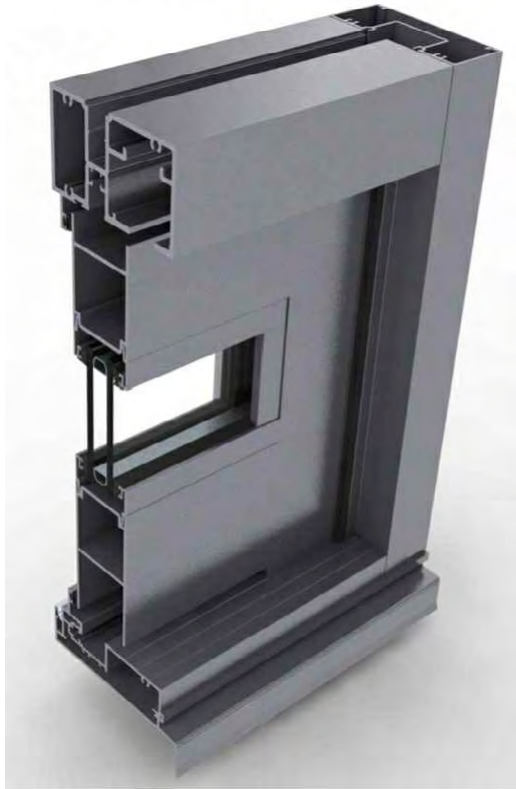


**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 1**

**MAX™ Bifold Door**



**FEATURES:**

- Suited for use with Max 100 Centre Double Glazed and Gen 100 Single Glazed framing
- Comprehensive range of configurations
- 50mm thick commercial door leaf for additional strength
- Beaded stiles as standard, Pocket Single or Double Glazed optional for simplified assembly.
- 90kg rated Stainless steel roller and hinge assemblies
- Accepts 6mm to 10.38mm single glazed
- Accepts 24mm to 28mm IGU's
- Beaded Stiles accept single glazed 6-12mm and 24-32mm IGU's
- Pocketed stiles accept 24-28mm IGU's
- Optional Rebated, Flat and Recessed tracks
- Open IN or OUT
- Identical appearance to Thermal Break, can be mixed on projects for visual unity.

**FABRICATION:**

- Square cut manufacture
- Simple panelized assembly

**PRODUCT APPLICATIONS:**

- High end residential applications
- Apartments

**LIMITATIONS:**

- Recommended Maximum panel height 3000, subject to structural limits (refer structural tables)
- 1000 panel width
- Maximum 90kg per panel.  
A 3000 x 1000 panel with 6/12/6 glass is less than 90kg
- 7 panels stacking to one end (combined 600kg)
- Structural performance of the supporting beam above

**NOTE CAREFULLY;**

General arrangement details have dimensions that are indicative only of the stile combinations shown. Stile widths and edge cover varies with different stile combinations resulting in different rail cutting and glass widths. Glass height however is identical for each rail combination.



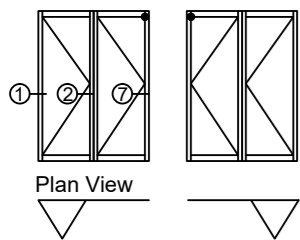


**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 2**  
**Bifold Door Configurations**

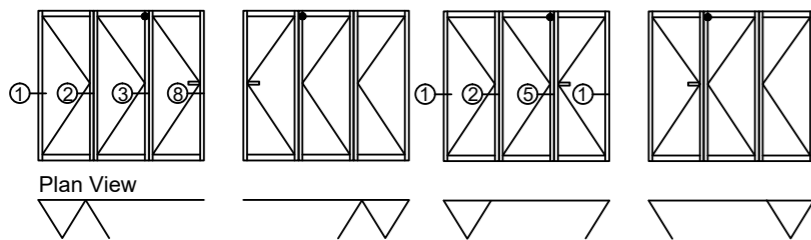
Some typical configurations are depicted below from 2 to 7 panel doors. Many more panel configurations are available but it needs to be kept in mind that as panels stack back to one side, the load is concentrated to the stacking end. For practical purposes a limit of 7 panels in each direction is recommended provided the supporting beam above can bear this weight without deflection.

- Maximum Height: 3000
- Maximum Panel Width: 1000
- Maximum weight per leaf: 90kg (limited by the hardware)
- Active hinged door leaves are indicated with a handle symbol. Note that odd leaf configurations are preferred as it allows an active leaf which can be opened from outside.
- Configurations 2.0, 0.2, 2.2, 4.2, 2.4 (marked \*) do not have active leaves and can only be unlocked by releasing flushbolts or twinbolt activators from inside.

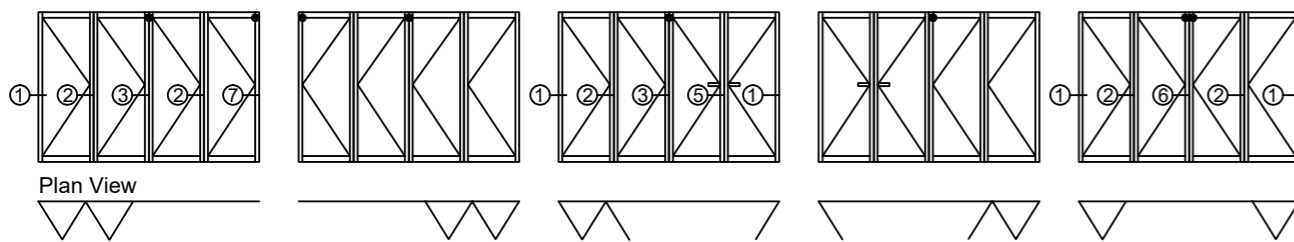
Type 2.0 \*    Type 0.2 \*



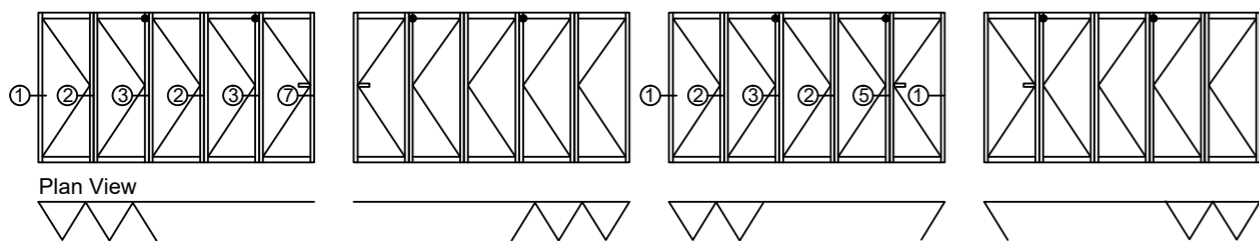
Type 3.0    Type 0.3    Type 2.1    Type 1.2



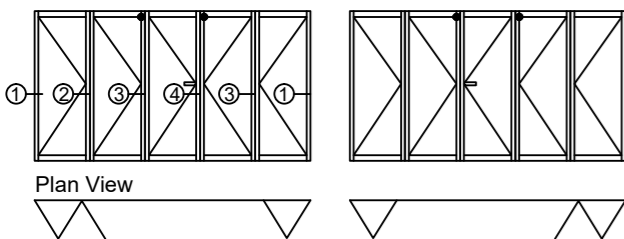
Type 4.0 \*    Type 0.4 \*    Type 3.1    Type 1.3    Type 2.2 \*



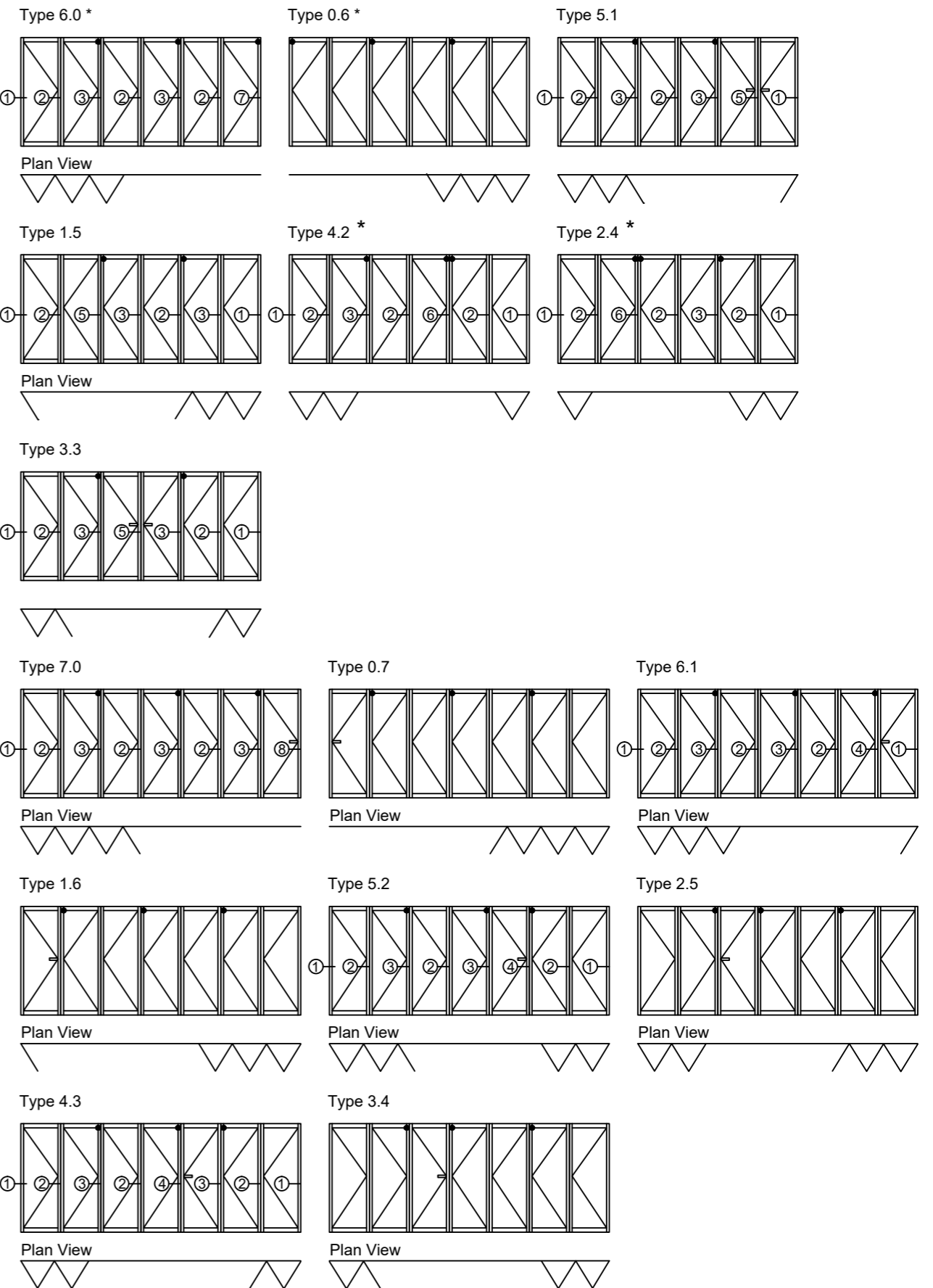
Type 5.0    Type 0.5    Type 4.1    Type 1.4



