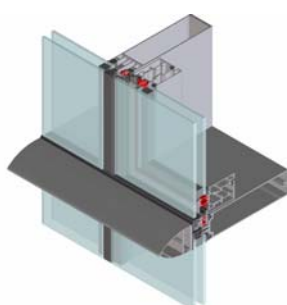
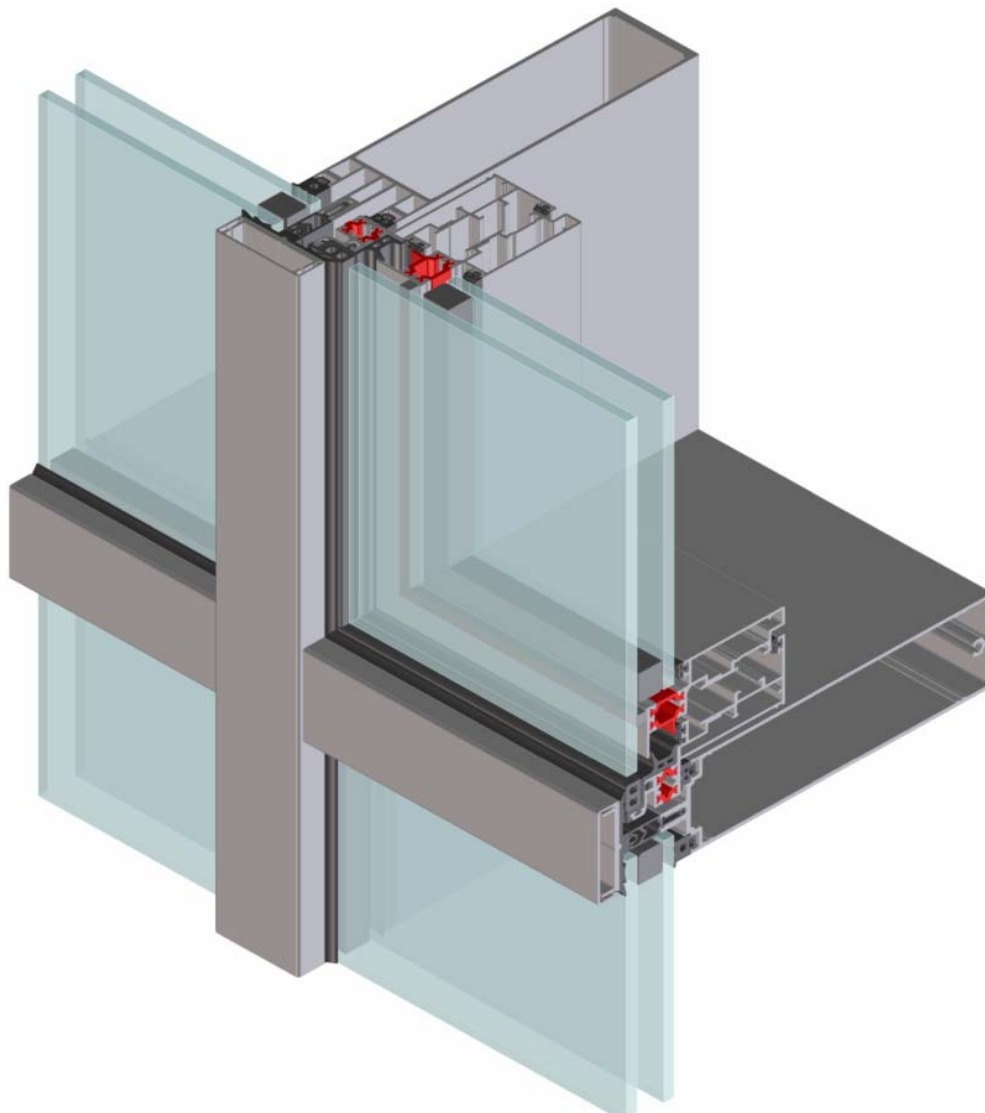
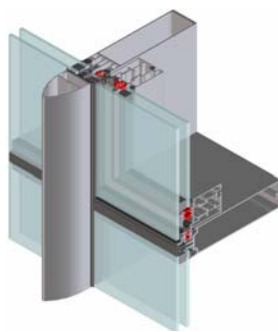


Concealed Vent into capped CW

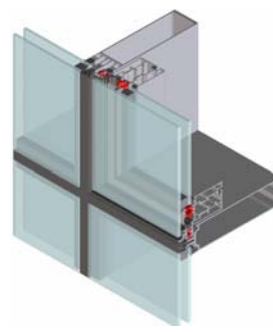
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into 2sided SGH



into 2sided SGV



into 4sided SG

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Issue: 04
Date :01-14

Introduction

Comar 6 EFT Concealed Vent

Comar 6 EFT Concealed Vent is a top hung or side hung window system, with friction hinges and is available with double glazed sealed units only.

This integrated curtain wall window system, the Comar 6 EFT Concealed Vent has an outer frame and vent frame developed with a thermal barrier.

Available Framing

For thermally broken double glazed units only:

System depth = 94 mm

4001 - Vent Frame

4003 - Outer Frame

Glazing options are: 24 mm / 28 mm / 30 mm

Suitable for Standard Curtain Wall

Suitable for 2 Sided Curtain Wall

Suitable for 4 Sided Curtain Wall

Specification Summary

Glazing

The system is glazed from the outside, structurally bonded to the moving frame (window vent)
Glass should conform to the requirement of BS 6262 for thickness / type and in terms of wind resistance, safety and security.

Drainage

The system is drained, achieved by meeting the requirements of "ventilated and drained glazing system" as specified in BS 6262

Thermal Insulation

Classification in accordance with DIN 4108 or EN ISO 10077-1

Thermally Concealed Vent

The thermal transmittance (U_f) $W/m^2 K$ is depending on the insulator strip, calculated as per EN ISO 10077-1
Comparable with class 1.0 or 2.1 DIN 4108 - 4 Table 3

Sound Insulation

Depending largely upon the glass specification, generally the curtain wall framing reduces the figure by 2db (A)

Materials

The system is constructed from extruded aluminium profiles, using alloy 6063 complying with the requirements of BS1474.

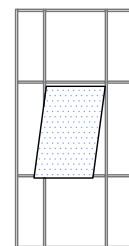
thermal barrier system is achieved by means of PVC / PP extrusion.

Construction

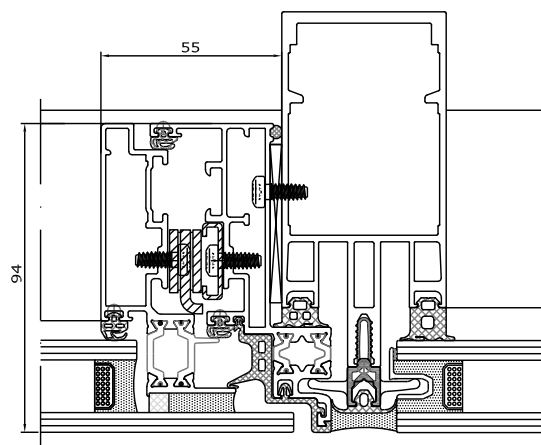
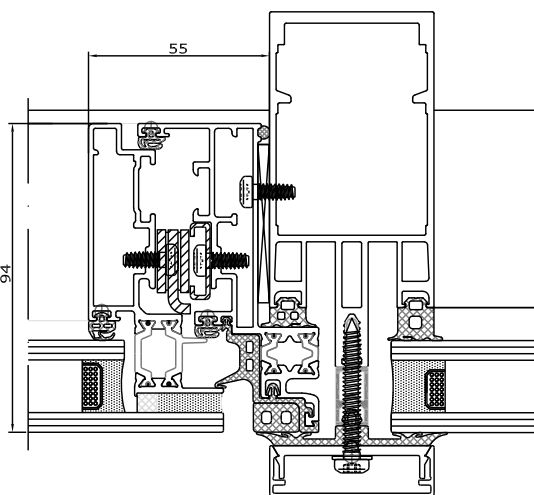
Any instructions regarding the manufacture and installation of the system must be strictly adhered to.

Concealed vent overview

Comar 6EFT



8.00

**Integrates into:**

Fully capped Curtain Walling
2 sided with vertical capping
(2sided SGV)

Integrates into:

2 sided with horizontal capping
(2sided SGH)
4 sided structural glazing
(4sided SG)

Limitations

	Max. width	Max. height	Min. width	Max. weight
Top project	dependant on locking	2500mm	450mm mullion cts	180kg
Side project	838mm	dependant on locking	350mm mullion cts	55kg

Notes:

1. Vents either side of a faceted mullion may be possible depending on the angle, contact Comar's technical department for advice.
2. A minimum of a 60mm transom (Ref:1150) must be used above and below where a concealed vent is to be positioned.
3. For width / height / weight combination options, please contact Comar's technical department.

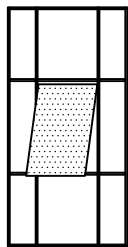
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Date :08-15

Typical details

8

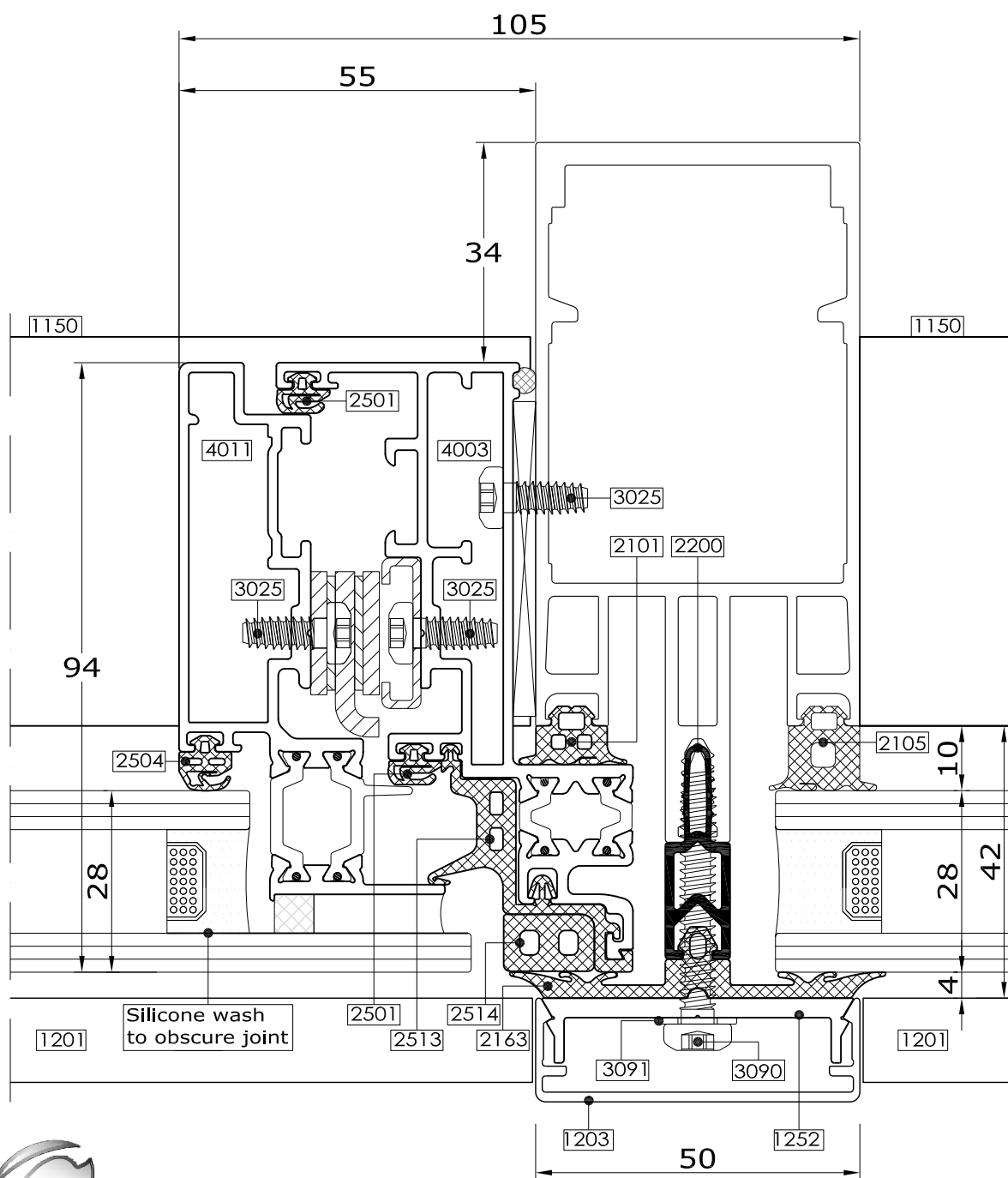
Comar 6EFT



Mullion detail with
Concealed Vent
Fully Capped Curtain Wall

8.01

Fabricators Guide



comar

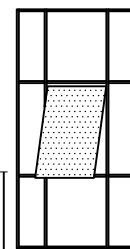
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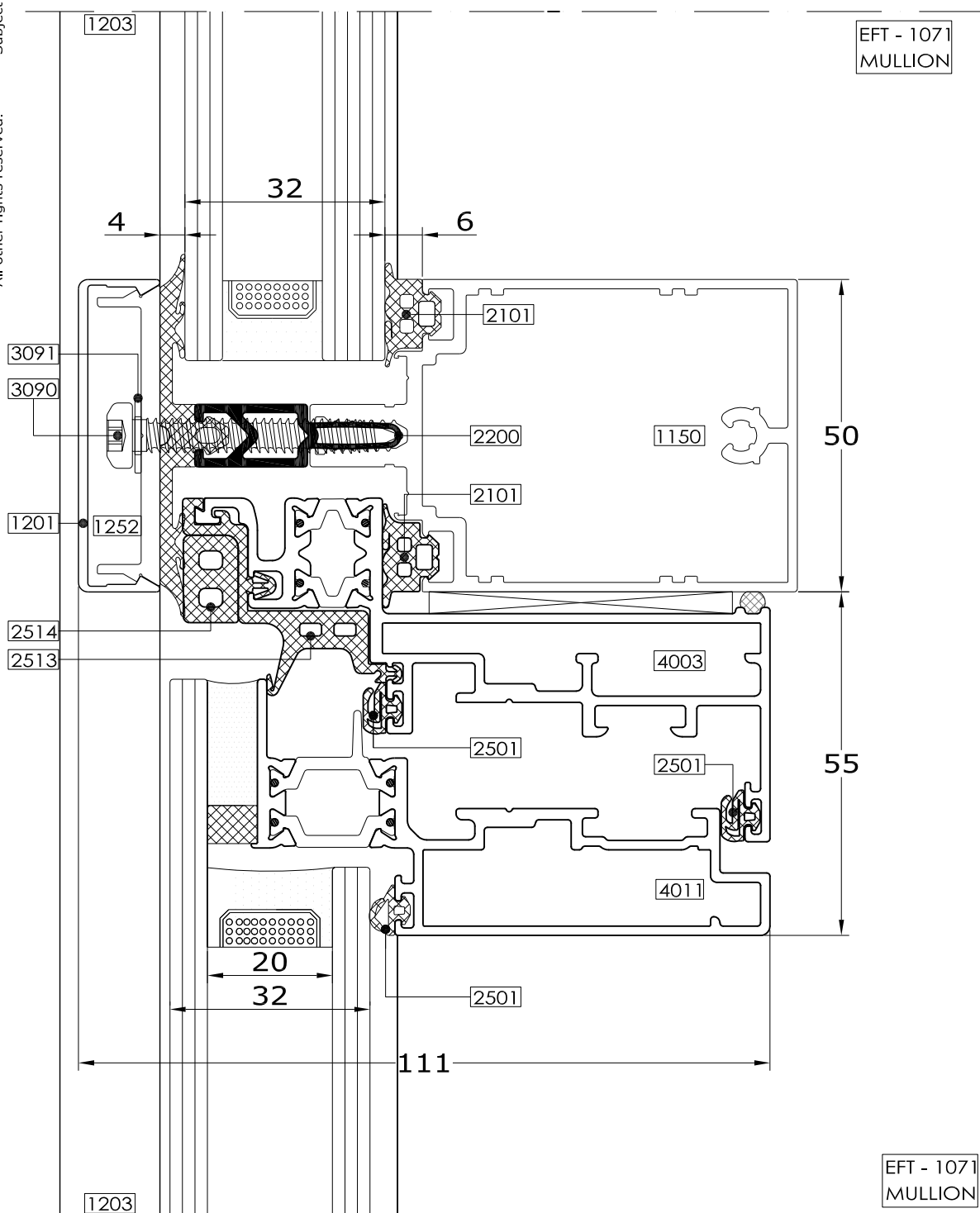
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Transom detail with Concealed Vent Fully Capped Curtain Wall



