



Series 650 Commercial Entry Door

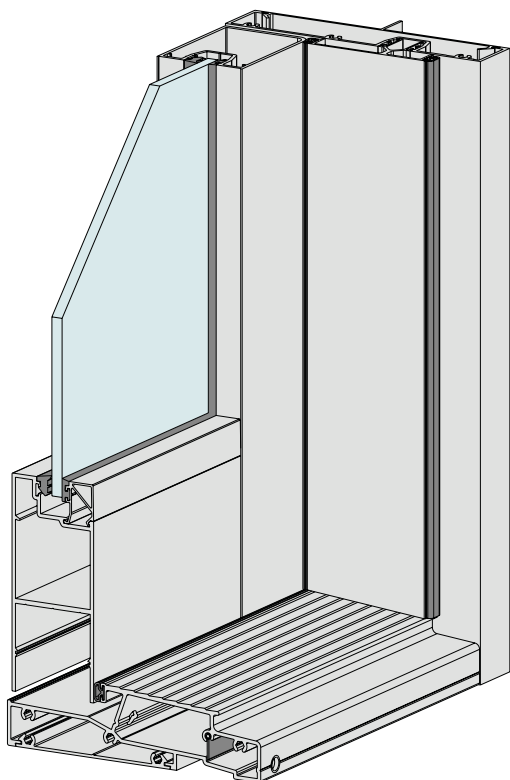


Photo courtesy of Queensland Windows

Series 650 COMMERCIAL ENTRY DOOR

DATE: MAY 13
REPLACES: JUNE 06
SCALE: NOT TO SCALE

KEY FEATURES/PERFORMANCE CHARACTERISTICS



- Entry door framing system designed to accept heavy duty 50mm thick commercial swing doors.
- 50mm thick door options including fully beaded. A major feature with these 50mm thick doors is strength, being approximately 70% stronger than industry standard 45mm thick stiles. Having stronger stiles is important when doors are high.
- Series 52 swing doors will accept insulating glass units up to 34mm thick.
- Four midrail sizes to choose from (50mm, 115mm, 125mm and 200mm deep).
- Two door thresholds cover both internal and external swing hinged doors.
- Sub-sills available for commercial applications.
- Snap-fit nailing fin adaptor for brick veneer and cavity brick installations.
- Will accept awning and casement sashes.
- Recessed clean fixed sidelights and highlights pocket glazed similar to commercial framing.
- Hinged flyscreen door/s can be fitted into the frame recess on the outside on internal swing hinged doors.
- Series 650 hinged doors can be fitted with a large variety of lever locks including multi-point lever compression locks.
- Series 650 can also be fitted with centre pivot doors.

Series 650 Hinged Entry Framing.
External view.

Maximum Panel Height*	3000mm
Maximum Panel Width*	1000mm
Maximum Glass Thickness	≤34mm

* Subject to individual site conditions and wind loads. Contact AWS Technical Support for more information, email techsupport@awsaustralia.com.au



2D & 3D CAD FILES AVAILABLE

To access 2D & 3D CAD models visit our online specifier resource centre
www.specifyaws.com.au



MORE INFORMATION

For the latest updates regarding this product visit our website
www.elevatealuminium.com.au

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WERS RATINGS

Single Glazed

Window ID	Glass Type	Uw	SHGCw	Tvw	Inf
AWS-033-01	5Clr	6.0	0.60	0.63	0.04
AWS-033-02	5SG	6.0	0.42	0.52	0.04
AWS-033-03	5Gy	6.0	0.45	0.35	0.04
AWS-033-04	6.38Sct	4.4	0.49	0.57	0.04
AWS-033-05	6.38VLam	5.9	0.59	0.63	0.04
AWS-033-06	6.38CPClr	4.4	0.50	0.58	0.04
AWS-033-07	4SnClr	4.8	0.44	0.48	0.04
AWS-033-08	6SnClr	4.7	0.43	0.48	0.04
AWS-033-09	6EVanBG	4.5	0.33	0.40	0.04
AWS-033-10	6EVanClr	4.5	0.45	0.47	0.04
AWS-033-11	6EVanGy	4.5	0.30	0.23	0.04
AWS-033-12	6EVanSpB	4.5	0.26	0.27	0.04
AWS-033-13	6EVanSpGn	4.5	0.26	0.33	0.04
AWS-033-14	6.38LamGy	5.9	0.26	0.09	0.04
AWS-033-15	6.38TLam	5.9	0.30	0.23	0.04
AWS-033-16	6.38SnClr	4.7	0.42	0.48	0.04
AWS-033-17	6.38SnGy	4.7	0.32	0.23	0.04
AWS-033-18	6.38CPClr	4.4	0.50	0.58	0.04
AWS-033-19	6.38CPGn	4.4	0.37	0.50	0.04
AWS-033-20	6.38CPGy	4.4	0.36	0.27	0.04
AWS-033-21	10SnClr	4.7	0.42	0.47	0.04
AWS-033-22	10.38LamClr	5.7	0.46	0.47	0.04
AWS-033-23	10.38LamGy	4.7	0.42	0.47	0.04
AWS-033-24	10.38Tlam	4.3	0.37	0.42	0.04
AWS-033-25	10.38SnClr	4.6	0.40	0.46	0.04

NOTES

1. Uw is the whole window U-value
2. SHGCw is the whole window solar heat gain coefficient
3. Twv is the whole window visible (light) transmittance
4. Maximum air infiltration is 5.0L/s.m² at a positive pressure difference of 75 Pa as measured according to AS 2047
5. Static performance (Uw SHGCw Twv Tdw) calculated using Window 6.3 and Therm 6.3 software (LBNL), 1999-2010
6. Results disclosed at Australian Fenestration Rating Council (AFRC) regulations.
7. Ratings for use with Section J of the Building Code of Australia - Class 2-9

For the latest WERS data for this system visit www.wers.net

HOW TO SPECIFY

SYSTEM NAME

Elevate™ Aluminium System Series
650 Commercial Entry Door

FINISH

Powder Coat
Anodised

COLOUR

Select from the AWS range of approved powder coat or anodising colours

GLASS

Specify thickness ≤24mm

Specify thermal performance where applicable (Uv & SHGC)

Specify acoustic performance where applicable (RW)



Specification Assistance

Need help specifying this product? Email techsupport@awsaustralia.com.au and our qualified technical advisors will assist you with product selection and specification for your project.



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SPECIFIER'S CHECKLIST

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DESIGN FEATURES

DESIGN FEATURES

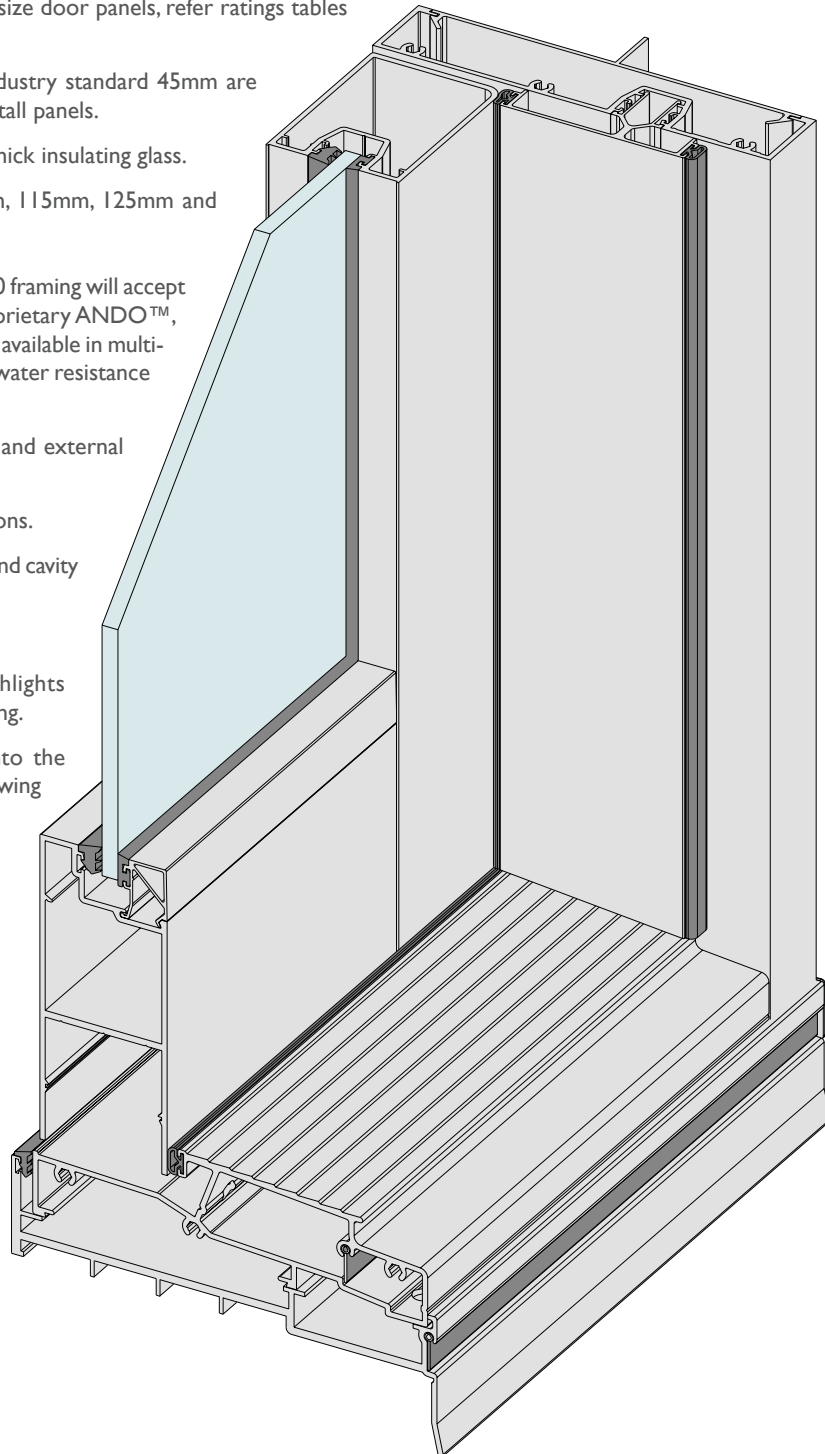
- Offset 150 x 30mm and 44mm pocket glazed entry door framing system designed to accept heavy duty 50mm thick commercial swing doors.
- Three 50mm wide door options including fully beaded. These heavy duty 50mm thick commercial doors are ideal for oversize door panels, refer ratings tables later in these notes.
- 50mm thick doors when compared to industry standard 45mm are approximately 70% stronger and ideal for tall panels.
- Series 52 swing doors will accept 24mm thick insulating glass.
- Four midrail sizes to choose from (50mm, 115mm, 125mm and 200mm deep).
- The Elevate™ doors that go with Series 650 framing will accept a variety of commercial locks and the proprietary ANDO™, MIRO™ or ICON™ locks. These locks are available in multi-point locking and will significantly improve water resistance and security.
- Two door thresholds cover both internal and external swing hinged doors.
- Sub-sills available for commercial applications.
- Snap fit nailing fin adaptor for brick veneer and cavity brick installations.
- Will accept awning and casement sashes.
- Recessed clean fixed sidelights and highlights pocket glazed similar to commercial framing.
- Hinged flyscreen door/s can be fitted into the frame recess on the outside on internal swing hinged doors.