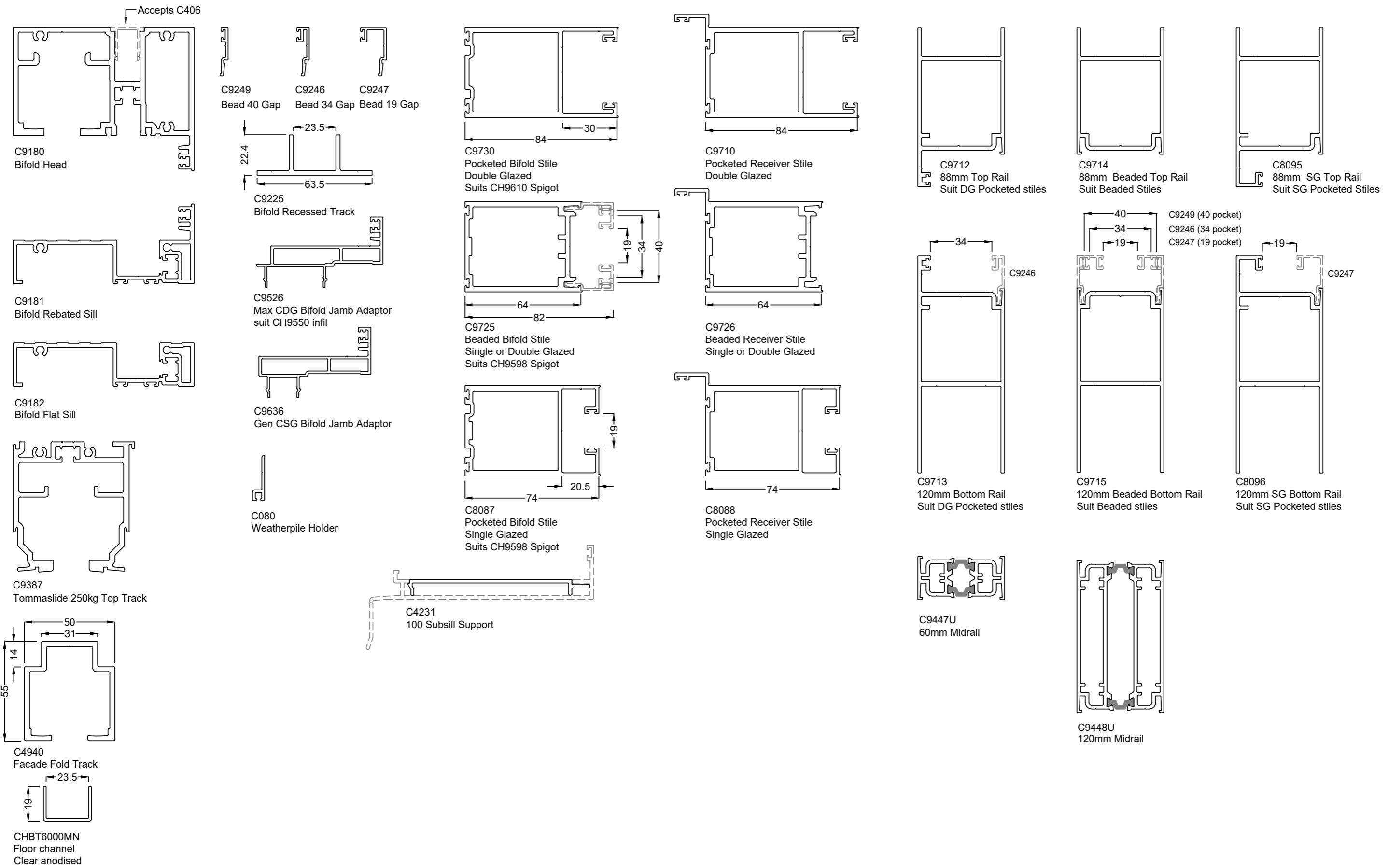
Type 3.2    Type 2.3



**Bifold Door Configurations**



**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 3**  
**Extrusion ID**



**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 4**  
**Component ID**

Note: Bifold hardware shown below is supplied in 304 stainless steel, and is supplied pre-set to the correct clearances.  
Please DO Not adjust unless it is necessary to do so.  
All items are available in stainless finish and Black Powdercoat.

CH93101A S/Steel  
CH93101ABLK Black P/Coat  
LH Bottom Pivot package  
comprises top & bottom pivots

CH93103A S/Steel  
CH93103ABLK Black P/Coat  
RH Bottom Pivot package  
comprises top & bottom pivots

CH93291 S/Steel  
CH93291BLK Black P/Coat  
LH Offset End Carrier package  
comprises top & bottom carriers

CH93293 S/Steel  
CH93293BLK Black P/Coat  
RH Offset End Carrier package  
comprises top & bottom carriers

CH93SN001 S/Steel  
CH93SN001BLK Black P/Coat  
Snubber Hinge Package

**Component ID**

CH93491 S/Steel  
CH93491BLK Black P/Coat  
LH Offset End carrier package  
comprises Top & Bottom  
offset carriers

CH93493 S/Steel  
CH93493BLK Black P/Coat  
RH Offset End carrier package  
comprises Top & Bottom  
offset carriers

CH93400 S/Steel  
CH93400BLK Black P/Coat  
Straight Intermediate carrier package  
comprises 1 standard hinge,  
Top & Bottom intermediate carriers

Fabricated Part  
Twinbolt Guide  
ex 40 x 12 x 3 angle

CH9613  
Twinbolt Guide

CH93299 S/Steel  
CH93299BLK Black P/Coat  
Offset Meeting Carrier package  
comprises LH&RH  
top & bottom carriers

CH93300 S/Steel  
CH93300BLK Black P/Coat  
Straight Hinge package  
comprises 3 hinges  
for doors <2700 high

CH93320 S/Steel  
CH93320BLK Black P/Coat  
Straight Hinge Handle package  
comprises 2 hinges &  
Hinge Handle for doors <2700 high

CH93370 S/Steel  
CH93370BLK Black P/Coat  
Offset Hinge Handle package  
comprises 2 offset hinges &  
Hinge Handle

CH93301  
CH93301BLK  
extra Straight Hinge  
for doors >2700 high

CH9598  
Beaded Door  
Spigot & Backing Plate package

CH9610  
DG Pocketed Door  
Spigot & Backing Plate package

CH8100  
SG Pocketed Door  
Spigot & Backing Plate package

CH9608  
Heel & Toe setting block

CH9595  
Subsill Support block

CH9520  
Subsill seal  
co-ex

CH9525  
Sill seal

CH9532  
Co-Ex Bifold Seal  
(Stiles)

CH9555  
Large Co-ex  
Bifold Seal (end stiles)

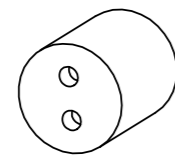
CH9550  
Filler Strip

AQ21  
Schlegel Aquamac Seal  
(Frame)

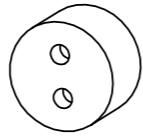
**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 5**  
**Component ID**



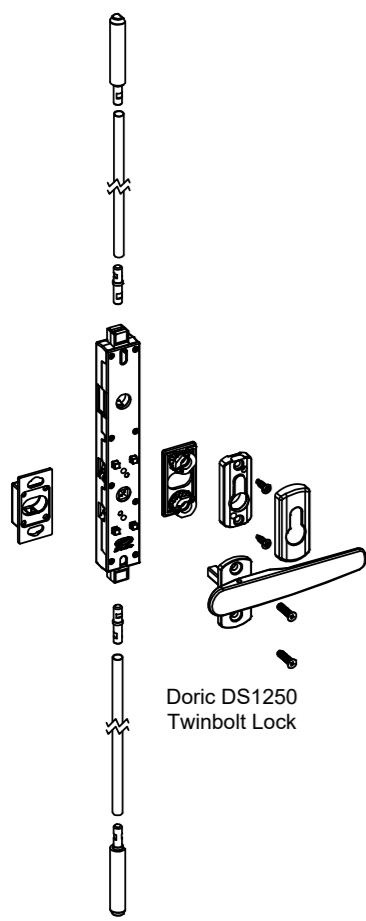
CH93DJ200  
Bifold Drill Jig



CHMC100SS  
30 dia x 35mm  
Stainless Steel Magnetic catch (pair)

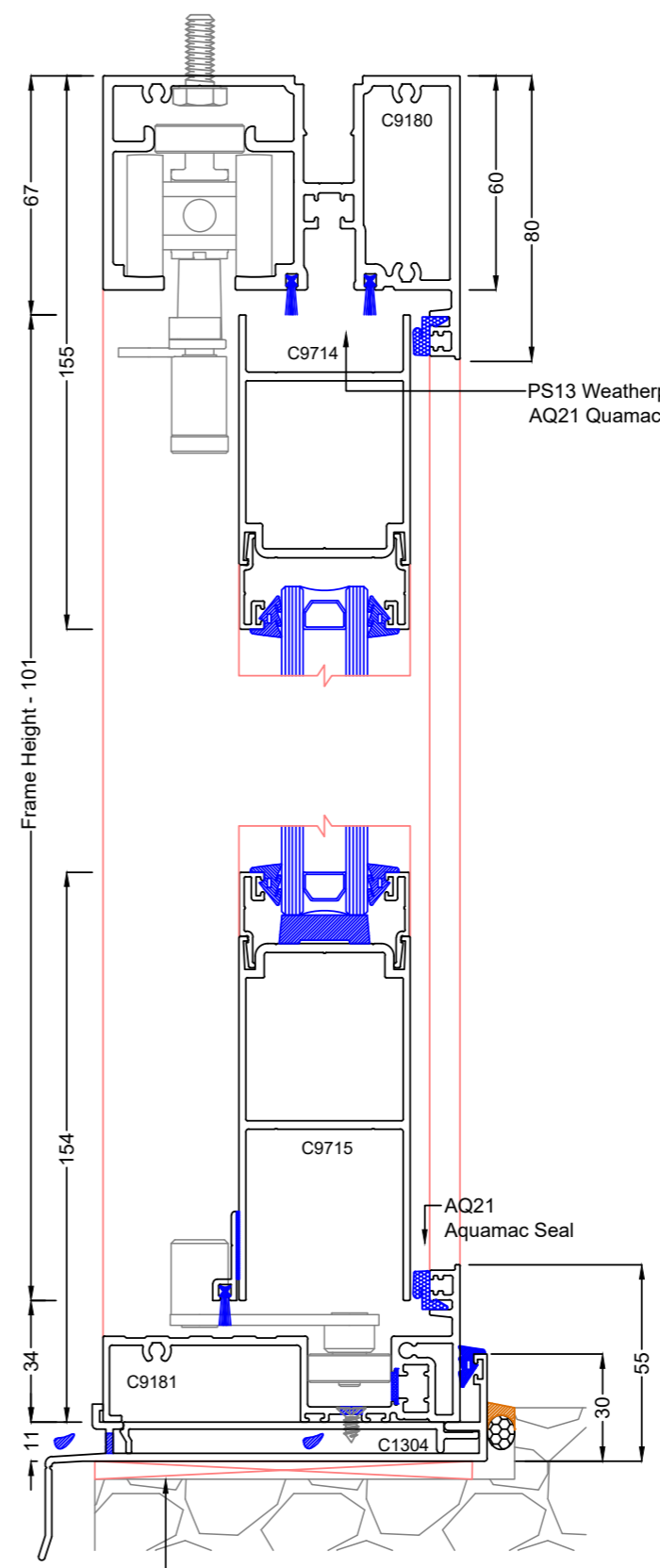


CHMC101SS  
30 dia x 12.5mm  
Stainless Steel Magnetic catch (pair)