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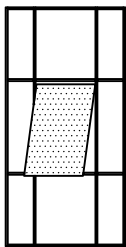
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Typical details

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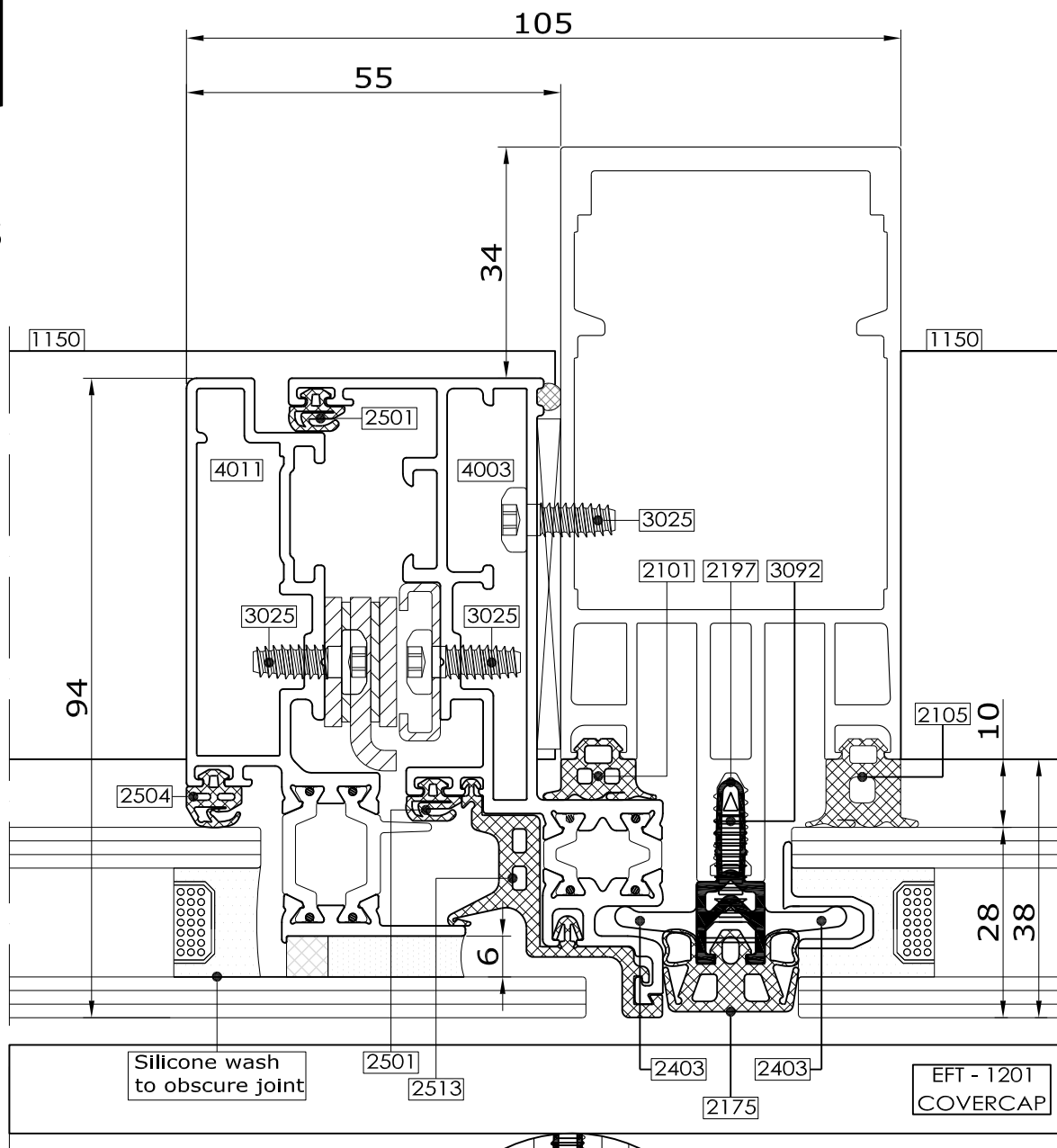
Comar 6EFT

Mullion detail with
Concealed Vent
2sided SGH

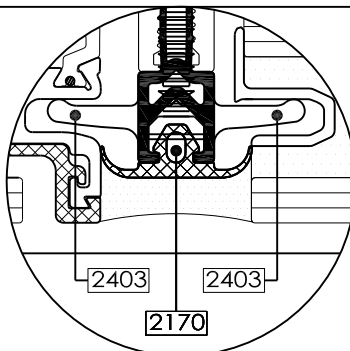


8.03

Fabricators Guide



Silicone seal
also available
using gasket
2170



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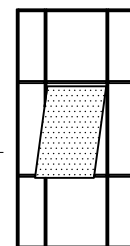
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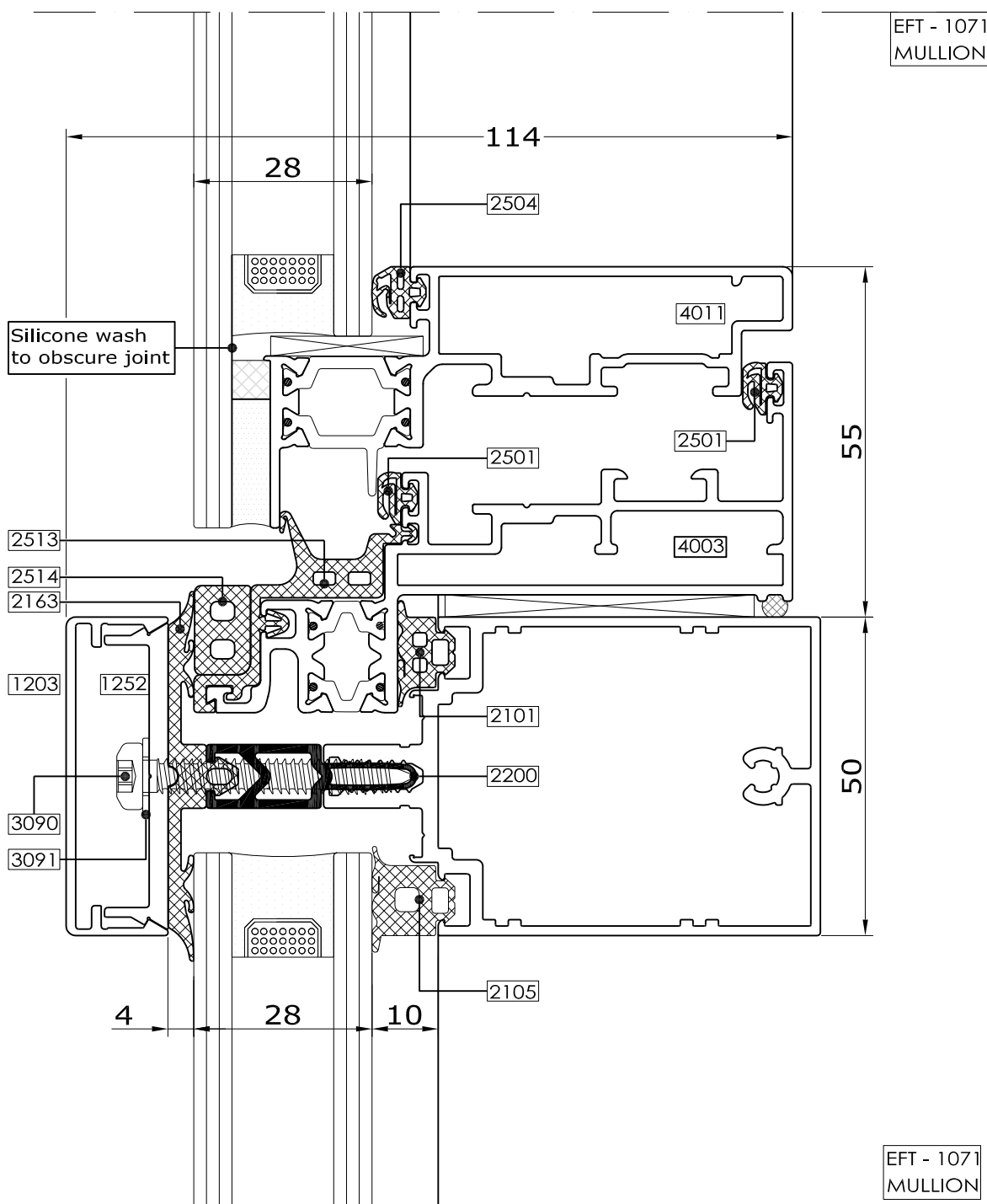
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Transom detail with Concealed Vent 2sided SGH



8.04

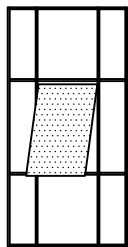


Typical details

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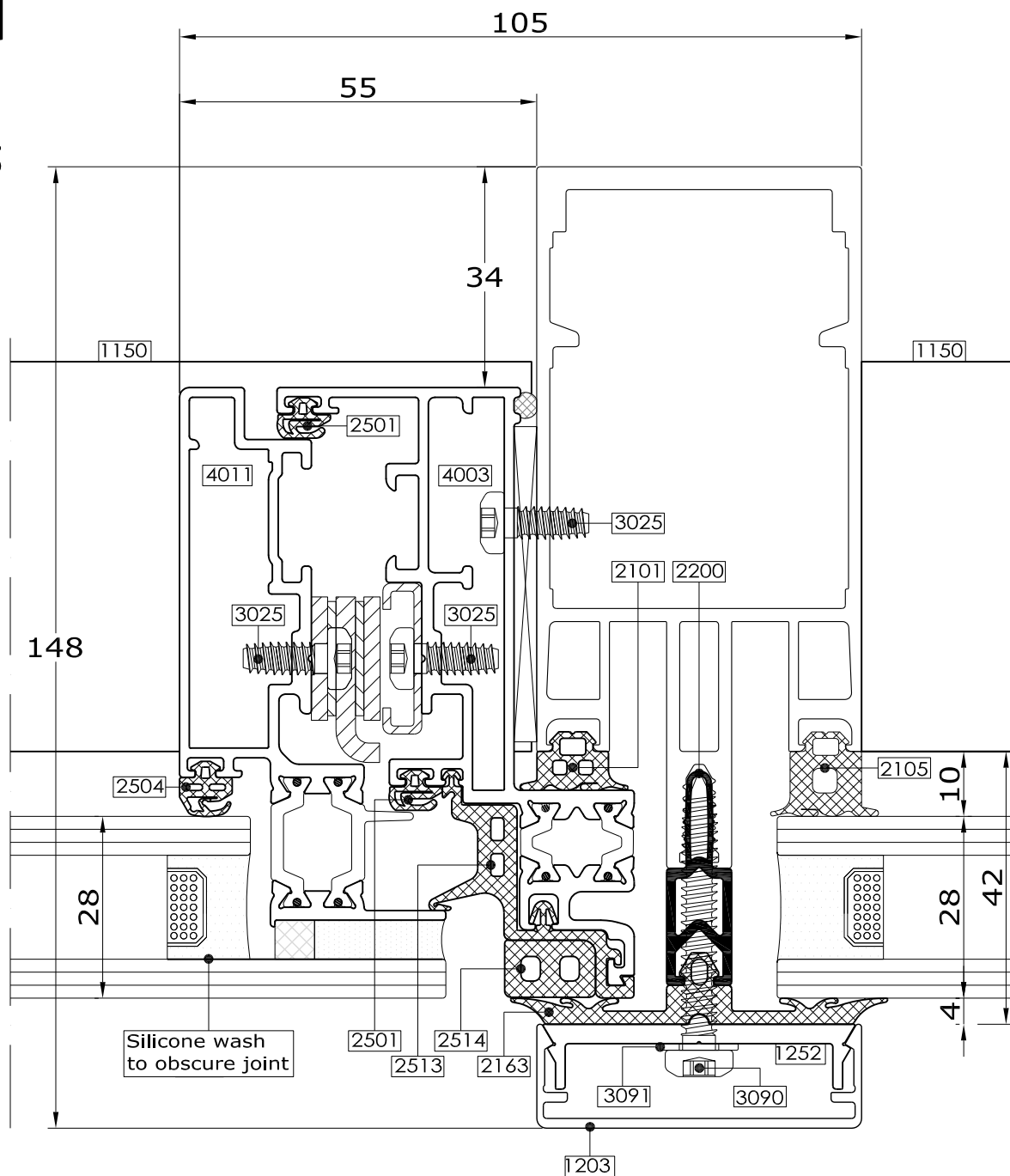
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Mullion detail with Concealed Vent 2sided SGV



8.05

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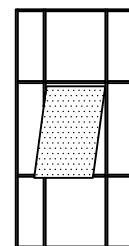
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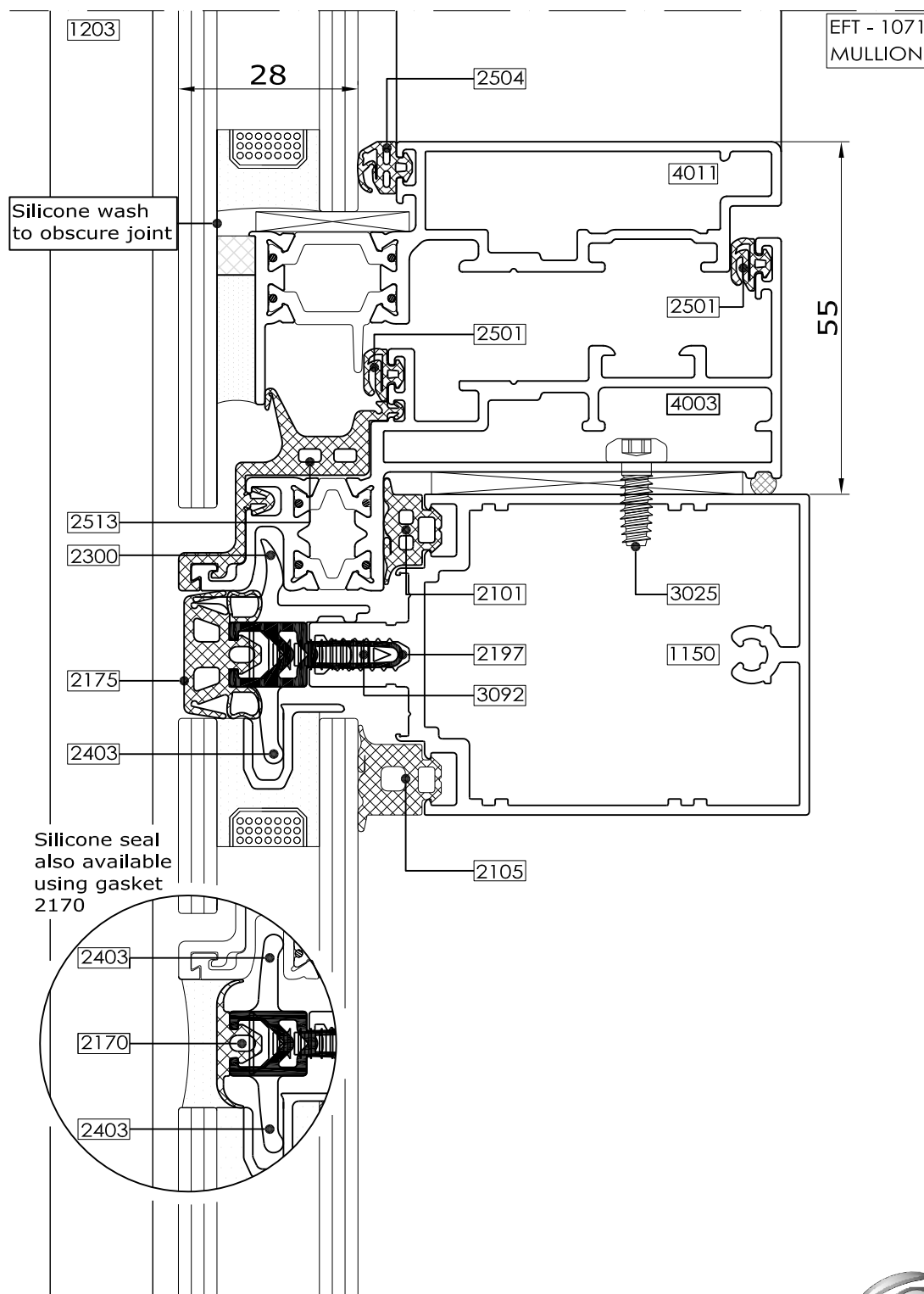
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Transom detail with Concealed Vent 2sided SGV