Compatibility:

We have designed a number of compatible framing suites that can be coupled or used together:

- Series 702 SlideMASTER™ high performance sliding door (150mm).
- Series 704 SlideMASTER™ Commercial architectural sliding door (150mm).
- Series 600 Wide Offset 150mm Framing
- Series 620 Single Glazed Centre Glazed 150mm Framing
- Series 624 Double glazed CentreGLAZE™ framing.
- Series 626 Double glazed FrontGLAZE™ framing.

Illustration shows sill sitting in optional sub-sill.



Series 650 COMMERCIAL ENTRY DOOR

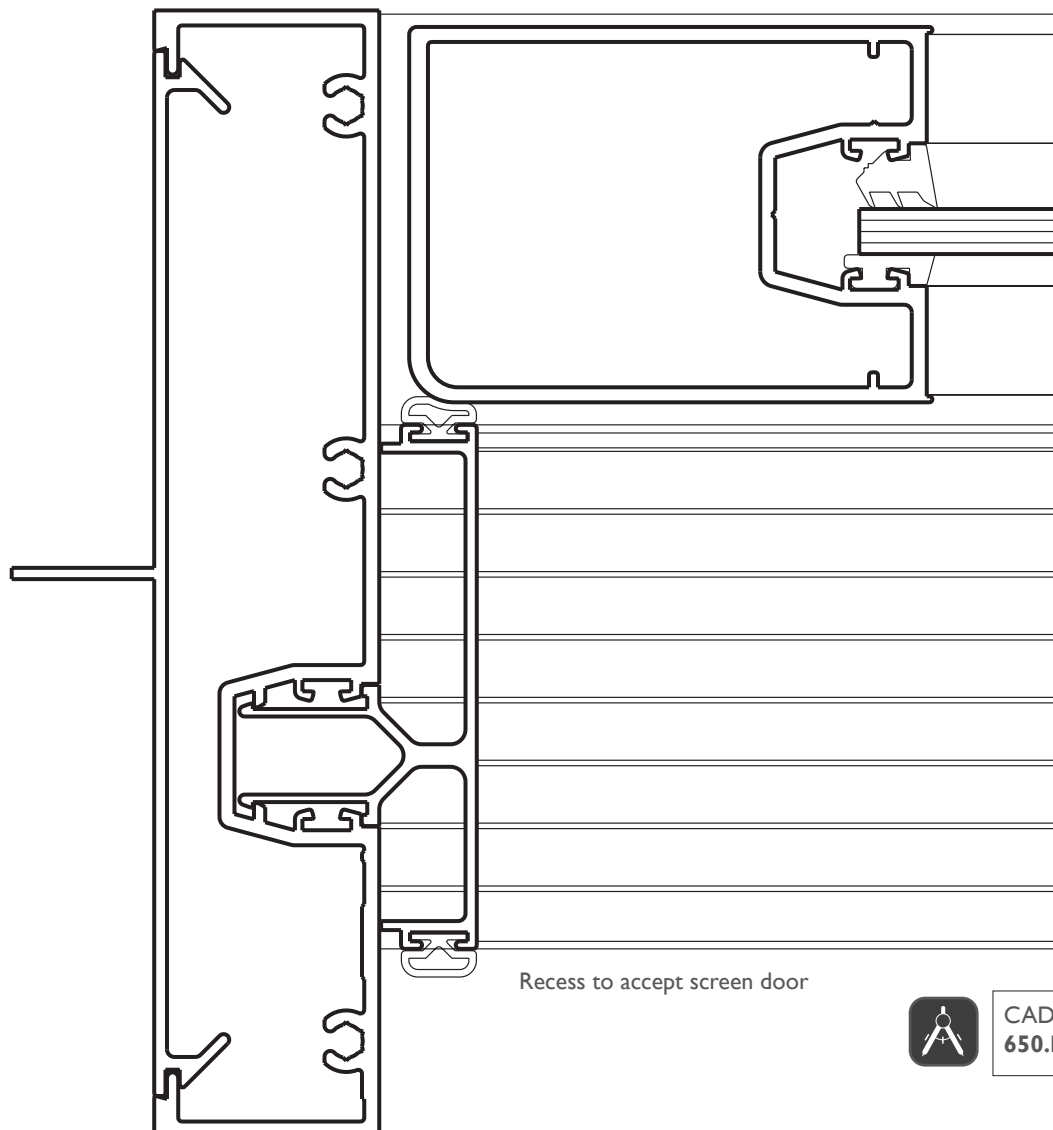
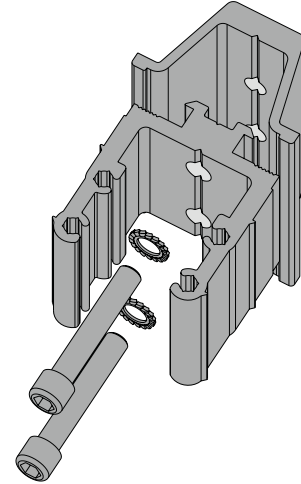
DATE: MAY 13
REPLACES: JUNE 06
SCALE: FULL SIZE & NTS

FRAME DESIGN FEATURES

SERIES 650 – STANDARD 30mm NARROW JAMB

Features :

- The standard 30mm jamb matches other Elevate™ Architectural Series windows.
- We also offer an alternative 44mm wide jamb for those customers looking for bold, wide framing.
- Jamb can be fitted with nailing fin adaptor for brick veneer or cavity brick installations.
- Custom door stop designed to allow screen doors to be fitted on the outside if required.
- Co-extruded Santoprene seal between door panel and frame ensures that most of the water stays on the outside.
- The detail right shows the heavy duty corner spigots used on Series 50 doors.



Recess to accept screen door



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650.DOOR.9

Series 650 COMMERCIAL ENTRY DOOR

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FRAME DESIGN FEATURES

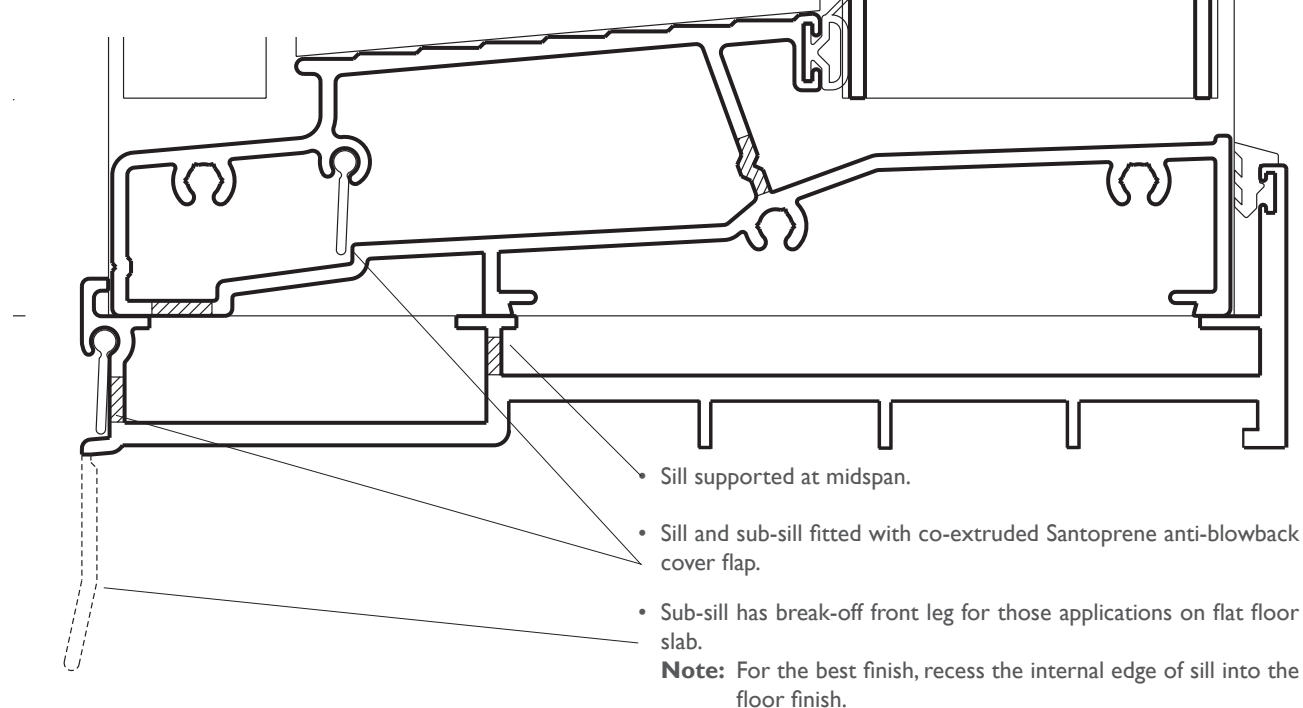
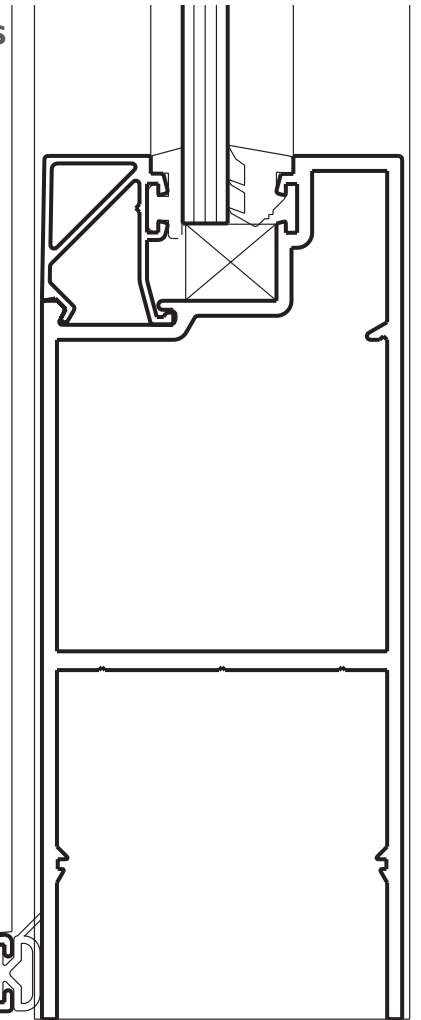
SERIES 650 – SILL DESIGNED FOR HEAVY DUTY 50mm DOORS

The advantage with heavy duty doors are obvious:

- Tall doors require stiles that can withstand the wind loads. 50mm thick stiles are significantly stronger (approximately 70%) than industry standard 45mm thick light duty doors.
- Doors are only as good as the joinery (stile to rail junction). Elevate™ Series 50 and 52 doors are fitted with heavy duty aluminium spigots and backing plates.
- These commercial grade doors can be fitted with custom glass blocking system that allows the panels to be jacked back into square to match the frame if necessary.
- Besides the standard square glazing bead shown right, we offer 25° and 45° splayed beads. On the double beaded Series 52 door we also offer beads that will accept insulating glass units (IGU's) up to 34mm thick.
- Doors and adjoining fixed sidelights can be fitted with a variety of midrails as detailed later in these notes. A production feature with our glazing pocket is the ability to use the same midrail in doors and the fixed sidelight using the screw ports on the fixed lights, refer details later in these notes.
- The custom sill shown below suits internal swing doors. This detail is rated at 300Pa water resistance with sub-sill and 150pa water resistance without sub-sill.
- Co-extruded Santoprene seal between door panel and frame ensures that most of the water stays on the outside.