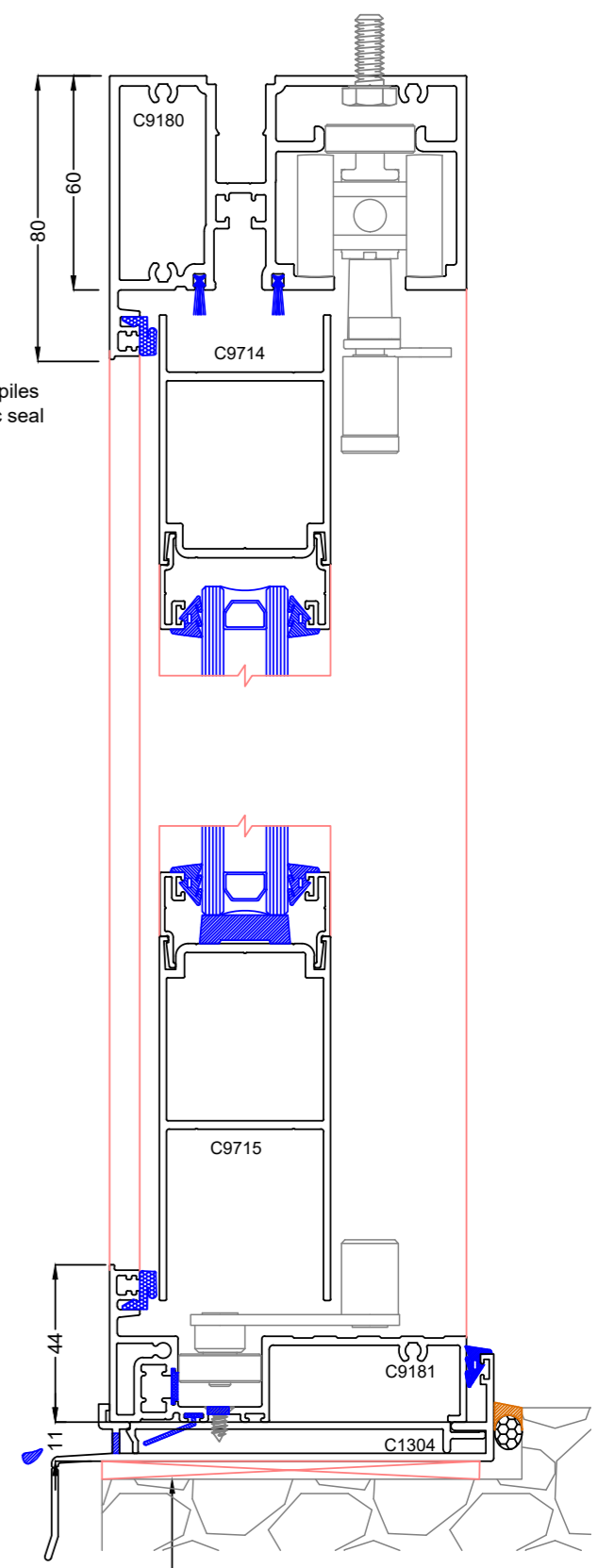
Doric DS1250  
Twinbolt Lock

**Bifold Door Open OUT**  
with standard Top & Bottom Rails



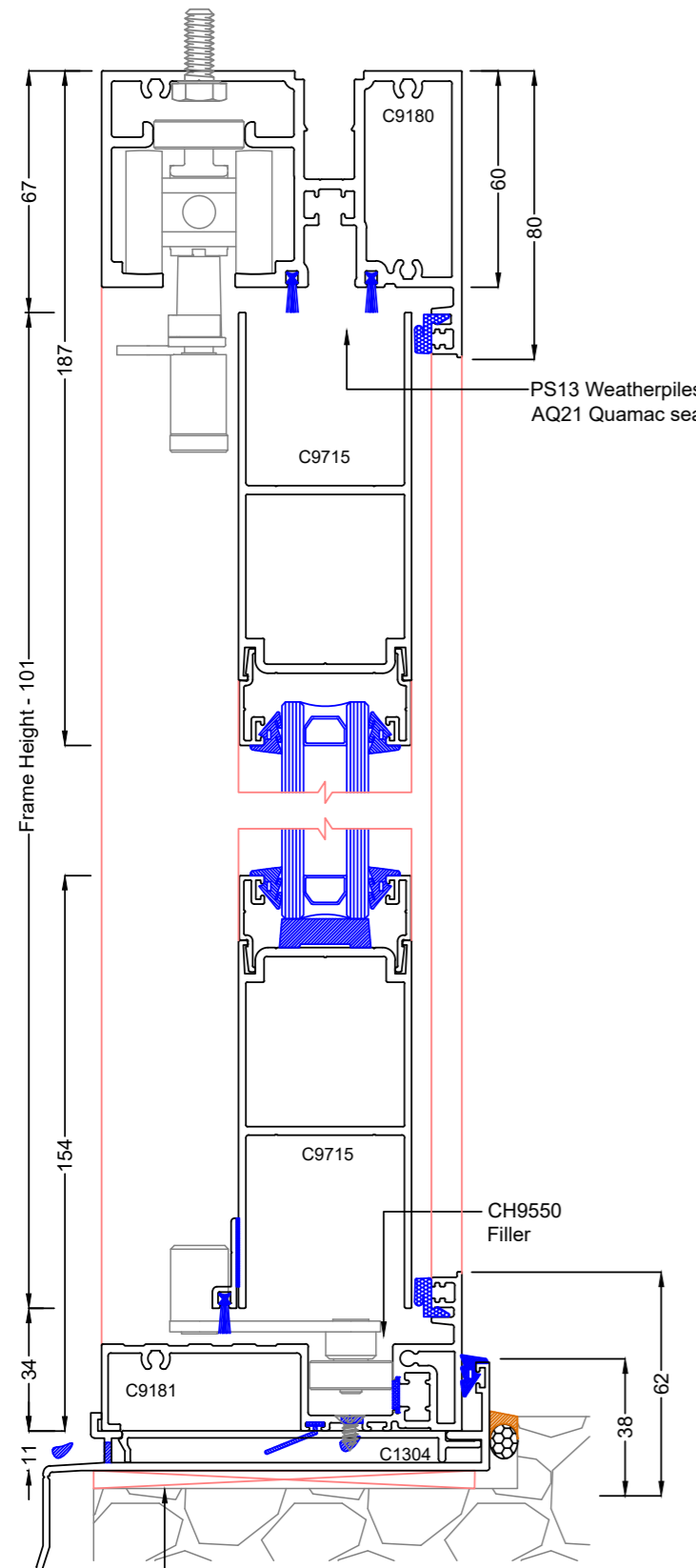
C4231 Subsill infil adaptor  
100mm long @ 900 ctrs & CSK fix Bifold sill.  
CH9525 Sill Flap reduces air infiltration.  
Notch to clear subsill support block if used.

**Bifold Door Open IN**  
with standard Top & Bottom Rails



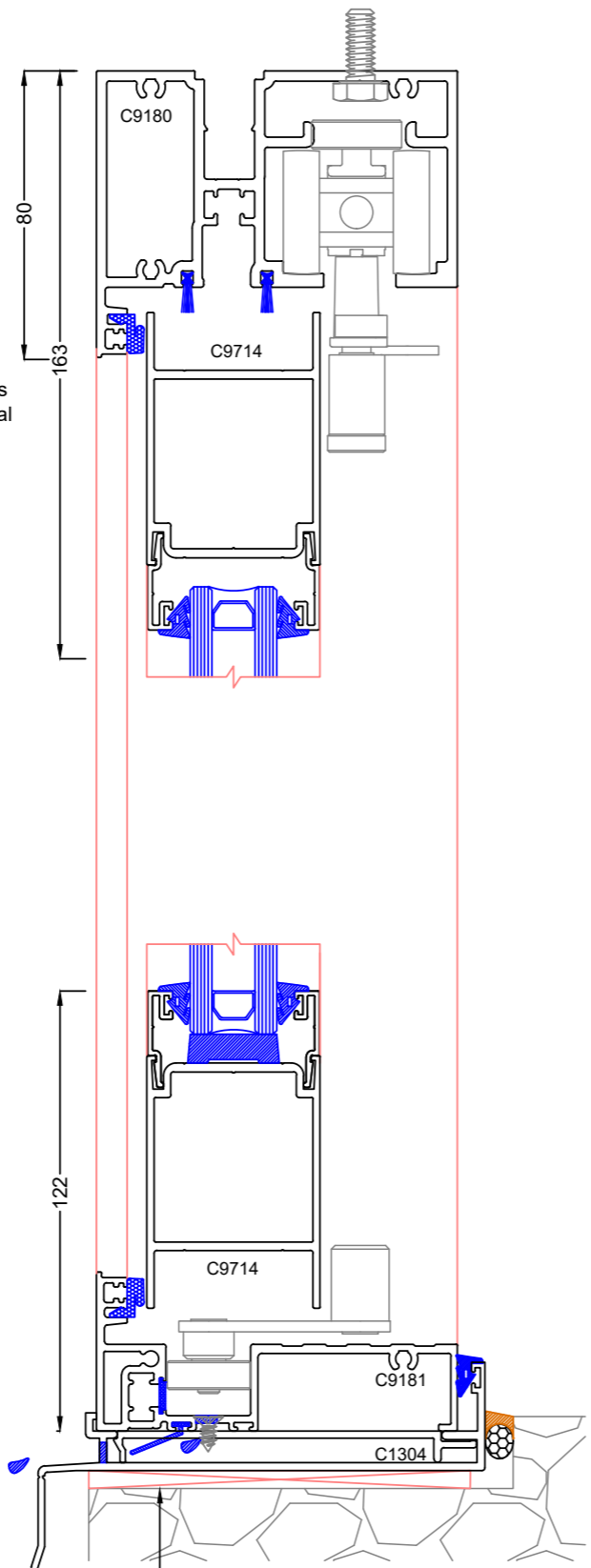
C4231 Subsill infil adaptor  
100mm long @ 900 ctrs & CSK fix Bifold sill.  
CH9525 Sill Flap reduces air infiltration.  
Notch to clear subsill support block if used.

**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 6**  
**Bifold Door Open OUT**  
with alternative Bottom Rail Top & Bottom



C4231 Subsill infil adaptor  
100mm long @ 900 ctrs & CSK fix Bifold sill.  
CH9525 Sill Flap reduces air infiltration.  
Notch to clear subsill support block if used.

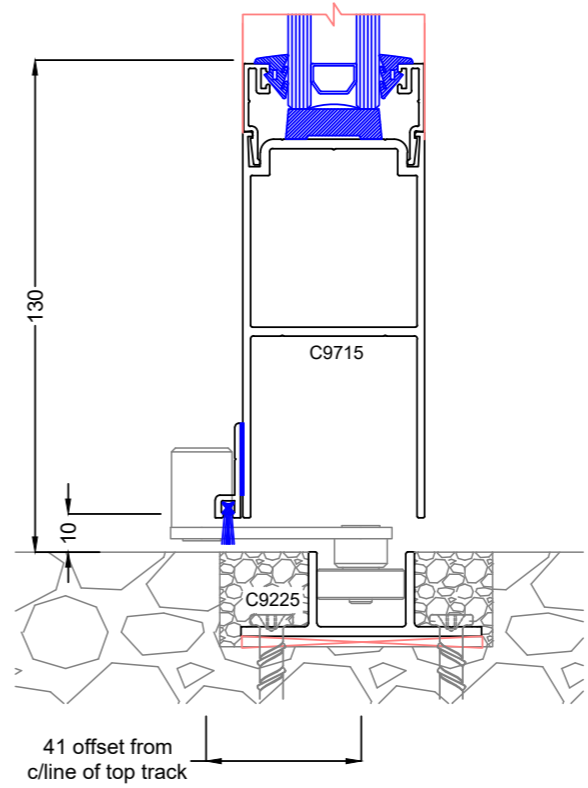
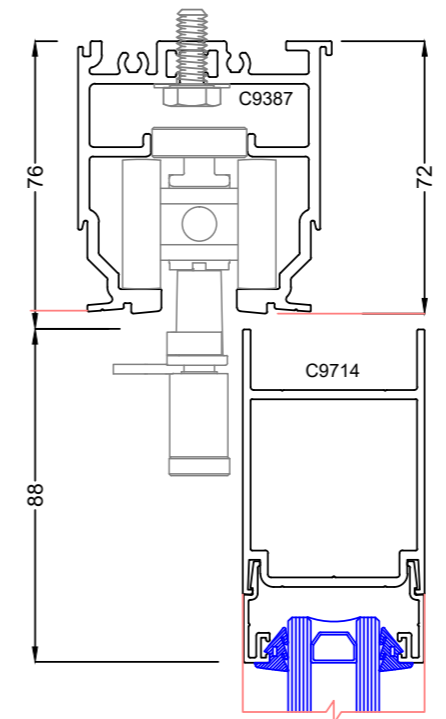
**Bifold Door Open IN**  
with alternative Bottom Rail Top & Bottom



C4231 Subsill infil adaptor  
100mm long @ 900 ctrs & CSK fix Bifold sill.  
CH9525 Sill Flap reduces air infiltration.  
Notch to clear subsill support block if used.

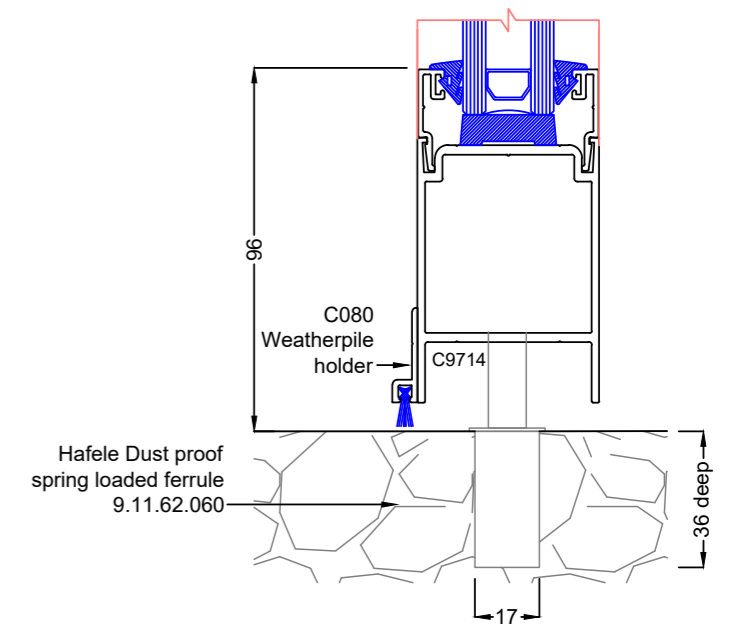
**Bifold Door Recessed Head and track**

Recessed heads may be used at times for aesthetics and recessed tracks are commonly used in public areas where trip hazards need to be avoided or as serveries when acting as a bifold window. Note that these details are not weatherproof or draught proof and must be used only in areas protected from weather.