8.06

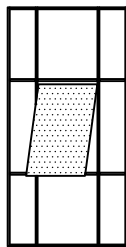


Typical details

8

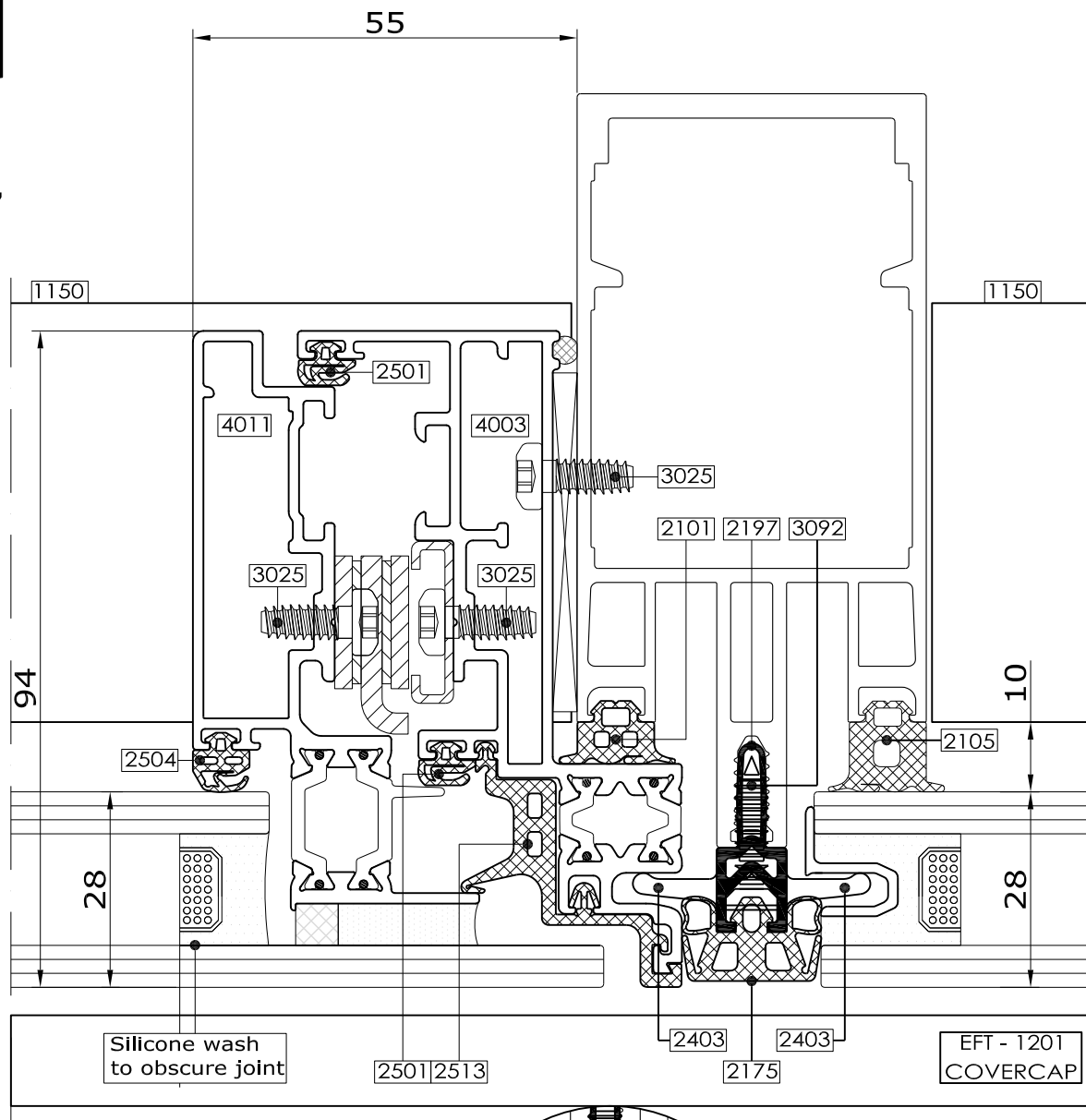
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Mullion detail with Concealed Vent 4sided SG

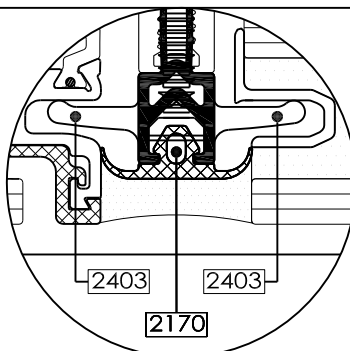


8.07

Fabricators Guide



Silicone seal
also available
using gasket
2170



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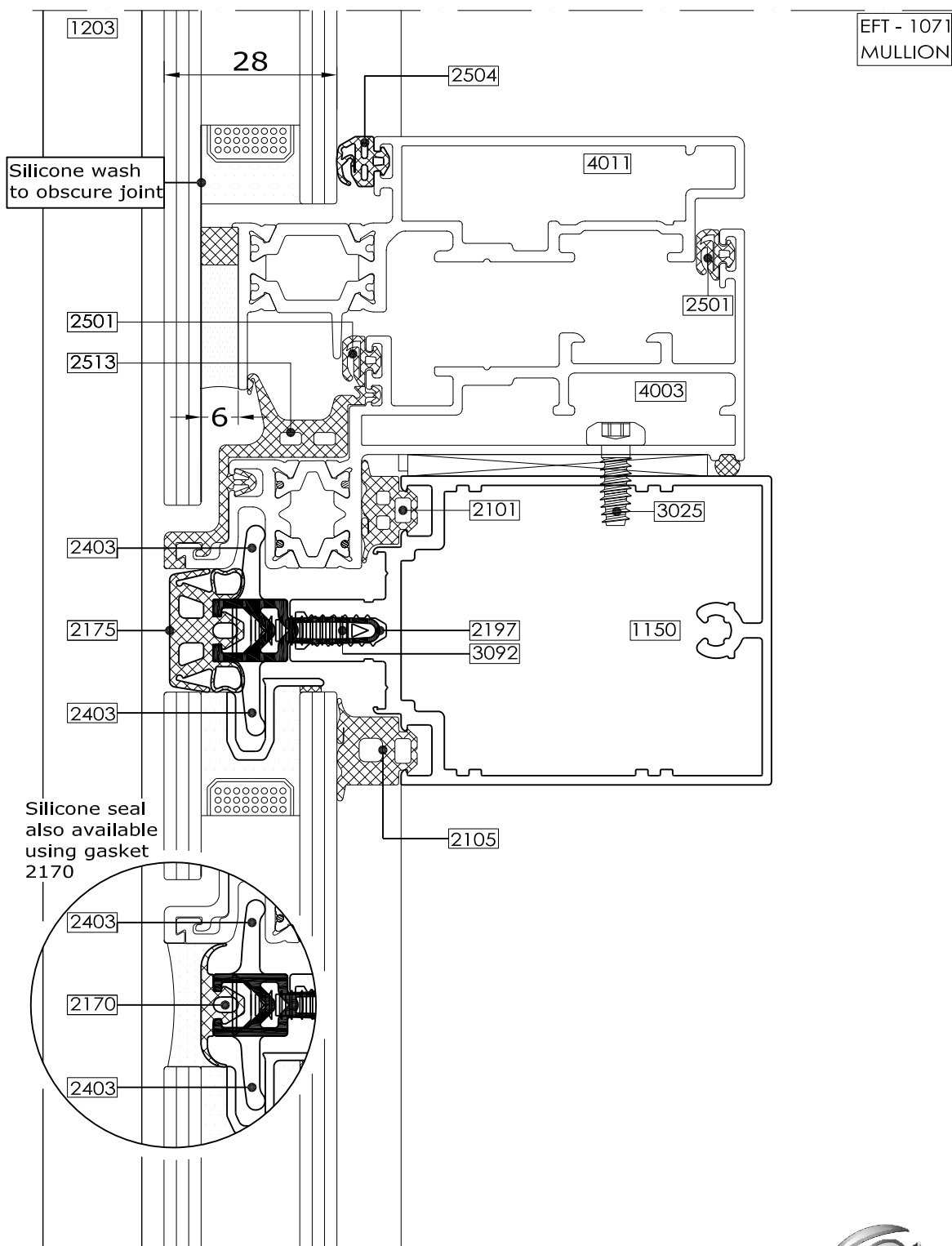
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Transom detail with Concealed Vent 4sided SG

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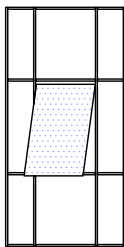
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Future Additions



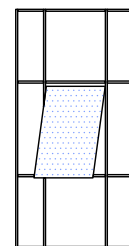
8.09 - 8.29

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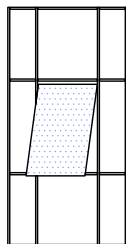
EPDM gaskets



8.30

Fabricators Guide

Illustration	Description	
	2501 Window seal (EFT - 4011) Material: EPDM Colour: Black Packing unit: 300 m Standard depth: 4mm	
	2504 Window seal (EFT - 4011) Material: EPDM Colour: Black Packing unit: 100 m Standard depth: 6mm	
	2508 Window seal (EFT - 4011) Material: EPDM Colour: Black Packing unit: 300 m Standard depth: 8mm	
	2510 Window seal (EFT - 4011) Material: EPDM Colour: Black Packing unit: 100 m Standard depth: 10mm	
	2514 Window fill block (EFT - 4003) Material: EPDM Colour: Black Packing unit: 50 m Standard depth: 9mm	
	2518 Window seal (EFT - 4011) Material: EPDM Colour: Black Packing unit: 300 m Standard depth: 2mm	



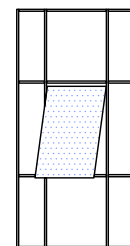
8.31

Fabricators Guide

Illustration	Description	Illustration	Description
	2513 Window air seal (EFT 4003) 30 mm Material: EPDM Colour: Black Packing Quantity: 50 mts		2613 Window air seal moulded corner (EFT 4003) 45 mm x 45mm Material: EPDM Colour: Black Packing Quantity: 50 mts

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Corner crimping cleats



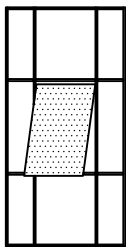
8.32

Fabricators Guide

Illustration	Description	Side View
	2530 R Corner cleat 45.5 mm (EFT 4011) Profile: 1435 Material: Aluminium Finish: Mill Packing Quantity: 10 pcs	
	2535 R Corner cleat 60.0 mm (EFT 4011) Profile: 1431 Material: Aluminium Finish: Mill Packing Quantity: 10 pcs	

Comar 6EFT

Future Additions

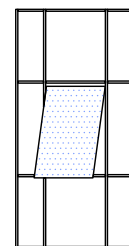


8.33

FUTURE
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Concealed vent hardware

Comar 6EFT



8.34

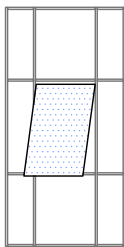
Illustration	Description	Illustration	Description
	1340 Lock rod (EFT 4011) Material: Polyamide Colour: Black Packing unit: 5 pcs. Standard length: 4 m		5007 Handle - Non locking Colours: White, silver, black Materials: • Die-cast aluminium handle • Cremone case, gear • Die cast zamak racks, sliding elements & misalignment block • Hostaform internal protection & terminal board • Steel spring • Stainless steel screw & fixing plate. Packing unit: 1 pcs.
	5001 Curtain wall striker Material: Aluminium Colour: Mill Packing unit: x pcs.		5008 Handle - Locking Colours: White, silver, black Materials: • Die-cast aluminium handle • Cremone case, gear • Die cast zamak racks, sliding elements & misalignment block • Hostaform internal protection & terminal board • Steel spring • Stainless steel screw & fixing plate. Packing unit: 1 pcs.
	5002 Adjustable pawl Material: Zamak base & pawl. Stainless steel screws Packing unit: x pcs.		5008 Handle - Locking Colours: White, silver, black Materials: • Die-cast aluminium handle • Cremone case, gear • Die cast zamak racks, sliding elements & misalignment block • Hostaform internal protection & terminal board • Steel spring • Stainless steel screw & fixing plate. Packing unit: 1 pcs.
	5003 Corner cleat Material: Zamak body & hand. Stainless steel grub screws and plates Packing unit: x pcs.		5008 Handle - Locking Colours: White, silver, black Materials: • Die-cast aluminium handle • Cremone case, gear • Die cast zamak racks, sliding elements & misalignment block • Hostaform internal protection & terminal board • Steel spring • Stainless steel screw & fixing plate. Packing unit: 1 pcs.
	5004 Connection block Material: White galvanised zamak. White galvanised steel fixing screw Packing unit: x pcs.		

