

# INTRODUCTION

## SPECIFICATION

The Technal GXi horizontal sliding window will be fabricated in accordance with this fabrication manual and the requirements of BS4873 and where applicable other trade standards and codes of practice.

### Scope

The product range can be supplied from a common range of sections with a flush 9mm polyamide thermal break to create a simple 2-leaf bi-parting to multi-panel configurations on two or three tracks, with concealed drainage or face drained through the cill.

GXi is fully compatible with the Technal FXi52 casement window suite to form composite configurations.

### Finishes

The following finishes are available:

- Standard mill finish rolled together.
- Anodised in accordance with BS1615 or BS3987, natural self colour or Anolock colours.
- Stoved polyester powder coated in accordance with BS6496, available in a large range of single or dual colour options.

### Size Limitations

Size limitations are determined by windloading, profile inertia values and roller weight limitations (see charts).

**Maximum Leaf Sizes: 2.0 x 2.5 (w x h) Height / Width not to exceed ratio 3:1**

1.005

Track	Roller	Max Weight
Aluminium GX1130 OR Steel GX1132	GX1810 Non - adjustable roller OR GX1811 Adjustable roller	200 Kg per Leaf
Polyamide GX1702	GX1810 Non - adjustable roller OR GX1811 Adjustable roller	120 Kg per Leaf

### Materials

- Aluminium profiles are extruded from aluminium alloy 6063 T6 to BS1474 or 6060 R20.
- Polyamide thermal breaks are extruded from PA6-6 (0.25 FV).
- Screws and components shall be either stainless steel, cadmium plated steel or other corrosion resistant materials.
- Gaskets are EPDM SH 60 - 75.

### Construction

Outer frames are mitre jointed using an epoxy bonded and mechanically crimped cleat that expands to the exact dimensions of the hollow ensuring a flush mitre joint. The leaves are square cut, silicone sealed with the stiles bolted to the rails.

All machining operations can be performed using Perfopack punch tooling, milling templates or drilling jigs. The GXi fully drained system requires a fully adjustable power crimper to crimp the corner cleats.

## SPECIFICATION

### Performance

The Technal GX<sub>i</sub> horizontal sliding window has been tested in accordance with BS6375 Parts I and II achieving the following results:

	Sizes	Air Permeability	Watertightness	Wind Pressure
<b>GXi 2 Leaves</b>	1.41 x 1.42	A*3	E*7A	V*C4
<b>GXi 2 Leaves + Sub Cill</b>	2.19 x 2.16	A*3	E*8A	V*B4

### Thermal Performance

W/H	U Value Glass (centre pane)		
	1.4	1.3	1.2
<b>1.85 x 2.18</b>	2.3	2.2	2.1
<b>1.85 x 2.50</b>	2.2	2.2	2.1
<b>2.80 x 2.25</b>	2.1	2.0	1.9

### Security

For maximum security, to prevent the removal of glass from the outside all leaves are glazed with a wrap-around gasket and the system uses comprehensive locking systems upto 4-point hook locks.

### Tolerances

Tolerances in fabrication are to be in accordance with BS4873 and recommendations made in this Technal fabrication manual.

### Installation

Installation will be managed by suitably approved Technal fabricators and strictly in accordance with this fabrication manual.

### Glazing

The leaves are dry glazed with flush wrap-around EPDM gaskets designed to absorb the varying tolerances of paint and glass thickness. The system accommodates glazing from 20mm - 26mm in accordance with the codes of practice BS6262 including Part 4 and Section N of the Building Regulations

### Special Requirements

Many projects require special consideration to meet architects / designers specification. If in doubt, please consult our Technical Advisory Service.

### Quality

Technal operates a quality control system assessed to the European Quality Standard reference BS EN ISO 9001 and is listed on the Lloyds register of quality service, certificate number 900377.

### Further Information

Further information concerning both our products and various aspects of our industry, have been incorporated into our Technical Control Sheets. These sheets cover items such as Design Wind Pressure, Industry Standards and Regulations, Performance Criteria etc.

You can access or request copies of these via:

- The "Fabricators Area" of our web site at : [www.technal-library.co.uk](http://www.technal-library.co.uk)
- Requested by email to: [technical@technal.hydro.com](mailto:technical@technal.hydro.com)
- Through your Technal representative.

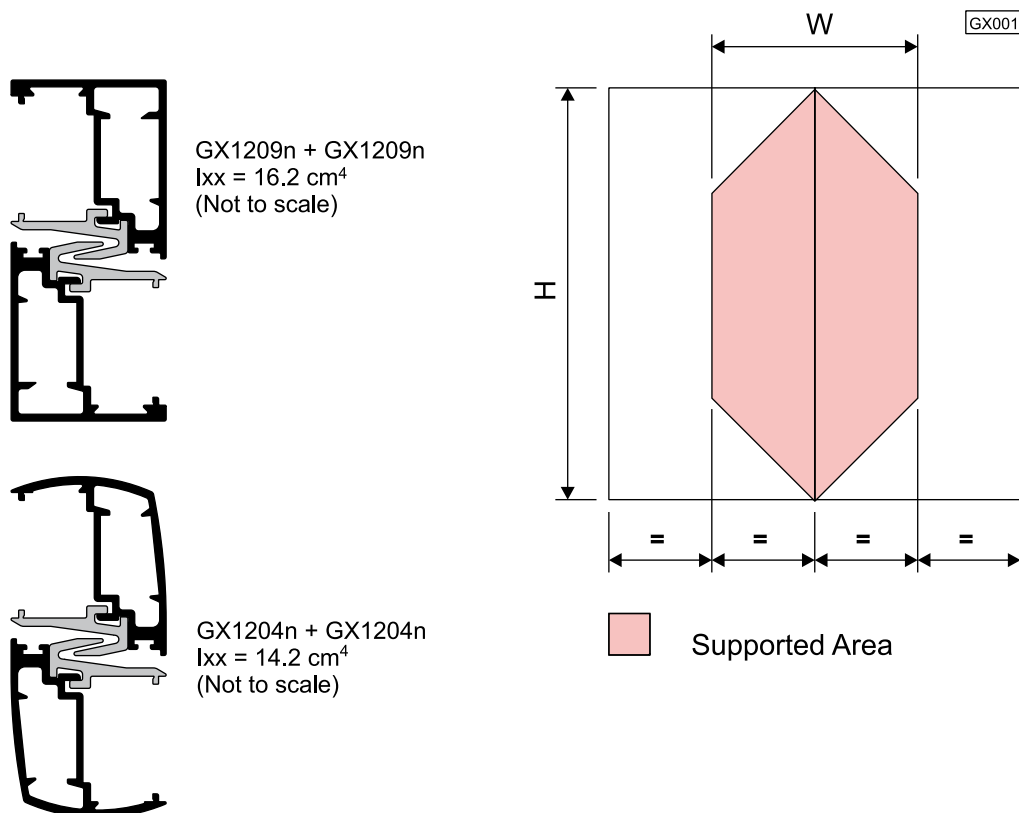
### Further Enquiries

General enquires can be submitted via email to: [info.technal@hydro.com](mailto:info.technal@hydro.com).

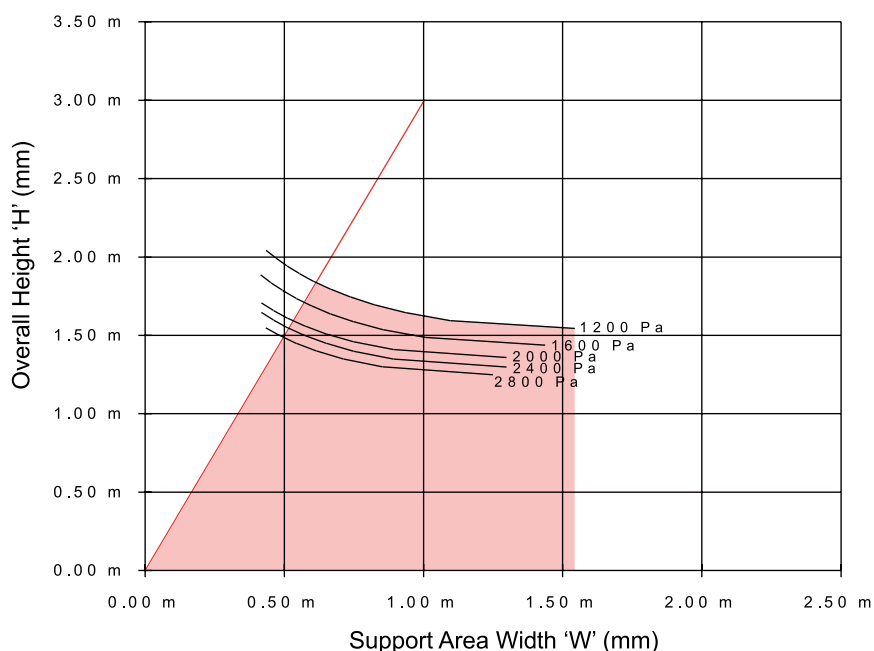
Technical enquires can be submitted via email to: [technical@technal.hydro.com](mailto:technical@technal.hydro.com)

# INTERLOCK WIND LOAD CHART

Based on deflection limit of L/175 and stress limits in accordance with BS8118



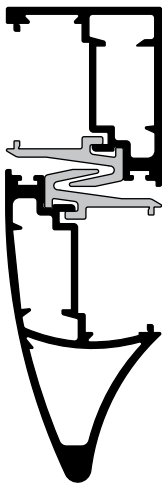
1.015



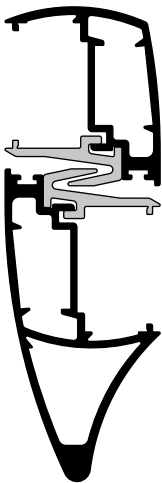


INTERLOCK WIND LOAD CHART

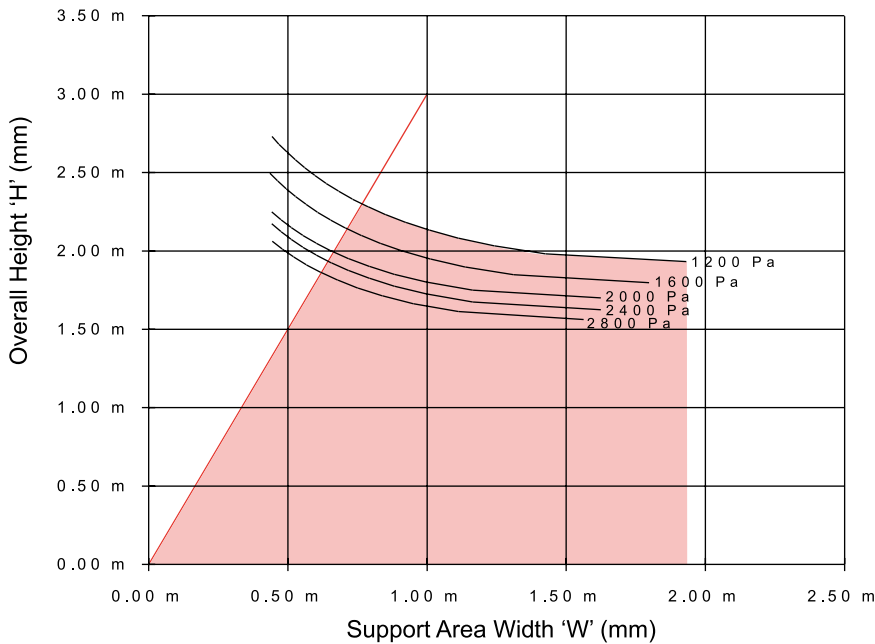
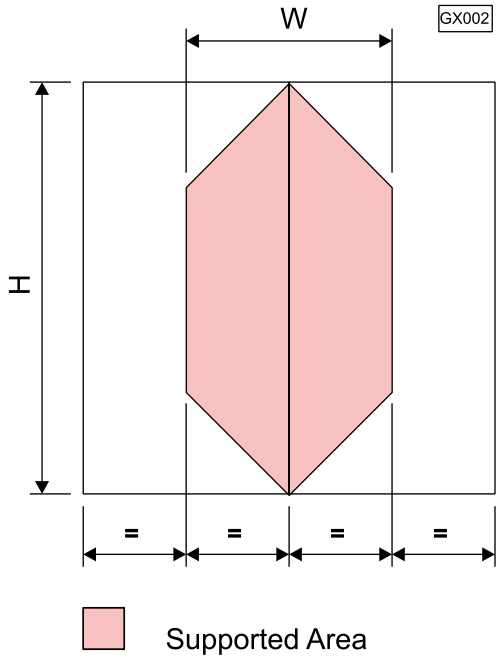
Based on deflection limit of L/175 and stress limits in accordance with BS8118



GX1209n + GX1205n  
 $I_{xx} = 35.8 \text{ cm}^4$   
(Not to scale)

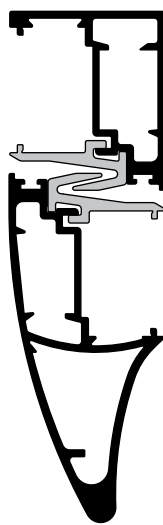


GX1204n + GX1205n  
 $I_{xx} = 34.8 \text{ cm}^4$   
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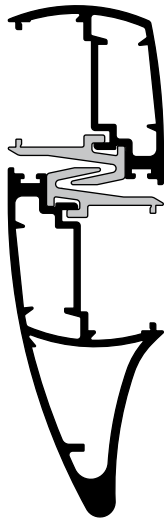


# INTERLOCK WIND LOAD CHART

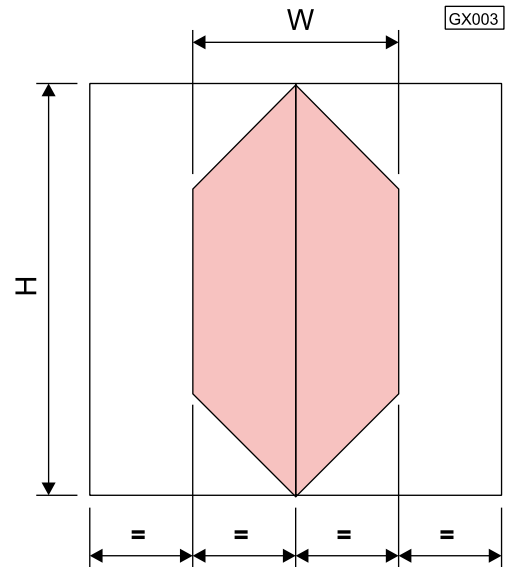
Based on deflection limit of L/175 and stress limits in accordance with BS8118



GX1209n + GX1206n  
 $I_{xx} = 48.3 \text{ cm}^4$   
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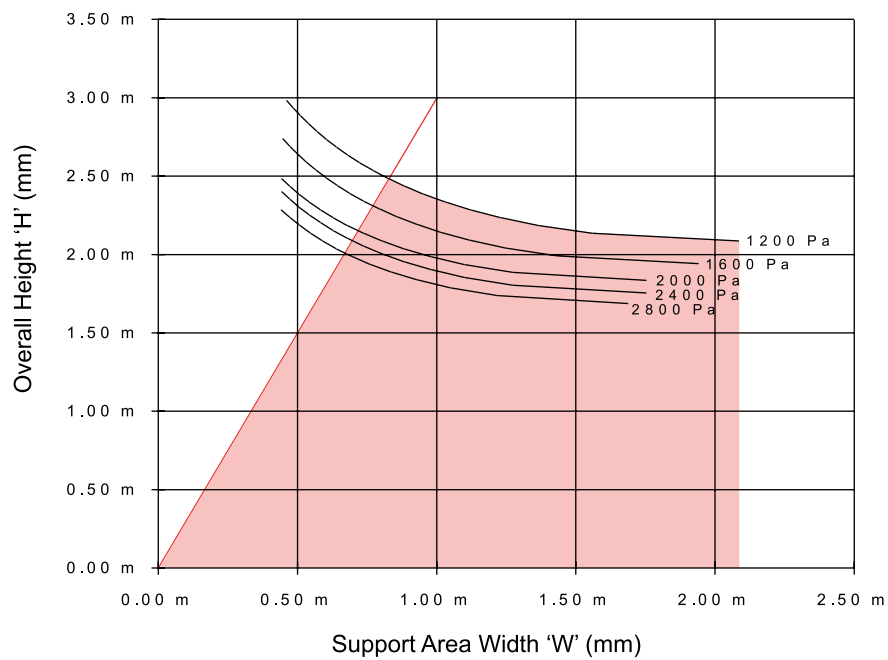


GX1204n + GX1206n  
 $I_{xx} = 47.3 \text{ cm}^4$   
 (Not to scale)



