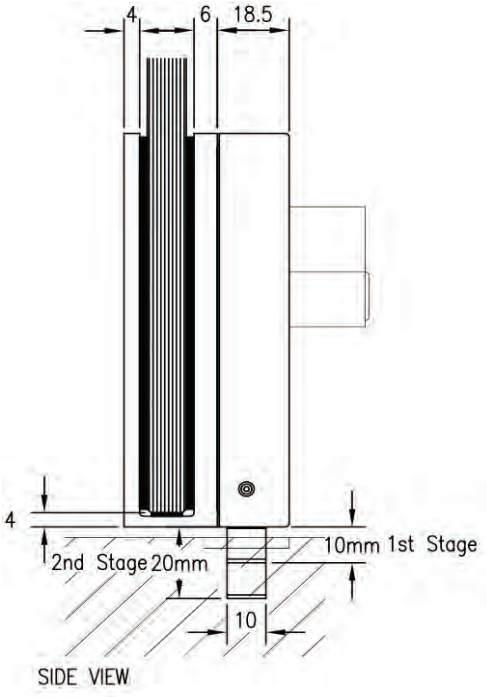
© GHA SOLUTIONS

343.1 Patch Lock



Doors are handed from
outside view and pivot side.





AVAILABLE FINISHES

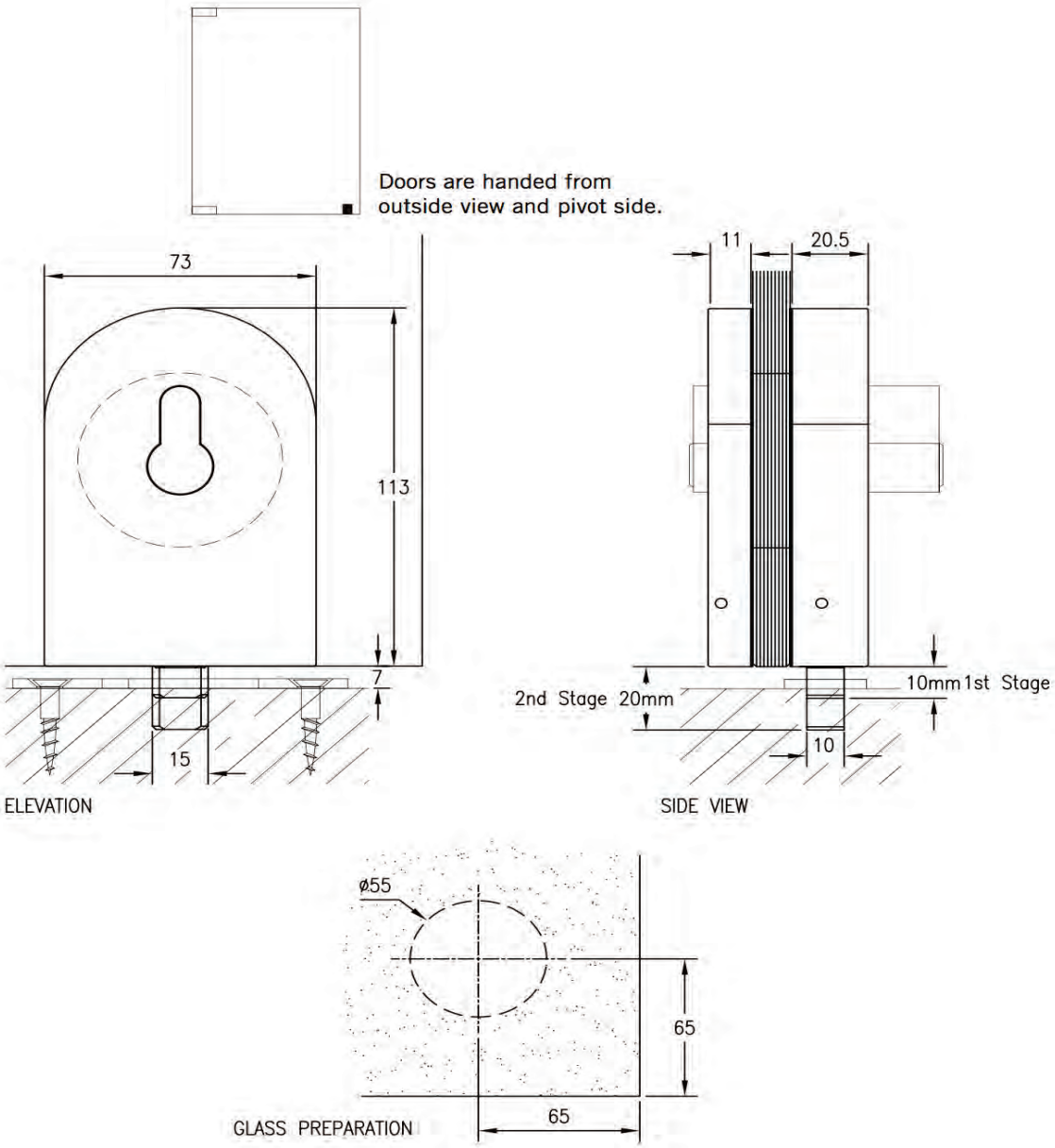
- Aluminium: SAA

TECHNICAL DETAILS

- Universal 110mm x 70mm
- Lower pin throw slide over patch lock
- Specify glass thickness 10 or 12mm
- Illustrated with 345 Keeper Plate
- Optional: CD 68 Cylinder

© GHA SOLUTIONS

M14.400 Patch Lock



AVAILABLE FINISHES

- Stainless: SSS, PSS

TECHNICAL DETAILS

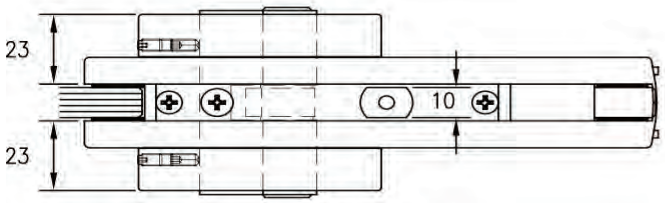
- Universal 110mm x 70mm
- Lower pin throw patch lock with covers
- Specify glass thickness 10, 12 or 15mm
- Illustrated with 345 Keeper Plate
- Optional: CD 68 Cylinder

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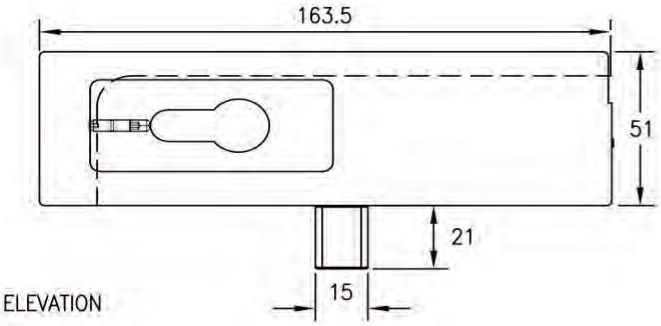
US10 Patch Lock



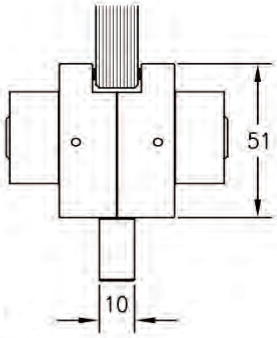
Doors are handed from outside view and pivot side.



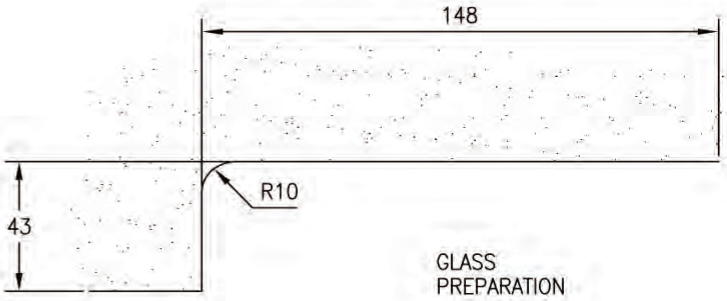
REFLECTED PLAN



ELEVATION



END VIEW



GLASS PREPARATION

AVAILABLE FINISHES

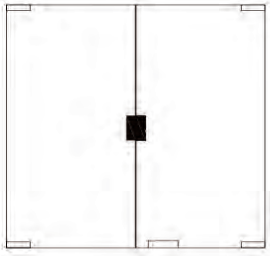
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

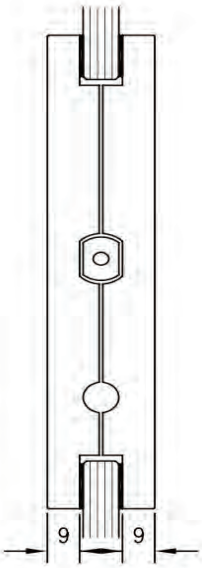
- Universal 164mm x 51mm
- Lower pin throw patch lock
- Specify glass thickness 10, 12 or 15mm
- Optional: CD 68 Cylinder

© GHA SOLUTIONS

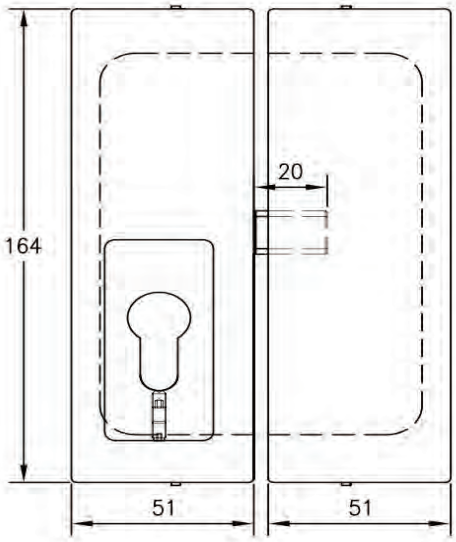
US20 / GK50 Patch Lock



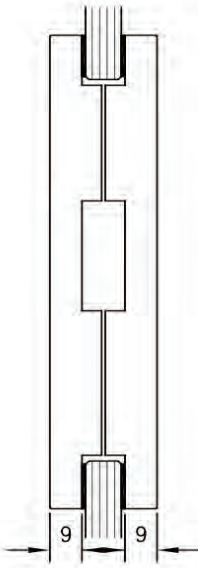
Doors are handed from outside view and pivot side.



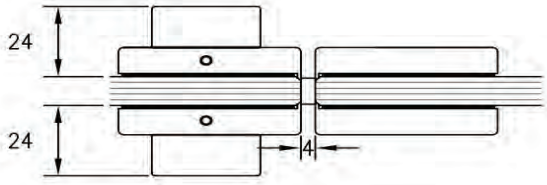
US 20 SIDE VIEW



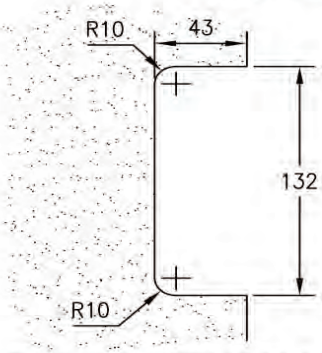
ELEVATION



GK50 SIDE VIEW



PLAN



GLASS PREPARATION US 20 & GK 50

AVAILABLE FINISHES

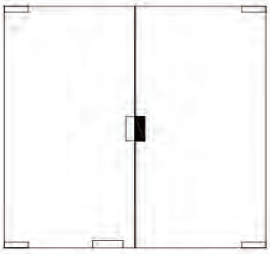
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

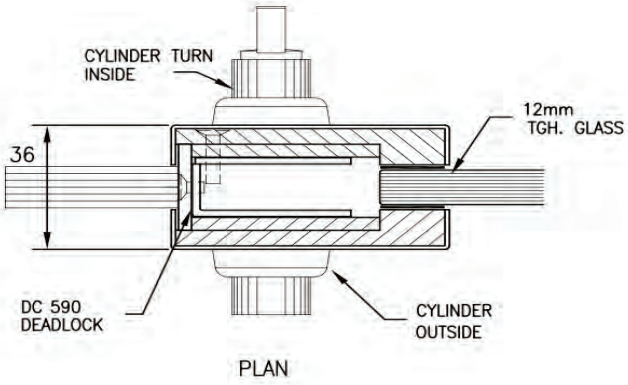
- Universal 164mm x 51mm
- Side mount pin throw patch lock and GK50 side mount patch keeper to suit US20
- Specify glass thickness 10, 12 or 15mm
- Optional: CD 68 Cylinder

© GHA SOLUTIONS

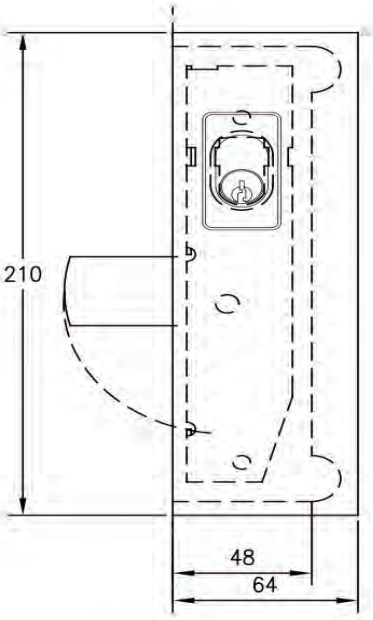
CD351A Patch Lock



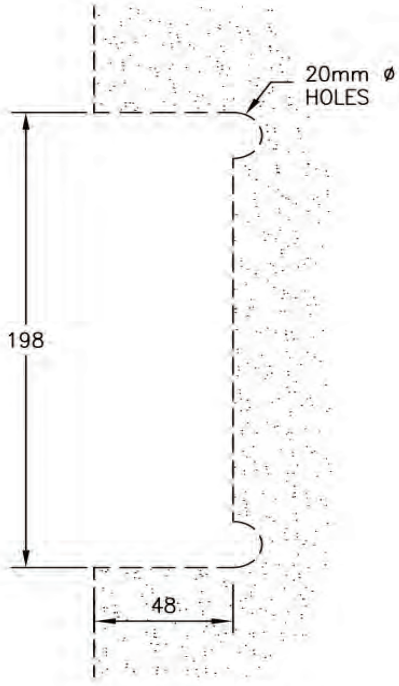
Doors are handed from outside view and pivot side.



PLAN



ELEVATION



GLASS PREPARATION

AVAILABLE FINISHES

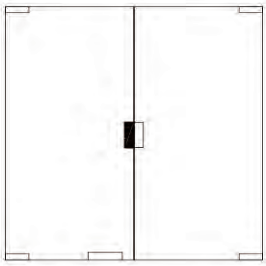
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

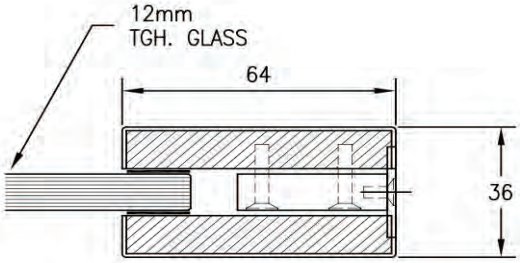
- ON-EAZI side fix patch lack complete with door lock (DC 590)
- Specify lock operation cylinder, double cylinder or cylinder and turn
- Note: Add CD351K if matching patch keeper is required.
- Specify glass thickness 10, 12 or 15mm

© GHA SOLUTIONS

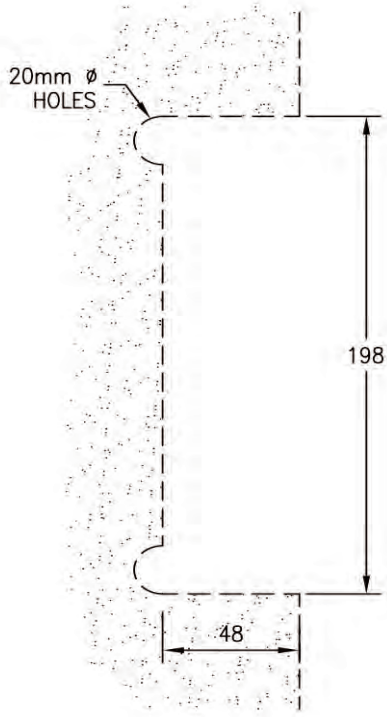
CD351K Patch Lock



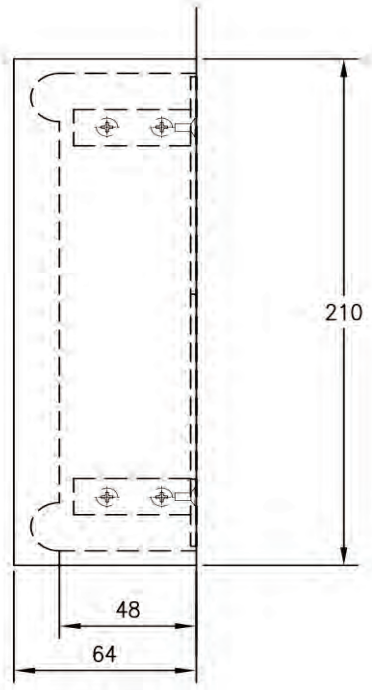
Doors are handed from outside view and pivot side.



PLAN



GLASS PREPARATION



ELEVATION

AVAILABLE FINISHES

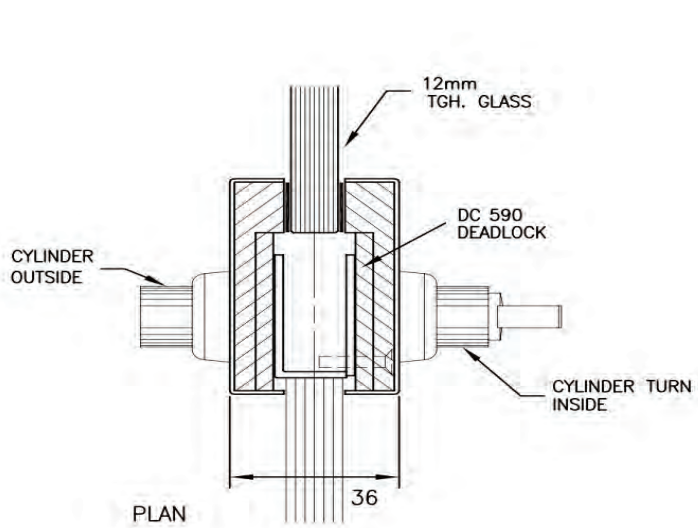
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

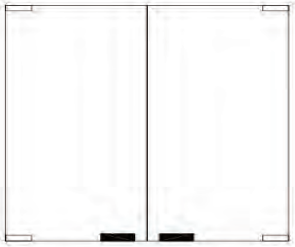
TECHNICAL DETAILS

- ON-EAZI side fix patch keeper to suit CD351A with door lock
- Specify glass thickness 10, 12 or 15mm

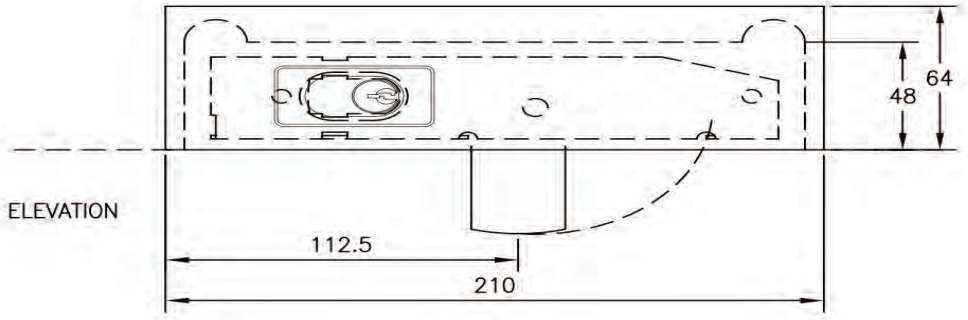
© GHA SOLUTIONS

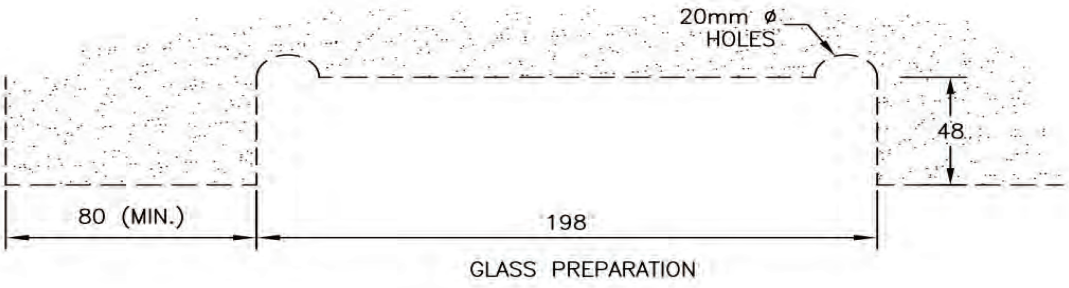
CD351B Patch Lock





Doors are handed from outside view and pivot side.





AVAILABLE FINISHES

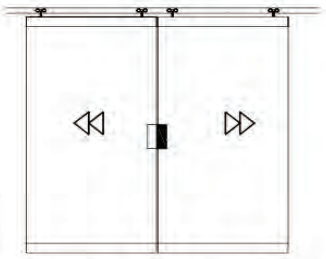
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

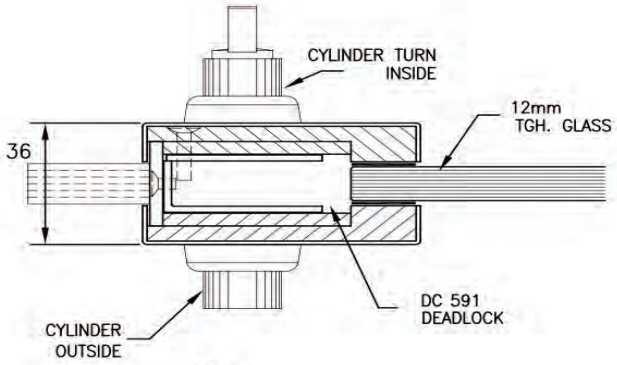
- ON-EAZI bottom fix patch lock complete with door lock
- Specify lock operation single cylinder, double cylinder or cylinder and turn
- Add CD353 lock trough floor keeper if required
- Specify glass thickness 10, 12 or 15mm

© GHA SOLUTIONS

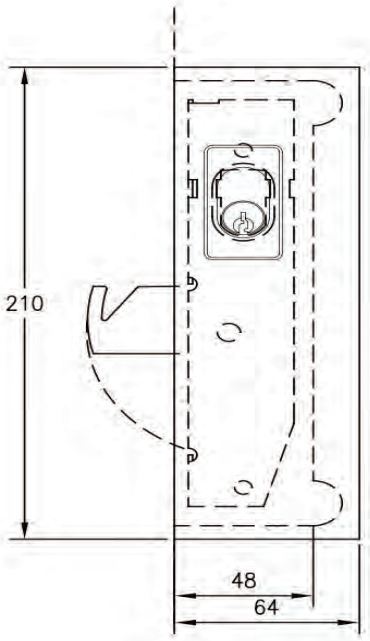
CD351S Patch Lock



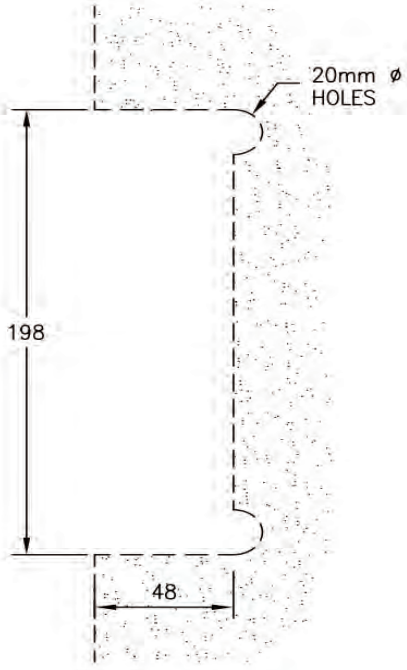
Doors are handed from outside view and pivot side.



PLAN



ELEVATION



GLASS PREPARATION

AVAILABLE FINISHES

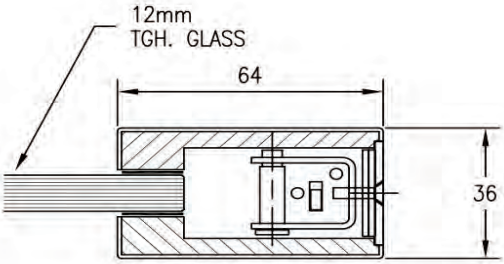
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

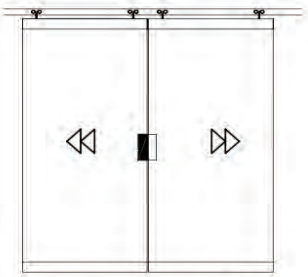
- ON-EAZI sliding door side fix patch
- Lock complete with door lock
- Specify lock operation single cylinder, double cylinder or cylinder and turn
- Add CD351KS if matching patch keeper if required
- Specify glass thickness 10, 12 or 15mm

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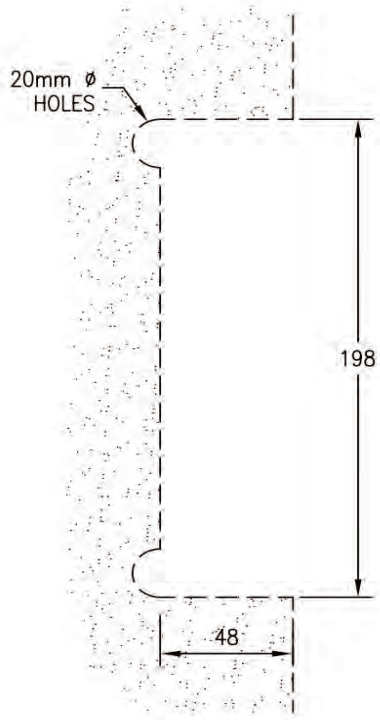
CD351KS Patch Lock



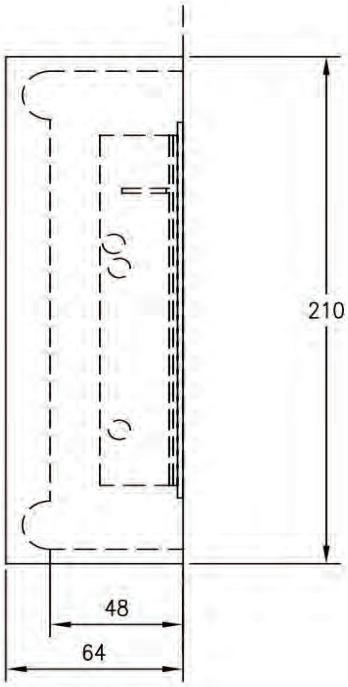
PLAN



Doors are handed from
outside view and pivot side.



GLASS PREPARATION



ELEVATION

AVAILABLE FINISHES

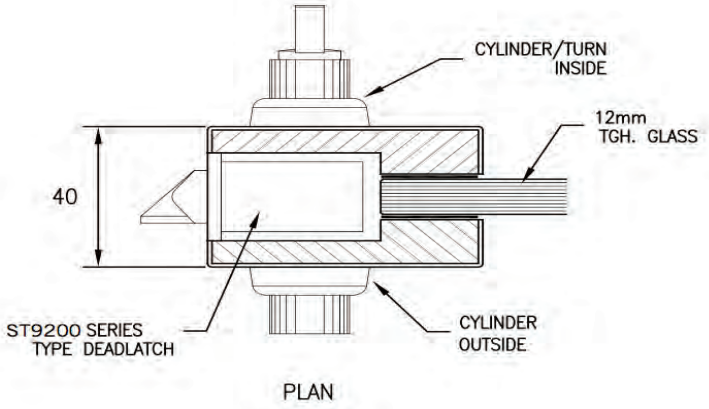
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

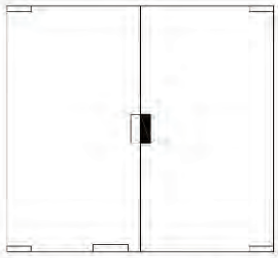
- ON-EAZI sliding door side fix patch keeper to suit CD351S with door lock
- Specify glass thickness 10, 12 or 15mm

© GHA SOLUTIONS

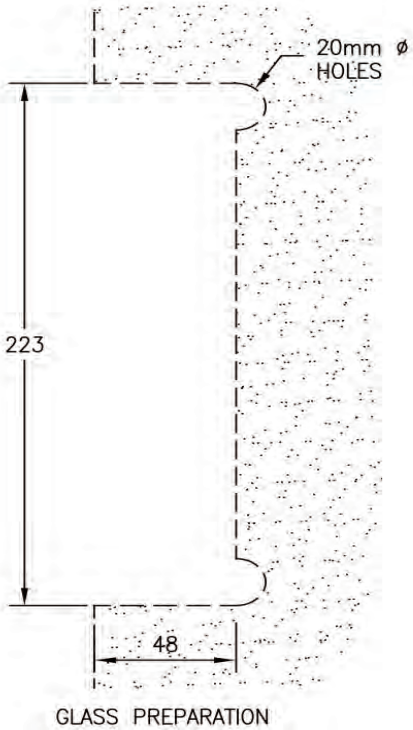
CD451 Patch Lock



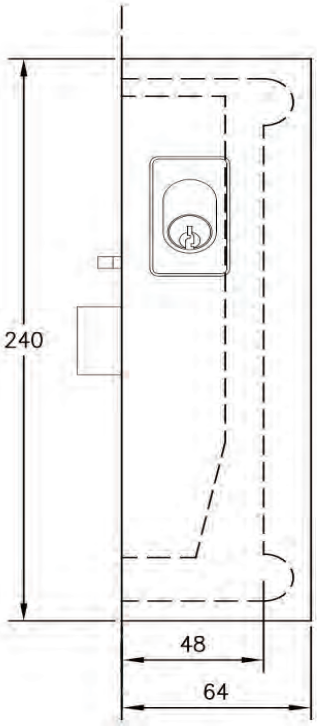
PLAN



Doors are handed from outside view and pivot side.



GLASS PREPARATION



ELEVATION

AVAILABLE FINISHES

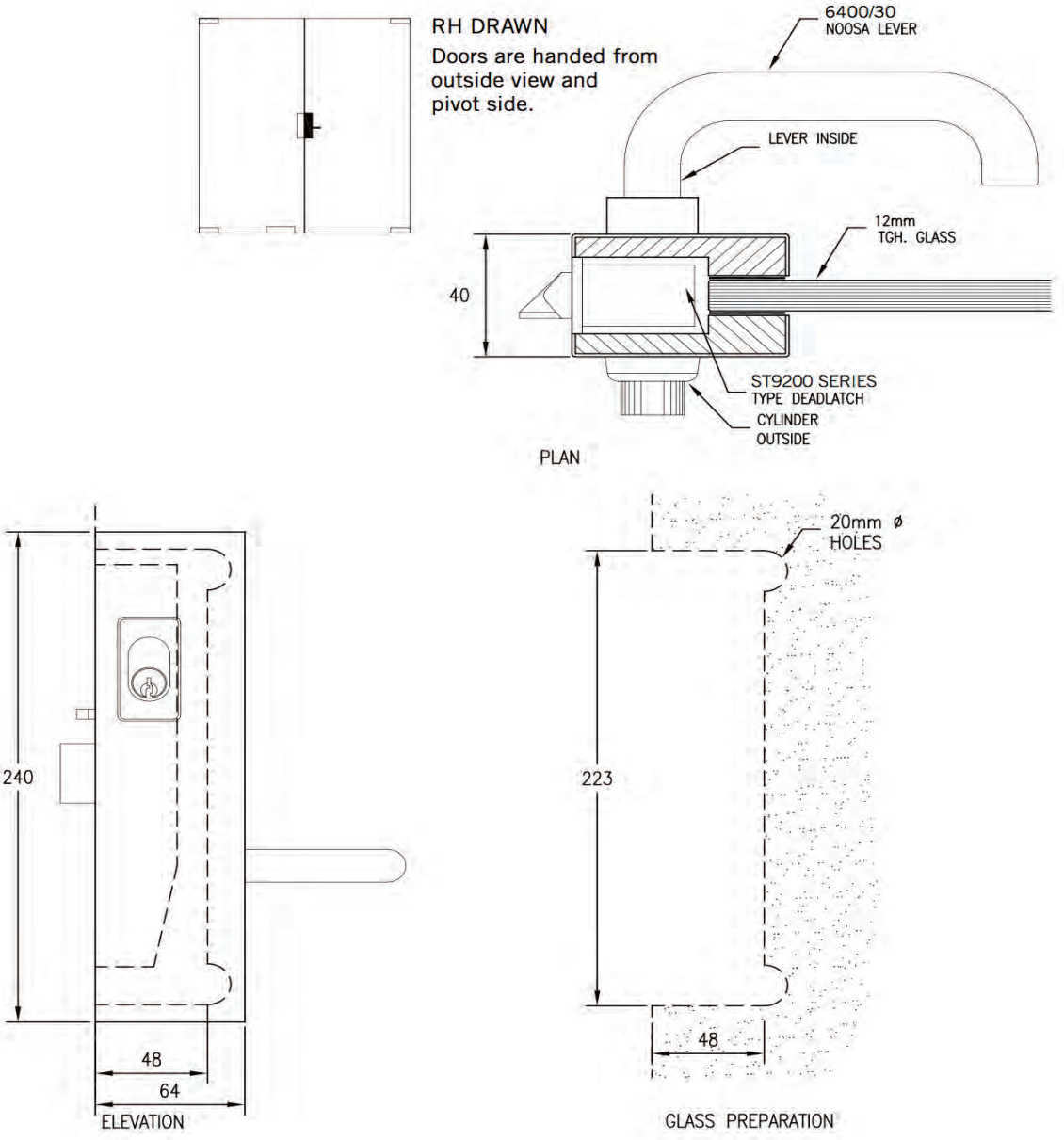
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

- ON-EAZI side fix patch lock complete with ST9210 lock
- Specify lock operation single cylinder, double cylinder or cylinder and turn. Specify hand of door.
- Add CD451K if matching keeper if required
- Specify glass thickness 10, 12 or 15mm

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CD451E Patch Lock



AVAILABLE FINISHES

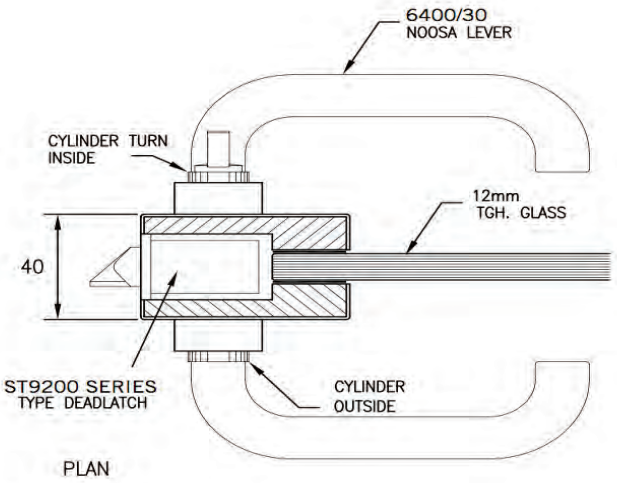
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

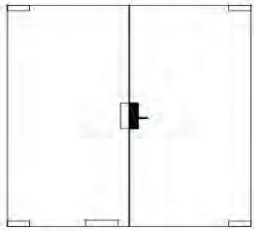
- ON-EAZI side fix EGRESS patch lock complete with ST9212 lock and series lever furniture
- Specify lock operation, free lever inside only, cylinder or blank outside
- Specify hand of door
- Add CD451K if matching patch keeper is required
- Specify glass thickness 10, 12 or 15mm

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CD451F Patch Lock

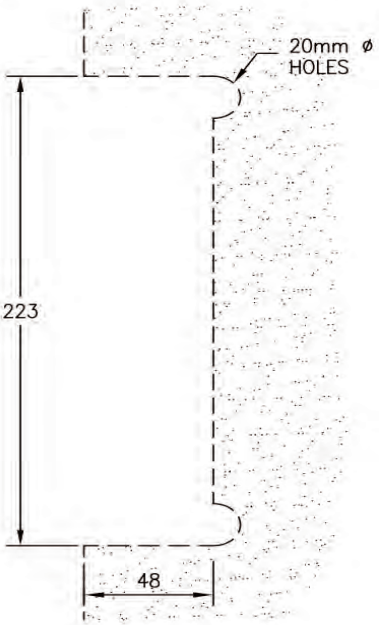


PLAN

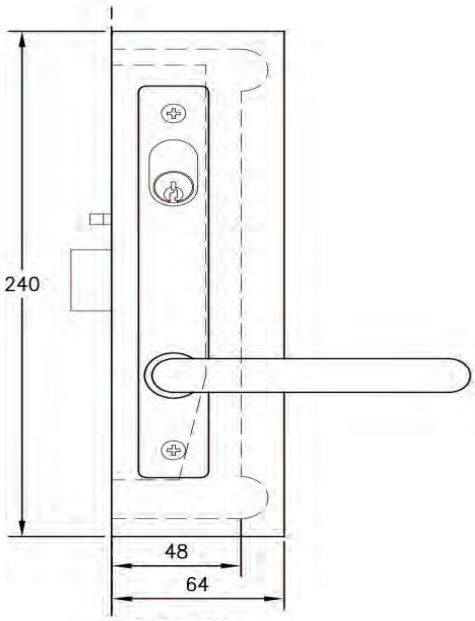


RH DRAWN

Doors are handed from outside view and pivot side.



GLASS PREPARATION



ELEVATION

AVAILABLE FINISHES

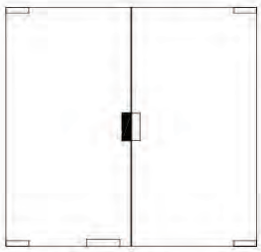
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

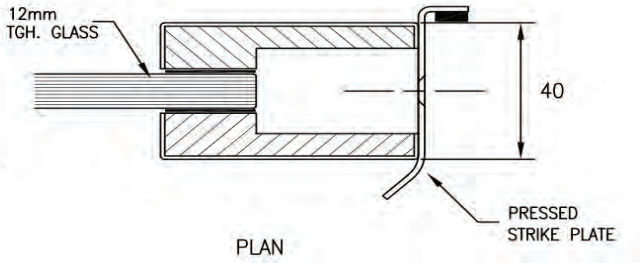
- ON-EAZI side fix patch lock complete with ST9212 lock and 6400 series lever furniture
- Specify lock operation single cylinder, double cylinder or cylinder and turn with double levers
- Specify hand of door
- Add 451K if matching patch keeper is required
- Specify glass thickness 10, 12 or 15mm

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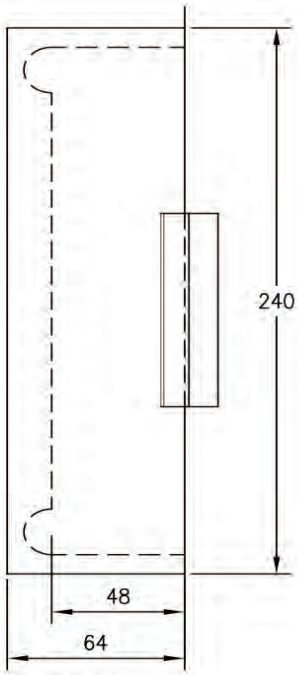
CD451K Patch Lock



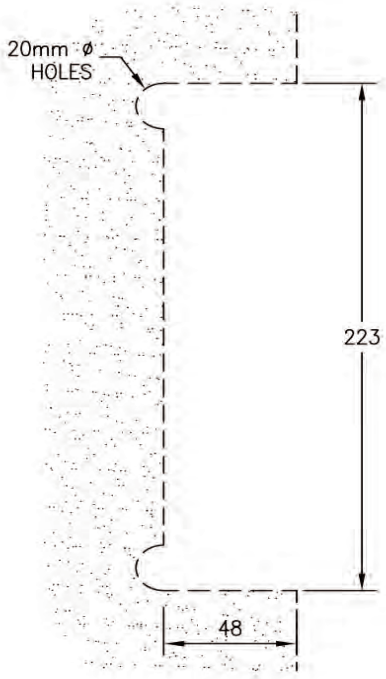
Doors are handed from outside view and pivot side.



PLAN



ELEVATION



GLASS PREPARATION

AVAILABLE FINISHES

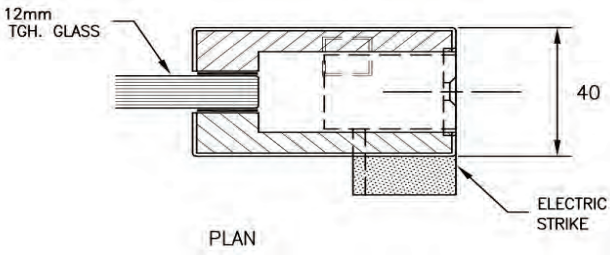
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

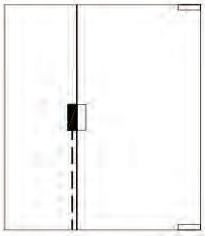
- ON-EAZI side fix patch lock keeper to suit CD451
- CD451E and CD451F with ST9200 series locks
- Specify glass thickness 10, 12 or 15mm

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CD451KE Patch Lock



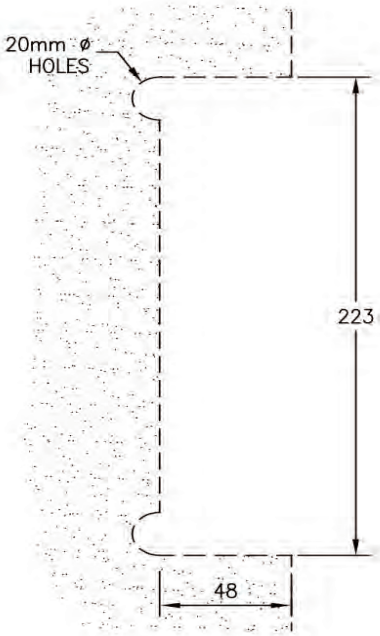
PLAN



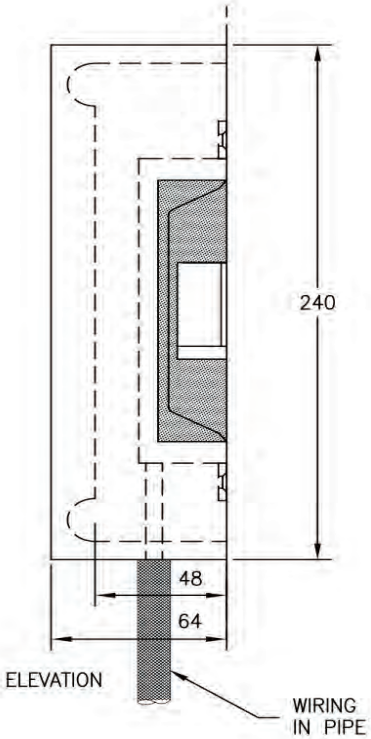
LH DRAWN

Note: state open in or open out at the time of order

Doors are handed from outside view and pivot side.



GLASS PREPARATION



ELEVATION

AVAILABLE FINISHES

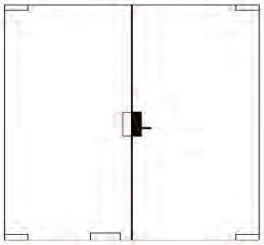
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

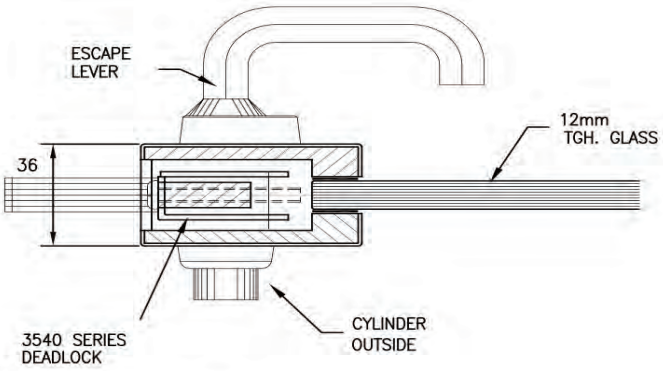
- ON-EAZI side fix patch keeper incorporating FSH FES20M electric strike to suit CD451, CD451E and CD451F with ST9200 series locks
- Note: wiring possibilities include surface pipe, edge channel or horizontal silicone joint
- Note: wiring by surface pipe indicated on drawing
- Specify glass thickness 10, 12 or 15mm
- Specify handing

© GHA SOLUTIONS

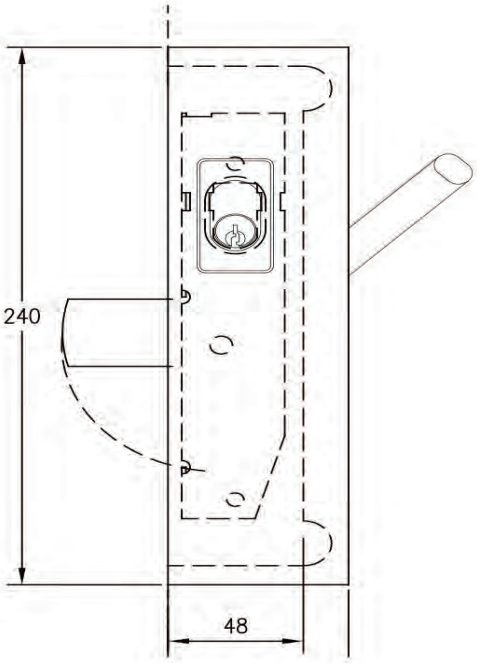
CD451/3540 Patch Lock



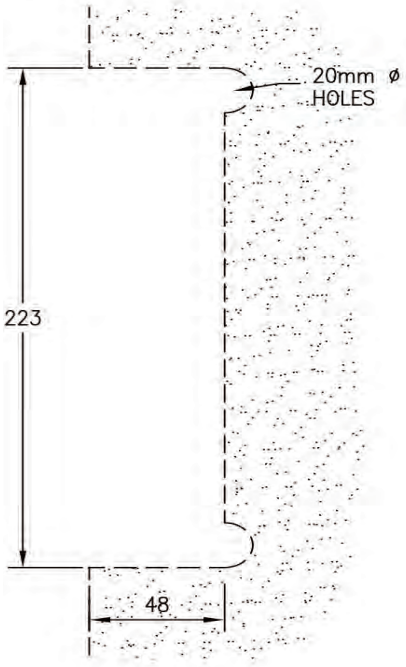
RH DRAWN
Doors are handed from outside view and pivot side.



