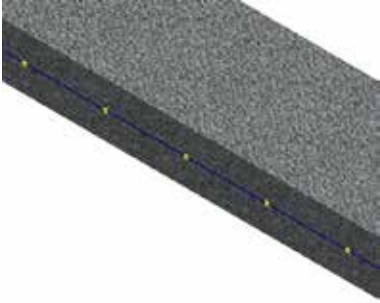



# PLATEFIX PF150 BALUSTRADE SYSTEM

## Installation / Fitting Instructions

### SIDE FIX (PF150) – Platefix

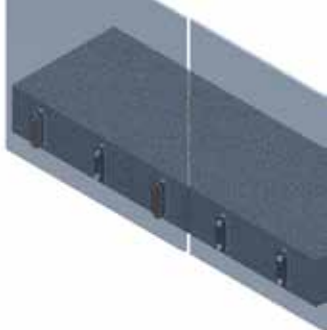
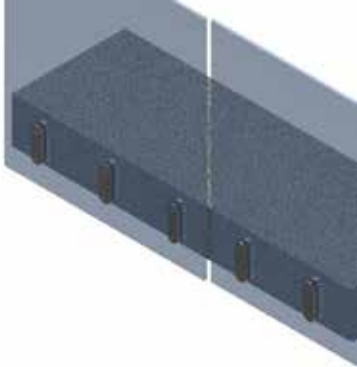


Product	Installation/Fitting Instructions
<p><b>Structure Fastening Installation</b></p> <p>Typical Layout of PF150 Platefix Anchors.</p> 	<ul style="list-style-type: none"> <li>• Verify the deck capacity can withstand the loads required for installation prior to fixing balustrade.</li> <li>• Using laser level or string line, cast level lines horizontally and vertically to find the centre points of the fastenings required for the building structure as detailed in the PS1. <ul style="list-style-type: none"> <li>– For double fixing minimum edge distance from top of structure to centre line of fixing is 50mm for concrete and 40mm for steel / timber.</li> <li>– For single fixing minimum edge distance from top of structure to centre line of fixing is 85mm for concrete and 75mm for steel.</li> <li>– Fixing layout centres are calculated as: minimum 100mm, maximum 200mm in from glass edges; Equal spacing's between corner fixings to match PS1 design tables.</li> </ul> </li> </ul>
<p><b>Backing Plate Installation</b></p> <p>Structural fastening into backing Disc Tolerance.</p> 	<ul style="list-style-type: none"> <li>• Install fastenings as per the given PS1 for structure type.</li> <li>• Fix PF150 backing plate to the fastening. (Tightening will vary by substrate type). <ul style="list-style-type: none"> <li>– Ensure the backing discs are all on a level plane. If the building structure is not level:</li> <li>– For PF150 Platefix Anchor - add fibre gaskets (3 gaskets max.) or additional custom plates to a maximum of 100mm.</li> </ul> </li> </ul> <p>Ensure that the fastenings in the building structure are flush to the face of the backing disc. Any protrusion over the face side will cause damage to the glass surface.</p>

**IMPORTANT NOTE:** The guide above is simplified, and should in no way be referenced in isolation. For full comprehensive substrate fixing details please refer through to the PS1.

# PLATEFIX PF150 BALUSTRADE SYSTEM

## Installation / Fitting Instructions

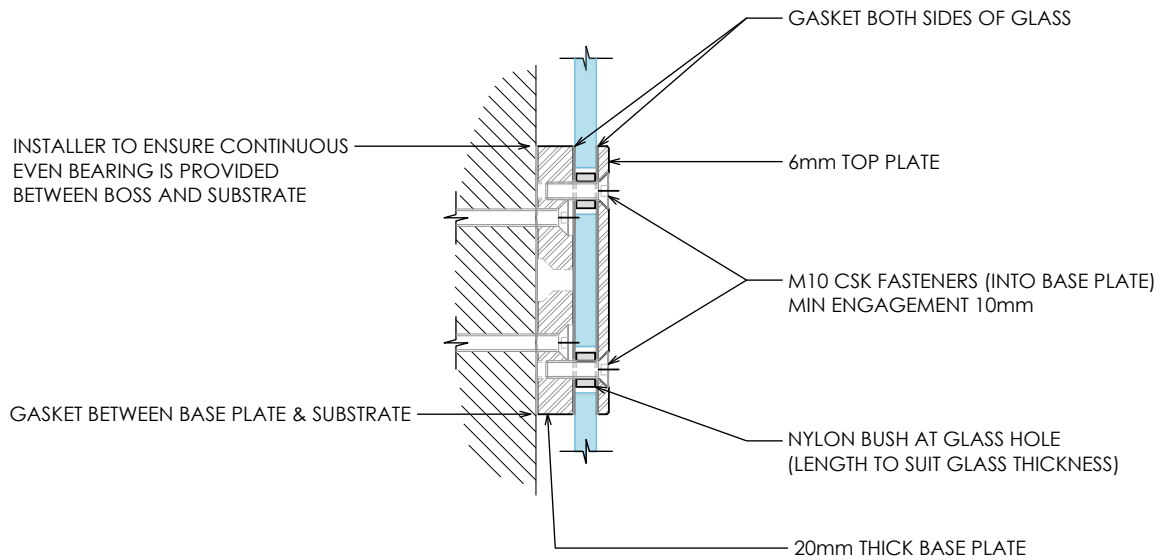
Product	Installation/Fitting Instructions
<p><b>Glass Installation</b></p> 	<ul style="list-style-type: none"> <li>• NOTE: when ordering glass ensure the hole diameters are 26mm.</li> <li>• Check that the hole locations in the glass panels align with the backing disc fastening locations.</li> <li>• Install glass panels.             <ul style="list-style-type: none"> <li>– For PF150 Platefix Anchor – use black fibre gasket to backing disc surface, suitable bush for tolerance (thickness to suit the glass t), black fibre gasket to outer disc and M12 fastening (single fix) or M10 fastening for (double fixing) (length to suit the glass t).</li> </ul> </li> <li>• Fix the PF150 Platefix front plate through the glass panel to the backing plate, tightening to 40Nm.             <ul style="list-style-type: none"> <li>– M12 / M10 fastening must not clash with building structure fastening inside the backing disc.</li> </ul> </li> </ul>
<p><b>Final Adjustment</b></p> 	<ol style="list-style-type: none"> <li>1. Check Glass panel gaps, levels and alignments of frit or similar pattern details. Align with setting blocks and/ or spacers to suit.</li> <li>2. Check PF150 Platefix anchors have been torqued to 40Nm.</li> </ol>
<p><b>Cleaning</b></p>	<p>Once everything is correctly in place and the job is complete, the glass and disc need to be cleaned. Use a non-abrasive glass cleaner on the glass and warm soapy water on the PF150 Platefix anchor. We also recommend a soft sponge or cloth, again to avoid any risk of scratching. For full care and maintenance guidelines please refer to our comprehensive guide <a href="#">pages 778-779</a>.</p>

**IMPORTANT NOTE:** The guide above is simplified, and should in no way be referenced in isolation. For full comprehensive substrate fixing details please refer through to the PS1.