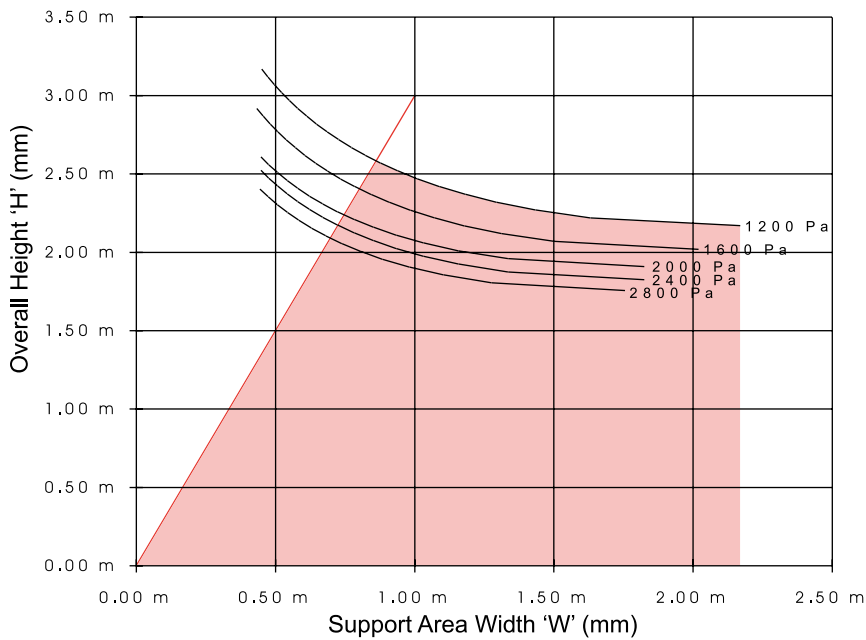
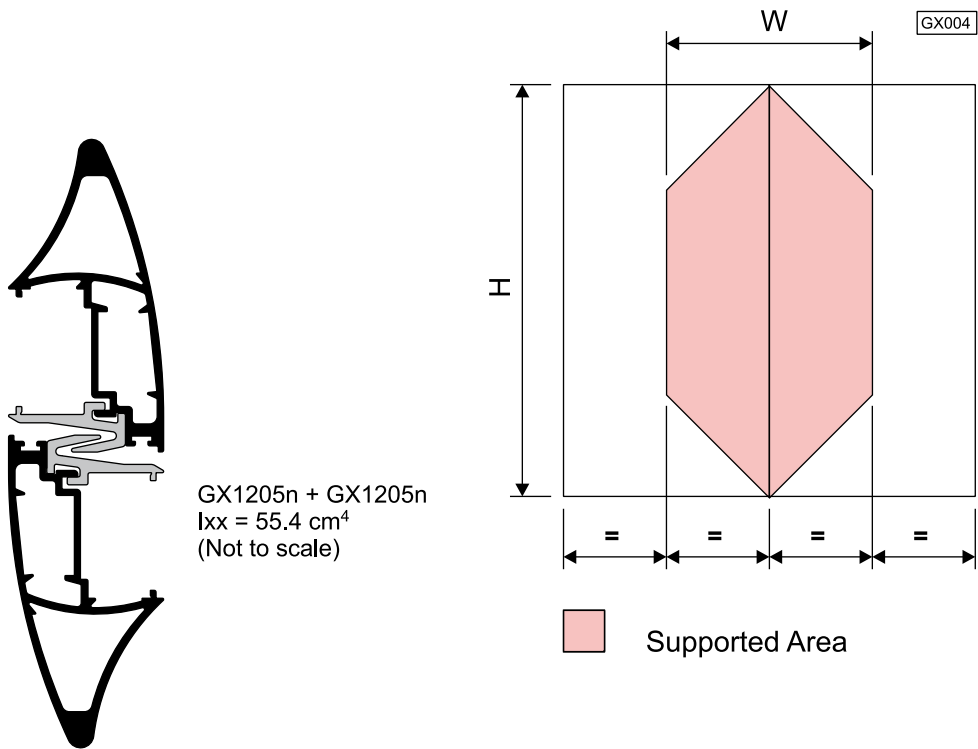
Supported Area

1.025



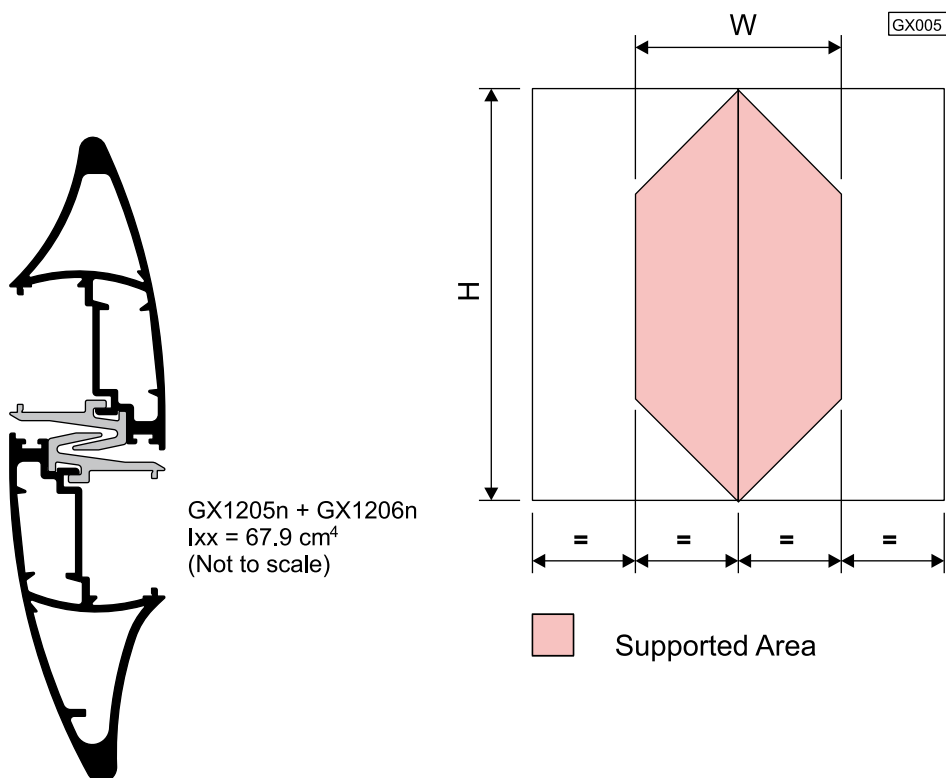
INTERLOCK WIND LOAD CHART

Based on deflection limit of L/175 and stress limits in accordance with BS8118

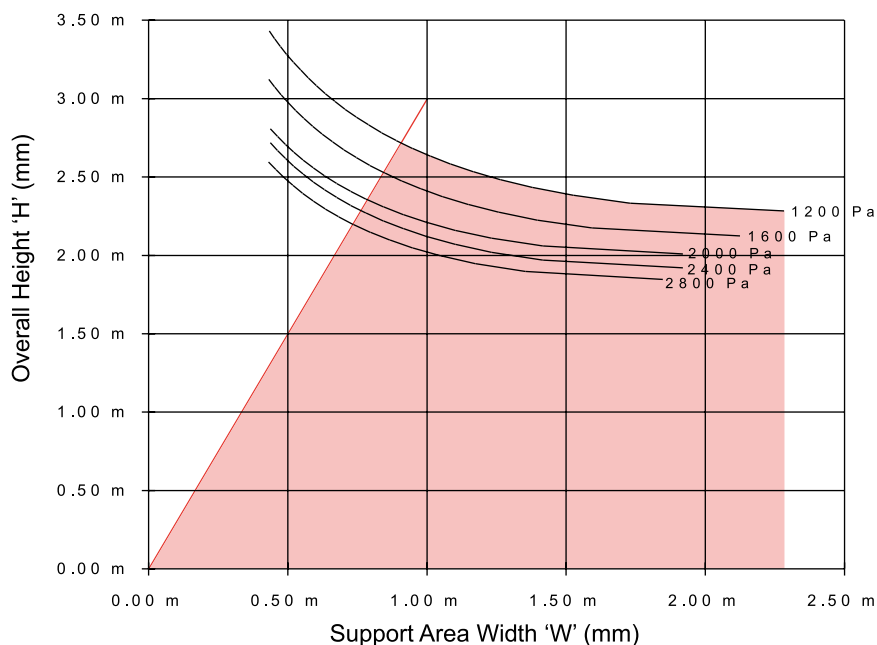


# INTERLOCK WIND LOAD CHART

Based on deflection limit of L/175 and stress limits in accordance with BS8118

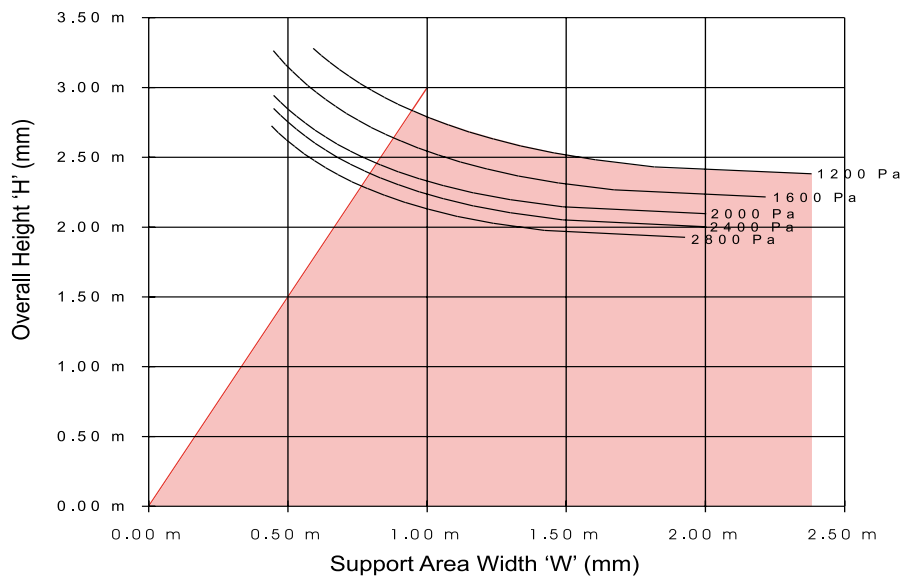
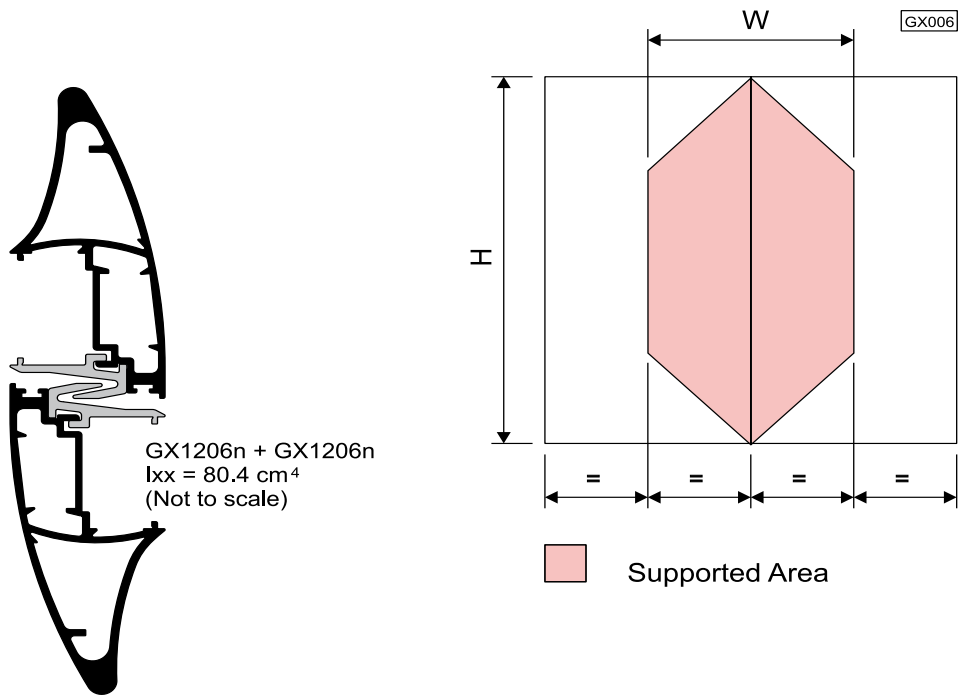


1.035



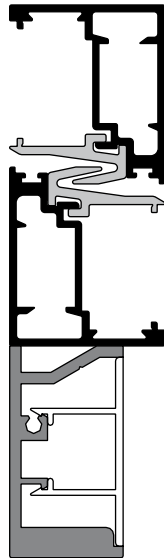
INTERLOCK WIND LOAD CHART

Based on deflection limit of L/175 and stress limits in accordance with BS8118

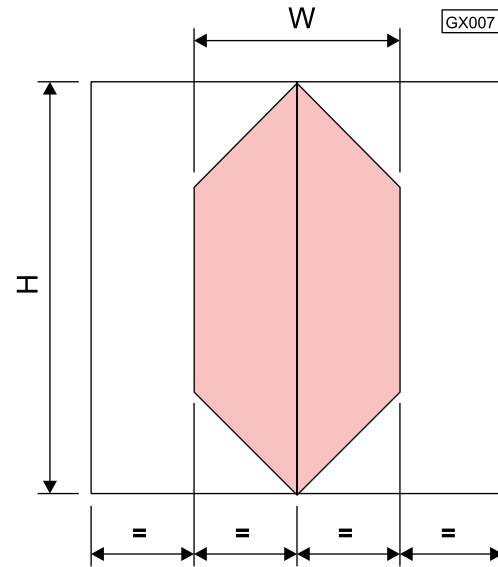



# INTERLOCK WIND LOAD CHART

Based on deflection limit of L/175 and stress limits in accordance with BS8118

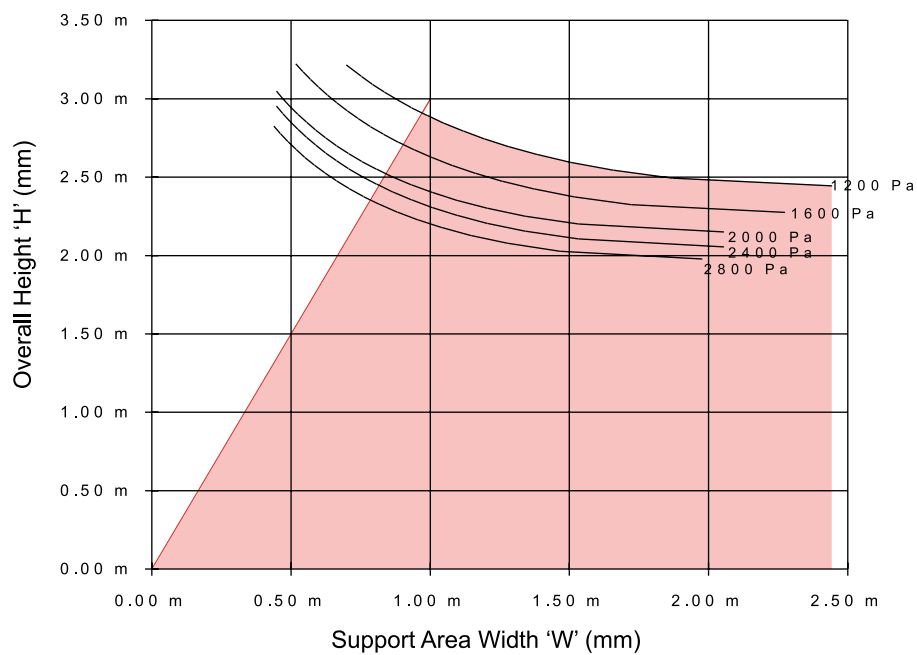


GX1209n + GX1209n + VWA308/309  
 $I_{xx} = 89.2 \text{ cm}^4$   
 (Not to scale)