Accessories

8

Comar 6EFT

Friction hinges details



8.35

TOP PROJECTED

Part no.	Hinge size	Max. sash weight	Min. sash height	Max. sash height	Max. opening angle $\pm 2.5^\circ$
HN506XSLF	26"/660mm	180kg	2000mm	2500mm	20°
HN515XSLF	22"/558mm	100kg	1500mm	2000mm	45°

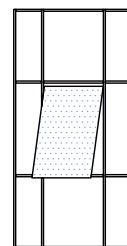
SIDE PROJECTED

Part no.	Hinge size	Max. sash weight	Max. sash width	Min. sash width	Max. opening angle $\pm 2.5^\circ$
HN507XSLF	10"/254mm	38kg	660mm	300mm	85°
HN508XSLF	16"/406mm	55kg	838mm	450mm	60°

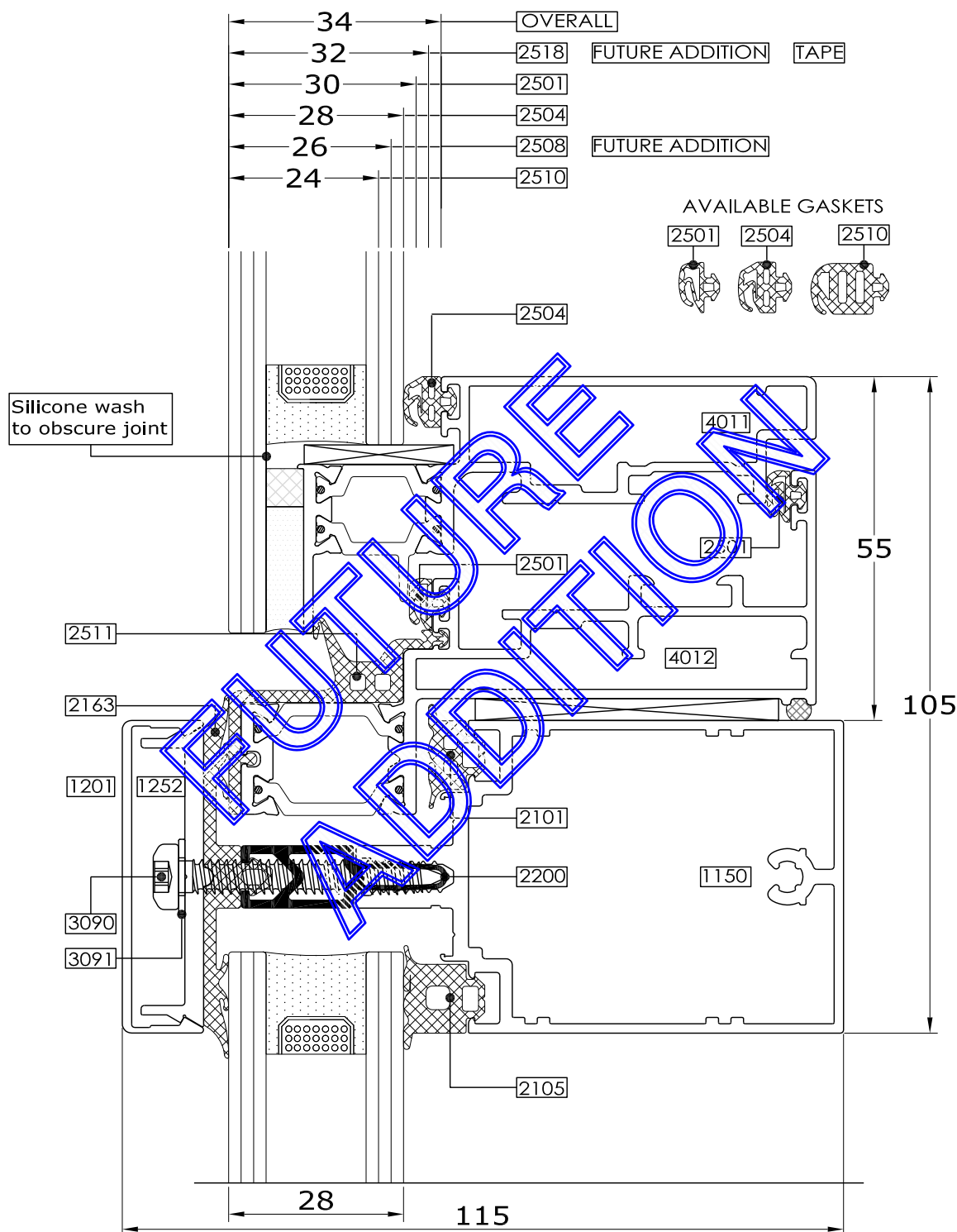
Note: For Max. Sash Width please contact the Comar Technical Dept.

Illustration	Description	Illustration	Description	Illustration	Description
	HN506 Friction hinge SPT 26 Nominal size: 660mm Material: Stainless steel Packing unit: Pair Max. weight top hung vent: 180kg Max. height: 2500mm Min. height: 2000mm Max. width: to be advised Opening angle: 20°		HN515 Friction hinge SPT 22W Nominal size: 558mm Material: Stainless steel Packing unit: Pair Max. weight top hung vent: 100kg Max. height: 2000mm Min. height: 1500mm Max. width: to be advised Opening angle: 45°		HN004 Restrictor 7" Nominal size: 178 mm Material: Stainless steel Packing unit: Pair

Glazing chart 4011 / 4012



8.40



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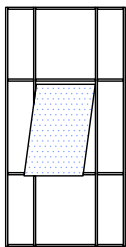
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Date : 01-14

Glazing charts

8

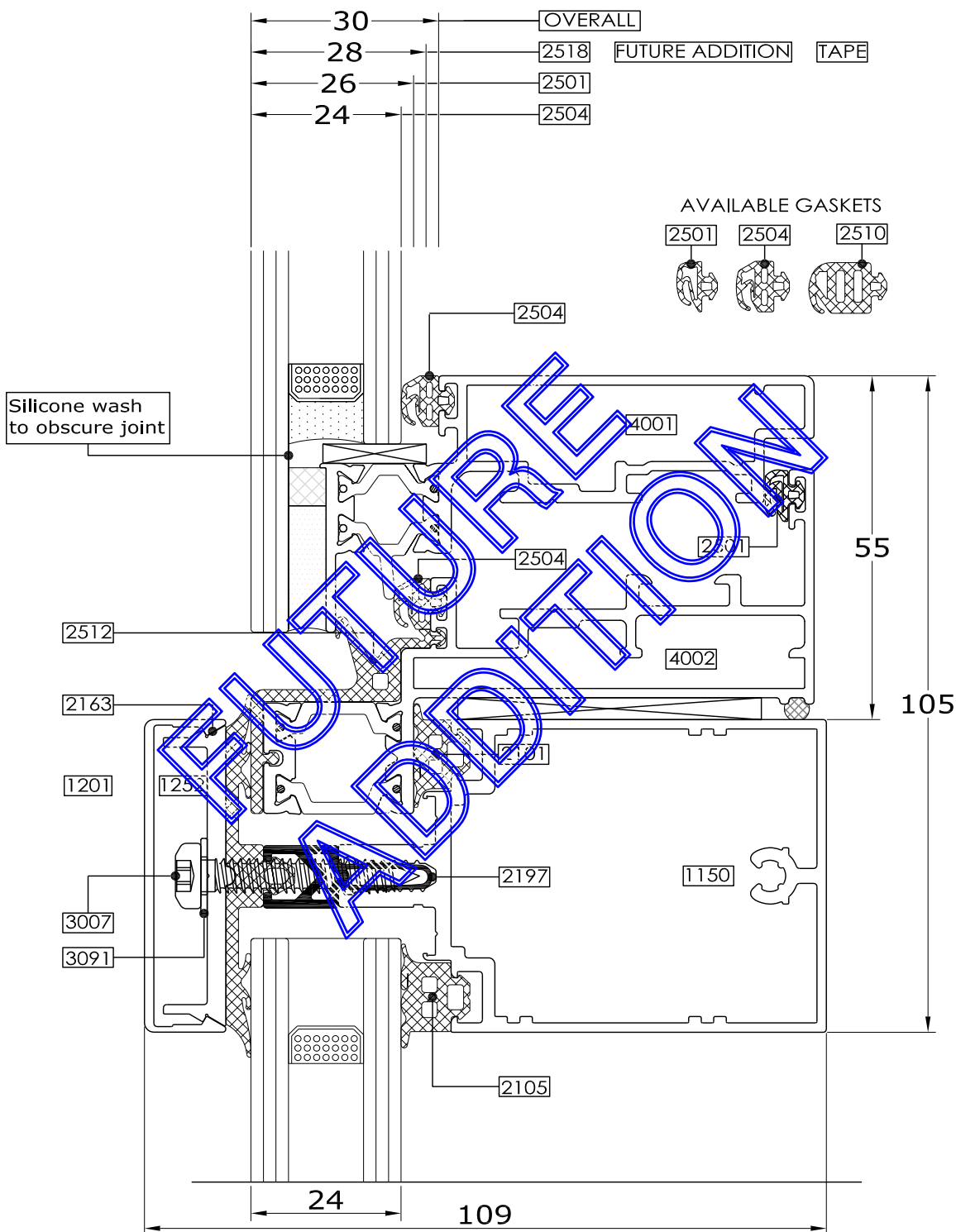
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Glazing chart 4001 / 4002



8.41

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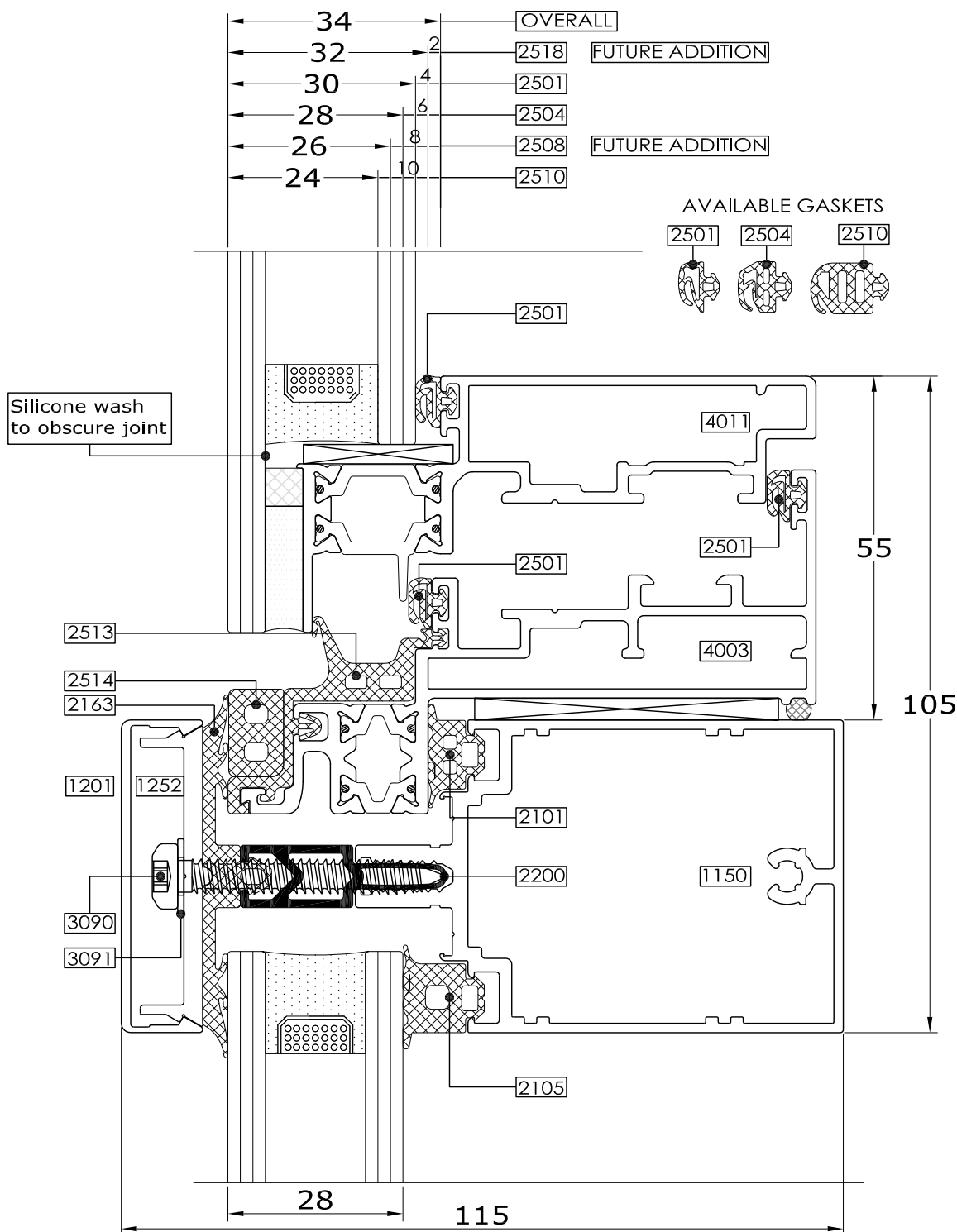
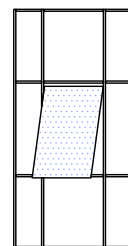
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Glazing chart - Capped 4003 / 4011



8.42

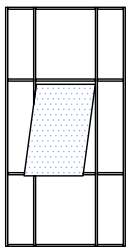
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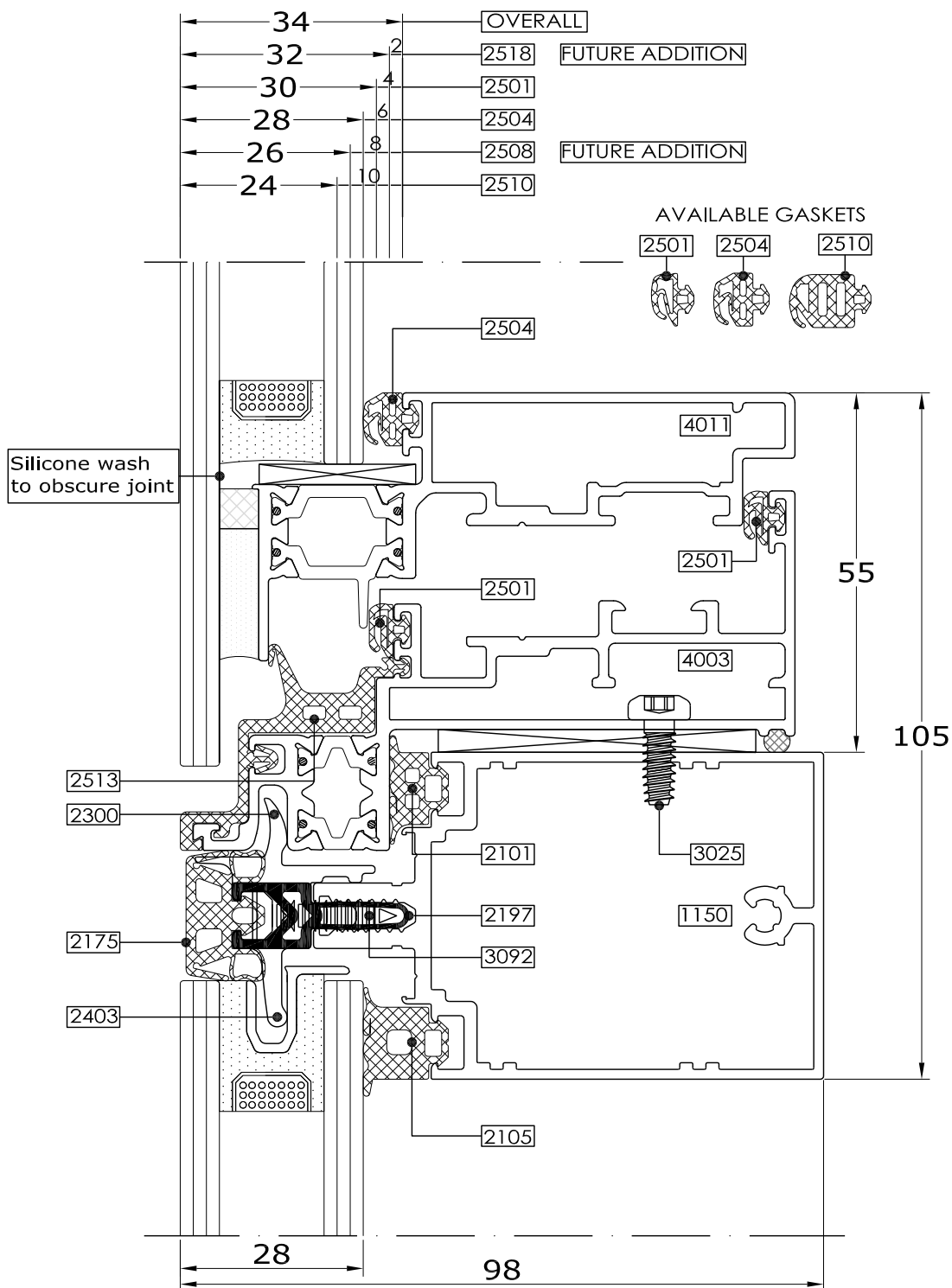
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Glazing chart - SG 4003 / 4011