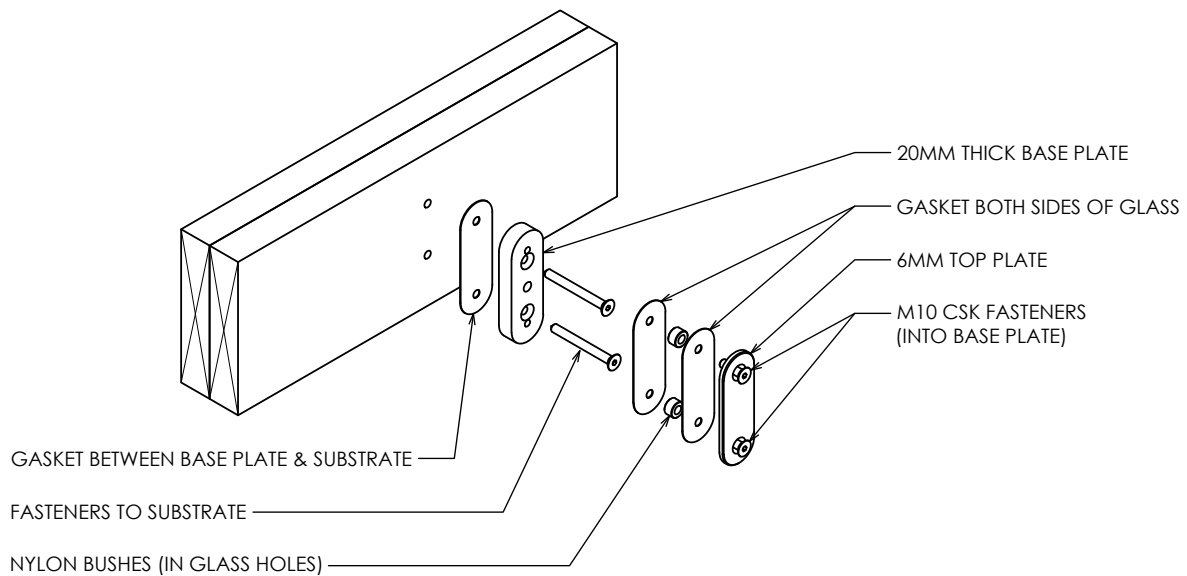
# PLATEFIX PF150 SYSTEM

## Section and Exploded Views

### PLATE FIX PF150 (2 x M10 FIXING) SECTION VIEW



### PLATE FIX PF150 STANDARD FITTING EXPLODED VIEW

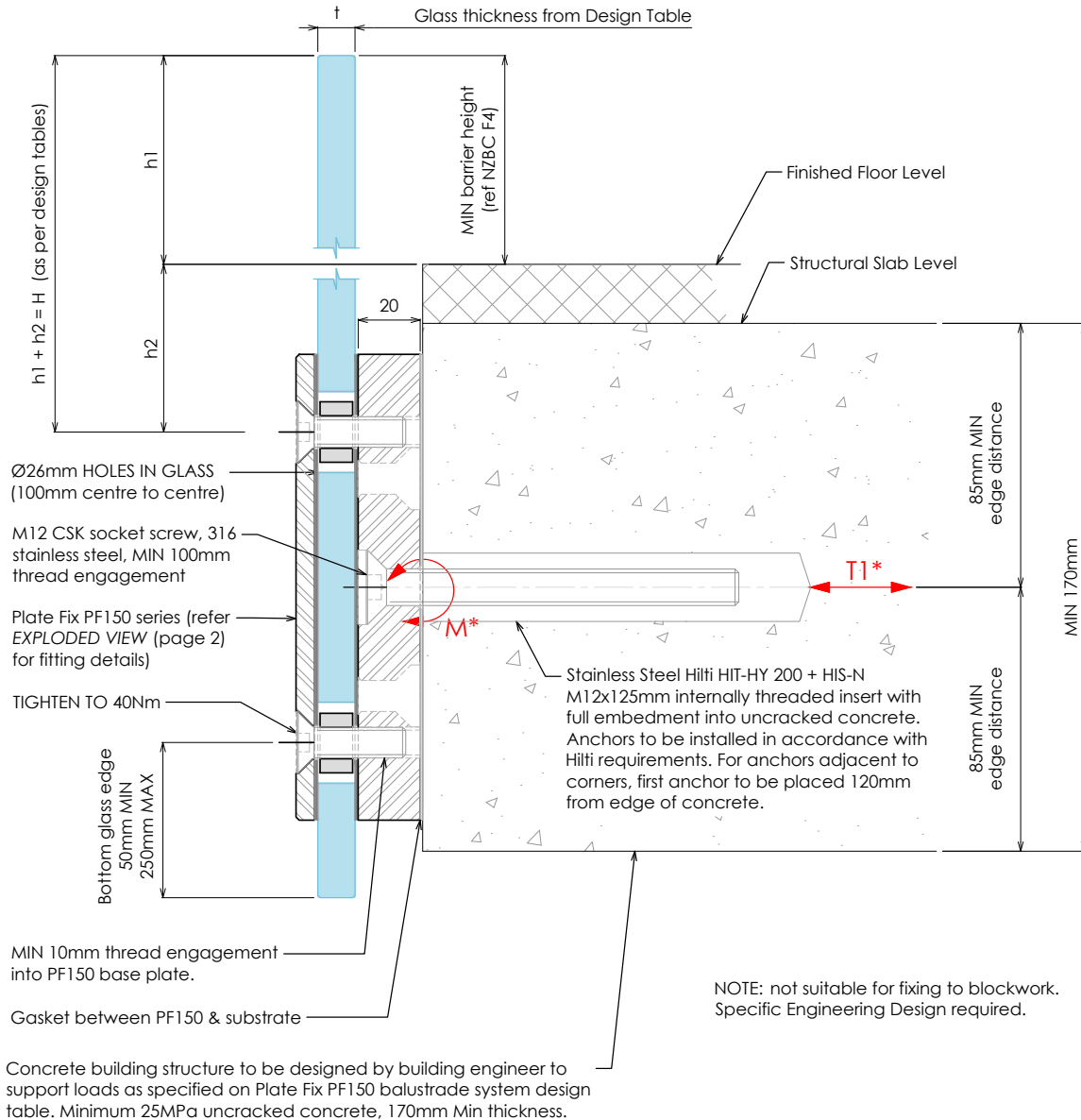


# PLATEFIX PF150 SYSTEM

## Concrete Fixing Detail

Drawing No.	Revision	Fixing Type	Occupancy
PF150 / C / RA-M12	R6.1	PF150 with M12 sleeve	A, B, E, C3

NOT SUITABLE FOR OCCUPANCY C1/C2, D OR C5



Refer to Plate Fix PF150 balustrade system design table for required glass thickness, fixing spacings and fixing loads according to AS/NZS 1170.1:2002 for the occupancies listed above. Refer to design tables and elevations for post failure requirements. Interlinking rail / clips not shown for clarity. 'H' refers to top of barrier.