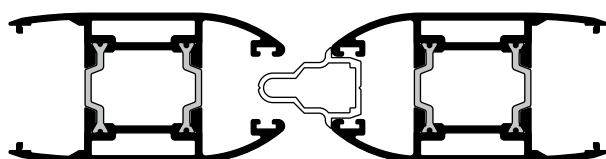
 Supported Area

1.045

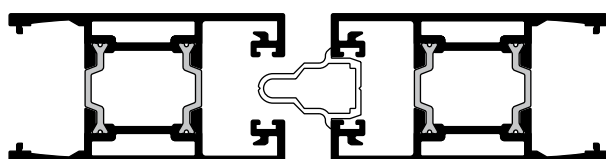


## MEETING STILE WIND LOAD CHART

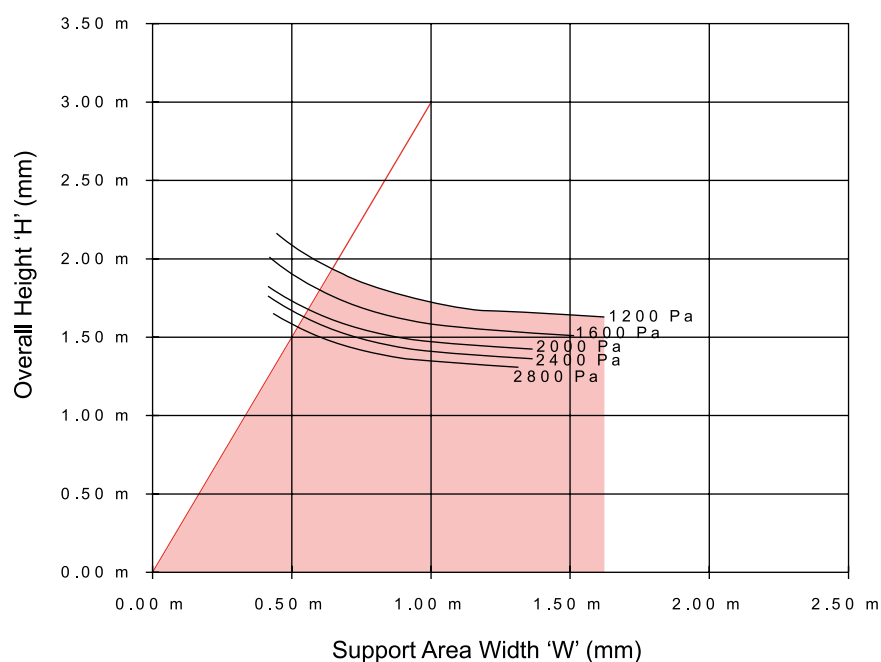
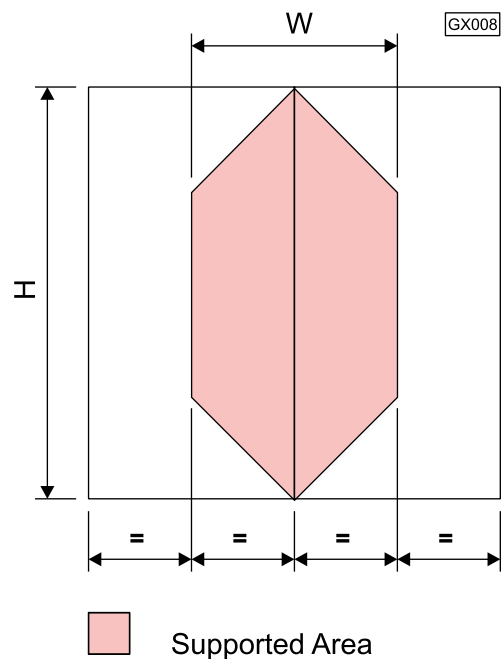
Based on deflection limit of L/175 and stress limits in accordance with BS8118



GX1200p + GX1200p  
 $I_{xx} = 17.4 \text{ cm}^4$   
 (Not to scale)

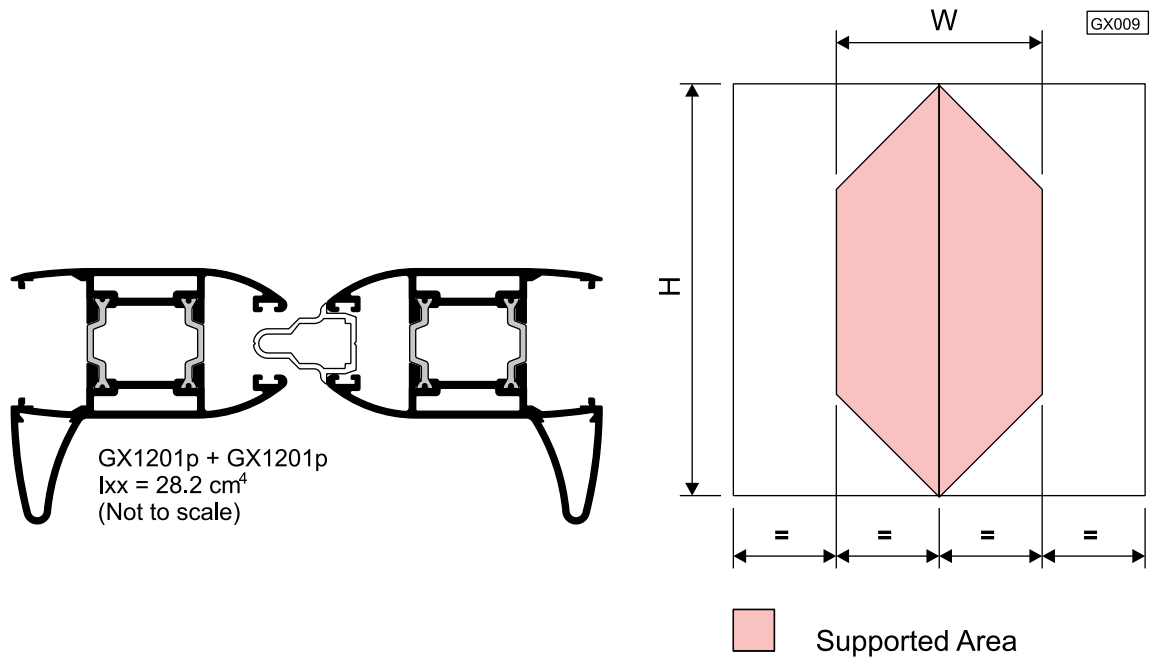


GX1208p + GX1208p  
 $I_{xx} = 16.1 \text{ cm}^4$   
 (Not to scale)

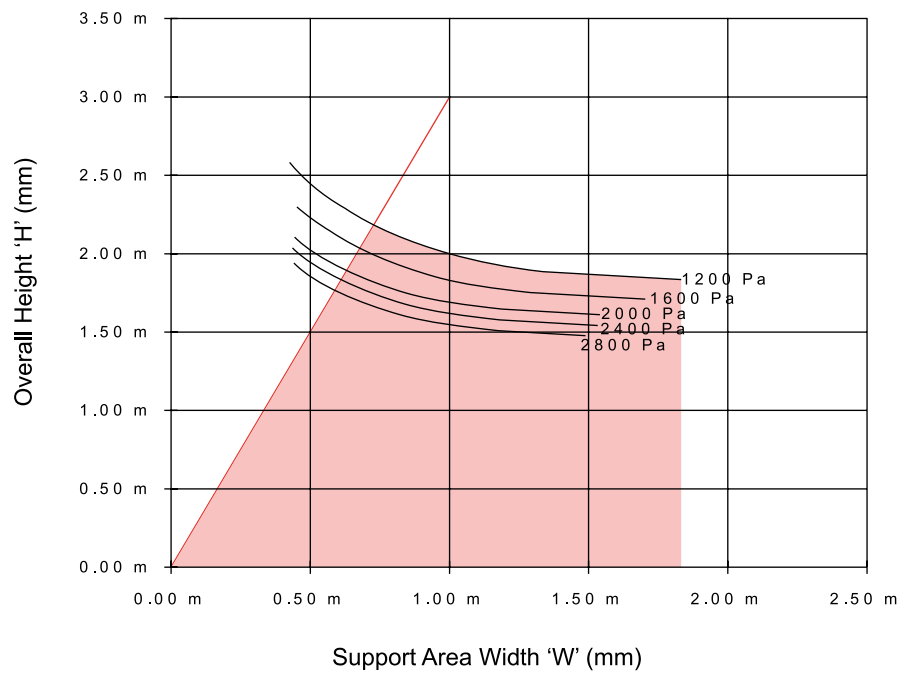


# MEETING STILE WIND LOAD CHART

Based on deflection limit of L/175 and stress limits in accordance with BS8118



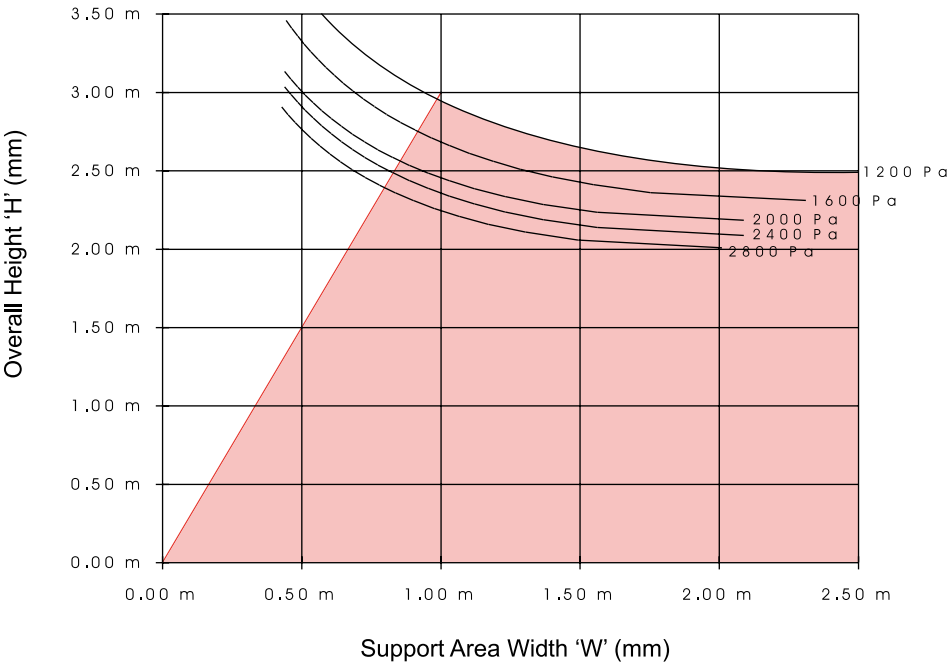
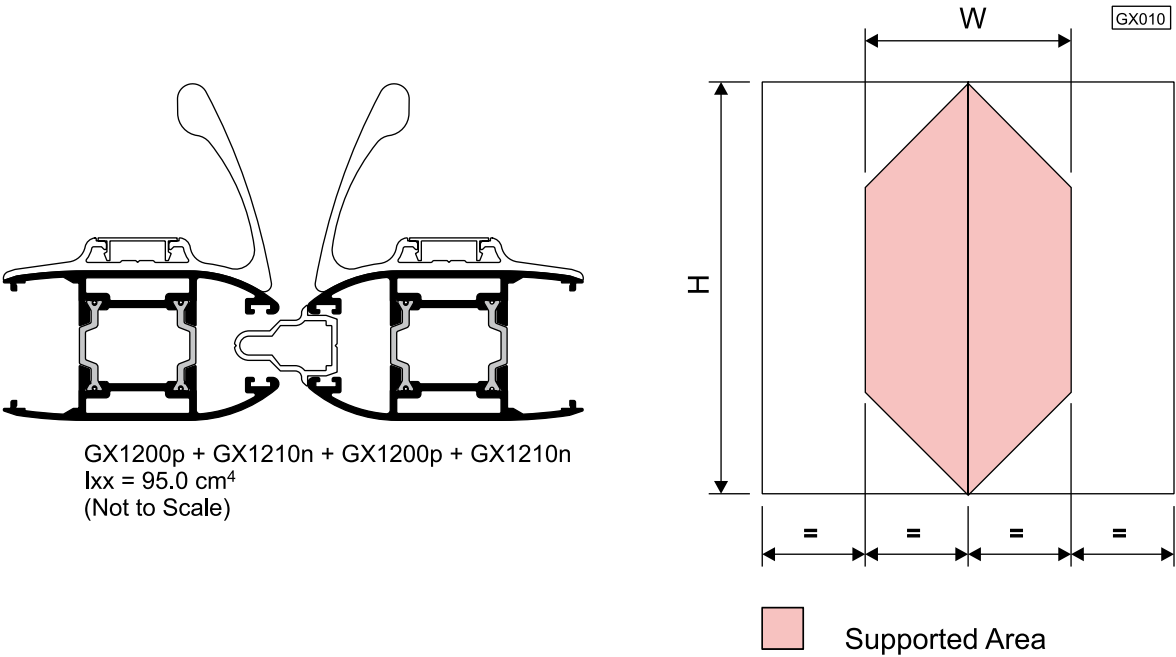
1.055





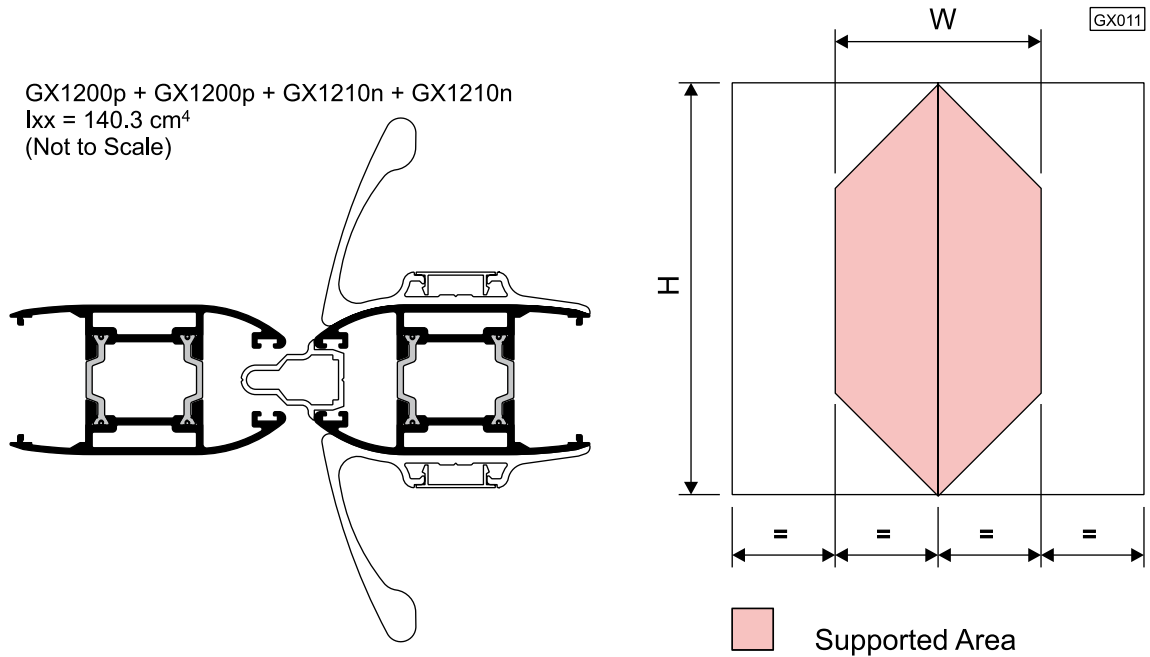
MEETING STILE WIND LOAD CHART

Based on deflection limit of L/175 and stress limits in accordance with BS8118

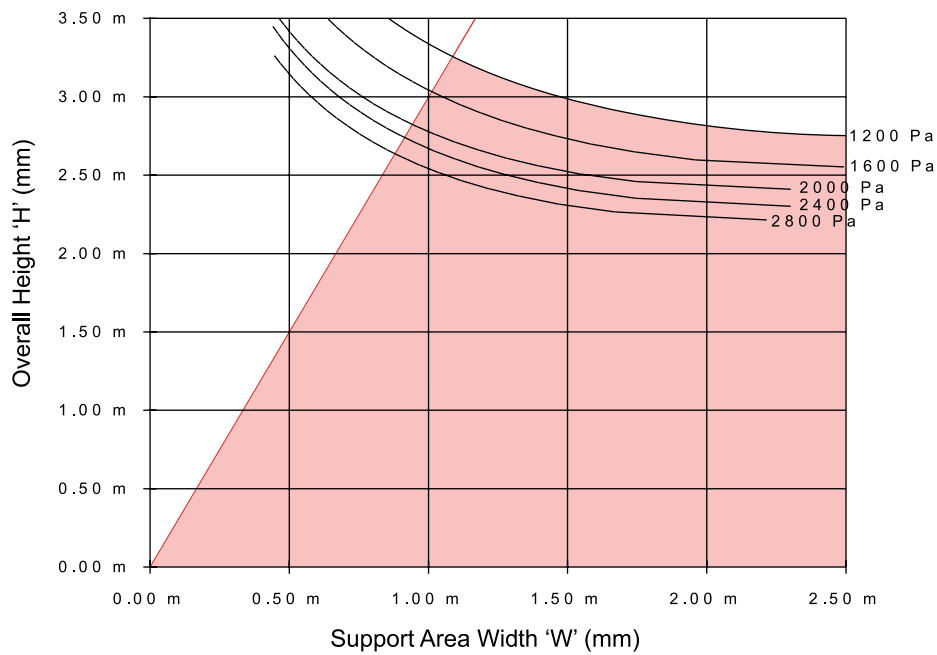


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Based on deflection limit of L/175 and stress limits in accordance with BS8118