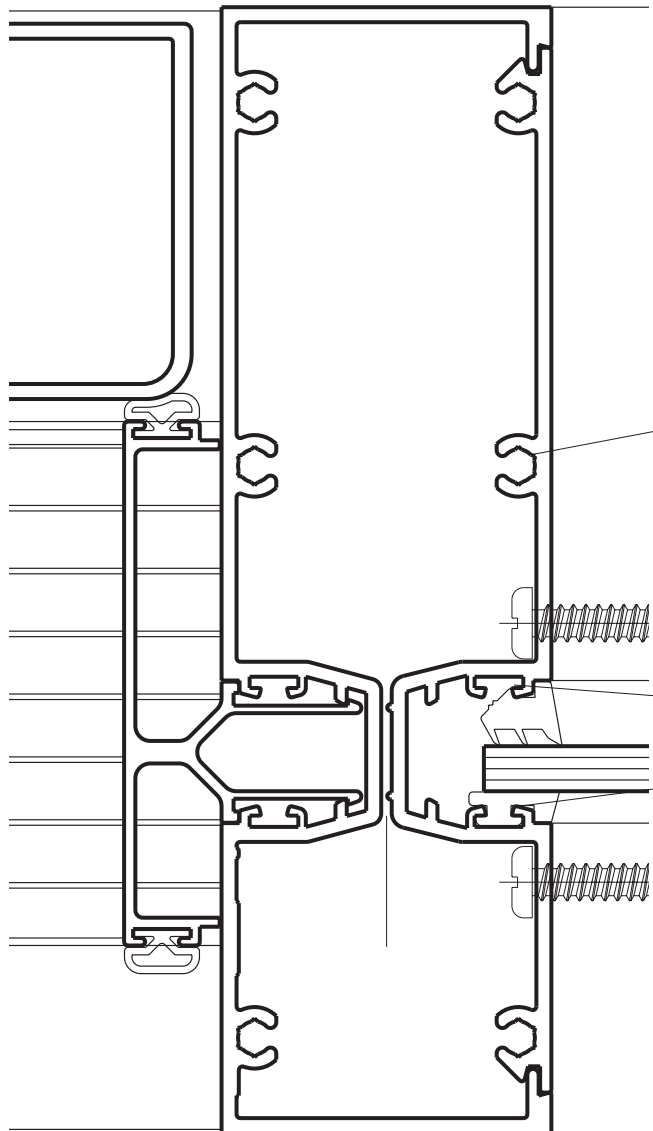
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650.DOOR.7



Series 650 COMMERCIAL ENTRY DOOR

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FRAME DESIGN FEATURES



SERIES 650 – 150 X 44mm MULLION

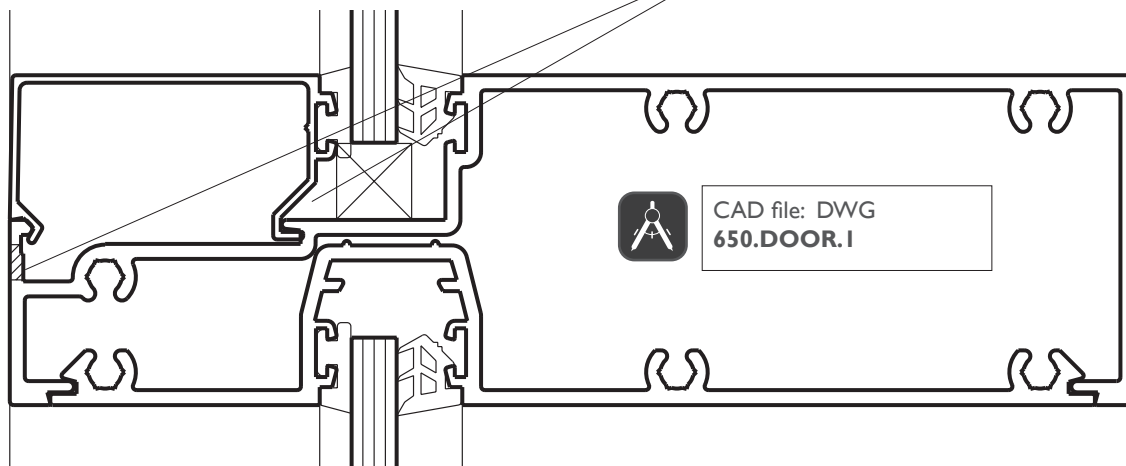
The glazing pocket has been designed to be compatible with industry standard, but more importantly:

- Additional line of screw ports in the centre of the 150mm frame to ensure that we can pull horizontals tight up to the verticals across the full width of the section.
- Pocket has been designed to allow the same door midrails to be securely screw fixed both sides of framing pocket.
In other (competitor) suites, screws at the back of the pocket can work loose and need to be countersunk or they will clash with the adjoining sidelight fixings.
- Recessed wedges on framing and doors. Improves performance and appearance.
- Accepts true captive wedge glazing to reduce on-site glazing labour. This also improves security.



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650.DOOR.14

Drainage slots at transom and in the glazing bead.

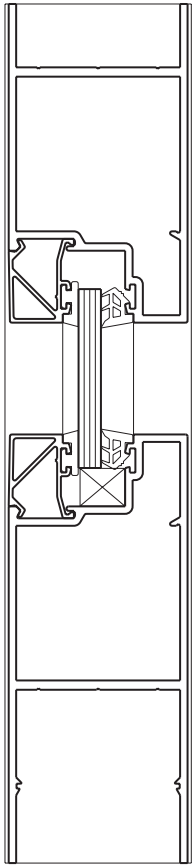


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650.DOOR.1

Series 650 COMMERCIAL ENTRY DOOR

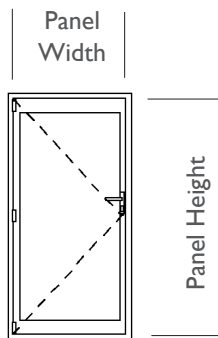
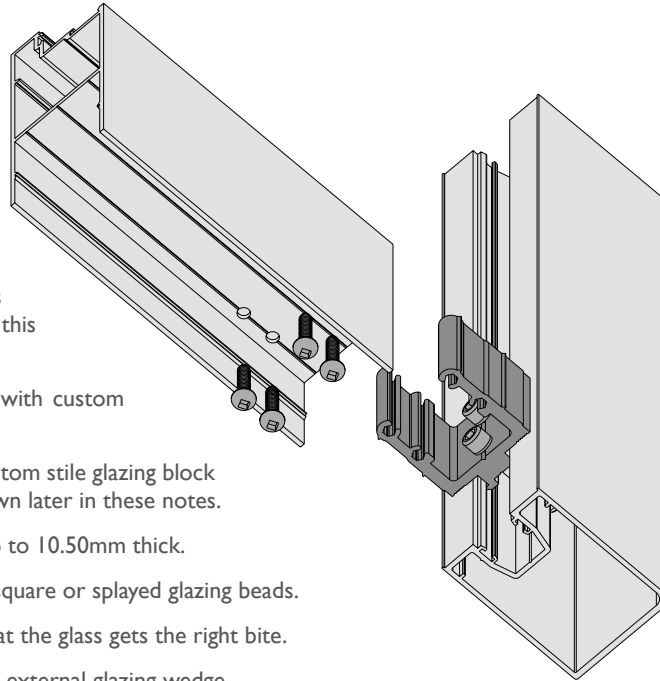
DATE: MAY 13
REPLACES: JUNE 06
SCALE: HALF SIZE

DOOR DESIGN FEATURES - SERIES 50



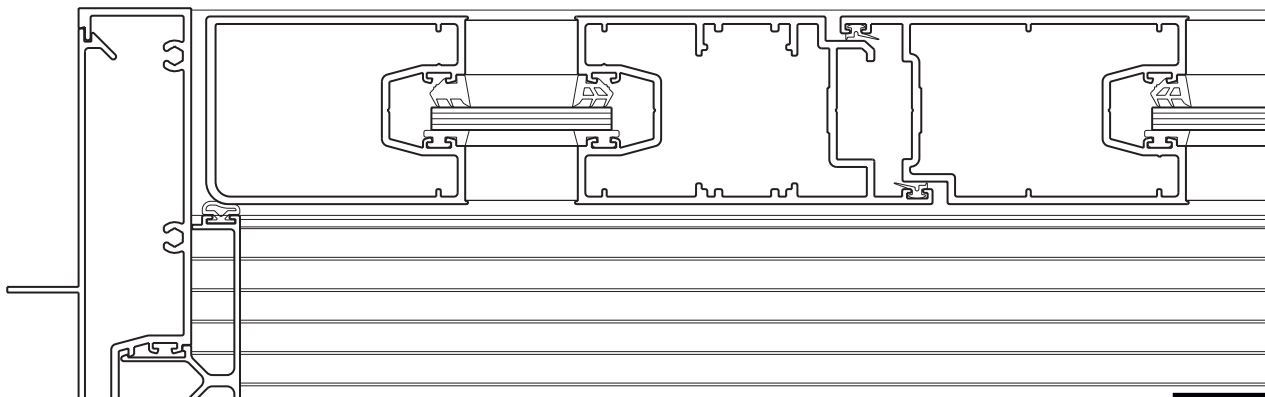
FEATURES

- 50mm wide doors are significantly stronger (approximately 70%) than industry standard 45mm wide doors. Basically 50mm wide doors are ideal for overhead doors – they comply.
- Series 50 doors have removable snap-on glazing beads on horizontals and wrap around stiles as shown on this page.
- Stile to rail joint is securely fixed with custom spigot assembly as shown above.
- Door glass can be blocked with custom stile glazing block and adjustable setting block as shown later in these notes.
- Series 50 doors will accept glass up to 10.50mm thick.
- Horizontal rails can be fitted with square or splayed glazing beads.
- 19mm high glazing beads ensure that the glass gets the right bite.
- Can be security glazed with captive external glazing wedge.
- Four midrail options 50mm, 115mm, 125mm and 200mm deep.
- Lock stile wide enough to accept most lock types.
- Rebated French meeting stiles.
- Dedicated hardware – makes life easier.