### NOTES:

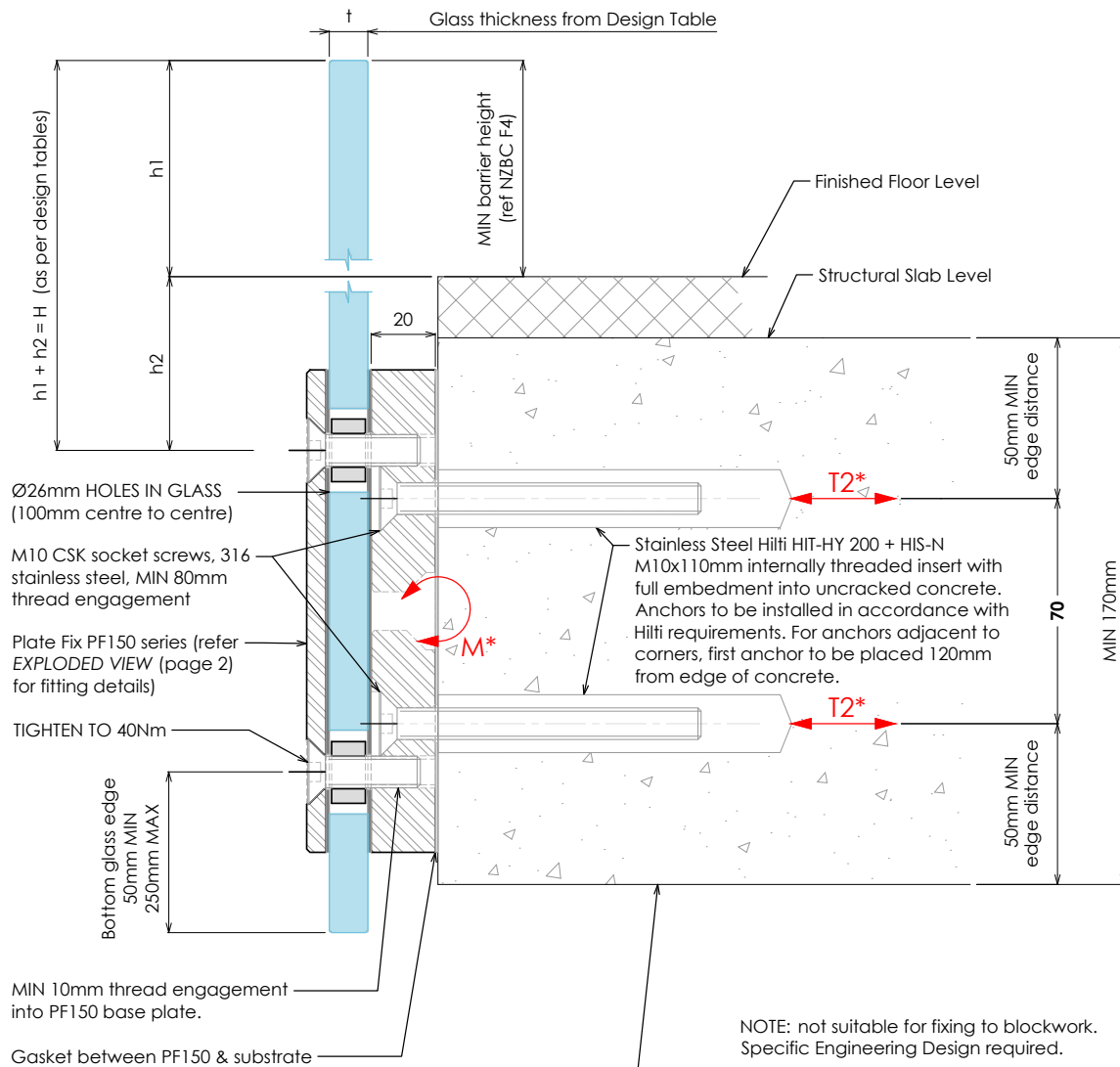
- Capacity of structure is to be of sufficient strength to support loads  $M^*$  and  $T^*$  specified on Plate Fix PF150 balustrade system design table. Structure capacity to be verified by building engineer prior to fixing balustrade.
- Max loading to comply with AS/NZS 1170.1:2002 Minimum Imposed Actions for Barriers Occupancy, shown at top of drawing, for design in accordance with Plate Fix PF150 balustrade system design table.
- Penetration through a membrane must be completed in accordance with written instructions of the membrane manufacturer.
- No substitution allowed - any variation from the details above and design tables will require specific design.

# PLATEFIX PF150 SYSTEM

## Concrete Fixing Detail

Drawing No.	Revision	Fixing Type	Occupancy
PF150 / C / RA-M10	R6.1	PF150 with 2 x M10 sleeve	A, B, E, C3

NOT SUITABLE FOR OCCUPANCY C1/C2, D OR C5



Concrete building structure to be designed by building engineer to support loads as specified on Plate Fix PF150 balustrade system design table. Minimum 25MPa uncracked concrete, 170mm Min thickness.

Refer to Plate Fix PF150 balustrade system design table for required glass thickness, fixing spacings and fixing loads according to AS/NZS 1170.1:2002 for the occupancies listed above. Refer to design tables and elevations for post failure requirements. Interlinking rail / clips not shown for clarity. 'H' refers to top of barrier.

### NOTES:

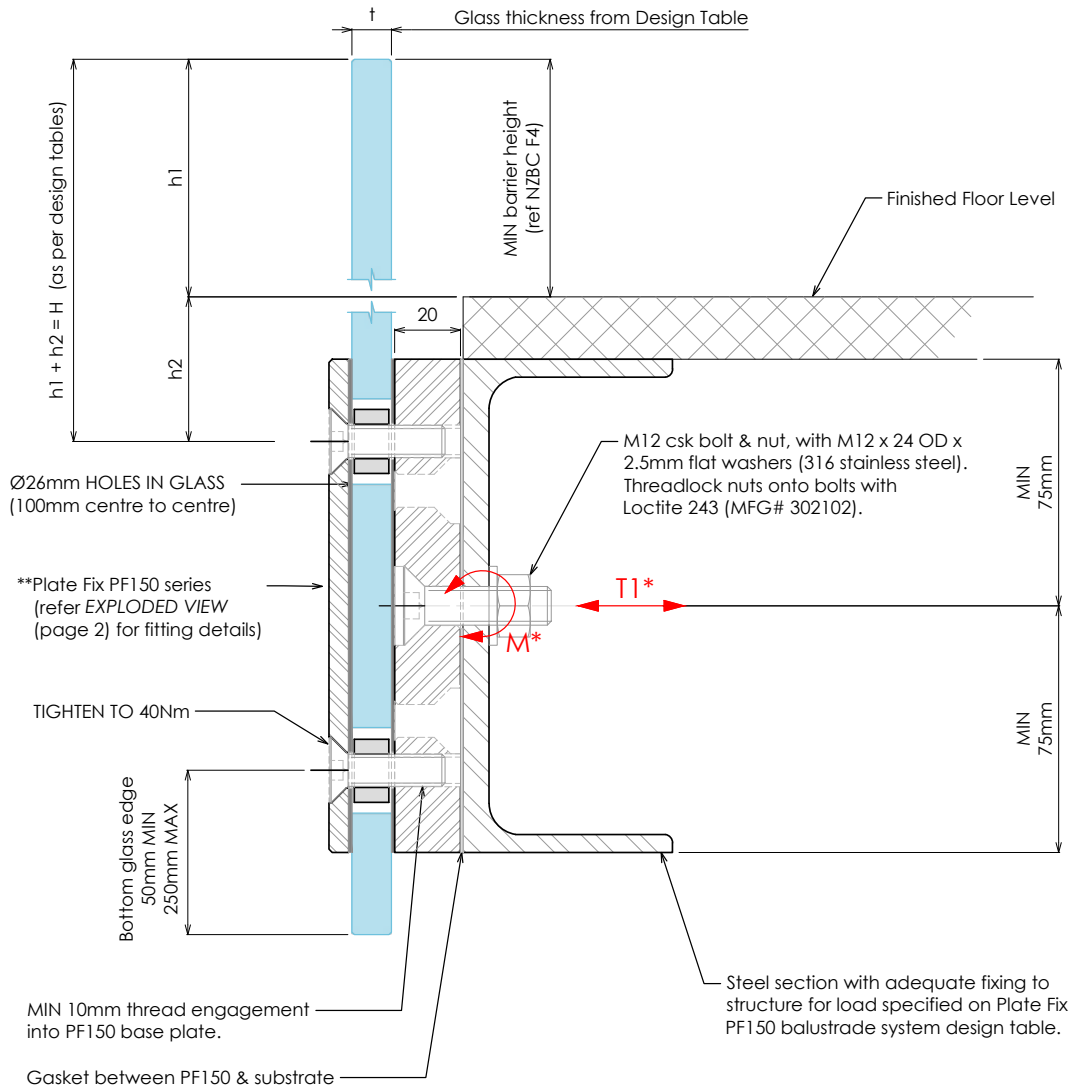
- Capacity of structure is to be of sufficient strength to support loads  $M^*$  and  $T^*$  specified on Plate Fix PF150 balustrade system design table. Structure capacity to be verified by building engineer prior to fixing balustrade.
- Max loading to comply with AS/NZS 1170.1:2002 Minimum Imposed Actions for Barriers Occupancy, shown at top of drawing, for design in accordance with Plate Fix PF150 balustrade system design table.
- Penetration through a membrane must be completed in accordance with written instructions of the membrane manufacturer.
- No substitution allowed - any variation from the details above and design tables will require specific design.