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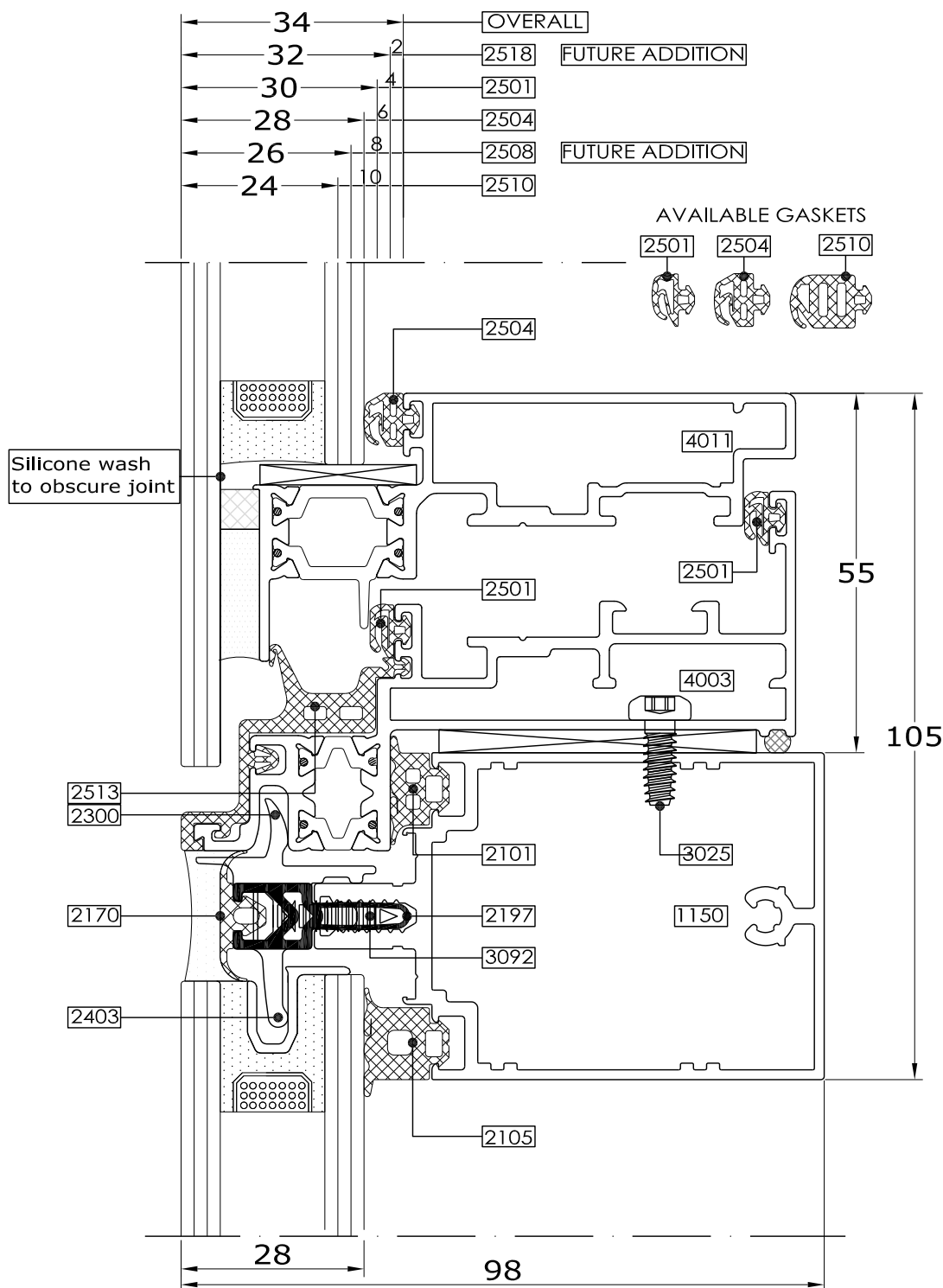
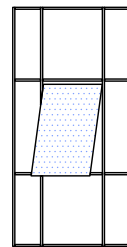
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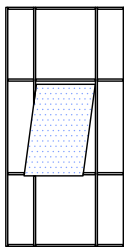
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Glazing chart - SG 4003 / 4011



Comar 6EFT

Future Additions



8.45 - 8.49

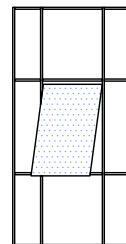
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Future Additions

Comar 6EFT



8.50

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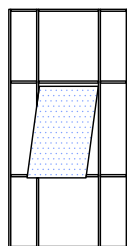
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Fabrication

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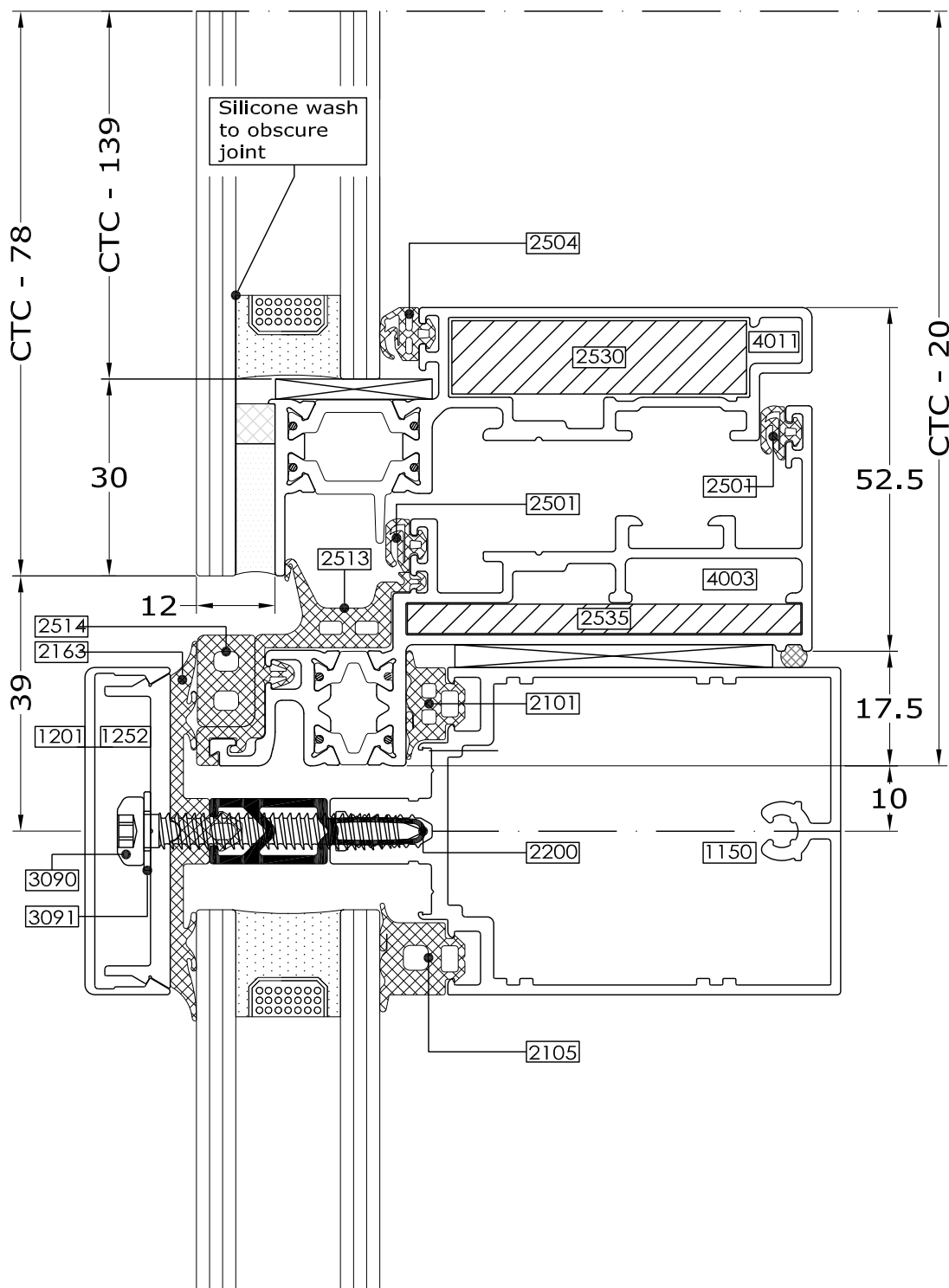
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Cutting sizes - 4003/4011



8.51

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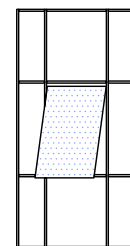
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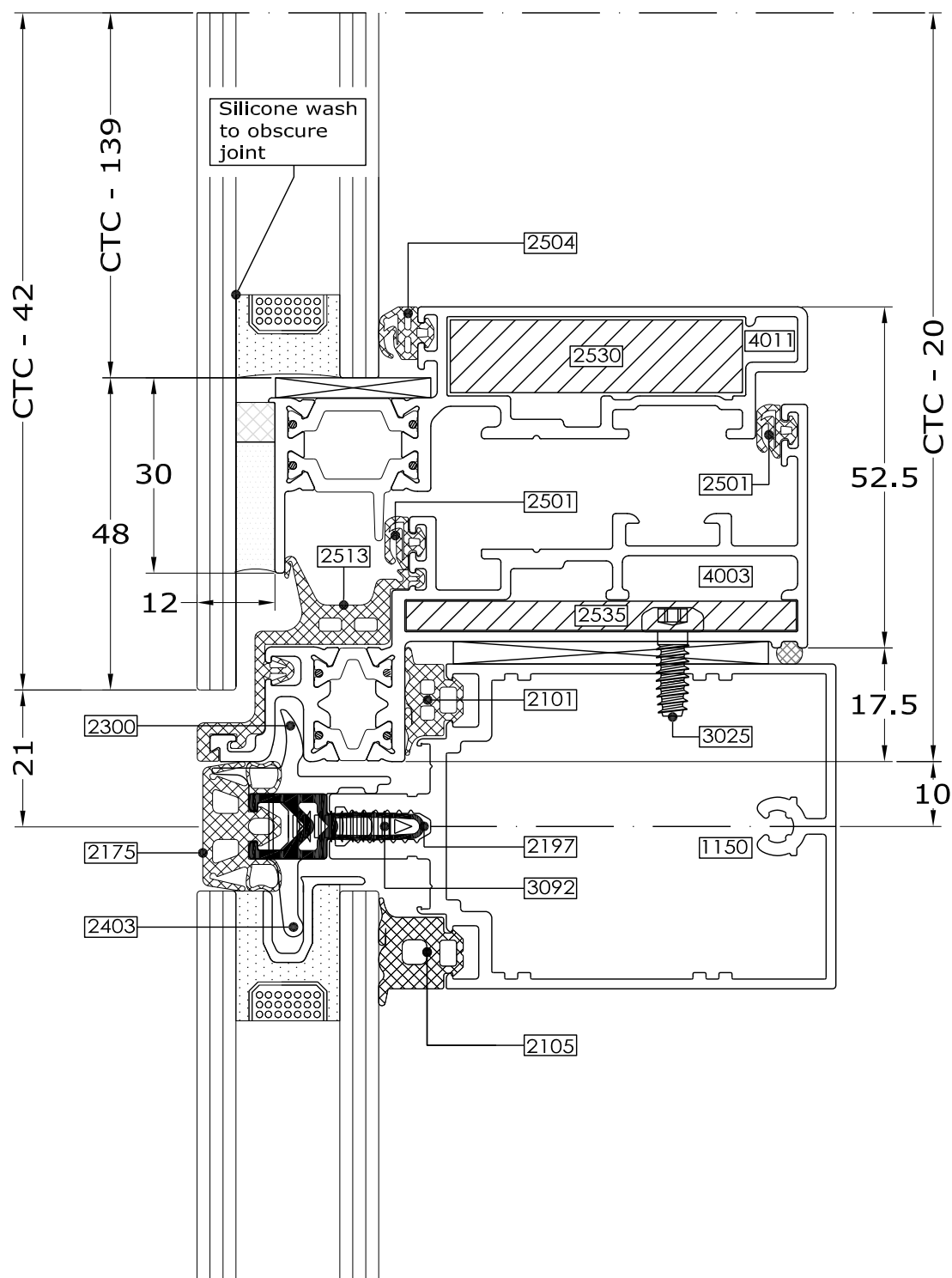
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Cutting sizes - 4003 / 4011 SG



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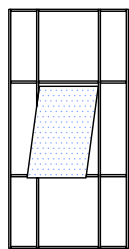
Issue: 04
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Fabrication

8

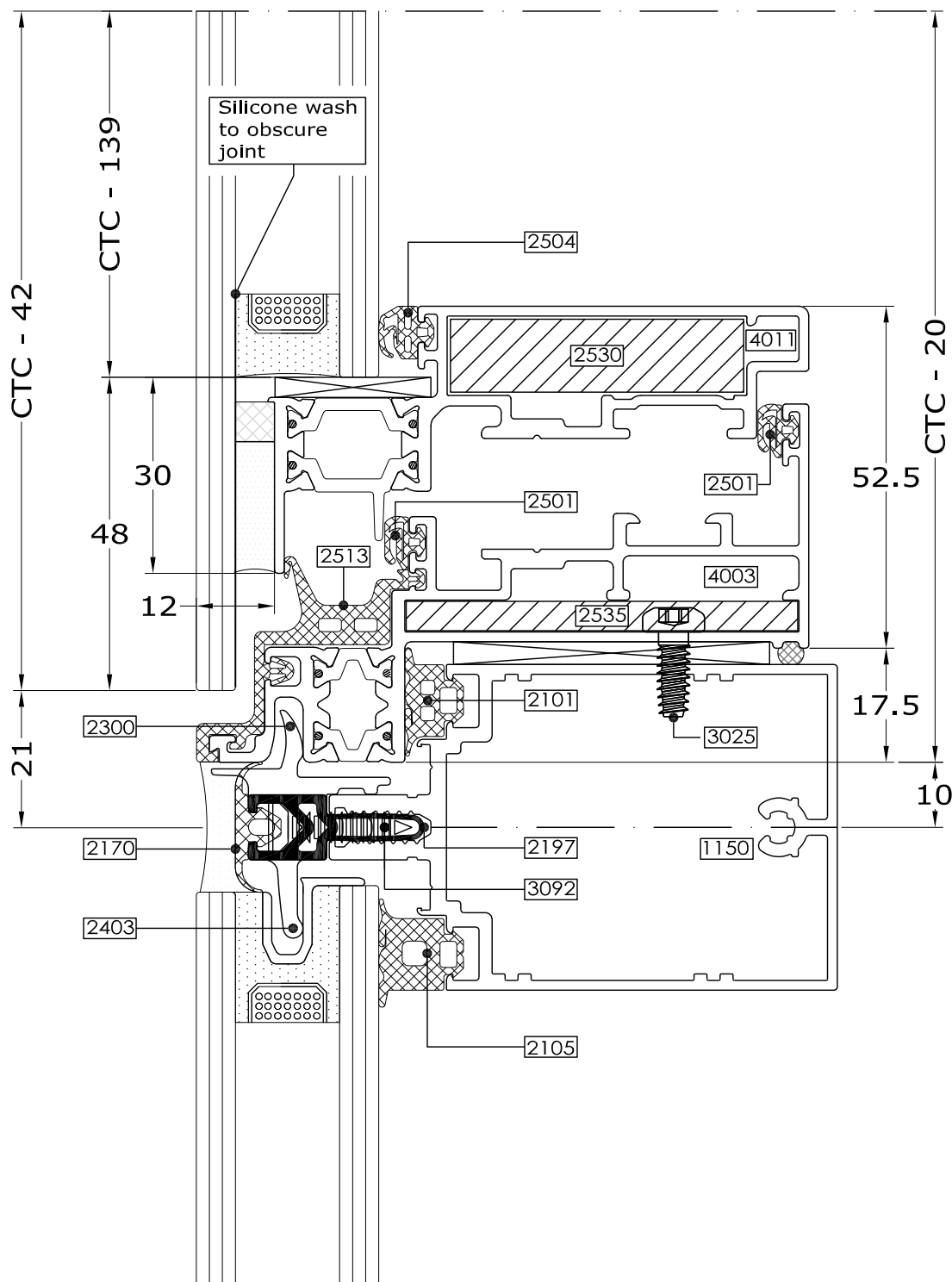
Comar 6EFT

Cutting sizes - 4003/4011



8.53

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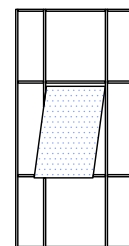
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Crimping options Profile 1431