PLAN



ELEVATION



GLASS PREPARATION

AVAILABLE FINISHES

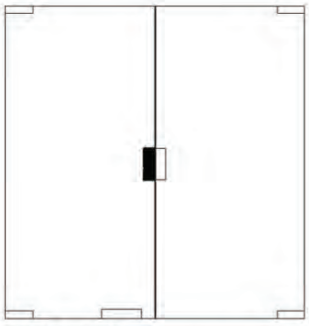
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

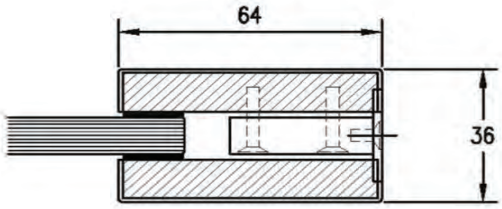
- ON-EAZI side fix patch lack complete with door lock (3542 long throw) or (3542 short throw)
- Specify lock operation cylinder outside nad lever inside or lever inside only
- Specify hand of door
- Specify CD451/3542 for long throw or CD451/3540 for short throw or CD451/3541 for sliding lock
- Note: Add CD451 K/3540 if matching patch keeper is required.
- Specify glass thickness 10, 12 or 15mm

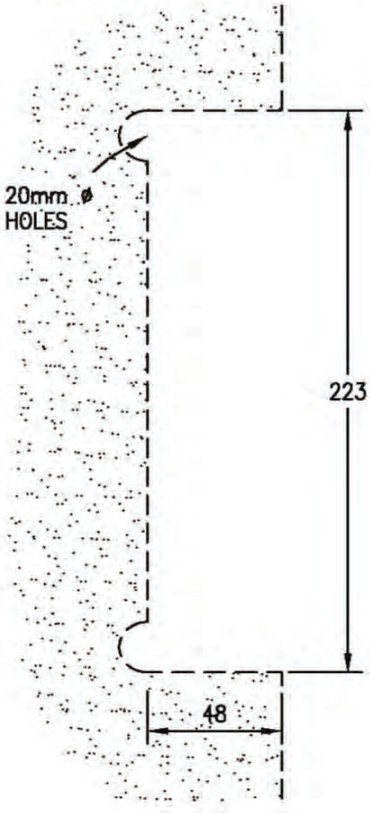
© GHA SOLUTIONS

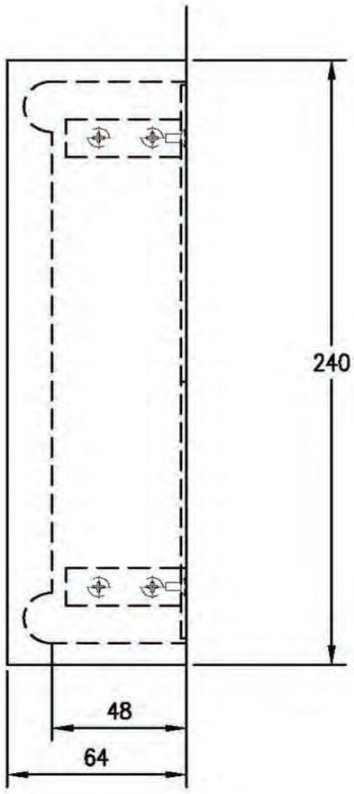
CD451K/3540 Patch Lock



NON HANDED
Doors are handed from outside view and pivot side.







AVAILABLE FINISHES

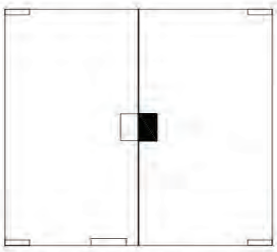
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

- ON-EAZI side fix patch keeper to suit CD451/3540 door lock
- Specify glass thickness 10, 12 or 15mm

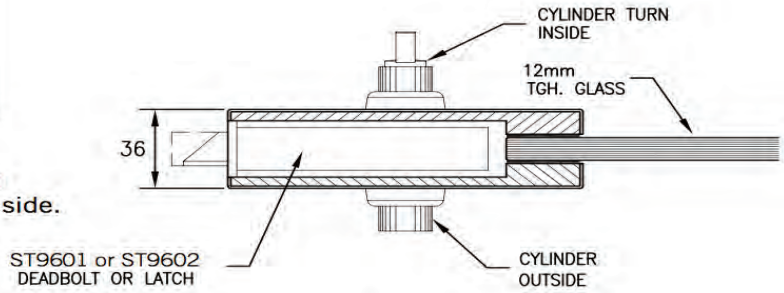
© GHA SOLUTIONS

CD1050 Patch Lock

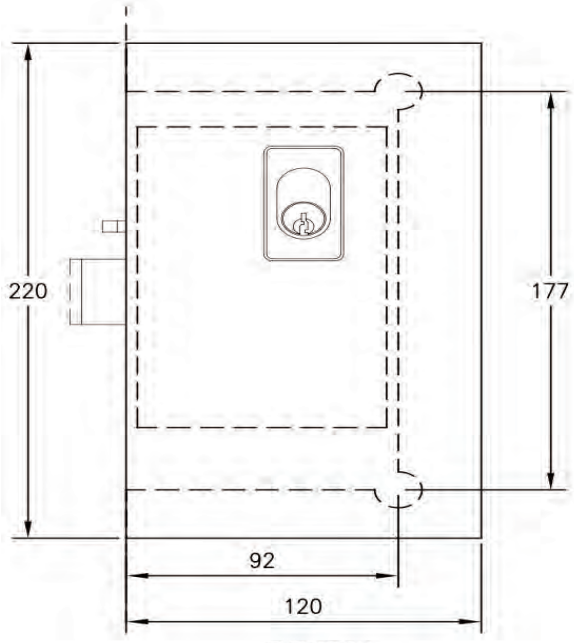


NON HANDED

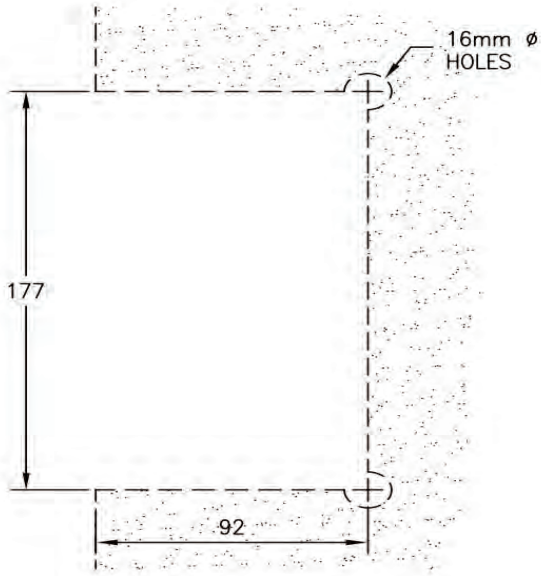
Doors are handed from outside view and pivot side.



PLAN



ELEVATION



GLASS PREPARATION

AVAILABLE FINISHES

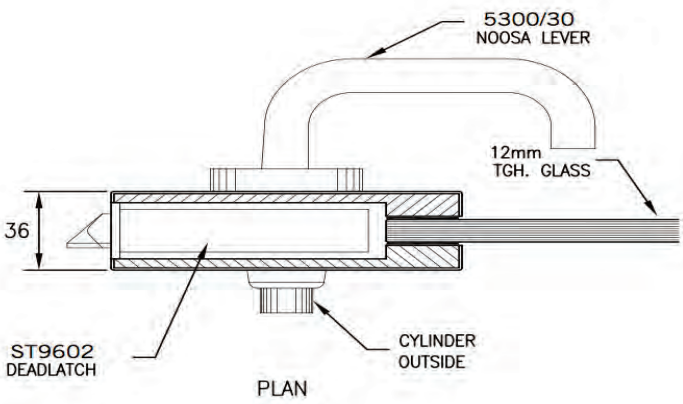
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

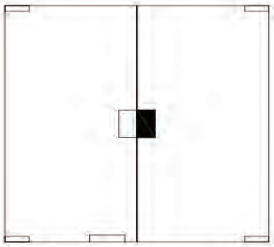
- ON-EAZI side fix patch lock complete with wide backset door lock (ST9601 or ST9602)
- Specify lock operation single cylinder, double cylinder or cylinder and turn
- Specify hand of door
- Note: Add CD1051K or CD1050K if matching patch keeper required
- Specify glass thickness 10, 12 or 15mm
- Specify lock type ST9601, Deadbolt/ST9602 or Deadlatch

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CD1050E Patch Lock

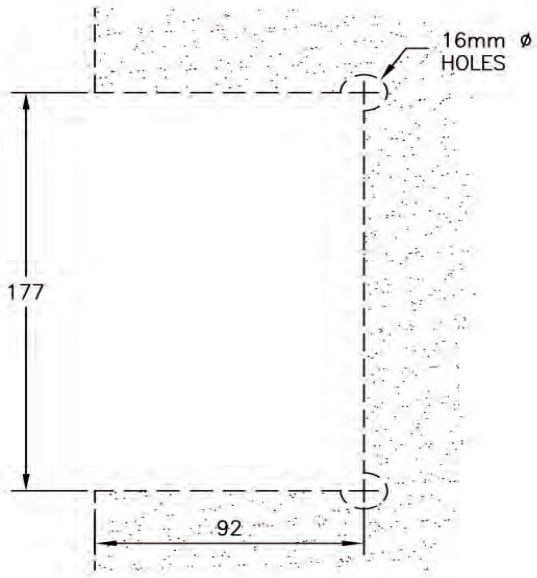


PLAN

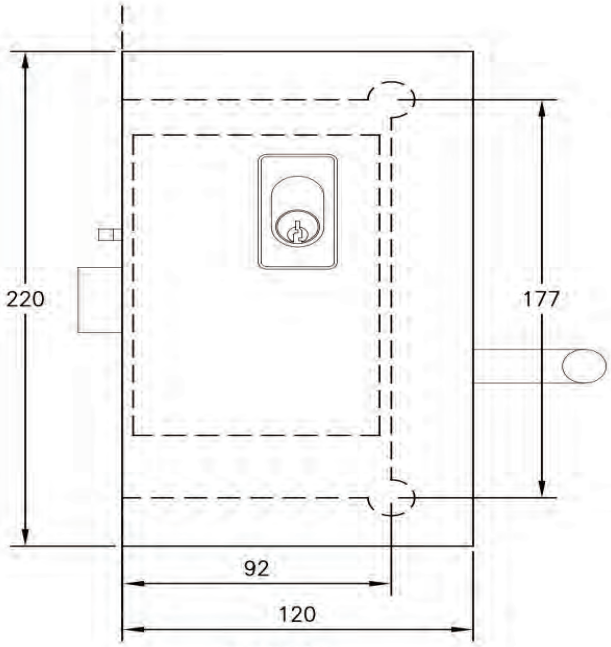


RH DRAWN

Doors are handed from outside view and pivot side.



GLASS PREPARATION



ELEVATION

AVAILABLE FINISHES

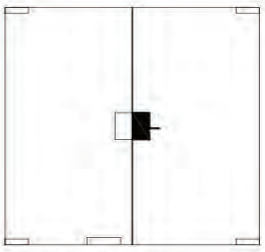
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

- ON-EAZI side fix EGRESS latch lock complete with wide backset door lock (ST9602) and lever fruniture inside only.
- Specify lock operation free lever inside always, cylinder or blank outside
- Specify hand of door
- Note: Add CD1051K or CD1050K if matching patch keeper required
- Specify glass thickness 10, 12 or 15mm

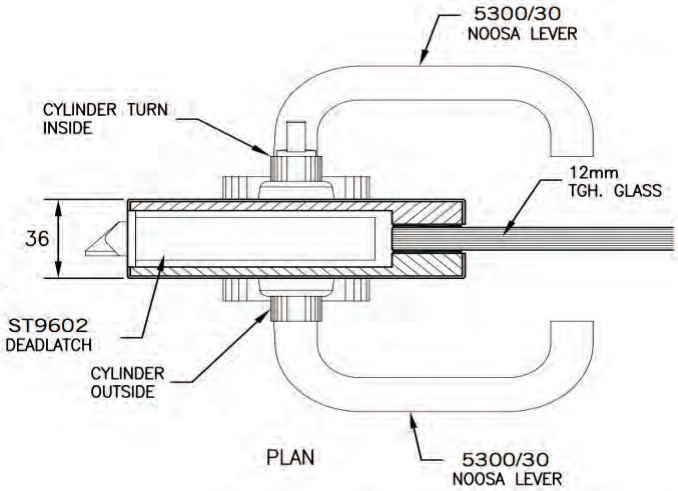
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CD1050F Patch Lock

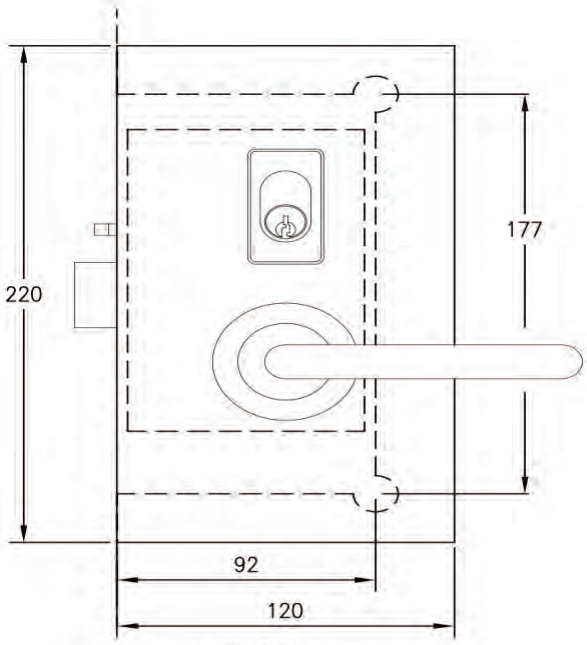


RH DRAWN

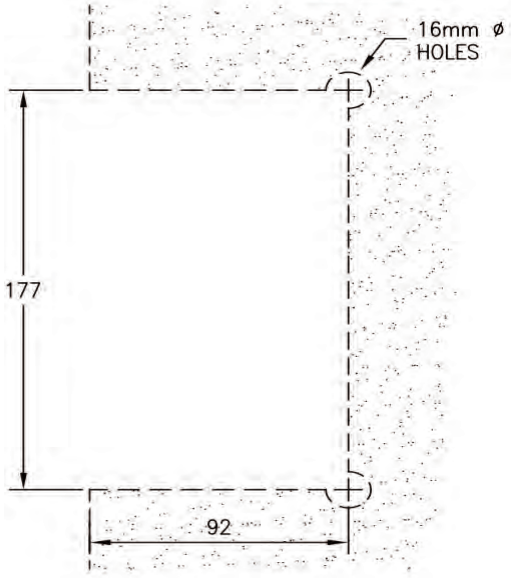
Doors are handed from outside view and pivot side.



PLAN



ELEVATION



GLASS PREPARATION

AVAILABLE FINISHES

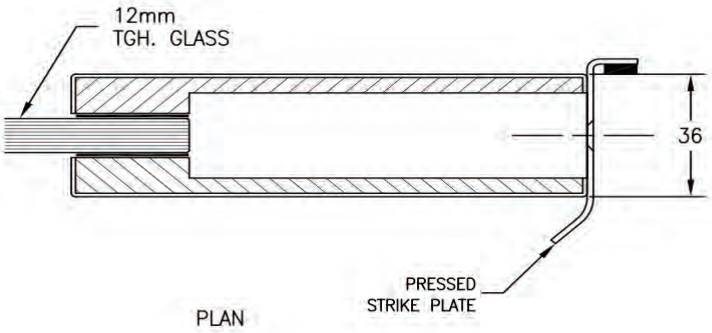
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

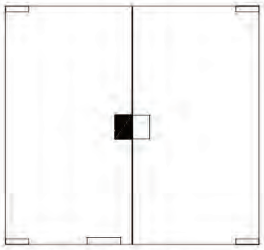
- ON-EAZI side fix patchlock complete with wide backset door lock (ST9602) and lever furniture
- Specify lock operation single cylinder, double cylinder or cylinder and turn with double levers.
- Specify hand of door
- Note: Add 1051K or CD1050K if matching patch keeper required
- Specify glass thickness 10, 12 or 15mm

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1050K Patch Lock

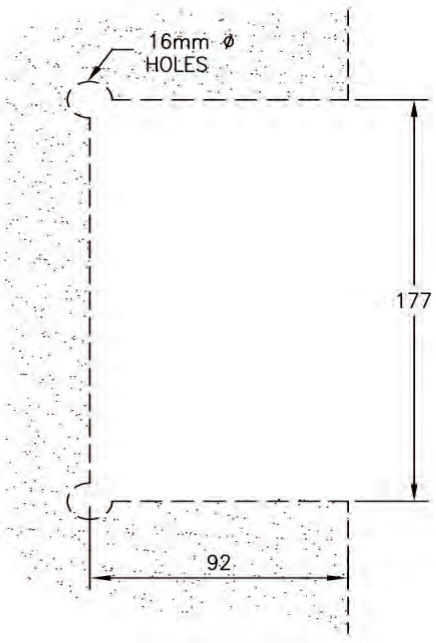


PLAN

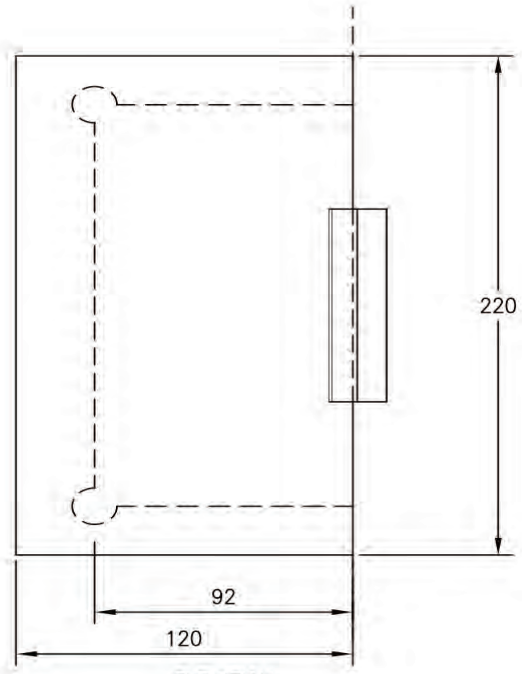


NON HANDED

Doors are handed from outside view and pivot side.



GLASS PREPARATION



ELEVATION

AVAILABLE FINISHES

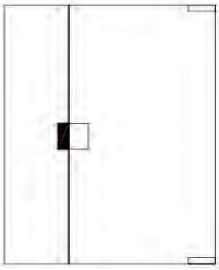
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

- ON-EAZI side fix patch keeper to suit CD1050, CD1050E and CD1050F with door lock (ST9601 or ST9602)
- Note: This patch fitting is used generally on pairs of doors to match patch lock
- Specify glass thickness 10, 12 or 15mm

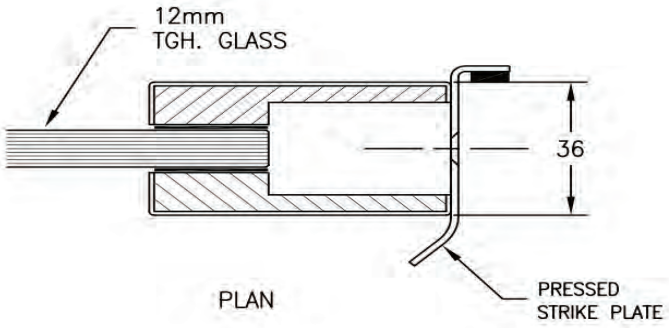
© GHA SOLUTIONS

1051K Patch Lock

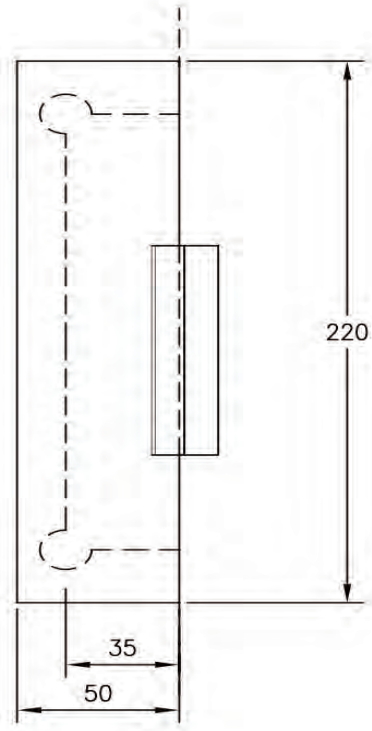


NON HANDED

Doors are handed from outside view and pivot side.



PLAN



ELEVATION



GLASS PREPARATION

AVAILABLE FINISHES

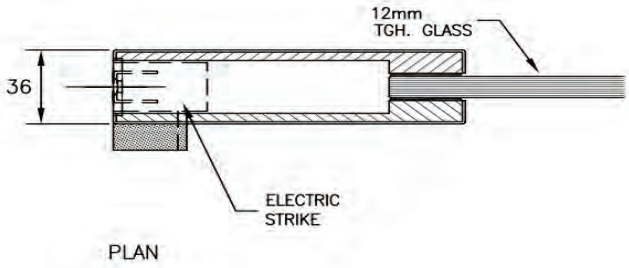
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

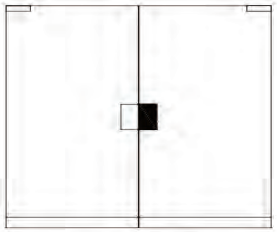
- ON-EAZI side fix patch keeper to suit CD1050, CD1050E and CD1050F with door lock (ST9601 or ST9602)
- Note: This patch fitting is used generally on side panels
- Specify glass thickness 10, 12 or 15mm

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CD1050KE Patch Lock



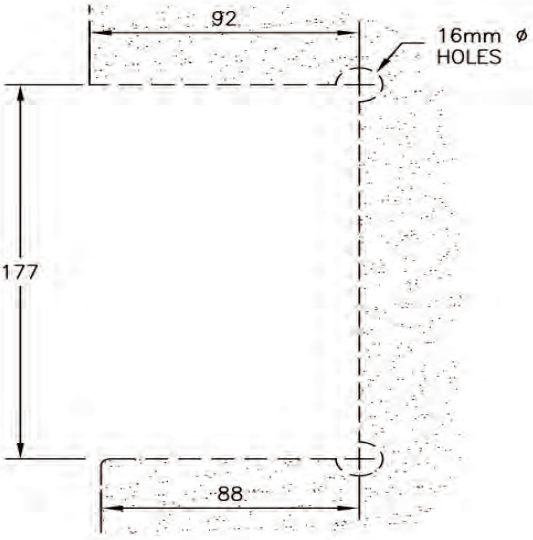
PLAN



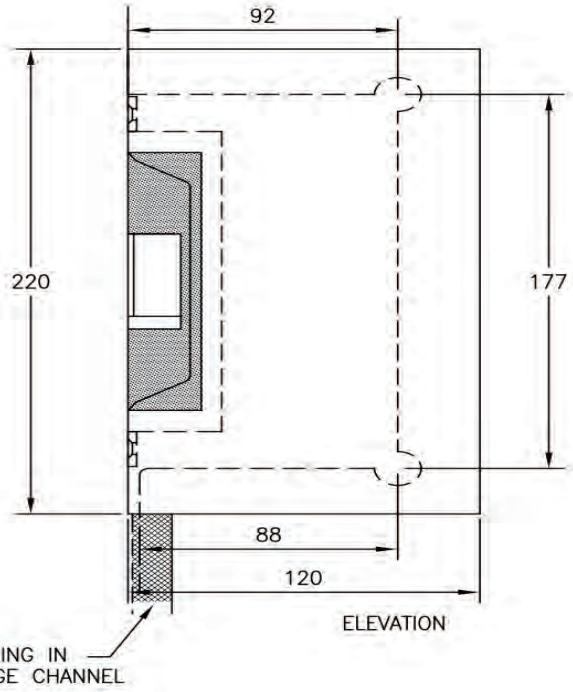
NON HANDED

Note: state open in or open out at the time of order

Doors are handed from outside view and pivot side.



GLASS PREPARATION



ELEVATION

AVAILABLE FINISHES

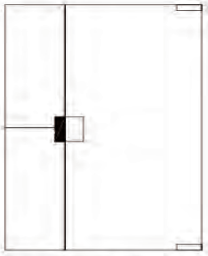
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

- ON-EAZI side fix electric strike patch keeper to suit CD1050, CD1050E and CD1050F, incorporating FSH FES20M electric strike
- Note: Wiring possibilities include surface pipe, edge channel or horizontal silicone joint
- Note: wiring by edge channel indicated on drawing
- Specify glass thickness 10, 12 or 15mm
- Specify hand of door

© GHA SOLUTIONS

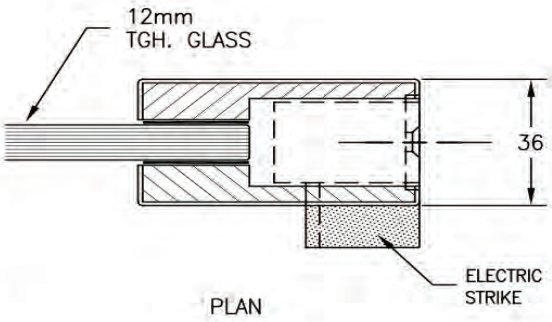
CD1051KE Patch Lock



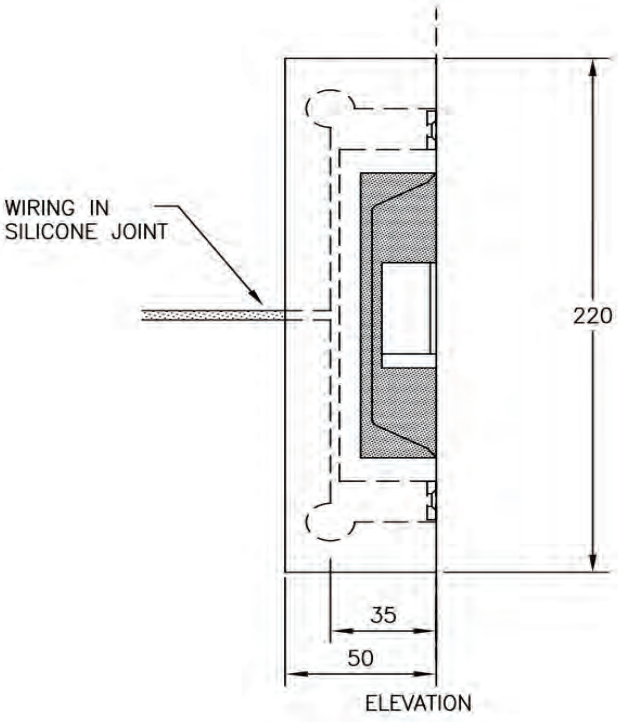
NON HANDED

Note: state open in or open out at the time of order

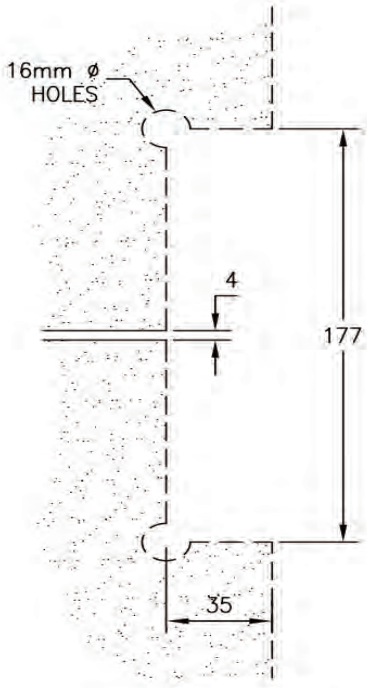
Doors are handed from outside view and pivot side.



PLAN



ELEVATION



GLASS PREPARATION

AVAILABLE FINISHES

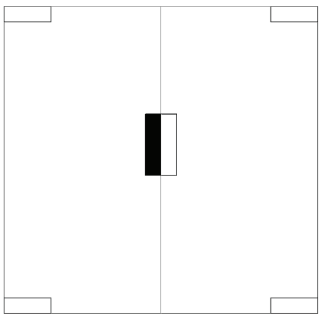
- Aluminium: Mill, SAA
- Stainless: SSS, PSS

TECHNICAL DETAILS

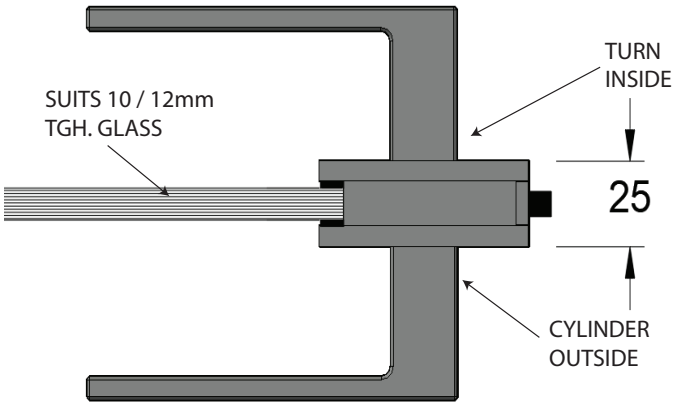
- ON-EAZI side fix electric strike patch keeper to suit CD1050, CD1050E and CD1050F, incorporating FSH FES20M electric strike
- Note: Wiring possibilities include surface pipe, edge channel or horizontal silicone joint
- Note: wiring in silicone joint indicated on drawing
- Specify glass thickness 10, 12 or 15mm
- Specify hand of door

© GHA SOLUTIONS

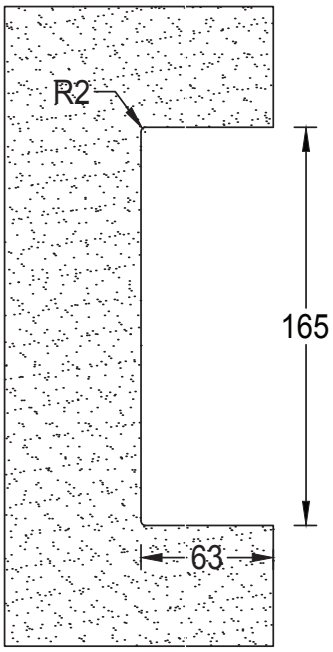
AL8700A-49 Magnetic Door Lock Satin Anodised



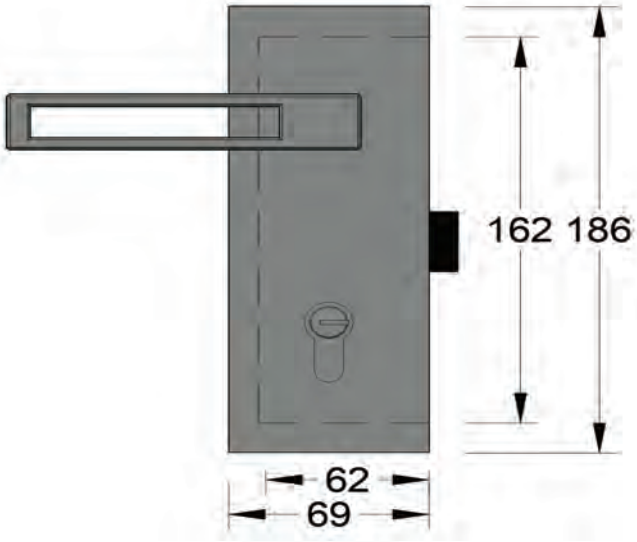
LH DRAWN
Doors are handed from
outside view and pivot side



PLAN



GLASS PREPARATION



ELEVATION

AVAILABLE FINISHES

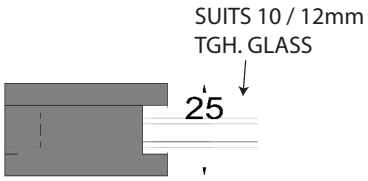
- Anodised Satin Stainless

TECHNICAL DETAILS

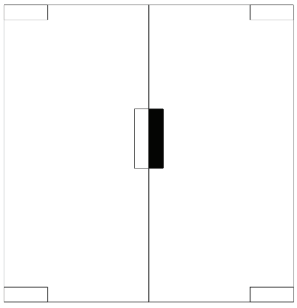
- Aluminium
- 10 mm or 12 mm Glass

© GHA SOLUTIONS

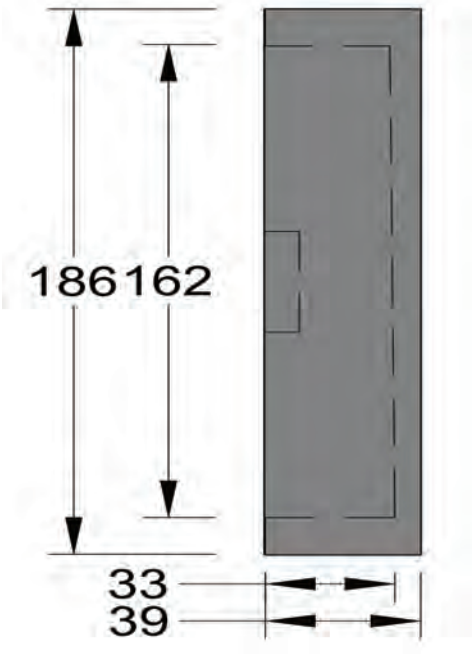
AL8700A-49B Magnetic Lock Keeper Satin Anodised



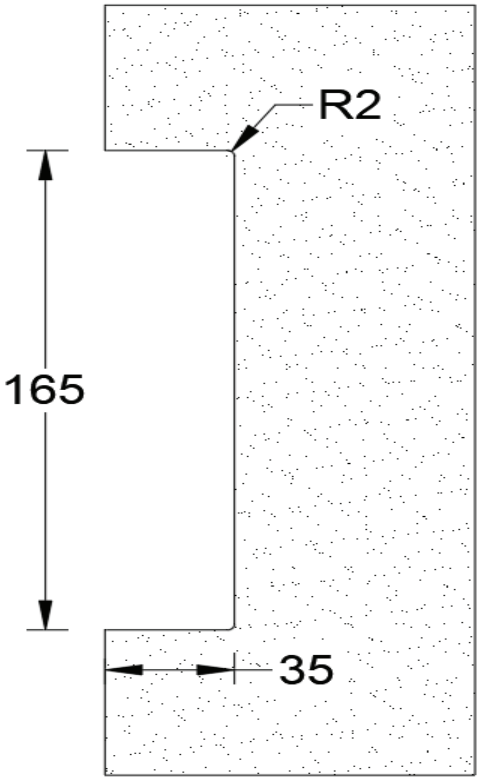
PLAN



Doors are handed from outside view and pivot side.



ELEVATION



GLASS PREPARATION

AVAILABLE FINISHES

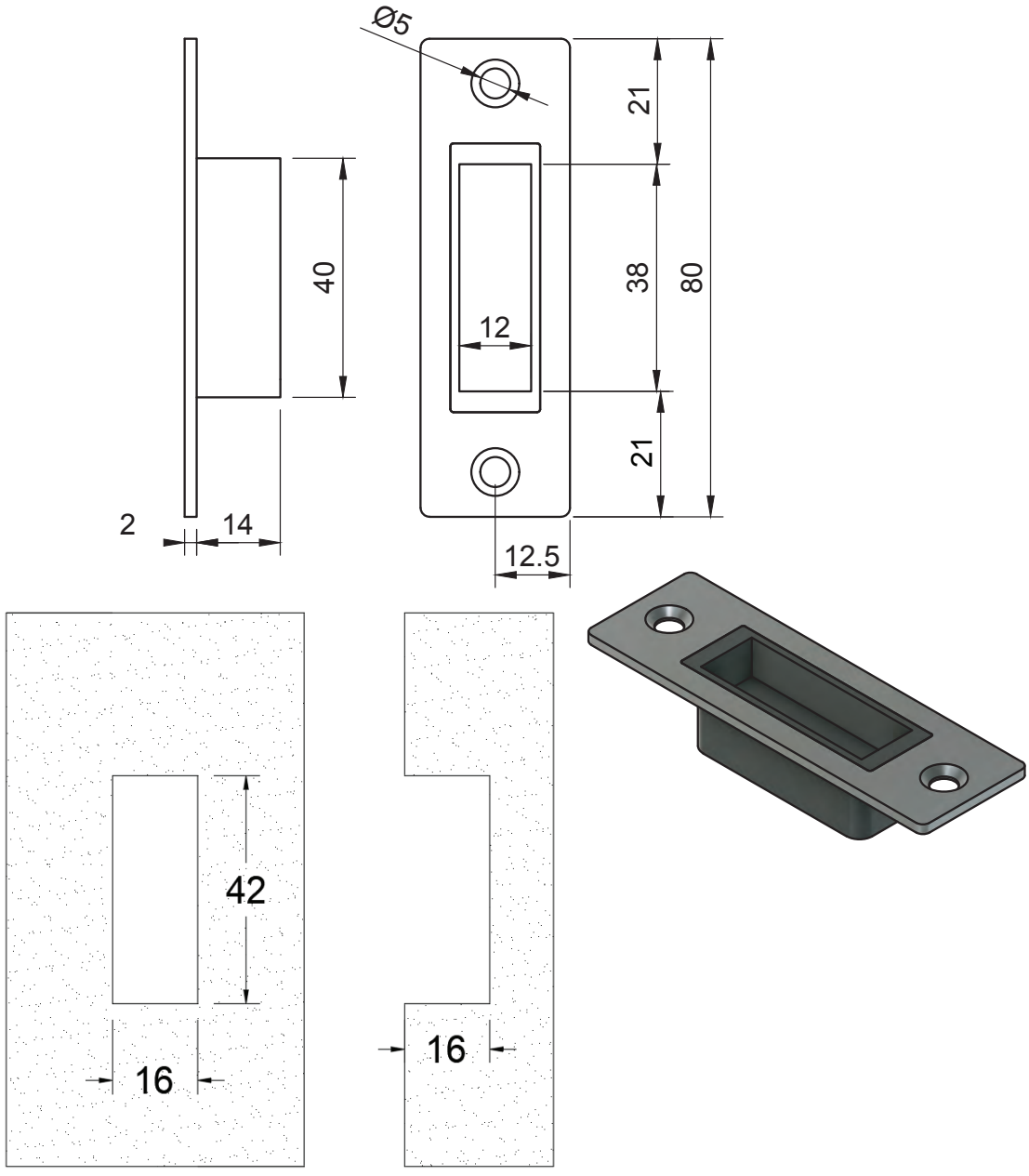
- Anodised Satin Stainless

TECHNICAL DETAILS

- Aluminium
- 10 mm or 12 mm Glass

© GHA SOLUTIONS

AL8700A-49D Magnetic Wall Mount Keeper



WALL CUTOUT

AVAILABLE FINISHES

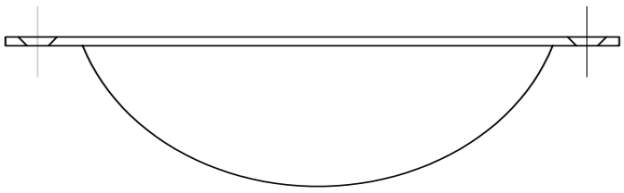
- Anodised Satin Stainless

TECHNICAL DETAILS

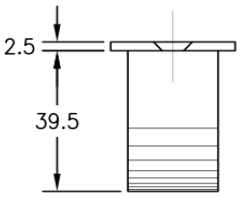
- Aluminium
- 10 mm or 12 mm Glass

© GHA SOLUTIONS

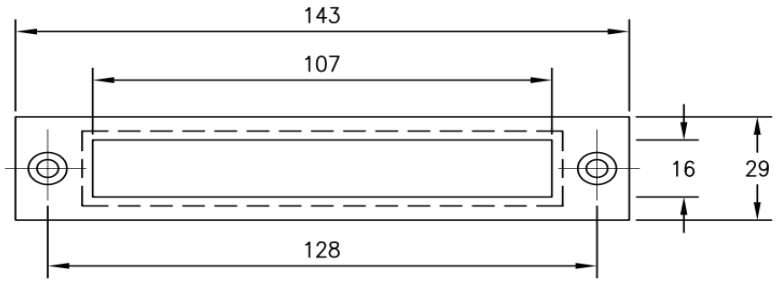
CD353 / CD353C / CD353C/S Patch Lock



SIDE VIEW



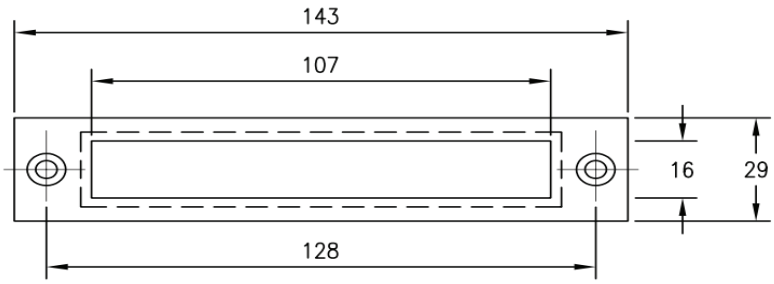
END VIEW



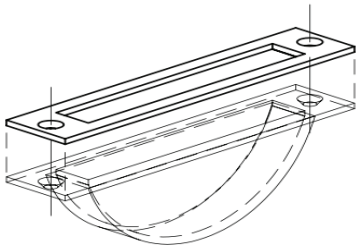
CD 353
LOCK TROUGH

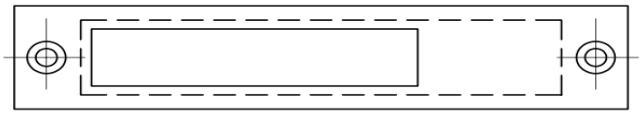
PLAN





CD 353C
PLAN, FOR SWING DOOR





CD 353C/S
PLAN, FOR SLIDING DOOR

AVAILABLE FINISHES

- Stainless: SSS, PSS

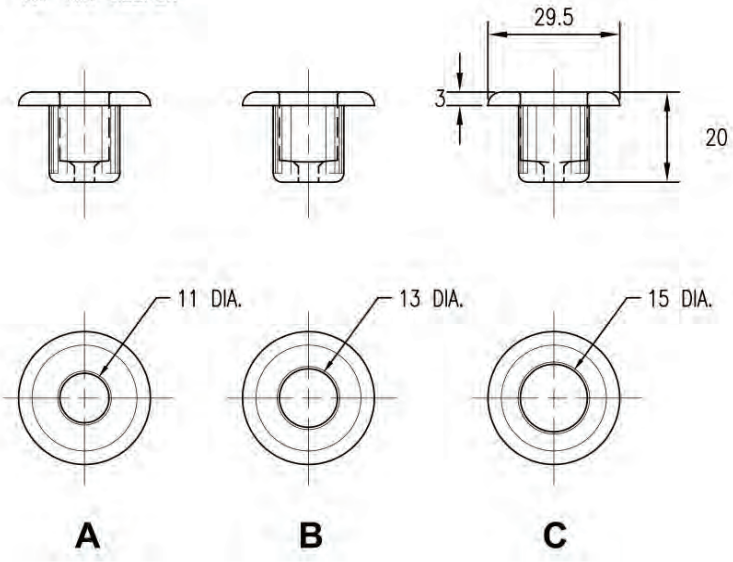
TECHNICAL DETAILS

- CD353: Cast lock trough floor keeper to suit DC590 long throw dead lock, finished in SCP
- CD353C: Lock trough cover plate to provide special finishes for CD353 lock trough
- CD353C/S: Lock trough cover plate to provide restricted trough opening for sliding door application

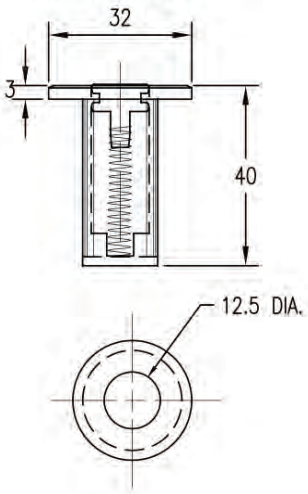
© GHA SOLUTIONS

KEEPERS

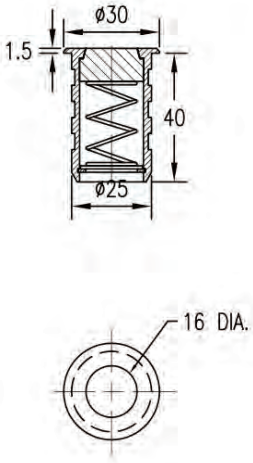
CD 60
TOP HAT KEEPER



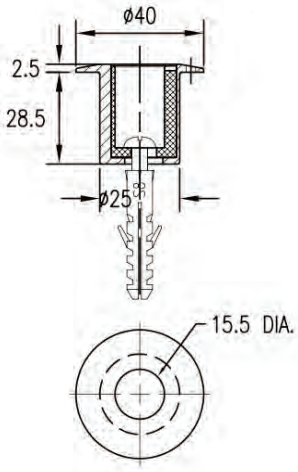
CD 60S
TOP HAT KEEPER
WITH DUST COVER



H80519300099
TOP HAT KEEPER WITH
SPRING LOADED COVER



M05.194
UNIVERSAL ECCENTRIC
BUSH KEEPER

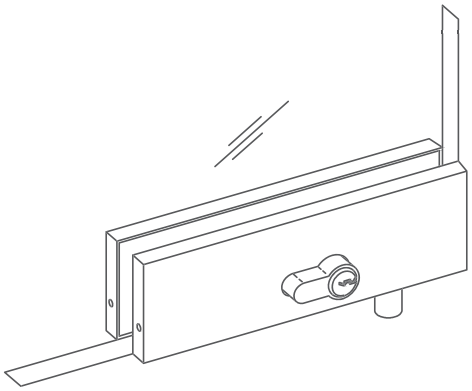


AVAILABLE FINISHES

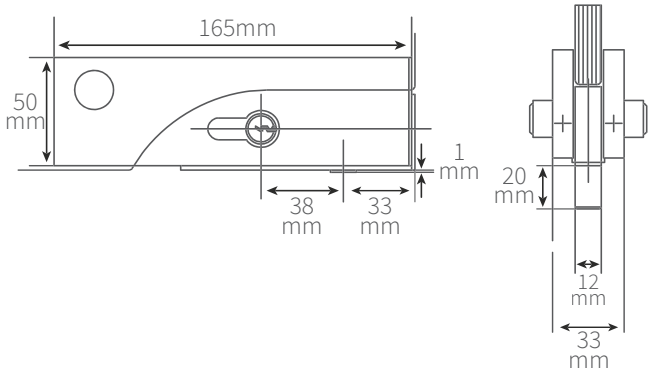
- CD60 - Aluminium: Mill, SAA
- CD60S - Brass: SCP
- M05.193 - Aluminium: SAA
- M05.194 - Stainless: SSS