# PLATEFIX PF150 SYSTEM

## Steel Fixing Detail

Drawing No.	Revision	Fixing Type	Occupancy
PF150 / S / RN (OPEN) M12	R6.1	PF150 with M12 bolt & nut	A, B, E, C3

NOT SUITABLE FOR OCCUPANCY C1/C2, D OR C5



Refer to Plate Fix PF150 balustrade system design table for required glass thickness, fixing spacings and fixing loads according to AS/NZS 1170.1:2002 for the occupancies listed above. Refer to design tables and elevations for post failure requirements. Interlinking rail / clips not shown for clarity. 'H' refers to top of barrier.

### NOTES:

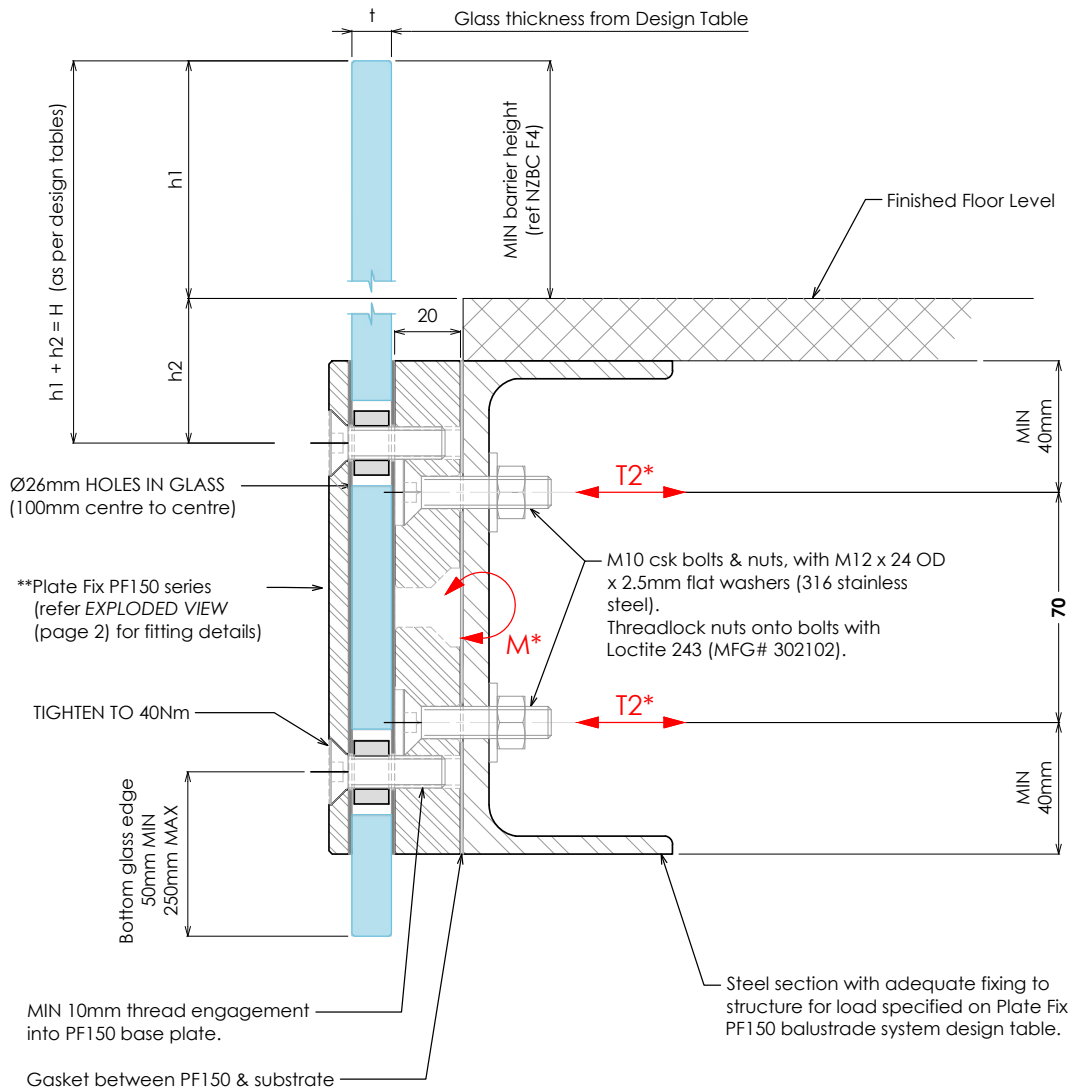
- Capacity of structure is to be of sufficient strength to support loads  $M^*$  and  $T^*$  specified on Plate Fix PF150 balustrade system design table. Structure capacity to be verified by building engineer prior to fixing balustrade.
- Max loading to comply with AS/NZS 1170.1:2002 Minimum Imposed Actions for Barriers Occupancy, shown at top of drawing, for design in accordance with Plate Fix PF150 balustrade system design table.
- Penetration through a membrane must be completed in accordance with written instructions of the membrane manufacturer.
- For fixing to steel substrates, the installer shall ensure the bolts are tightened to a "snug-tight" level as defined in NZS3404.
- No substitution allowed - any variation from the details above and design tables will require specific design.