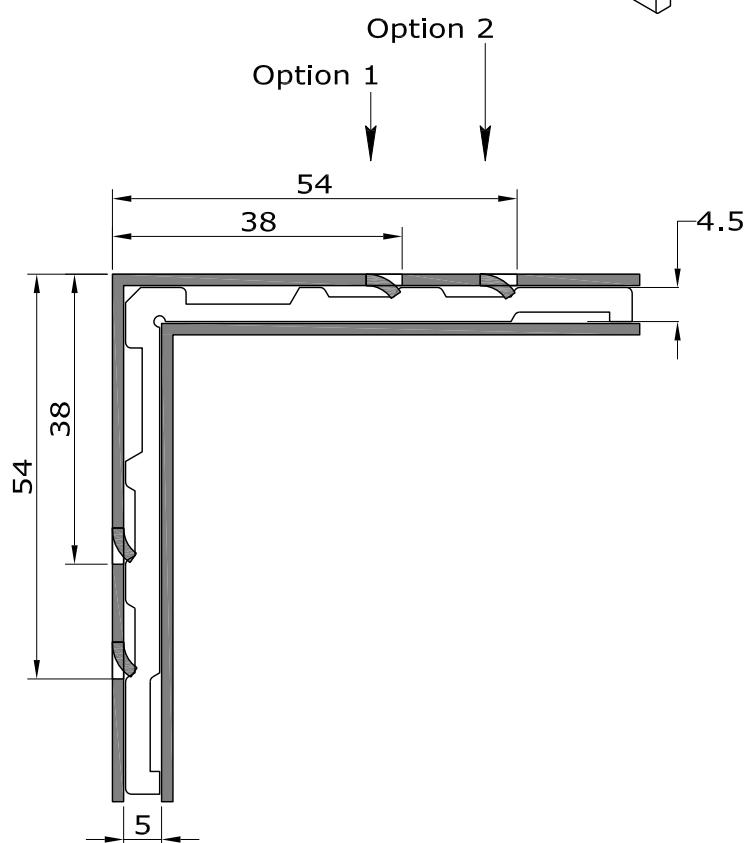
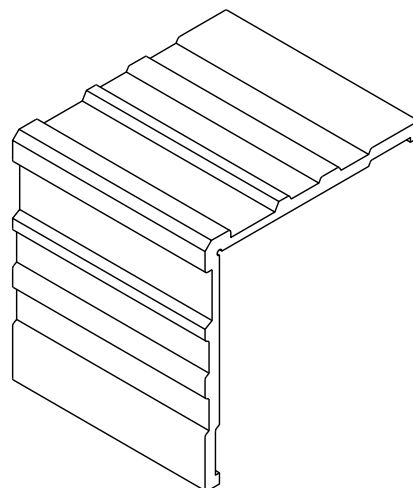
8

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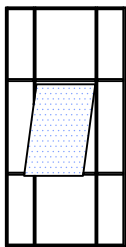
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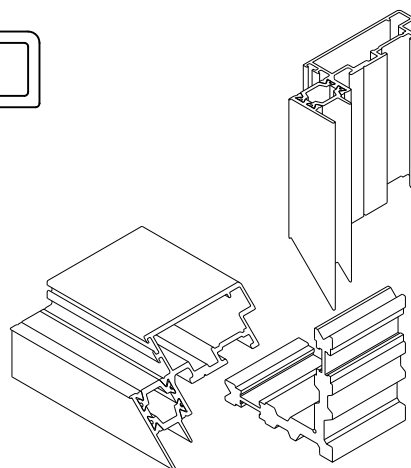
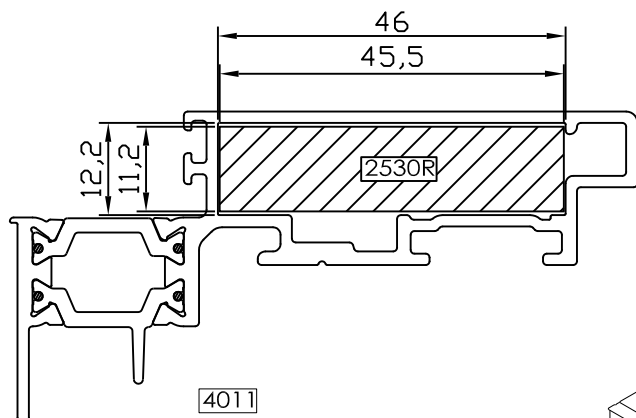
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Concealed vent sash crimping cleats

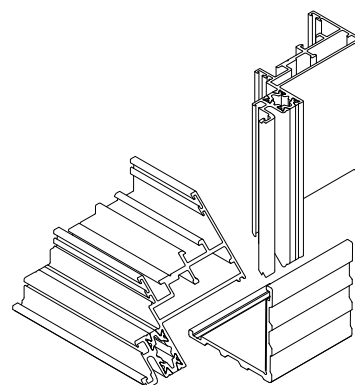
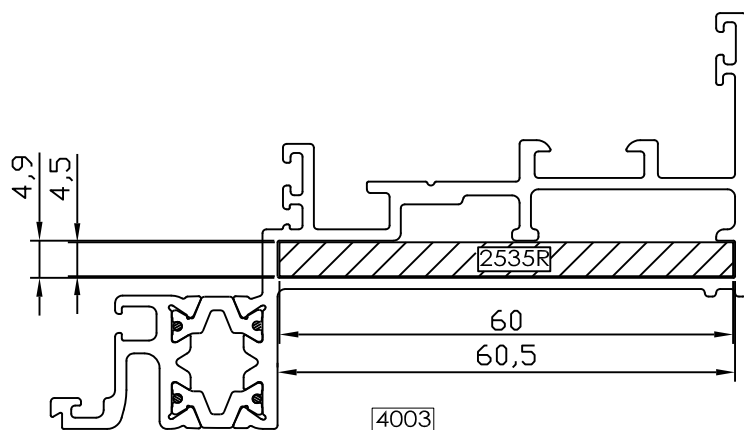


8.55



Use cleat 2530R
(cut from profile 1435)

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Use cleat 2535R
(cut from profile 1431)



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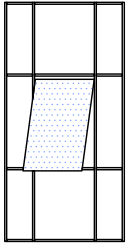
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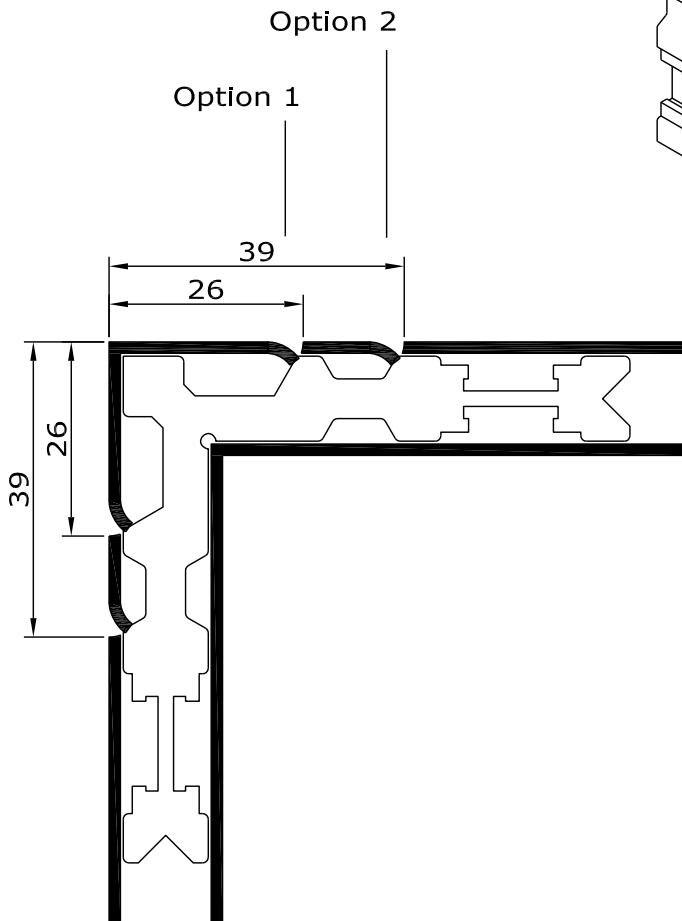
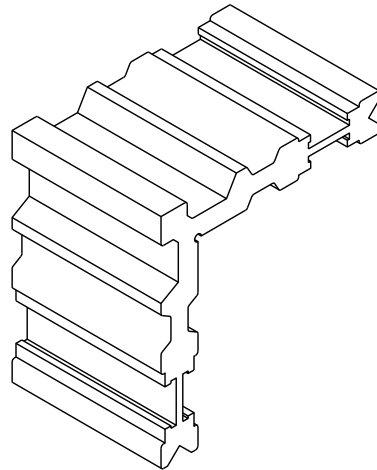
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Crimping options for EFT - 2530 cut from profile 1435



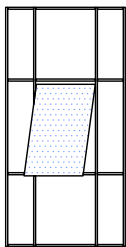
8.56



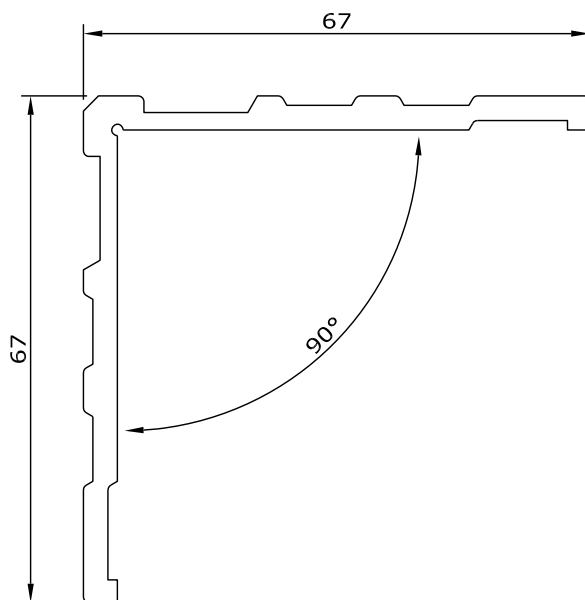
Typical details

8

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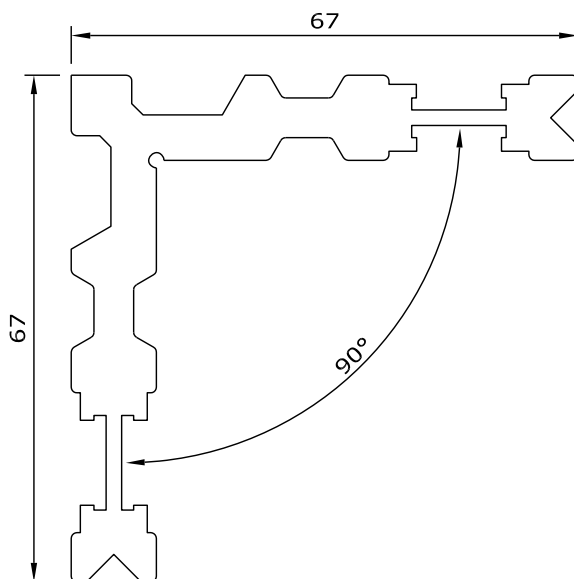
Concealed vent sash
crimping cleats

1431 - Corner cleat - 4.5 mm



8.57

1435 - Corner cleat - 11.8 mm



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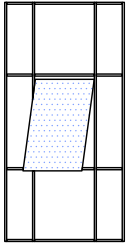
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8.58

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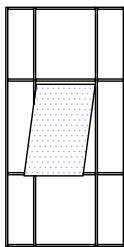
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Future Additions



8.59

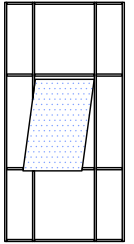
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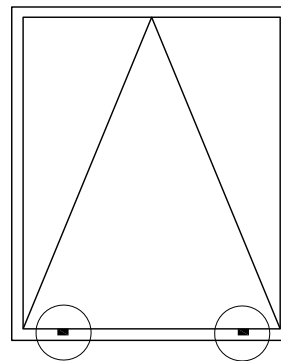
Drainage & ventilation overview

Comar 6EFT



Drainage

TOP HUNG VENT



8.60

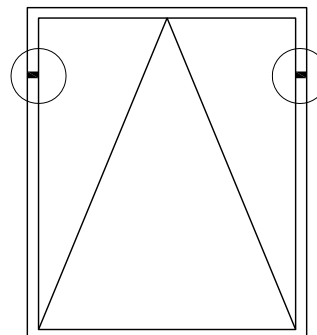
2 options for drainage:

Option 1: Drainage through frame chamber.

Option 2: Flush at window sill.

Ventilation

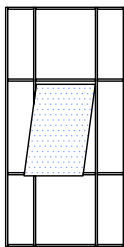
(pressure equalisation)



Fabrication

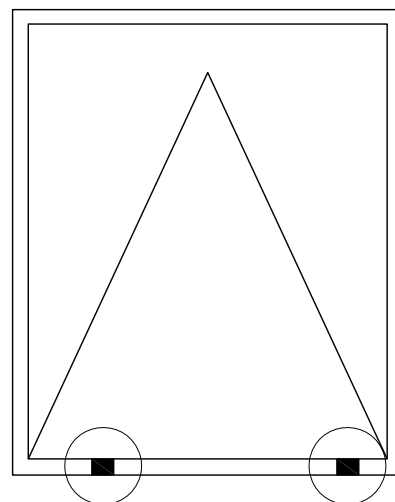
8

Comar 6EFT

Drainage & ventilation
Option 1**Drainage: Option 1****Drainage through frame chamber**

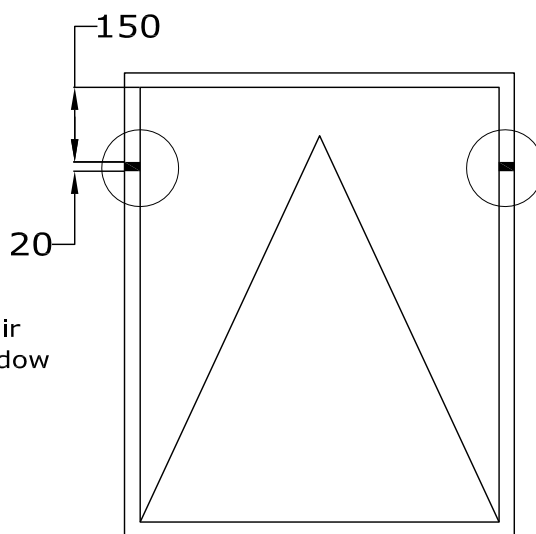
8.61

1. Drill minimum 8mm CWCT diameter hole into frame.
2. Mill slot of 5mm x 25mm CWCT minimum.
3. Mill upstands away, 2 x approx. 10mm.
4. Remove/cut EPDM air seal profile.
5. Drill 8mm CWCT diameter hole for drainage & ventilation.