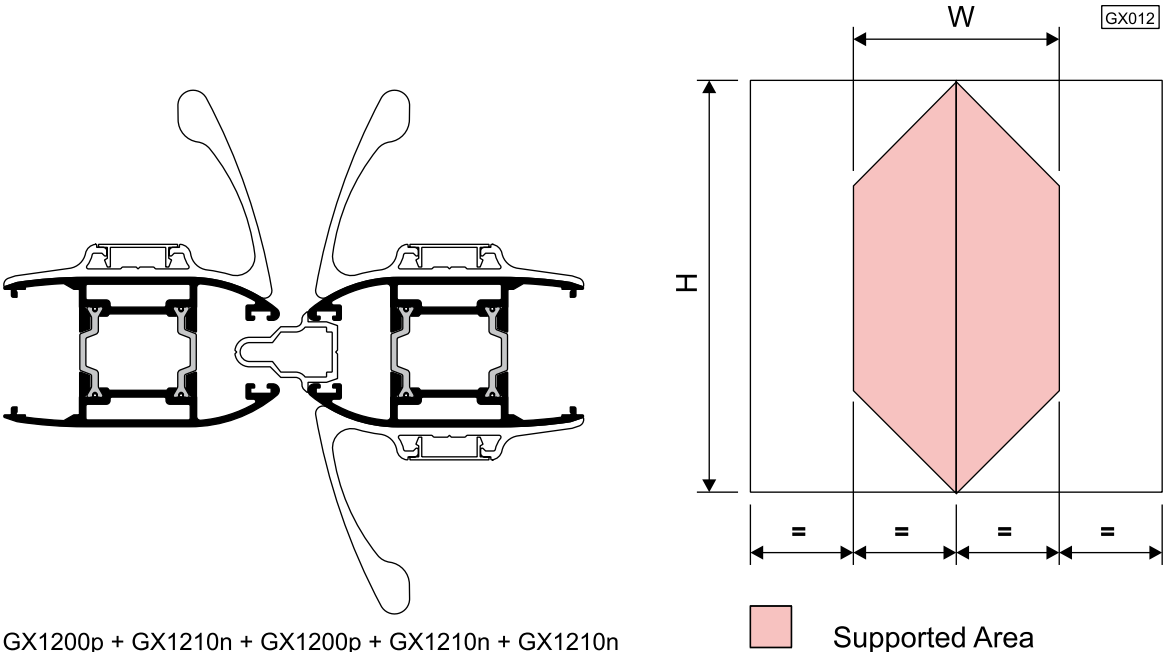


1.065

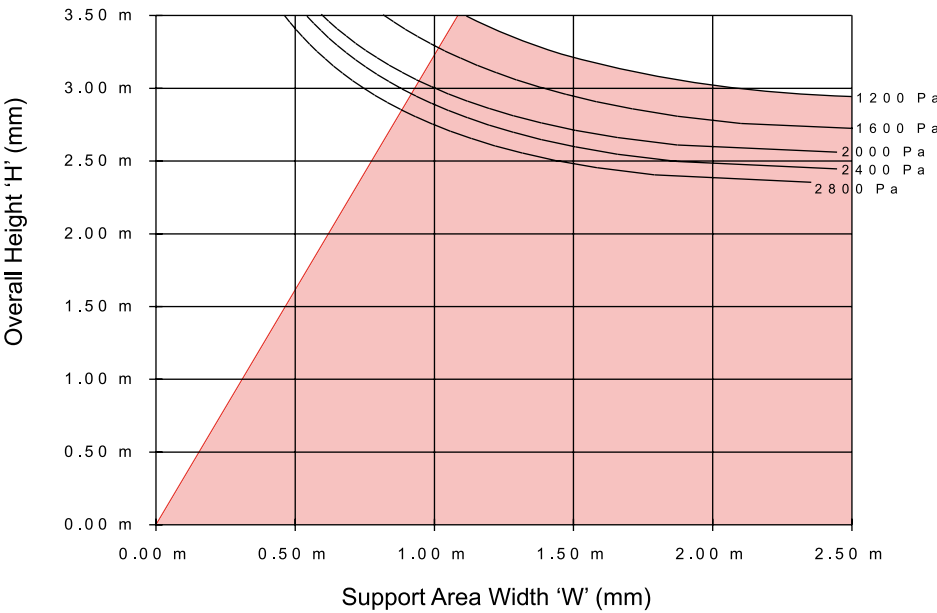


MEETING STILE WIND LOAD CHART

Based on deflection limit of L/175 and stress limits in accordance with BS8118

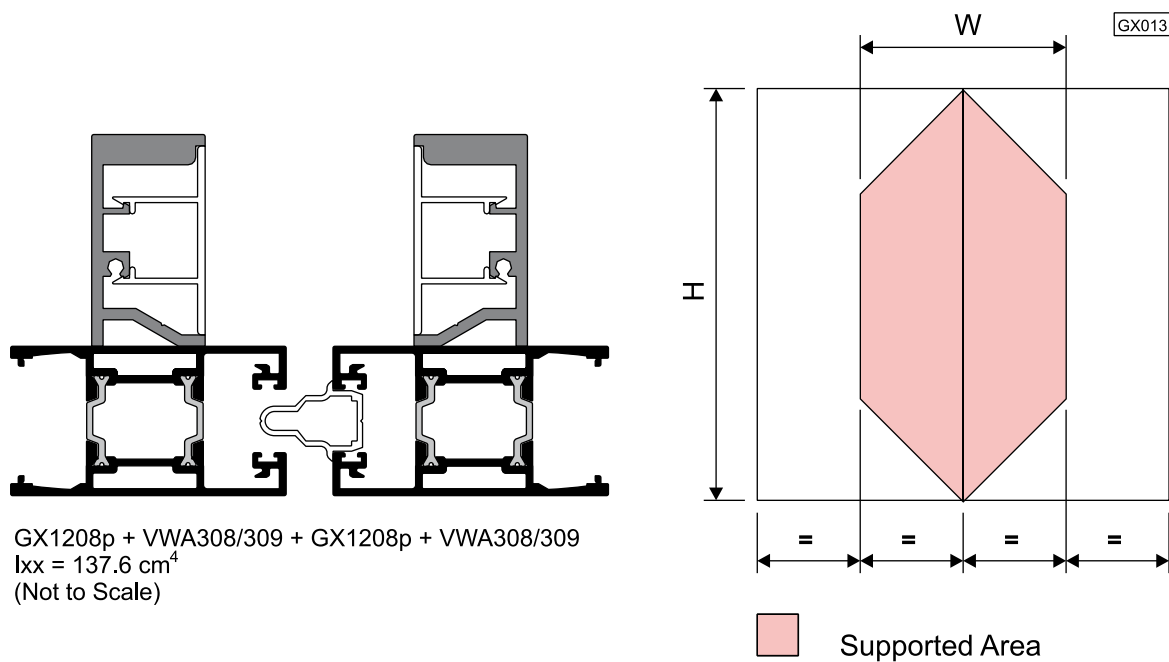


GX1200p + GX1210n + GX1200p + GX1210n + GX1210n  
 $I_{xx} = 179.2 \text{ cm}^4$   
(Not to Scale)

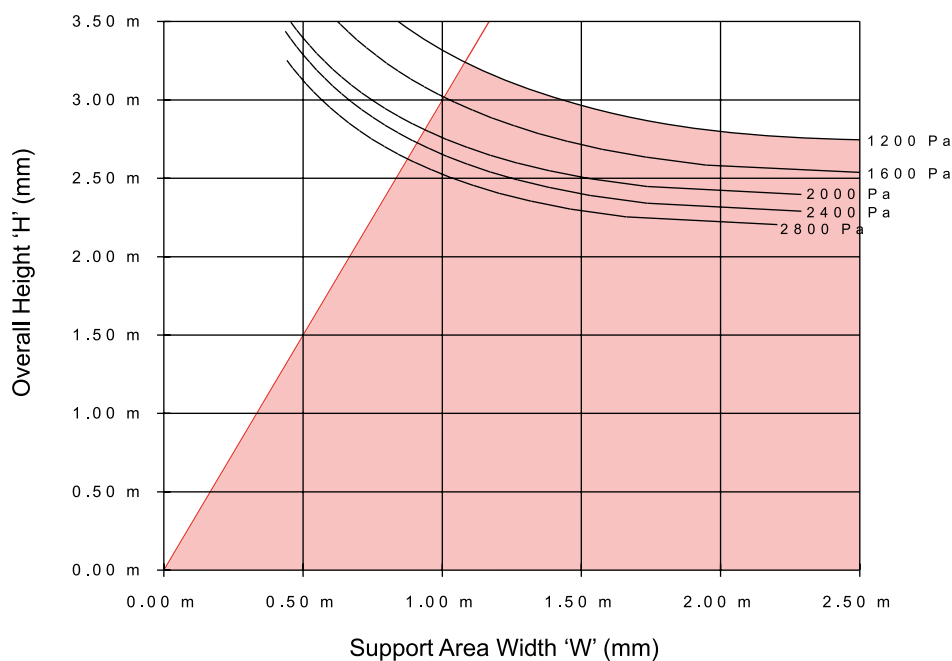


# MEETING STILE WIND LOAD CHART


Based on deflection limit of L/175 and stress limits in accordance with BS8118

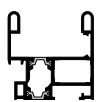


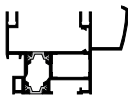
1.075

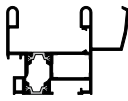


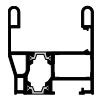
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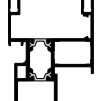
	Ref.	$I_{xx}'$ (cm <sup>4</sup> )	$I_{yy}'$ (cm <sup>4</sup> )	$Z_{xx}'$ (cm <sup>3</sup> )	$Z_{yy}'$ (cm <sup>3</sup> )
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	GX1100p	18.00	12.5	6.20	3.6
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	GX1101p	28.6	11.9	6.3	3.5
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	GX1103p	30.3	14.3	6.6	4.4
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	GX1104p	19.3	12.5	6.8	3.6
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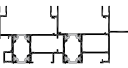
	GX1107p	15.6	12.3	5.2	3.5
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
	GX1200p	8.7	14.2	4.4	3.7
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	GX1201p	14.1	19.7	3.3	4.9
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	GX1203p	6.9	18.9	4.2	4.8
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	GX1136n	1.1	3.4	0.6	1.0
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	GX1109p	111.01	17.98	15.74	5.07
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	Ref.	$I_{xx}'$ (cm <sup>4</sup> )	$I_{yy}'$ (cm <sup>4</sup> )	$Z_{xx}'$ (cm <sup>3</sup> )	$Z_{yy}'$ (cm <sup>3</sup> )
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	GX1204n	7.1	2.9	2.6	1.0
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	GX1205n	27.7	4.9	6.5	1.9
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	GX1206n	40.2	5.9	8.4	2.5
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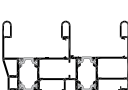
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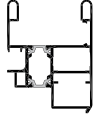
	GX1208p	8.1	19.92	4.9	3.2
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	GX1209n	6.4	3.3	2.3	1.1
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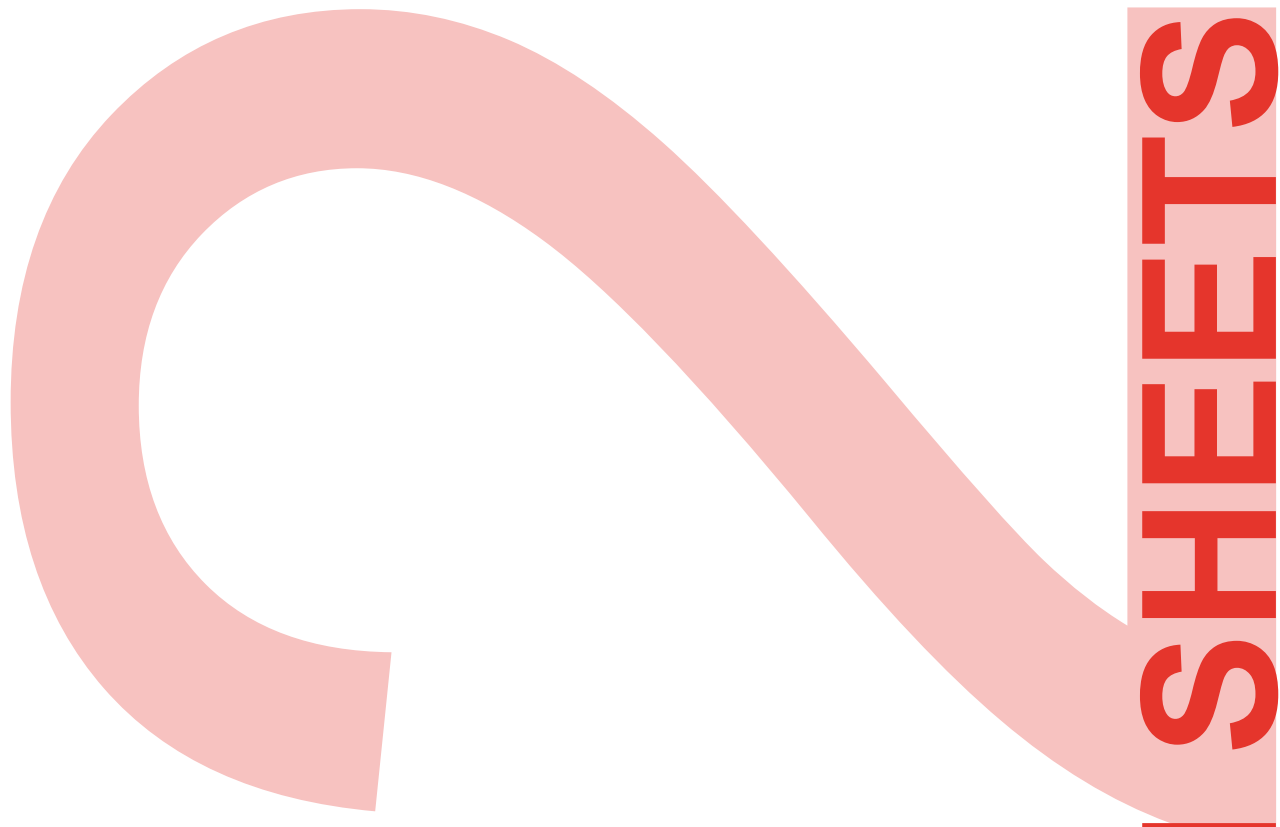
	GX1210n	15.1	13.5	4.6	2.7
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	VWA308	19.4	3.9	5.7	1.9
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	GX1108p	95.2	20.3	17.5	5.7
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	GX1110p	20.6	20.0	6.8	5.1
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1.080