# PLATEFIX PF150 SYSTEM

## Steel Fixing Detail

Drawing No.	Revision	Fixing Type	Occupancy
PF150 / S / RN (OPEN) M10	R6.1	PF150 with 2 x M10 bolt & nut	A, B, E, C3

NOT SUITABLE FOR OCCUPANCY C1/C2, D OR C5



Refer to Plate Fix PF150 balustrade system design table for required glass thickness, fixing spacings and fixing loads according to AS/NZS 1170.1:2002 for the occupancies listed above. Refer to design tables and elevations for post failure requirements. Interlinking rail / clips not shown for clarity. 'H' refers to top of barrier.

### NOTES:

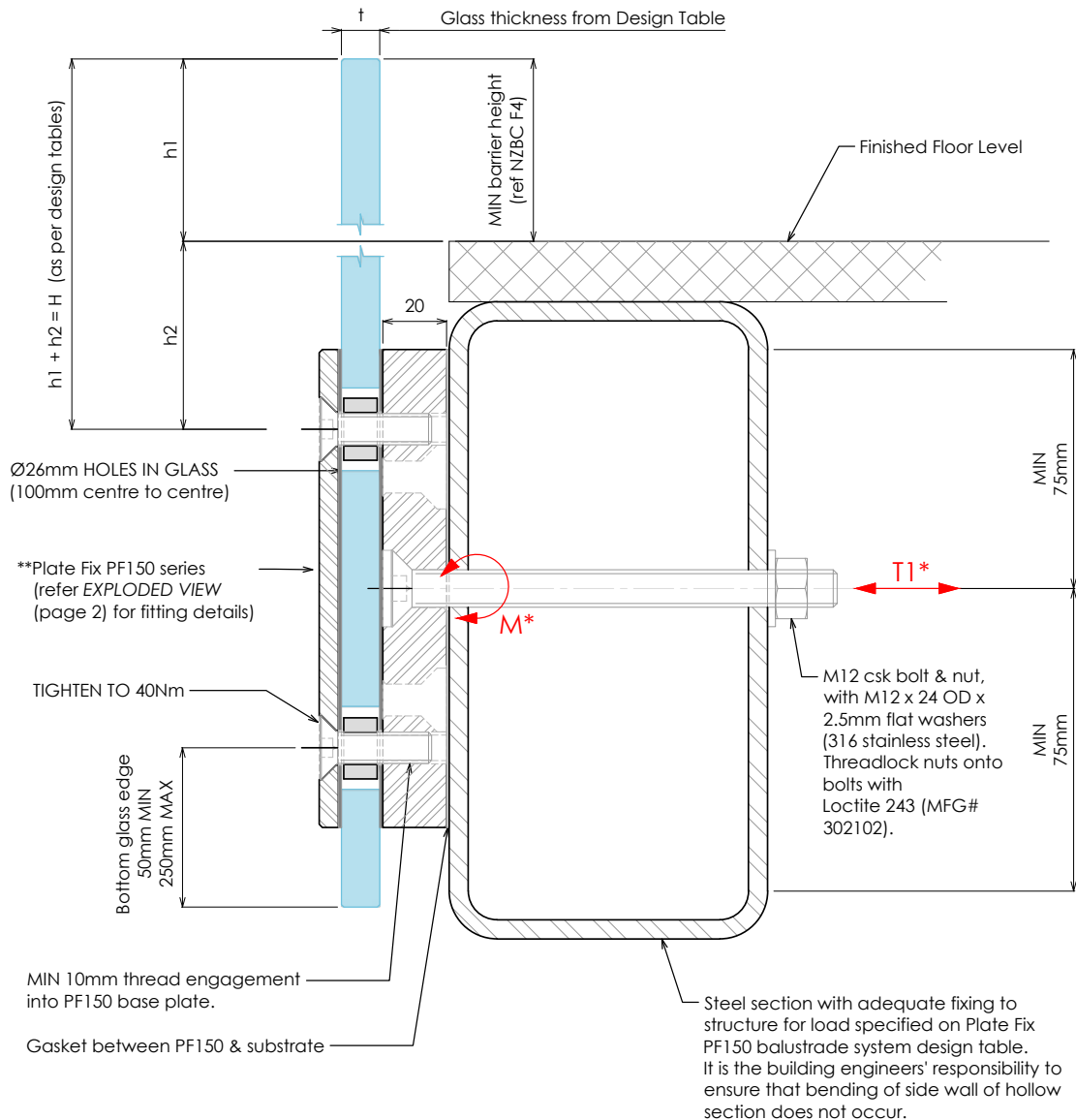
- Capacity of structure is to be of sufficient strength to support loads  $M^*$  and  $T^*$  specified on Plate Fix PF150 balustrade system design table. Structure capacity to be verified by building engineer prior to fixing balustrade.
- Max loading to comply with AS/NZS 1170.1:2002 Minimum Imposed Actions for Barriers Occupancy, shown at top of drawing, for design in accordance with Plate Fix PF150 balustrade system design table.
- Penetration through a membrane must be completed in accordance with written instructions of the membrane manufacturer.
- For fixing to steel substrates, the installer shall ensure the bolts are tightened to a "snug-tight" level as defined in NZS3404.
- No substitution allowed - any variation from the details above and design tables will require specific design.

# PLATEFIX PF150 SYSTEM

## Steel Fixing Detail

Drawing No.	Revision	Fixing Type	Occupancy
PF150 / S / RN (CLOSED) M12	R6.1	PF150 with M12 bolt & nut	A, B, E, C3

NOT SUITABLE FOR OCCUPANCY C1/C2, D OR C5



Refer to Plate Fix PF150 balustrade system design table for required glass thickness, fixing spacings and fixing loads according to AS/NZS 1170.1:2002 for the occupancies listed above. Refer to design tables and elevations for post failure requirements. Interlinking rail / clips not shown for clarity. 'H' refers to top of barrier.

### NOTES:

- Capacity of structure is to be of sufficient strength to support loads M\* and T\* specified on Plate Fix PF150 balustrade system design table. Structure capacity to be verified by building engineer prior to fixing balustrade.
- Max loading to comply with AS/NZS 1170.1:2002 Minimum Imposed Actions for Barriers Occupancy, shown at top of drawing, for design in accordance with Plate Fix PF150 balustrade system design table.
- Penetration through a membrane must be completed in accordance with written instructions of the membrane manufacturer.
- For fixing to steel substrates, the installer shall ensure the bolts are tightened to a "snug-tight" level as defined in NZS3404.
- No substitution allowed - any variation from the details above and design tables will require specific design.