Maximum Recommended Series 50 Door Panel Sizes

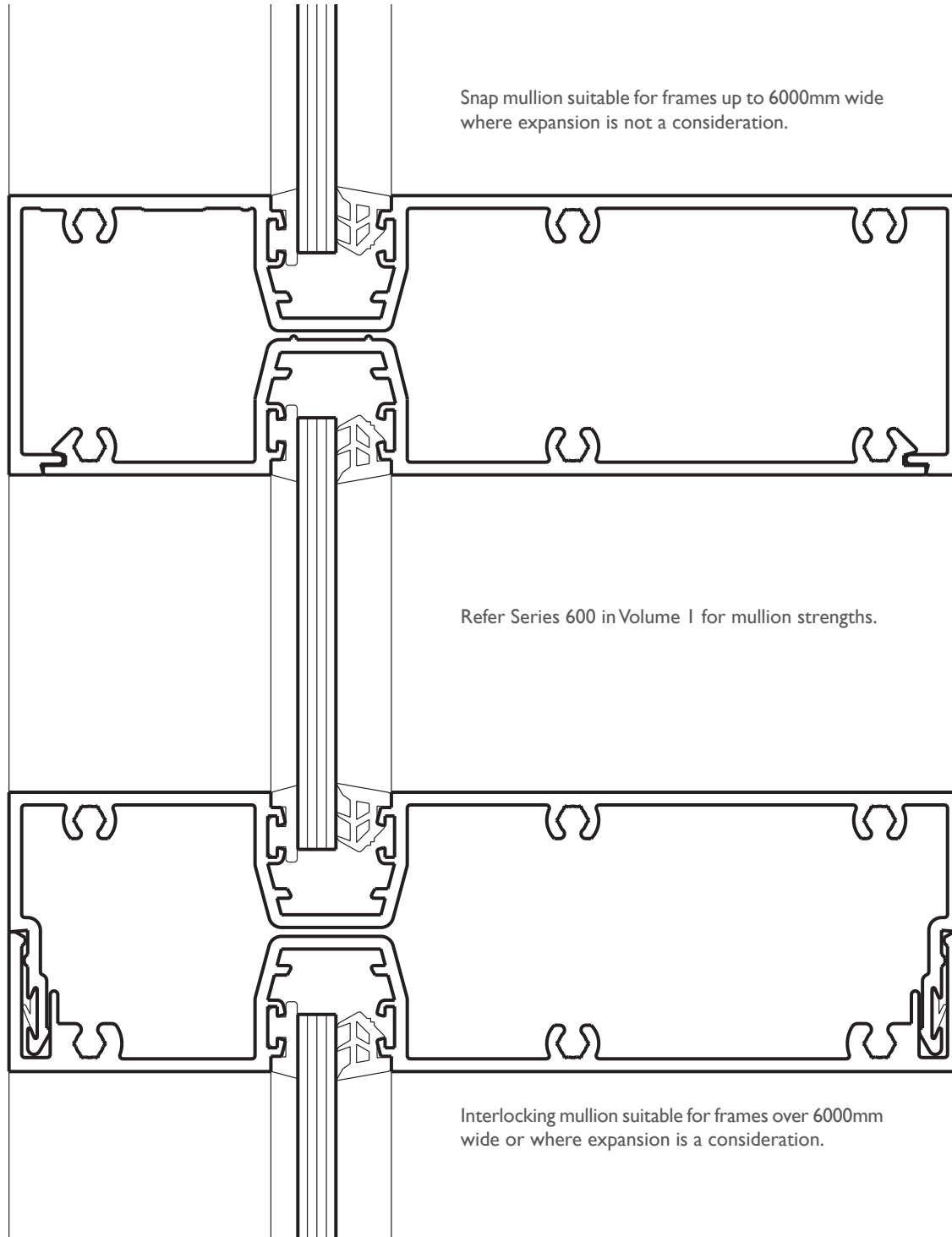
Hinge quantity	3 hinges – height less than or equal to 2200mm.
	4 hinges – height greater than to 2200mm.
Maximum weight	with 3 hinges 30 kg
	with 4 hinges 50 kg
Maximum panel width	1000mm
Maximum panel height	3000mm (subject to wind load)



Series 650
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FIXED MULLIONS



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Series 650 COMMERCIAL ENTRY DOOR

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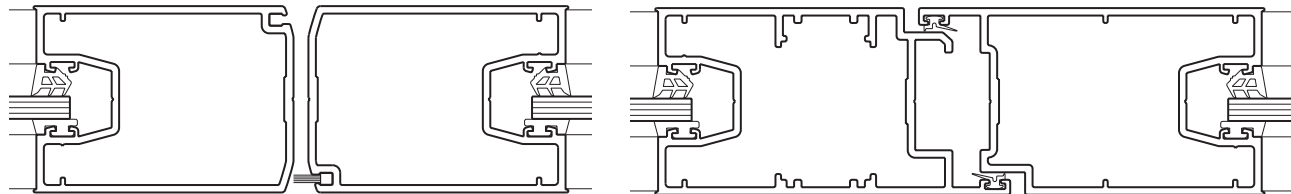
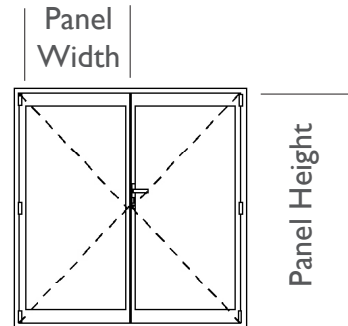
MULLION STRENGTH

Don't ignore the strength of the door meeting stiles.

- S** = Serviceability limit state (deflection = L/250).
- U** = Ultimate strength limit state (factored yield strength = 104 MPa).

These tables have been calculated using nominal section properties.

Serviceability rating has been limited to 3333 Pa and
Ultimate strength rating has been limited to 5000 Pa.



Pivot/wiper meeting stiles
(Series 50/51 illustrated)

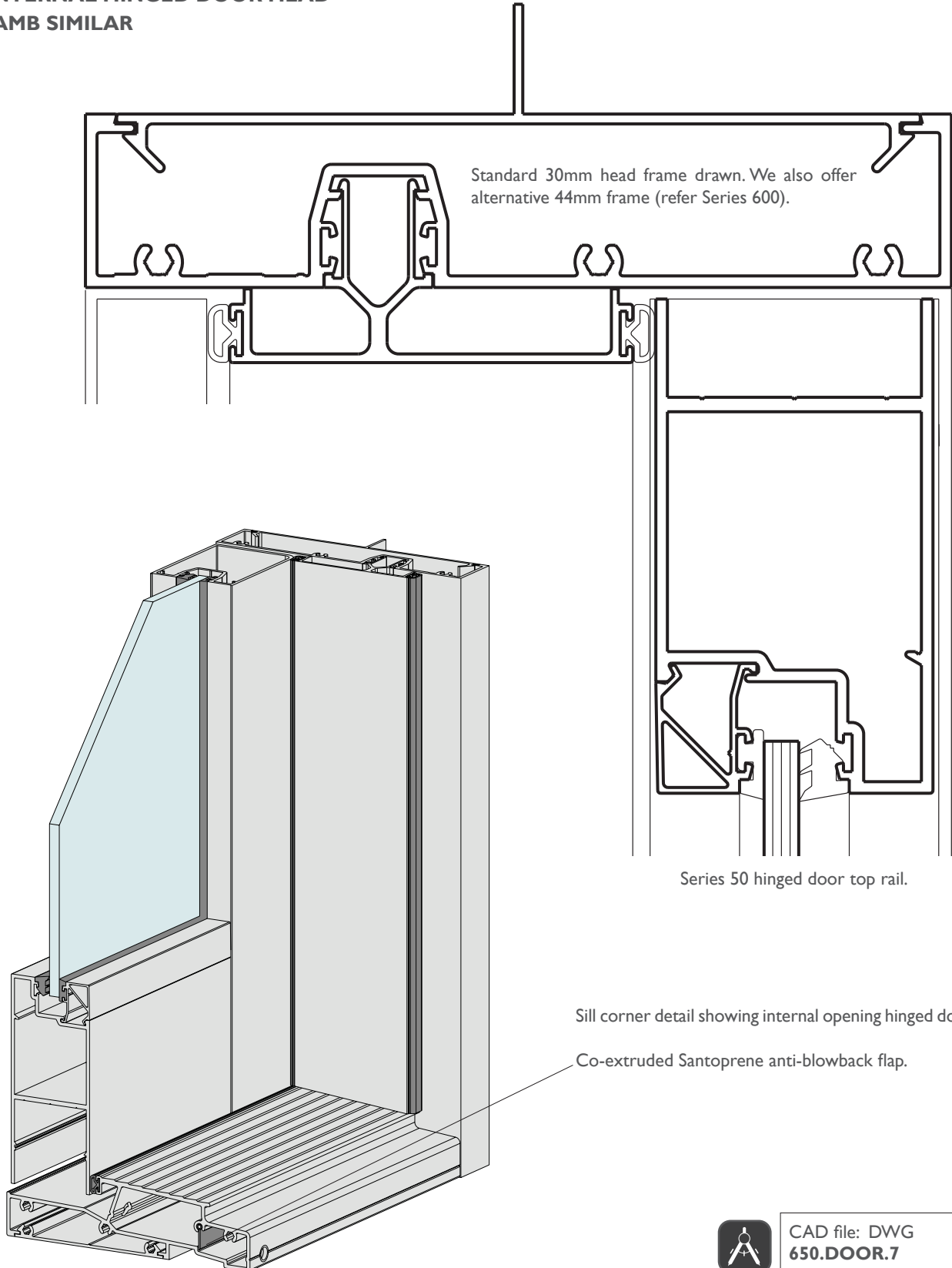
Rebated French meeting stiles
(Series 50/51 illustrated)

Pivot Door Meeting Stile Strength Guide				Ratings - Rebated French meeting stiles					
Panel Height mm	Panel Width mm	Ratings - Pivot meeting stiles		Ratings - Rebated French meeting stiles		Ratings - Rebated French meeting stiles			
		Series 50 & 51 S	Series 50 & 51 U	Series 52 S	Series 52 U	Series 50 & 51 S	Series 50 & 51 U	Series 52 S	Series 52 U
2100	700	1395	4492	1070	3431	1741	5000	1416	4310
2100	800	1238	3978	950	3038	1545	4764	1256	3816
2100	900	1118	3584	858	2737	1395	4293	1135	3439
2100	1000	1025	3276	786	2502	1278	3923	1040	3143
2400	700	925	3409	710	2603	1154	4083	939	3270
2400	800	818	3009	627	2298	1020	3604	830	2887
2400	900	736	2703	565	2064	918	3237	747	2593
2400	1000	671	2461	515	1879	838	2947	681	2361
2600	700	724	2892	555	2209	903	3464	734	2775
2600	800	639	2550	-	-	797	3054	648	2446
2600	900	574	2286	-	-	716	2738	582	2193
2600	1000	523	2078	-	-	652	2489	530	1994
2800	700	577	2485	-	-	720	2976	586	2384
2800	800	509	2189	-	-	635	2621	516	2100
2800	900	-	-	-	-	569	2348	-	-
2800	1000	-	-	-	-	518	2131	-	-
3000	700	-	-	-	-	583	2586	-	-
3000	800	-	-	-	-	514	2275	-	-
3000	900	-	-	-	-	-	-	-	-
3000	1000	-	-	-	-	-	-	-	-

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**INTERNAL HINGED DOOR HEAD
 JAMB SIMILAR**