© GHA SOLUTIONS

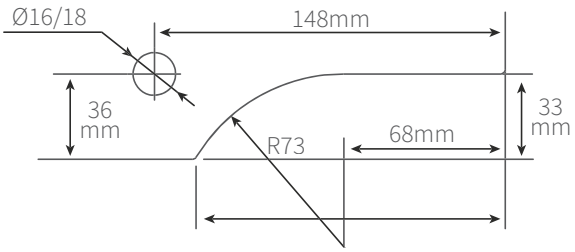
48700 Corner Lock



DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

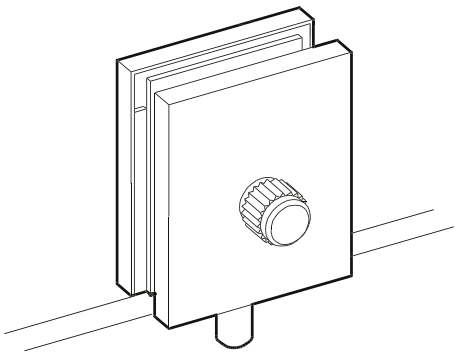
- Satin silver anodised
- Polished stainless steel
- Satin stainless steel
- Polished brass

TECHNICAL DETAILS

- Corner pin lock – CASMA
- Maximum glass hold 150kg
- Recommended torque for fixing screws Nm 14-16
- Euro style cylinder

© GHA SOLUTIONS

14600 /14700 Internal cylinder / snib lock



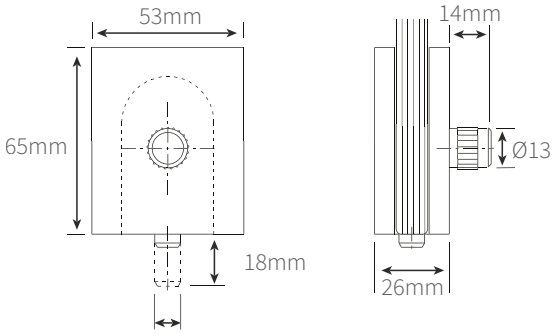
AVAILABLE FINISHES

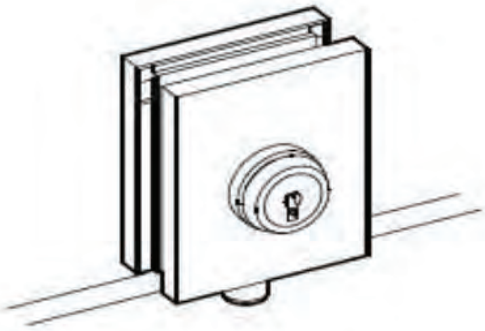
- Polished stainless steel
- Satin stainless steel

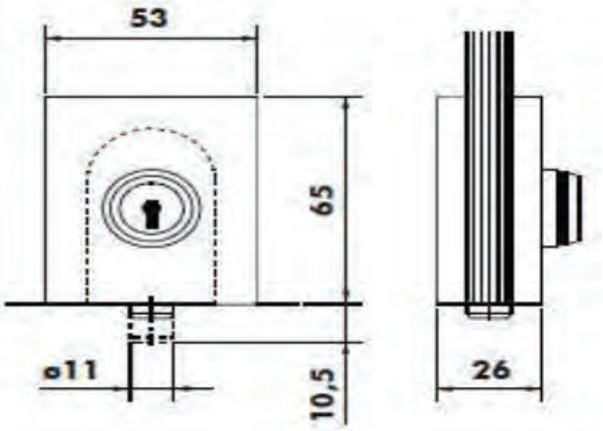
TECHNICAL DETAILS

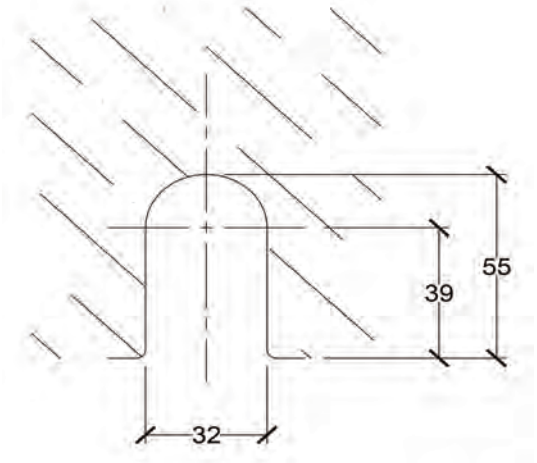
- Bottom pin lock with thumbturn (14700) or lock (14600)
- Internal single snib lock
- Maximum glass hold 90kg

DETAIL



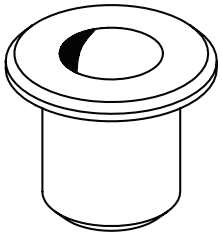


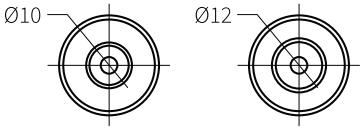


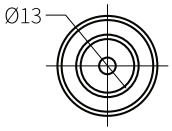


© GHA SOLUTIONS

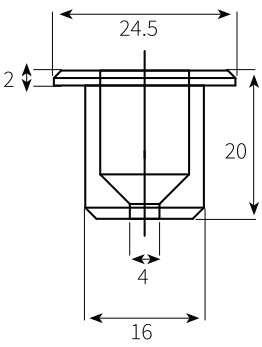
15501 / 15502 Floor Ferule



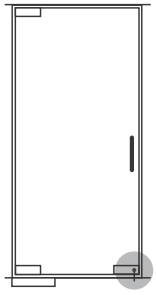




DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

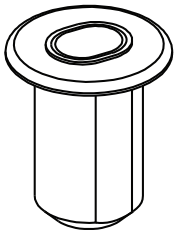
- Natural anodised

TECHNICAL DETAILS

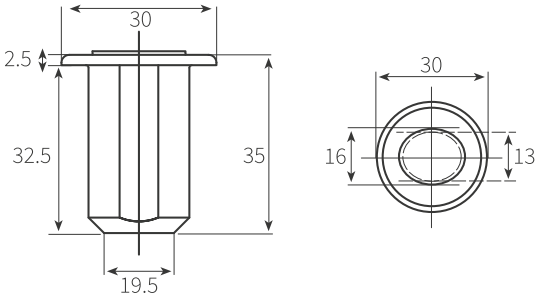
- To be used in flooring or structure with pin locks
- Use with 10, 12 and 13 diameter pin style locks in show cases

© GHA SOLUTIONS

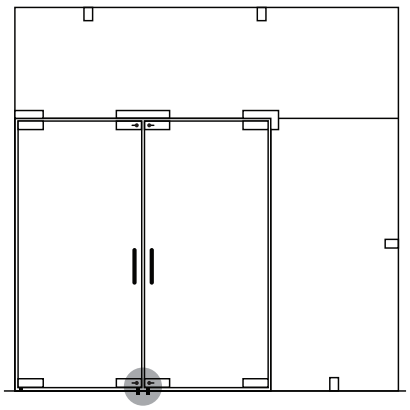
15519 Floor Ferule Elongated Hole



DETAIL



INSITU APPLICATION



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- To be used in flooring or structure with pin locks
- Elongated hole for adjustment with lock on site
- Suitable for eurostyle pin locks in floor

© GHA SOLUTIONS

Locking Pull Handles









Locking Handles provide an elegant and practical solution to top and bottom mounted locks. Avail as either single sided or back to back.

No more crouching down or climbing up to operate inconveniently positioned locks and turns. The locks are operated from a standing position either inside or outside.

Locks can be either single acting into the floor or doubleacting into both the floor and overhead.

The overhead lock tongue provides an additional structural support point for the door. Lock bolt has a 35 mm throw.

© GHA SOLUTIONS

Locking Pull Handles (Cont'd)

MATERIALS

- 304 or 316 stainless steel

AVAILABLE FINISHES

- Satin stainless steel
- Polished stainless steel

KEYING

- Double keyed cylinder
- Keyed cylinder and turn
- Blanked off and turn

Keyed Alike and Keyed randomly options available

TECHNICAL DETAILS

Custom sizes, configurations and finishes to order

Note. Not all model, size, configuration, material and finishes combinations are stocked, please check before ordering.



HL-511



HL-512



HL-515

HL-530



HL-531

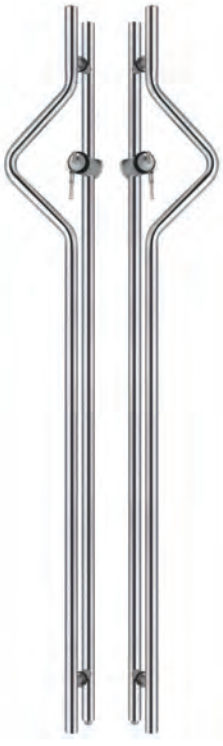
HL-530



HL-541



HL-501



HL-506

CODE	HEIGHT	HANDLE	LOCK
HL-511	1500mm	35mm diameter	Floor
HL-512	1500mm	35mm diameter	Floor
HL-515	1500mm	38 x 25mm	Floor
HL-531	2200mm	35mm diameter	Floor & Top

CODE	HEIGHT	HANDLE	LOCK
HL-541	2200mm	38 x 25mm	Floor & Top
HL-501	1400mm	25mm diameter	Floor
HL-506	1340mm	25mm diameter	Floor

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GHA H10-300 "D" Pull Handle BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- Material 304
- Diameter 32mm
- Centres 300mm
- Hole diameter 14mm

GHA-H10-600 Pull Handle BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- Material 304
- Size 632mm
- Hole centres 600mm
- Diameter 32mm
- Hole size 14mm

GHA H20-300/H20-600 Offset "D" Pull Handle BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- Material 304
- Diameter 32mm
- Centres 300mm and 600mm
- Hole diameter 14mm

GHA H30-300 Offset "C" Pull Handle BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- Material 304
- Diameter 32mm
- Centres 300mm
- Hole diameter 14mm

© GHA SOLUTIONS

GHA H40-600 Pull Handle BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- Material 304
- Diameter 32mm
- Centres 600mm
- Hole diameter 14mm
- Overall 632mm

GHA-H80 Square Pull Handle BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel
- Black
- PSS

TECHNICAL DETAILS

- Material 304
- Size 40 x 20mm
- Centres 600mm
- Hole diameter 14mm
- Overall 620mm

GHA-H070/H074/H078 Straight BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- Material 304
- Hole diameter 14mm

CODE	SIZE	OVERALL	CENTRES
GHA-H070	30 x 15mm	480	450
GHA-H074	30 x 15mm	630	600
GHA-H078	30 x 15mm	1030	1000

© GHA SOLUTIONS

GHA-H170/H174/H178 Square Offset Pull Handle BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- Material 304
- Hole diameter 14mm

CODE	SIZE	OVERALL	CENTRES
GHA-H170	30 x 15mm	480	450
GHA-H174	30 x 15mm	630	600
GHA-H178	30 x 15mm	1030	1000

GHA-H160 Square Pull Handle BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- 50 x 25
- Material 304
- Hole diameter 14mm

CODE	SIZE	OVERALL	CENTRES
GHA-HD160	625 x 600mm	625	600
GHA-HD160	825 x 800mm	825	800
GHA-HD160	1025 x 1000mm	1025	1000
GHA-H160	1225 x 1200mm	1225	1200
GHA-H160	1025 x 1000mm	1825	1800

GHA-H45 Square Pull Handles BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel

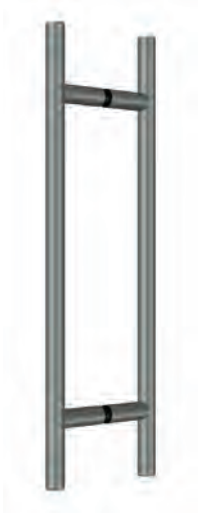
TECHNICAL DETAILS

- 25 diameter and 32 diameter
- Material 304
- Hole diameter 14mm

CODE	SIZE	OVERALL	CENTRES
GHA-H45	25	625	600
GHA-H45	32	632	600

© GHA SOLUTIONS

GHA-H142 Straight Pull Handle BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel
- Black

TECHNICAL DETAILS

- Material 304
- Hole diameter 15mm

CODE	DIAMETER	OVERALL	CENTRES
GHA-H142	25	450	300
	25	600	450
	25	800	600
	25	1000	800
	25	1200	1000
	25	1400	1200
	32	600	450 (400 Black)
	32	800	600 (Black)
	32	1000	800
	32	1200	1000
	32	1400	1200
	32	1600	1400 (Black)
	32	1800	1600

GHA-H142_3 Straight Pull Handle (3 holes) BACK TO BACK



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

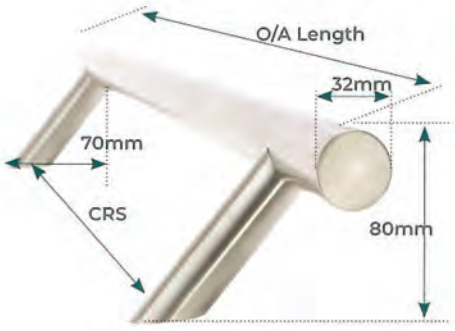
- Material 304
- Hole diameter 15mm

CODE	DIAMETER	OVERALL	CENTRES
GHA-H142_3	25	1600	700
	25	1800	800
	25	1900	875
	25	2000	900
	25	2100	975
	25	2200	1000
	25	2400	1100
	32	2000	900
	32	2200	1000
	32	2400	1100

© GHA SOLUTIONS

GHA-142 Offset







AVAILABLE FINISHES

- Satin stainless steel
- Polish stainless steel

TECHNICAL DETAILS

- 316 stainless steel
- 32 mm diameter
- Hole diameter – 15 mm

CODE	OVERALL	CENTRES
GHA -142-OFFSET 7300	600	400
GHA -142-OFFSET 7301	900	700
GHA -142-OFFSET 7302	1200	1000
GHA -142-OFFSET 7303	1800	1600

GHA-CAP Handle End Cap

GHA-CAP



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- Material 304
- Cap Diameter 32mm
- M8
- M6

© GHA SOLUTIONS

Milano Folding Door System

The edge hung Milano folding door system incorporates elegantly crafted cast stainless steel fittings

Rollers mounted at the glass corners allow the panels to fold clear of one end and be stacked either inside or outside of the room. Designed for glass panel thickness of 8/10/12mm with a gap between the glass panels of less than 3mm. Several different handle and locking arrangements are available for various layouts. We would be pleased to discuss these with you.

LS-13-CC Milano Stainless Steel Sliding Door Lock





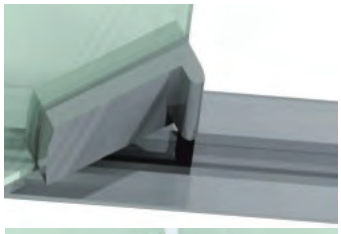
AVAILABLE FINISHES

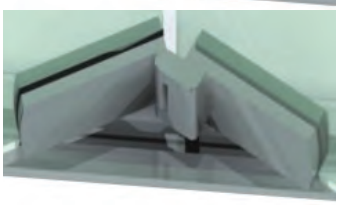
- Satin stainless steel

© GHA SOLUTIONS

DT-215 Milano Stainless Steel Floor Guide







AVAILABLE FINISHES

- Satin stainless steel

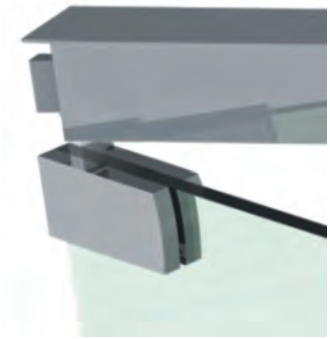
TECHNICAL DETAILS

- Rollers mounted at the glass corners allow the panels to fold clear of one end and be stacked either inside or outside of the room
- Designed for glass panel thickness' of 8mm, 10mm or 12mm with a gap between the glass panels of less than 3mm
- Several different handle and locking arrangements are available

Specify glass thickness when ordering

DF-216





AVAILABLE FINISHES

- Satin stainless steel

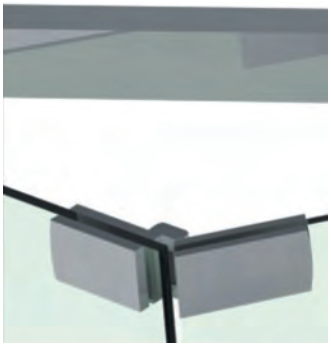
TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Top track stock length 4m with a clear anodised finish as standard
- Bottom track is 4m pressed stainless steel with satin finish
- All glass is to be monolithic and fully toughened in accordance with AS 2208

Specify glass thickness when ordering

DF-206





AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

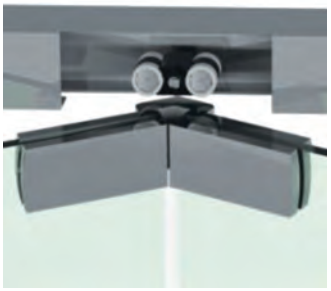
- Available either as a 4 or 5 panel kit, or individual components
- Top track stock length 4m with a clear anodised finish as standard
- Bottom track is 4m pressed stainless steel with satin finish
- All glass is to be monolithic and fully toughened in accordance with AS 2208

Specify glass thickness when ordering

© GHA SOLUTIONS

DF-210





AVAILABLE FINISHES

- Satin stainless steel

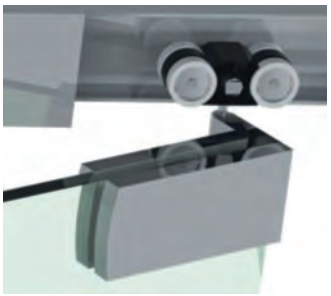
TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Top track stock length 4m with a clear anodised finish as standard
- Bottom track is 4m pressed stainless steel with satin finish
- All glass is to be monolithic and fully toughened in accordance with AS 2208

Specify glass thickness when ordering

DF-211





AVAILABLE FINISHES

- Satin stainless steel

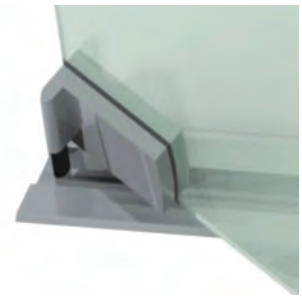
TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Top track stock length 4m with a clear anodised finish as standard
- Bottom track is 4m pressed stainless steel with satin finish
- All glass is to be monolithic and fully toughened in accordance with AS 2208

Specify glass thickness when ordering

DF-217





AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Top track stock length 4m with a clear anodised finish as standard
- Bottom track is 4m pressed stainless steel with satin finish
- All glass is to be monolithic and fully toughened in accordance with AS 2208

Specify glass thickness when ordering

© GHA SOLUTIONS

DF-213



AVAILABLE FINISHES

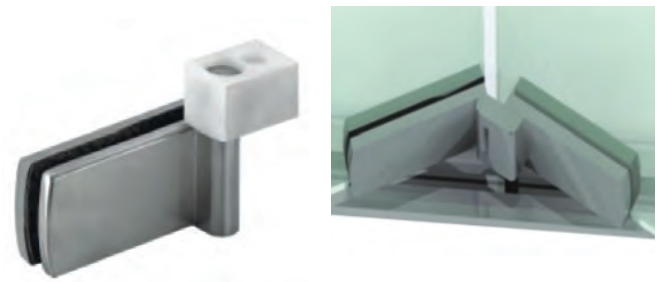
- Satin stainless steel

TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Top track stock length 4m with a clear anodised finish as standard
- Bottom track is 4m pressed stainless steel with satin finish
- All glass is to be monolithic and fully toughened in accordance with AS 2208

Specify glass thickness when ordering

DF-212



AVAILABLE FINISHES

- Satin stainless steel

TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Top track stock length 4m with a clear anodised finish as standard
- Bottom track is 4m pressed stainless steel with satin finish
- All glass is to be monolithic and fully toughened in accordance with AS 2208

Specify glass thickness when ordering

DF-214



AVAILABLE FINISHES

- Satin stainless steel

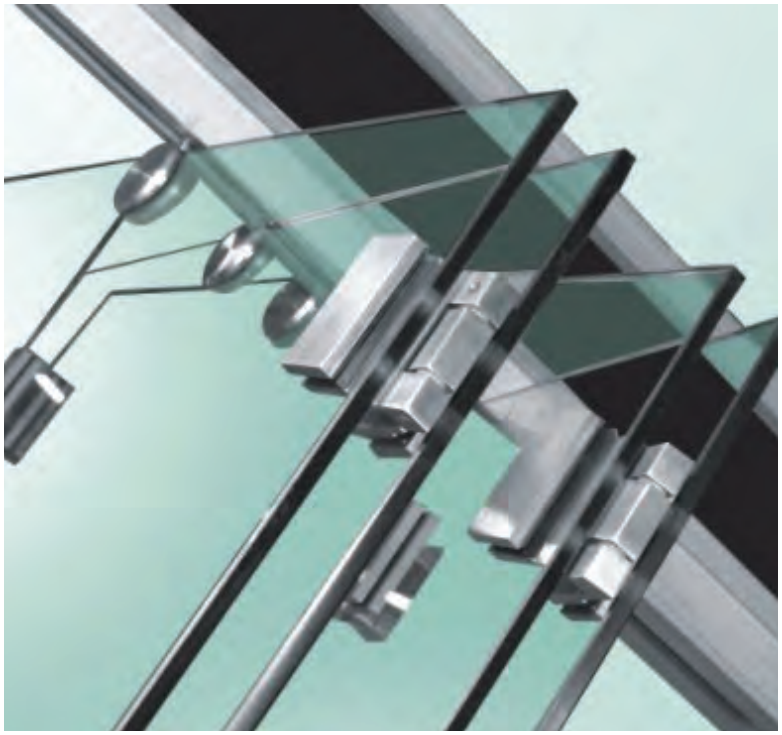
TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Top track stock length 4m with a clear anodised finish as standard
- Bottom track is 4m pressed stainless steel with satin finish
- All glass is to be monolithic and fully toughened in accordance with AS 2208

Specify glass thickness when ordering

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Napoli Folding Door System





Perfect design and elegant style

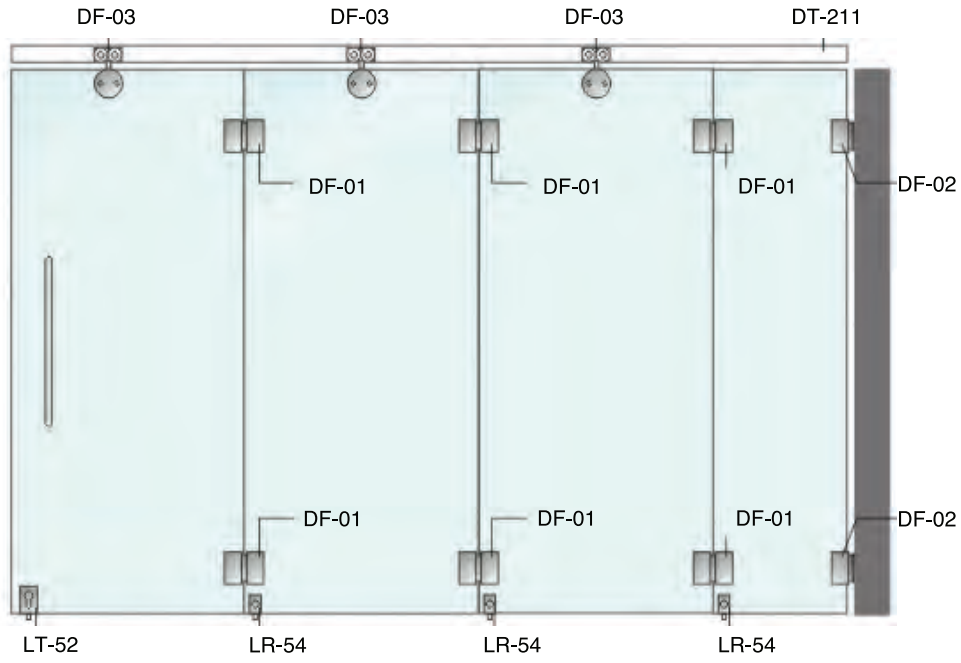
Panels of NAPOLI series of movable glass partitions can form a continuous transparent partition without the requirement for any frame. Rollers mounted at the top centre of the glass panels provide balanced support, and together with the screw fixed hinges in the first panel, eliminate the requirement for a bottom guide track.

Hinges are mounted onto the glass with no visible fixings providing a sleek and stylish appearance.

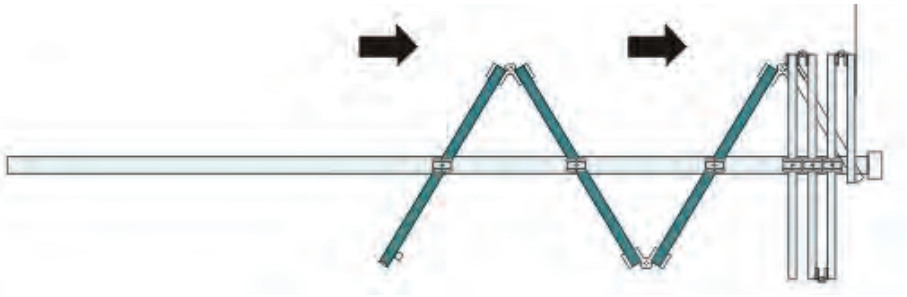
Overhead track can be either surface mounted or recessed into the ceiling.

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Napoli Folding Door System Diagram



Folding door with central roller, pull handle and bottom floor lock	Folding door with central roller and floor bolt	Folding door with central roller and floor bolt	Half panel folding door with screw fixed hinges and floor bolt



© GHA SOLUTIONS

DT-211



AVAILABLE FINISHES

- Satin stainless steel

Specify glass thickness when ordering

TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Handles to be ordered separately
- Top track stock length 4m with a clear anodised finish as standard
- All glass is to be monolithic and fully toughened in accordance with AS 2208

DF-03



AVAILABLE FINISHES

- Satin stainless steel

Specify glass thickness when ordering

TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Handles to be ordered separately
- Top track stock length 4m with a clear anodised finish as standard
- All glass is to be monolithic and fully toughened in accordance with AS 2208

DF-01



AVAILABLE FINISHES

- Satin stainless steel

Specify glass thickness when ordering

TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Handles to be ordered separately
- Top track stock length 4m with a clear anodised finish as standard
- All glass is to be monolithic and fully toughened in accordance with AS 2208

DF-02



AVAILABLE FINISHES

- Satin stainless steel

Specify glass thickness when ordering

TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Handles to be ordered separately
- Top track stock length 4m with a clear anodised finish as standard
- All glass is to be monolithic and fully toughened in accordance with AS 2208

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DLT-52



AVAILABLE FINISHES

- Satin stainless steel

Specify glass thickness when ordering

TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Handles to be ordered separately
- Top track stock length 4m with a clear anodised finish as standard
- All glass is to be monolithic and fully toughened in accordance with AS 2208

DLT-54



AVAILABLE FINISHES

- Satin stainless steel

Specify glass thickness when ordering

TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Handles to be ordered separately
- Top track stock length 4m with a clear anodised finish as standard
- All glass is to be monolithic and fully toughened in accordance with AS 2208

AK-100



AVAILABLE FINISHES

- Satin stainless steel

Specify glass thickness when ordering

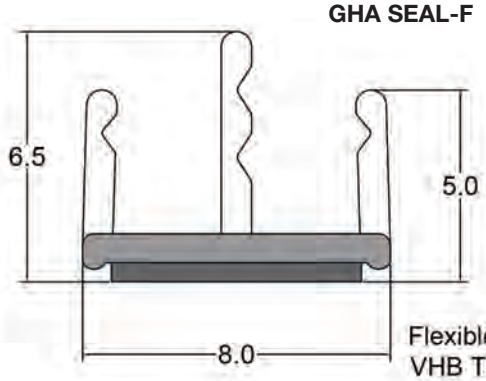
TECHNICAL DETAILS

- Available either as a 4 or 5 panel kit, or individual components
- Handles to be ordered separately
- Top track stock length 4m with a clear anodised finish as standard
- All glass is to be monolithic and fully toughened in accordance with AS 2208

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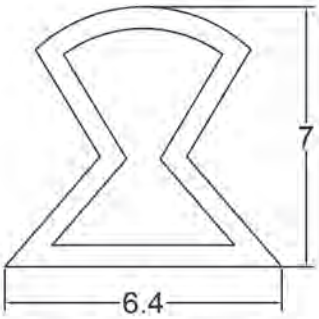
GHA Pivot Seals – GHA Seal-F & GHA Seal-B

GHA SEAL-F

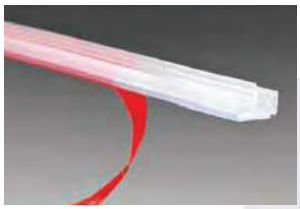


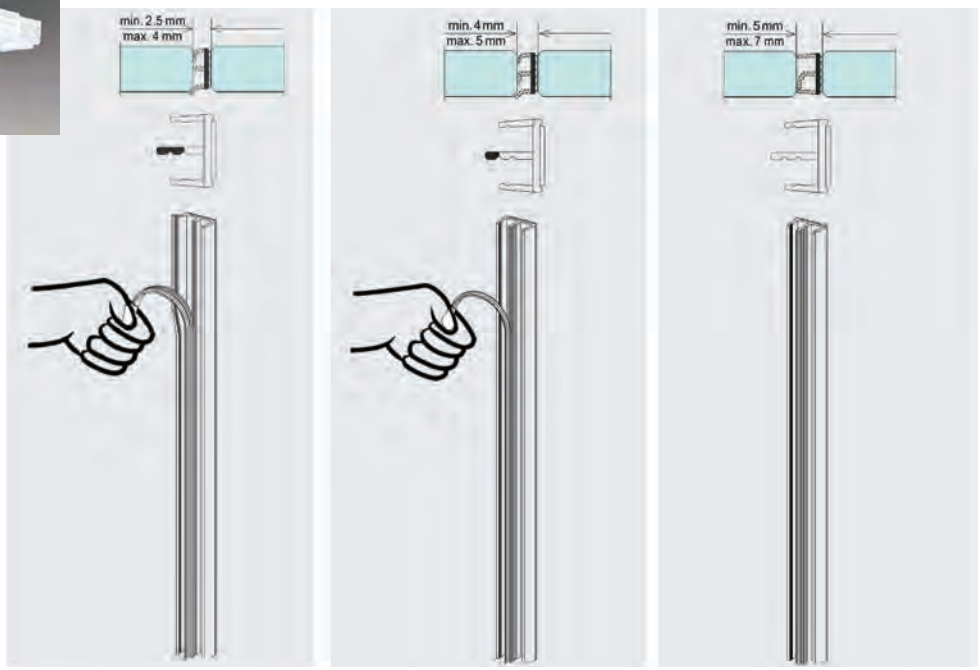
Flexible Fins
VHB Tape Applied to the Base

GHA SEAL-B



VHB Tape Applied to the Base





Door Seals – 12mm Touchened

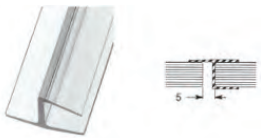
WS-12-06



WS-12-07



WS-12-11



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HSW Easysafe



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HSW Easysafe The right stacking arrangement for any situation

Perfect parking every time

Existing structures or unusual layouts often require special solutions, particularly in the design of the stacking area. dormakaba HSW systems can be parked in a range of different positions. The stack of panels can be aligned parallel or square to the frontage, be readily visible for effect or hidden behind columns etc.

Another possibility is that of parking the system in line but out of the way, whether behind a wall or in a niche.

The panels can also perform certain functions when the frontage is open, such as providing the sides of internal store windows and showcases, or, if provided with the appropriate printing on the glass, for adding artistic value to a wall. The following pages show some system solutions devised in answer to a wide range of different problems.



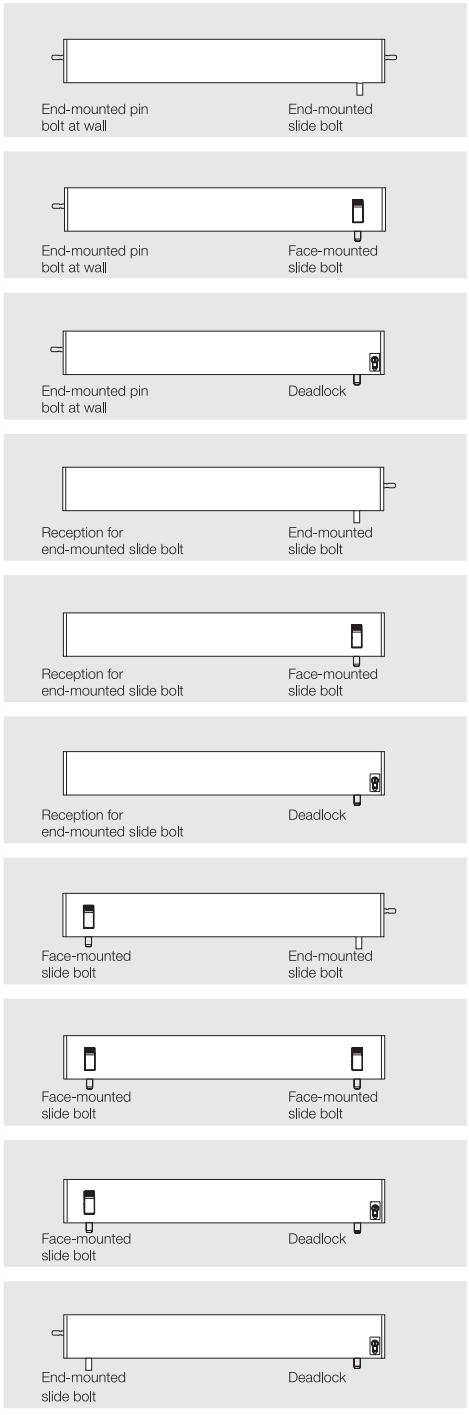


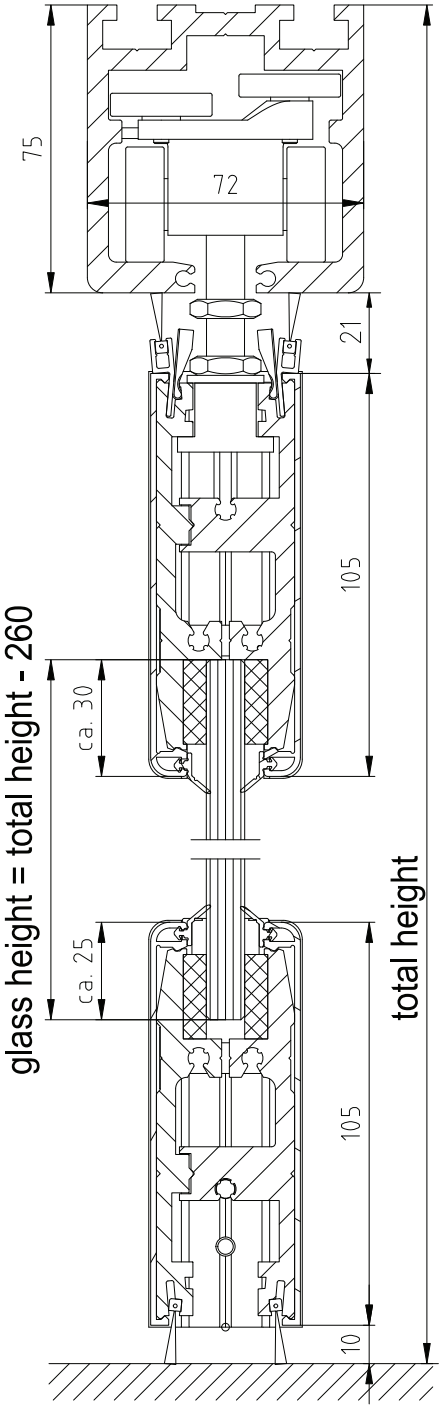
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HSW Easysafe Door rails and general details

Bottom locking devices.

All depicted combinations are also available as mirror arrangements.

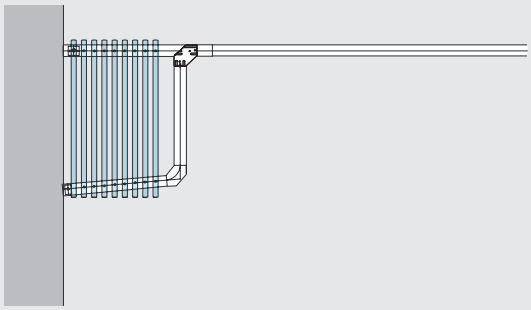
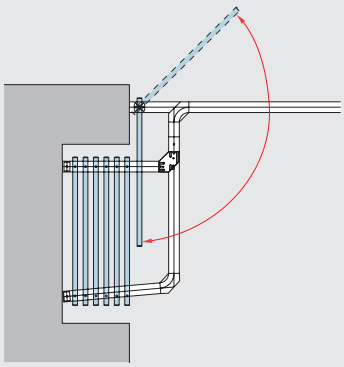
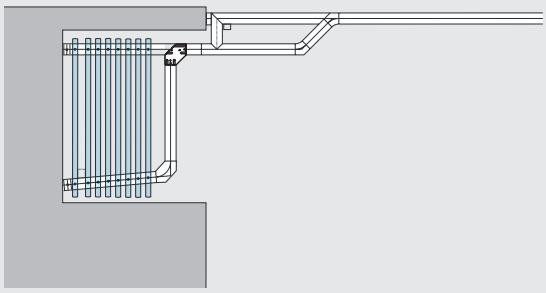
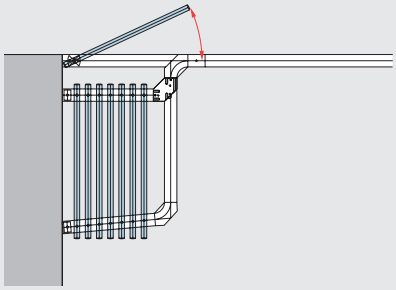




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HSW Easysafe Panels transverse to travel direction

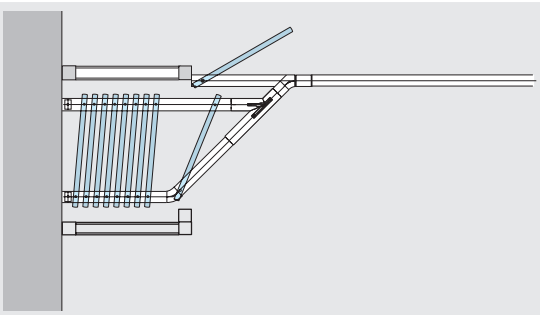
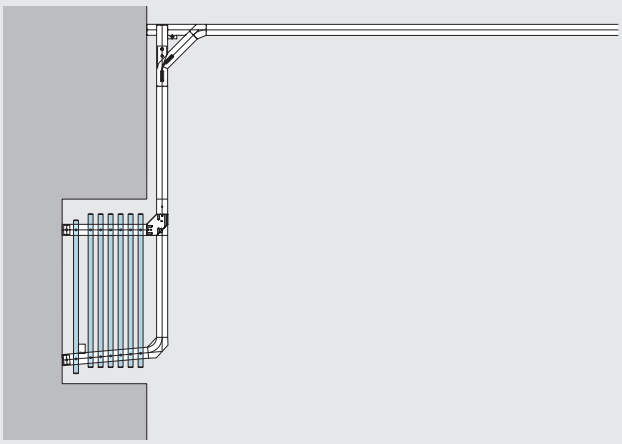
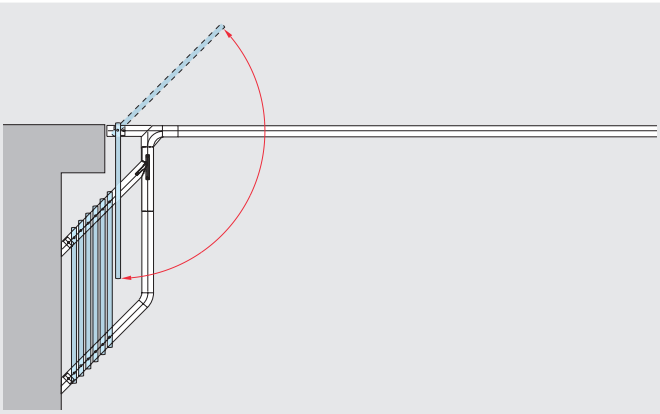
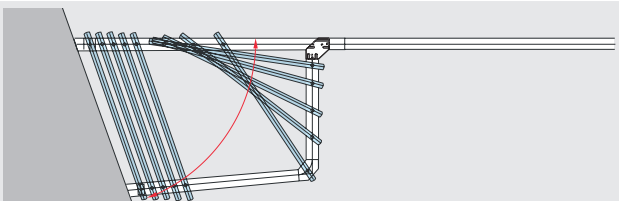
Panels stacked 90° angle transverse to travel direction

	PRODUCT DESCIPTION
	**Standard stacking arrangement.** With pivoting end panel, single or double-action, to use as possible access leaf (left or right, or left and right).
	**Niche stacking.** With pivoting end panel, single or double-action, to use as possible access leaf (left or right, or left and right).
	**Stacking with reshuffle bypass.** (Without pivoting end panel). Behind wall projection/fixed side panel (left or right, or left and right).
	**Stacking behind pivoting end panel.** Single-action or double-action (left or right, or left and right).

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HSW Easysafe Panels transverse to travel direction

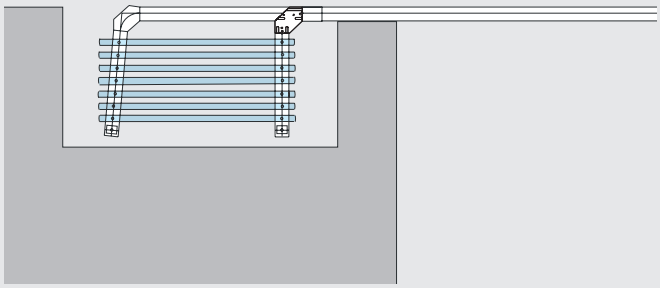
Panels stacked 90° angle transverse to travel direction

	PRODUCT DESCIPTION
	**Stacking in a box or niche, behind pivoting end panel.** Double-action Sliding panels only, around 135° offset (left or right, or left and right)
	**Stacking in a box/pocket.** For sliding panels or double-action sliding panels (left or right, or left and right).
	**Stacking behind column.** **Stacking legs at 135° angle.** With pivoting end panel, double-action, to use as possible access leaf (left or right, or left and right) or left and right).
	**Stacking at acute angle.** All panels brought into position with rear track roller.

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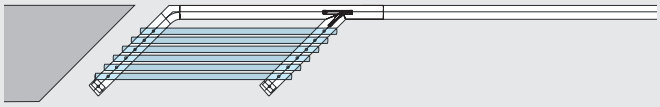
HSW Easysafe Panels parallel to travel direction

PRODUCT DESCIPTION



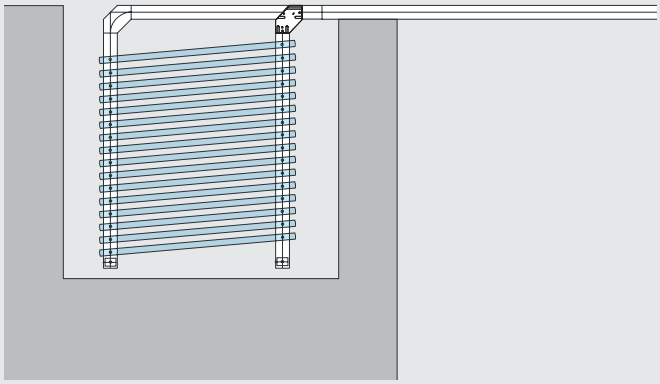
Stacking in a niche, outer stacking leg at 95° angle.

For small number of panels (up to 6) (left or right, or left and right).



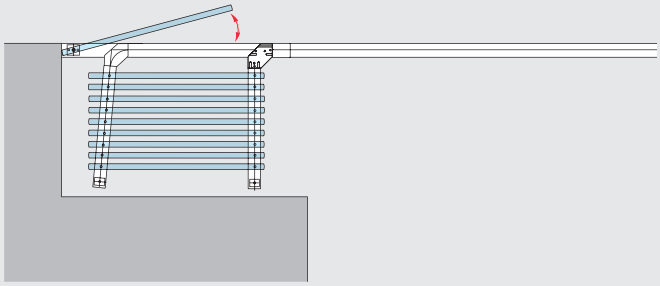
Stacking legs at 135° angle.

(Left or right, or left and right).



Stacking legs at 90° angle.

For large number of panels (more than 6) (left or right, or left and right).



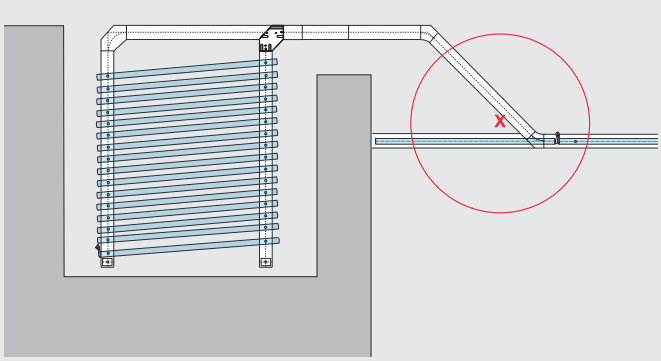
Stacking behind pivoting end panel.

Outer stacking leg at 95°
(left or right, or left and right).

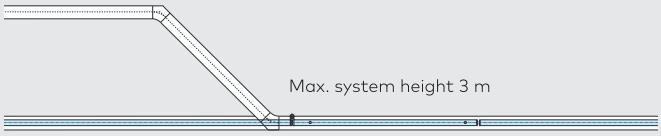
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HSW Easysafe Panels parallel to travel direction

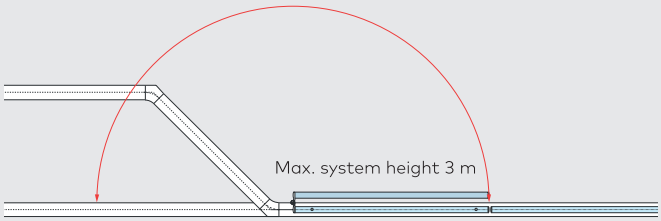
PRODUCT DESCIPTION



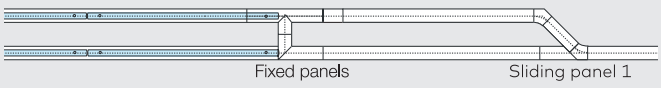
Detail X
Sliding folding panel in closed wall.