**Ventilation**

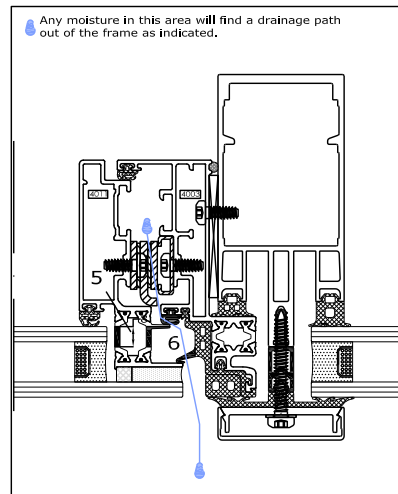
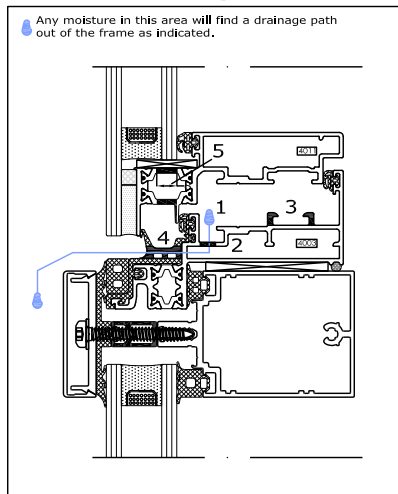
(pressure equalisation)

6. Remove / cut out EPDM seal & EPDM air seal (if applicable) at both sides of window at approx. 150 mm from top.
Length: approx. 20 mm

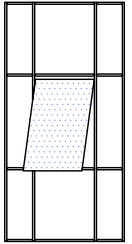


Note: Drainage and ventilation prep. is the same for capped /non capped, top project/side project concealed vents.

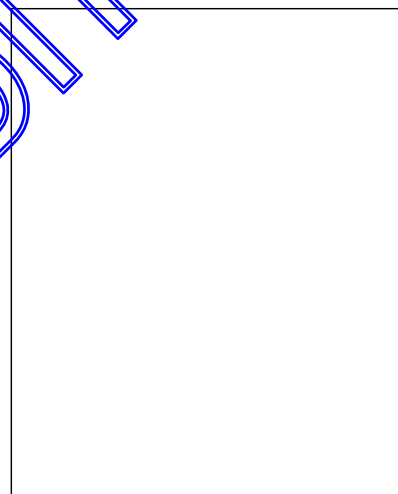
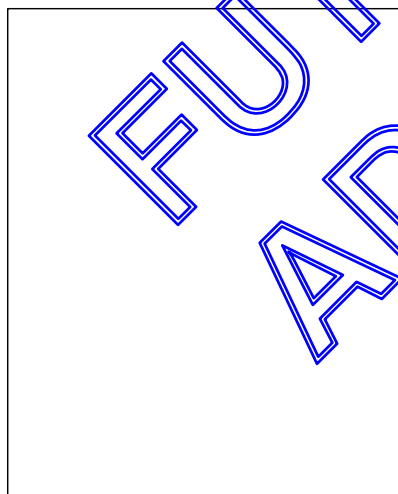
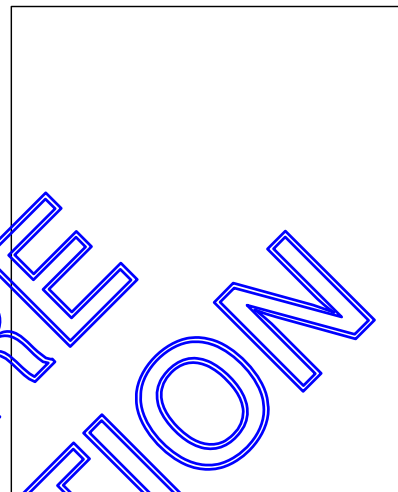
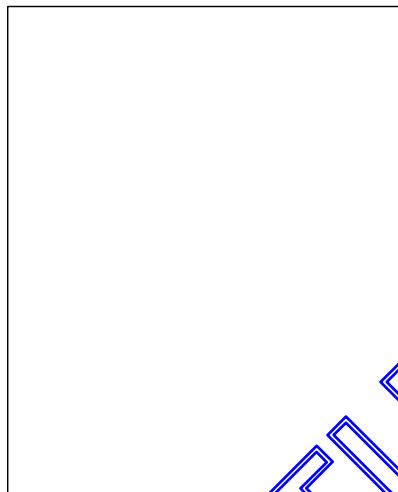
Drainage & ventilation overview - Option 1



Refer to page 8.63 for details



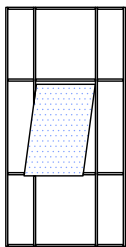
8.62



FUTURE ADDITION

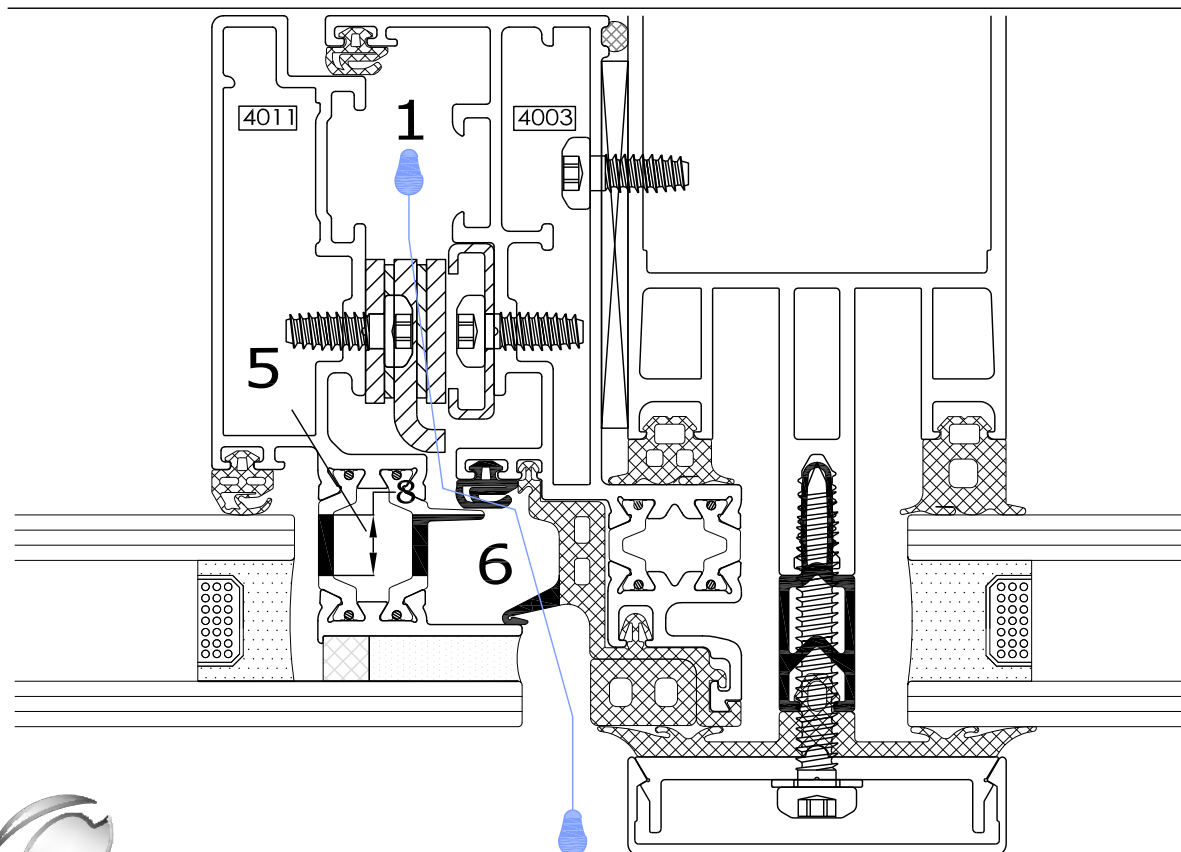
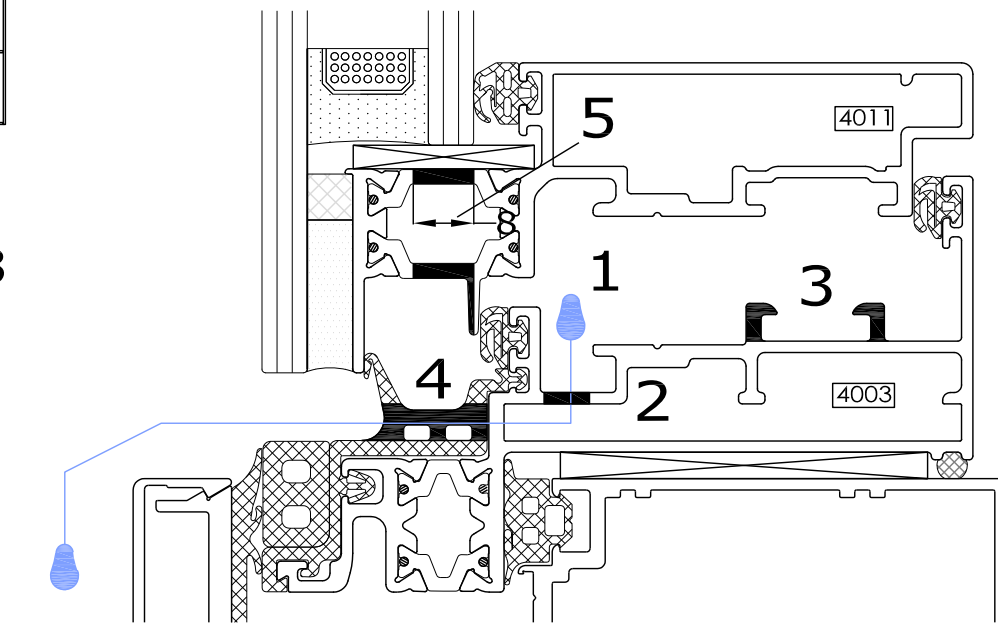
Comar 6EFT

Drainage & ventilation Option 1



1 Any moisture in this area will find a drainage path out of the frame as indicated.

8.63

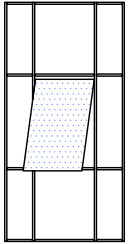


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Future Additions

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8.64 - 8.66

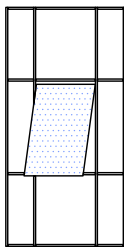
FUTURE
ADDITION

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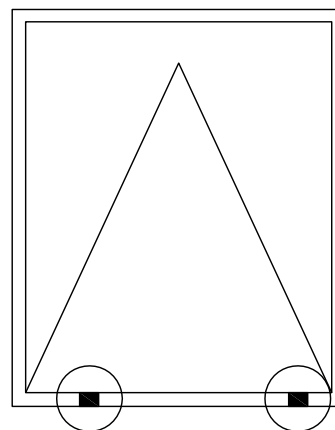
8

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Drainage & ventilation
Option 2**Drainage: Option 2****Flush at window sill**

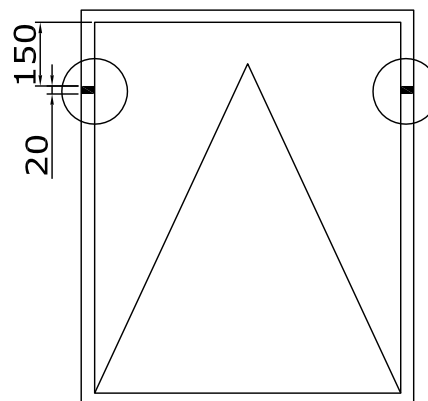
8.67

1. Mill slot of 5mm x 25mm CWCT.
2. Mill upstands away, 2 x approx. 10mm.
3. Drill 8mm CWCT hole for ventilation / drainage.
4. Remove/cut EPDM air seal profile.

**Ventilation**

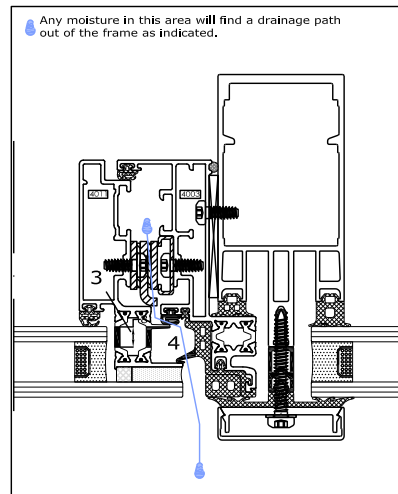
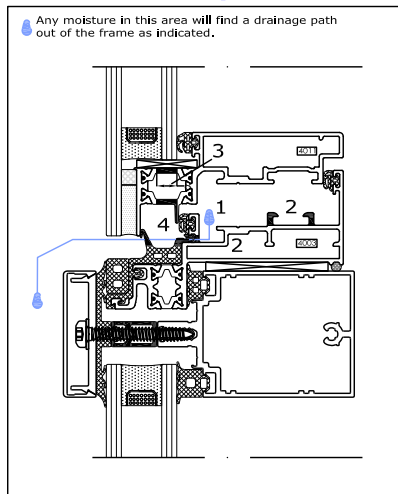
(pressure equalisation)

5. Remove / cut out EPDM seal & EPDM air seal (if applicable) at both sides of window at approx. 150 mm from top. Length: approx. 20 mm

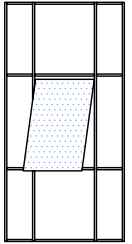


Note: Drainage and ventilation prep. is the same for capped / non capped, top project/side project concealed vents.