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650.DOOR.7

Series 650 COMMERCIAL ENTRY DOOR

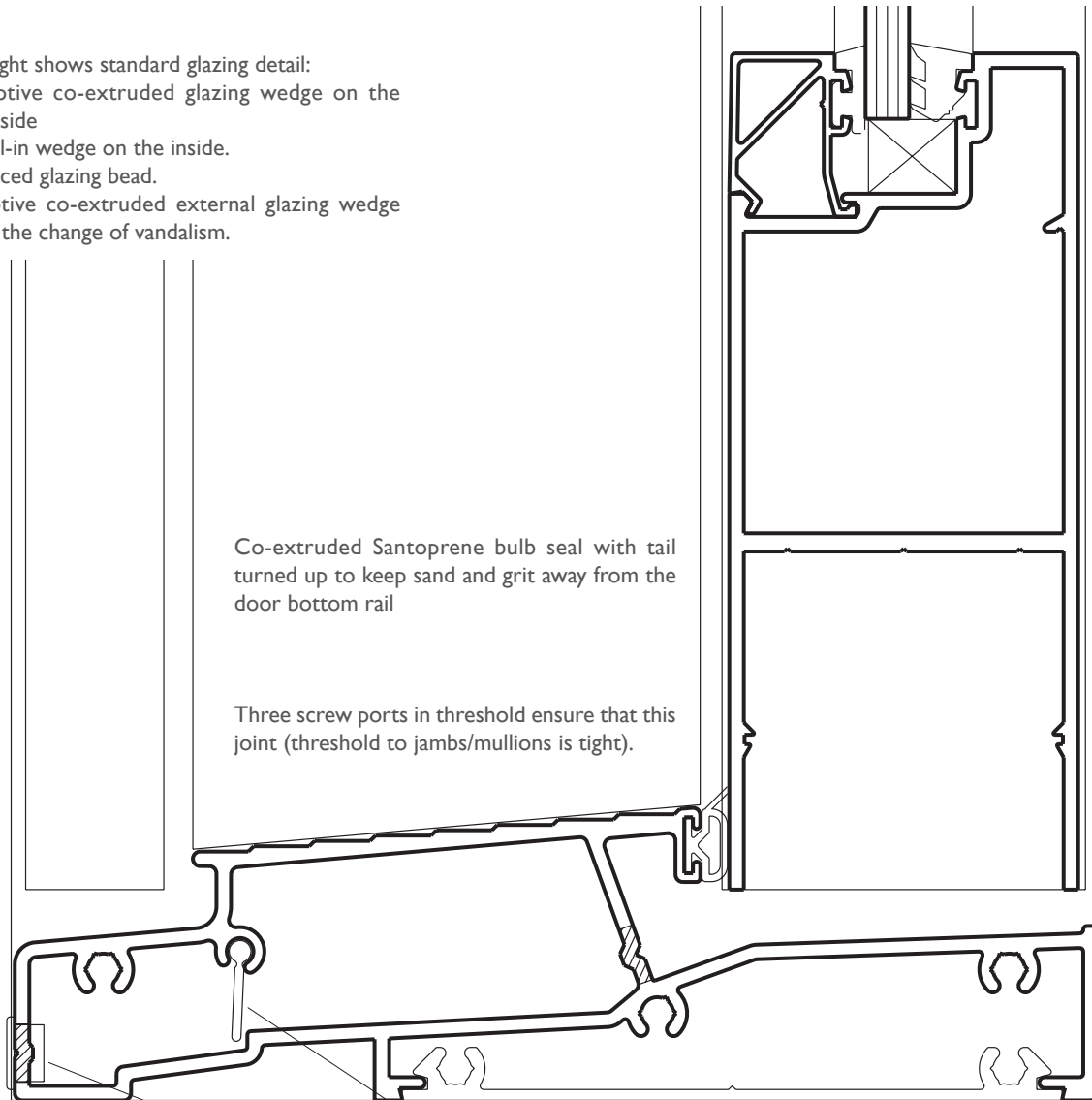
DATE: MAY 13
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INTERNAL HINGED DOOR SILL

Detail right shows standard glazing detail:

- Captive co-extruded glazing wedge on the outside
- Roll-in wedge on the inside.
- Braced glazing bead.

The captive co-extruded external glazing wedge reduces the change of vandalism.



Co-extruded Santoprene bulb seal with tail turned up to keep sand and grit away from the door bottom rail

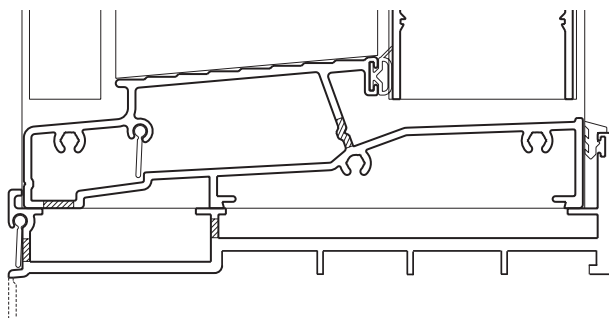
Three screw ports in threshold ensure that this joint (threshold to jambs/mullions is tight).

Internal swing door threshold.

Co-extruded Santoprene anti-blowback flap.

Drainage holes.

Sill can be fitted into custom stepped sub-sill as detailed left for even higher water resistance, sub-sill also fitted with anti-blowback flap to cover drainage slots.

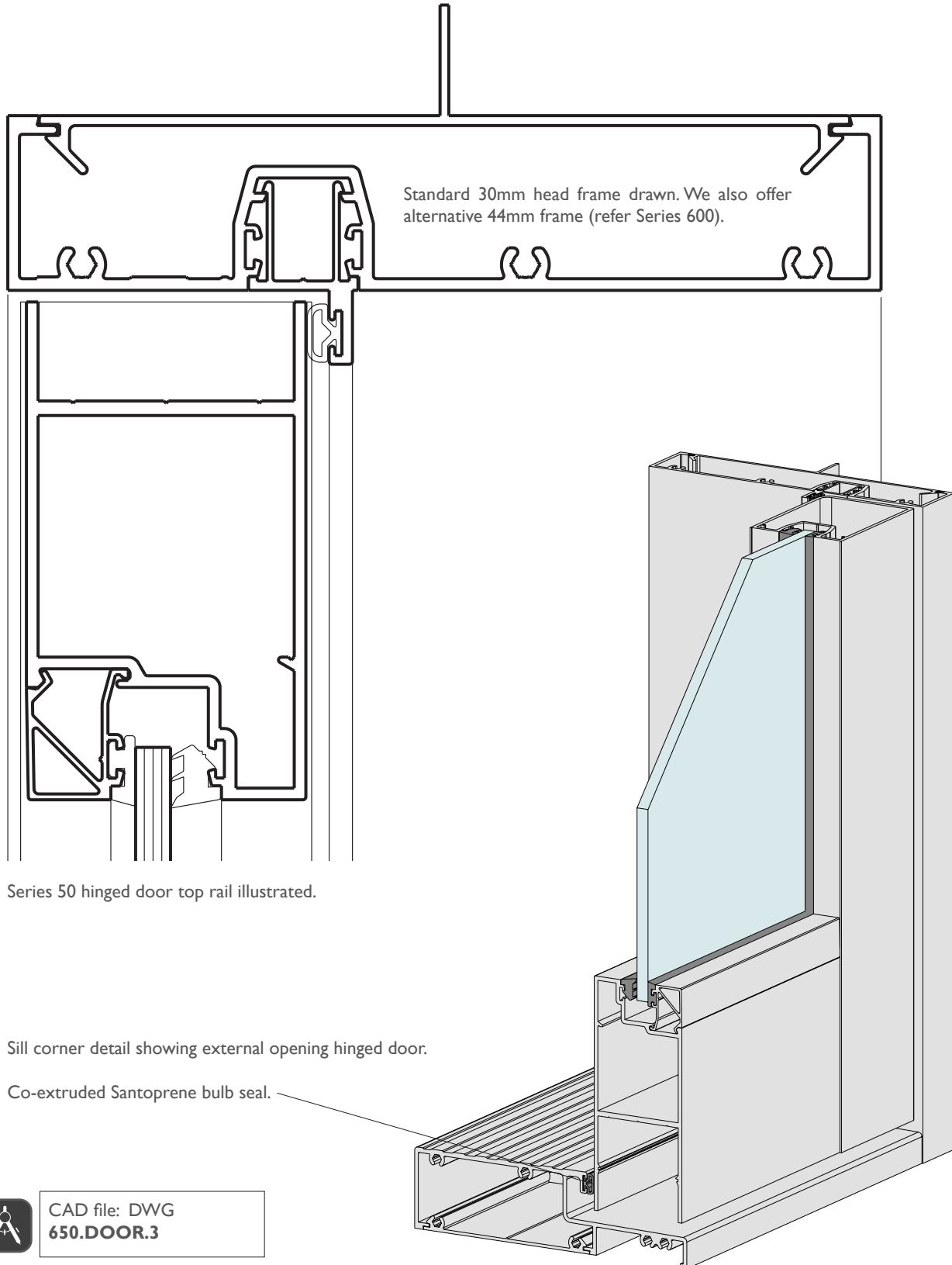


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650.DOOR.7

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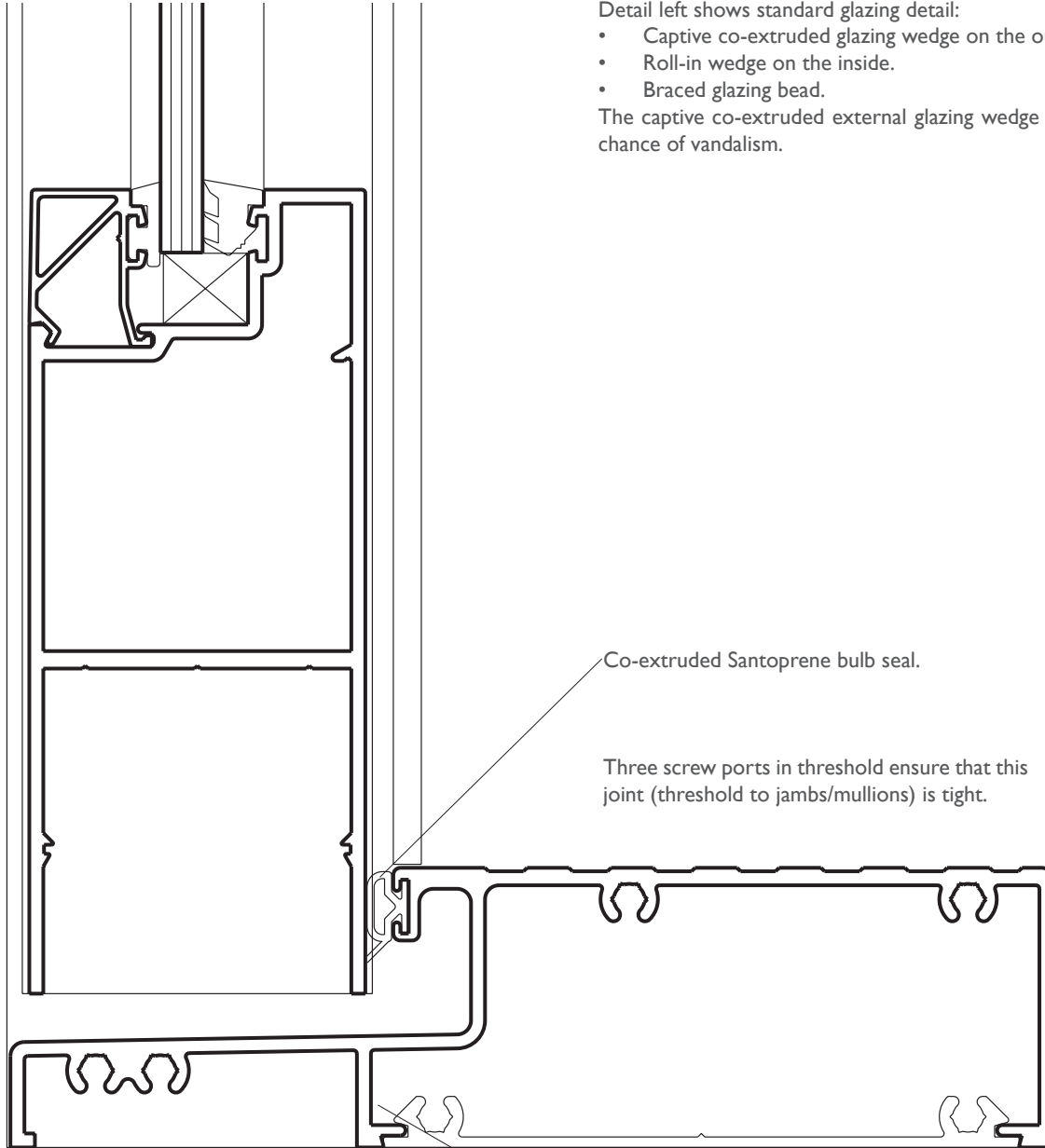
EXTERNAL HINGED DOOR HEAD JAMB SIMILAR



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EXTERNAL HINGED DOOR SILL



Detail left shows standard glazing detail:

- Captive co-extruded glazing wedge on the outside.
- Roll-in wedge on the inside.
- Braced glazing bead.