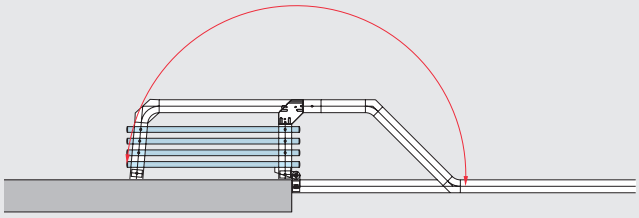
Sliding folding panel ready for sliding into stacking area.



Stacking offset in niche.
With sliding folding panel as all connection stacking legs at 90° (left or right, or left and right).



Stacking behind fixed panels.
(Left or right, or left and right).



SStacking offset, beyond offset hung pivoting end panel, single or double-action.
Lleft or right, or left and right).

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HSW Easysafe Simple locking with hand or foot

Multilock – Three locking possibilities in one component

The new Multilock system opens up a new world of simplicity

The Multilock combines three locking possibilities in one compact element and can be installed effortlessly in the bottom door rail.

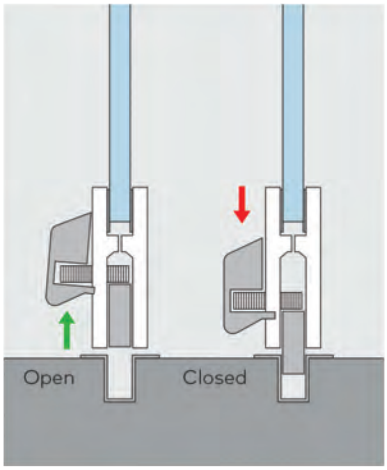






Easy foot-operated opening and closing





Simplicity with clear benefits:

The 3-in-1 Multilock can be offered in three options for secure locking: side locking device, front locking device or cylinder lock.

- Maximum convenience with foot-operated locking options for the face-mounted floor bolt – simple and hassle-free.

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HSW Easysafe Technical Details and Applications

Technical Details

- Max. system height: 4000mm
- Max. panel width: 1250mm
- Max. panel weight: 150kg
- Seamlessly accepts glass thickness ranging from 10 to 19mm

Applications

For use in:

- Shops and shopping centres
- Stadiums
- Airports
- Train stations
- Hotels
- Banks and insurance companies
- Private living rooms

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FSW EASY Safe Bifold Types and functions

FSW toughened glass folding walls featuring door rails top and bottom and a roller carrier at the end of each second panel.

FSW folding sliding walls are suitable for linear configurations. With an FSW EASY Safe assembly, you can have either two or four panels (a basic panel and 1 or 3 folding panels) linked together. Where two counter-running (bi-parting) assembles are installed, it is possible to create frontages with up to eight FSW panels. As the panels are visually compatible with the HSW EASY Safe pivoting/sliding panels, and both systems use the same track design, shop/store frontages or similar transparent partition system can be made up of these two different types, with the FSW assembly at the free end or supplemented by a single or double-action HSW end panel (types 4+5). FSW systems can be designed for either opening direction.

01
Track rail

02
Upper locking bolt

03
Roller carrier

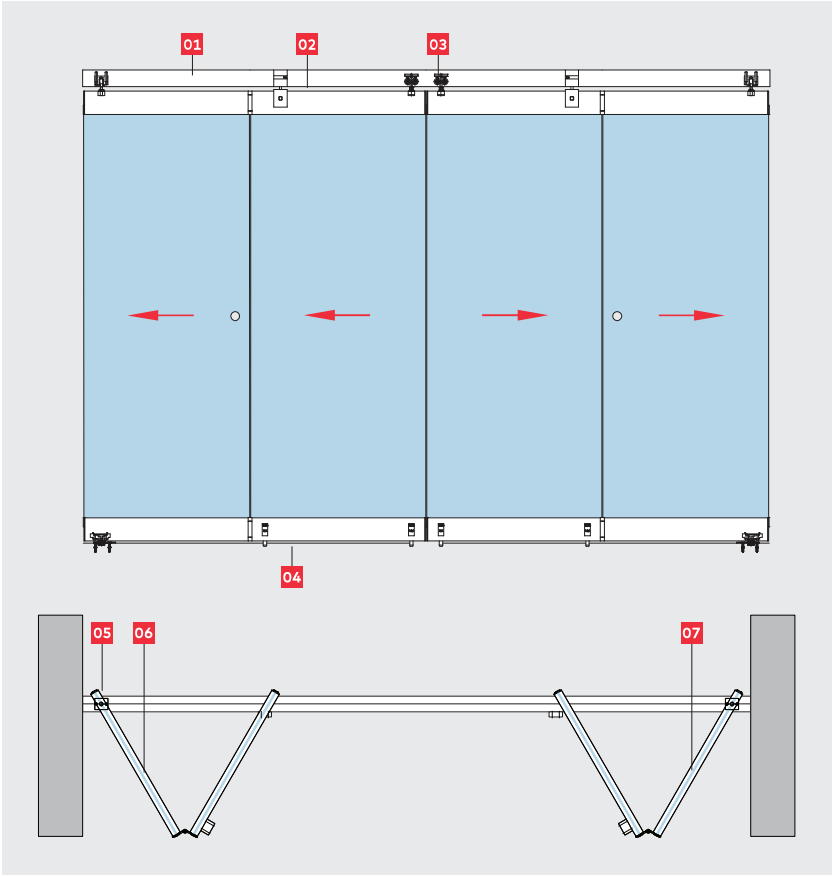
04
Face mounted slide bolt

05
Upper pivot bearing of the basic panel

06
Basic panel

07
Folding panel

Example: Design with 2 x 2 panels (type 1c), bi-parting

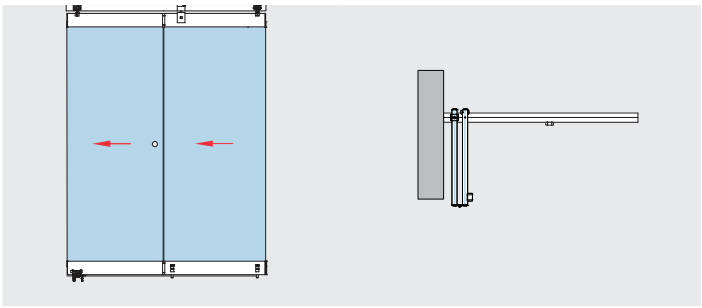


Max. panel sizes and weights	Basic panel with top pivot and floor pivot	Folding panel with roller carrier and lock bolts top and bottom	Folding panel with roller carrier and lock bolts top and bottom	Basic panel with roller carrier and lock bolts top and bottom
Max. assembly height	3000mm	3000mm	3000mm	3000mm
Max. panel width	1100mm	1100mm	1100mm	1100mm
Max. panel weight	80kg	80kg	80kg	80kg

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FSW EASY Safe Bifold Layout Variants

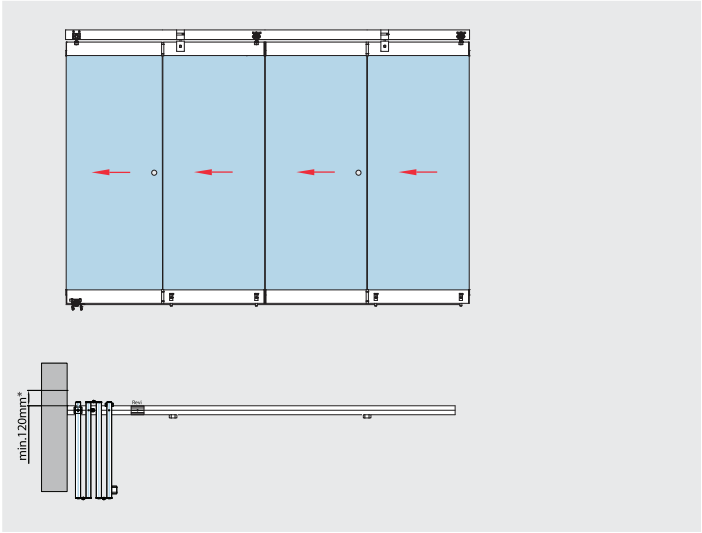
TYPE 1



Classifcation	Product Description
1a	2 panels left, as illustrated
1b	2 panels right, invers
1c	4 panels (2 panels left and 2 panels right), bi-parting

Article No.	Description
9409000000213	FSW ES BASIC 2 PANEL SET

TYPE 2

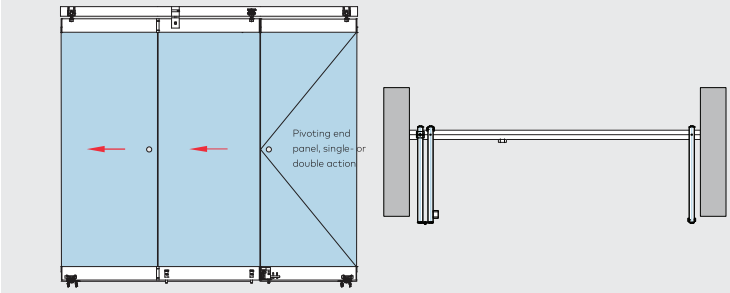


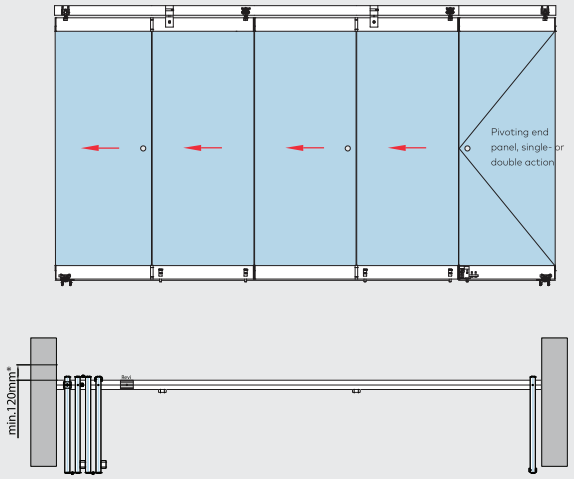
Classifcation	Product Description
2a	4 panels left, as illustrated
2b	4 panels right, inves
2c	8 panels (4 panels left and 4 panels right), bi-parting

Article No.	Description
9409000000214	FSW ES BASIC 4 PANEL SET

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FSW EASY Safe Bifold Layout Variants

TYPE 3	Classifcation	Product Description
	3a	2 panels left and 1 pivoting end panel, single or double action, right (as illustrated)
	3b	2 panels right and 1 single action or double action end panel left (invers)

TYPE 4	Classifcation	Product Description
	4a	4 panels left and 1 pivoting end panel, single or double action, right (as illustrated)
	4b	4 panels right and 1 pivoting end panel, single or double action left (invers)

*Minimum structural clearance (e.g. balustrade, railings etc)

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FSW EASY Safe C Types and functions

Toughened glass folding partitions with door rails top and bottom roller carrier at panel centre.

The FSW EASY Safe C is adaptable to large spans. An assembly comprises a basic panel, up to 6 folding centre panels and a folding pivoting panel which, when the system is closed, can be used for access (alternatively, a non-attached single or double action end panel can be used). The number of panels therefore ranges between 3 and 8. As the roller carriers are centrally arranged on the centre panels, the basic panel must be designed as a half-width unit (plus pivot offset at 65mm). The pivot access panel can be of either basic panel or centre panel width. The slightly offset hinges mean that the panels can be folded into particularly compact stacks with high stability also ensured. Available as standard for glass thicknesses of 10 or 12mm. Other glass thicknesses and models with laminated safety glass also available on request. Please indicate your requirements when ordering!

01
Pivot bearing top and bottom

02
Basic panel

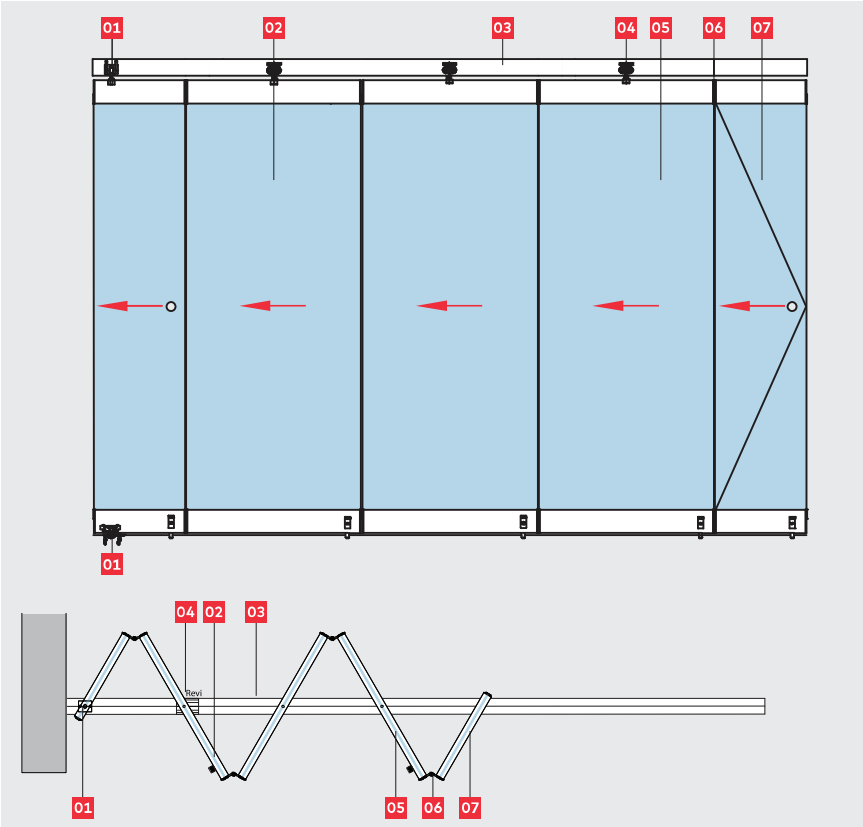
03
Track rail

04
Roller carrier

05 + 07
Flap panel unit

06
Folding hinge

Example: Partition type C2 (symmetrical with narrow pivoting access panel)

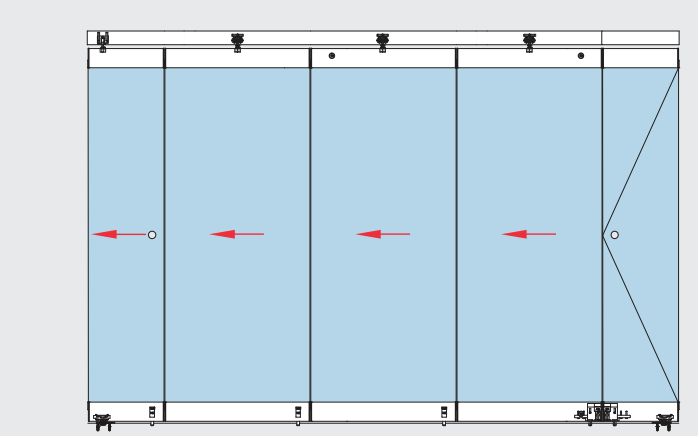


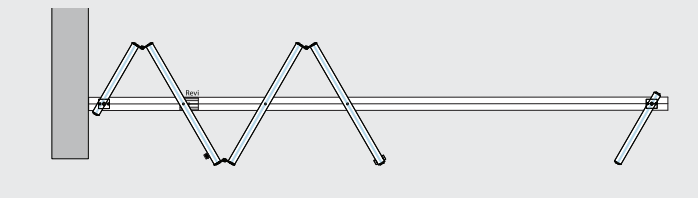
Max. panel sizes and weights	Basic panel with top pivot and floor pivot	Centre panel with roller carrier and lock bolts top and bottom	Centre panel with roller carrier and lock bolts top and bottom	Flap panel unit
Max. assembly height	3000mm	3000mm	3000mm	3000mm
Max. panel width	1/2 panel width + 65mm	1100mm	1100mm	1100mm
Max. panel weight	80kg	80kg	80kg	80kg

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FSW EASY Safe C Layout Variants

TYPE C1



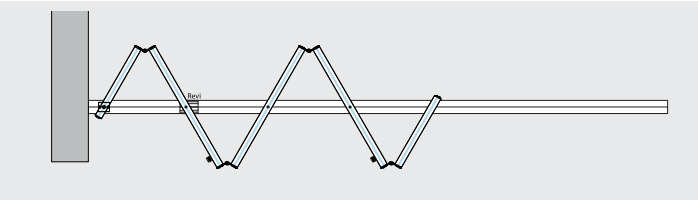


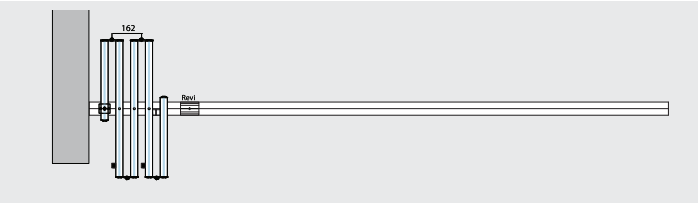


Product Description

- 1 pivoting end panel, single-action, as access (here in narrow design for reasons of symmetry)
- 1-6 centre panels
- 1 basic panel (narrow)

TYPE C2





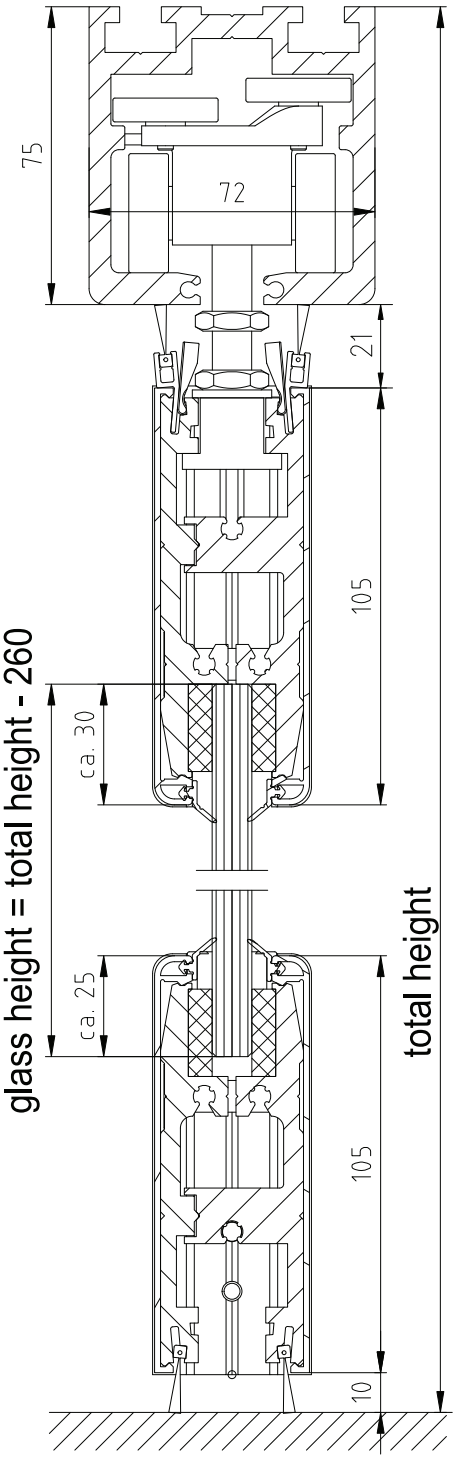
Product Description

- 1 pivoting access panel (here in narrow design for reasons of symmetry)
- 1-6 centre panels
- 1 basic panel (narrow)

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FSW EASY Safe C Section Details

Section sliding panel without substructure



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FSW EASY Safe C Safety-related Information

Important safety-related information for the mounting and use of dormakaba glass fittings.

Follow these instructions in addition to the mounting and operating instructions in order to avoid damage of product and damage to person or property.

Important: All users have to be information about relevant points mentioned in these safety-related information and the mounting and operating instructions!

General information

1. dormakaba recommends the use of TSG-H (heat-stored tempered safety glass) according to DIN EN 12150-1.
2. dormakaba glass fittings are not suitable for outdoor installation.
3. dormakaba glass fittings are not suitable for rooms where chemicals (e.g. chlorine) are used, e.g. swimming pools, saunas and brine baths.



4. Sliding panels must not be moved faster than at walking speed and must be stopped by hand before reaching the end position will be.
5. Pivoting panels must not be thrown too hard. If there is a risk of over-turning, this must be prevented by a door stop.

Mounting

1. Only properly qualified and specially trained staff is authorised to mount dormakaba glass fittings.
2. Never use glass with conchoidal fractures and/or damaged edges.
3. Protective clothing (especially gloves and protective goggles) is required during installation.
4. Clean clamping area with fat solvent (standard commercial cleaning agent) before mounting the glass fitting.
5. Never use clamping shoes on structured glass surfaces (except on satined glass) or glass of heavily varying thickness unless with a corresponding levelling layer.
6. Never use clamping shoes on self-cleaning coatings.
7. When adjusting glass elements, always stick to the required clearance for the respective fitting. Adjust clearance so that the glass does not touch hard components such as glass, metal or concrete.
8. Make sure not to use excessive force when installing the glass (avoid local stress resulting from very tight screws).

Maintenance

Check fittings at regular internals for proper positioning and smooth running and door for correct adjustment. Especially highly-frequented door systems require inspection by properly qualified staff (specialised companies or installation firms). Immediately replace damaged glass elements (no glass flaking and/or conchoidal features)!

General care instructions

The surface finishes of the fittings are not maintenance-free and should be cleaned according to their material and design.

- For metallic surface (anodised finishes, stainless steel) please use appropriate cleaning agents without abrasive additives only.
- For varnished surfaces please use appropriate solvent-free cleaning agents only.
- Brass surfaces (without surface protection) have to be treated with an appropriate maintenance agent on occasion, to avoid tarnishing.

Note: The printed colours indicating the surface finishes are not 100% true, but do provide a useful guide. Statements made with regard to the nature or use of the products are for the purposes of descriptions. Assent with regard to the existence of particular properties or particular uses always requires special written agreement. Pictures may show special designs which are different to the standard scope of delivery.

Subject to change without notice.

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8900B Stacking Door System

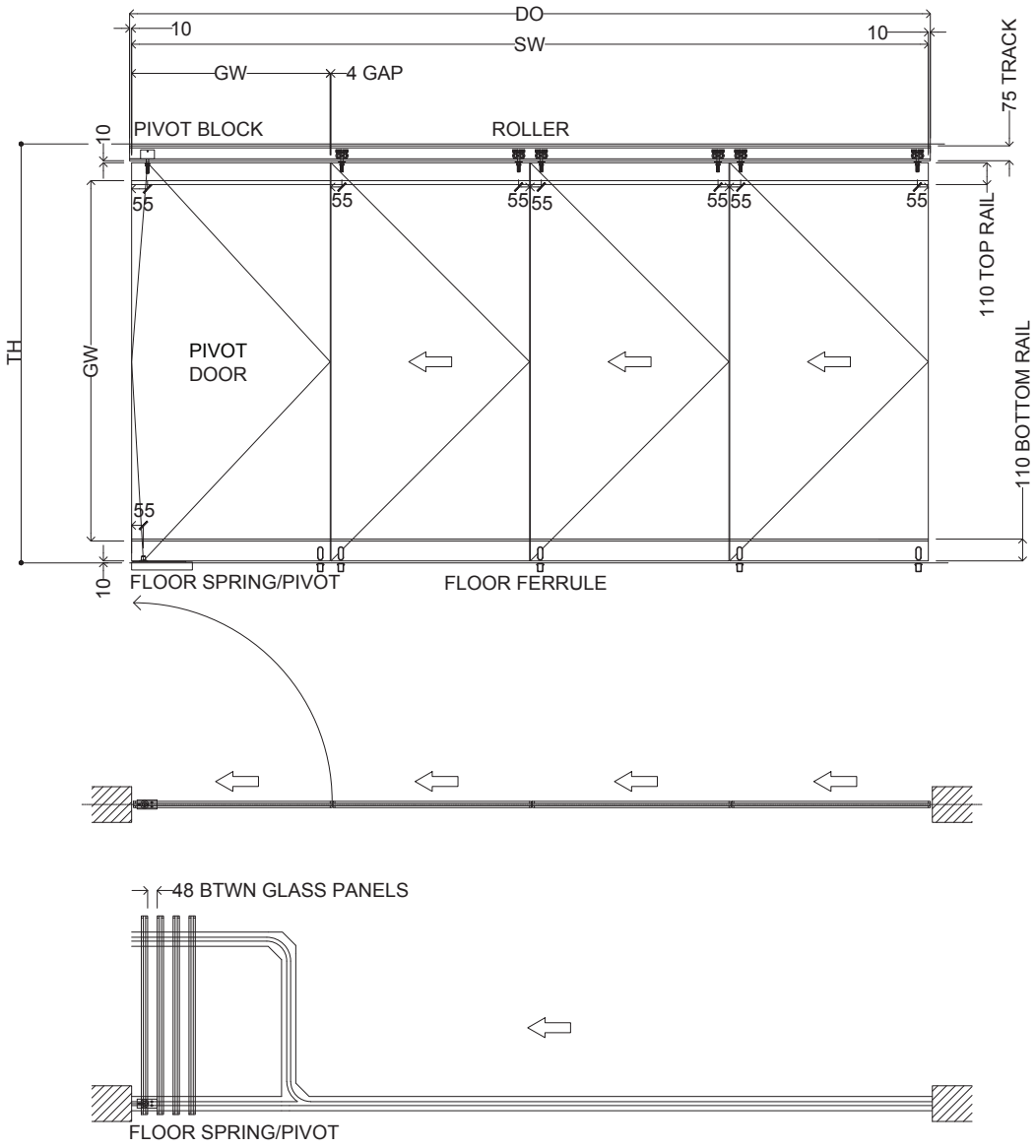




DOORS MOVE SEPERATLY
GLIDE SMOOTHLY

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8900B Stacking Door System



TECHNICAL DETAILS

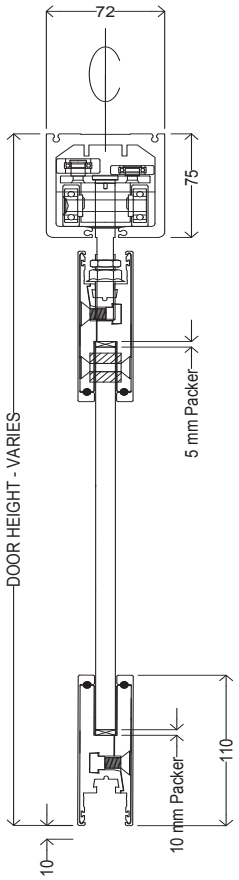
- For installation of 10 - 15 mm glass thickness
- Max. weight of door panels 100 kg
- Calculation of glass height
  GH = TH - 240
  max. 3000 mm
- Calculation of glass width
  SW = DO - 20
  GW = [SW - 4 * (ND - 1)] * ND
  max. 1100 mm

TH = Total height FFL to Top of Track (site measure)
GH = Glass height
DO = Dayllight opening
SW = Overall system width
ND = Number of doors
GW = Glass width
t = Glass thickness

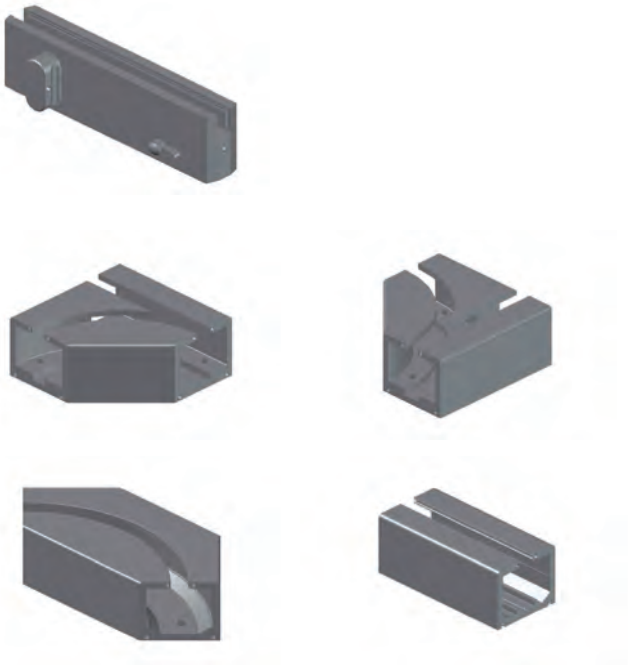
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8900B Components

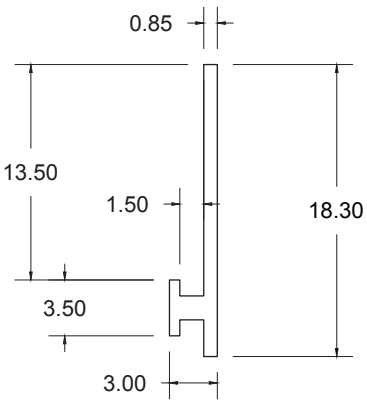
FIXING



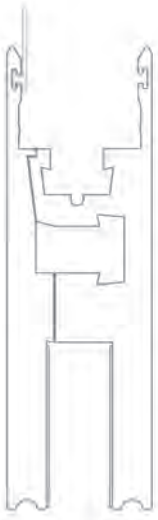
COMPONENTS



GHA Stacking & Bifold Top Seal



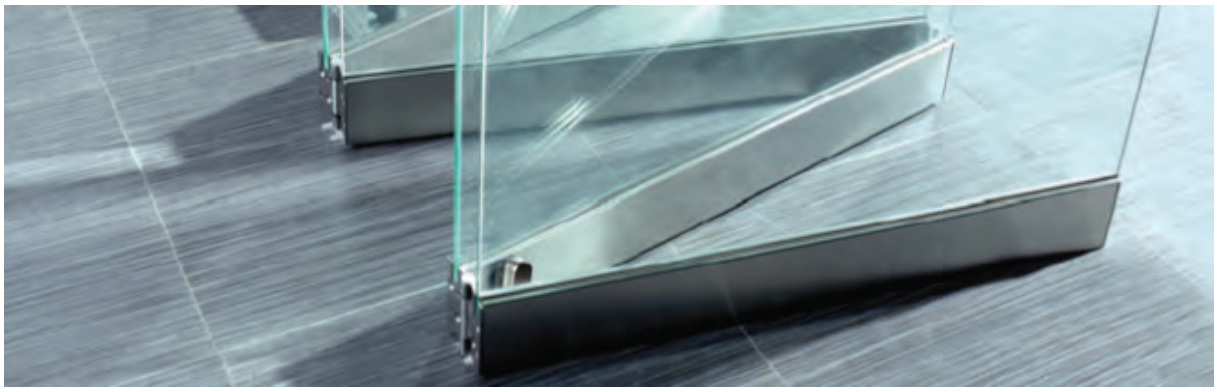
INSTALLATION



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8900W Bifold Door System



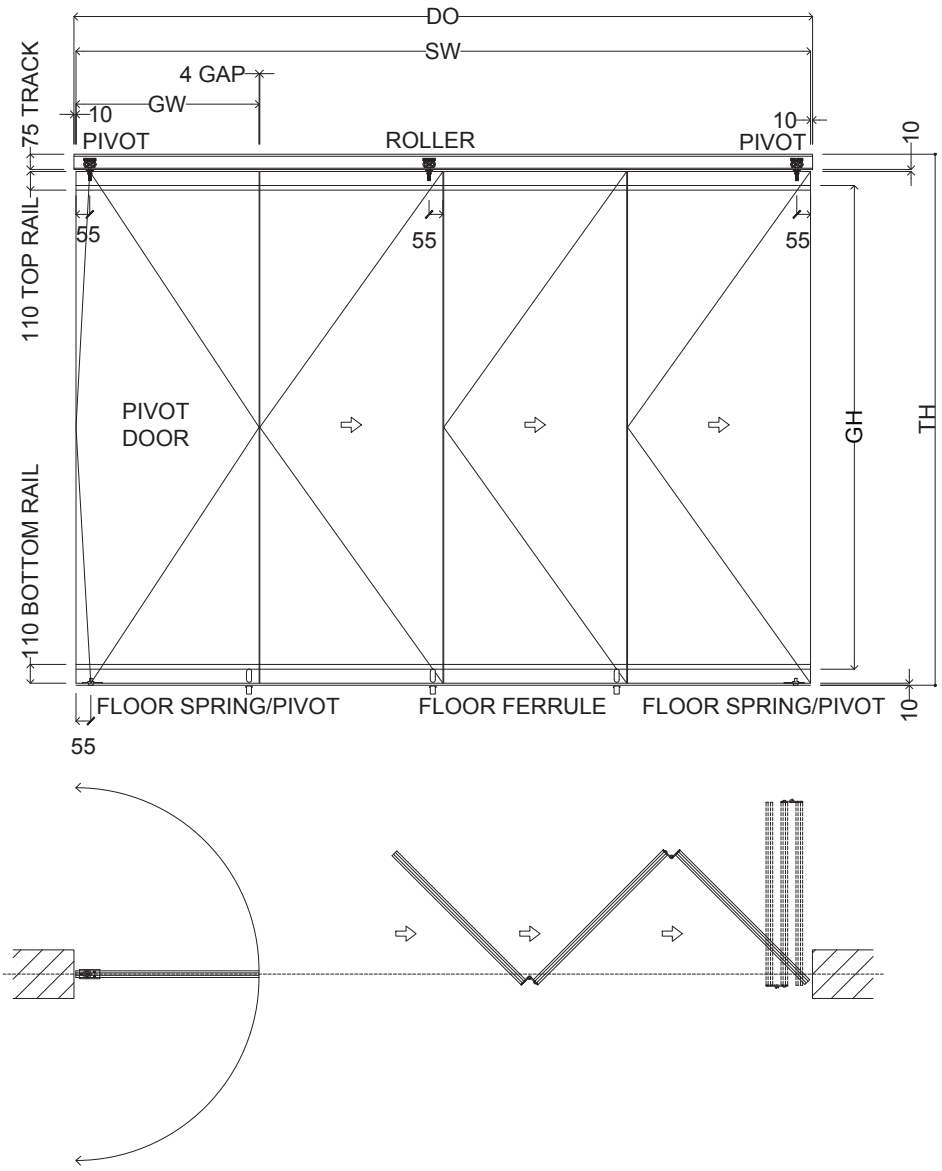




USE OPENING DOORS AND BIFOLDING TOGETHER CAN COMBINE AND BIFOLD BOTH LEFT AND RIGHT OPENING

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8900W Bifold Door System



TECHNICAL DETAILS

- For installation of 10 - 15 mm glass thickness
- Max. weight of door panels 100 kg
- Calculation of glass height
  GH = TH - 235
  max. 3000 mm
- Calculation of glass width
  SW = DO - 20
  GW = [SW - 4 * (ND - 1)] * ND
  max. 1100 mm

TH = Total height FFL to Top of Track (site measure)
GH = Glass height
DO = Dayllight opening
SW = Overall system width
ND = Number of doors
GW = Glass width
t = Glass thickness

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8900Z Using 1/2 Panels to Have Complete Opening





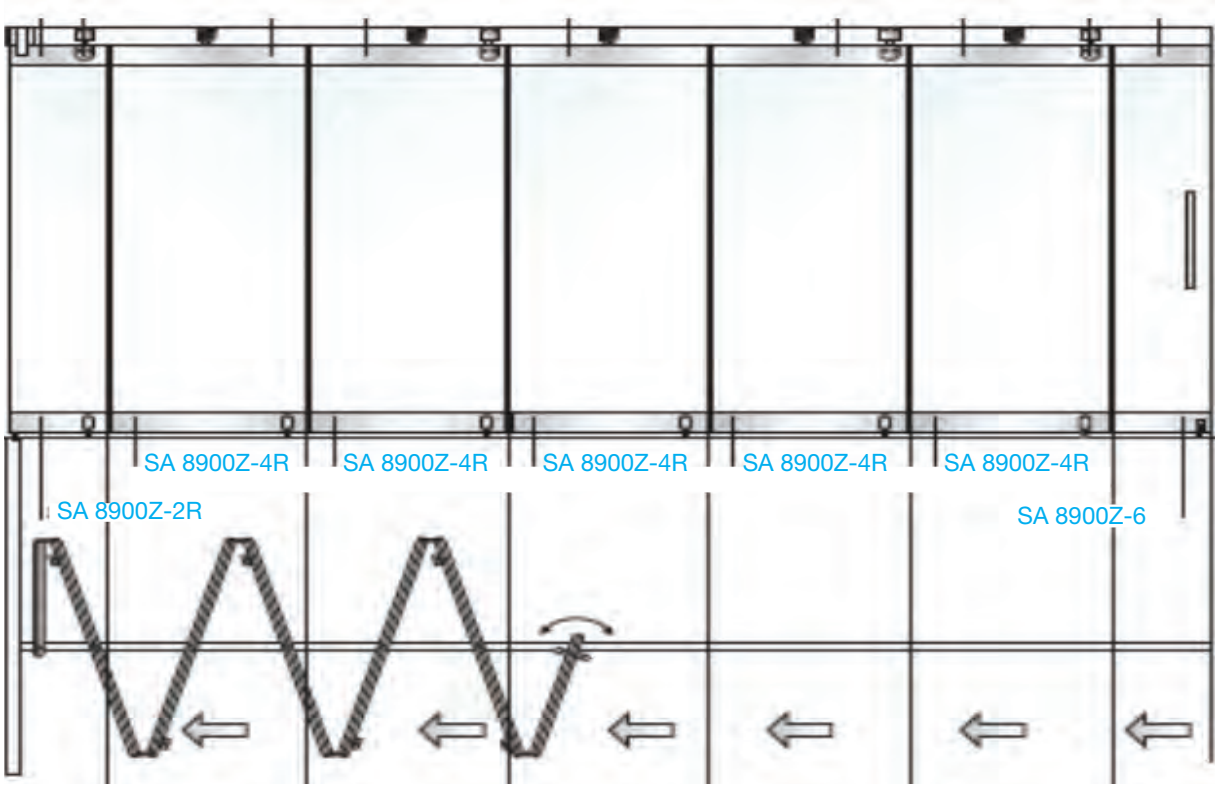


Simple and Easy

Folding glass partition panels are of streamlined design without any obstruction therein; in addition, the glass curtain walls are more transparent; both upper and lower door strips are connected into integrity, to ensure stability and smoothness; easy operation ensures only one person completes the whole partitioning process, satisfactory for the partitioning of various spaces and shops.

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8900Z Bifold Door System



The beginning folding door leaf is equipped with upper and lower fixed door leafs and bottom lock	Folding door leaf, folding door hanging pulley and bottom bolt	Folding door leaf, folding door hanging pulley and bottom bolt	Folding door leaf, folding door hanging pulley and bottom bolt	Folding door leaf, folding door hanging pulley and bottom bolt	Folding door leaf, folding door hanging pulley and bottom bolt	End folding door leaf equipped with upper and lower locks
3000mm	3000mm 1000mm 90kg	3000mm 1000mm 90kg	3000mm 1000mm 90kg	3000mm 1000mm 90kg	3000mm 1000mm 90kg	3000mm

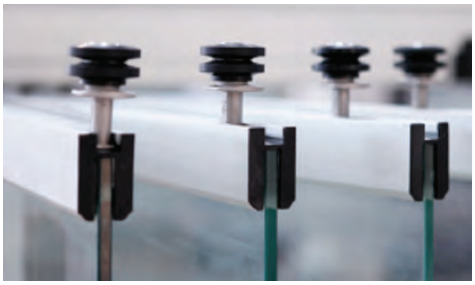


ALSO AVAILABLE USING PATCH FITTINGS - 8900A

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GHA8900H Stacking Door System

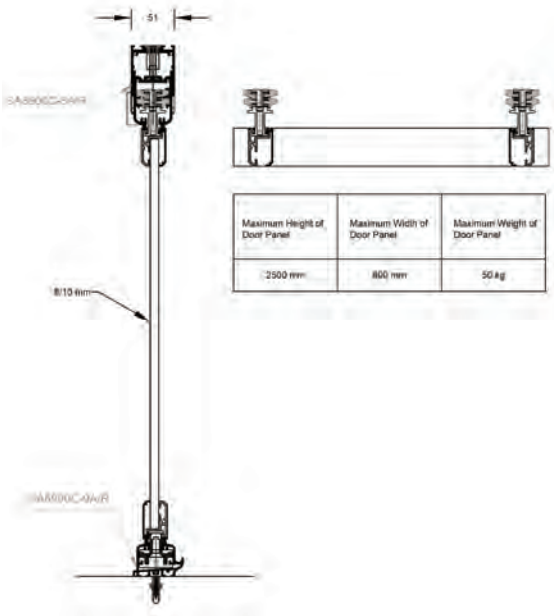






Natural anodise finish
No stacking bay required
Ideal for balconies or internal use
All seals supplied
Smooth easy operable doors

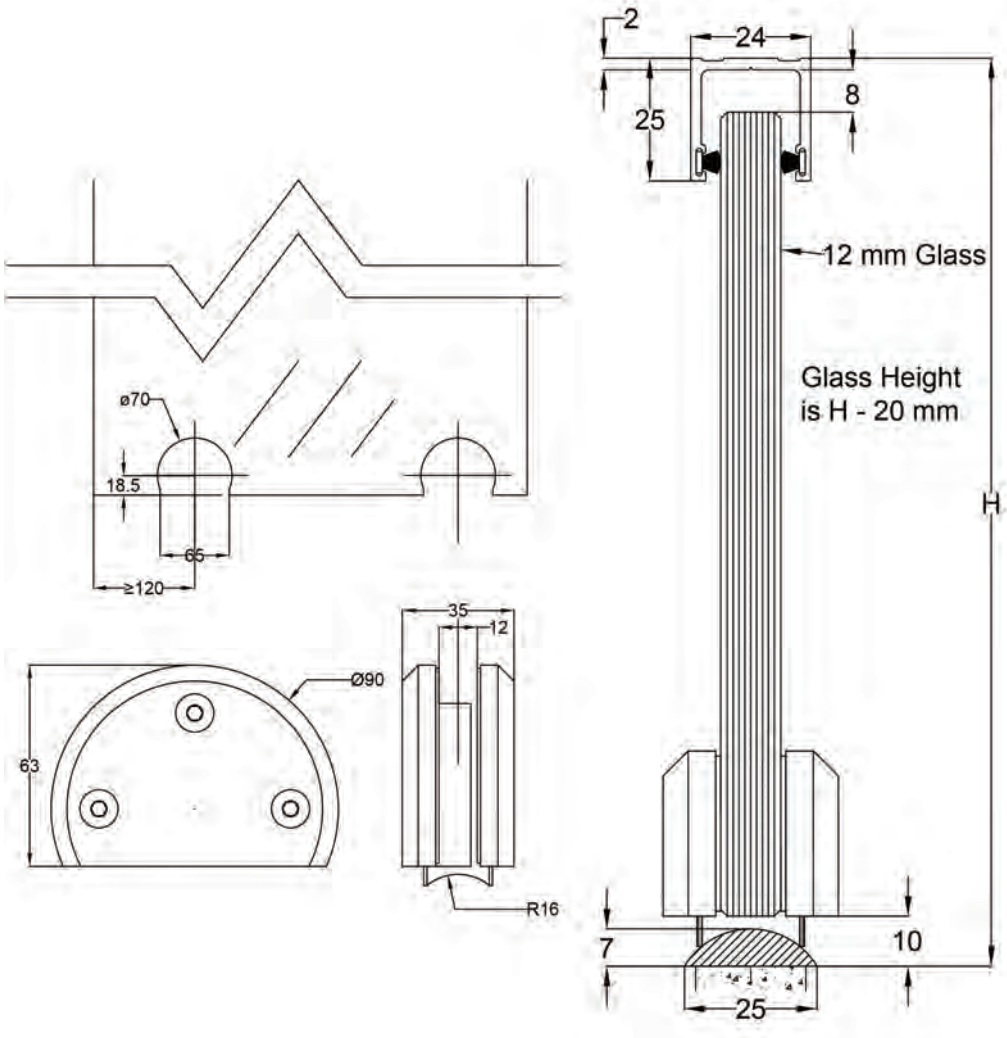




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8300H Bottom Sliding Door System





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40 Series Sliding Door



The 40 series range of sliding doors provides a comprehensive range of aluminium overhead tracks and roller types to suit most sliding doors including glass, wood and aluminium.

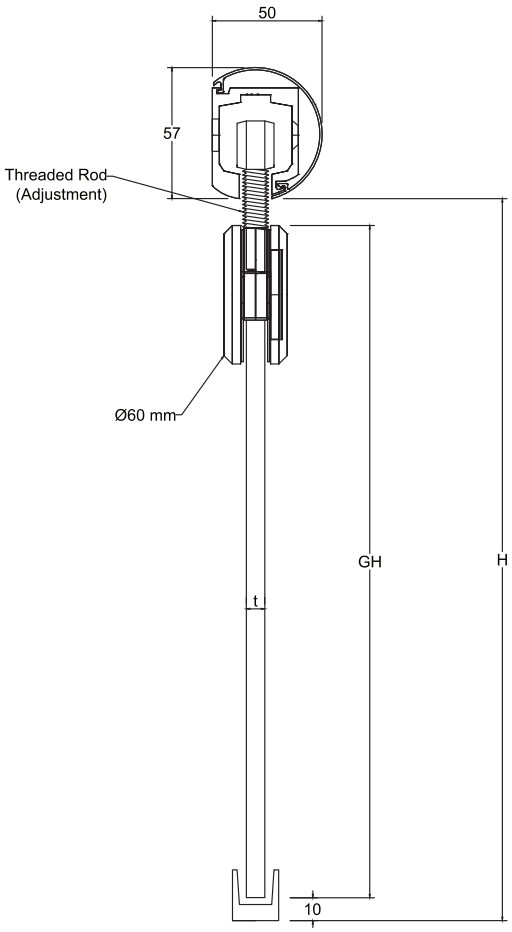
© GHA SOLUTIONS

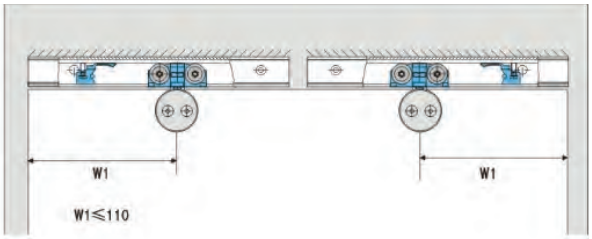
40-4 Sliding Track

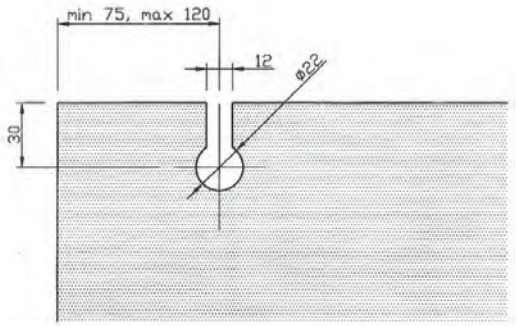


The 40-4 track is designed for surface mounting to a wall and features a curved snap on cover to conceal the mounting screw holes.