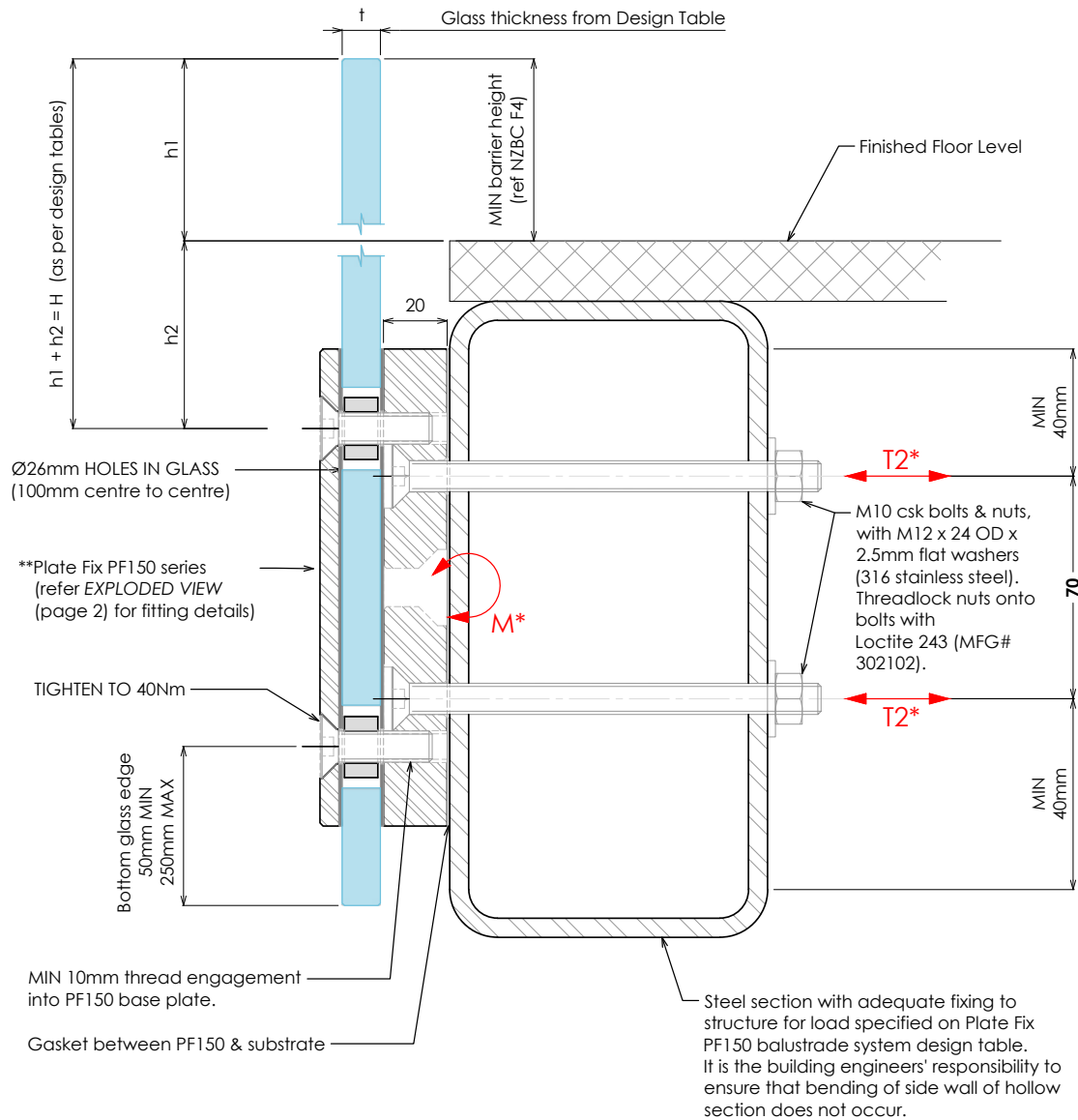


# PLATEFIX PF150 SYSTEM

## Steel Fixing Detail

Drawing No.	Revision	Fixing Type	Occupancy
PF150 / S / RN (CLOSED) M10	R6.1	PF150 with 2 x M10 bolt & nut	A, B, E, C3

NOT SUITABLE FOR OCCUPANCY C1/C2, D OR C5



Refer to Plate Fix PF150 balustrade system design table for required glass thickness, fixing spacings and fixing loads according to AS/NZS 1170.1:2002 for the occupancies listed above. Refer to design tables and elevations for post failure requirements. Interlinking rail / clips not shown for clarity. 'H' refers to top of barrier.

### NOTES:

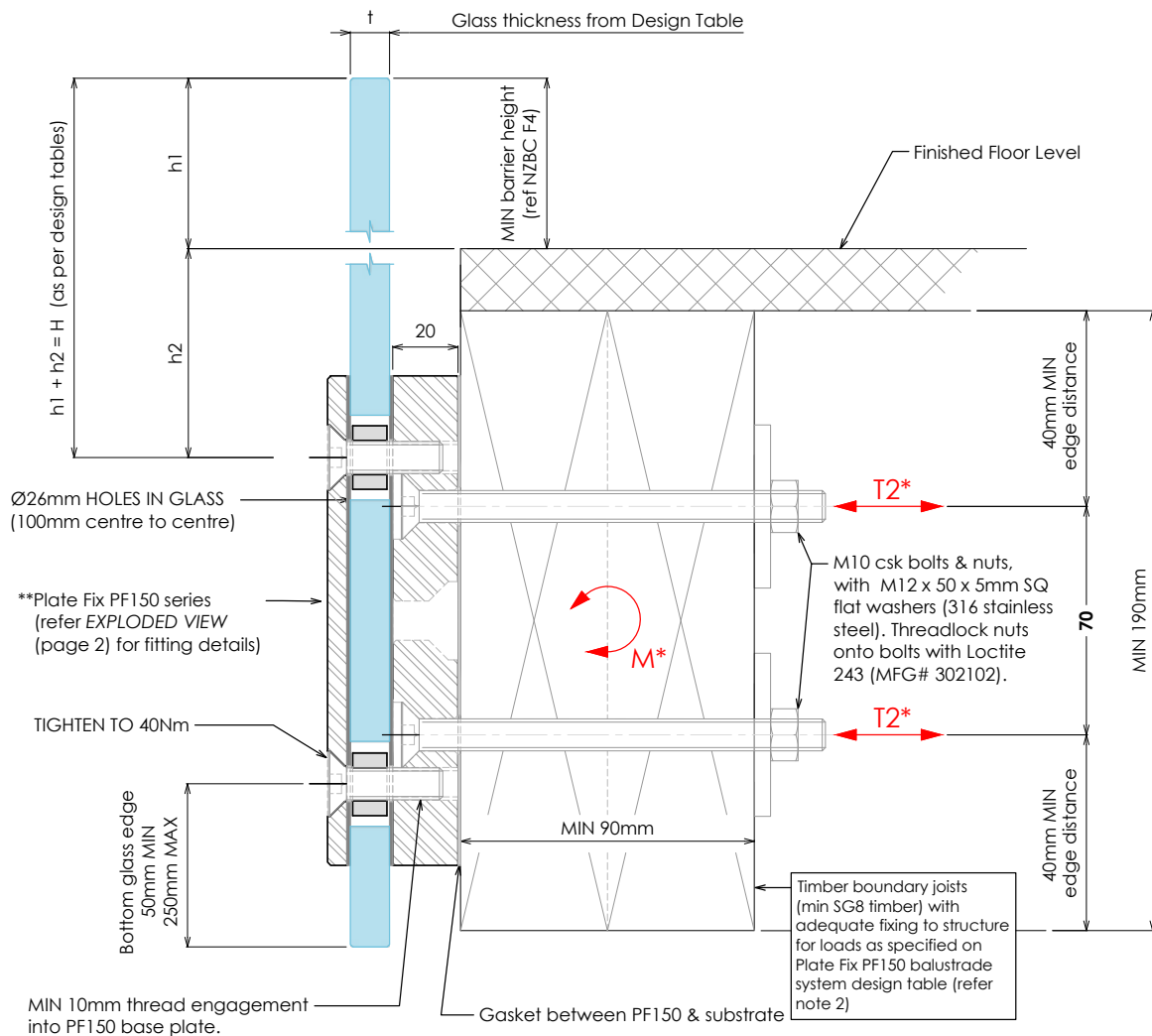
- Capacity of structure is to be of sufficient strength to support loads M\* and T\* specified on Plate Fix PF150 balustrade system design table. Structure capacity to be verified by building engineer prior to fixing balustrade.
- Max loading to comply with AS/NZS 1170.1:2002 Minimum Imposed Actions for Barriers Occupancy, shown at top of drawing, for design in accordance with Plate Fix PF150 balustrade system design table.
- Penetration through a membrane must be completed in accordance with written instructions of the membrane manufacturer.
- For fixing to steel substrates, the installer shall ensure the bolts are tightened to a "snug-tight" level as defined in NZS3404.
- No substitution allowed - any variation from the details above and design tables will require specific design.