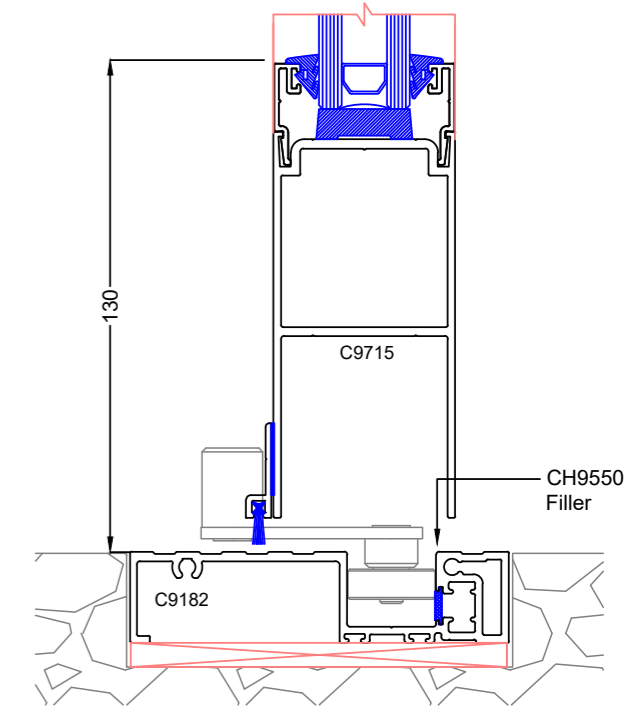


**Bifold Window without track**

Bifold windows can be manufactured without a bottom track provided there are not more than 2 panels stacking each way. The top roller system, and intermediate hinged provide good support in operation. Note the use of a Hafele spring loaded ferrule recessed into the bench. The twinbolt shoot bolt keys into the ferrule to captivate the panels. This is not a weatherproof application, but draughts can be reduced with a weatherpile holder fitted to the face of panels.



**Bifold Door Flat Recessed track**





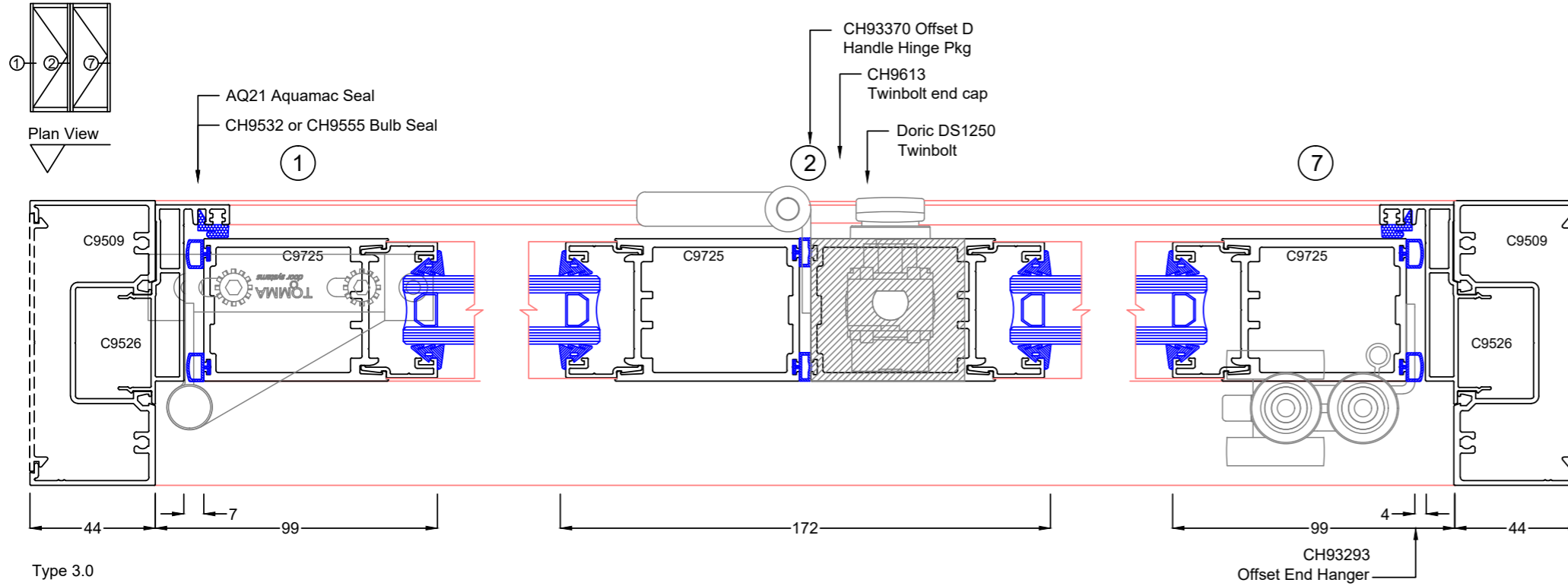
**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 7**  
**Bifold Configurations - Beaded stiles**

Below are some examples detailing the assemblies used in the makeup of different Bifold configurations based on beaded stiles (pocketed glazed assemblies differ). Note the configurations below: even panel configurations cannot be unlocked from outside as they do not have a free swinging panel. Odd leaf configurations are preferred as they can be locked or unlocked from outside. Refer the following pages for a detail of all assemblies.

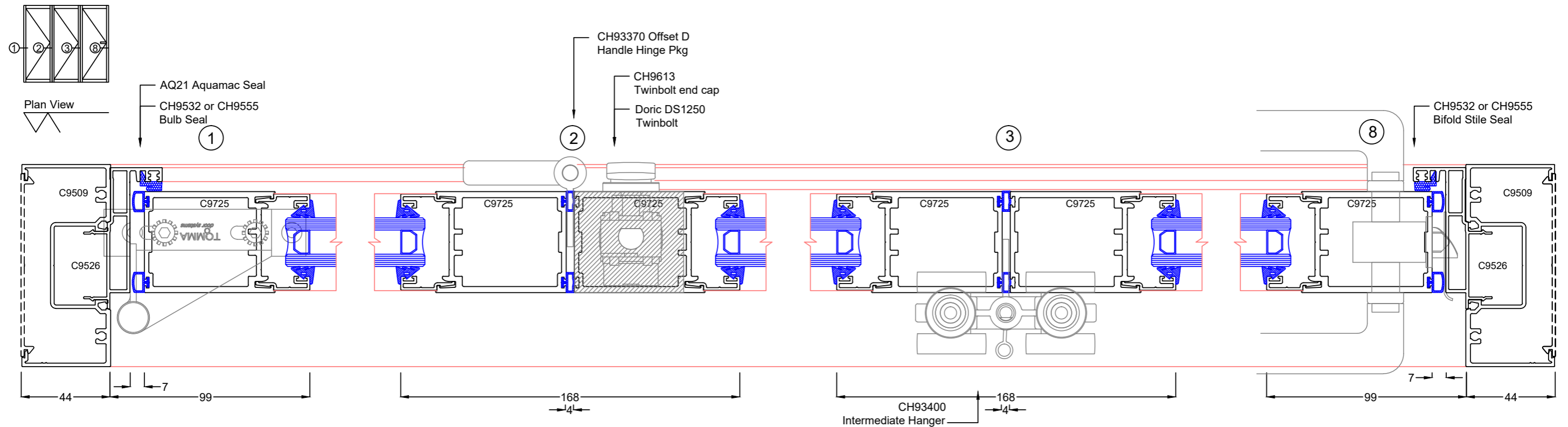
**NOTE CAREFULLY**

General arrangement details have dimensions that are indicative only of the stile combinations shown. Stile widths and edge cover varies with different stile combinations resulting in different rail cutting and glass widths. Glass height however is identical for each rail combination.

Type 2.0



Type 3.0



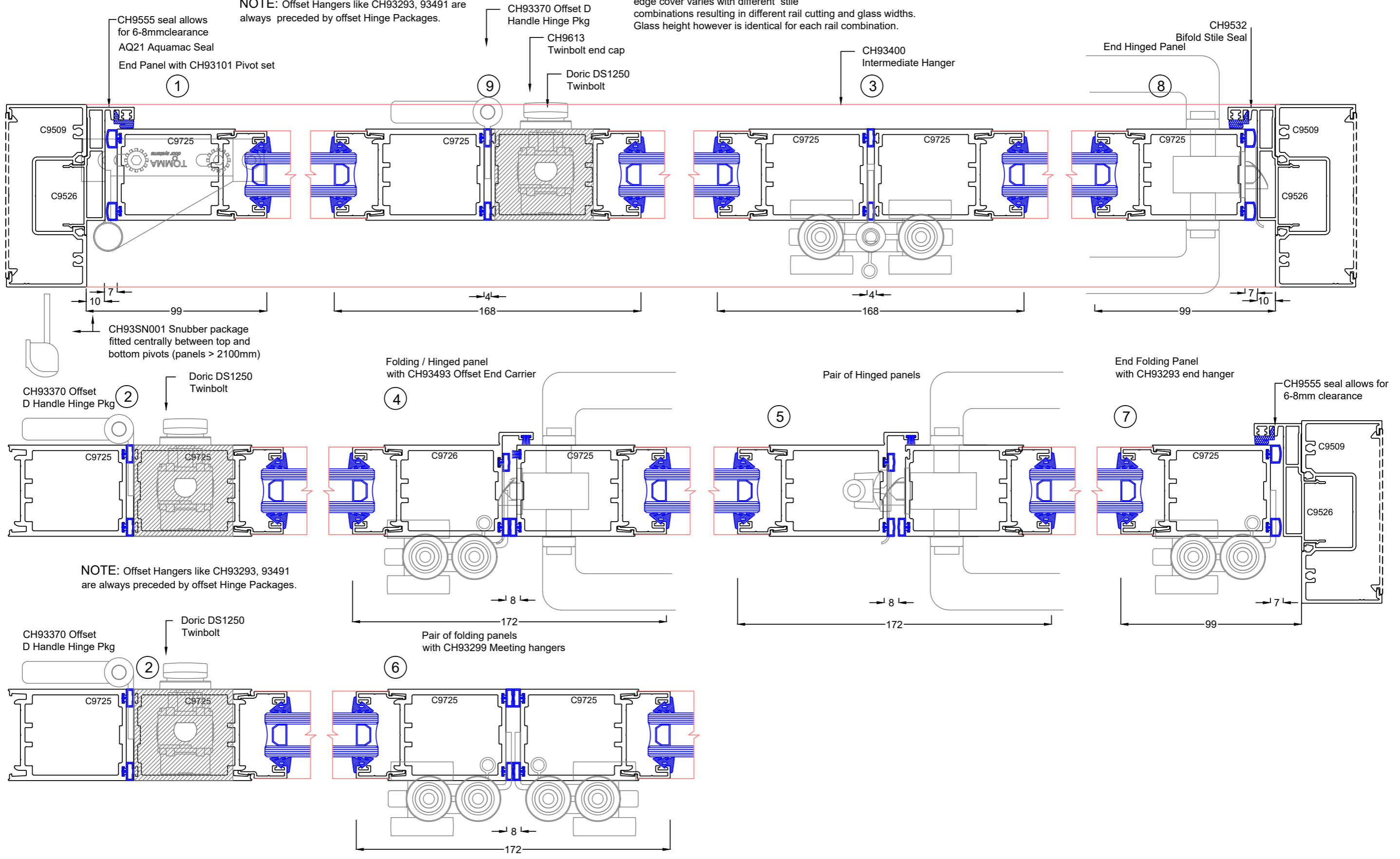
**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 8**  
**Beaded Bifold Assemblies Detail**

Please refer the configurations pages which indicate where each assembly is used.

NOTE: Offset Hangers like CH93293, 93491 are always preceded by offset Hinge Packages.

**NOTE CAREFULLY**

General arrangement details have dimensions that are indicative only of the stile combinations shown. Stile widths and edge cover varies with different stile combinations resulting in different rail cutting and glass widths. Glass height however is identical for each rail combination.