A small selection of roller types, locks and handles is shown here. For further options and information please contact the sales team.







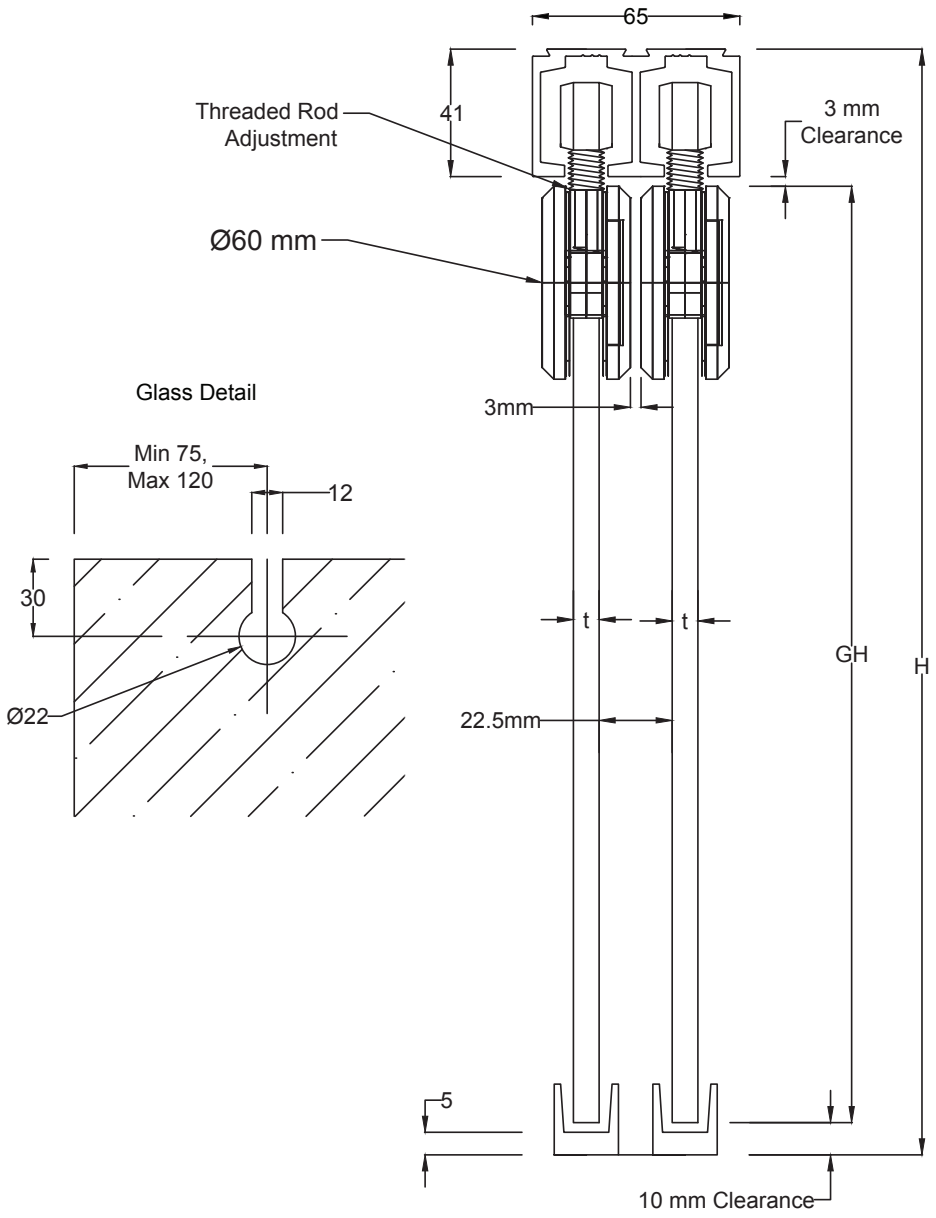
TECHNICAL DETAILS

- For installation with one or two panels fixed at ceiling;
- for 10 - 12 mm glass thickness
- Max. weight of door panels 90 kg
- Calculation of glass height
  GH = H - 55
  max. 3000 mm

GH = Glass height
H = Total height
t = Glass thickness

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GHA DT-102 Ceiling Fix Double Sliding Track



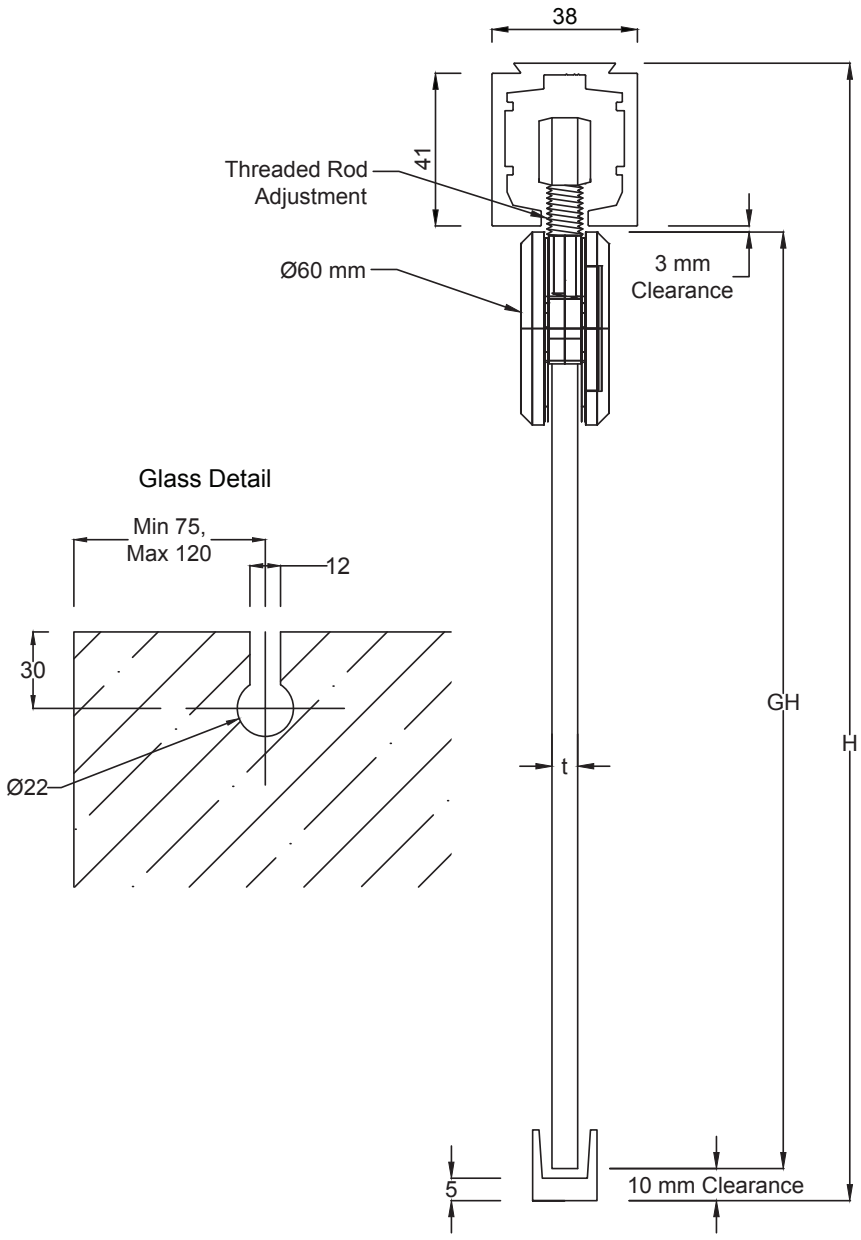
TECHNICAL DETAILS

- For installation with one or two panels fixed at ceiling; for 10 - 12 mm glass thickness
- Max. weight of door panels 90 kg
- Calculation of glass height
  GH = H - 55
  max. 3000 mm

GH = Glass height
H = Total height
t = Glass thickness

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GHA DT-101 Ceiling Fix Single Sliding Track



TECHNICAL DETAILS

- For installation with one or two panels fixed at ceiling;
  for 10 - 12 mm glass thickness
- Max. weight of door panels 90 kg
- Calculation of glass height
  GH = H - 55
  max. 3000 mm

GH = Glass height
H = Total height
t = Glass thickness

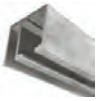
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Fittings

CODE		NOTES	GLASS CLEARANCES DT-101, 102, 103 Top of glass to u/s track NOMINAL GAP	DT-101, 102, 103 MAX/MIN GAP	DT-104 Top of glass to u/s track NOMINAL GAP	DT-104 MAX/MIN GAP	DETAILS
SA-102		End cap for DT-101					
SA-103		Internal stop for all tracks					
SA-104R		End cap for DT-104					
SA-104L		End cap for DT-104					
SA-105		Bracket for mounting track DT-101, 102, 103 to wall					
SA-106-CH		Countersunk bracket for mounting all tracks to fixed glass panel					
SA-106-RH		Round head bracket for mounting all tracks to fixed glass panel					
SA-114		Internal 90 degree connection bracket for all tracks					
SA-115		Internal bracket to mount track to wall					
SG-01		Floor guide adjustable for 8, 10, 12, 15mm thick glass	10mm	Min 6.5mm Max 16mm	10mm	Min 6.5mm Max 16mm	22mm High 31mm Wide 44mm Long

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Tracks

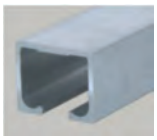
CODE		NOTES	DETAILS
DT-101		Over head mounted	41mm High 38mm Wide
DT-102		Over head mounted double track	41mm high 65mm wide Roller centrelines 31mm
DT-103		Over head mounted side glazing pocket	41mm high 50mm wide Glazing pocket 13.9mm wide
DT-104		Wall mounted pre-drilled holes clip on cover	58mm high 48mm wide

Handles / Finger Pulls

CODE		NOTES	DETAILS
SH-16		Solid cast handle	73mm High 25mm Wide 33 proud from glass
SH-17		Solid cast handle	165mm High 24mm Wide 17 proud from glass
SH-19SQ		Cast square finger pull handle	50mm High 50mm Wide 12 proud from glass
SH-101		Cast finger pull handle	58mm Diameter 9 proud from glass

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Series 220 Sliding Track System

CODE		DOOR WEIGHT
SW-222		300kg
SW-223		400kg
DT-221		Track Height 49.5mm Width 57.71mm
A01 Glazing Clamp		Patch Height 115mm Width 70mm

Sliding Door Locks

CODE	
LS-13	
LS-13k	
LS-14k	
LS-15k	

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Sliding Door Locks (Cont'd)

CODE	
LS-20	
LS-21	
LS-56	
LS-56k	
LS-57	
LS-57k	
LS-58	
LS-58k	

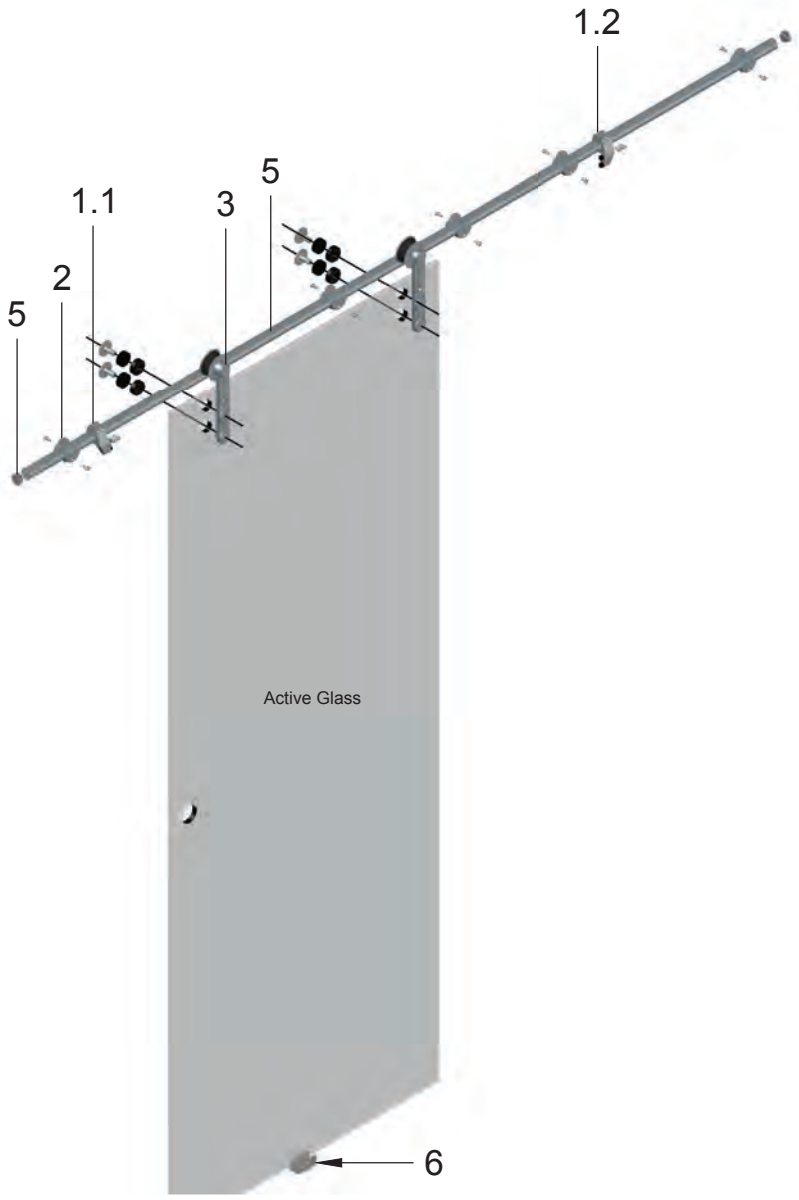
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Roller and clamping sets

CODE		NOTES	GLASS CLEARANCES DT-101, 102, 103 Top of glass to u/s track NOMINAL GAP	DT-101, 102, 103 MAX/MIN GAP	DT-104 Top of glass to u/s track NOMINAL GAP	DT-104 MAX/MIN GAP	DETAILS
SR-100101-SS			5mm	Min 1mm Max 16mm *Can use longer threaded rod*	5mm	Min 1mm Max 10mm *Can use longer threaded rod*	90kg / Door Leaf (2 roller sets)
SR-101102			TBC	No adjustment	TBC	No adjustment	90kg / Door Leaf (2 roller sets)
SR-100103		Mounting of aluminium or timber doors / panels	17mm	Min 15mm Max 19mm *Can use longer threaded rod*	*Standard bolt not suited can use longer hex bolt*	*Standard bolt not suited can use longer hex bolt*	90kg / Door Leaf (2 roller sets)
SR-102104			5mm	Min 1mm Max 16mm *Can use longer threaded rod*	5mm	Min 1mm Max 10mm *Can use longer threaded rod*	90kg / Door Leaf (2 roller sets)
SR-102105			40mm	Min 34mm Max 53mm *Can use longer threaded rod*	40mm	Min 34mm Max 45mm *Can use longer threaded rod*	90kg / Door Leaf (2 roller sets)
SR-100114			27mm	Min 22mm Max 32mm *Can use longer threaded rod*	24mm	Min 24mm Max 24mm *Can use longer threaded rod*	90kg / Door Leaf (2 roller sets)

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GHA-L10 Sliding Door Wall and Glass Mounts



KIT CONTENTS

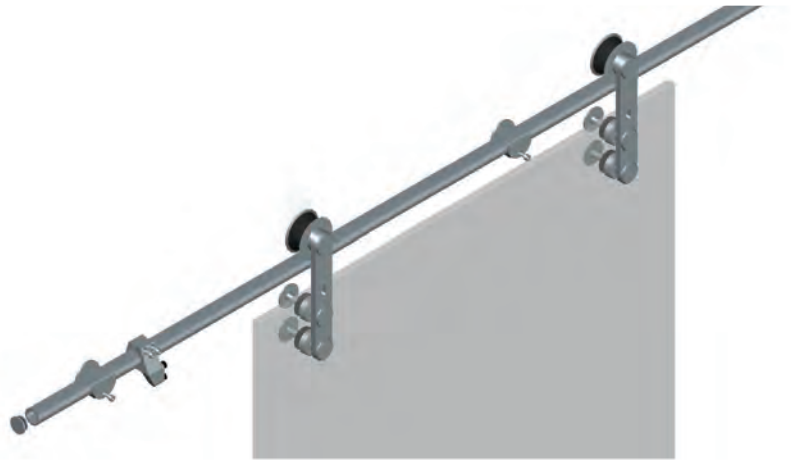
- 1.1 - SR913L - 1 piece
- 1.2 - SR913R - 1 piece
- 2 - TC101-25 - 5 pieces
- 3 - SD111 - 2 sets
- 4 - ST101 - 1 piece

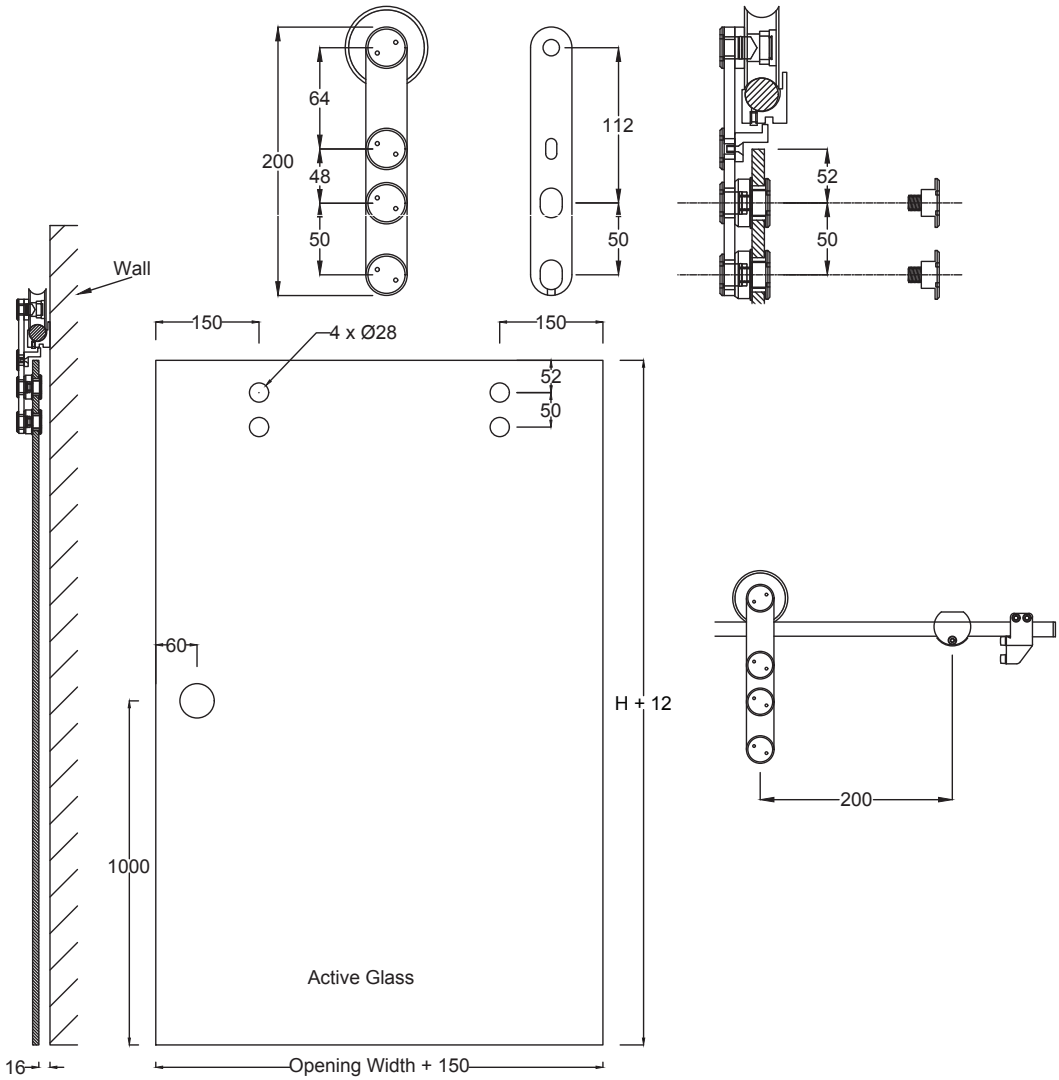
KIT CONTENTS

- 5 - END CAPS - 2 pieces
- 6 - FG201 - 1 piece

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L10 Sliding Glass Door System





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L10 Sliding Glass Door System





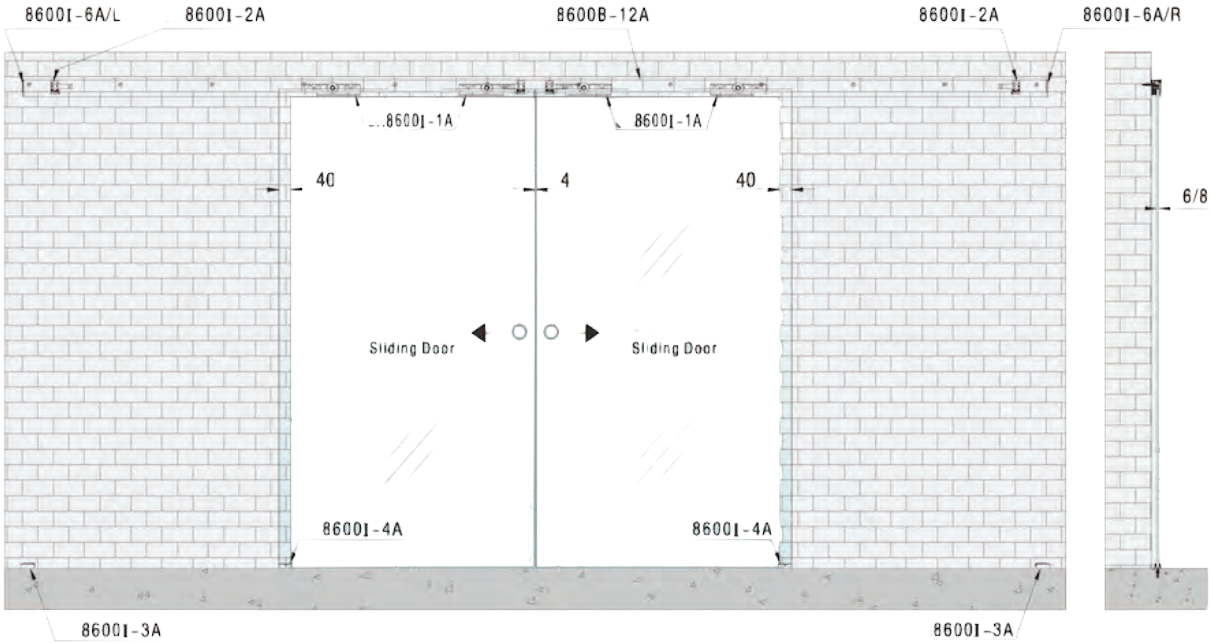
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GHA8600I-A



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GHA8600I-A Installation Instructions - Single Door Structure



GHA8600I-A Installation



GHA8600I-1A (4PCS)



GHA8600I-2A (4PCS)



GHA8600I-3A (2PCS)



GHA8600I-4A (2PCS)



GHA8600I-12A (1PC)



GHA8600I-6A/L (1PC)



GHA8600I-6A/R (1PC)

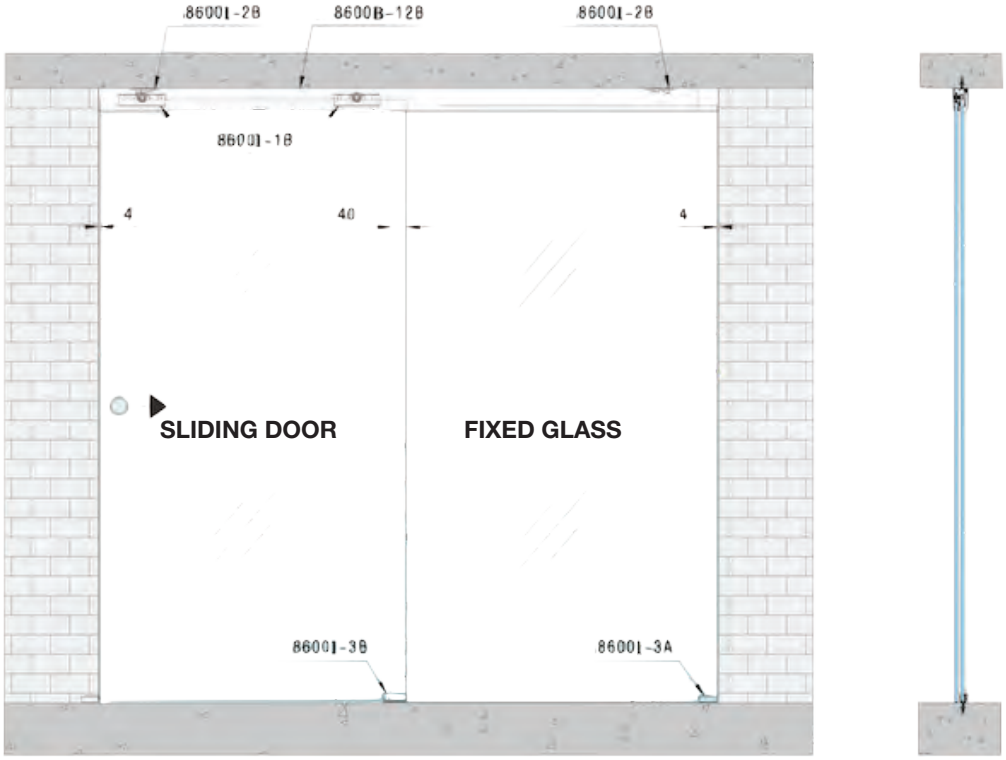
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GHA8699I-B



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GHA8600I-B Installation Instructions - Single Door Structure



GHA8600I-B Installation



GHA8600I-1B (2PCS)



GHA8600I-2B (2PCS)



GHA8600I-3A (1PC)



GHA8600I-3B (1PC)



GHA8600B-12B (1PC)

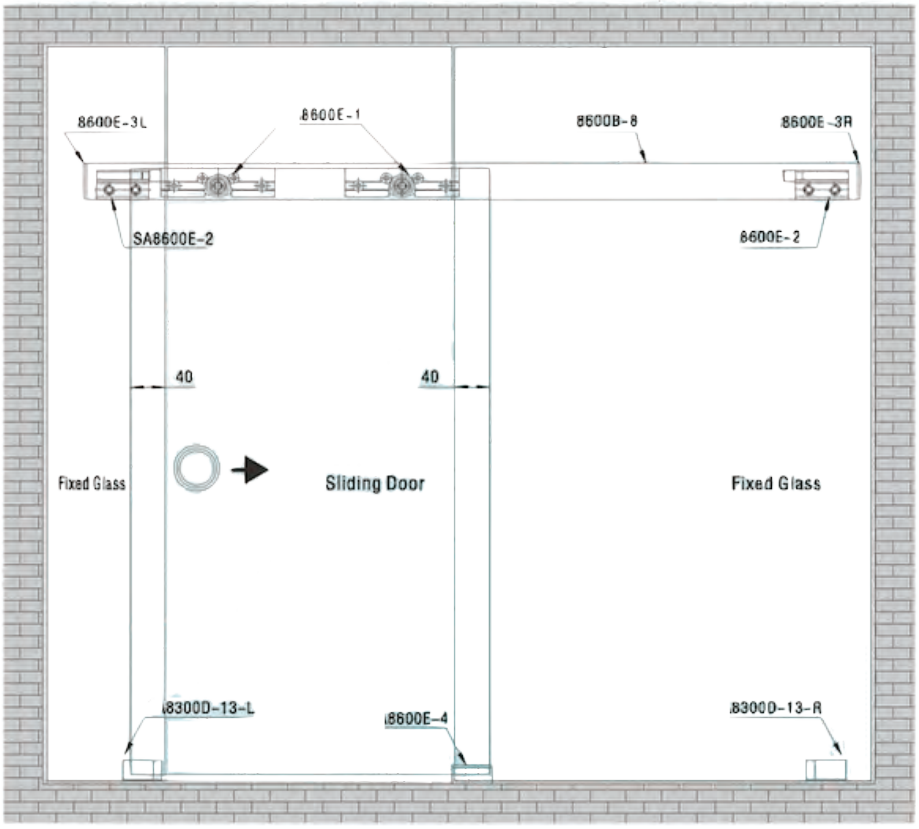
© GHA SOLUTIONS

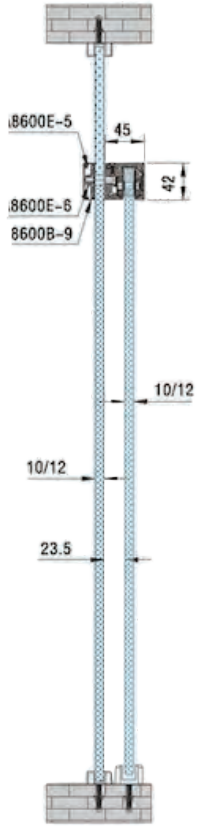
GHA8600E-1



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GHA8600E-1 Installation Instructions - Single Door Structure





GHA8600E-1 Installation



GHA8600E-1 (2PCS)



GHA8600E-2 (2PCS)



GHA8600E-3L (1PC)



GHA8600E-3R (1PC)



GHA8600E-4 (1PC)



GHA8600E-5 (2PCS)



GHA8600E-6 (7PCS)



GHA8600B-8 (1PCS)



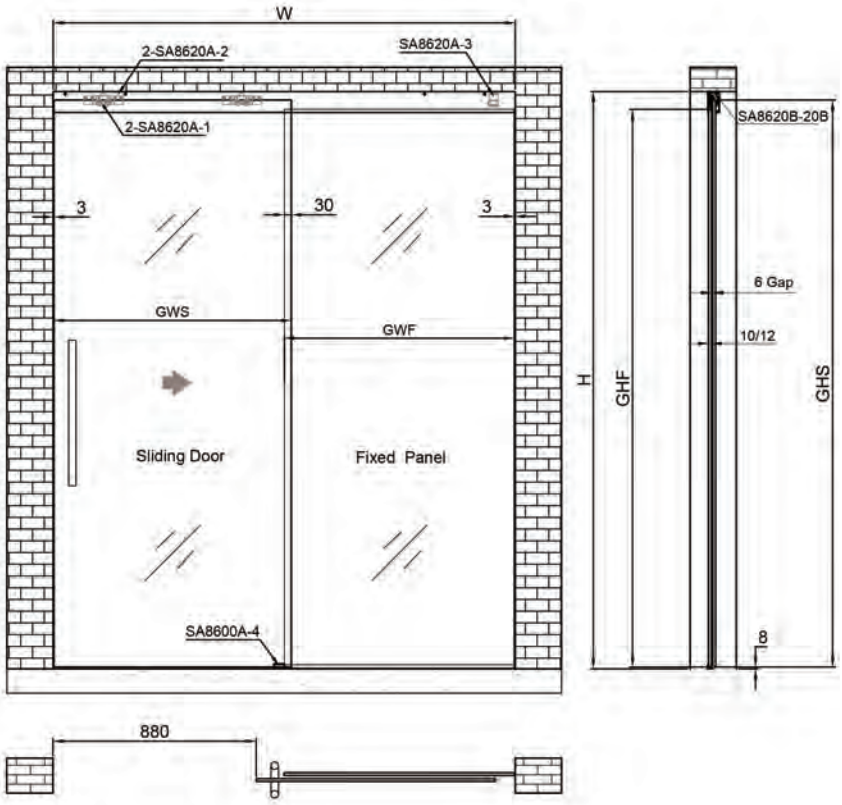
GHA8600B-9 (1PC)

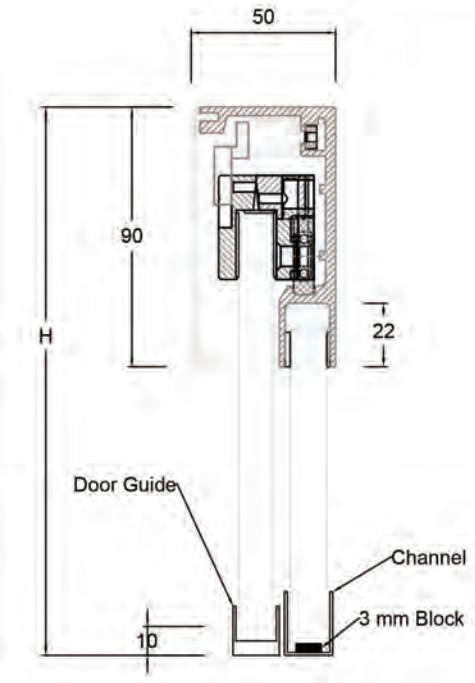


GHA8300D-12L/R (1PC)

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GHA8620A Single Door and Fixed Panel





TECHNICAL DETAILS

- For installation with one or two panels fixed at ceiling; for 10 - 12 mm glass thickness
- Max. weight of door panels 90 kg
- Calculation of glass width
  GWF = (Half of W) - 4
  GWS = (Half of W) + 28
- Calculation of glass height
  GHF = H - 85
  GHS = H - 43
  max. 3000 mm

GWF = Glass width (fixed panel)
GWS = Glass width (sliding panel)
W = Length of track
GHF = Glass height (fixed panel)
GHS = Glass height (sliding panel)
H = Total height
t = Glass thickness

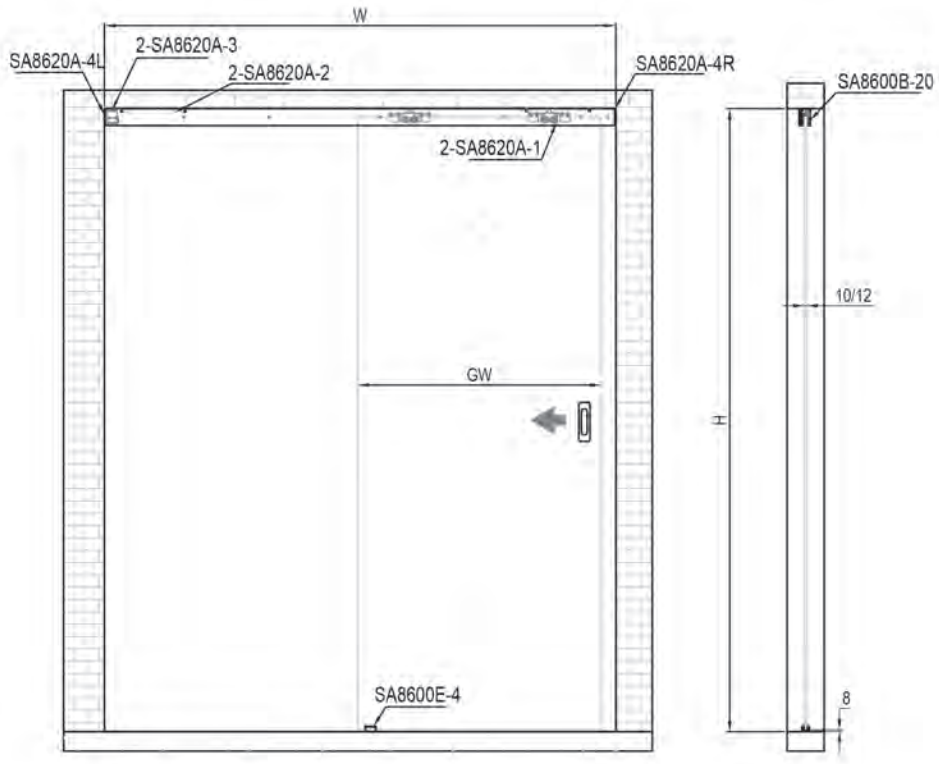
© GHA SOLUTIONS

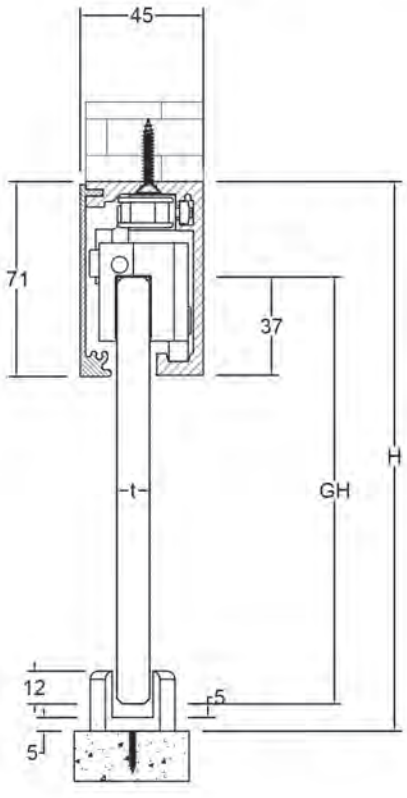
GHA8600I-A



© GHA SOLUTIONS

GHA8620A Head Fix Soft Close System





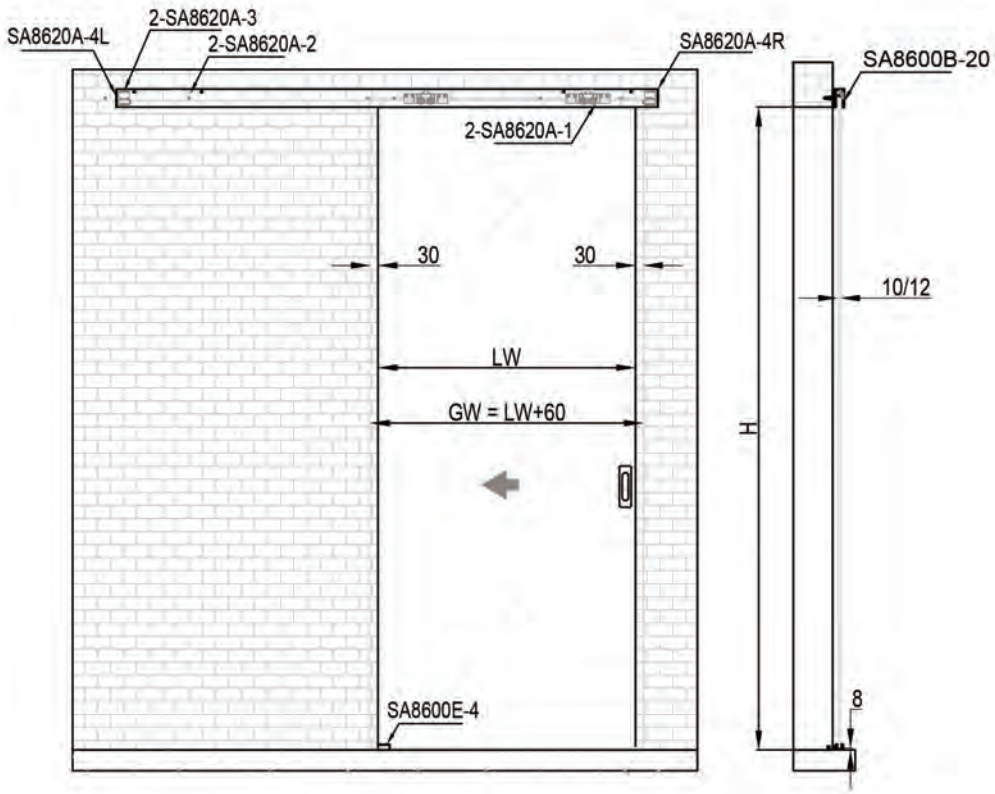
TECHNICAL DETAILS

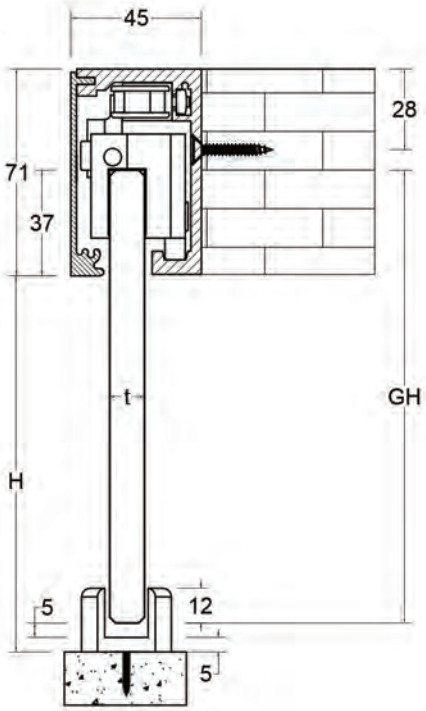
- For installation with one or two panels fixed at ceiling; for 10 - 12 mm glass thickness
- Max. weight of door panels 90 kg
- Calculation of glass width
  GW = Half of W
- Calculation of glass height
  GH = H - 44
  max. 3000 mm

GW = Glass width
W = Length of track
GH = Glass height
H = Total height
t = Glass thickness

© GHA SOLUTIONS

GHA8620A Face Fix Soft Close System





TECHNICAL DETAILS

- For installation with one panel fixed at wall face; for 10 - 12 mm glass thickness
- Max. weight of door panels 90 kg
- Calculation of glass width
  GW = LW + 60
- Calculation of glass height
  GH = H + 28
  max. 3000 mm

GW = Glass width
LW = Width of opening
GH = Glass height
H = Total height
t = Glass thickness

© GHA SOLUTIONS

GHA8600I-A Installation Instructions - Single Door Structure



GHA8600I-1A (2PCS)



GHA8600I-2A (2PCS)



GHA8600I-3A (2PCS)



GHA8600I-4A (1PC)



GHA8600B-12A (1PC)



GHA8600I-6A/R (1PC)



GHA8600I-6A/L (1PC)

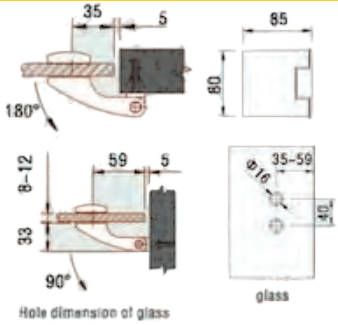
© GHA SOLUTIONS

GHA8700



GHA8700A-4A Frame Mounted Glass Door Hinge



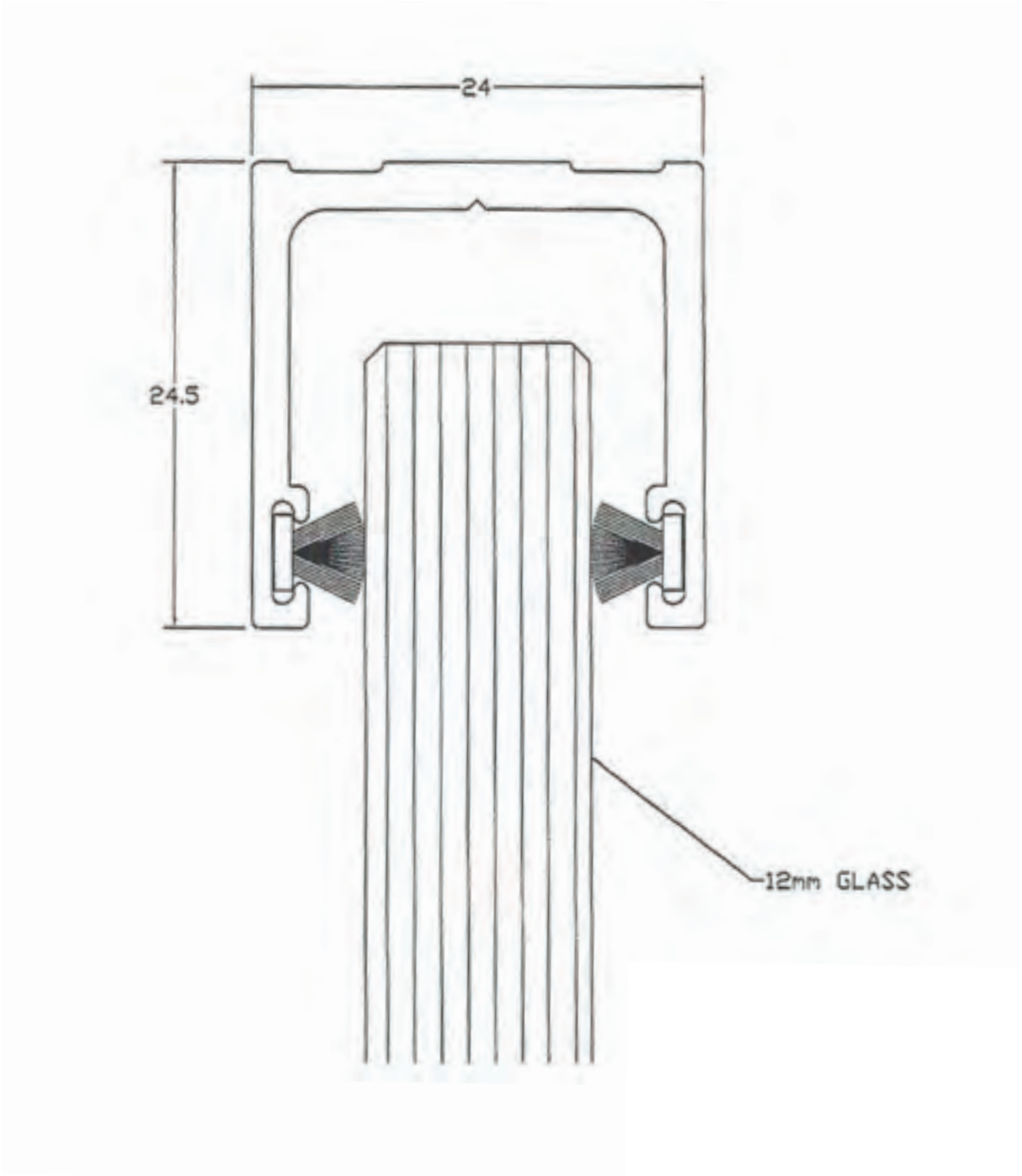


Hole dimension of glass



© GHA SOLUTIONS

GHATTM Top Track with Mohair



© GHA SOLUTIONS

SpiderFtg – Frameless Glass Fittings



GHA provides a full range of cast Spider Fittings 316 marine grade stainless steel spider fittings used in frameless glass point supported glass systems

SpiderFtg provides a flexible connection between the structural glass and the supporting system and the Spider Fittings can be assembled with a range of glass connectors.

SPIDERFTG RANGE

Heavy Duty:	445 series – 4 way or 2 way
	446 series – 4 way or 2 way
	448 series – 2 way
Light Duty:	443 series – 4 way or 2 way
	444 series – 4 way or 2 way

GLASS CONNECTIONS

Fixed:	M8 CSK
	M8 CSK Disc
	M10 CSK
	M10 CSK Disc
Swivel:	60/22-22n to suit up to 22mm total glass thickness
	60/22-42n to suit up to 42mm total glass thickness

MATERIAL AND FINISH

All fittings are 316 marine grade stainless steel and avialable in satin and polished finish.