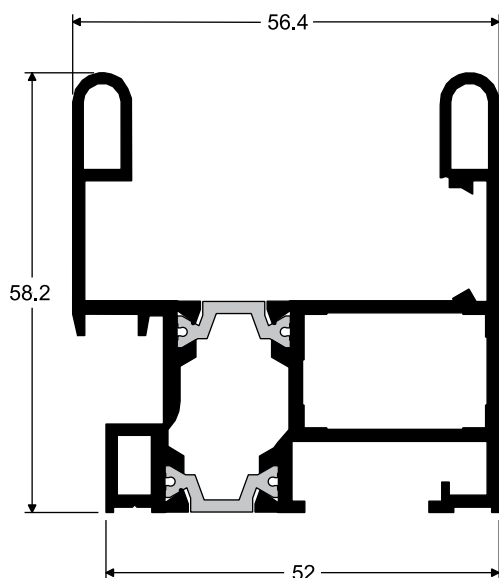


**SCAN SHEETS**

## OUTER FRAMES

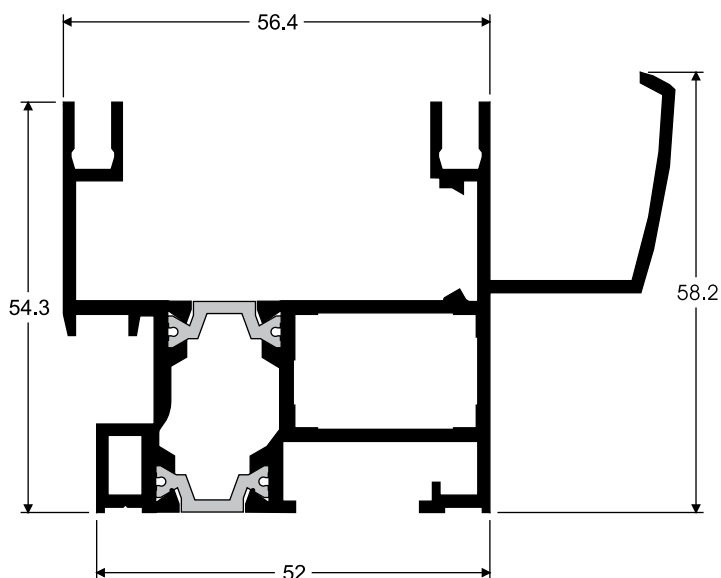
### **GX1100p**

Closed Track Outer Frame



### **GX1101p**

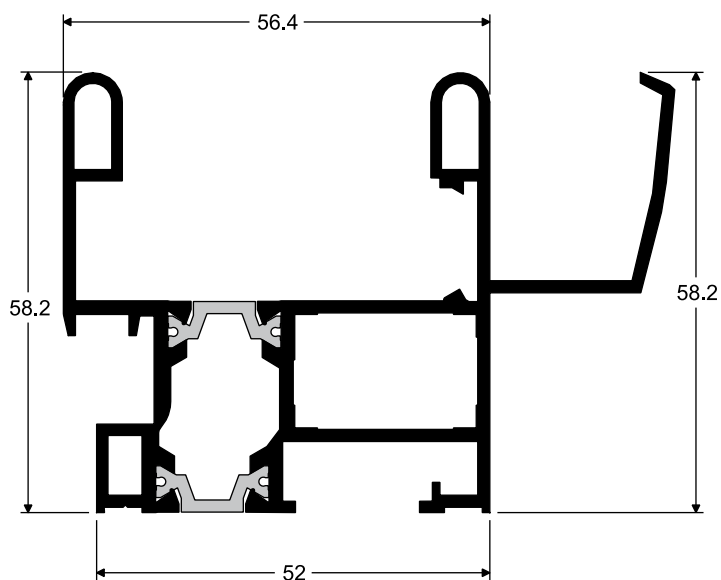
Open Track Outer Frame  
With Condensation Channel



2.005

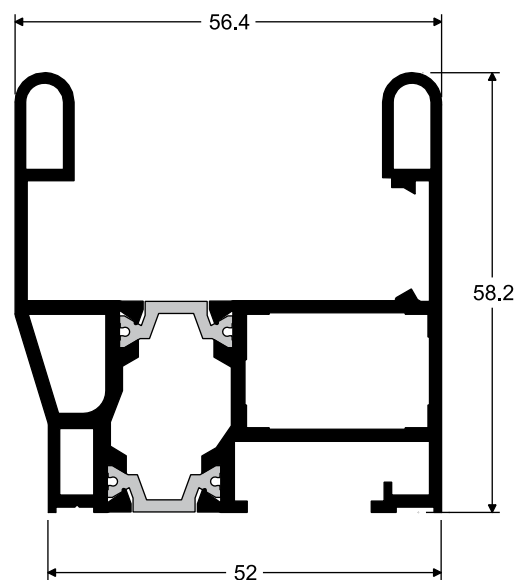
### **GX1103p**

Closed Track Outer Frame  
With Condensation Channel

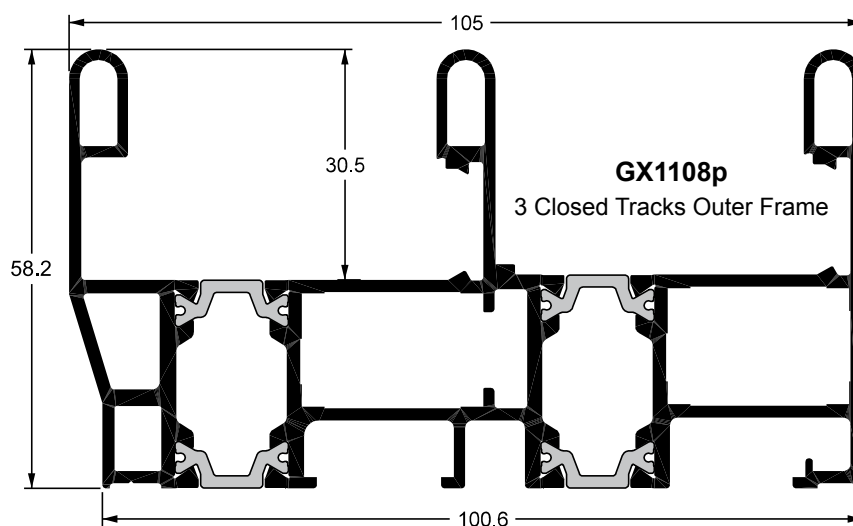
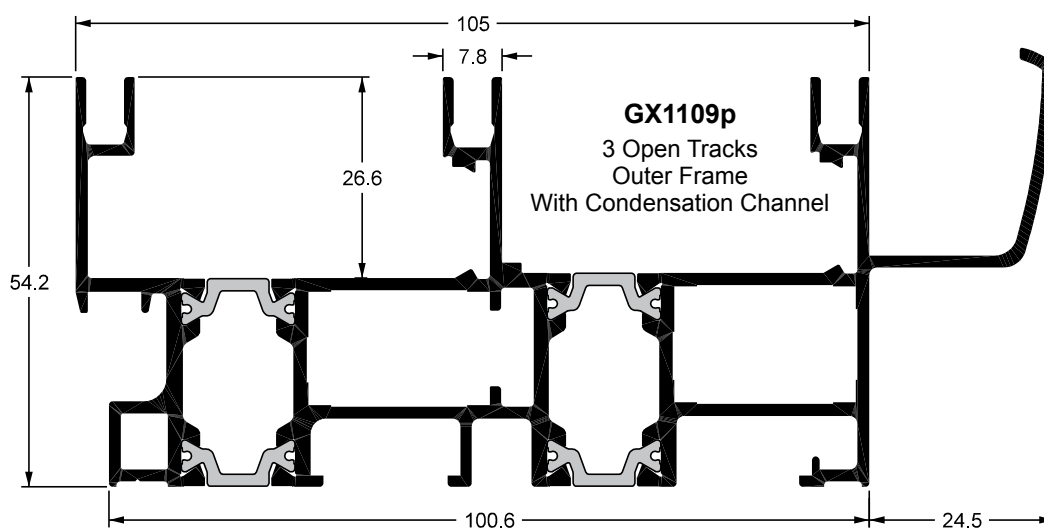
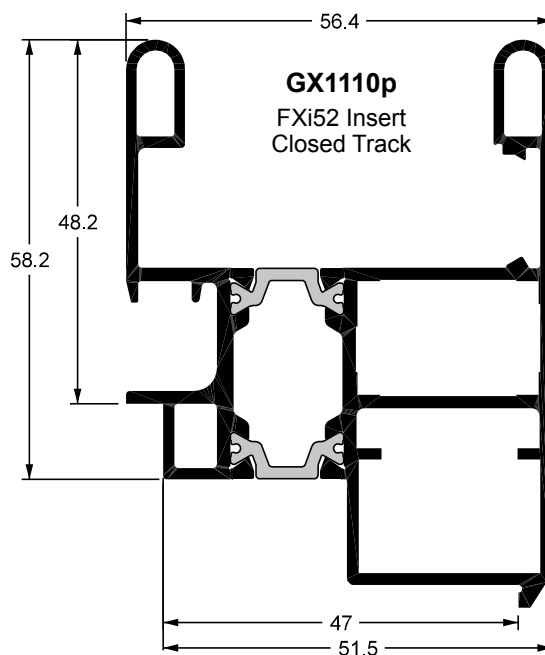
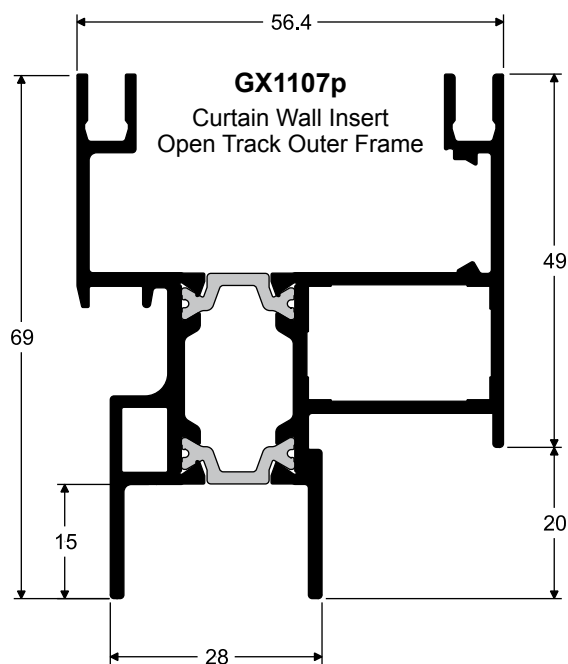


### **GX1104p**

Closed Track Outer Frame  
(For Top and Jambs)



## OUTER FRAMES

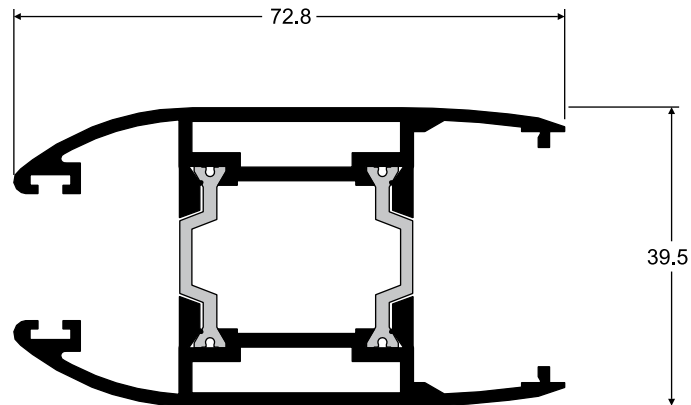


2.010

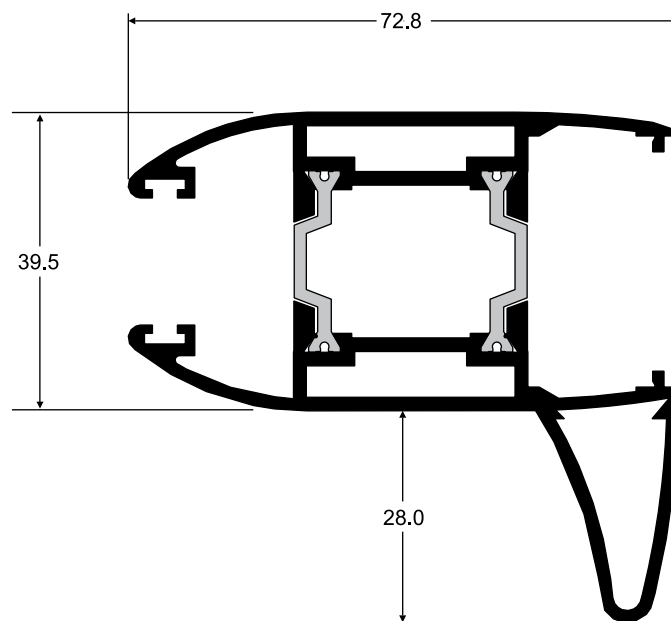


## LEAF SECTIONS

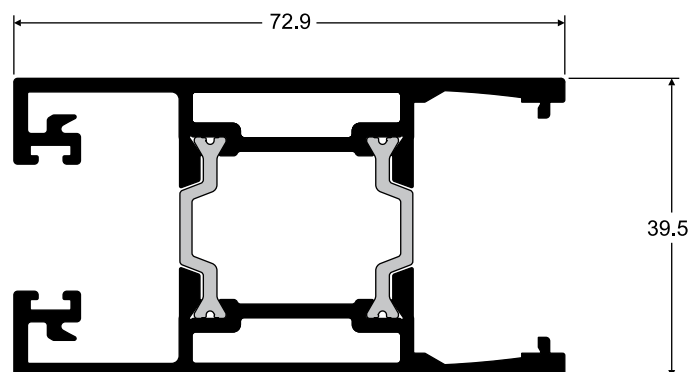
**GX1200p**  
Jamb Stile



**GX1201p**  
Reinforced Jamb Stile

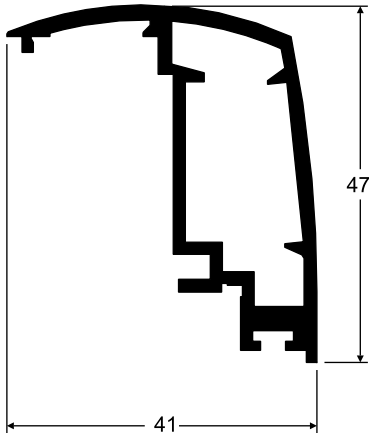


**GX1208p**  
Straight Jamb Stile

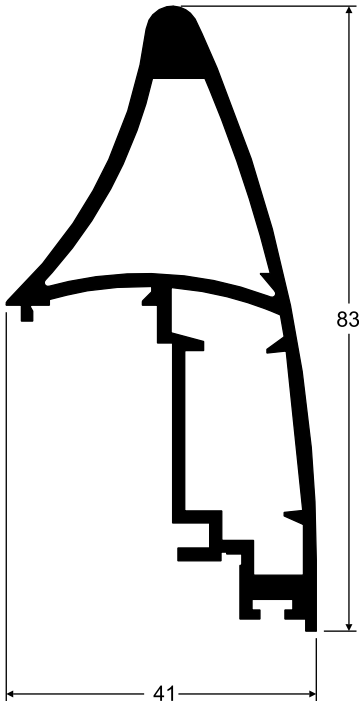


LEAF SECTIONS

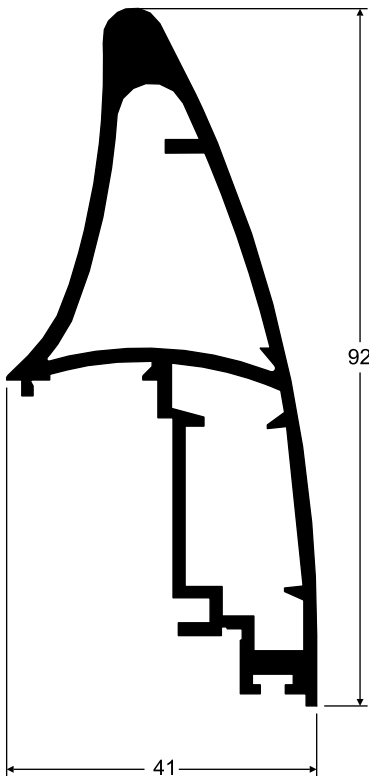
**GX1204n**  
Interlock Stile



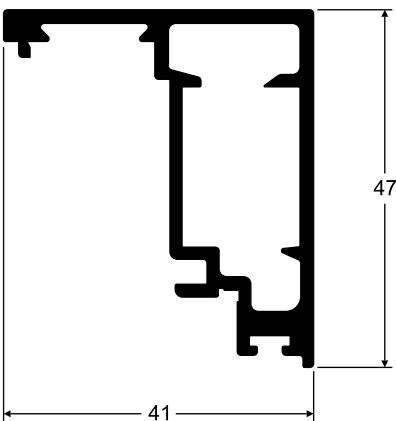
**GX1205n**  
Reinforced Interlock Stile