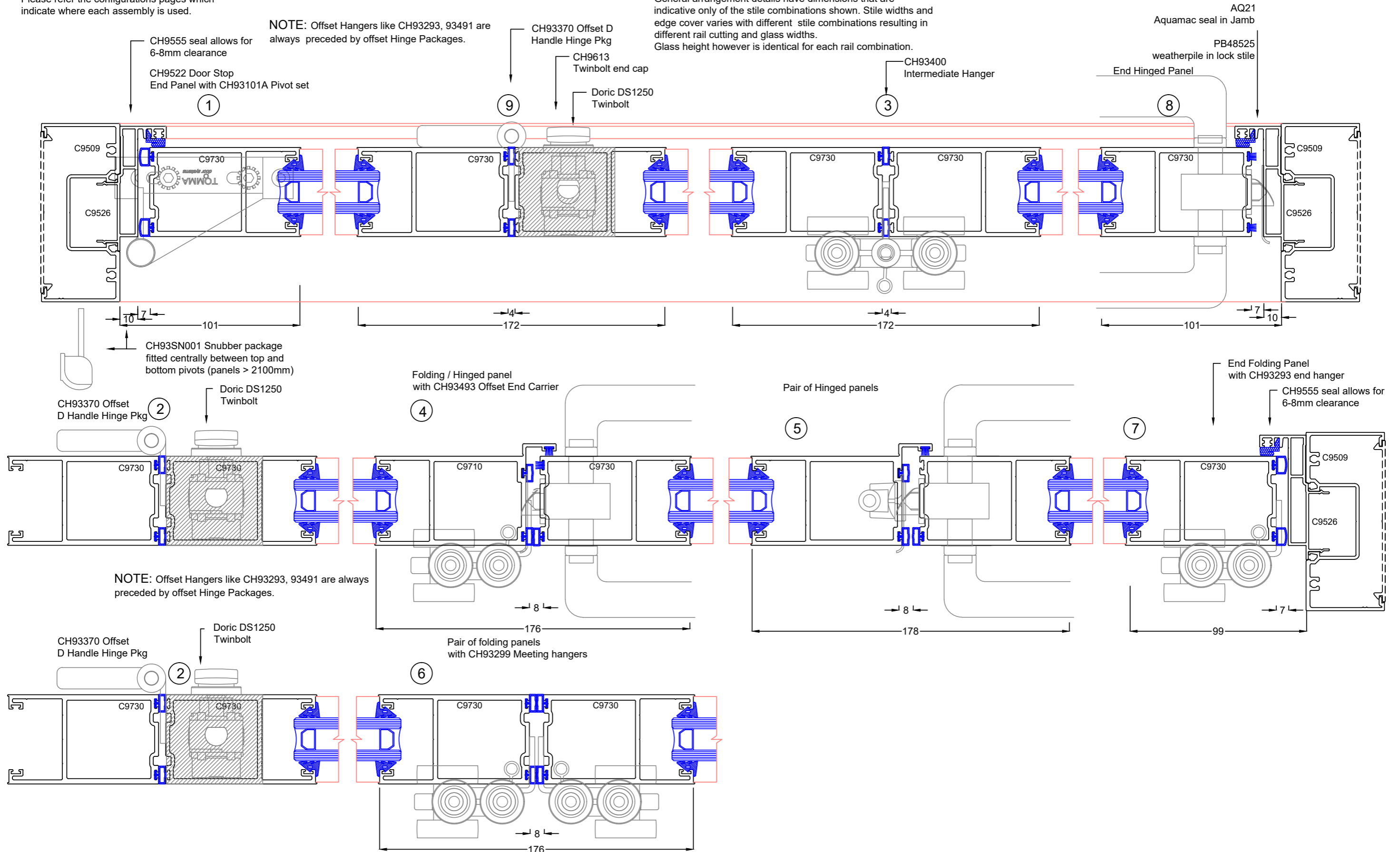
**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 9**  
**Pocketed Single Glazed Bifold Assemblies Detail**

Please refer the configurations pages which indicate where each assembly is used.

NOTE: Offset Hangers like CH93293, 93491 are always preceded by offset Hinge Packages.

**NOTE CAREFULLY**

General arrangement details have dimensions that are indicative only of the stile combinations shown. Stile widths and edge cover varies with different stile combinations resulting in different rail cutting and glass widths. Glass height however is identical for each rail combination.



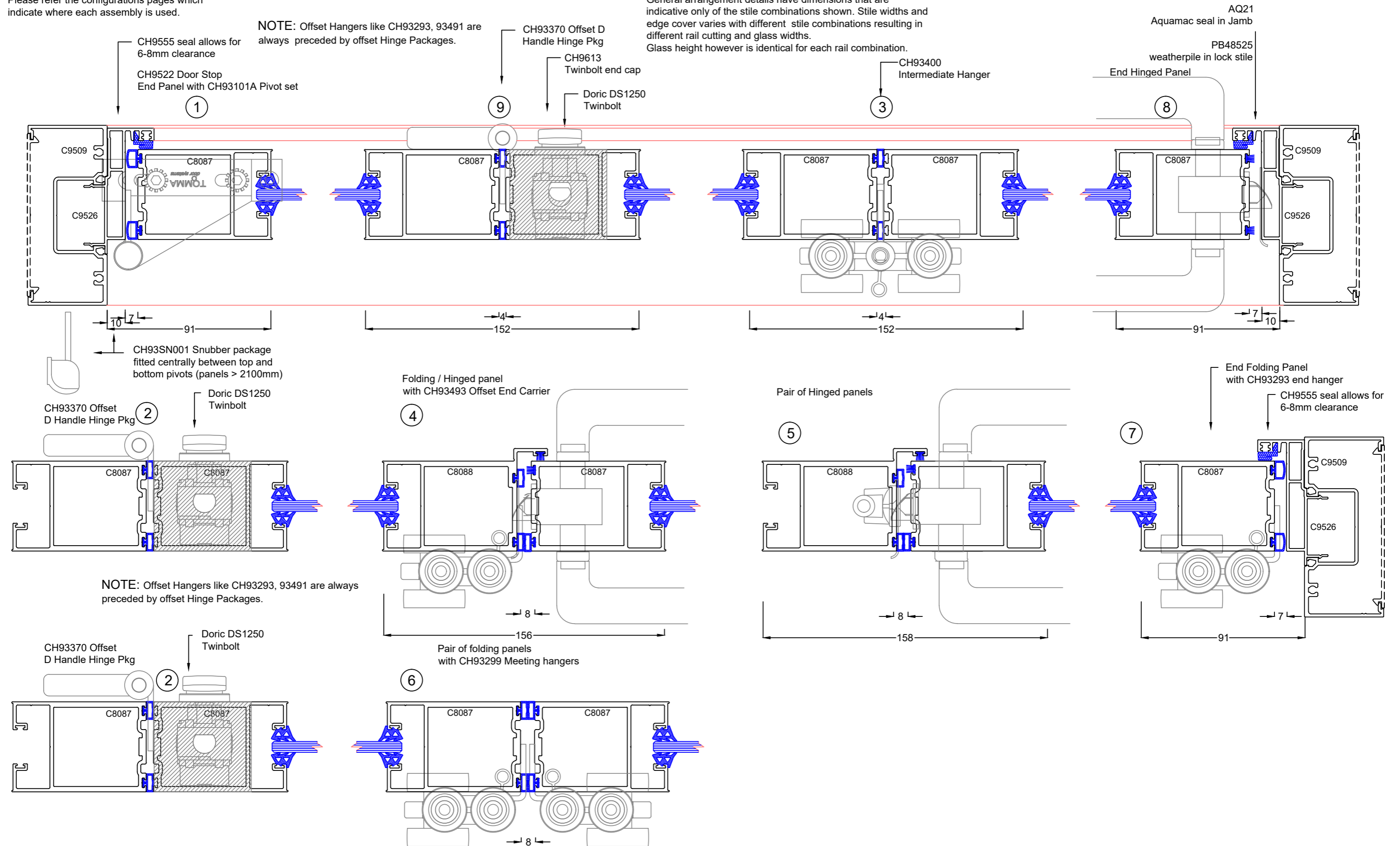
**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 10**  
**Pocketed Single Glazed Bifold Assemblies Detail**

Please refer the configurations pages which indicate where each assembly is used.

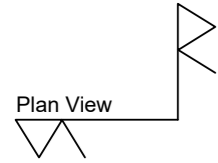
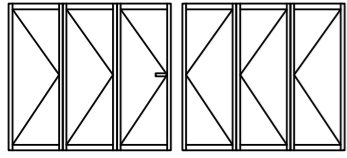
NOTE: Offset Hangers like CH93293, 93491 are always preceded by offset Hinge Packages.

**NOTE CAREFULLY**

General arrangement details have dimensions that are indicative only of the stile combinations shown. Stile widths and edge cover varies with different stile combinations resulting in different rail cutting and glass widths. Glass height however is identical for each rail combination.



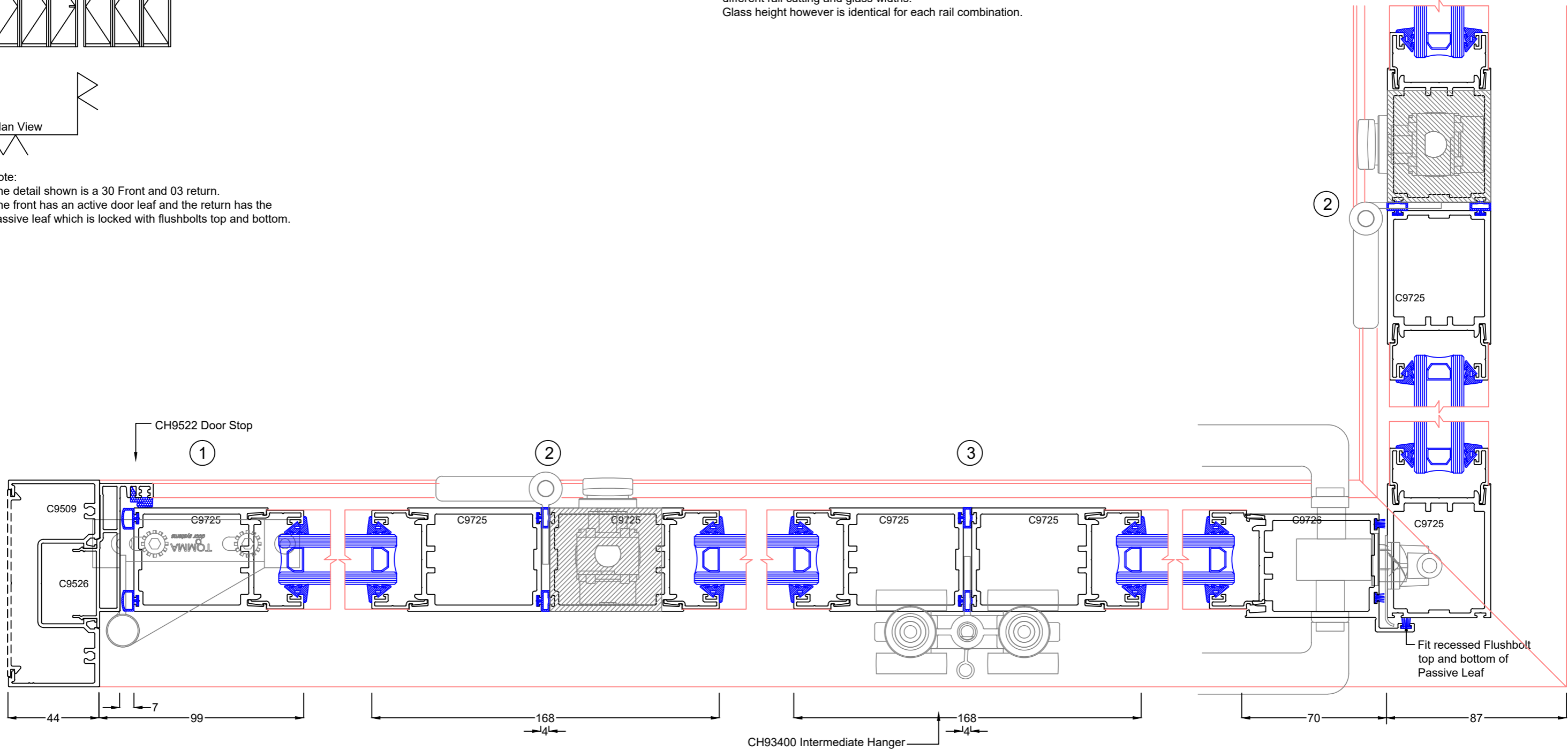
**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 11**  
**Odd Leaf Corner Bifold Door**



Note:  
The detail shown is a 30 Front and 03 return.  
The front has an active door leaf and the return has the passive leaf which is locked with flushbolts top and bottom.

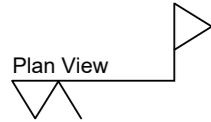
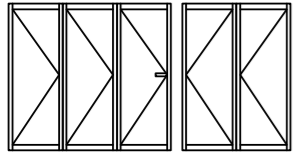
**NOTE CAREFULLY**

General arrangement details have dimensions that are indicative only of the stile combinations shown. Stile widths and edge cover varies with different stile combinations resulting in different rail cutting and glass widths. Glass height however is identical for each rail combination.