The captive co-extruded external glazing wedge reduces the chance of vandalism.

Co-extruded Santoprene bulb seal.

Three screw ports in threshold ensure that this joint (threshold to jambs/mullions) is tight.

External swing door threshold.

Threshold fitted with central support leg, this supports the threshold when dead load (shoe or wheelchair) is applied.

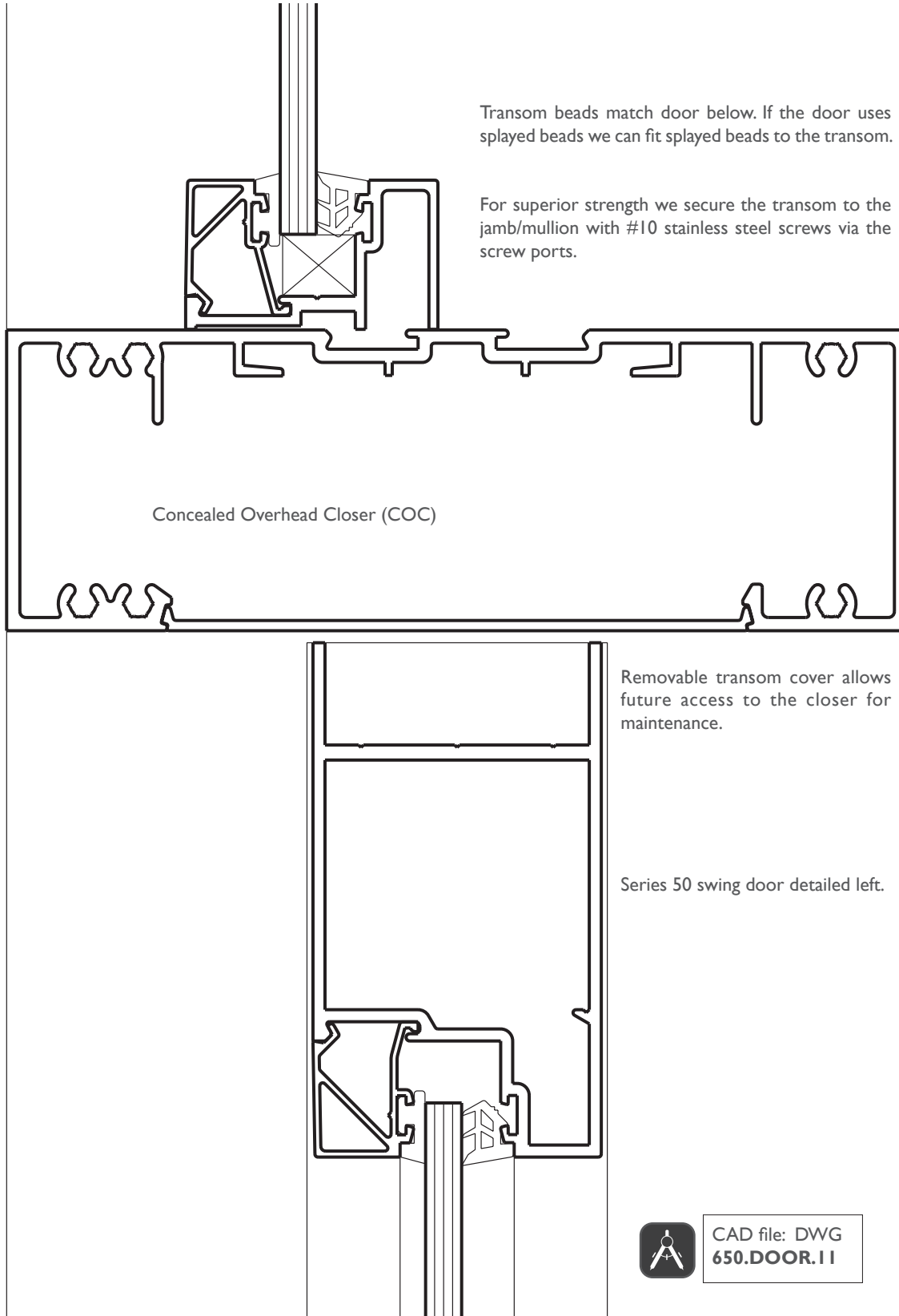


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650.DOOR.3

Series 650
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CONCEALED OVERHEAD CLOSER SWING DOOR



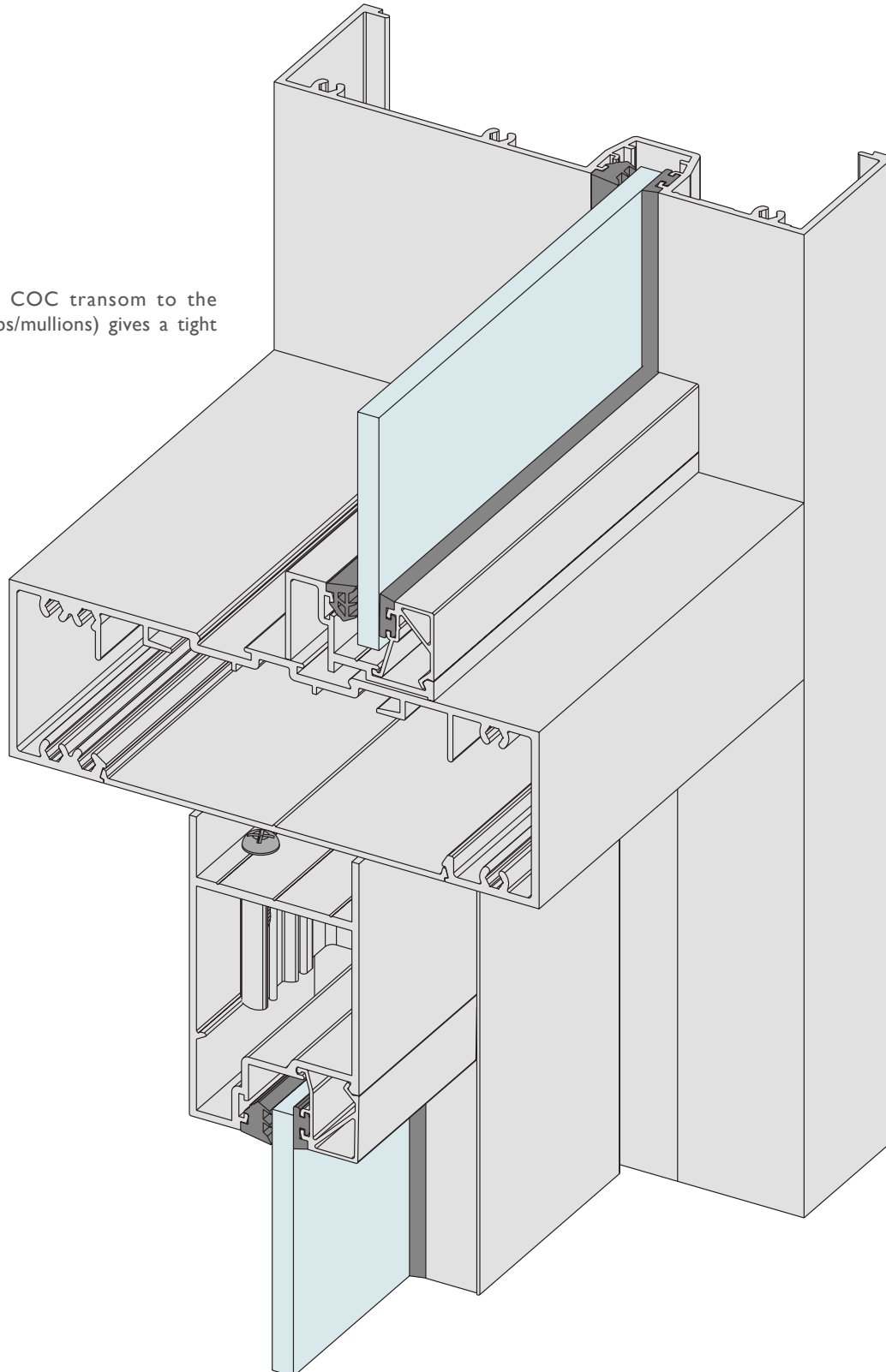
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650.DOOR.11

Series 650 COMMERCIAL ENTRY DOOR

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CONCEALED OVERHEAD CLOSER SWING DOOR

Screwing the COC transom to the verticals (jamb/mullions) gives a tight clean joint.



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AWNING/CASEMENT INLAY

Non-facing Awning and Casement sashes can be inlaid into Series 650 framing using custom inlay adaptor.

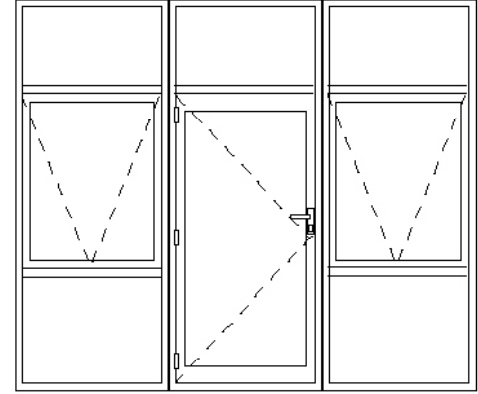
Sashes can be fitted with a large variety of hardware as shown on these pages:

- MIRO™ cam handles.
- ICON™ cam handles
- Wedgeless cam handles.
- Manually operated chain winders.
- Concealed electrically operated winders.

Notes:

If you want to fit flyscreens, fit one of the winder options.