**GX1206n**  
Reinforced Interlock Stile



**GX1209n**  
Straight Interlock Stile

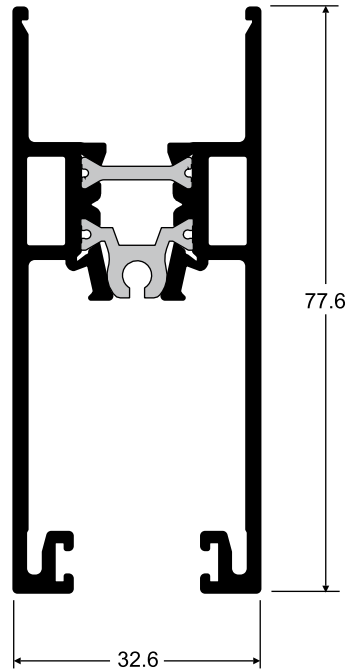


2.020

## LEAF SECTIONS

### **GX1203p**

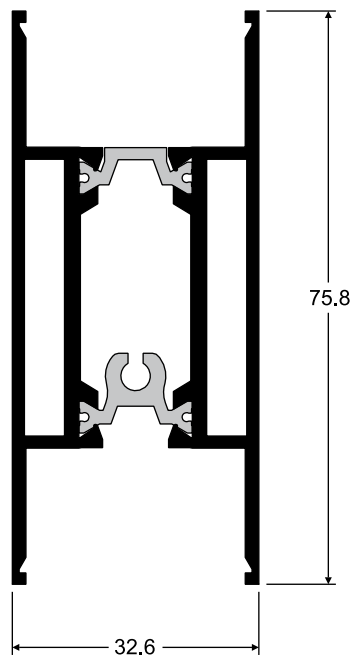
Top & Bottom Rail



2.025

### **GX1207p**

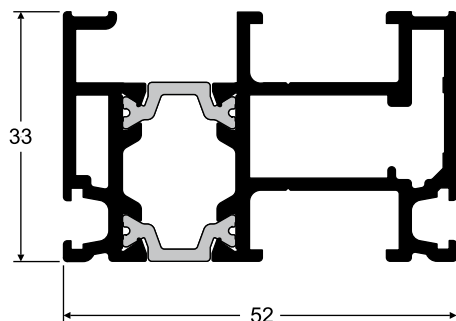
Mid Rail



## AUXILIARY SECTIONS

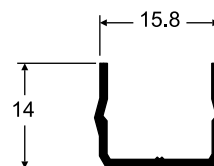
**GX1105p**

Sub Cill



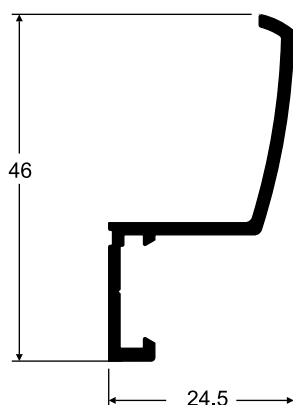
**GX1106n**

Location Clip Profile  
For Sub Cill



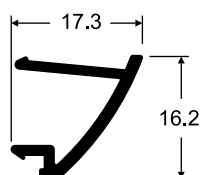
**GX1133n**

Condensation Channel



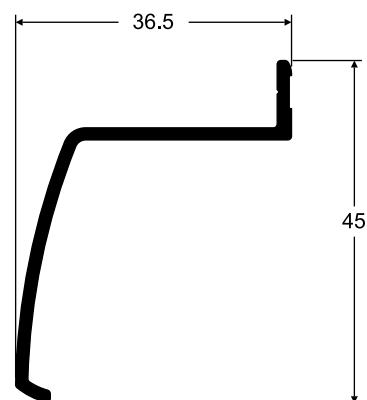
**GX1134n**

Clip For Condensation Channel



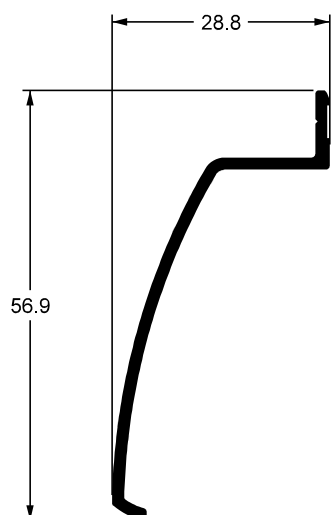
**GX1135n**

Weather Bar



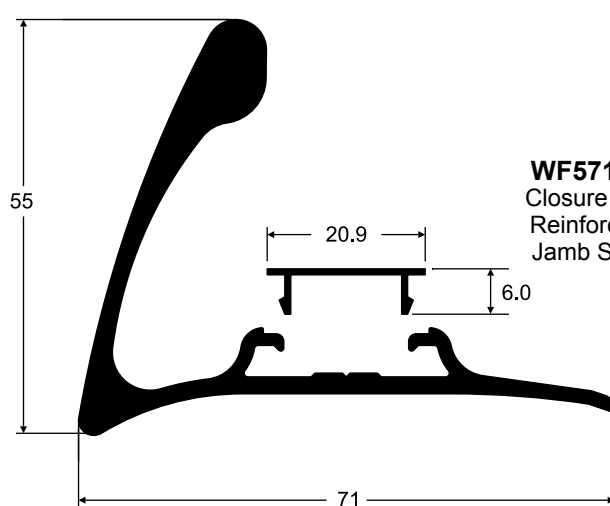
**GX1136n**

Weather Bar For 3 Tracks



**GX1210n**

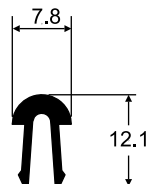
Reinforced Jamb Stile



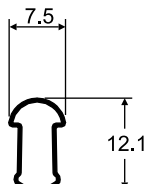
**WF57119**  
Closure For  
Reinforced  
Jamb Stile

## AUXILIARY SECTIONS

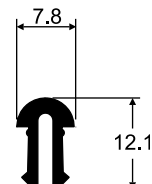
**GX1130**  
Aluminium Track



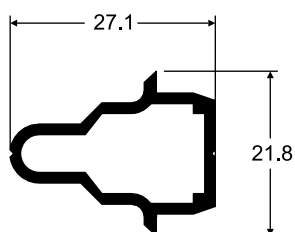
**GX1132**  
Stainless Steel Track



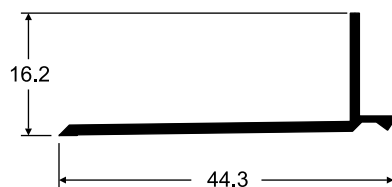
**GX1702**  
Polyamide Track



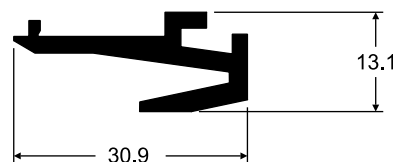
**GX1230n**  
Meeting Stile Adaptor



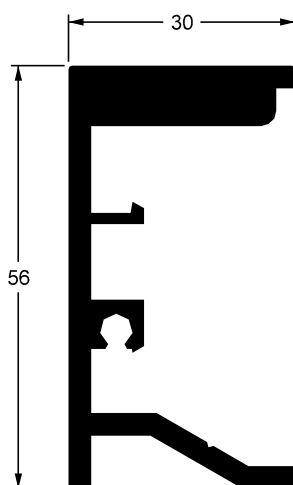
**GX1700**  
Polyamide Cover



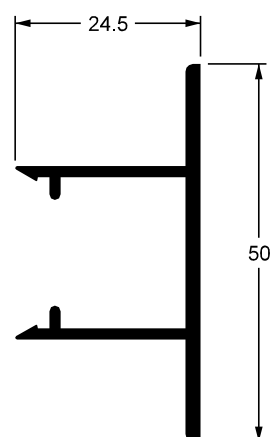
**GX1701**  
Polyamide Interlock



**VWA308**  
Reinforcing Bar



**VWA309**  
Reinforcing Bar Cover Plate

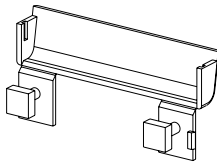




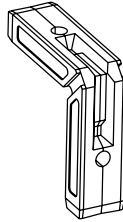
# **GASKETS & ACCESSORIES**

**ACCESSORIES**
**FV3160**

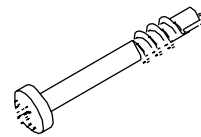
Drainage Cap


**FX510a**

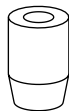
15x24 Corner Cleat


**FX518a**

Screw SR2 4.2x28


**FX529a**

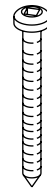
Pin For Corner Cleat


**GX1500**

Weather Bar Screw


**GX1501**

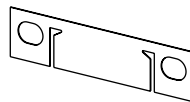
Leaf Assembly Screw 4.8x50


**GX1502**

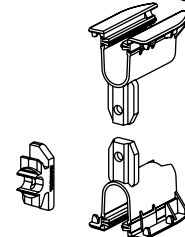
Screw 4.8x45


**GX1503**

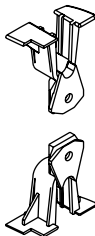
Valve Film For FV3160


**GX1504**

Jamb Stile End Plug Set


**GX1505**

Interlock Stile End Plug Set


**GX1506**

Interlock Stile Guide


**GX1507**

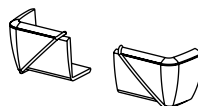
Reinforced Interlock Cap Set


**GX1508**

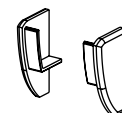
Reinforced Jamb Cap Set


**GX1509**

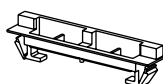
GX1101p and GX1103p Condensation Channel End Cap Set


**GX1510**

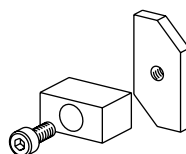
GX1133n Condensation Channel End Cap Set


**GX1511**

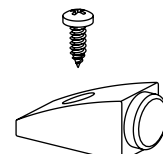
Drainage Deflector


**GX1512**

Fixing For Meeting Stile Adaptor


**GX1513**

Leaf Stop

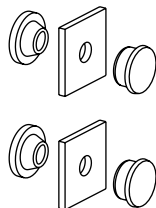


3.005

## ACCESSORIES

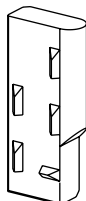
### GX1514

Fixing Set For Mid Rail



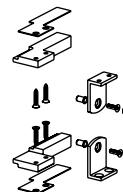
### GX1515

Track Corner Alignment Block



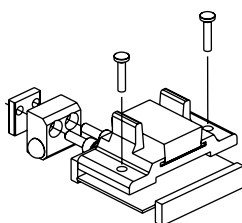
### GX1516

Fixing Set For Fixed Leaf



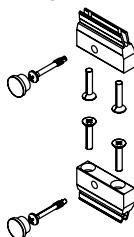
### GX1517

Leaf Restrictor



### GX1518

Invisible Fixing Set for Fixed Leaf



### GX1600

Brush Pile



### GX1601

Slip Gasket



### GX1602

20mm Glazing Gasket



### GX1603

22mm Glazing Gasket



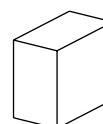
**FV601g**  
24mm Glazing Gasket



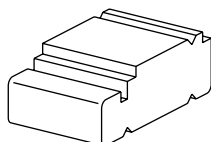
**GX1605**  
26mm Glazing Gasket



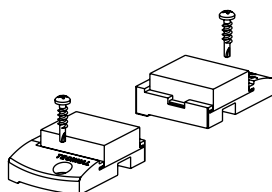
**GX1606**  
Plug



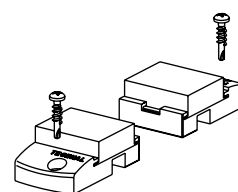
**GX1607**  
End Seal For Sub Cill



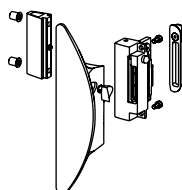
**GX1608**  
Woolpile Block Set



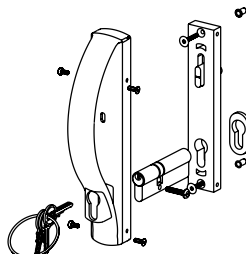
**GX1609**  
Central Woolpile Block Set For 3 Tracks



**GX1800**  
Half Moon Semi Automatic Lock



**GX1801**  
Multi Lock Handle



**GX1802**  
Pull Handle For Thumb Lock





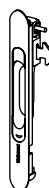
# **ACCESSORIES**

**GX1803**

Pull Handle


**GX1804**

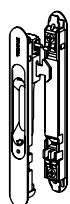
Finger Pull Single Lock


**GX1805**

Finger Pull No Lock


**GX1806**

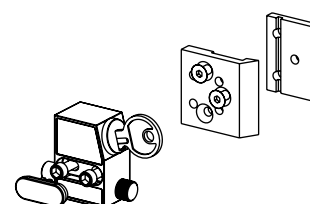
Internal & External Finger Pull Single Lock