INSTALLATION

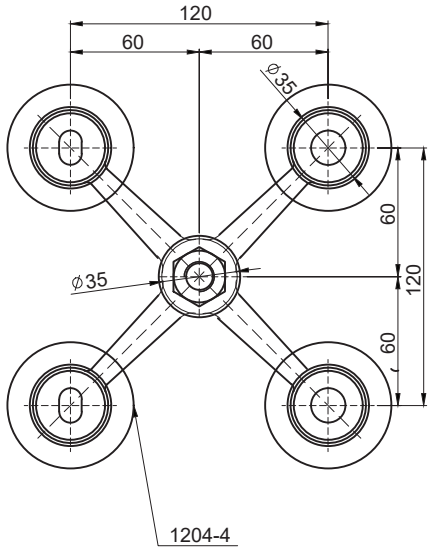
The SpiderFtg range can be used with Toughened Safety Glass or Toughened Laminated Safety Glass

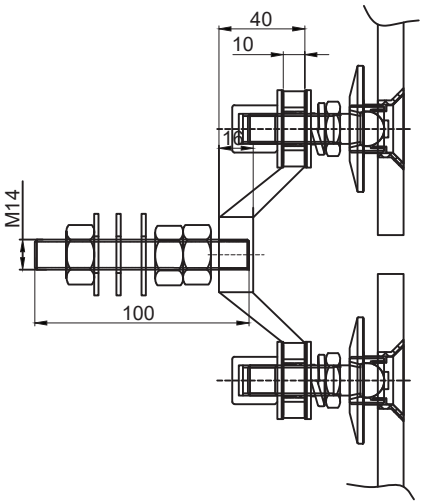
BENEFITS

- Suitable for 8mm to 25mm TSG
- Suitable for 10mm to 20mm TLSG
- Can be used with point fixed IGUs, up to maximum 42mm thick
- All drawings available as CAD files

© GHA SOLUTIONS

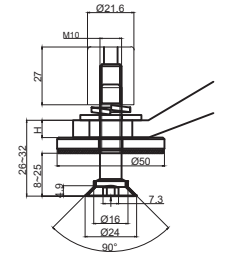
443.4 Spider Fitting



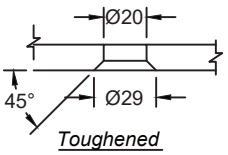


Material: 316 Grade Stainless Steel
Finish: Satin No. 4

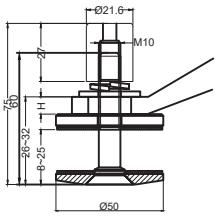
Glass Fasteners Options & Glass hole details



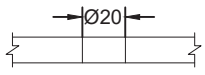
M10 CSK Screw
10T Min.



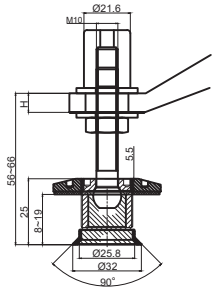
Toughened

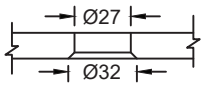


M10 CSK Disc
10T Min.

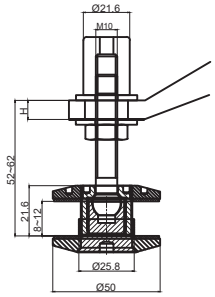


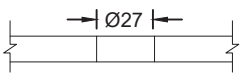
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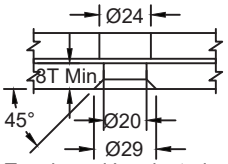


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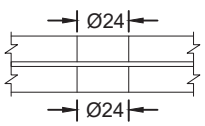




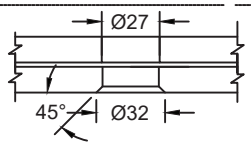
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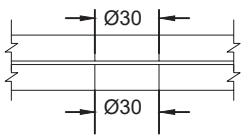
Toughened Laminated



Toughened Laminated



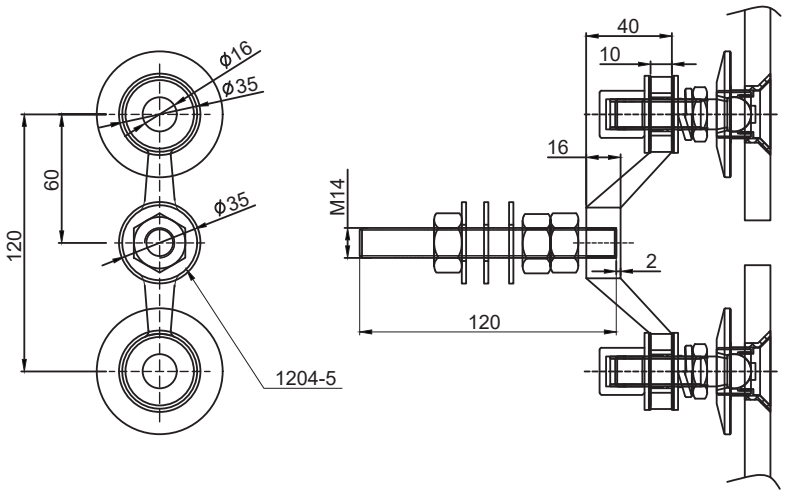
Toughened Laminated



Toughened Laminated

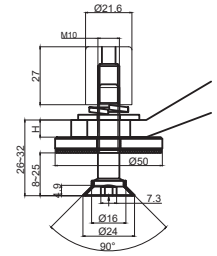
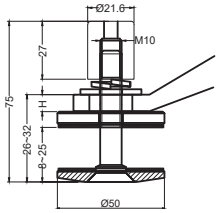
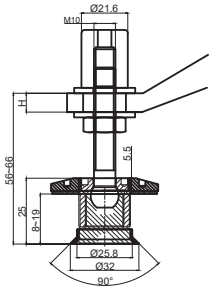
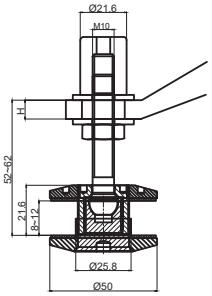
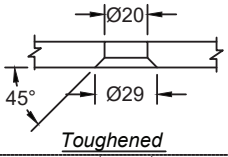
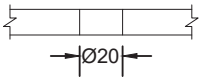
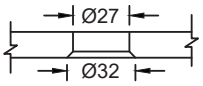
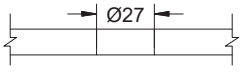
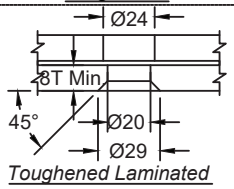
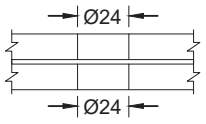
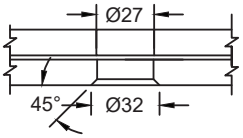
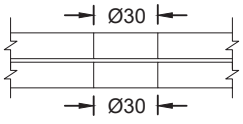
© GHA SOLUTIONS

443.2 Spider Fitting



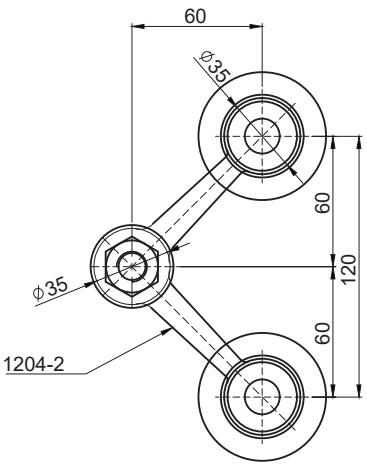
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

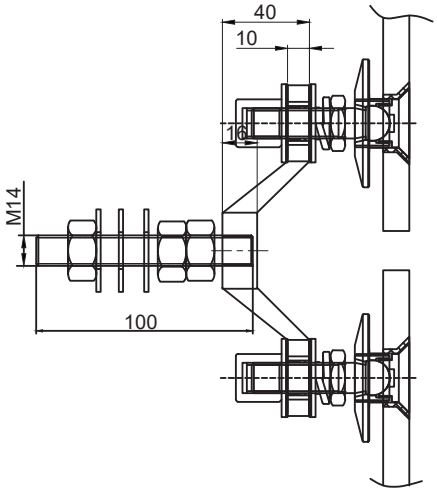
Glass Fasteners Options & Glass hole details

2996-5A	2997-5A	2991-5A	2993-5A
			
M10 CSK Screw 10T Min.	M10 CSK Disc 10T Min.		
			
Toughened	*Toughened*	*Toughened*	*Toughened*
			
Toughened Laminated	*Toughened Laminated*	*Toughened Laminated*	*Toughened Laminated*

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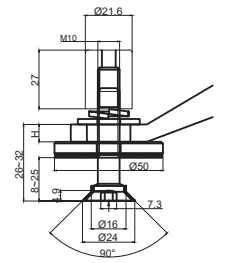
443.4.2 Spider Fitting



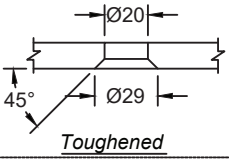


Material: 316 Grade Stainless Steel
Finish: Satin No. 4

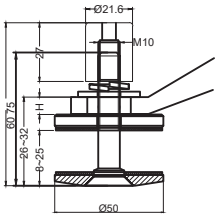
Glass Fasteners Options & Glass hole details



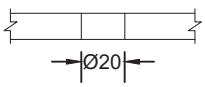
M10 CSK Screw
10T Min.



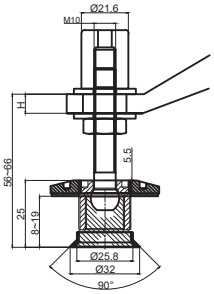
Toughened

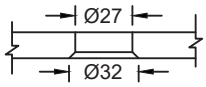


M10 CSK Disc
10T Min.

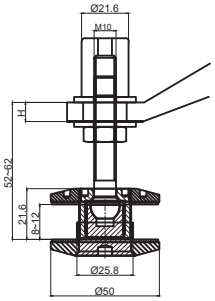


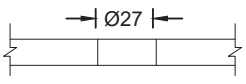
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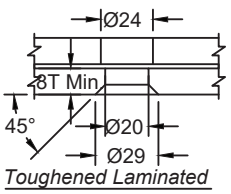


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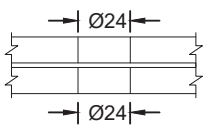




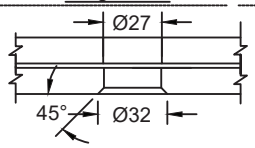
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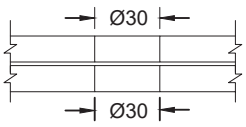
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Toughened Laminated



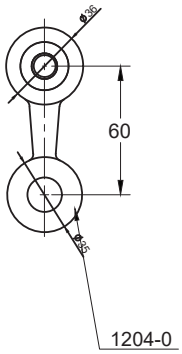
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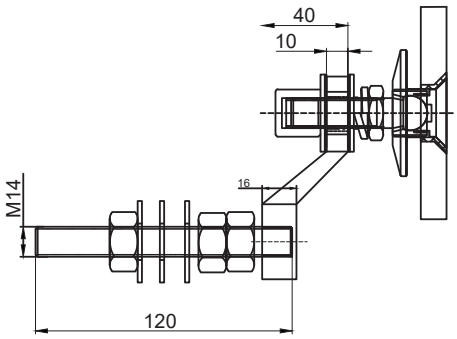


Toughened Laminated

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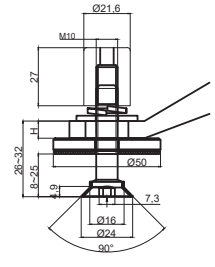
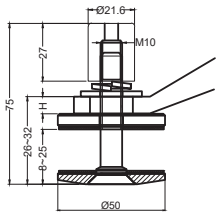
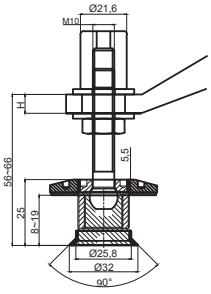
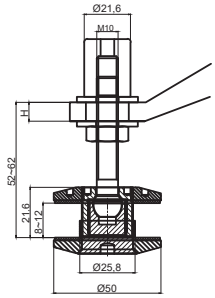
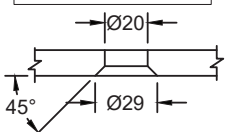
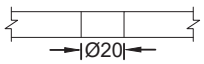
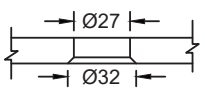
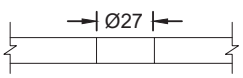
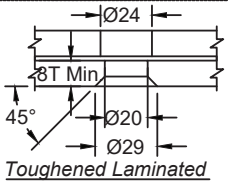
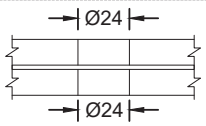
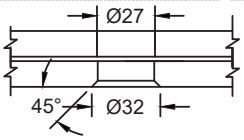
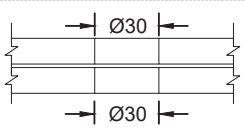
443.2.1 Spider Fitting





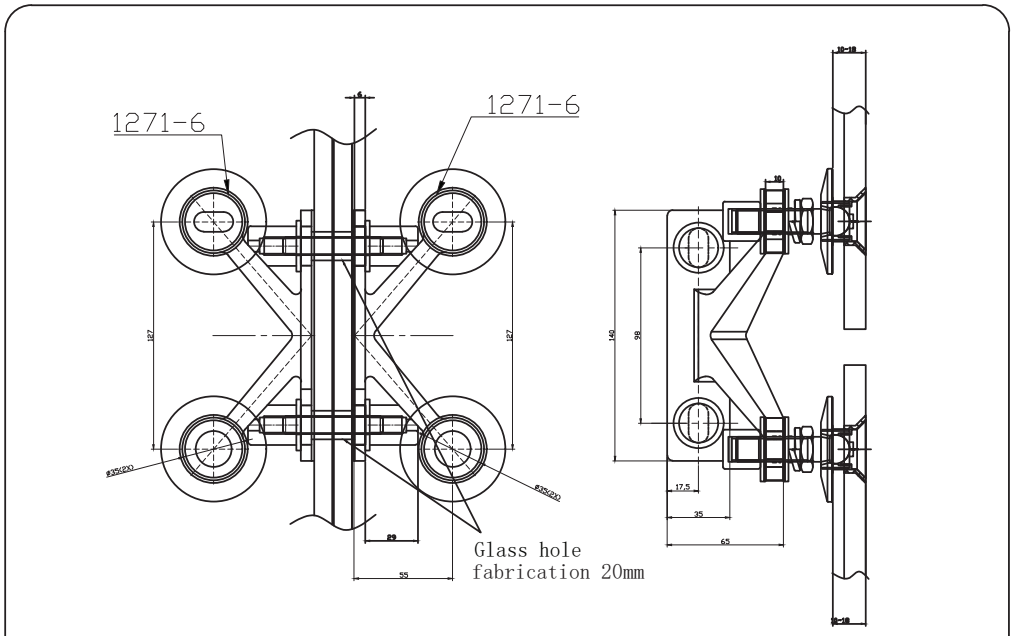
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details

2996-5A	2997-5A	2991-5A	2993-5A
			
M10 CSK Screw 10T Min.	M10 CSK Disc 10T Min.		
			
Toughened	*Toughened*	*Toughened*	*Toughened*
			
Toughened Laminated	*Toughened Laminated*	*Toughened Laminated*	*Toughened Laminated*

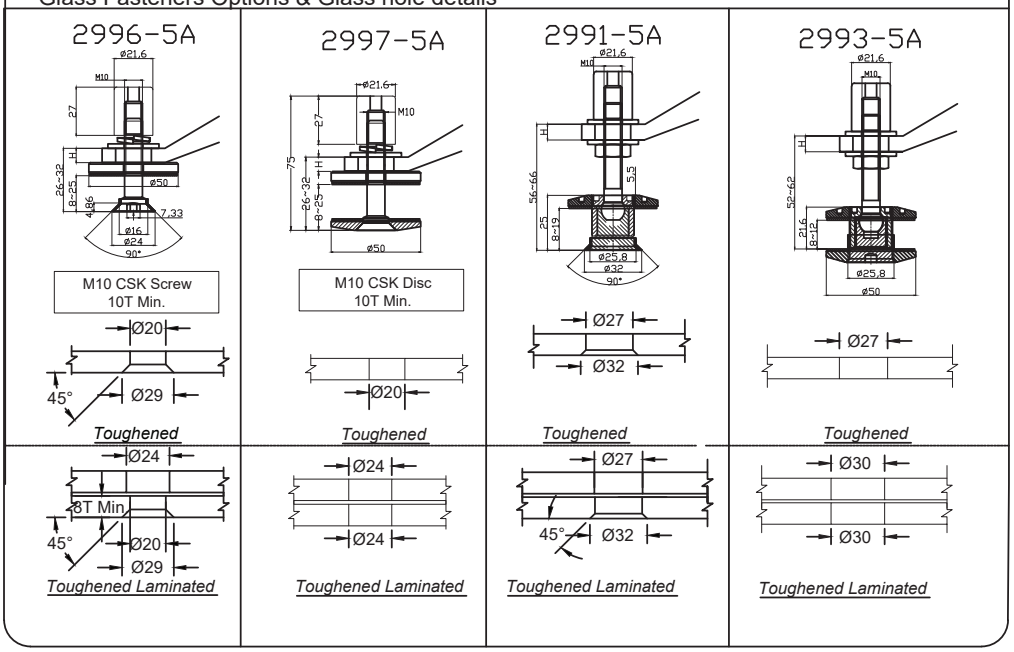
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444.4 Spider Fitting



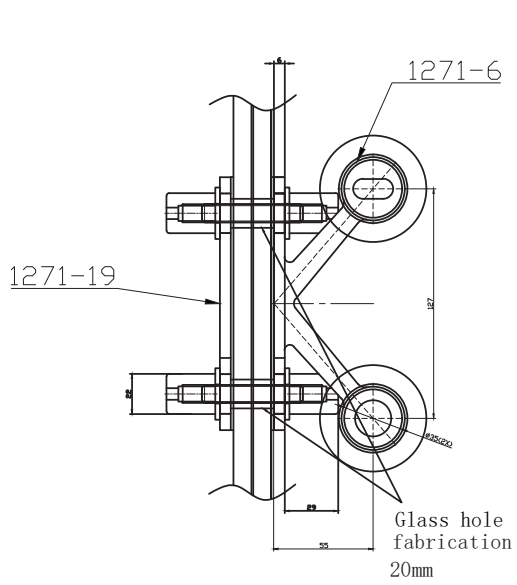
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



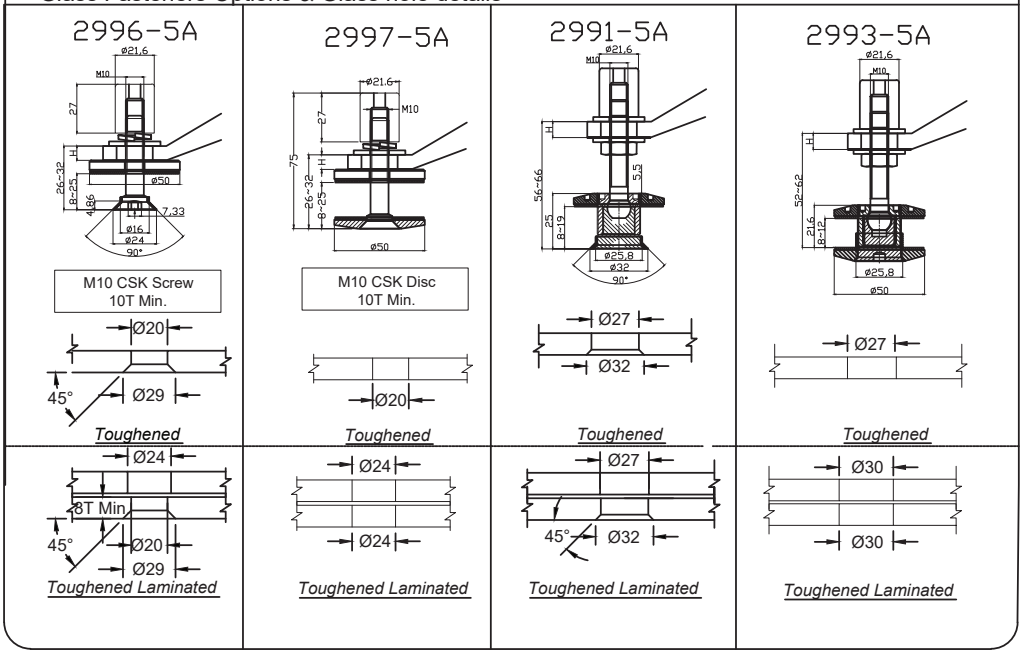
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444.4.2 Spider Fitting



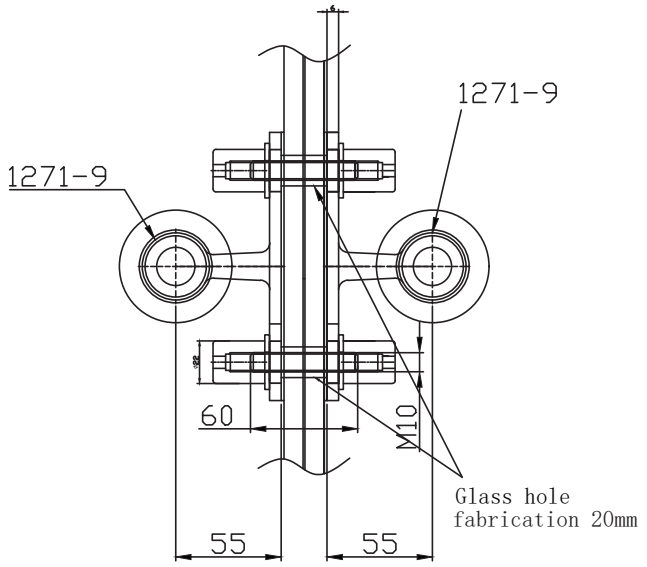
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

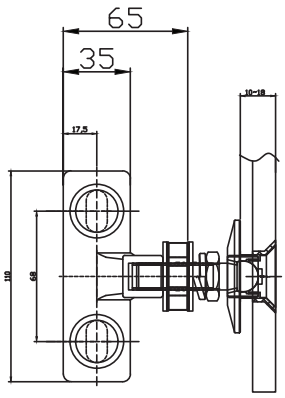
Glass Fasteners Options & Glass hole details



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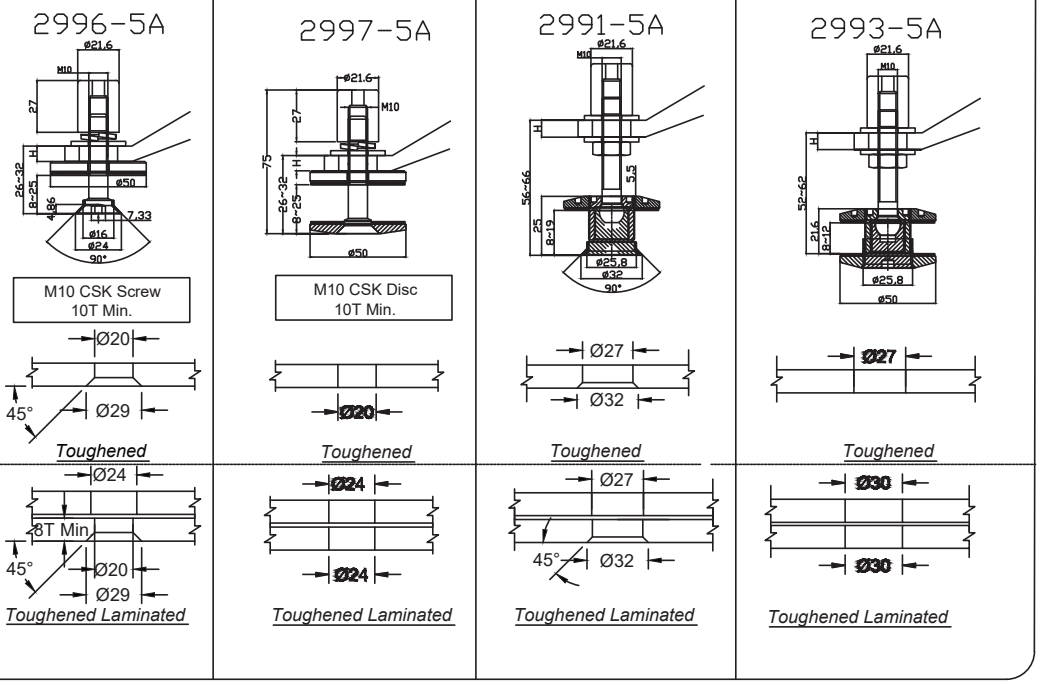
444.2 Spider Fitting





Material: 316 Grade Stainless Steel Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



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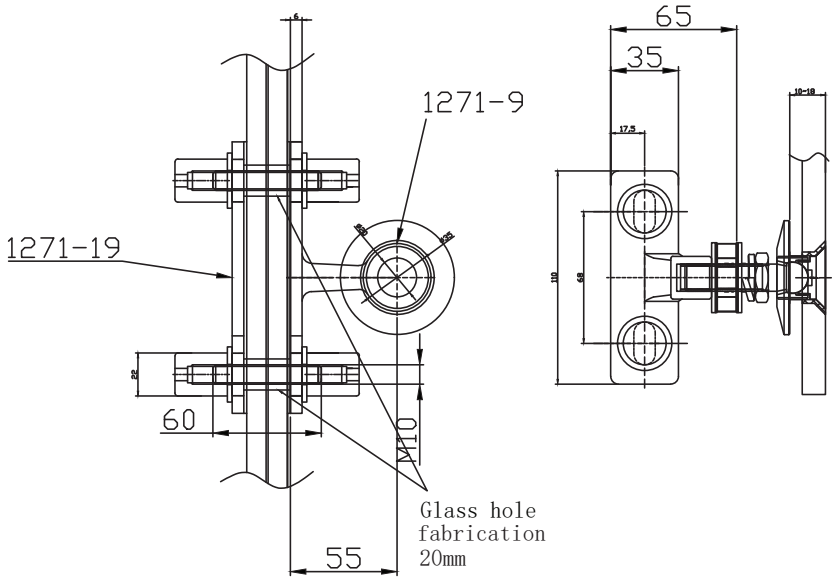
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Five Dock NSW 2046
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Email: sales@ghasolutions.com.au

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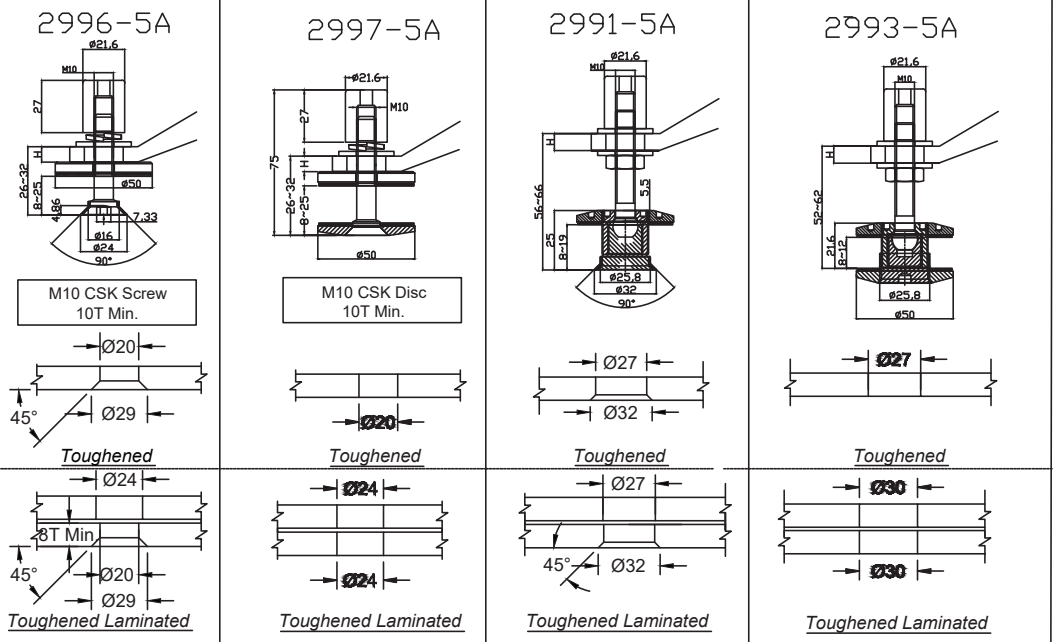
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444.2.1 Spider Fitting



Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



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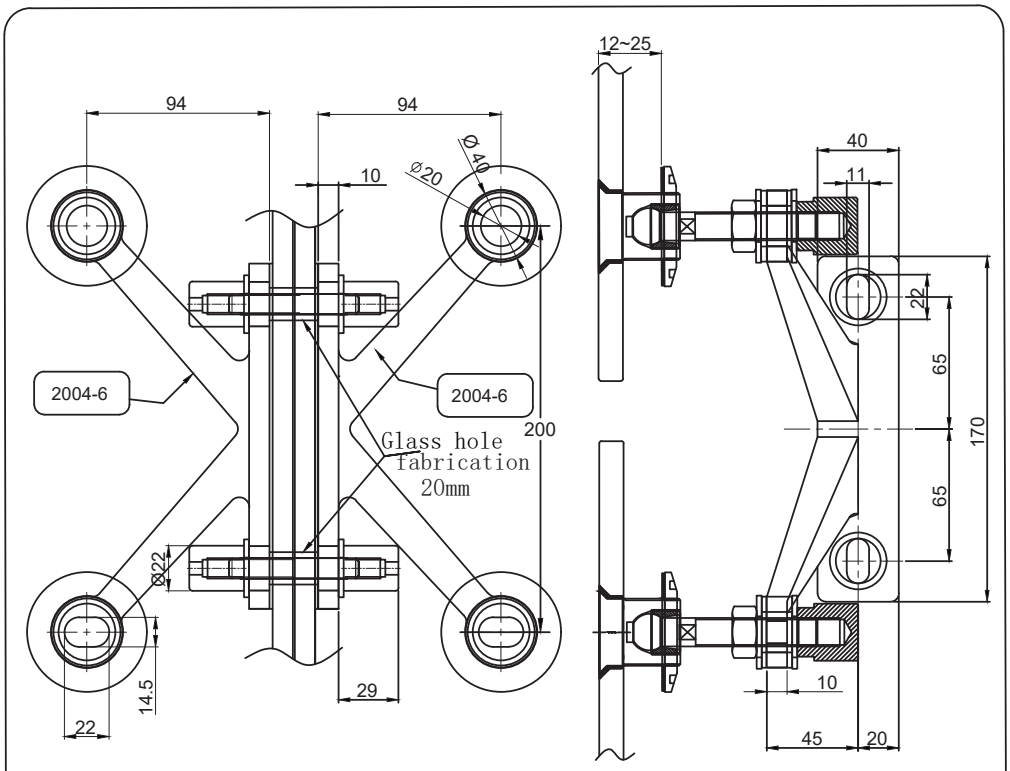
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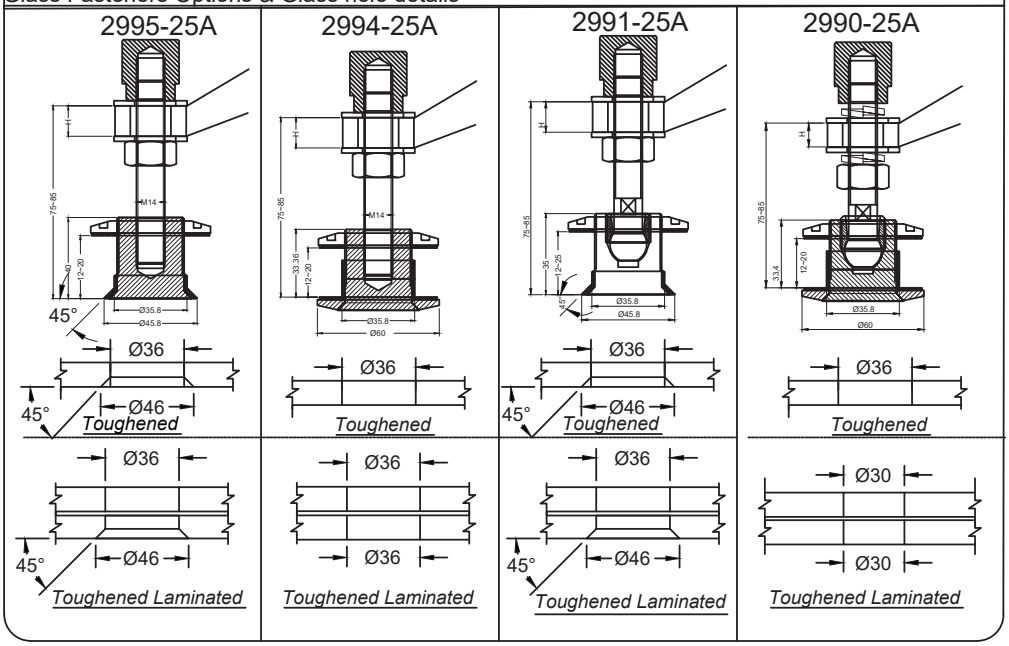
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445.4M Spider Fitting



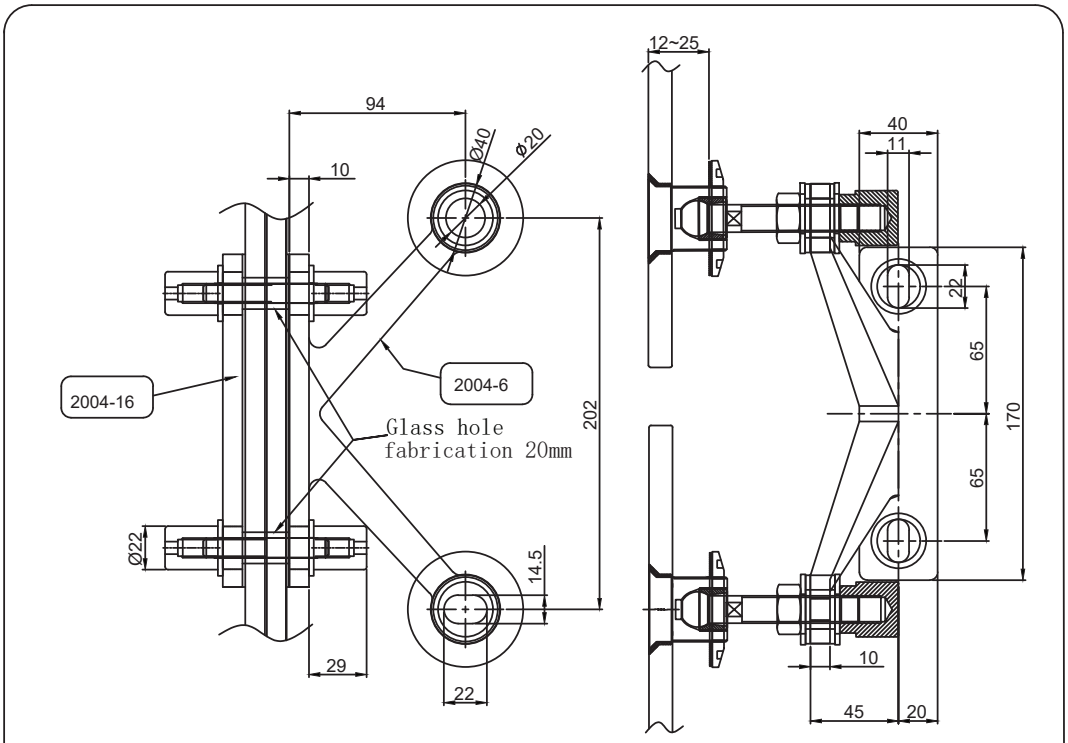
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details

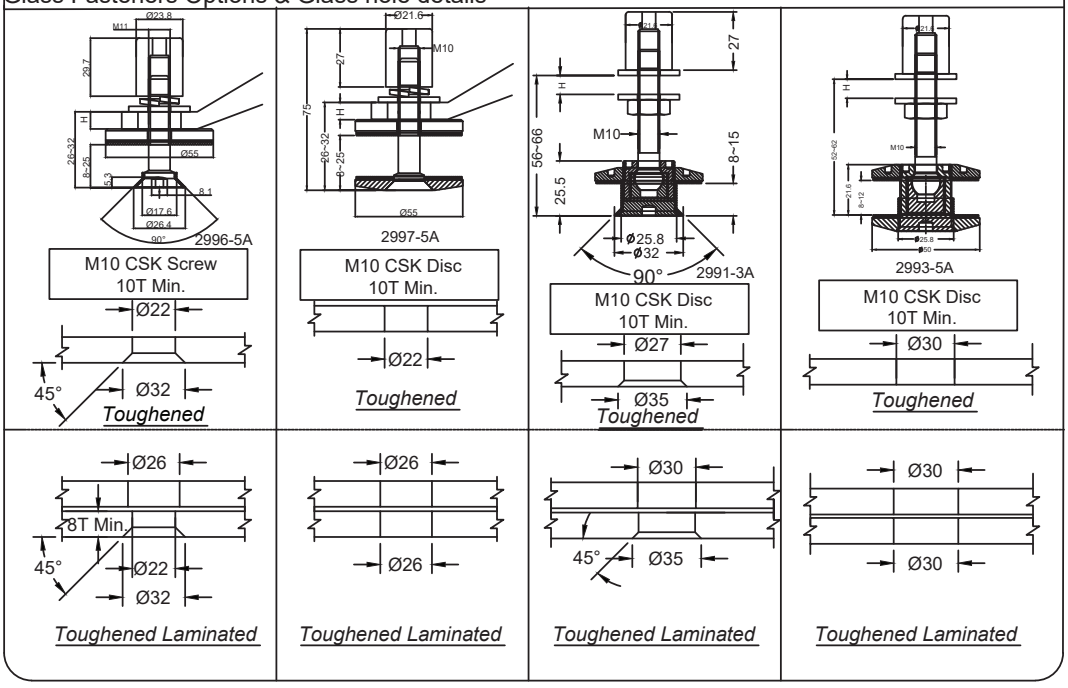


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445.4M.2 Spider Fitting

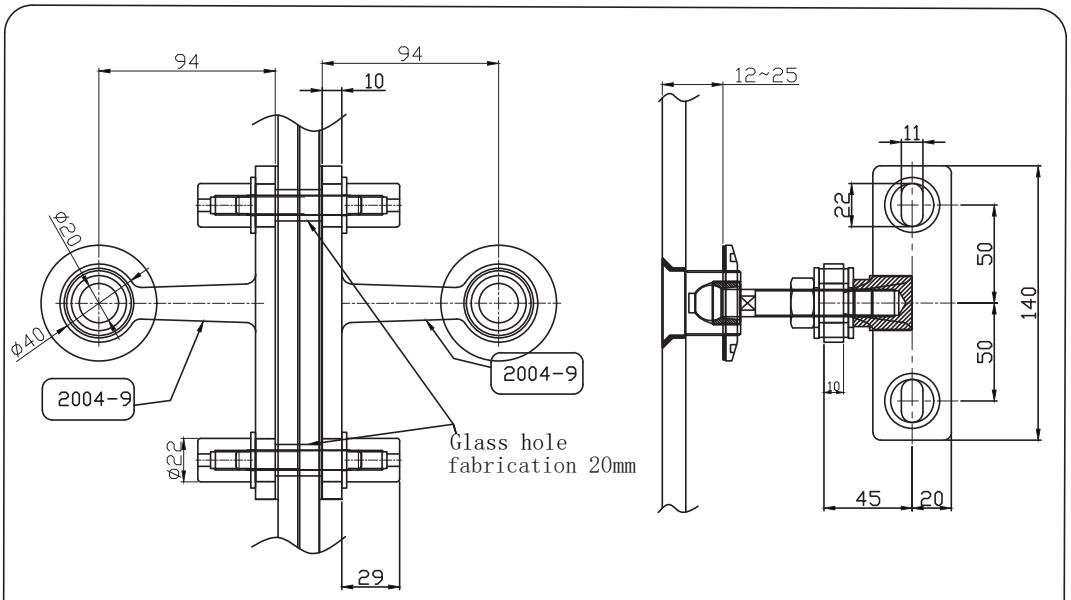


Glass Fasteners Options & Glass hole details

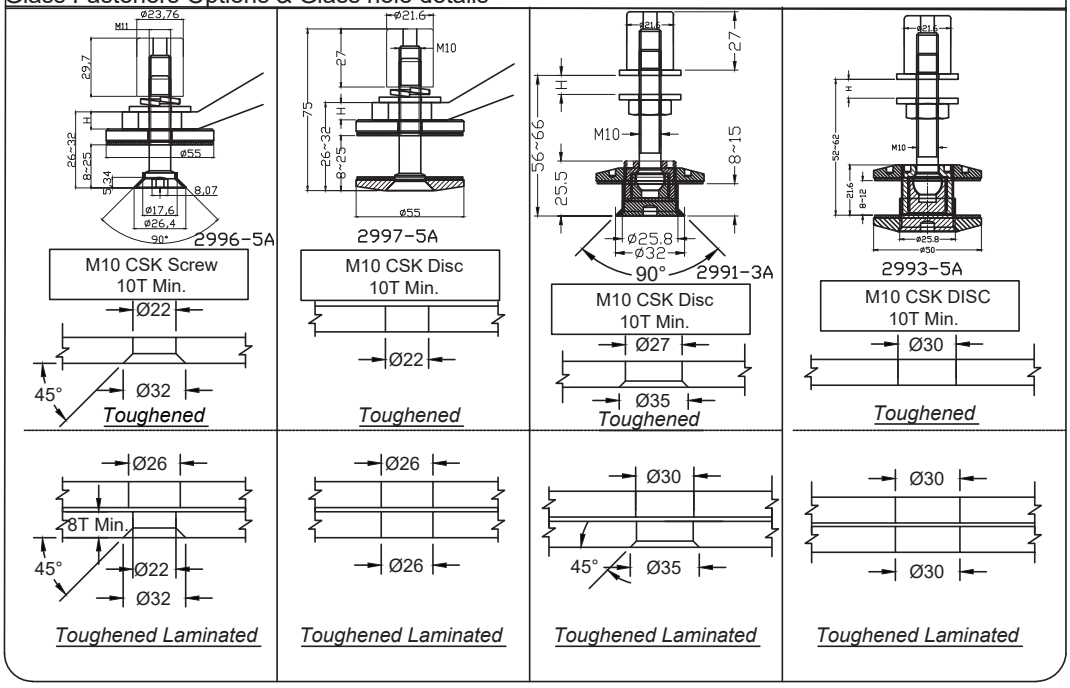


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445.2 Spider Fitting



Glass Fasteners Options & Glass hole details



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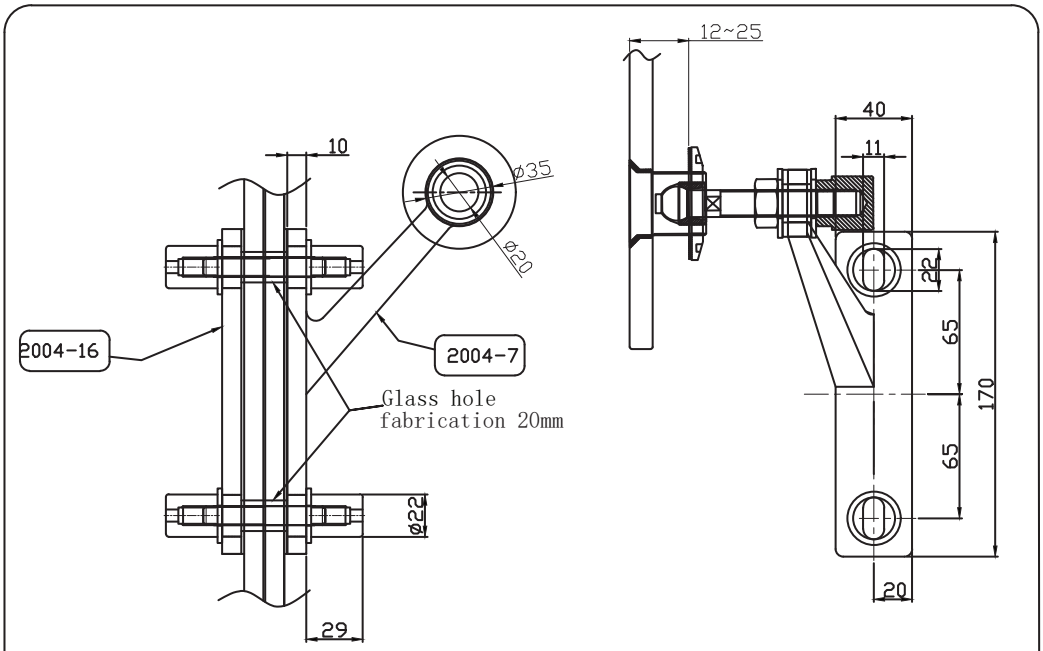
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Email: sales@ghasolutions.com.au

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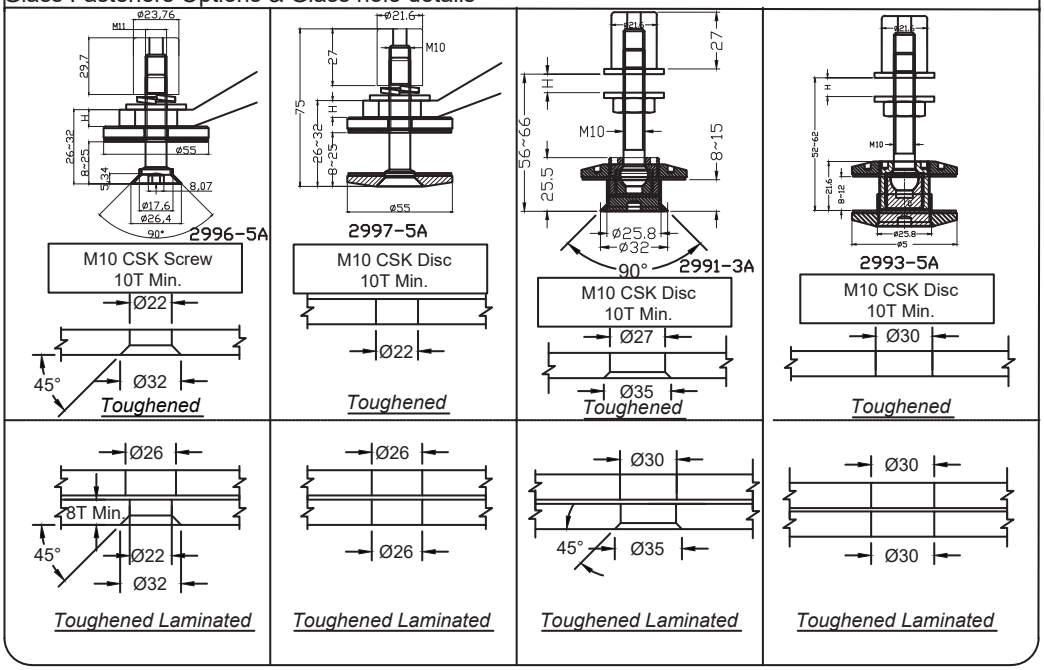
445.2