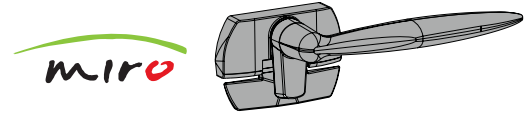
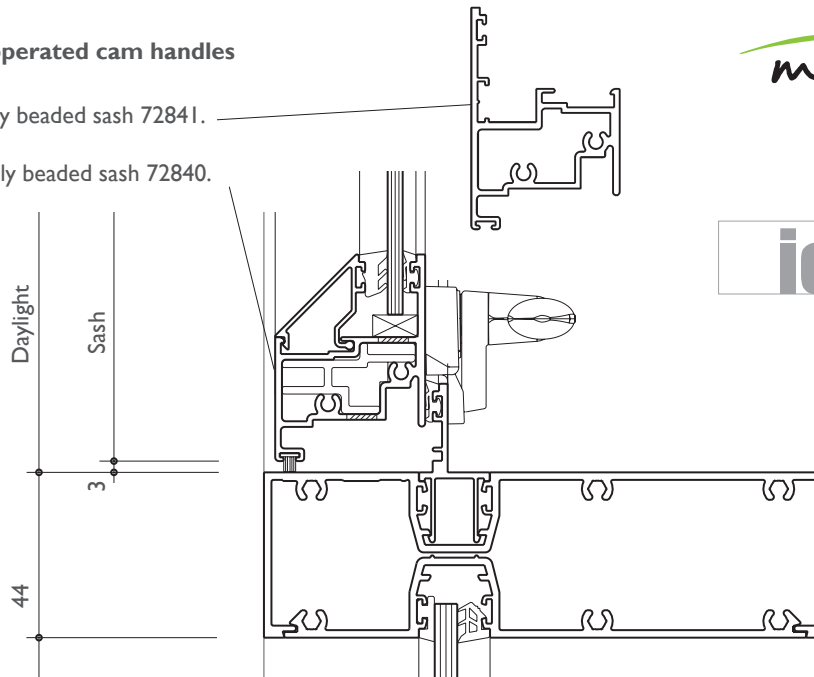
If the sashes are elevated (over doors) consider using electric winders.



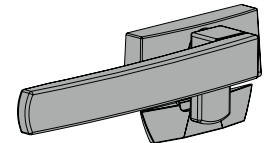
Hand operated cam handles

Internally beaded sash 72841.

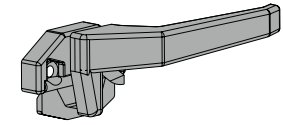
Externally beaded sash 72840.



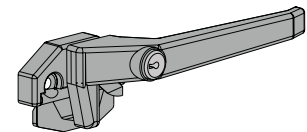
MIRO™ cam handle



ICON™ cam handle

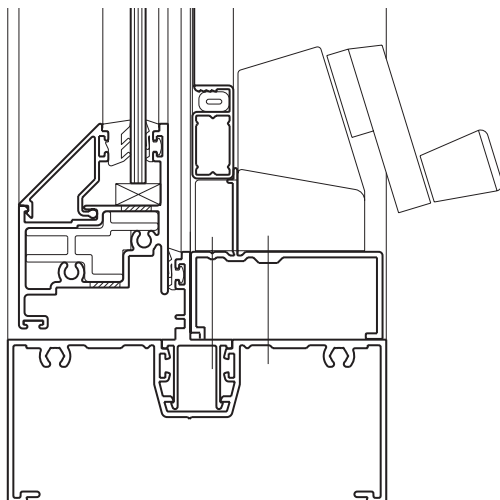


or
Wedgeless cam handle



or
Key locking wedgeless
cam handle .

Hand operated chain winder

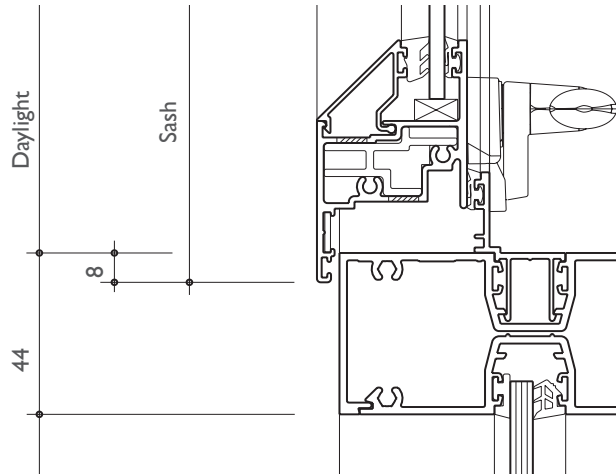


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600.AWN.2

Series 650 COMMERCIAL ENTRY DOOR

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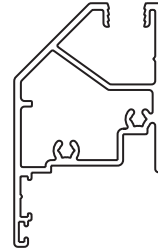
FACING AWNING SASH OPTIONS



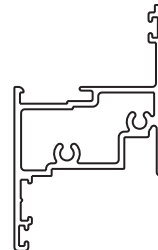
Hand operated cam handles.

Alternative facing sashes

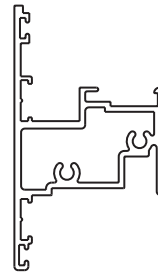
72836
Wraparound
40mm thick sash.



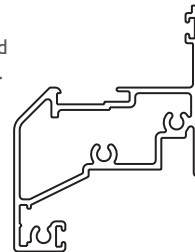
72837
Externally beaded
40mm thick sash.



72838
Internally beaded
40mm thick sash.



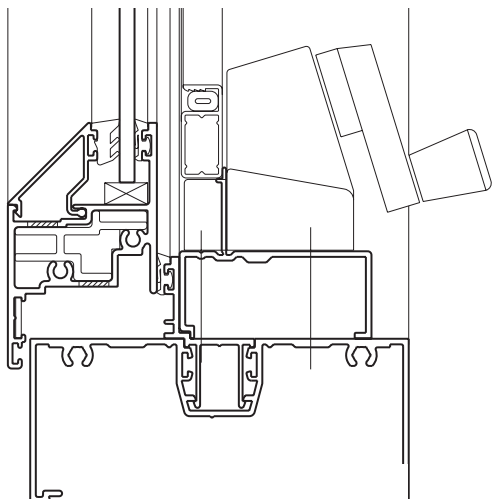
72839
Externally beaded
50mm thick sash.



Glazing beads

We have a large range of splayed and square glazing beads that will accept glass up to 24mm thick.

Hand operated chain winder.

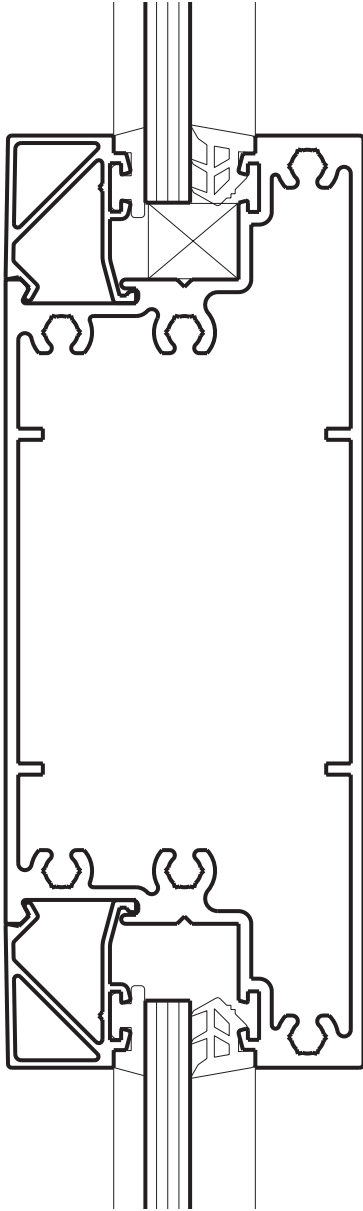


CAD file: DWG
600.AWN.1

Series 650 COMMERCIAL ENTRY DOOR

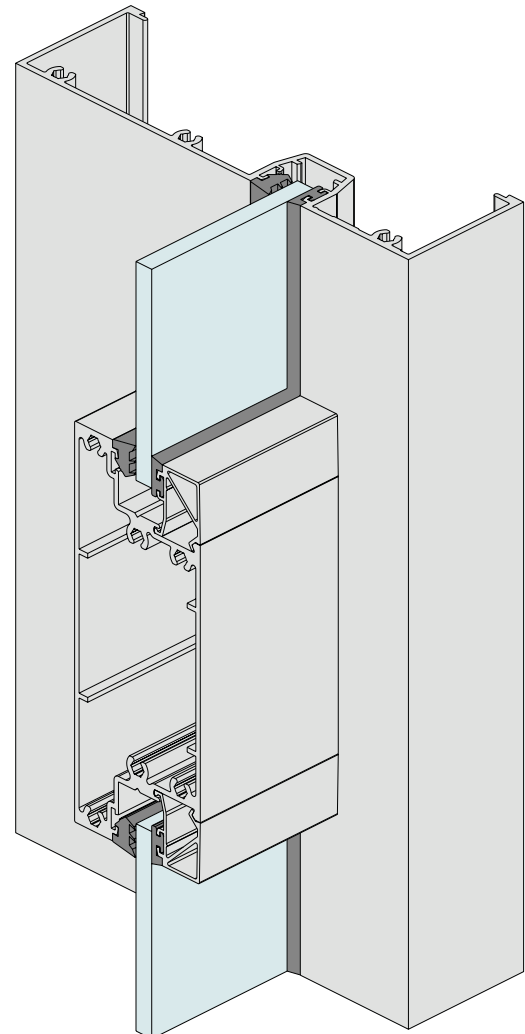
DATE: MAY 13
REPLACES: JUNE 06
SCALE: FULL SIZE & NTS

TYPICAL MIDRAIL



125mm standard midrail illustrated left, we also offer 50mm, 115mm and 200mm midrails.

The glazing pocket is designed to allow Elevate™ midrails to be screwed to verticals via screw ports as shown right.