**GX1807**

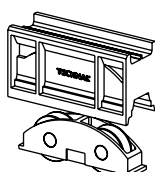
Lever Lock


**GX1808**

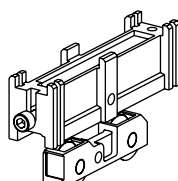
Interlock Plunger Lock


**GX1810**

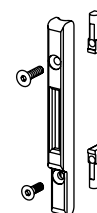
Non-Adjustable Roller


**GX1811**

Adjustable Roller


**GX1812**

Keep For Closed Track


**GX1814**

Centring Stop


**GX1815**

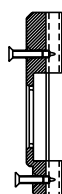
2 Point Multi Lock


**GX1816**

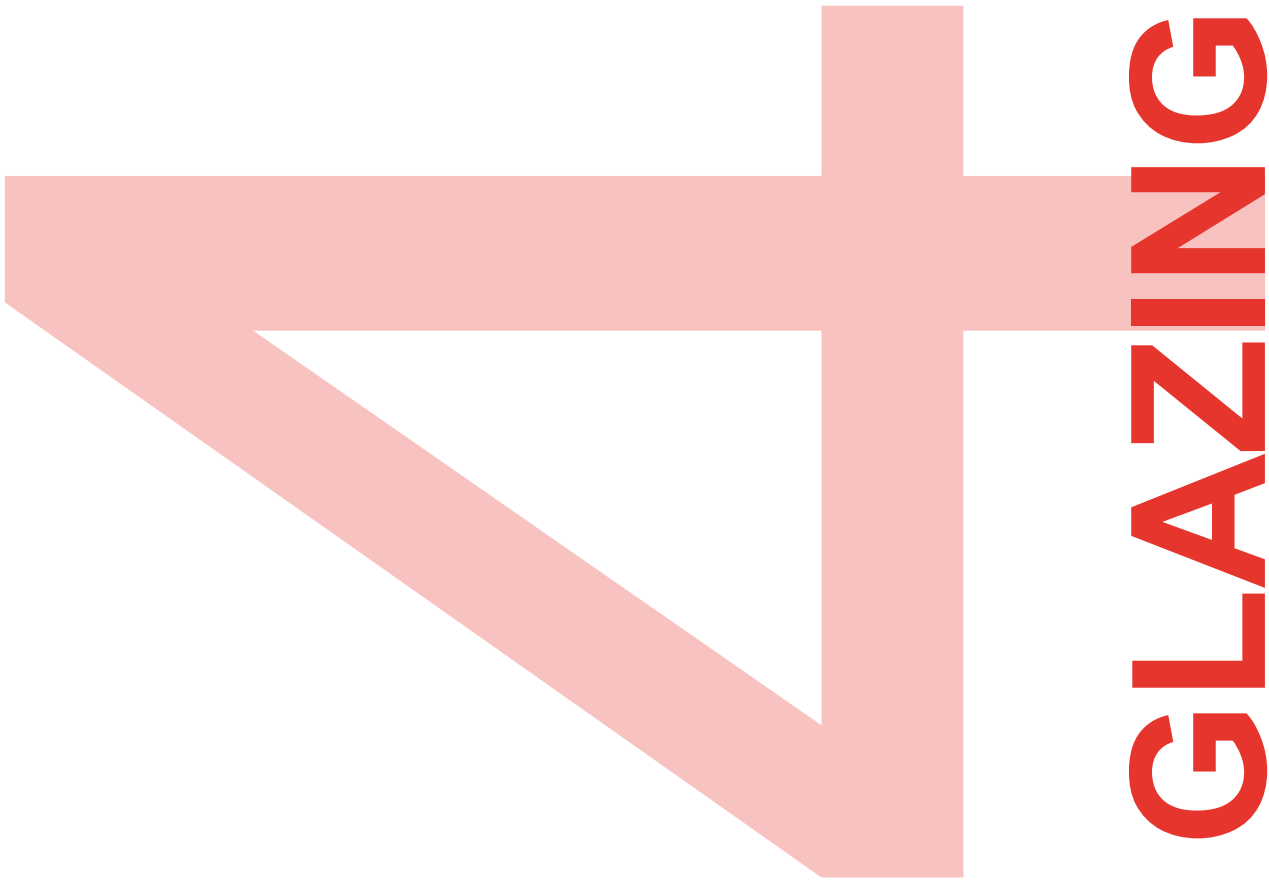
4 Point Multi Lock


**GX1817**





Keep For Open Track



3.015



**GXi GLAZING OPTIONS**

Gasket	Reference	Unit Size
	GX1602	20mm
	GX1603	22mm
	FV601g	24mm
	GX1605	26mm

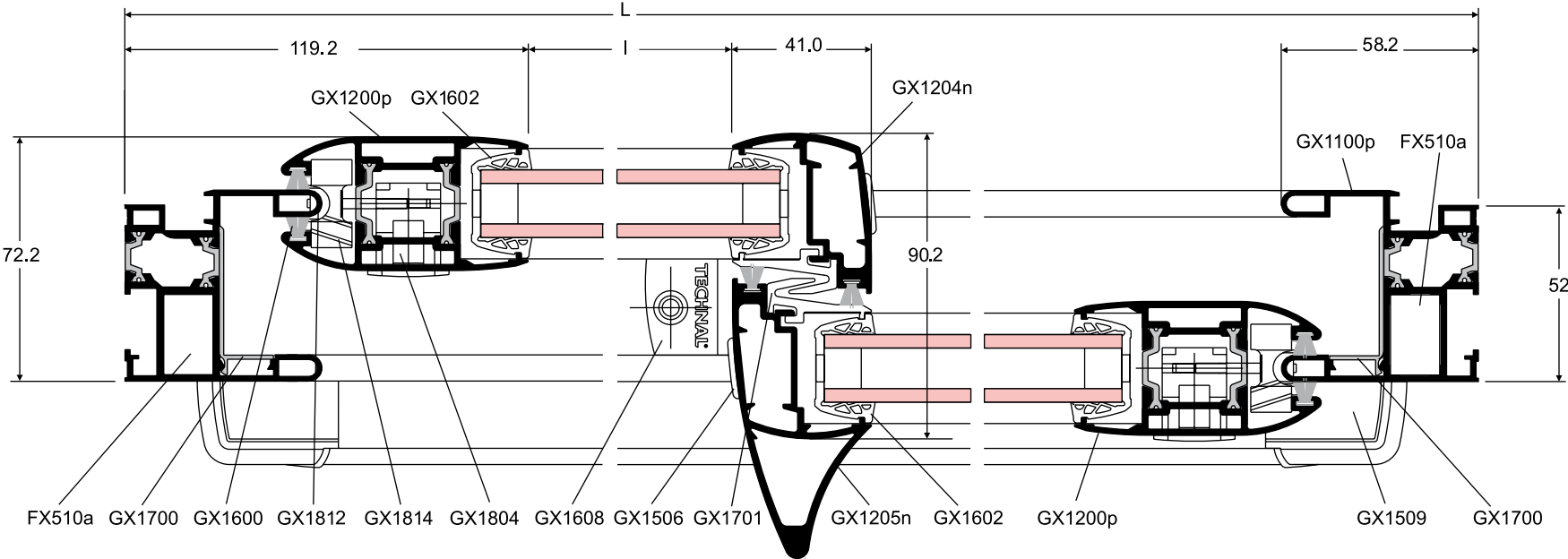
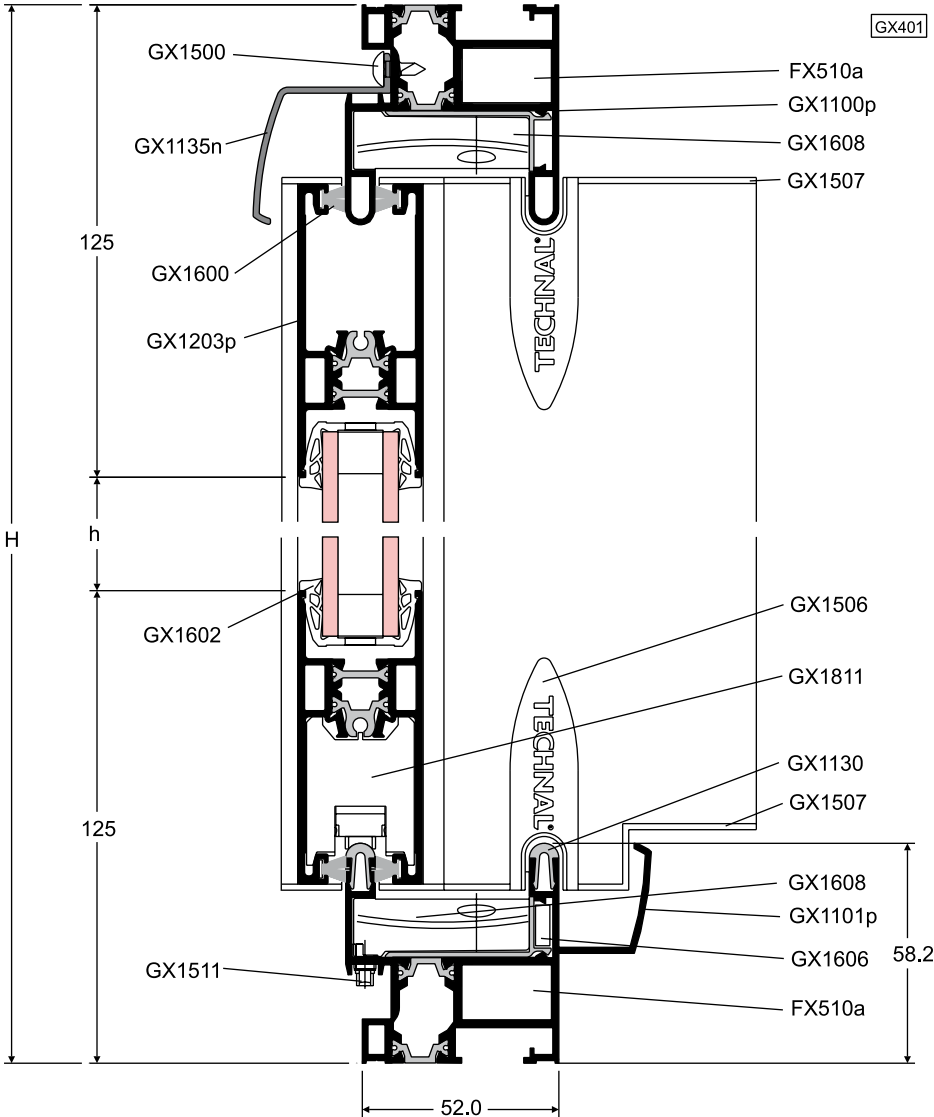
**4.005**

# EQ CUTTING FORMULA

2 LEAF - LEFT HAND LEAF ON EXTERNAL TRACK

SECTIONS	REF	DESCRIPTION	PREPARATION	QTY	CUTTING
	GX1101p	OPEN TRACK OUTER FRAME WITH CONDENSATION CHANNEL		1	L
	GX1100p	CLOSED TRACK OUTER FRAME		2 1	H L
	GX1200p	JAMB STILE		2	H-95
	GX1204n	INTERLOCK STILE		1	H-95
	GX1205n	REINFORCED INTERLOCK STILE		1	H-95
	GX1203p	TOP AND BOTTOM RAIL		4	L/2 - 100
	GX1701	POLYAMIDE INTERLOCK		2	H-95
	GX1700	POLYAMIDE COVER		2 2	H-56 L-56
	GX1130	ALUMINIUM TRACK		2	L-108.5
ACCESSORIES	GX1135n	WEATHER BAR		1	L-30
	GX1511	DRAINAGE DEFLECTOR		2	
	FX510a	CORNER CLEAT		4	
	GX1502	SCREW 4.8x45		8	
	GX1504	JAMB STILE END PLUG SET		2	
	GX1505	INTERLOCK STILE END PLUG SET		2	
	GX1507	REINFORCED INTERLOCK CAP SET		1	
	GX1506	INTERLOCK STILE GUIDE		4	
	GX1608	WOOLPILE BLOCK SET		1	
	GX1509	GX1101 AND GX1103 CONDENSATION CHANNEL END CAP SET		1	
	GX1811	ADJUSTABLE ROLLER		4	
	GX1515	TRACK CORNER ALIGNMENT BLOCK		4	
	GX1606	PLUG		3	
	GX1513	LEAF STOP		2	
	GX1500	WEATHER BAR SCREW		1/300mm	
	GX1600	BRUSH PILE		6H+4L*	
	GX1602	20mm GLAZING GASKET		4H+2L*	
	GX1804	FINGER PULL SINGLE LOCK		2	
	GX1812	KEEP FOR CLOSED TRACK		2	
	GX1814	CENTRING STOP		2	

GLAZING SIZES
H - 227mm L/2 - 113mm
Or sightline method l + 27mm h + 23mm

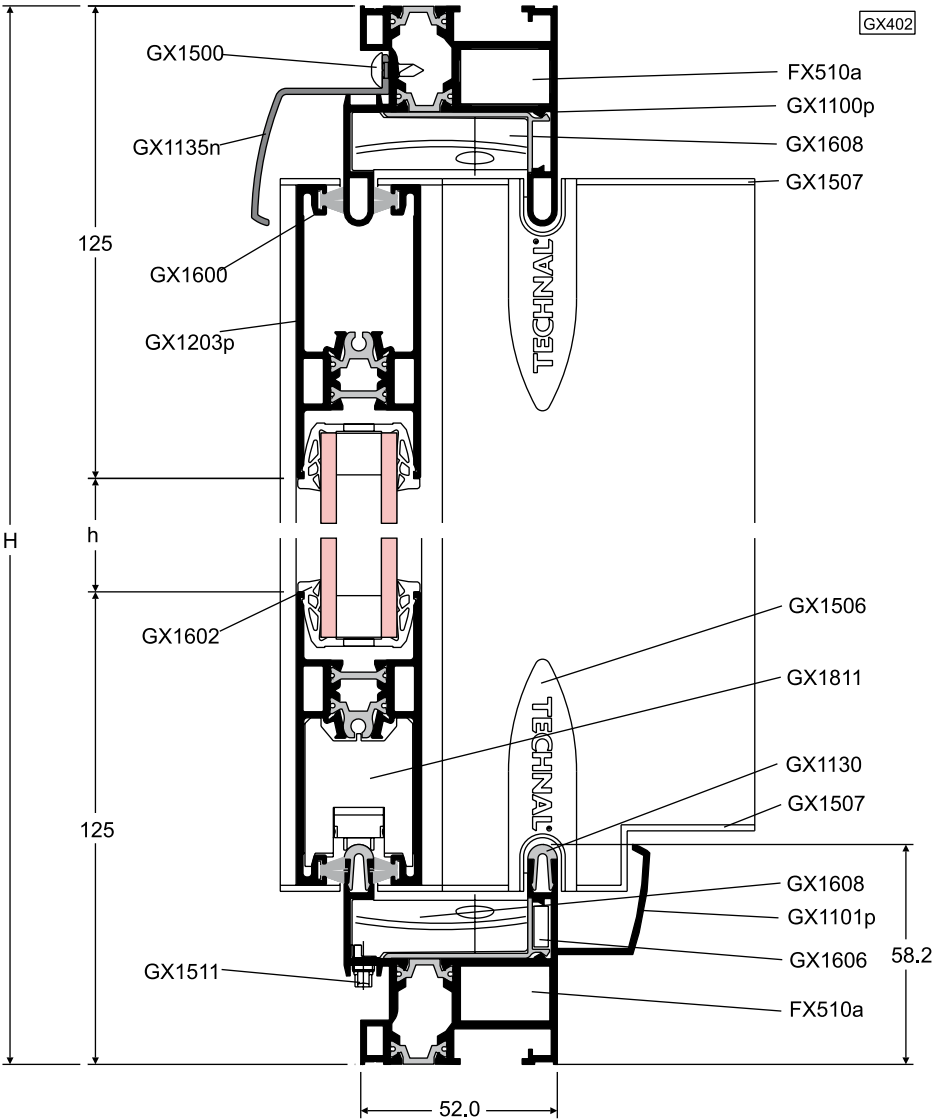


\*QTY REQUIRED - NOT CUTTING SIZE

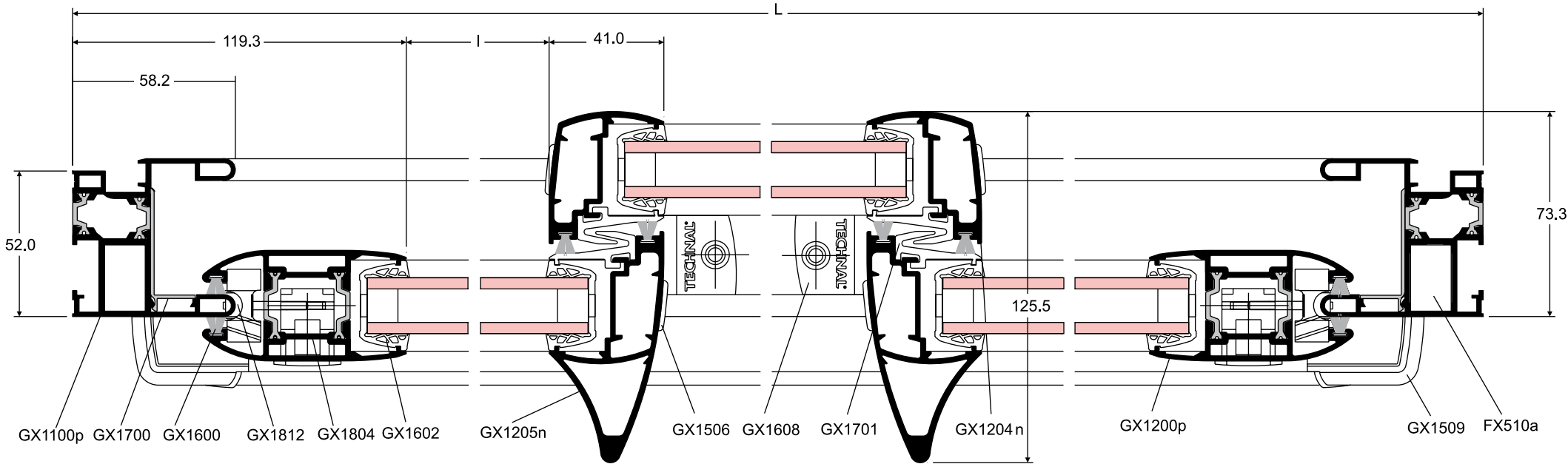
3 LEAF - CENTRAL LEAF ON EXTERNAL TRACK

SECTIONS	REF	DESCRIPTION	PREPARATION	QTY	CUTTING	GLAZING SIZES
	GX1101p	OPEN TRACK OUTER FRAME WITH CONDENSATION CHANNEL		1	L	
	GX1100p	CLOSED TRACK OUTER FRAME		2	H	
				1	L	
	GX1200p	JAMB STILE		2	H-95	
	GX1204n	INTERLOCK STILE		2	H-95	
	GX1205n	REINFORCED INTERLOCK STILE		2	H-95	
	GX1203p	TOP AND BOTTOM RAIL		6	L/3-67.5	
	GX1701	POLYAMIDE INTERLOCK		4	H-95	
	GX1700	POLYAMIDE COVER		2	H-56	
ACCESSORIES				2	L-56	
	GX1130	ALUMINIUM TRACK		2	L-108.5	H - 227mm L/3 - 80mm  Or sightline method l + 27mm h + 23mm
	GX1135n	WEATHER BAR		1	L-30	
	GX1511	DRAINAGE DEFLECTOR		2		
	FX510a	CORNER CLEAT		4		
	GX1501	SCREW 4.8x50		12		
	GX1504	JAMB STILE END PLUG SET		2		
	GX1505	INTERLOCK STILE END PLUG SET		4		
	GX1507	REINFORCED INTERLOCK CAP SET		2		
	GX1506	INTERLOCK STILE GUIDE		8		
	GX1608	WOOLPILE BLOCK SET		2		
	GX1509	GX1101 AND GX1103 CONDENSATION CHANNEL END CAP SET		1		H - 227mm L/3 - 80mm  Or sightline method l + 27mm h + 23mm
	GX1811	ADJUSTABLE ROLLER		6		
	GX1515	TRACK CORNER ALIGNMENT BLOCK		4		
	GX1606	PLUG		4		
	GX1513	LEAF STOP		4		
	GX1500	WEATHER BAR SCREW		1/300mm		
	GX1600	BRUSH PILE		8H+4L *		
	GX1602	20mm GLAZING GASKET		6H+2L *		
	GX1804	FINGER PULL SINGLE LOCK		2		
	GX1812	KEEP FOR CLOSED TRACK		2		
	GX1814	CENTRING STOP		2		