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445.4.1YL Spider Fitting

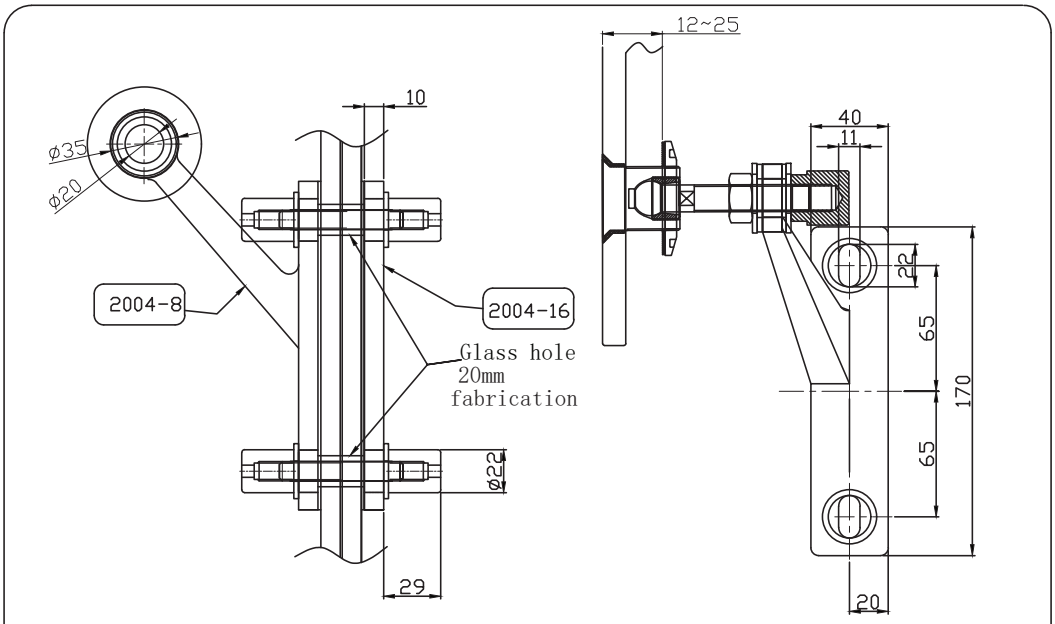


Glass Fasteners Options & Glass hole details

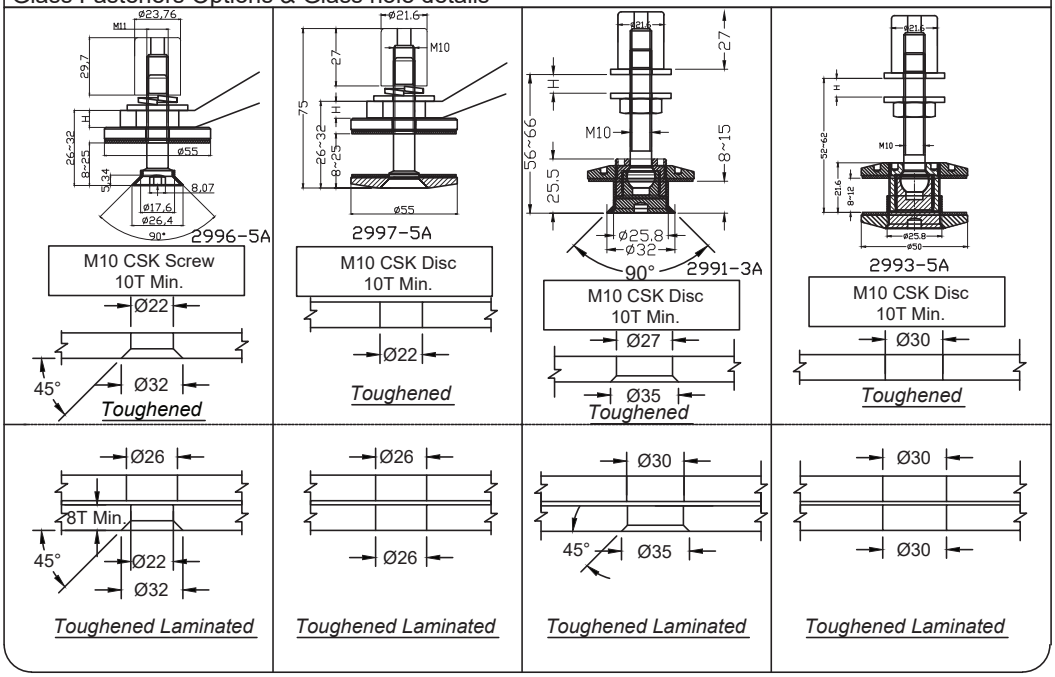


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445.4.1YR Spider Fitting



Glass Fasteners Options & Glass hole details



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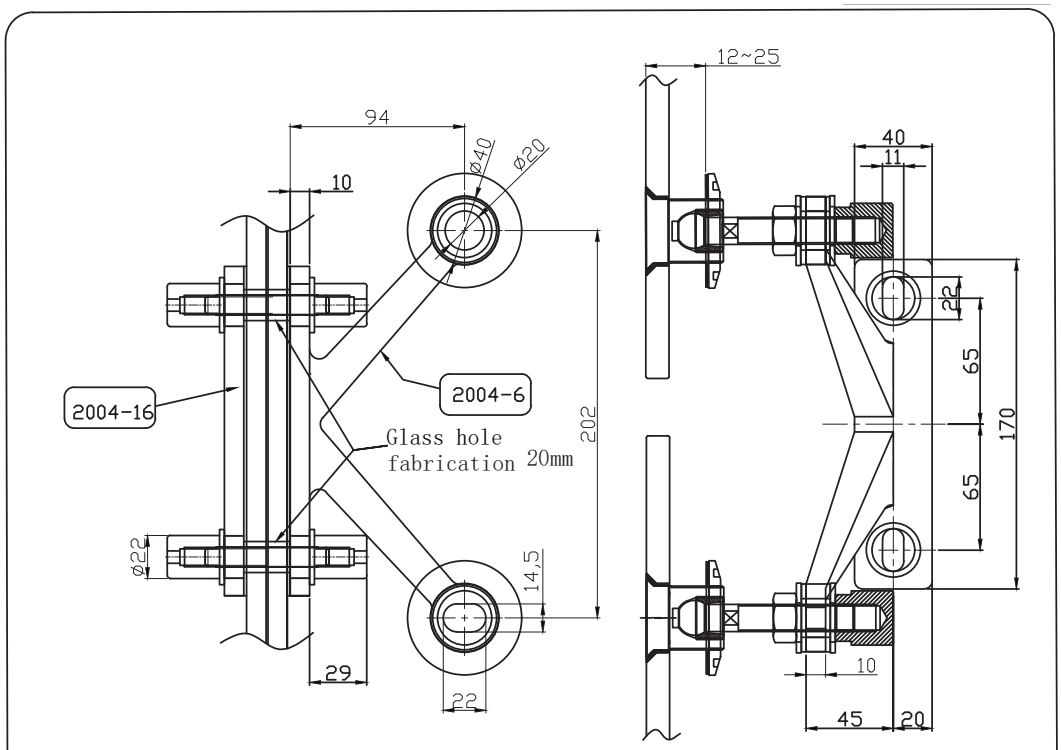
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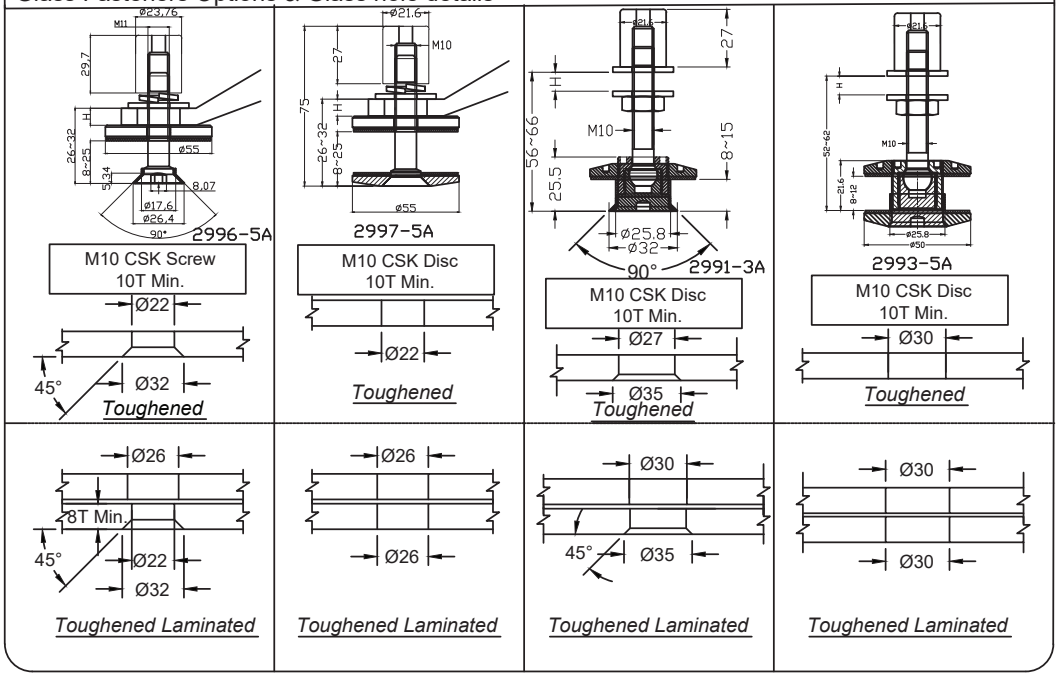
445.4.1YR

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445.4.2 Spider Fitting

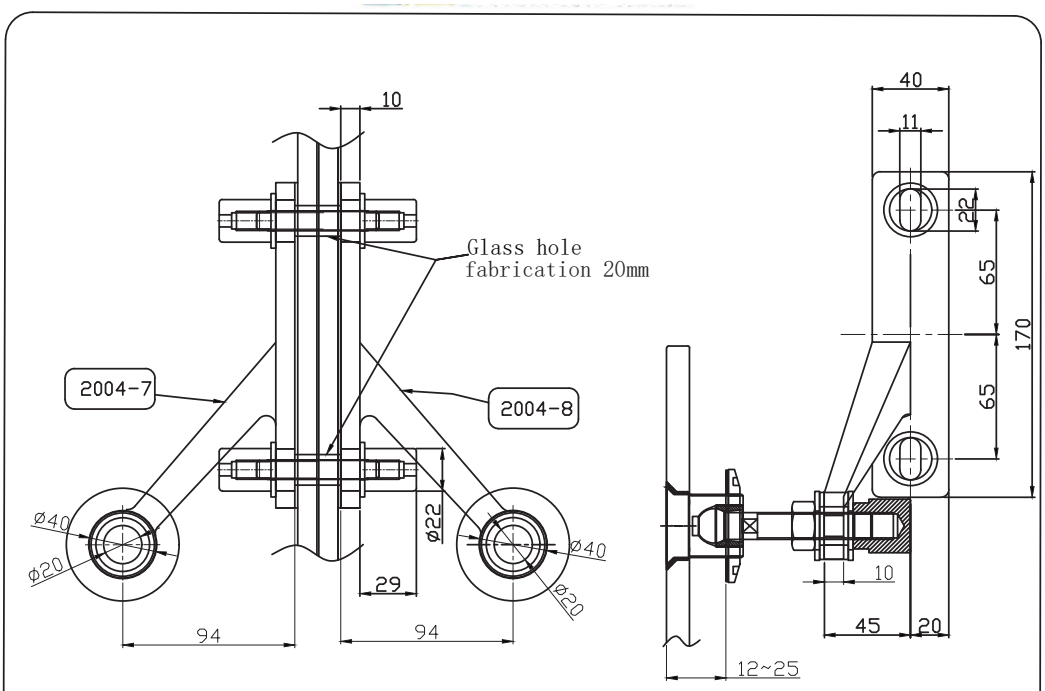


Glass Fasteners Options & Glass hole details

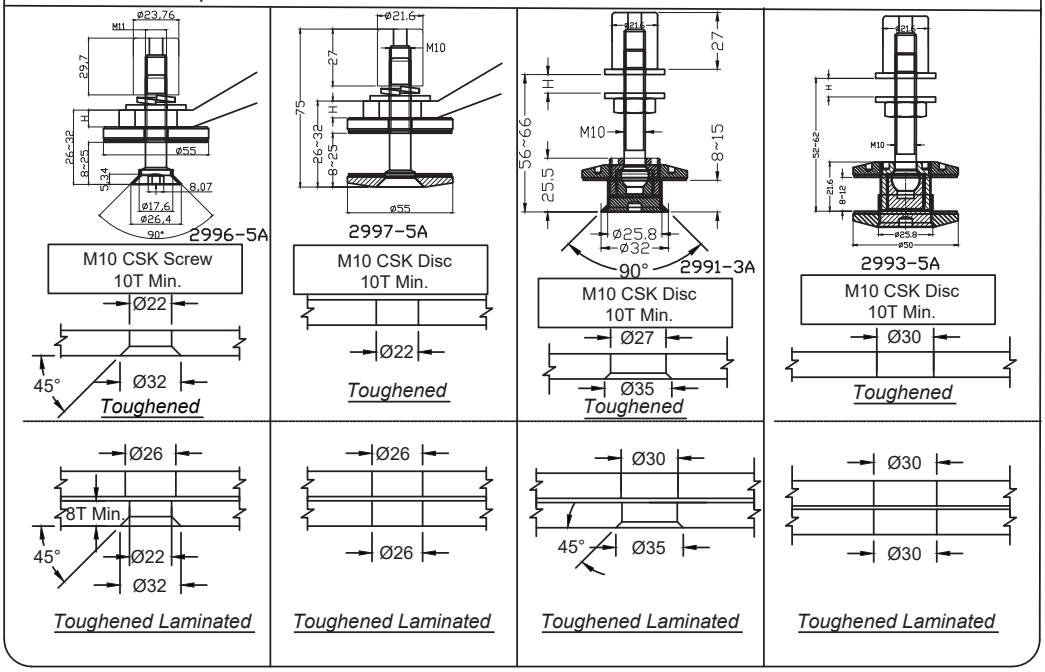


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445.4.2Y Spider Fitting

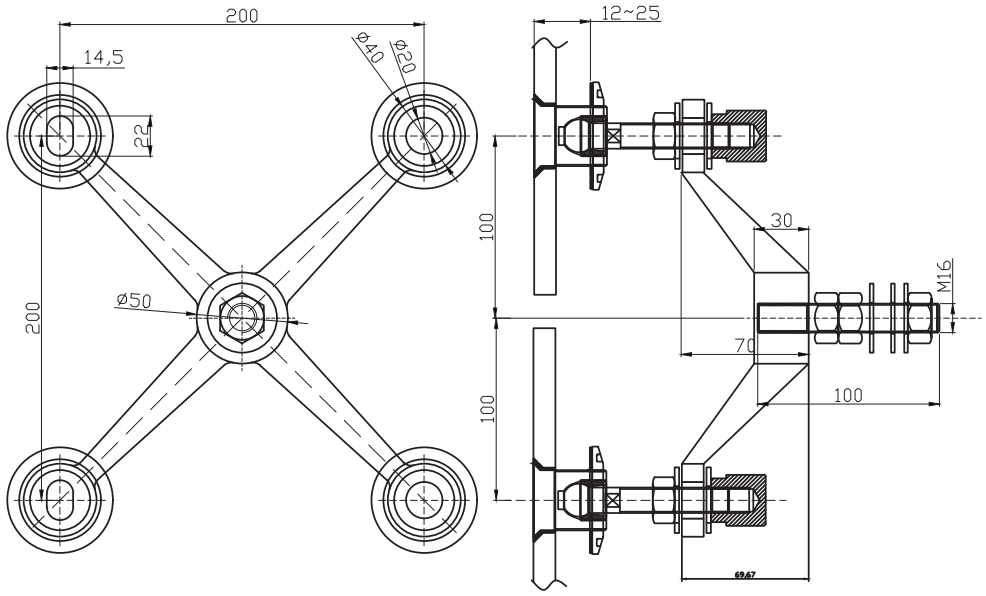


Glass Fasteners Options & Glass hole details



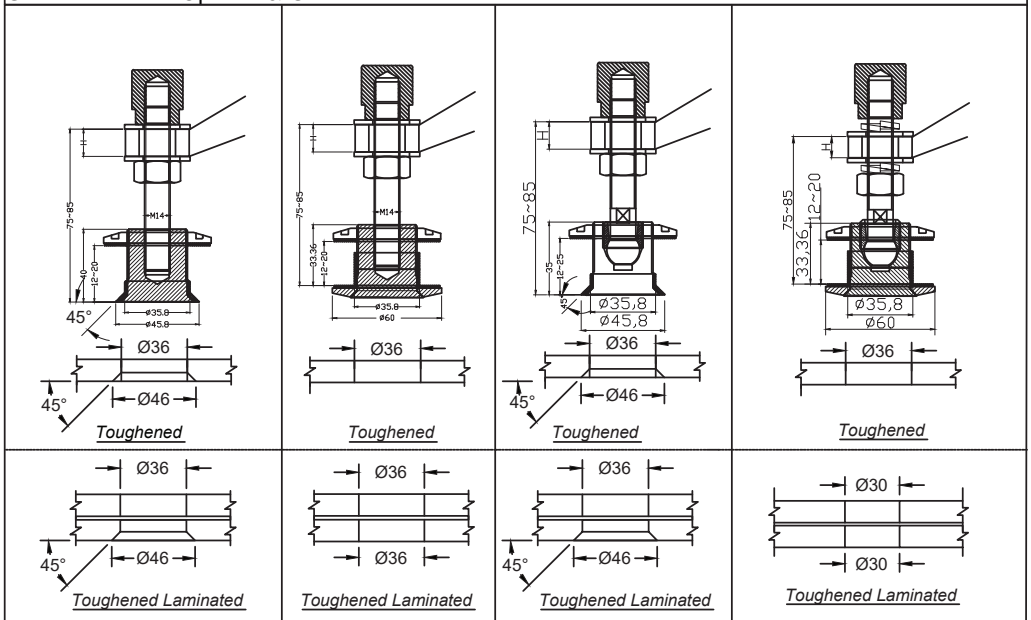
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446.4M Spider Fitting



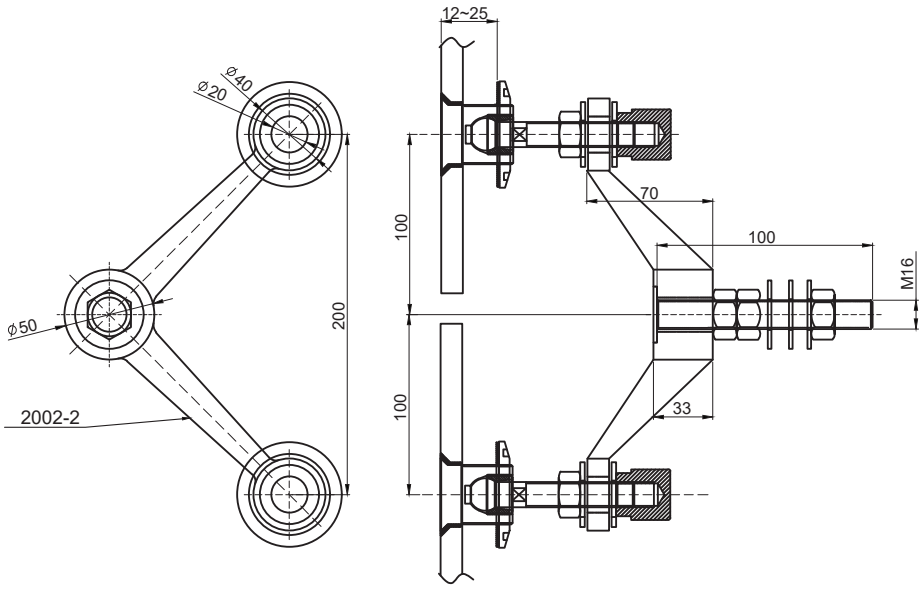
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



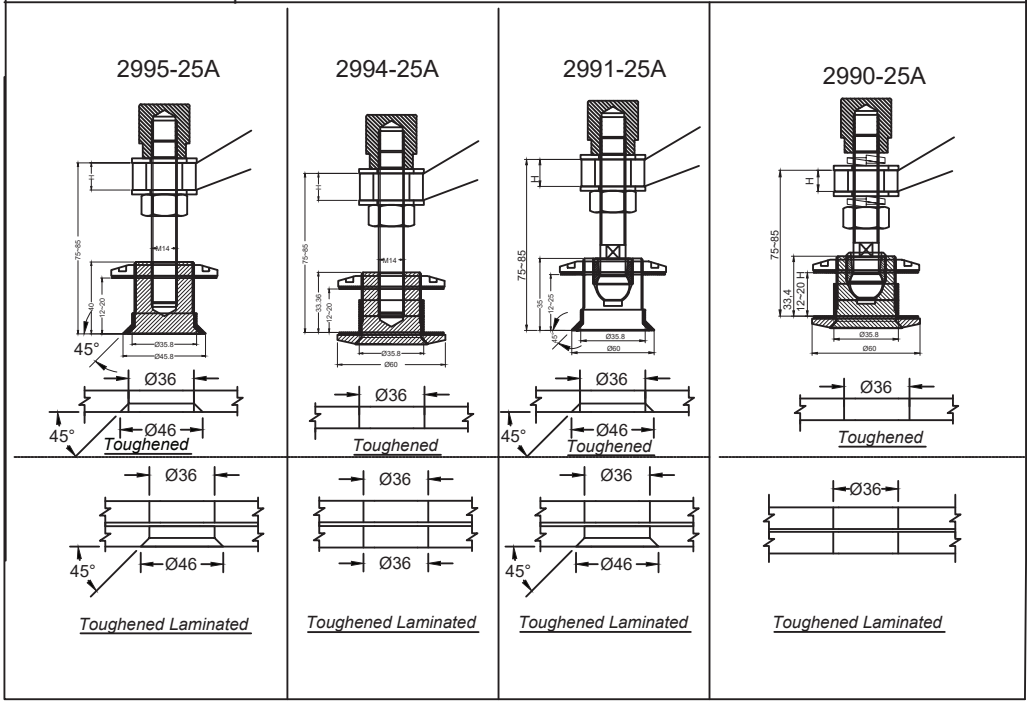
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446.4M.2 Spider Fitting



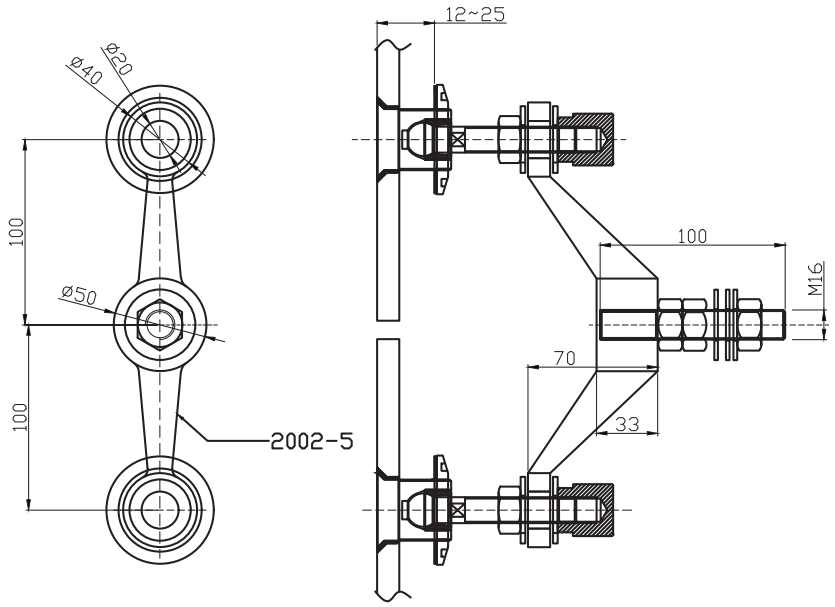
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



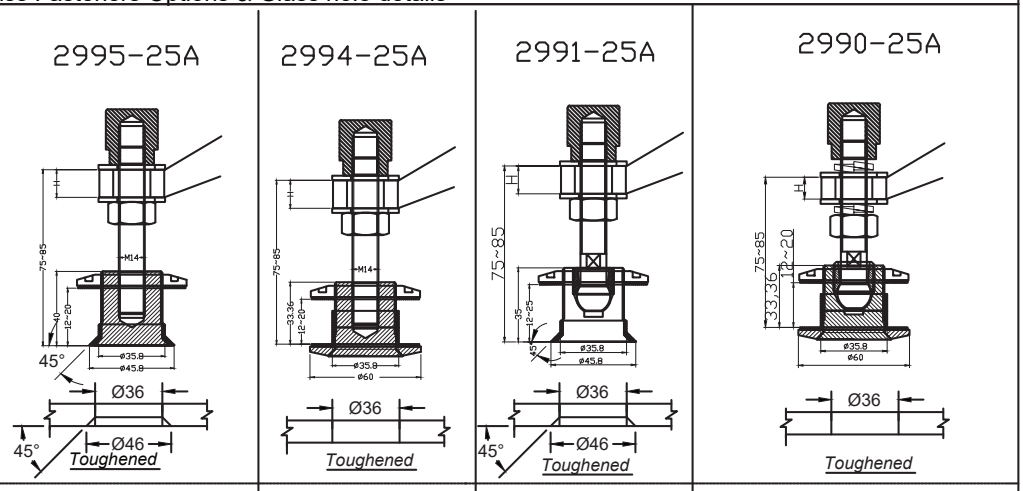
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446.2M Spider Fitting



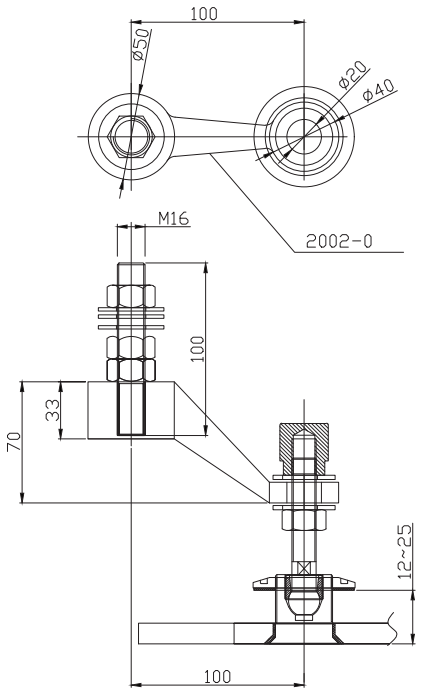
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



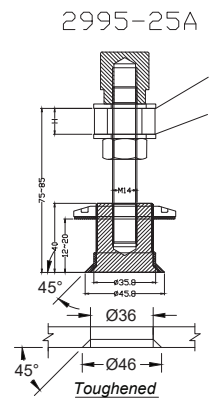
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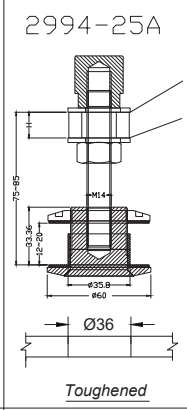
446.2M.1 Spider Fitting

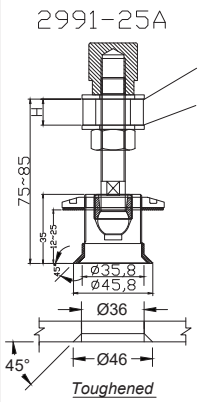


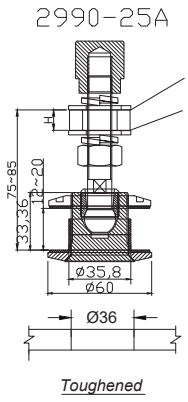
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

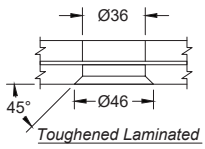
Glass Fasteners Options & Glass hole details

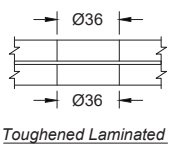


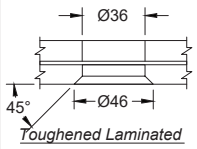


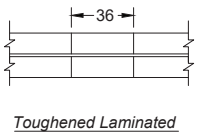






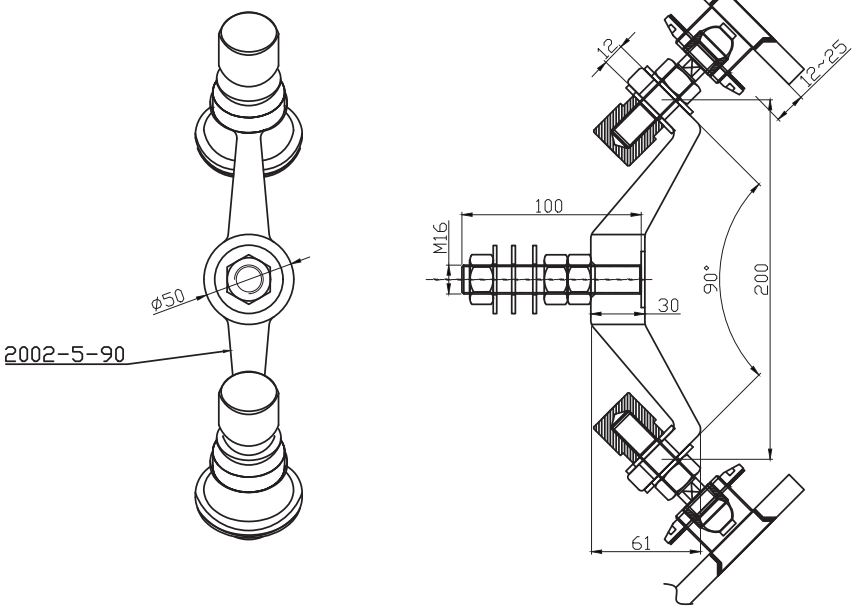






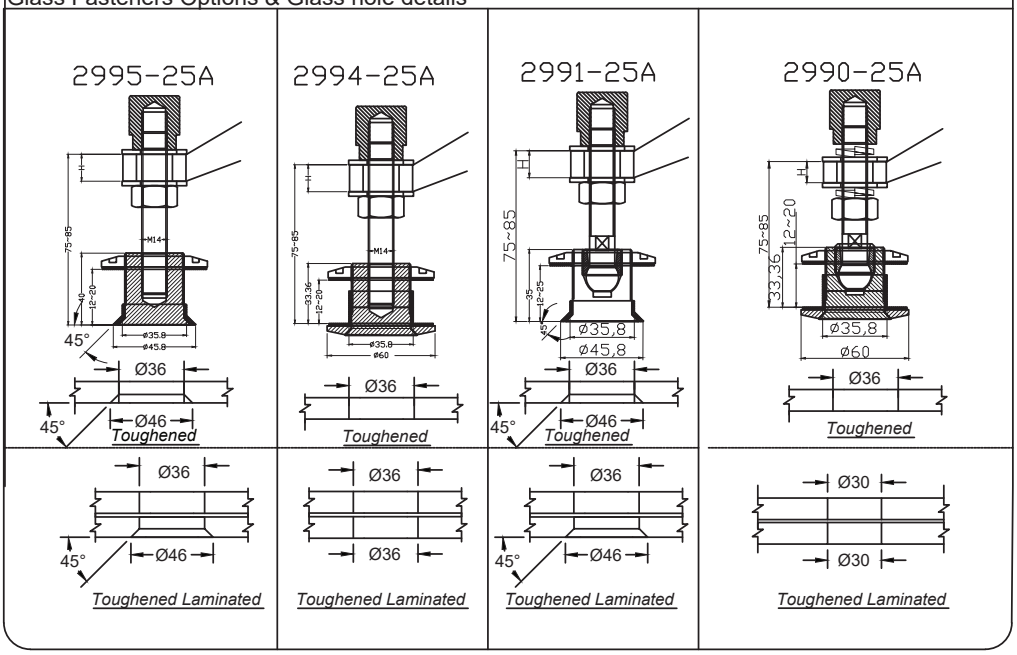
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446.2M.90° Spider Fitting



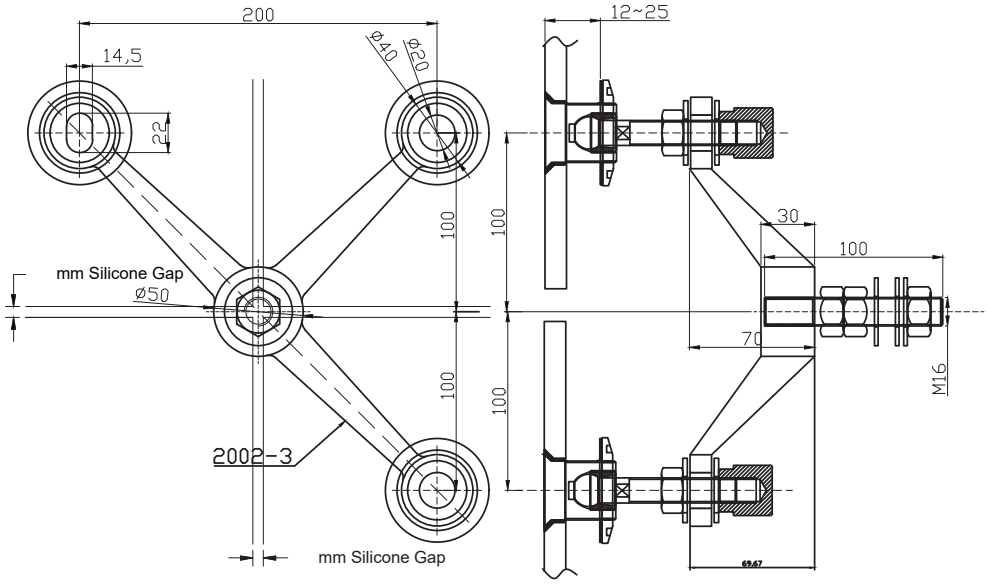
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



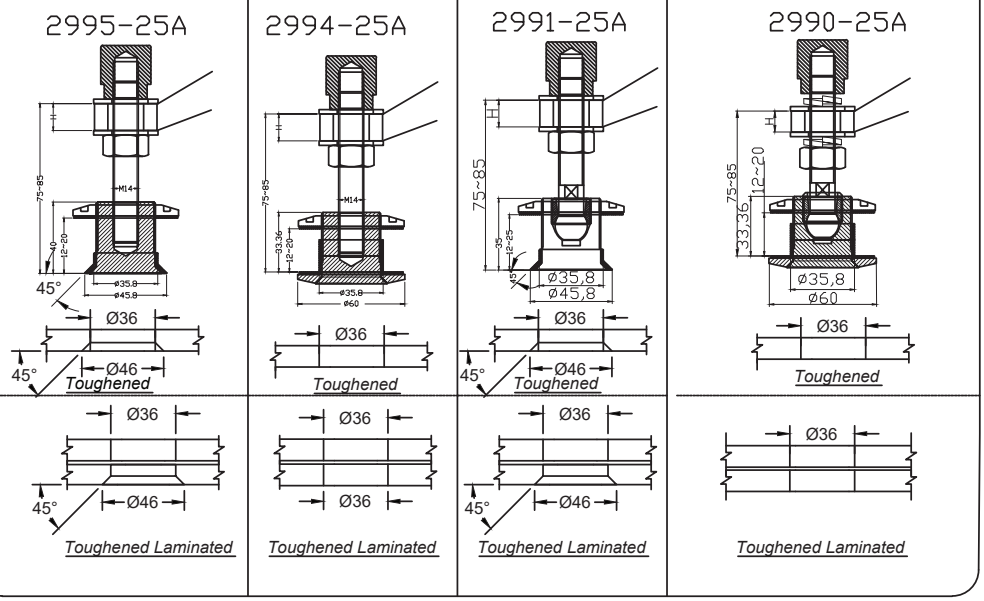
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446.4M.3 Spider Fitting



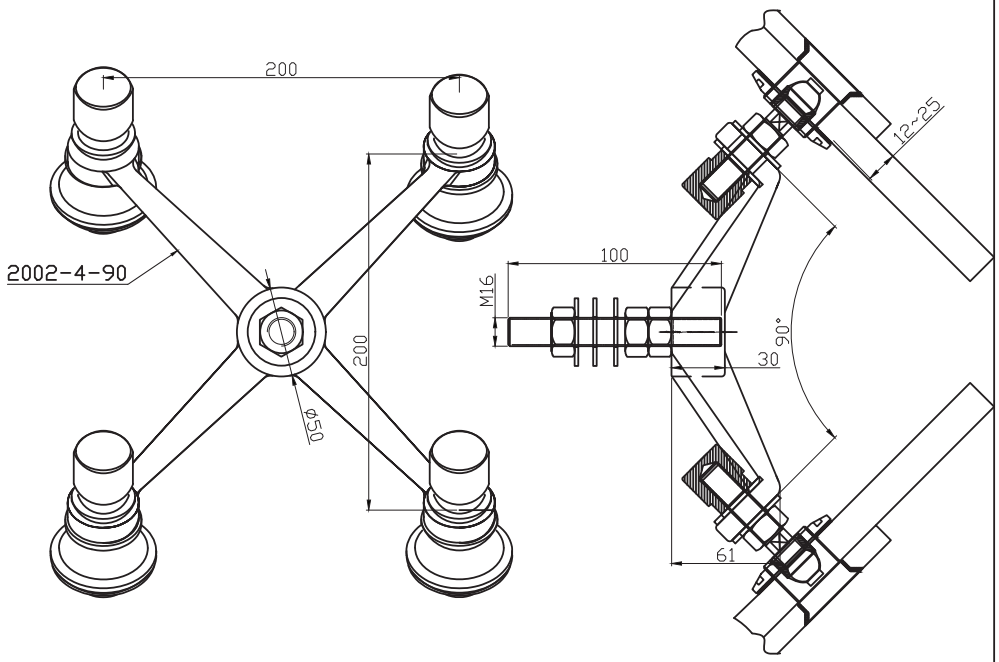
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



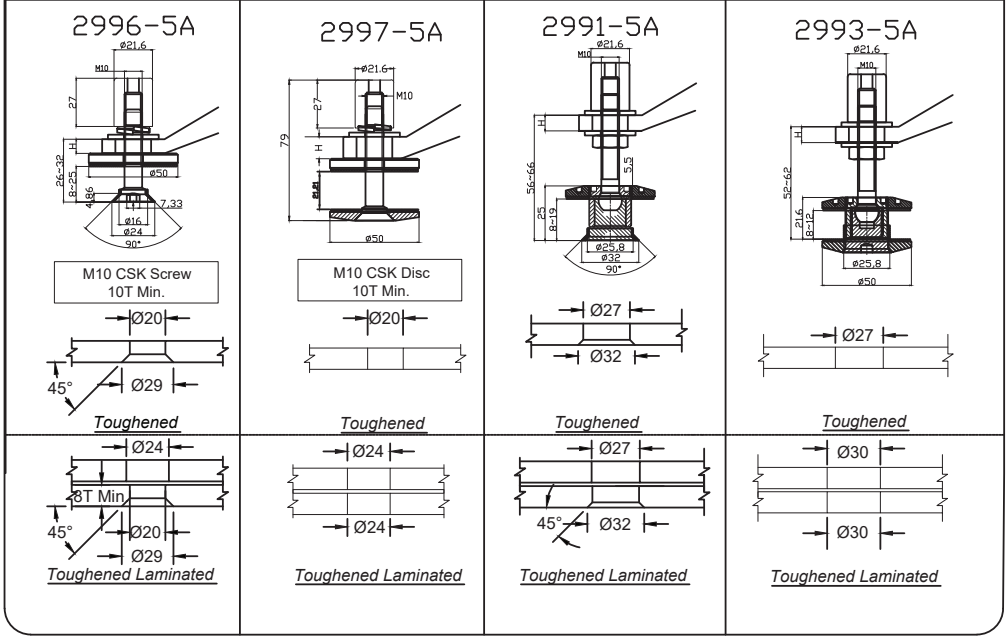
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446.4M.90° Spider Fitting



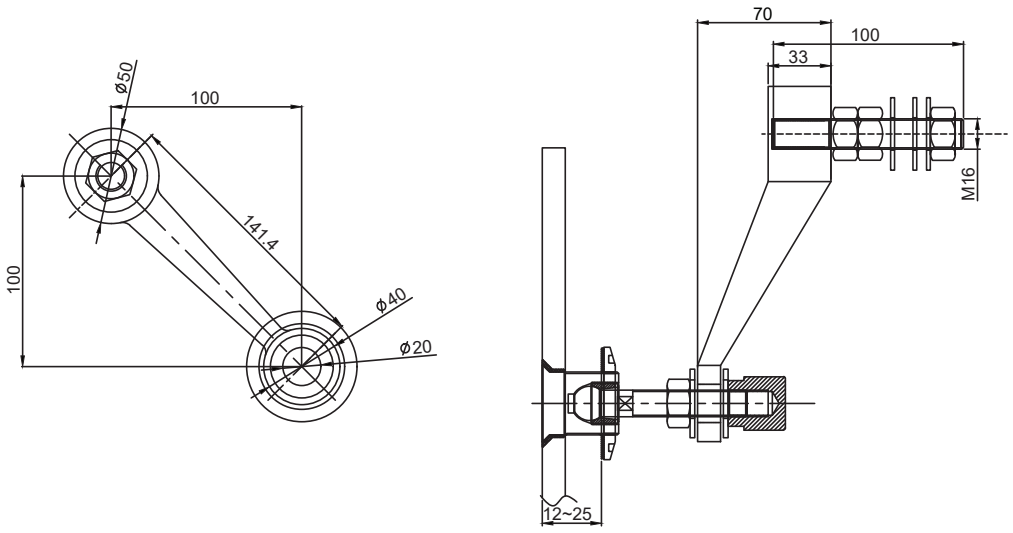
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



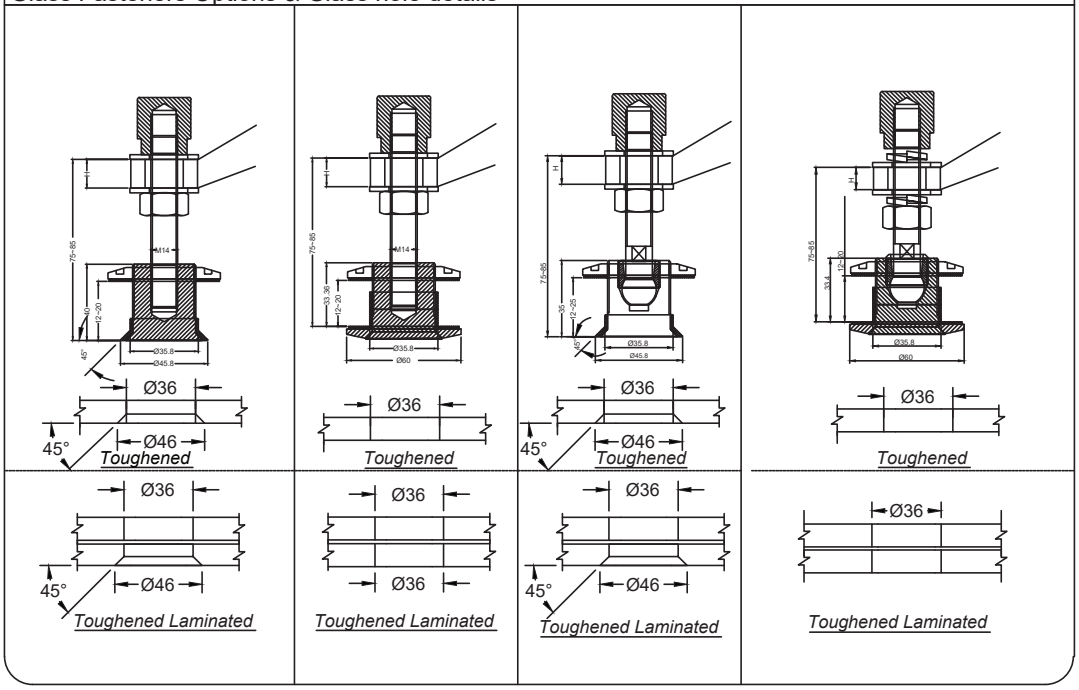
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446.4M.1 Spider Fitting



Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



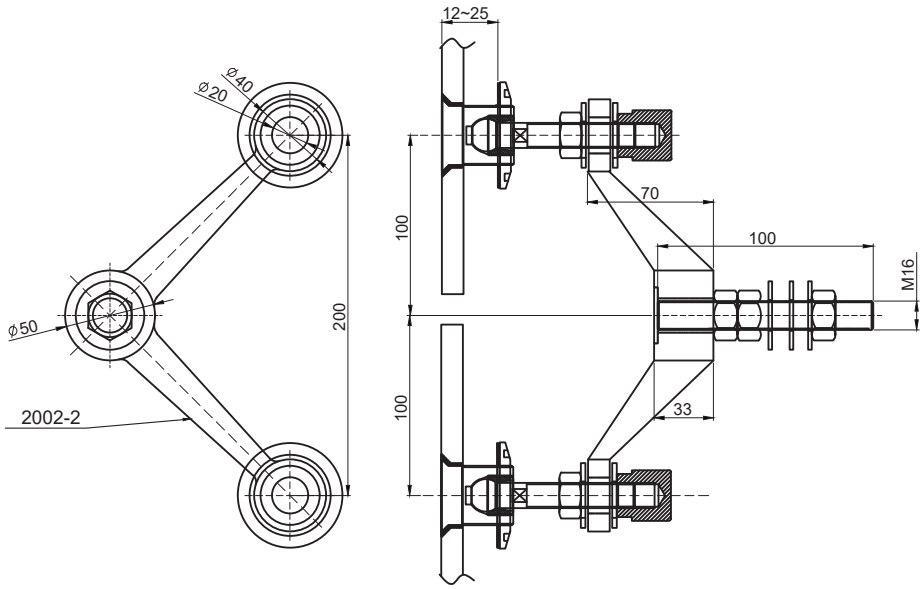
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Warehouse Factory D
53-75 Queens Road
Five Dock NSW 2046
Ph: 02 97153700
Email: sales@ghasolutions.com.au