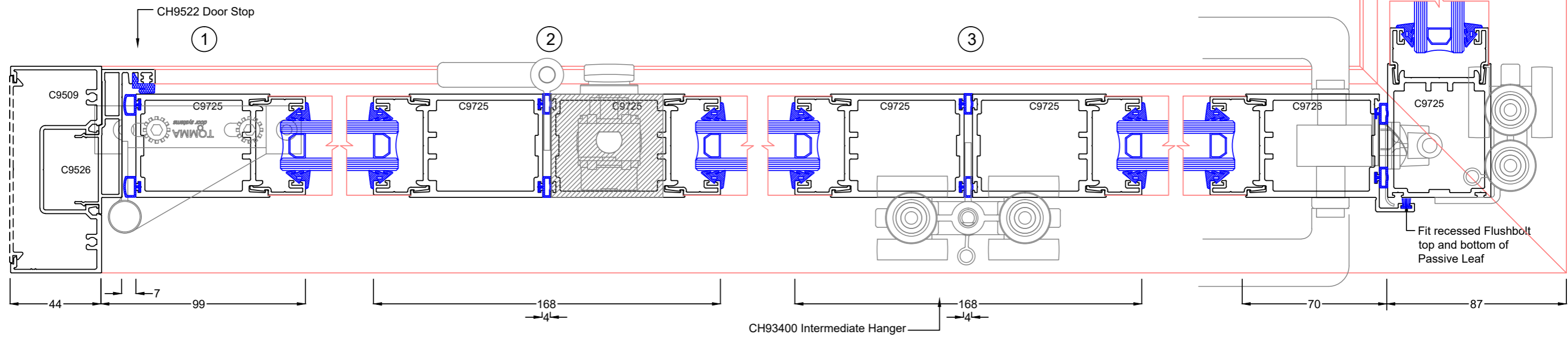
**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 12**  
**Odd and Even Corner Bifold Door**



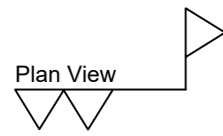
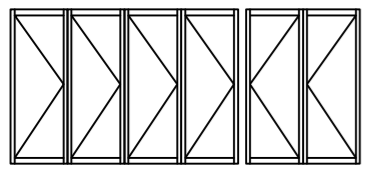
Note:  
The detail shown is a 30 Front and 02 return.  
The front 3 panel door has an active door leaf and the even numbered return must have the passive leaf, which is locked with flushbolts top and bottom.

**NOTE CAREFULLY**

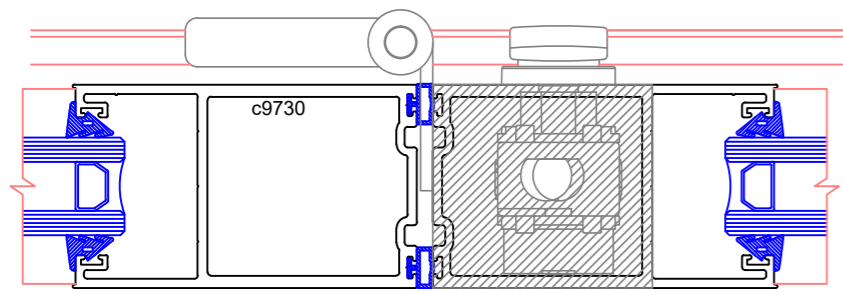
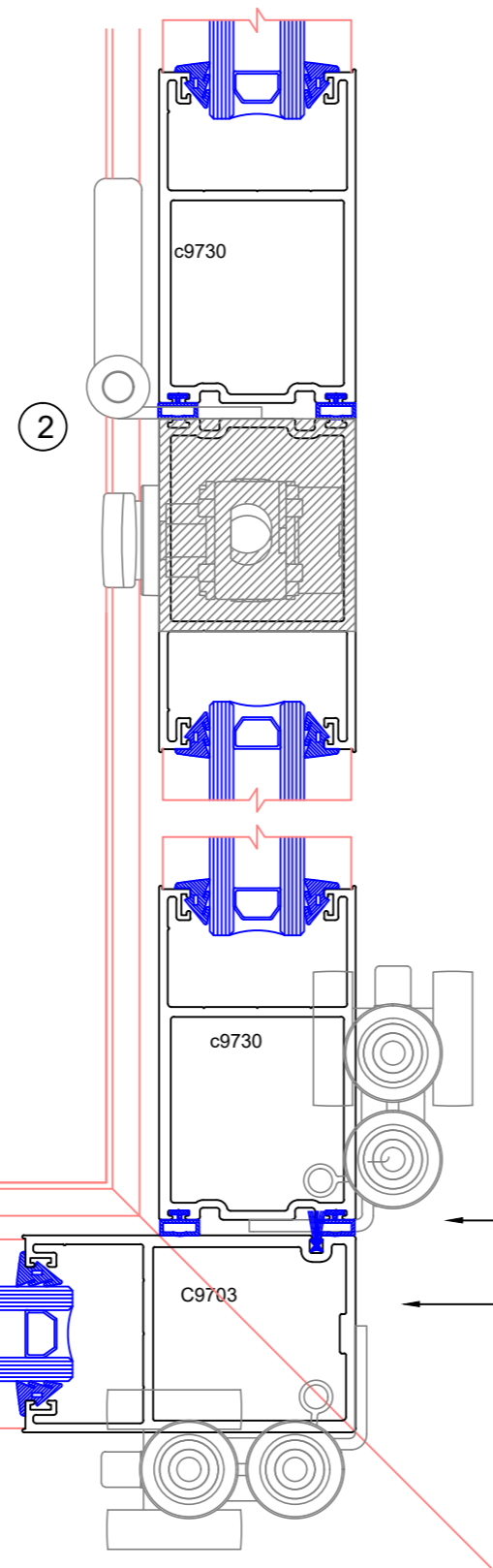
General arrangement details have dimensions that are indicative only of the stile combinations shown. Stile widths and edge cover varies with different stile combinations resulting in different rail cutting and glass widths. Glass height however is identical for each rail combination.



**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 13**  
**Even and Even Corner Bifold Door**



Note:  
The detail shown is a 40 Front and 02 return.  
This is not a preferred configuration as there is no active hinged leaf and the doors can only be opened from inside.  
There is limited ability to seal the corner stiles as they cannot overlap.

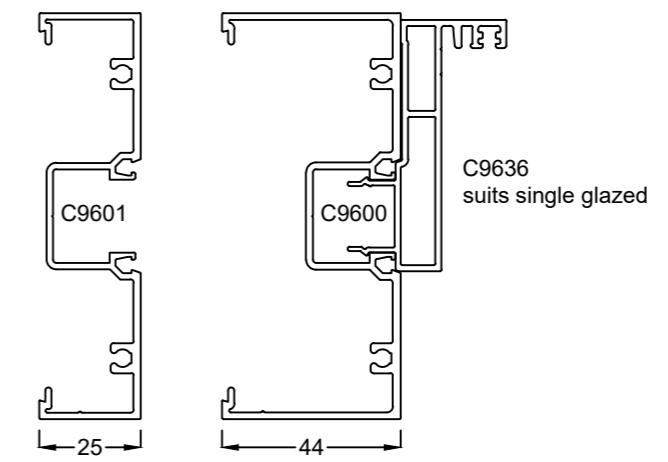


CH9532 bulb seal  
Plain stile or C9703 wiper stile.

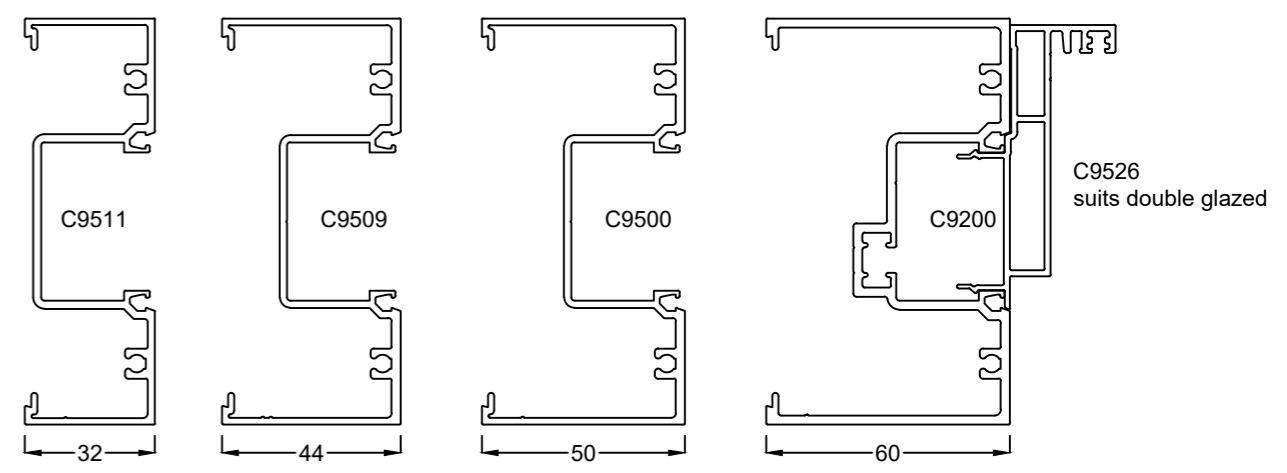
**Jamb Options for Single & Double Glazed**

There is a single glazed and double glazed jamb adaptor which allows the bifold door to couple to either Max Centre double glazed or Gen Centre Single Glazed.

**Gen 100 Single Glazed**



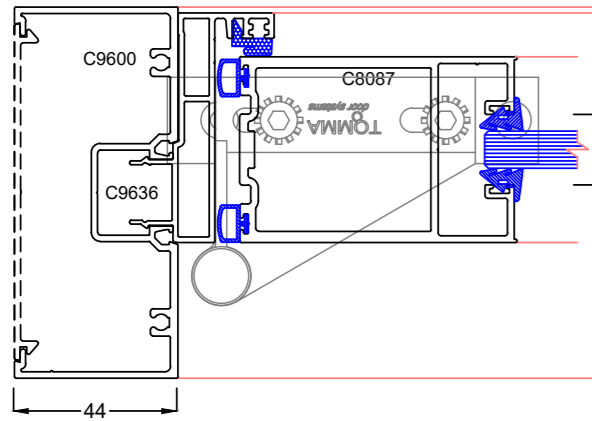
**Max 100 Double Glazed**



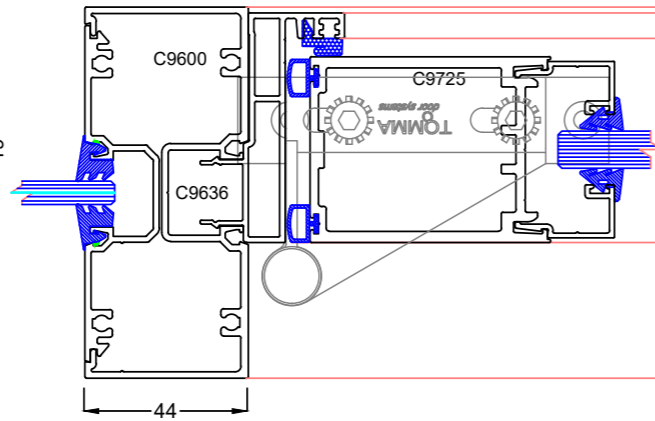
**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 14**  
**Alternative Jamb Options**

By having a single glazed and double glazed jamb adaptor, any Gen or Max 100mm Centre Glaze jamb can be used.

**Single Glazed Jamb, Single Glazed door**

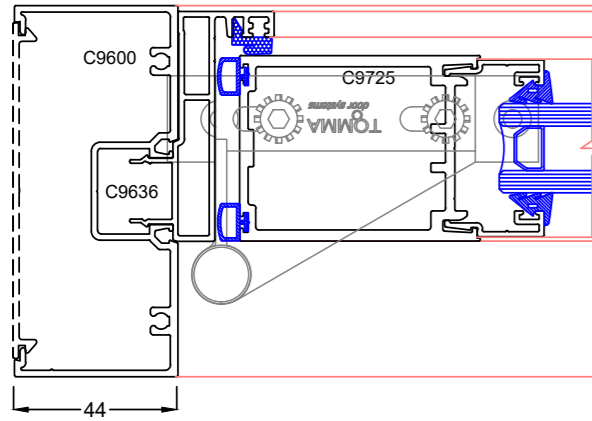


**Single Glazed Mullion, Single Glazed door**



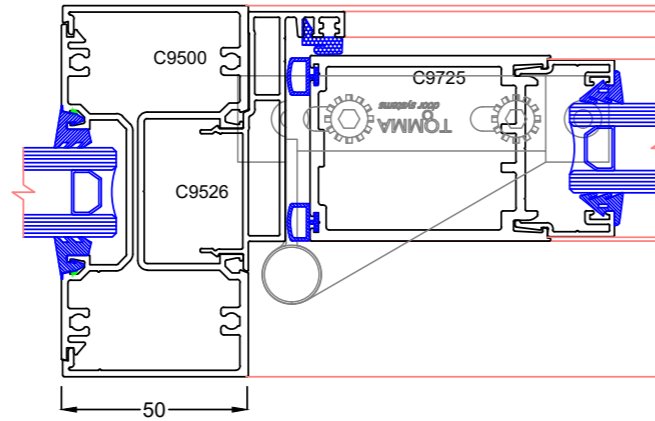
**Single Glazed Jamb, Double Glazed door**

C9526 single glazed adaptor and single glazed jamb preferred as it does not require the RPVC infil as the double glazed adaptor does.