# PLATEFIX PF150 SYSTEM

## Timber Fixing Detail

Drawing No.	Revision	Fixing Type	Occupancy
PF150 / T / RN	R6.1	PF150 with 2 x M10 bolt & nut	A, B, E, C3

NOT SUITABLE FOR OCCUPANCY C1/C2, D OR C5



Refer to Plate Fix PF150 balustrade system design table for required glass thickness, fixing spacings and fixing loads according to AS/NZS 1170.1:2002 for the occupancies listed above. Refer to design tables and elevations for post failure requirements. Interlinking rail / clips not shown for clarity. 'H' refers to top of barrier.

### NOTES:

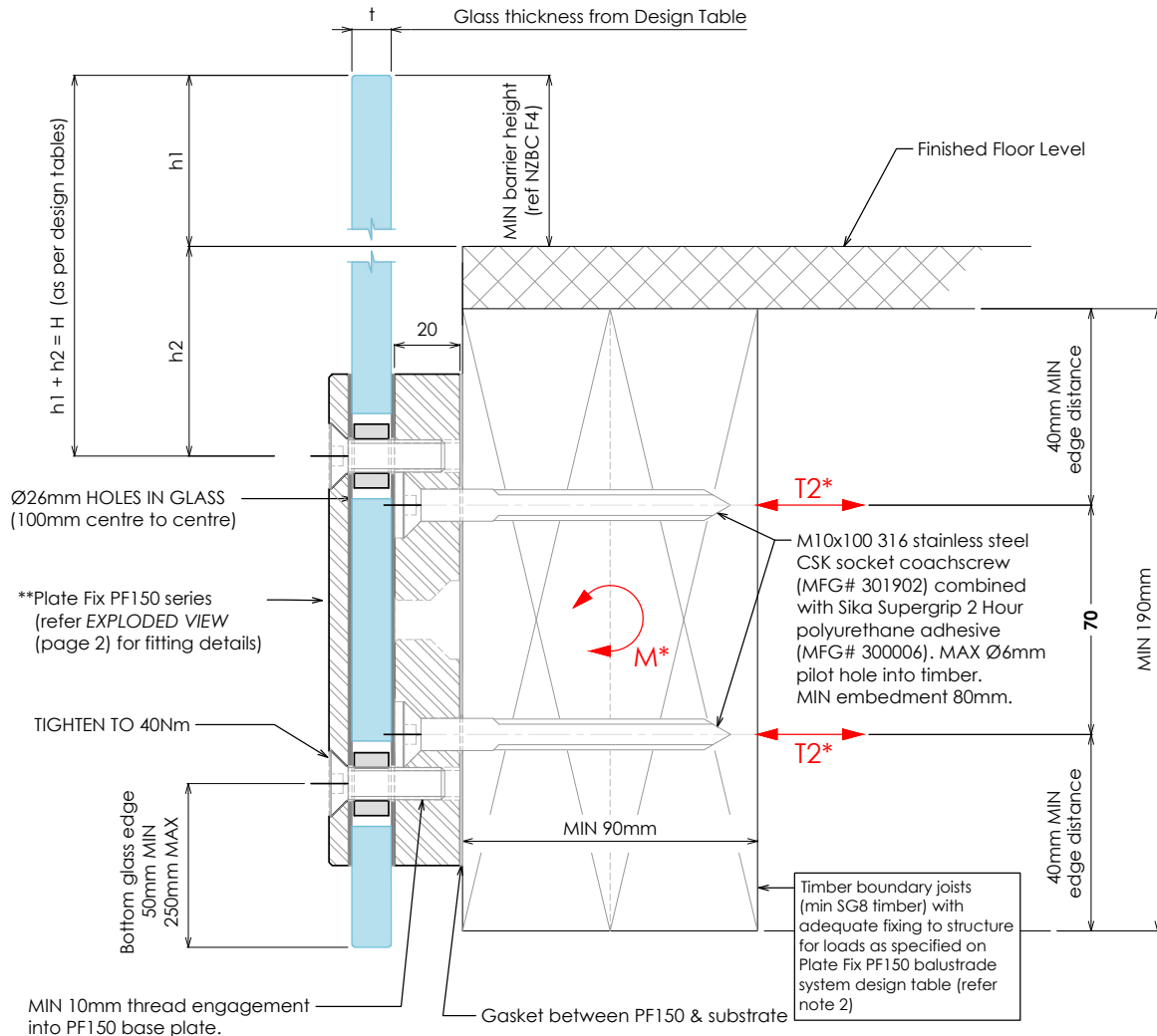
- Capacity of structure is to be of sufficient strength to support loads  $M^*$  and  $T^*$  specified on Plate Fix PF150 balustrade system design table. Structure capacity to be verified by building engineer where applicable or checked to NZS3604 requirements prior to fixing balustrade.
- Timber decks designed to NZS 3604:2011 guidelines will meet loading requirement, **except for decks including cantilever floor joists where specific design is required.**
- Max loading to comply with AS/NZS 1170.1:2002 Minimum Imposed Actions for Barriers Occupancy, shown at top of drawing, for design in accordance with Plate Fix PF150 balustrade system design table.
- Penetration through a membrane must be completed in accordance with written instructions of the membrane manufacturer.
- For fixing to timber substrates, the installer shall ensure that the bolt / coach screw is sufficiently tightened to reduce movement of the bolt head and washer. Care should be taken not to over tighten the fixings that would cause crushing of the timber or compromise the thread leading to anchor pull-out.
- No substitution allowed - any variation from the details above and design tables will require specific design.
- Fixings to timber must be re-tightened 2 months after installation and periodically thereafter to allow for timber shrinkage.

# PLATEFIX PF150 SYSTEM

## Timber Fixing Detail

Drawing No.	Revision	Fixing Type	Occupancy
PF150 / T / CS	R6.1	PF150 with 2 x screw	A, B, E, C3

NOT SUITABLE FOR OCCUPANCY C1/C2, D OR C5



Refer to Plate Fix PF150 balustrade system design table for required glass thickness, fixing spacings and fixing loads according to AS/NZS 1170.1:2002 for the occupancies listed above. Refer to design tables and elevations for post failure requirements. Interlinking rail / clips not shown for clarity. 'H' refers to top of barrier.