DRAWING No .
446.4M.1

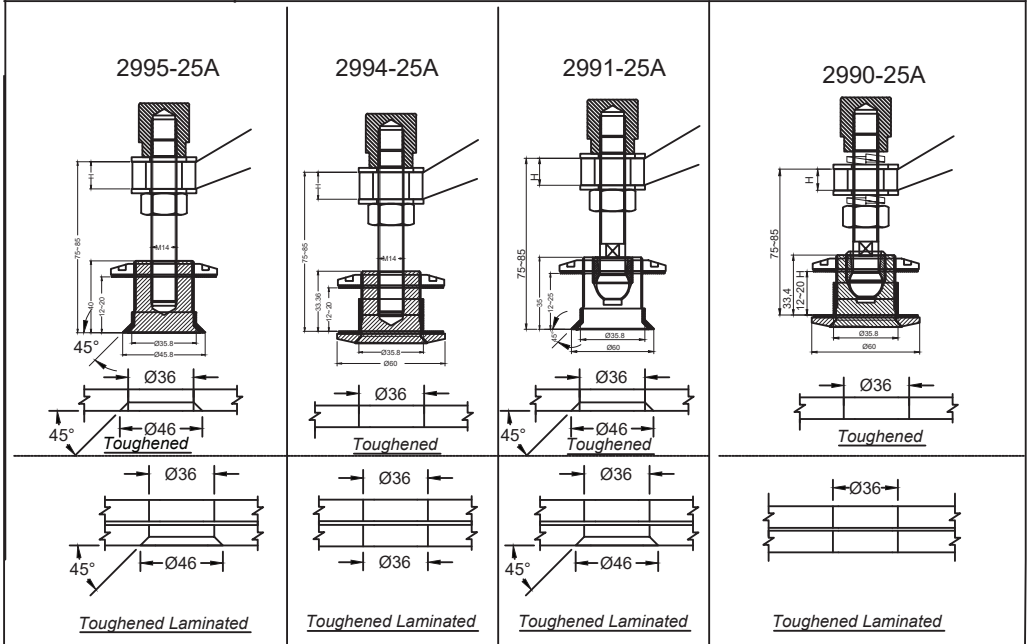
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446.4M.2 Spider Fitting



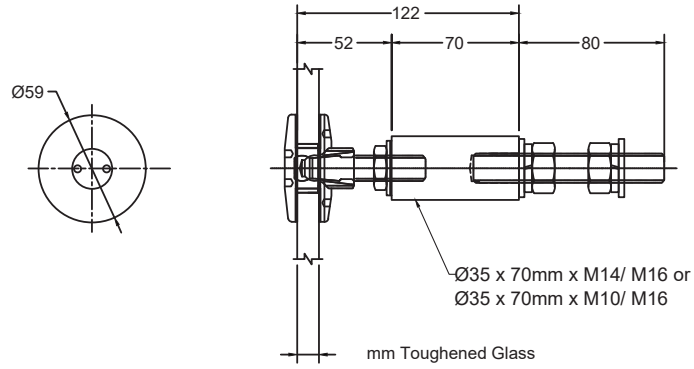
Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details



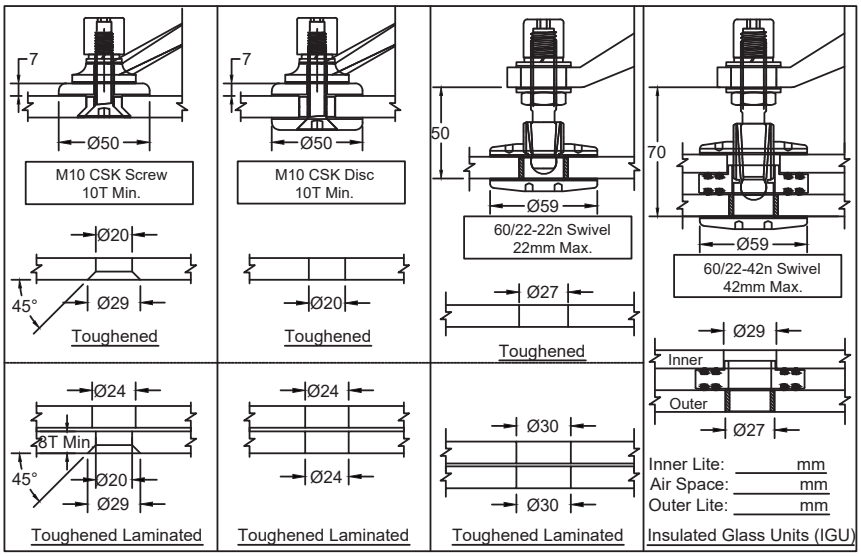
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447 Spider Fitting



Material: 316 Grade Stainless Steel
Finish: Satin No. 4

Glass Fasteners Options & Glass hole details

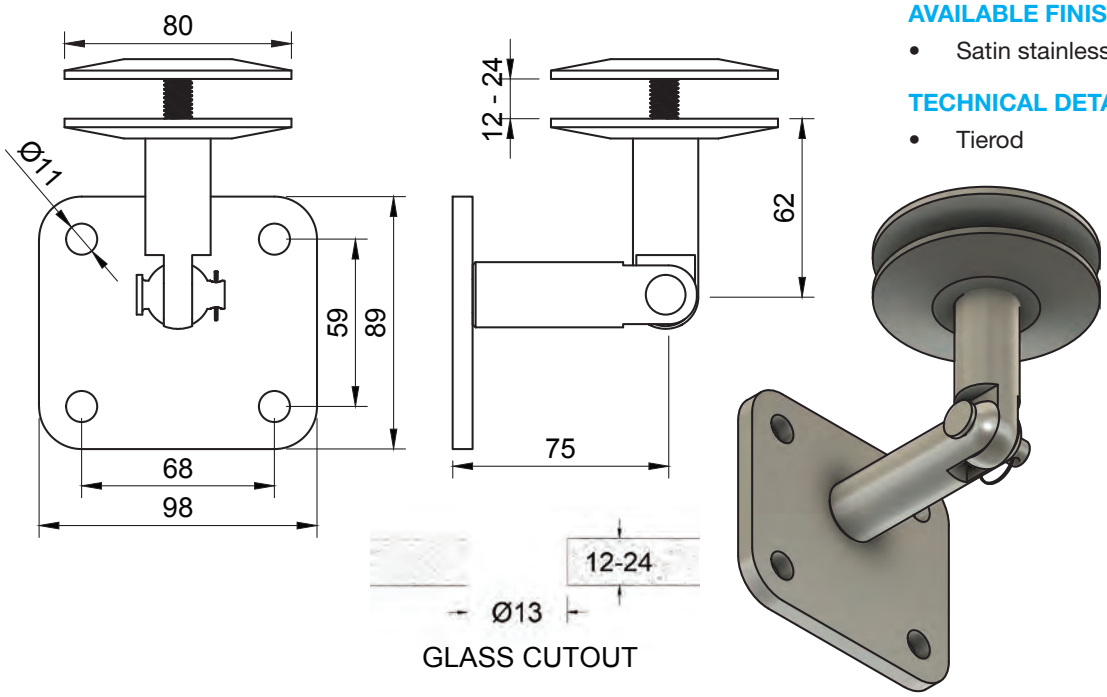


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SA8300E Canopy System



SA8300E-4 Bottom Wall Mount Fixing Plate Square SSS



AVAILABLE FINISHES

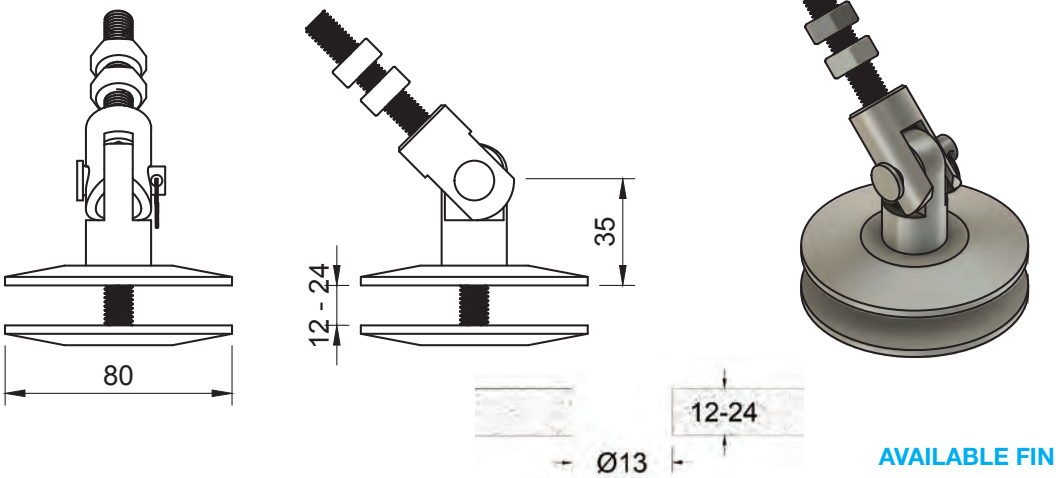
- Satin stainless steel

TECHNICAL DETAILS

- Tierod

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SA8300E-5 Glass Fixing For Tierod SSS



GLASS CUTOUT

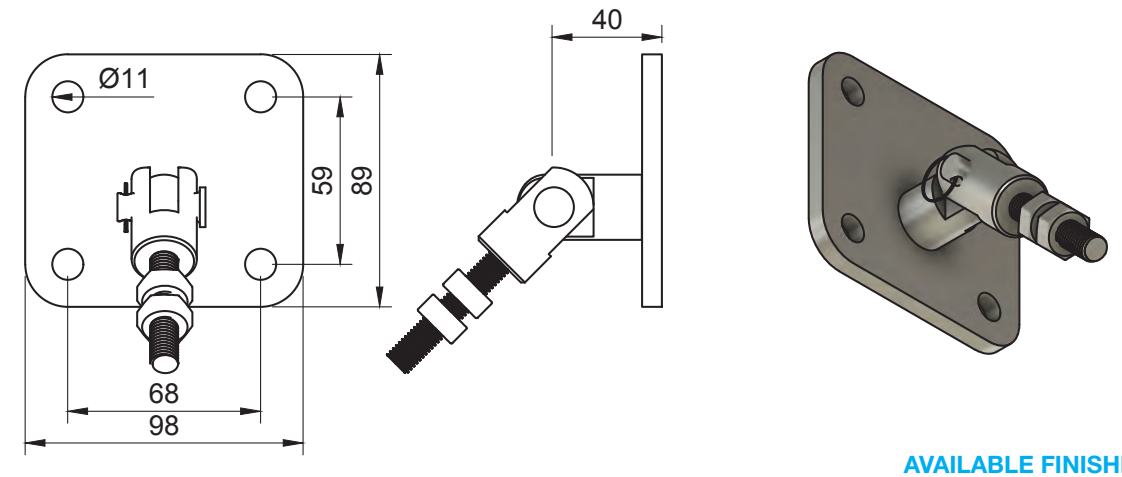
AVAILABLE FINISHES

- Satin stainless steel

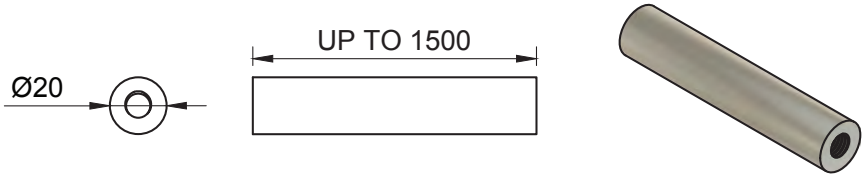
TECHNICAL DETAILS

- Tierod

SA8300E-6 Top Wall Mount Fitting For Tierod



CONNECTING ROD



AVAILABLE FINISHES

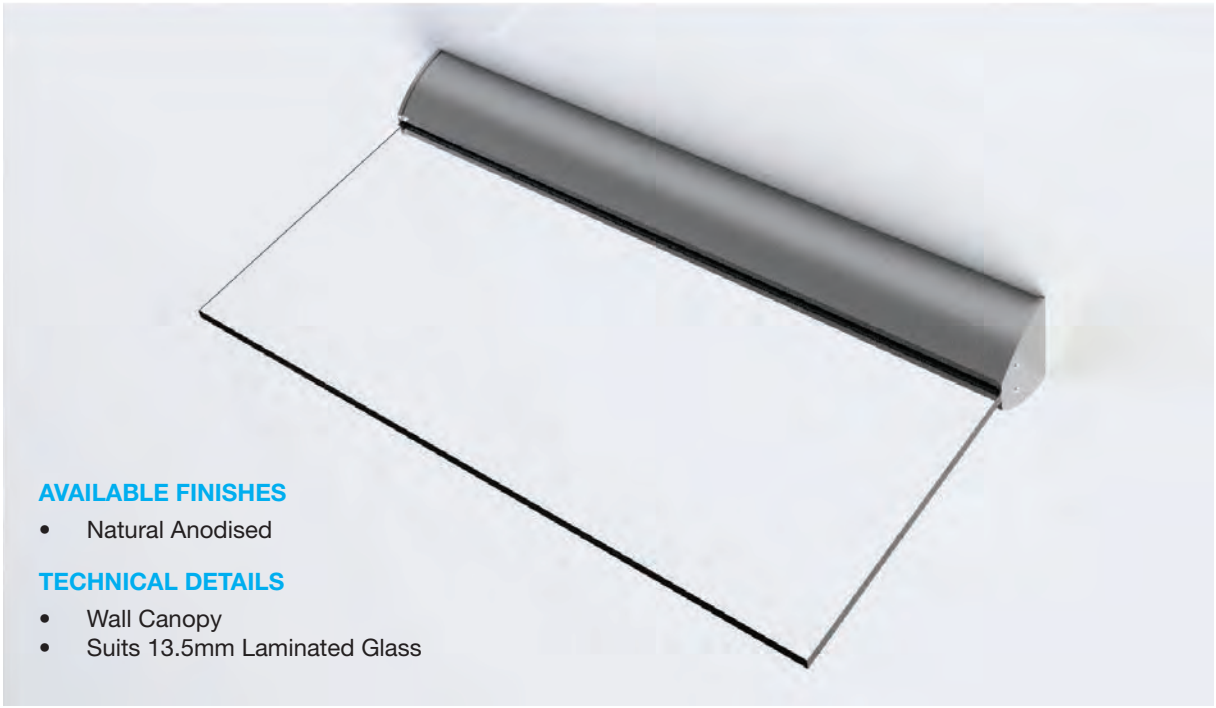
- Satin stainless steel

TECHNICAL DETAILS

- Tierod

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Glass Canopy - Curved



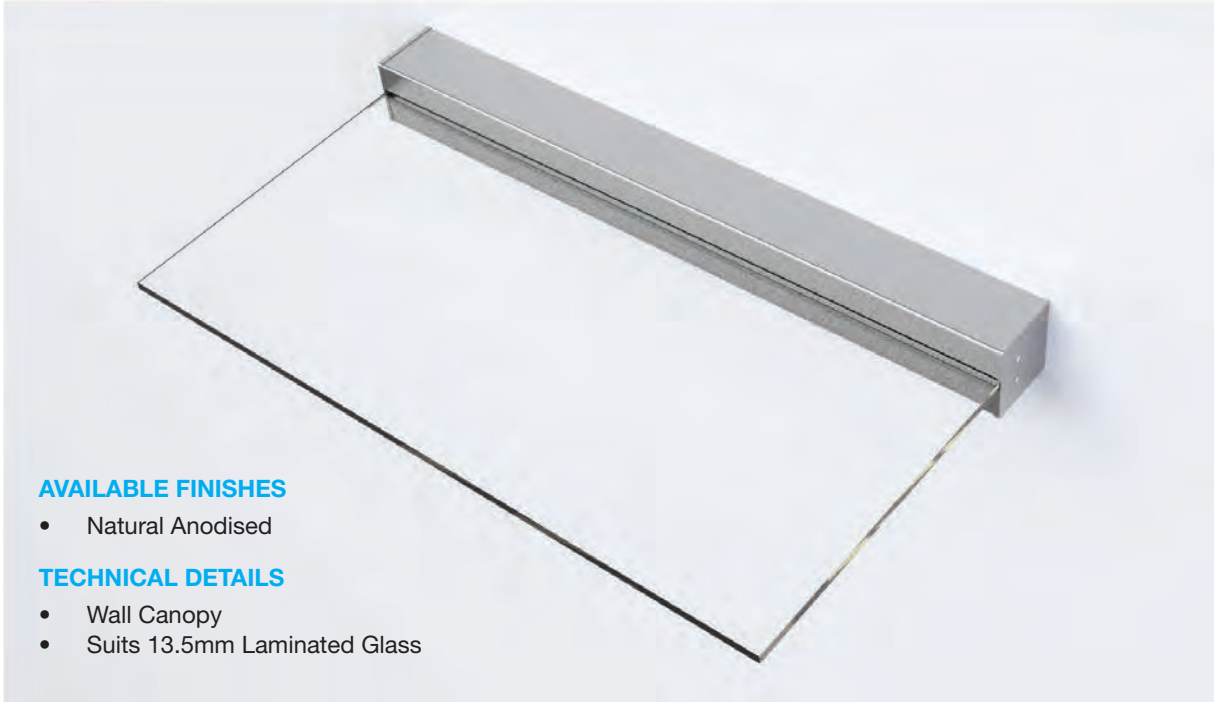
AVAILABLE FINISHES

- Natural Anodised

TECHNICAL DETAILS

- Wall Canopy
- Suits 13.5mm Laminated Glass

Glass Canopy - Square



AVAILABLE FINISHES

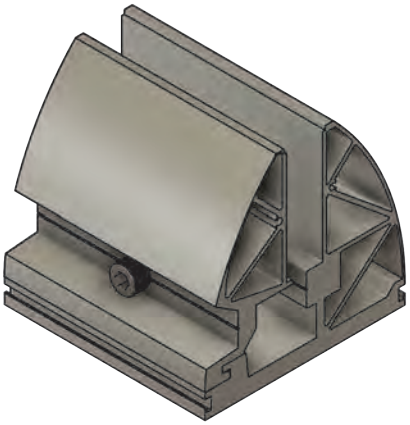
- Natural Anodised

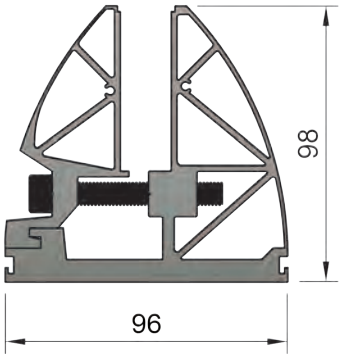
TECHNICAL DETAILS

- Wall Canopy
- Suits 13.5mm Laminated Glass

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HD-L003A-01S

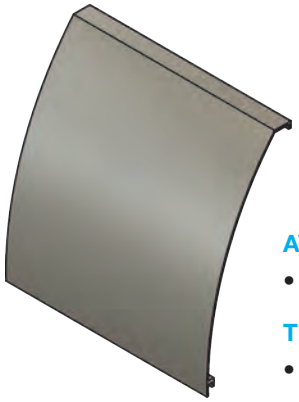




AVAILABLE FINISHES
- Natural Anodised

TECHNICAL DETAILS
- Wall Canopy

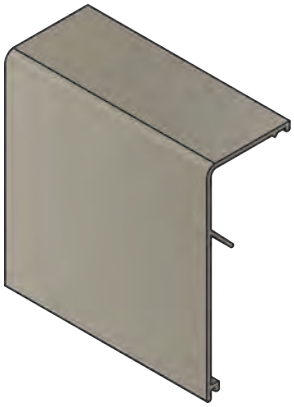
HD-L003A-03



AVAILABLE FINISHES
- Natural Anodised

TECHNICAL DETAILS
- Wall Canopy

HD-L003A-04



AVAILABLE FINISHES
- Natural Anodised

TECHNICAL DETAILS
- Wall Canopy

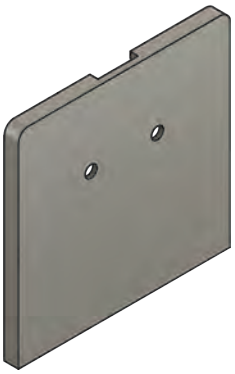
HD-L003A-05



AVAILABLE FINISHES
- Natural Anodised

TECHNICAL DETAILS
- Wall Canopy

HD-L003A-06



AVAILABLE FINISHES
- Natural Anodised

TECHNICAL DETAILS
- Wall Canopy

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Series R Patch Fitting Range





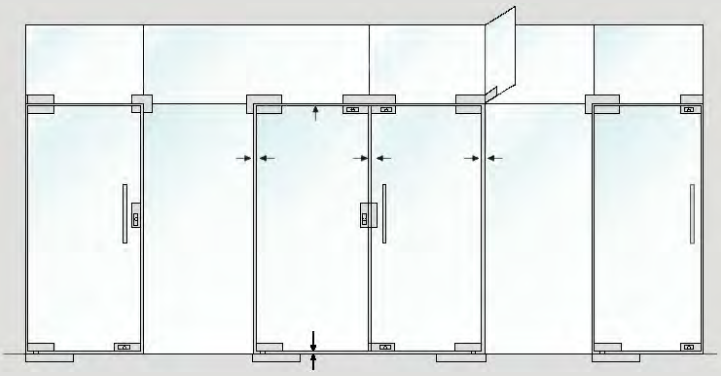
The Series R patch fitting range provides a refreshingly sleek connection system for frameless glazing.

45 mm high solid stainless steel plates with crisp sharp edges give a distinctive but minimalist feel to any glazed partition or entrance.

A comprehensive range of Series R fittings allows designers maximum flexibility when combined with locking pull handles and latching lever-sets.

© GHA SOLUTIONS

Series R Patch Fitting Range



AVAILABLE FINISHES

- Satin stainless steel
- Polished stainless steel

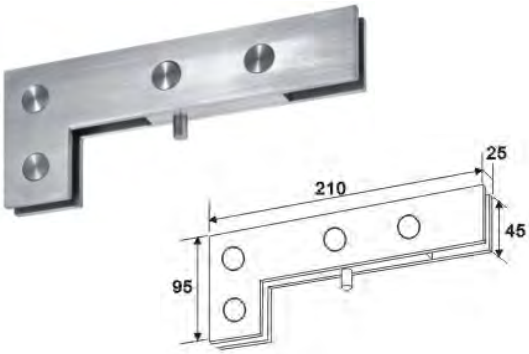
TECHNICAL DETAILS

- Glass 10mm and 12 mm monolithic fully toughened
- Bottom patch fittings connect to a standard tapered FC-84 floor spring or AT-180 free pivot

PR-41R / PR-41L



PR-40



PR-51



PR-50



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LR-51K / LR-51

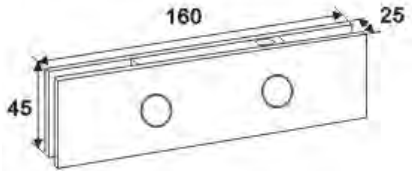


LR-20K / LR-20



PR-20



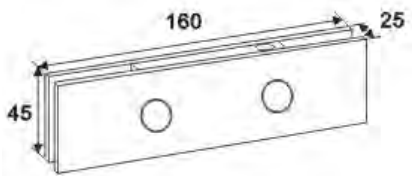


PR-30



PR-10





PR-30P

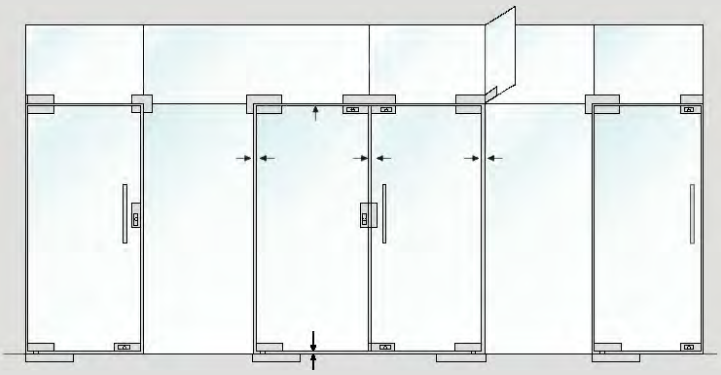


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Patch Fittings – Series H

CODE		DESCRIPTION
PH-10		Bottom patch 10 – Series H – Solid Stainless Castings
PH-20		Top patch 20 – Series H – Solid Stainless Castings
PH-30		Highlight patch 30 – Series H – Solid Stainless Castings

Patch Fittings – Series R



AVAILABLE FINISHES

- Satin stainless steel
- Polished stainless steel

TECHNICAL DETAILS

- Glass 10mm and 12 mm monolithic fully toughened
- Bottom patch fittings connect to a standard tapered FC-84 floor spring or AT-180 free pivot

CODE		DESCRIPTION
PR-10		Bottom patch 10 – Series R – Solid Face Plates
PR-20		Top patch 20 – Series R – Solid Face Plates
PR-30		Highlight patch 30 – Series R – Solid Face Plates

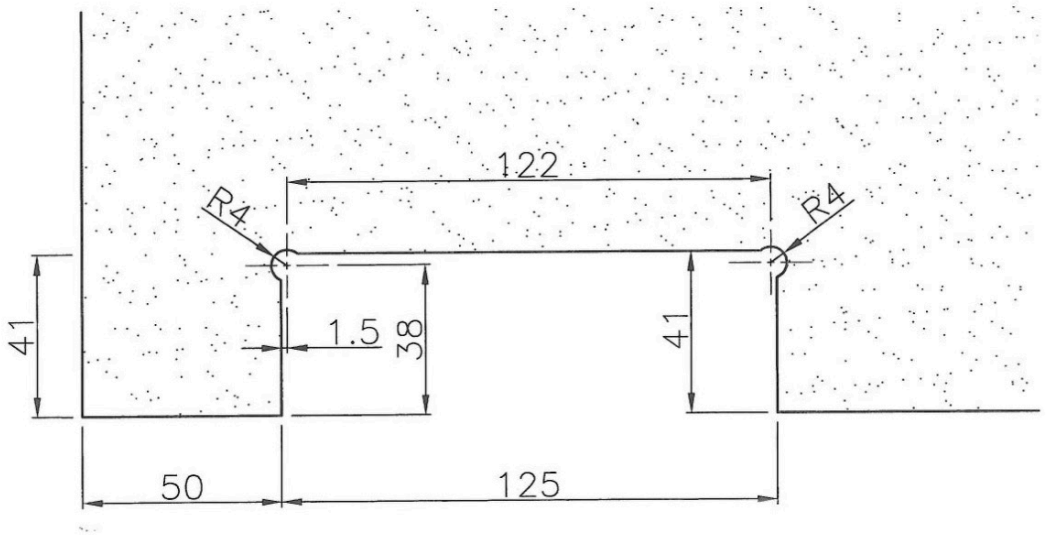
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Patch Fittings – Series R (Cont'd)

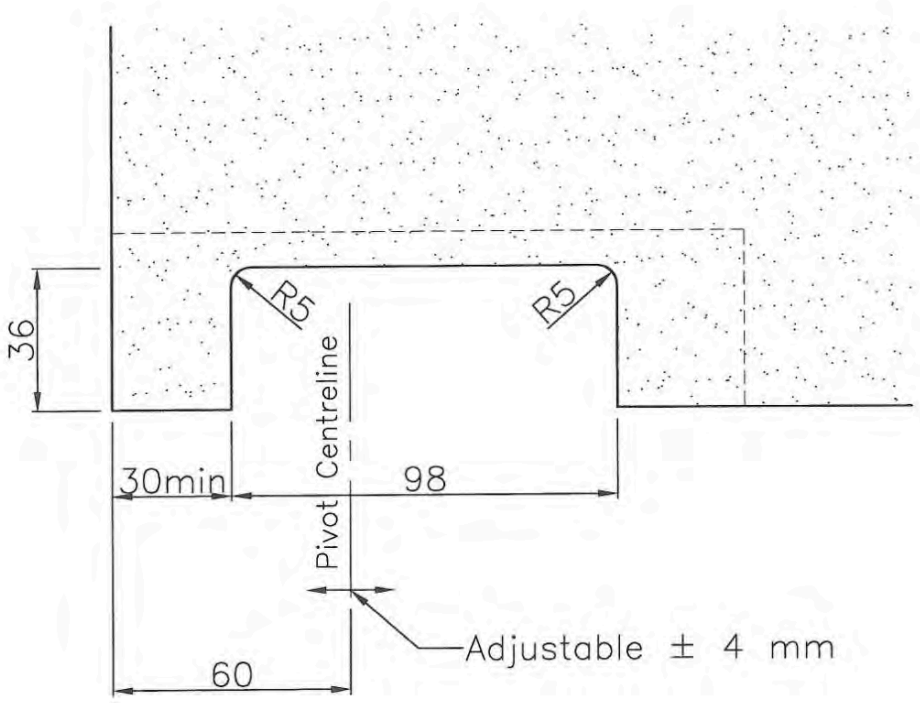
CODE		DESCRIPTION
PR-30P		Highlight patch 30 with wall mounting plate – Series – Solid Face Plates
PR-40		Corner pivot patch 40 – Series R – Solid Face Plates
PR-41L		Corner pivot patch 41L with fin – Series R – Solid Face Plates
PR-41R		Corner pivot patch 41R with fin – Series R – Solid Face Plates
PR-50		Twin pivot patch 50 – Series R – Solid Face Plates
PR-51		Twin pivot patch 51 with fin – Series R – Solid Face Plates

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LR-51 Glass Cutout for Patch Lock

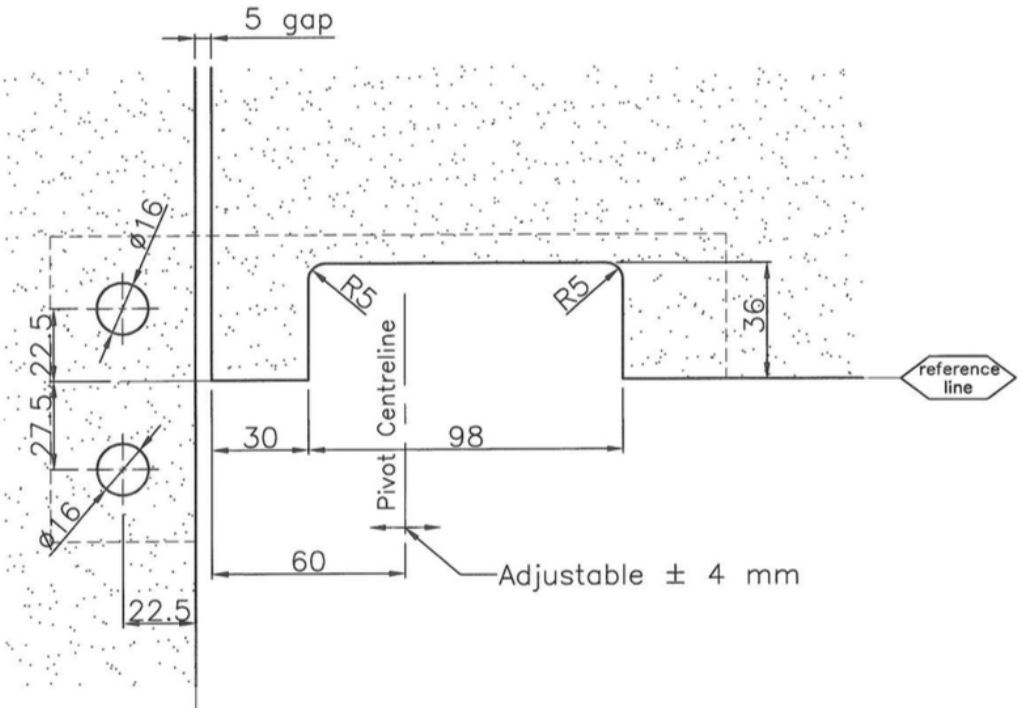


PR-10 / 20 / 30 Glass Cutout for Patch Fittings

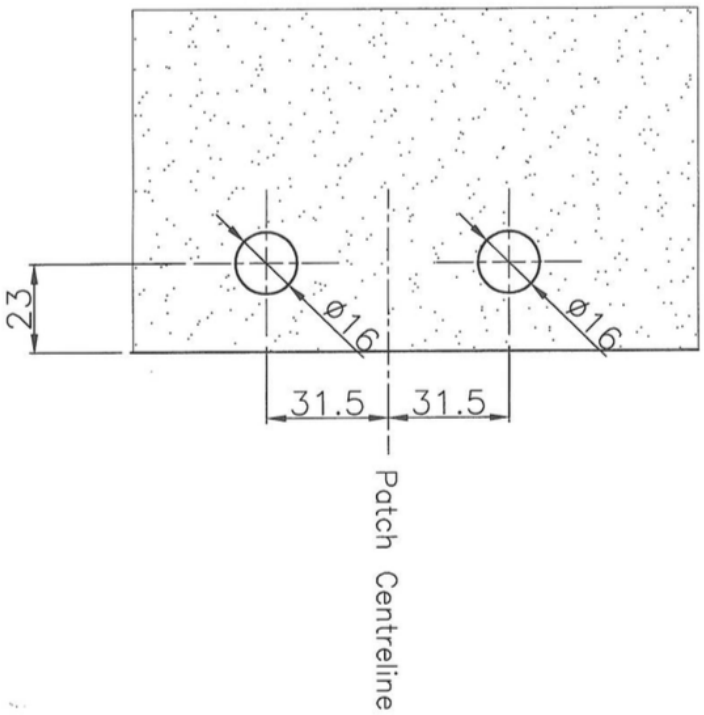


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PR-40 Glass Cutout for Patch Fittings



PR-70s Glass Cutout for Patch Fittings



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SeigelSeal N05+ High Performance Silicone

- 100% Neutral Cure Silicone
- Excellent Adhesion
- Non-Slump Formula
- Permanent Flexibility
- UV & Weathering Resistant

Colours

- Black
- Grey
- White
- Translucent



CRLGC CRL Glass Cleaner



Sanitary



CRLHI CRL Hi Sheen



CRL01 Kwikset Grout



Sets in 15-20 minutes.

EzyBrace Pro

The EzyBrace Bracing system is an all-in-one bracing solution designed specifically for the glass industry. It allows for temporary bracing of glass panels in ‘wet-glaze’ pool fencing and balustrading



Dual Clamp

The Dual Clamp allows you to fit a row of panels without moving the Ezy Brace



© GHA SOLUTIONS

Ezy Snap Blades

Standard snap-off knife



Ezy Snap Blades

6 snap-off segments for a total of 7 cutting edges per blade



Razor Blades

- Single edge razor blade
- Pack of 100



Clear Setting Block

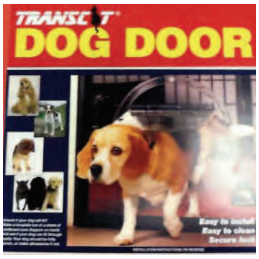
- Available sizes: 1.5mm, 3mm, 5mm
- 100 pieces per bag



Cat Door



Dog Door



Gator Trigger

- Professional grade 1/10-gallon drop-free caulk gun
- Thermoplastic comfort grip
- Professional drip-free hex rod
- Includes ladder hook
- All-steel, welded construction



© GHA SOLUTIONS

Glass Sucker

- Lightweight
- Heavy duty handle
- Load capacity 56kg



Mini Glass Sucker

Load capacity 25kg



Suction Pad Brackets

Precision drilling accuracy in tiles



Glass Cutter

Box of 6



Double Ended Drill Bits

- 3mm
- 10 pack



Spatula



Spade Porcelain Eater

For drilling through porcelain tiles



Round Porcelain Eater

- 6mm
- For drilling through tough porcelain tiles



© GHA SOLUTIONS

Phillip Head Drill Bits

- 25mm or 50mm
- 2 pack





Jigsaw Blades

2 pack



Quad 6mm Drill Bit

For drilling through ceramic tiles



Spade 6mm Tile Drill Bit

For drilling through tiles



© GHA SOLUTIONS

Soft1 Glueless Patch



Soft1 Glueless Patch is a self-adhesive patch that does not bond to skin, hair nor wounds and can be applied even if the skin is dirty or wet.

- Skin Friendly
- Cross-elastic
- Blood absorbent
- Keeps debris away
- Protects the wound
- Provides great flexibility in the joints



Strong adhesion. The patch does not fall off, ever when wet.

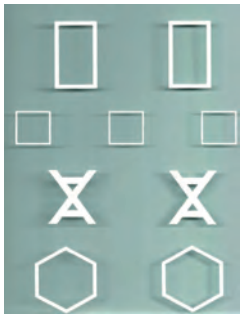


The patch is very flexible. It moulds to the joint's movements.



The patch does not bond to the skin, hair or wounds. Leaves no sticky residue

Soft1 Glueless Patch



Available shapes

- Rectangle
- Square
- X-shape
- Hexagon

Technical details

- Available in 1000mm or 120mm lengths
- Custom designs available

Glass Gloves



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SiegelSeal S21 Sanitary Silicone



NEUTRAL SANITARY SILICONE

- Premium 100% Silicone
- Superior Adhesion
- Mold & Mildew Resistant
- Permanent Flexibility
- Non-Corrosive

COLOURS

- White
- Translucent

TECHNICAL DATA

Sealant Type	Neutral Cure Silicone		
Colour	White	Translucent	
Density	1.02g/ml	1.02g/ml T	ASTM D792
Shore Hardness A	25	25	ASTM C661
Tensile Strength	1.1 N/mm2		ASTM D412
Application Temperature	-20°c to +40°c		
Temperature Resistance	-60°c to +180°c		
Adhesion-in-Peel	>35 N		ASTM C794
Movement Capacity	25% ±		ASTM C719
Elongation at Break	400%		ASTM D412
Sagging	0mm		ISO 7390
Skin Formation	10 -15 min (23°c and 50% R.H)		

APPLICATIONS


Kitchens


Wet Areas


Bathrooms


Cool Rooms

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SiegelSeal N05+ High Performance Silicone



PREMIUM ALL PURPOSE SILICONE

- 100% Neutral Cure Silicone
- Excellent Adhesion
- Non-Slump Formula
- Permanent Flexibility
- UV & Weathering Resistant

COLOURS

- Black
- Grey
- White
- Translucent

TECHNICAL DATA

Sealant Type	Neutral Cure Silicone		
Colour	Colours	Translucent	
Density	1.35g/ml	1.02g/ml T	ASTM D792
Shore Hardness A	30	25	ASTM C661
Tensile Strength	1.3 N/mm2		ASTM D412
Application Temperature	+5°c to +40°c		
Temperature Resistance	-60°c to +180°c		
Adhesion-in-Peel	>35 N		ASTM C794
Movement Capacity	30% ±		ASTM C719
Elongation at Break	≥400%		ASTM D412
Sagging	0mm		ISO 7390
Skin Formation	5-10 min (23°c and 50% R.H)		

APPLICATIONS


Glazing


Cladding


HVAC


Roofing

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SabreSeal – GP Multipurpose Gap Filler



- **Permanently flexible**
- **Overpaintable with most paints**
- **Easy application and water clean-up**
- **Weather resistant**
- **Fast drying**



SabreSeal GP Multipurpose Gap Filler is an all purpose water-based acrylic sealant formulated for sealing and flexible filling of low movement joints both indoors and outdoors. It has high flexibility and is paintable, enabling it to accommodate movements and vibrations.

BENEFITS

- Paintable with most paints
- Can be used on porous and non-porus surfaces
- Suitable for joints with low movement
- Easy application and water clean-up
- Low VOC content

APPLICATIONS

- External (when painted over) and internal
- sealing around timber and metal window and
- door frames
- Profiles, trim and cladding
- Sealing cracks and gaps in brickwork, masonry,
- and concrete
- Joints between stairs and walls
- Windowsills
- Decorating
- Skirting boards
- Ceiling cornices

“The best gap filler I’ve used”

Since launching our SabreSeal GP Multipurpose Gap Filler we’ve had nothing but glowing reviews.

Fast drying, permanently flexible and suitable for indoor and outdoor use, SabreSeal GP helps painters achieve the perfect finish.



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Clean – X The Invisible Shield



The Invisible Shield is a multifuntional transperent polymer coating for the preservation, enhancement and prentative cleaning of glass, porcelain and ceramics! It mechanically seals, polishes and protects these surfaces with a system of 'isometric' polymers that durably bond to the surface.When applied as directed, the Invisible Shield coating is warranted to make surfaces instantly water, soil and stain repellent. It is guaranteed to be chemically inert, thermally stable and absolutely invisible without cracking, peeling or discolouring.

Uniquely, it can be infintely renewed without build-up. By making surfaces actively water, soil and stain repelllent, the Invisible Shield permits the practice of preventative cleaning and maintenance. It reduces cleaning costs, repairs and replacements; while improving appearance... keeping surfaces like new!

- A single application of Invisible Shield will last up to 10 years on exterier windows, architectural glass and facades with a minimal annual cleaning program.
- A single application of Invisible Shield will last up to 5 years on glass verandas, partitions and solar glass with proper maintenance.
- A single application of Invisible Shield will last up to 2 years on shower cabins, glass enclosures and all sandblasted glass with proper maintenance.

Windows, Partitions, Curtain walls, Automotive / Marine / Aircraft, Shower doors, Solar panels, Sandblasted glass, Decorative glass, Porcelain sinks / tubs, Ceramic tiles

PROPERTIES

Form:	Liquid
Appearance:	Clear
Active ingredients:	Min. 7.5% activated 'isometric' polymers
Flash point:	16 degrees celcius
Ph:	3.0
Catalist system:	Ethyl / isopropyl / hydrogen sulfate
Solvent:	Specially denatured ethanol / isopropanel
Specific gravity:	0.810 (@ 15.5 degrees celcuis)
Shelf life:	Indefinite (in closed containers)
Surface coverage:	Average 4000 sq.ft./gal.

*Available in 55-gallon drum, 5-gallon pail, 1-gallon, 32 fl. oz and 16 fl. oz

Test data: Based on 3rd party tests conducted by international testing organisation, Nanovea, that utilise ASTM standards, G99, D7027 and D7187, Unelko's Transparaent polymer coating was proven to be: glass with proper maintenance.

- 23% more resistant to wear and uncoated or untreated glass.
- 77.3% more resistant to scratch penetration.
- 31.2% less stress on coated glass compared to uncoated due to greater resistance to scratch penetration.

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Clean – X The Invisible Shield – Performance and Application



The Invisible Shield is ready to use as supplied, requires no shaking or stirring and should not be diluted. Invisible Shield should be used sparingly; but in a manner that ensures complete and uniform treatment. Applied by conventional wiping and polishing, it affords remarkable coverage - well in excess of 100 m2/litre or 4000 sq.ft/gallon. Specific coverage will vary slightly in accoradance with the type and condition of the particular surafce being treated and care with ahich the material is applied.

Surface preparation: All surfaces must be washed and thoroughly dried before treatment. New clean surfaces may be flushed with plain water and thoroughly dried. Visibly soiled, stained, worn or eroded surfaces must be first cleaned with clearwtaer to remove all cleaner residues. Invisible Shield does not build up on itself and it is not necessary to remove previous applications before retreating and renewing surfaces. It requires no curing and time-bonds instantly.

Application directions: Invisible Shield can be hand or spray applied. Apply the Invisible Shield to a clean, soft cloth that has been folded into a pad. The cloth should be soaked, but not dripping wet. Carefully wipe wetted cloth over the entire area to be treated, using a firm, cicular overlapping motion. If excess material, remove by wiping with a clean cloth; until all excess polymer is removed. Remove the excess material by wiping with a clean cloth; turning the cloth frequently until all the excess polymer is removed. Excess product can also be removed from large surfaces or intricate forms by spraying the surface with clean water and wiping with a dry cloth until the surface is clean and sparkling.

Application temperatures: Although the Invisible Shield can be freely applied throughout the year, surfaces to be treated must be completely dry. For greatest application efficiency, the surface should not have temperatures below 0 degrees or above 35 degrees celcius.

Handling and storage precautions: The Invisible Shield contains a fast-eveporating flamable solvent and should not be used or stored near an open flame or temperatures above 45 degrees celcius.

Ready to use - Require no mixing, dillution or catalysts.
Spray or wipe-on treatment - Offers vesatility and ease of application.
Fast acting and non-dusting - Contains no waxes, plastics or resins.
Multi-functional - Repels water - reduces friction and scratching - improves clarity.
Invisible and non-distorting - Monomolelcular film - optically clear

Durability: The resulting coating is ultra durable and wil last up to 10 years depending upon environmental exposure. Performance is only affected only by abrasive conditions. Itls ultimate effectiveness and durability will be a function of (1) the type and condition of the surface, (2) the quality of the application and (3) the nature and degree of exposure. Re-application will be necessary when the surface does not bead water at a contact angle of 80 degrees. It is recommended that a maintenance procedure be regularl reviewed in light of the demands of the environmental exposures.

Importantly, at only pennis per square emtre or square foot, Invisible Shield saves substantial time, labor and money ordinarily needed to clean glass. It makes cleaning remarkably easy, reduces required maintenance and saves work, repairs and replacements.



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REPEL – Glass cleaner



REPEL Glass Cleaner

This patent-pending glass and surface cleaner cleans glass and other surfaces to a streak free shine and simultaneously bonds a nano-scale 'invisible barrier' to the surface that repels water, soil, grime and stains for less re-soiling ad easier next time cleaning.

REPEL reduces the adhesion and build-up of hard water spots, oil, grime, smudges, fingerprints, soap scum and mineral desposits. REPEl is great on windows, doors, showers, mirrors, tables, sinks, tubs, tiles, counters and more! Once you use REPEL, you'll never use an old fashioned glass cleaner again!

Availble in RTU & Contentrate form.

Directions for use: Spray the surface with REPEL and wipe up with cloth or paper towel until the surface is dry and polished.

Precaution: Avoid eye contact. If contacted, flush eyes with water for 15 minutes. See physician if irritation develops. Keep out of reach of children.

Properties:

- Active ingredients: 1-Octadecanaminium N, N-Dimethyl N (3-trimethoxysilyl) propyl chloride.
- Flash point: None (non-flammable)
- Odor: pleasant
- Color: tinted - slightly cloudy (normal)
- pH; 5.0-7.0
- Viscosity: Consistency of water
- Foam: Slight when shaken or sprayed
- Abrasives: None
- Solubility: Complete with water
- Storage stability: Minimum 2 years
- Weight per gallon: 8.35lbs
- Freeze/thaw stability: Good
- Packaged: 32fl. oz. ready to use spray bottles

Bottle
REPEL (32 fl. oz.)
REPEL (1 gal.)

Case Pack

REPEL (32 fl. oz.)	12 bottles / case
REPEL (1 gal.)	4 bottle / case

Pallet Pack

REPEL (32 fl. oz.)	44 bottles / case
REPEL (1 gal.)	40 bottle / case

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