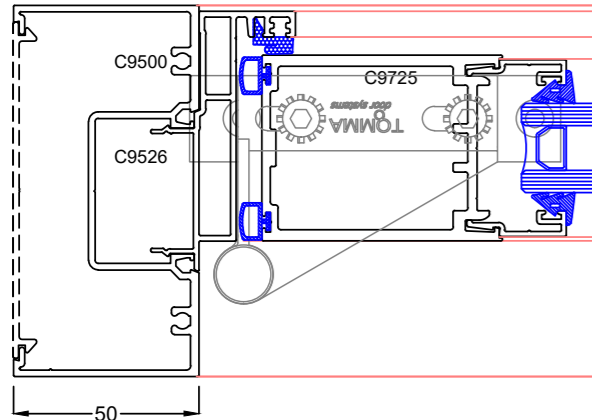
**Double Glazed Mullion, Double Glazed door**

Note: Max Centre Glaze or Front Glaze pocketed fillers can couple as a mullion provided there is no highlight above the bifold.



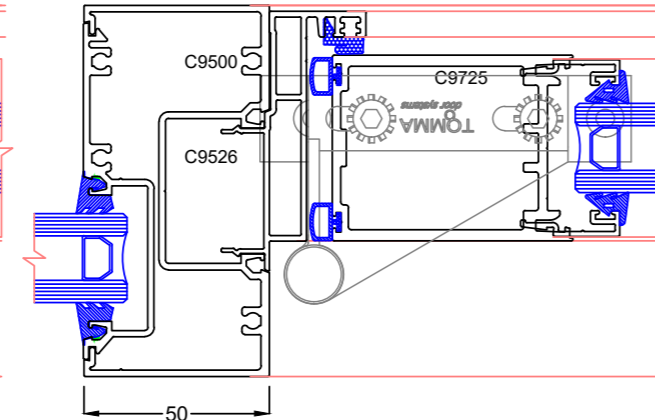
**Double Glazed Jamb, Double Glazed door**

C9526 double glazed adaptor preferred for consistency with double glazed framing. This also ensures there is no issue with projects where highlights may be over the door, requiring a continuous jamb.



**Double Glazed Mullion, Double Glazed door**

Note: Max Centre Glazed using C9503 or Max Front Glaze Framing using C9555 pocketed filler provided there is no highlight above the bifold.



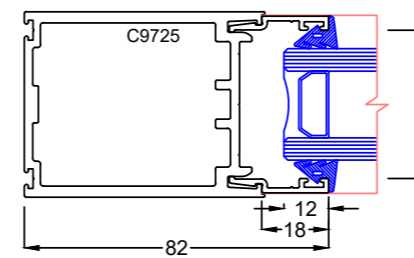
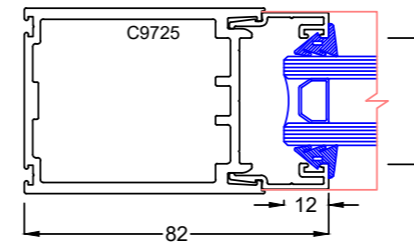
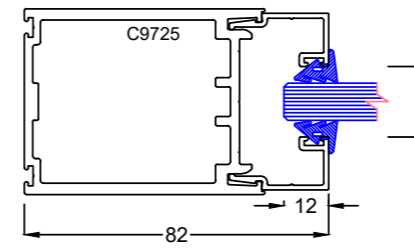
**Beaded and Pocket Glazed Panels**

Beaded stiles give the greatest flexibility in terms of the range of glass thicknesses from 6mm to 34mm IGU's including a simple panel to accommodate Louvres and other panel inserts. Double Glazed Stiles and Rails suit 24-28mm IGU's. Single Glazed Stiles and Rails suit 6-13.52mm Glass

Note Carefully: Stile widths and edge cover varies with different stile combinations resulting in different rail cutting and glass widths. Glass height however is identical for each rail combination

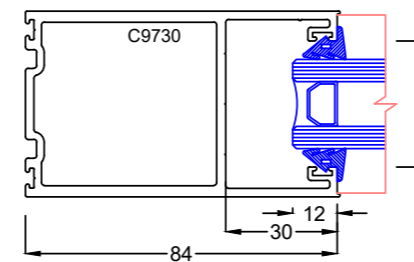
**Beaded Stiles**

suits single or double glazed



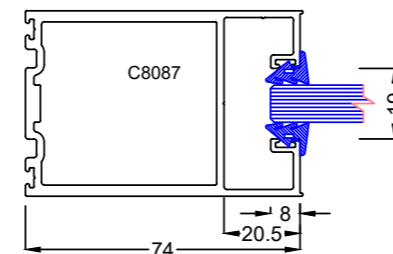
**Pocketed Glazed Stiles (34mm Pocket)**

Double Glazed Only



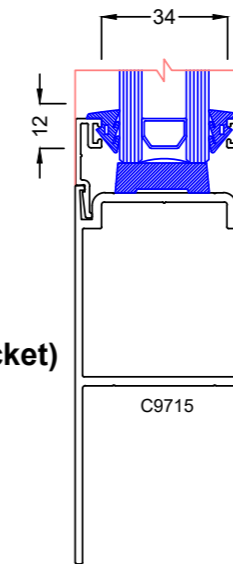
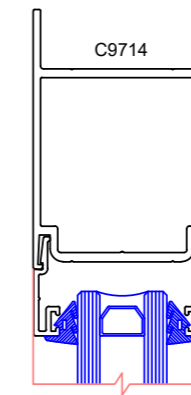
**Pocketed Glazed Stiles (19mm Pocket)**

Single Glazed Only



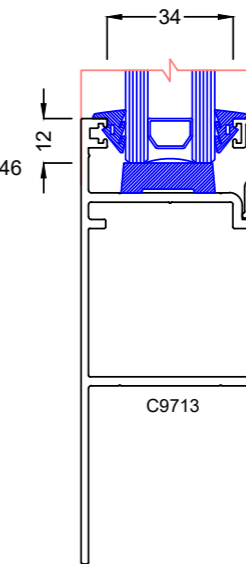
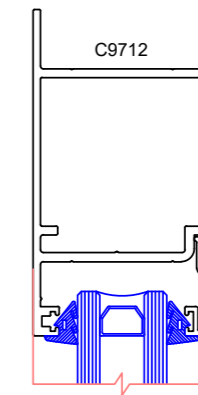
**Beaded Rails**

suits single or double glazed



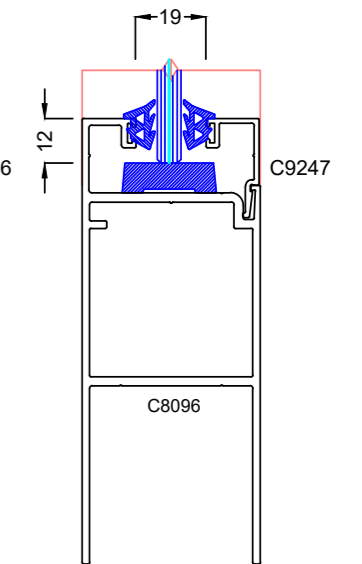
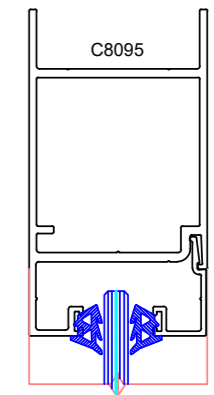
**Double Glazed Rails**

suit DG Pocketed Stiles



**Single Glazed Rails**

suit SG Pocketed Stiles



C9715

C9713

C8096



**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 15**

**Frame Seal Options and Water performance**

As a result of NATA testing we have several details that gave different water results on a 3 panel door with subsill.

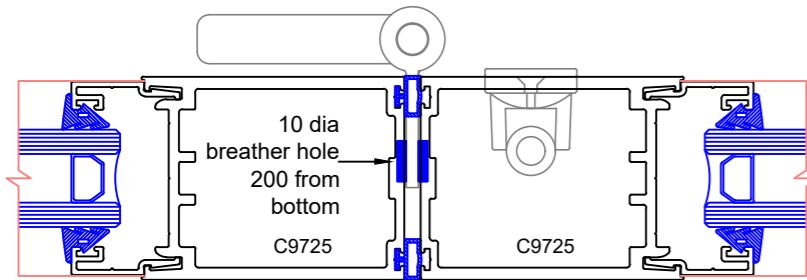
It was found a plant on weatherpile holder C080 significantly reduced water splashing onto the sill that wet the underside of rails that impacted on seals. In particular the area around the internal hinge was the most vulnerable area. As a result the following results were achieved using AQ21 aquamac seals.

**Meeting stile detail only on internal hinge**

Because of the close proximity of the inner hinge to top of sill (20mm), water splashing onto the sill was able to track through the bottom hinge. This can be improved by lifting the location of the hinge.

Test results below:

- 200pa water performance without external brush seal and breather hole
- 400pa water performance with external brush seal and no breather hole
- 450pa water performance with external brush seal and breather hole



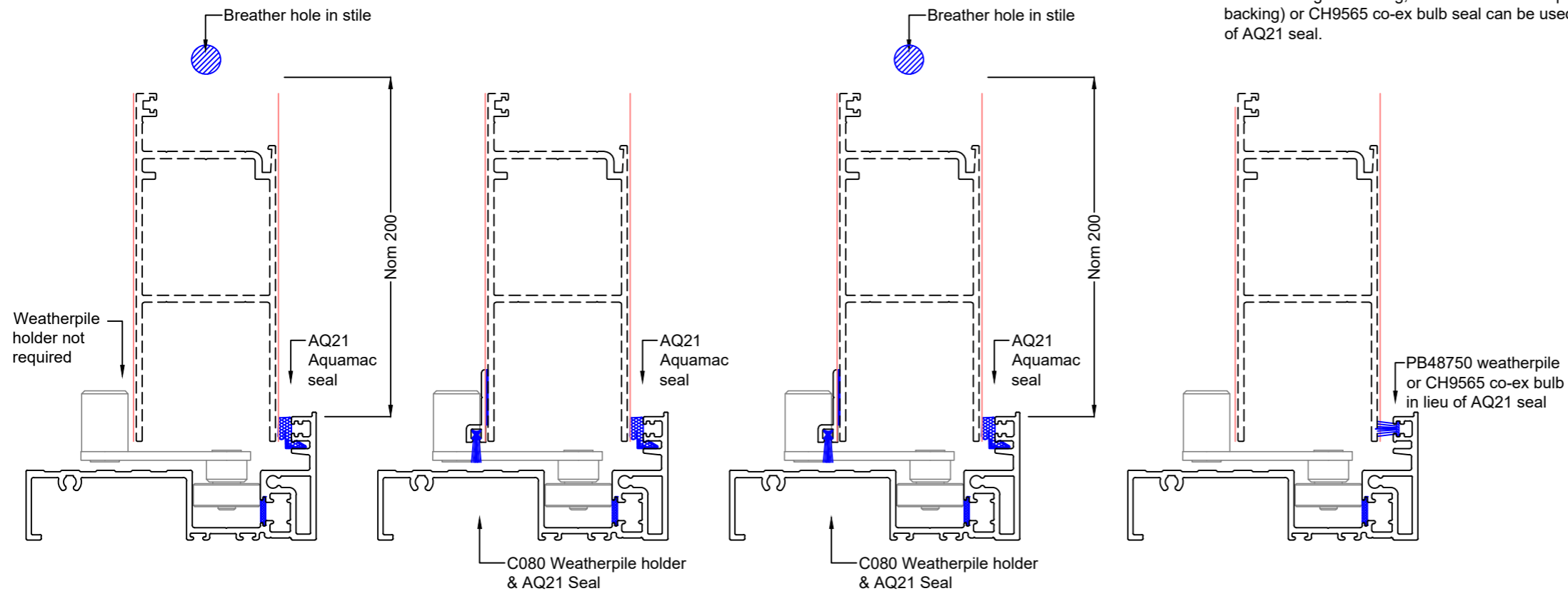
**200pa Water performance**

**400pa Water performance**

**450pa Water performance**

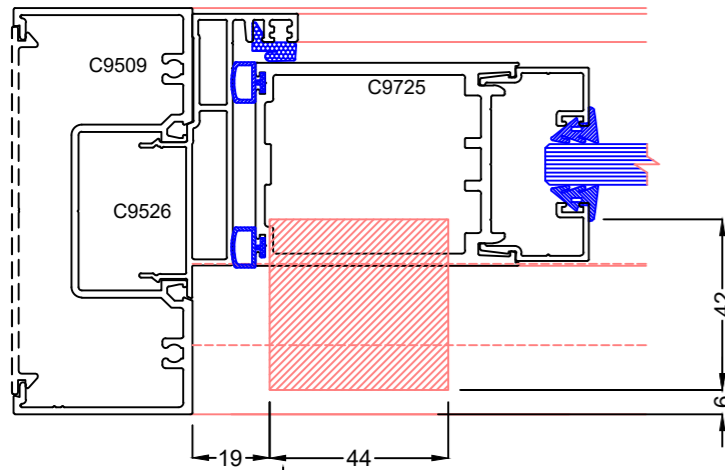
**Non weathered conditions**

Where weather performance is not a requirement - room divider or large overhang, a standard weather pile (4.9 backing) or CH9565 co-ex bulb seal can be used in lieu of AQ21 seal.