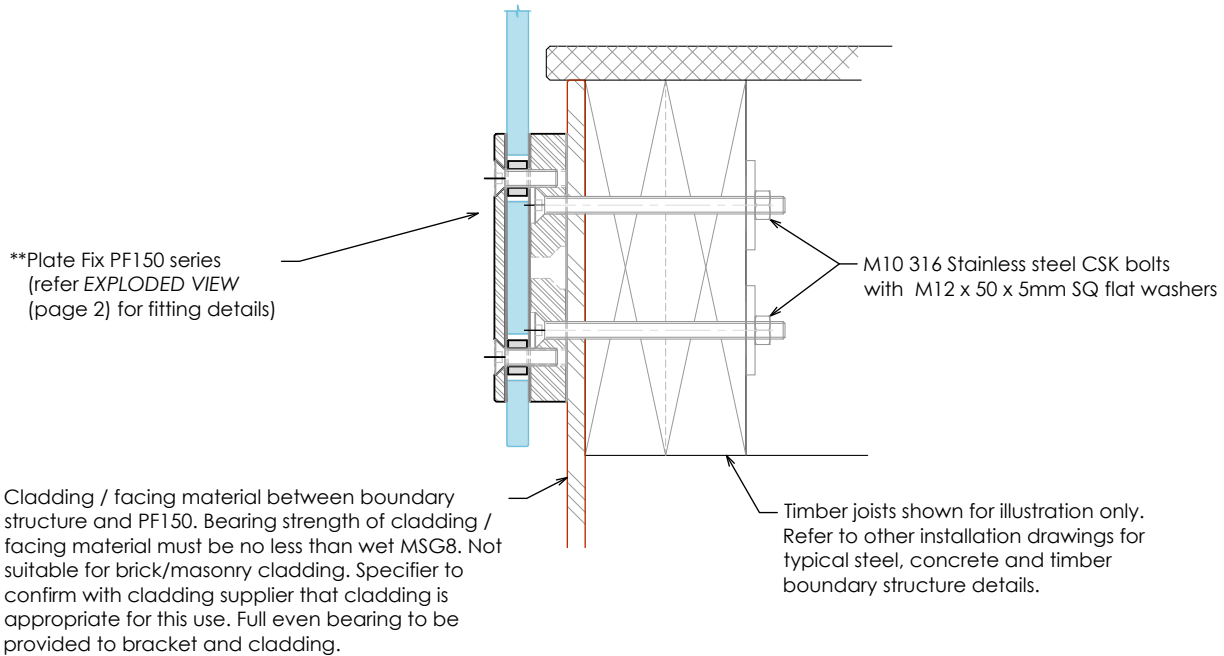
### NOTES:

- Capacity of structure is to be of sufficient strength to support loads  $M^*$  and  $T^*$  specified on Plate Fix PF150 balustrade system design table. Structure capacity to be verified by building engineer where applicable or checked to NZS3604 requirements prior to fixing balustrade.
- Timber decks designed to NZS 3604:2011 guidelines will meet loading requirement, **except for decks including cantilever floor joists where specific design is required.**
- Max loading to comply with AS/NZS 1170.1:2002 Minimum Imposed Actions for Barriers Occupancy, shown at top of drawing, for design in accordance with Plate Fix PF150 balustrade system design table.
- Penetration through a membrane must be completed in accordance with written instructions of the membrane manufacturer.
- For fixing to timber substrates, the installer shall ensure that the bolt / coach screw is sufficiently tightened to reduce movement of the bolt head and washer. Care should be taken not to over tighten the fixings that would cause crushing of the timber or compromise the thread leading to anchor pull-out.
- No substitution allowed - any variation from the details above and design tables will require specific design.
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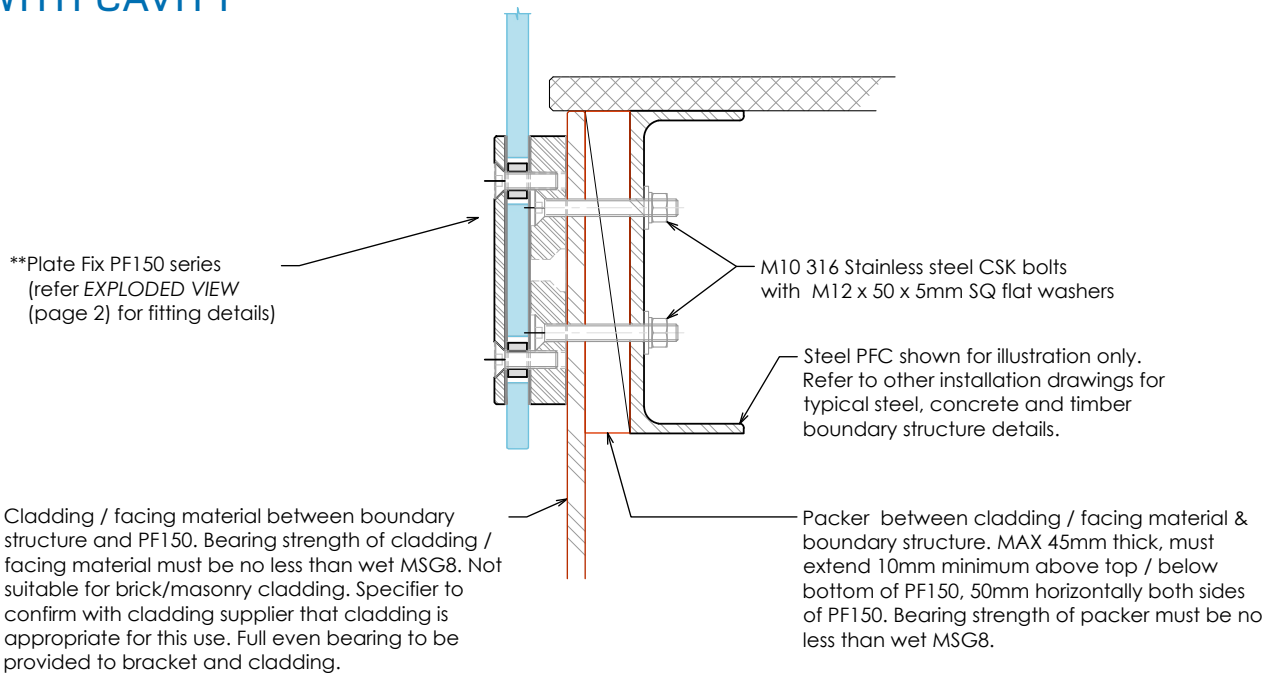
# PLATEFIX PF150 SYSTEM

## Cladding / Fascia Installation Details

### CLADDING / FASCIA PANEL DETAIL



### CLADDING / FASCIA PANEL DETAIL WITH CAVITY



**NOTE:** For PF150 clamps connected to steel/concrete and bearing on timber cladding, facing material and/or timber packers, clamp spacing and balustrade height must be selected in accordance with timber substrate requirements in design tables.