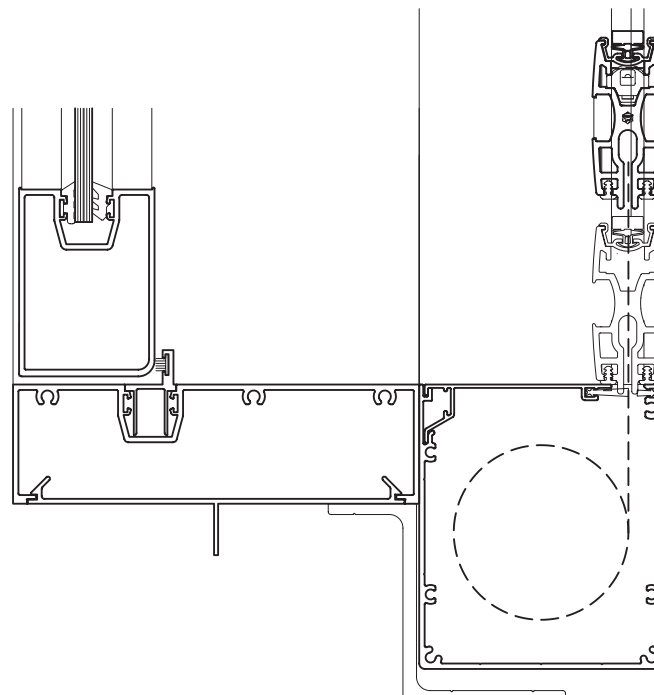
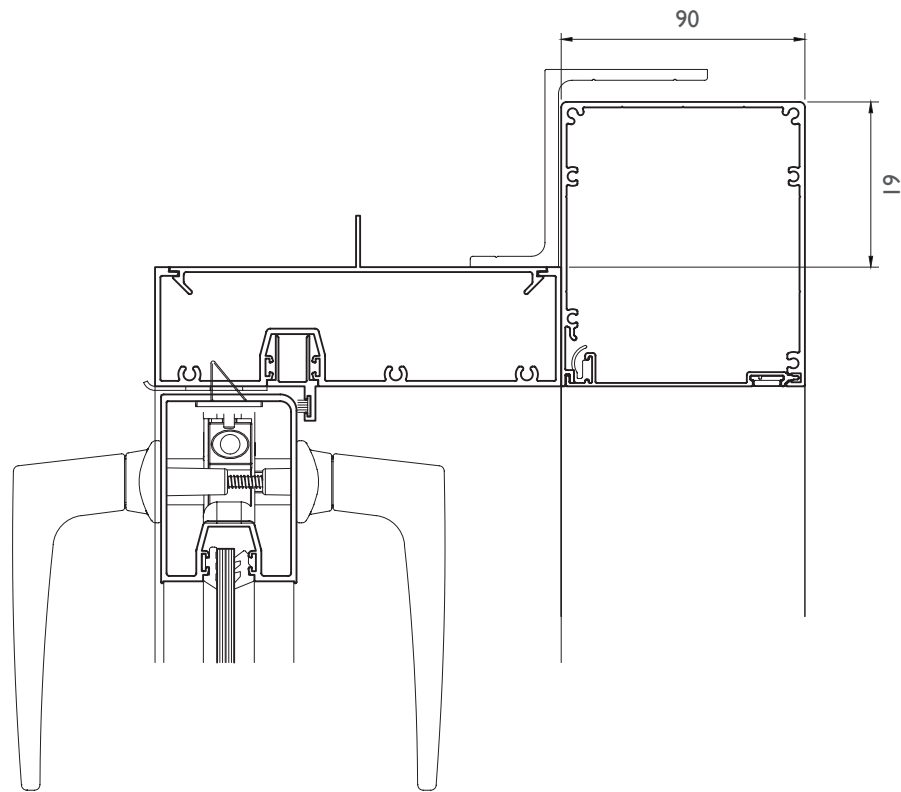
CAD file: DWG
600.AWN.4

Series 650 COMMERCIAL ENTRY DOOR

DATE: AUG 20
REPLACES: MAY 13
SCALE: NOT TO SCALE

CENTOR S4 SCREEN OPTION - EXTERNAL SWING DOOR WITH SINGLE SCREEN

Note: It's important that the builder leaves the appropriate cavity in wall to accept screen canister as detailed.

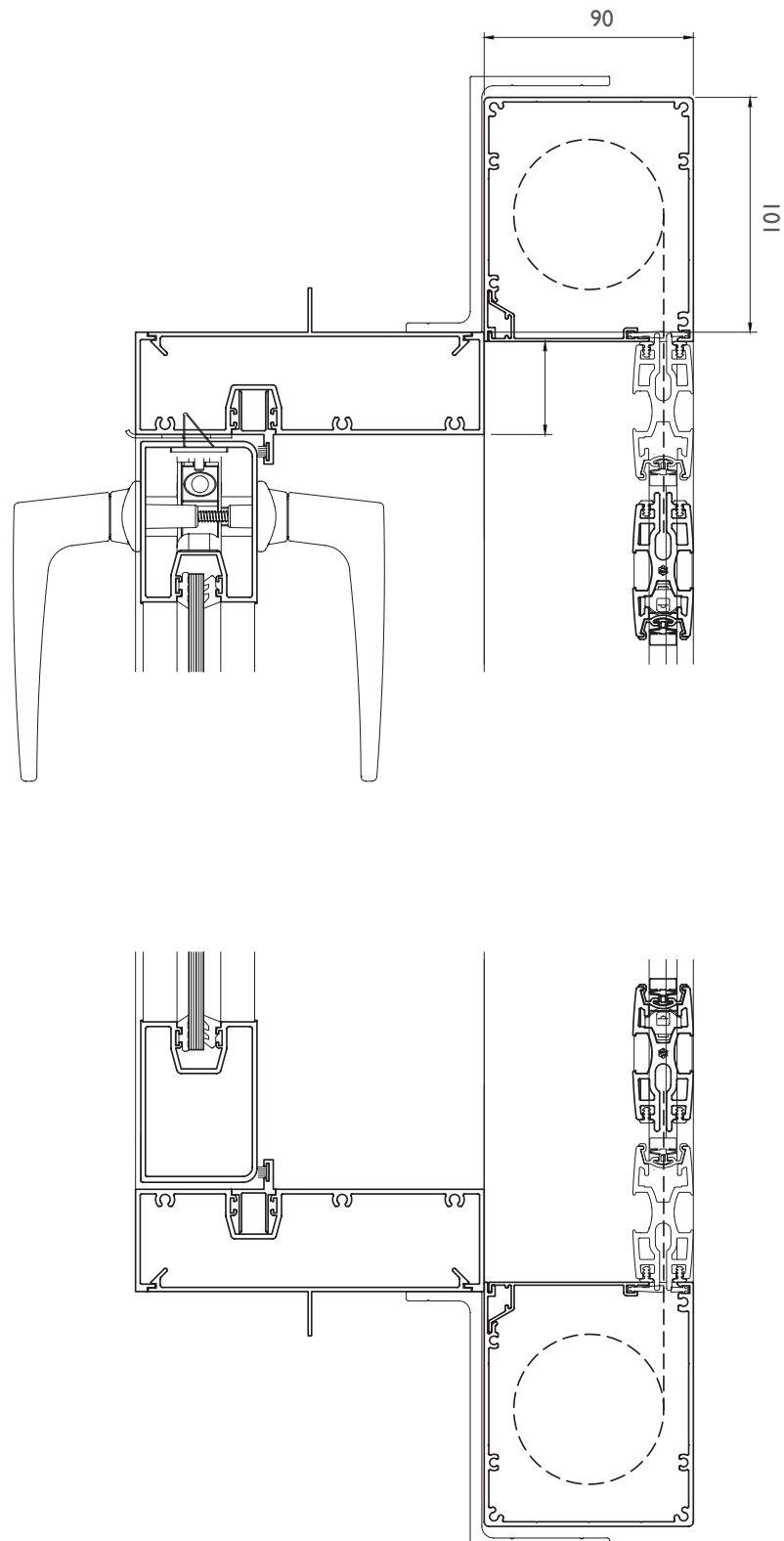


Series 650
COMMERCIAL ENTRY DOOR

DATE: AUG 20
 REPLACES: MAY 13
 SCALE: NOT TO SCALE

CENTOR S4 SCREEN OPTION - EXTERNAL SWING DOOR WITH DOUBLE SCREEN

Note: It's important that the builder leaves the appropriate cavity in wall to accept screen canister as detailed.

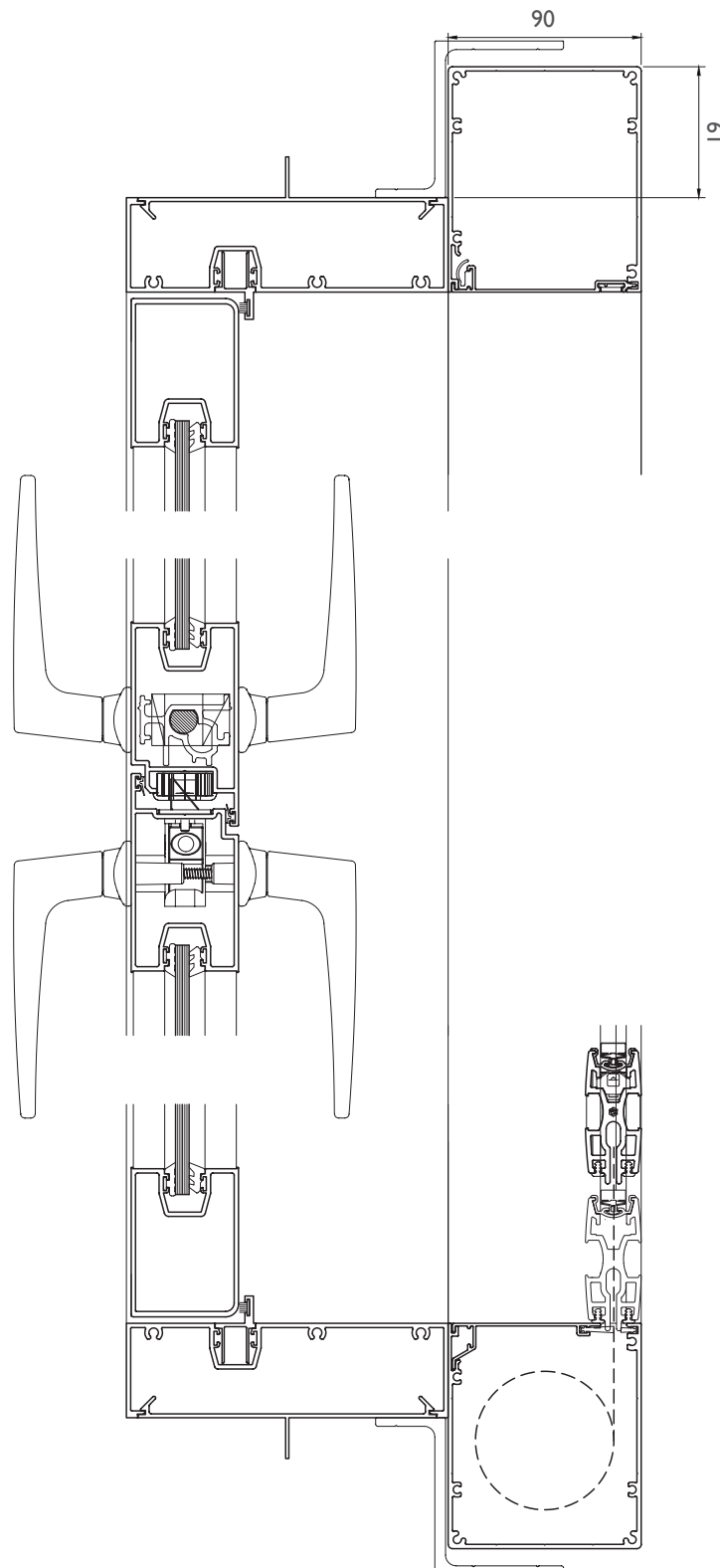


Series 650 COMMERCIAL ENTRY DOOR

DATE: AUG 20
REPLACES: MAY 13
SCALE: NOT TO SCALE

CENTOR S4 SCREEN OPTION - EXTERNAL SWING DOUBLE HINGED DOOR WITH SINGLE SCREEN

Note: It's important that the builder leaves the appropriate cavity in wall to accept screen canister as detailed.



Series 650
COMMERCIAL ENTRY DOOR

DATE: AUG 20
 REPLACES: MAY 13
 SCALE: NOT TO SCALE

CENTOR S4 SCREEN OPTION - EXTERNAL SWING DOUBLE HINGED DOOR WITH DOUBLE SCREEN

Note: It's important that the builder leaves the appropriate cavity in wall to accept screen canister as detailed.