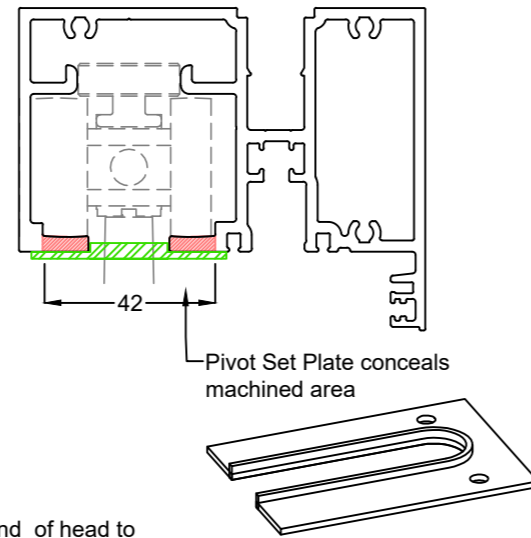


**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 16**  
**Bifold Head Machining to accept Rollers**

This detail is performed at the Pivot Set end of the Bifold head to allow roller hardware to be threaded into the head of the bifold frame prior to fitting to panels. The machining is concealed by a Stainless Steel plate which is part of the Pivot Set assembly. This allows easy removal of hardware if required in the future.



Machine out 44mm long x 42mm wide slot in one end of head to allow roller hardware to be threaded up into head for fitting to panel. The length of slot is sufficient that it also allows hardware can be removed if required for service or replacement in the future without removal of the jamb adaptor.



Pivot Set Plate conceals machined area

**Bifold Head showing S/Steel concealment plate**

Slot is concealed behind Stainless steel plate which is supplied as part of the Pivot Set Package. The plate still allows access to the Pivot Set adjustment screws.

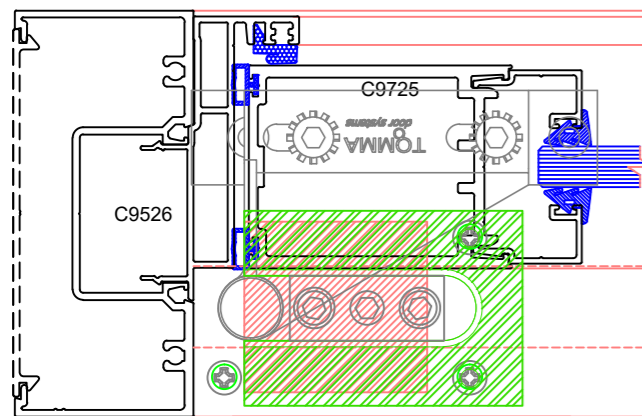
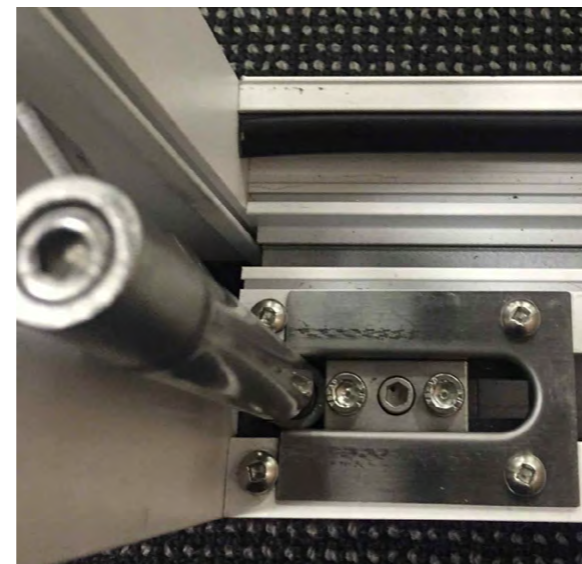
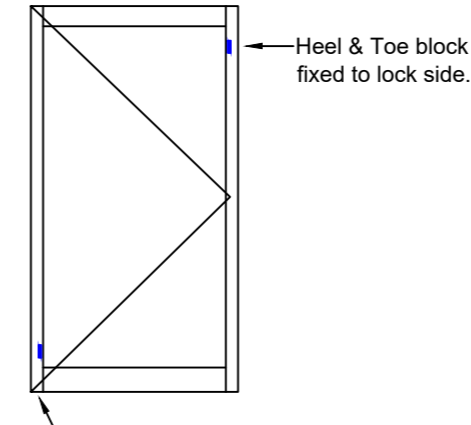


Plate shown in green conceals the machined slot which allows hardware to be fitted from the pivot set end.



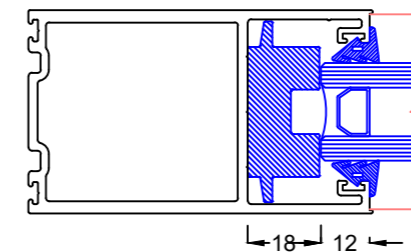
**Pocket Glazed Glazing Details**

These stile have a 30mm deep pocket which allows 12mm edge cover on IGU's. The detail below shows CH9608 heel & toe block placement.



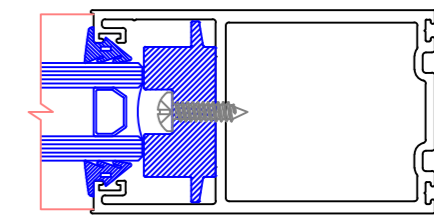
Lower block fitted with glass in situ.

1. Install glass, angling into hinge side of panel, then centering.
2. Push glass full height in rebate and support with nom 15mm setting blocks below
3. Use 12mm segments of CH9608, place in stile below glass
4. Push up side of stile behind glass to brace against glass.
5. Place 6mm setting blocks at bottom, and top to complete blocking of door.



18 12

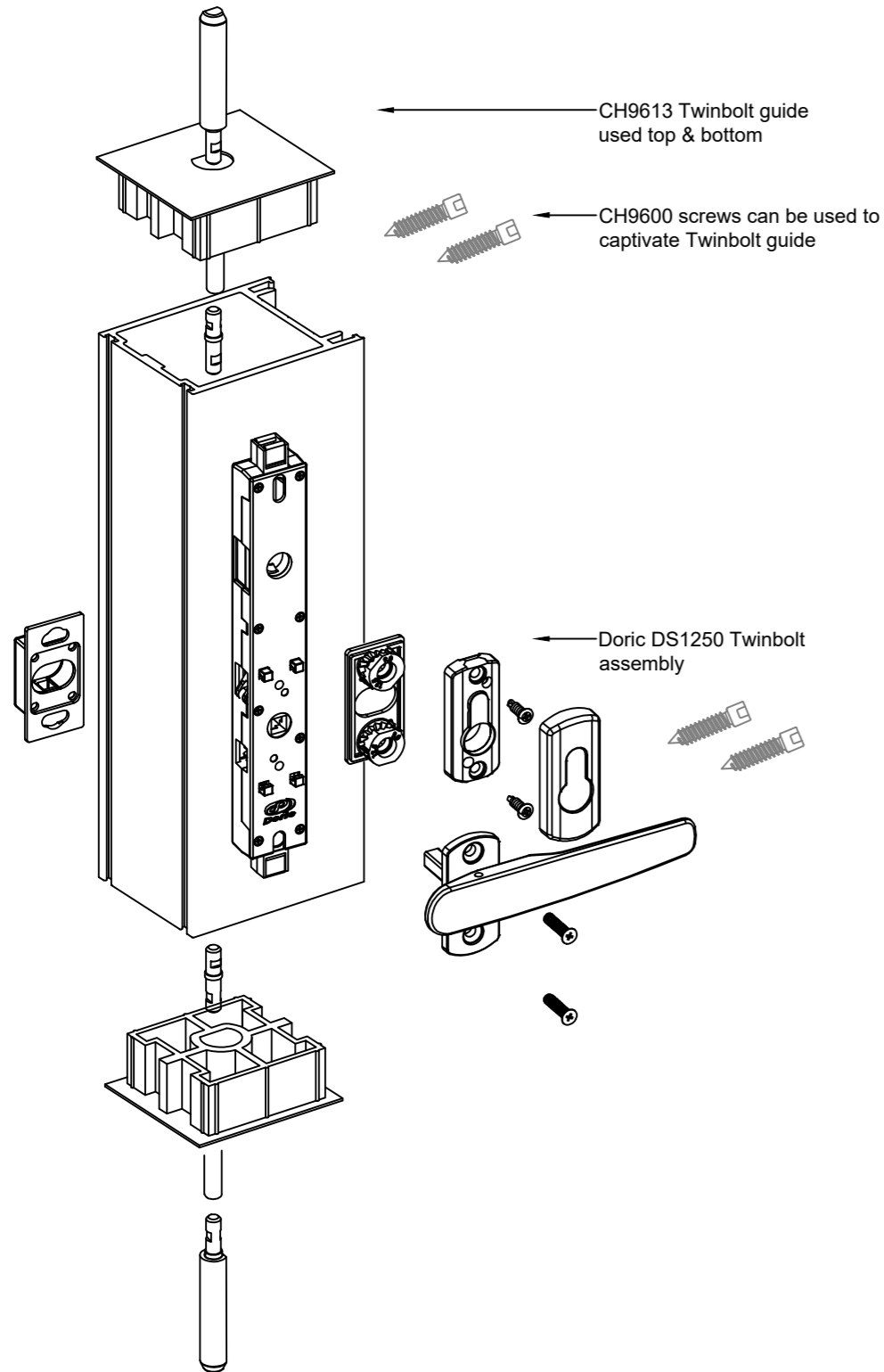
With glass in situ, Fit 12mm segments of CH9608 block into hinge side and slide up to brace glass.



Fix CH9608 block on lock side, approx 100mm from top of door light.

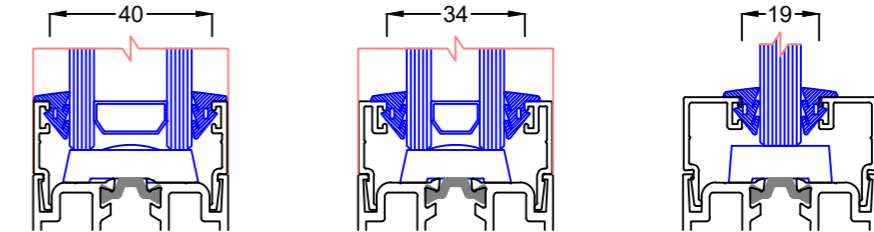
**Max™ 50mm BIFOLD DOOR**  
**Max Framing Systems: MBIFOLD - 17**  
**Stile & CH9613 Twinbolt Guide Detail**

Used where Twinbolt operators are used.  
Please refer the configurations pages which indicate where each assembly is used.



**Wedge glazing charts for MAX Commercial Doors**

- Glazing capabilities depend on chosen door stiles.
- Fully Beaded allows a range from 6 - 34mm Glass
  - Pocket glazed allows 24 - 28mm Glass



	Glass thickness	Bead	Rebate wedge	Gap	Glazing wedge	Gap
Beaded Stiles	6mm	C9247	CH9503	7mm	CH9503	7mm
	8mm	C9247	CH9502	5mm	CH9503	7mm
	10mm	C9247	CH9502	5mm	CH9502	5mm
	14mm	C9246 / C9247	CH9502	5mm	CH9503	7mm
	18mm	C9246 / C9247	CH9500	3mm	CH9500	3mm
Beaded Stiles or Pocket Glazed Stiles	Glass thickness	C9246 Bead	Rebate wedge	Gap	Glazing wedge	Gap
	24mm	6/12/6	CH9502	5mm	CH9502	5mm
	25mm	6.38/12/6	CH9502	5mm	CH9502	5mm
	26mm	8/12/6	CH9501	4mm	CH9501	4mm
	27mm	8.38/12/6	CH9501	4mm	CH9501	4mm
	28mm	8/12/8	CH9500	3mm	CH9500	3mm
Beaded Stiles	Glass thickness	C9249 Bead	Rebate wedge	Gap	Glazing wedge	Gap
	34mm	6/22/6	CH9500	3mm	CH9500	3mm