Drainage & ventilation overview - Option 2



Refer to page 8.69 for details

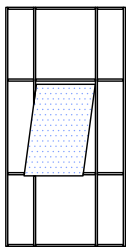


8.68

FUTURE
ADDITION

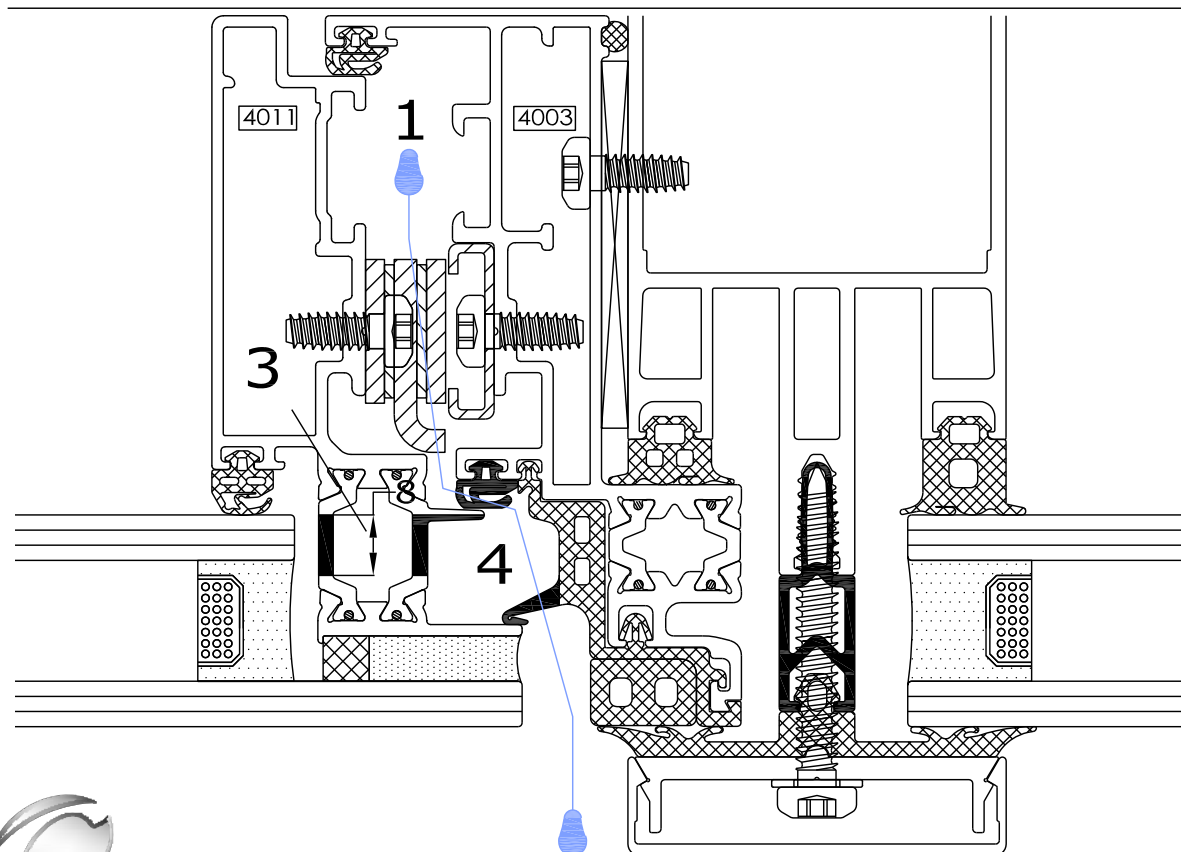
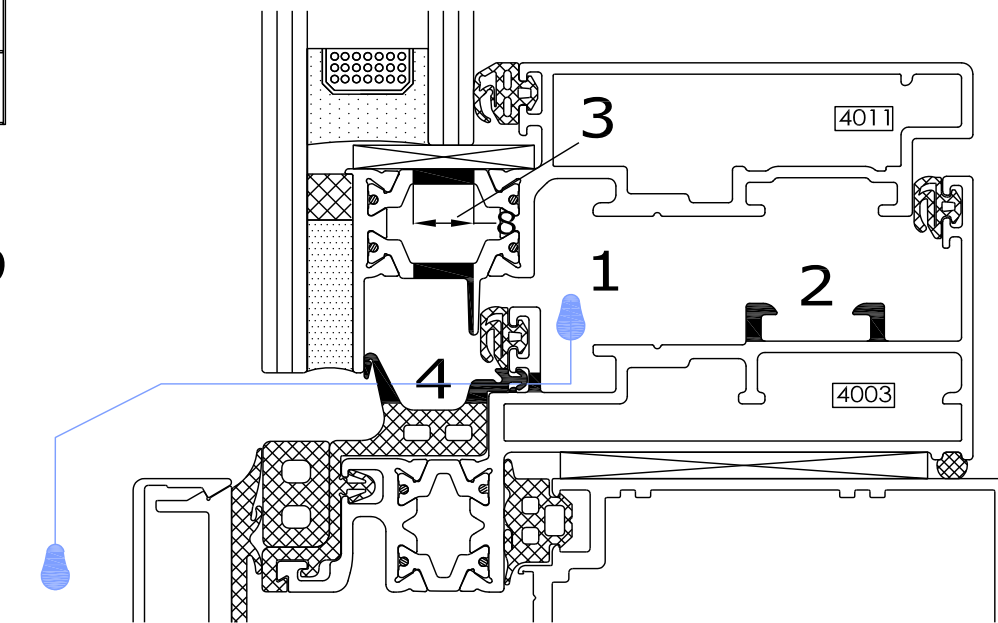
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Drainage & ventilation Option 2



1 Any moisture in this area will find a drainage path out of the frame as indicated.

8.69



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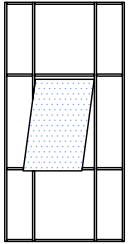
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Fabrication

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8.70

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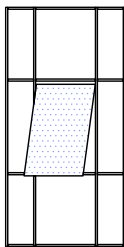
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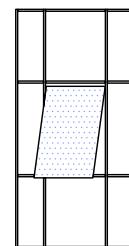


8.71 - 8.79

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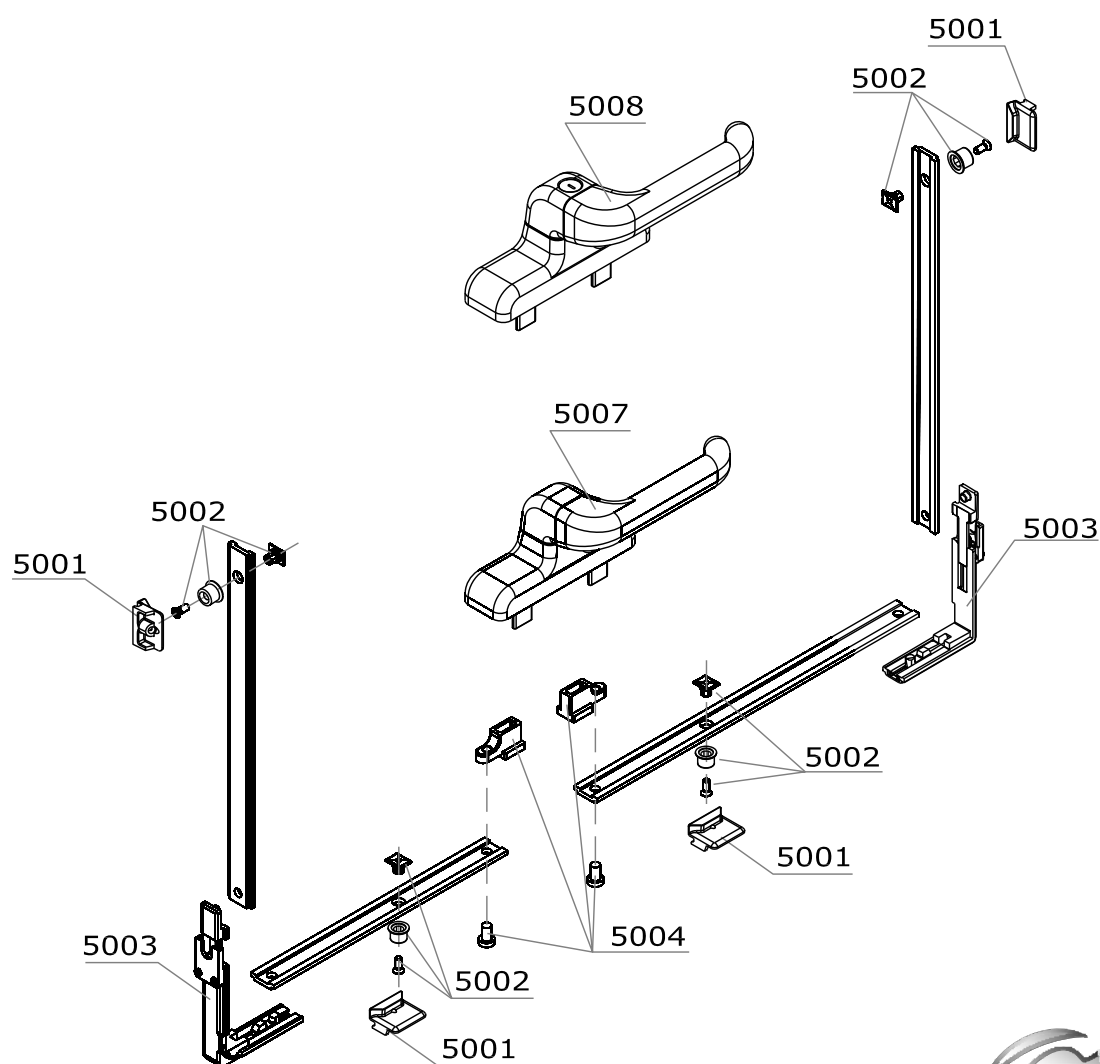
FUTURE
ADDITION

Hardware overview



8.80

Part no.	Description	Locking	
		2 points	4 points
1340	Drive rods	see 8.81	see 8.81
5001	Curtain wall striker	2 of	4 of
5002	Adjustable pawl	2 of	4 of
5003	Corner cleat	0 of	2 of
5004	Connection block	1 of	1 of
5007	Handle - non locking	1 of	1 of
5008	Handle - locking	1 of	1 of



comar

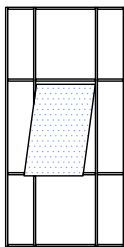
ARCHITECTURAL ALUMINIUM SYSTEMS

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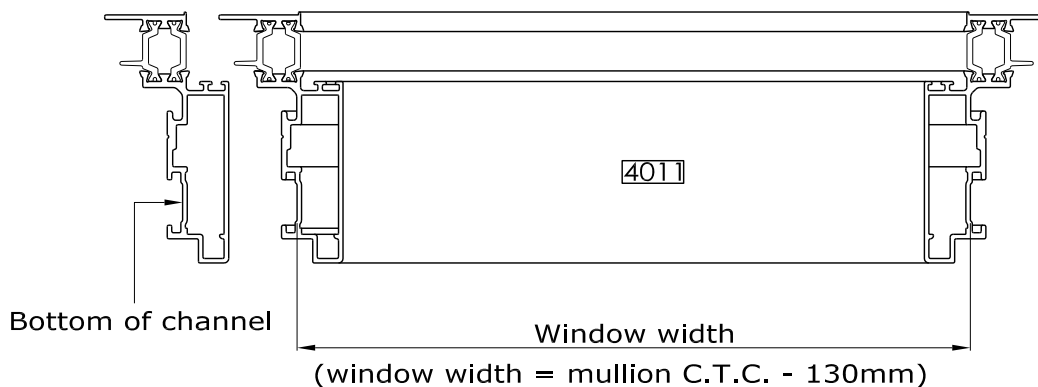
Bottom drive rods 1340 preparation



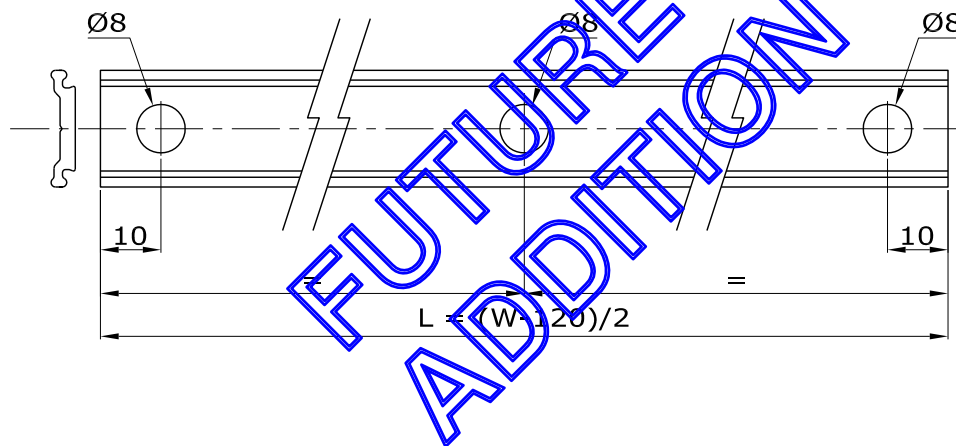
4 POINTS LOCKING: Rod lengths = window width - 124mm/2
2 POINTS LOCKING: Rod lengths = window width - 79mm/2

Window width measured along bottom of channel

8.81

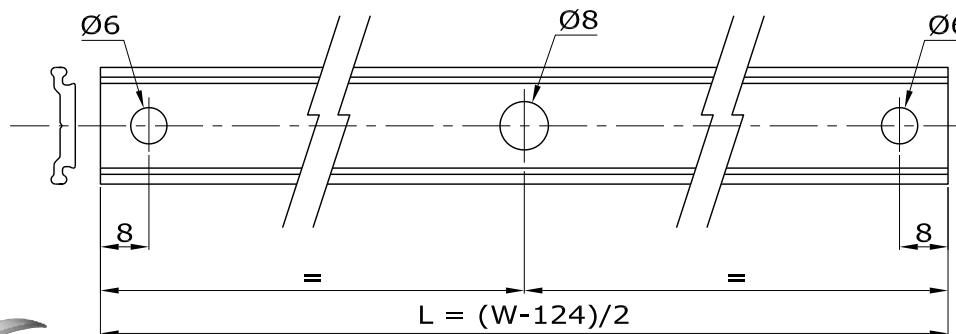


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x2

"OR"



x2



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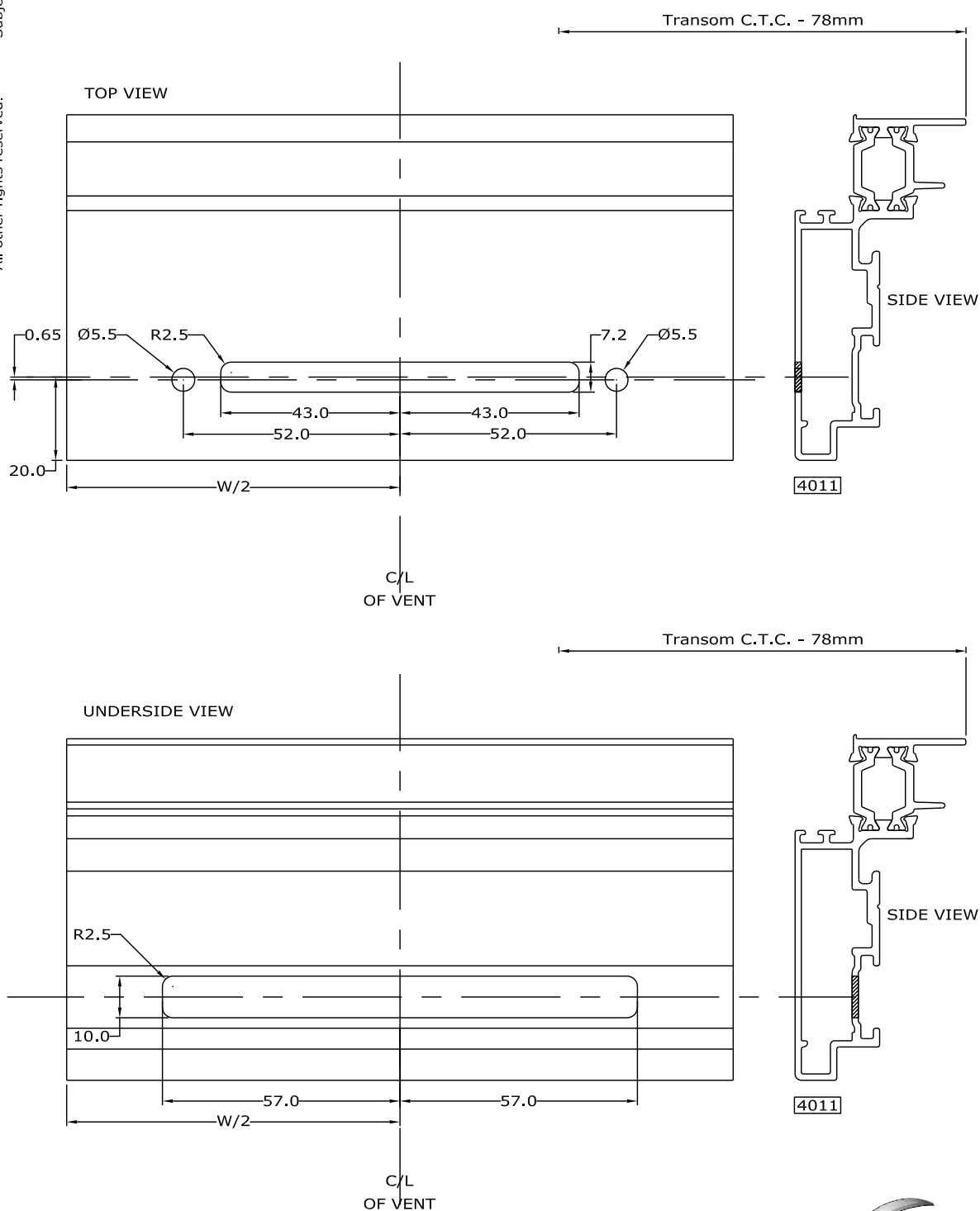
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Handle preparation 5007 & 5008

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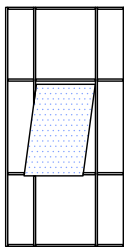
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Future Additions



8.83 - 8.99

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