\*QTY REQUIRED - NOT CUTTING SIZE



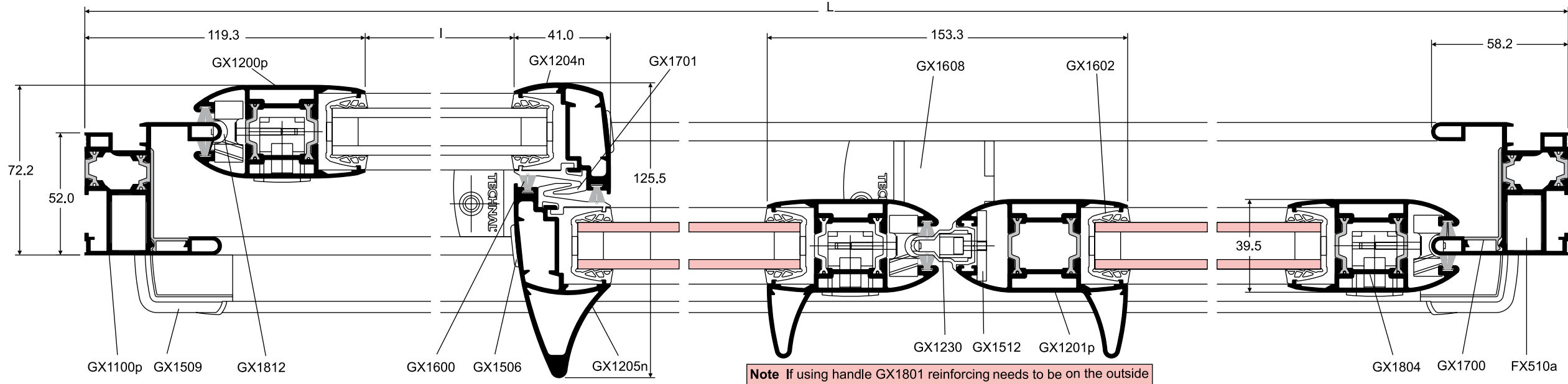
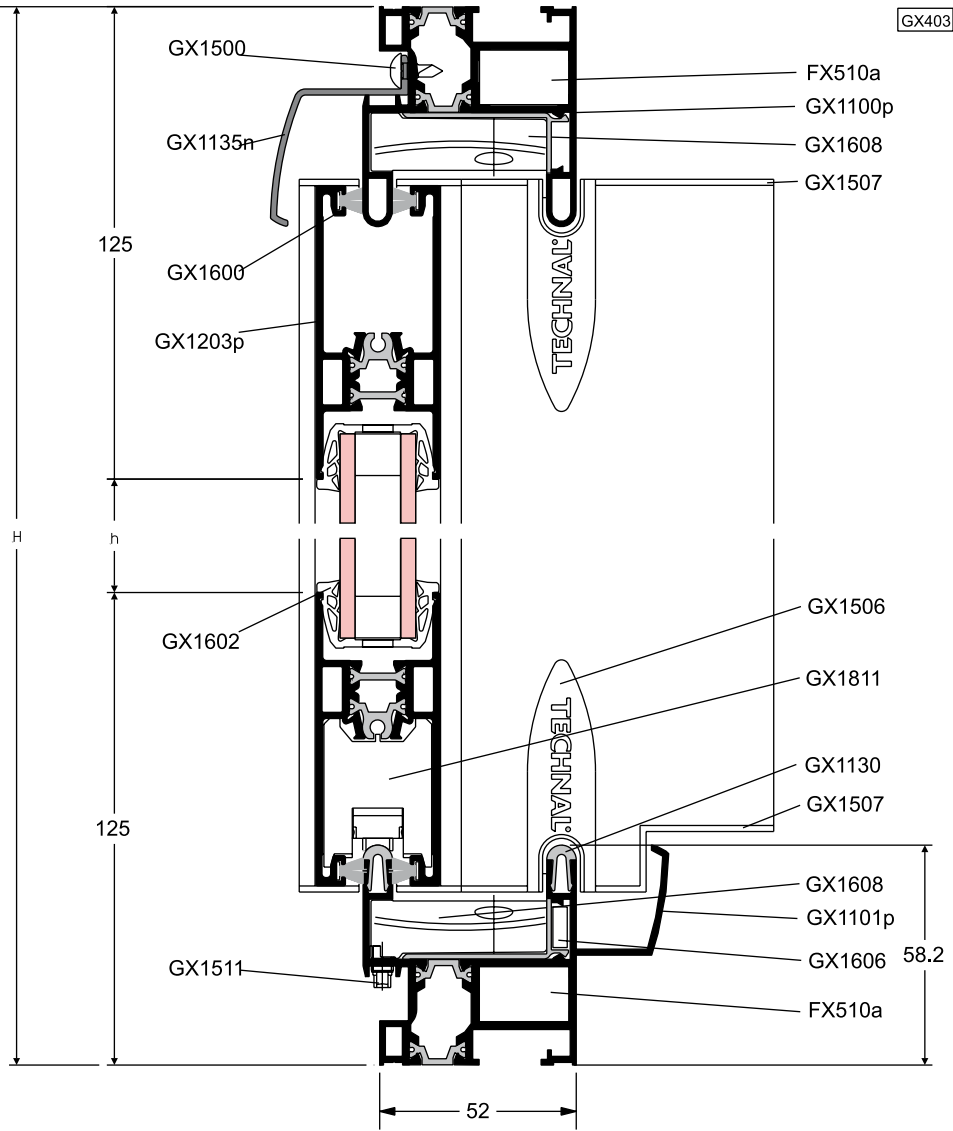
5.015



3 LEAF - LEFT HAND LEAF ON EXTERNAL TRACK

SECTIONS	REF	DESCRIPTION	PREPARATION	QTY	CUTTING
	GX1101p	OPEN TRACK OUTER FRAME WITH CONDENSATION CHANNEL		1	L
	GX1100p	CLOSED TRACK OUTER FRAME		2	H
	GX1200p	JAMB STILE		2	H-95
	GX1201p	REINFORCED JAMB STILE		2	H-95
	GX1204n	INTERLOCK STILE		1	H-95
	GX1205n	REINFORCED INTERLOCK STILE		1	H-95
	GX1203p	TOP AND BOTTOM RAIL		6	L/3-104.5
	GX1701	POLYAMIDE INTERLOCK		2	H-95
	GX1700	POLYAMIDE COVER		2	H-56
	GX1130	ALUMINIUM TRACK		2	L-108.5
	GX1135n	WEATHER BAR		1	L-30
	GX1230n	MEETING STILE ADAPTOR		1	H-95
ACCESSORIES	GX1511	DRAINAGE DEFLECTOR		2	
	FX510a	CORNER CLEAT		4	
	GX1501	SCREW 4.8x50		12	
	GX1504	JAMB STILE END PLUG SET		4	
	GX1508	REINFORCED JAMB STILE CAP SET		2	
	GX1505	INTERLOCK STILE END PLUG SET		2	
	GX1507	REINFORCED INTERLOCK CAP SET		1	
	GX1506	INTERLOCK STILE GUIDE		4	
	GX1608	WOOLPILE BLOCK SET		2	
	GX1509	GX1101 AND GX1103 CONDENSATION CHANNEL END CAP SET		1	
	GX1811	ADJUSTABLE ROLLER		6	
	GX1515	TRACK CORNER ALIGNMENT BLOCK		4	
	GX1606	PLUG		3	
	GX1513	LEAF STOP		2	
	GX1500	WEATHER BAR SCREW		1/300mm	
	GX1600	BRUSH PILE		8H+4L*	
	GX1602	20mm GLAZING GASKET		6H+2L*	
	GX1804	FINGER PULL LOCK SINGLE LOCK		3	
	GX1812	KEEP FOR CLOSEDTRACK		3	
	GX1814	CENTRING STOP		3	

GLAZING SIZES
H - 227mm L/3 - 117.5mm
Or sightline method l + 27mm h + 23mm

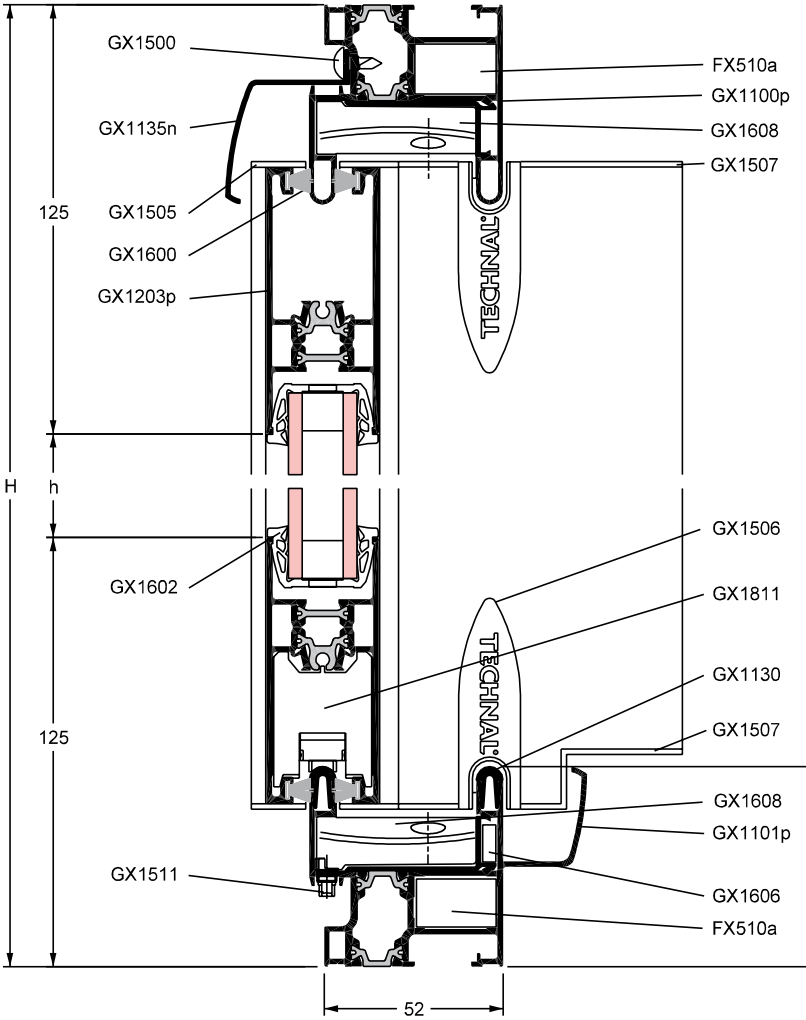


Note If using handle GX1801 reinforcing needs to be on the outside

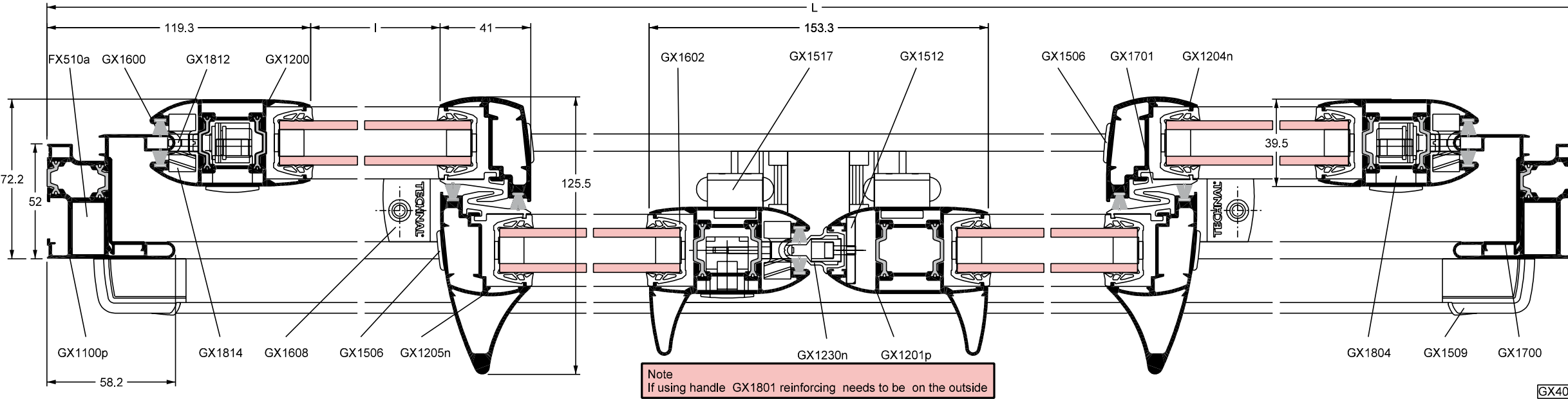
4 LEAF - OUTER LEAVES ON EXTERNAL TRACK

SECTIONS	REF	DESCRIPTION	PREPARATION	QTY	CUTTING
	GX1101p	OUTER FRAME SILL SECTION		1	L
	GX1100p	CLOSED TRACK OUTER FRAME		2	H
				1	L
	GX1200p	JAMB STILE		2	H-95
	GX1201p	REINFORCED JAMB STILE		2	H-95
	GX1204n	INTERLOCK STILE		2	H-95
	GX1205n	REINFORCED INTERLOCK STILE		2	H-95
	GX1203p	TOP AND BOTTOM RAIL		8	L/4-79
	GX1701	POLYAMIDE INTERLOCK		4	H-95
	GX1700	POLYAMIDE COVER		2	H-56
				2	L-56
	GX1130	ALUMINIUM TRACK		2	L-108.5
	GX1135n	WEATHER BAR		1	L-30
	GX1230n	MEETING STILE ADAPTOR		1	H-95
ACCESSORIES	GX1511	DRAINAGE DEFLECTOR		4	
	FX510a	CORNER CLEAT		4	
	GX1501	SCREW 4.8x50		16	
	GX1504	JAMB STILE END PLUG SET		4	
	GX1508	REINFORCED JAMB STILE CAP SET		2	
	GX1505	INTERLOCK STILE END PLUG SET		4	
	GX1507	REINFORCED INTERLOCK CAP SET		2	
	GX1506	INTERLOCK STILE GUIDE		8	
	GX1608	WOOLPILE BLOCK SET		2	
	GX1517	LEAF RESTRICTOR		1	
	GX1509	GX1101 AND GX1103 CONDENSATION CHANNEL END CAP SET		1	
	GX1811	ADJUSTABLE ROLLER		8	
	GX1515	TRACK CORNER ALIGNMENT BLOCK		4	
	GX1606	PLUG		4	
	GX1513	LEAF STOP		4	
	GX1500	WEATHER BAR SCREW		1/300mm	
	GX1512	FIXING FOR MEETING STILE ADAPTOR		5	
	GX1600	BRUSH PILE		10H+4L*	
	GX1602	20mm GLAZING GASKET		8H+2L*	
	GX1804	FINGER PULL SINGLE LOCK		3	
	GX1812	KEEP FOR CLOSED TRACK		3	
	GX1814	CENTRING STOP		3	

GLAZING SIZES
H - 227mm L/4 - 92mm
Or sightline method l + 27mm h + 23mm



\*QTY REQUIRED - NOT CUTTING SIZE



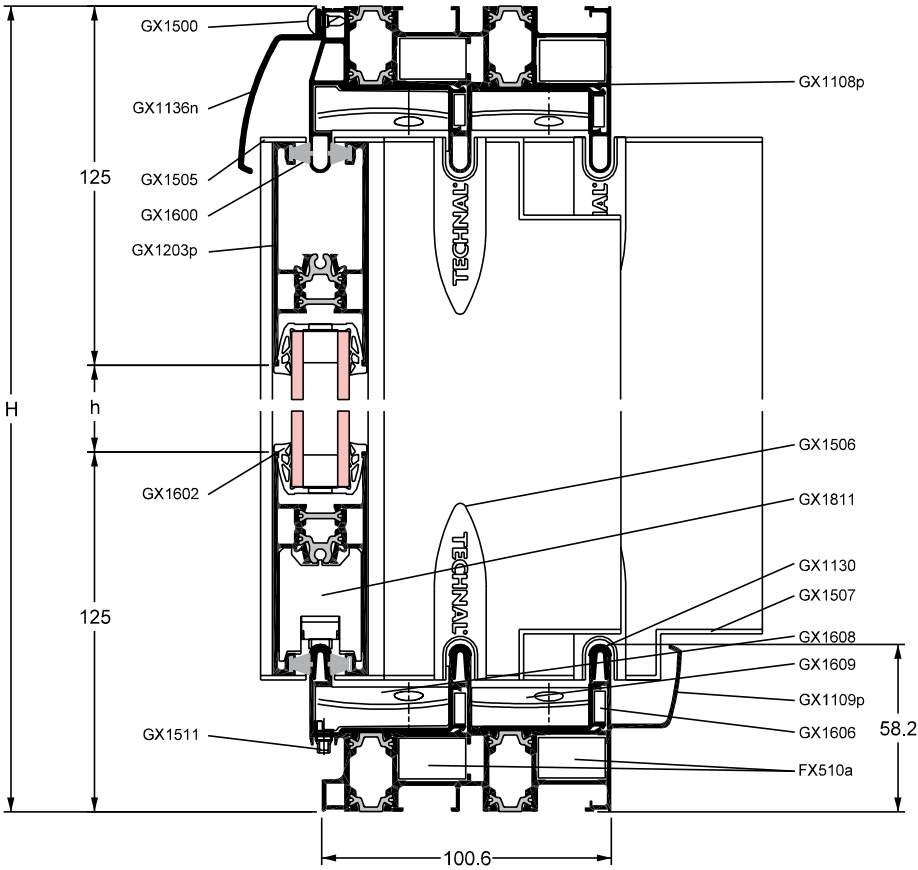
Note  
If using handle GX1801 reinforcing needs to be on the outside

GX40

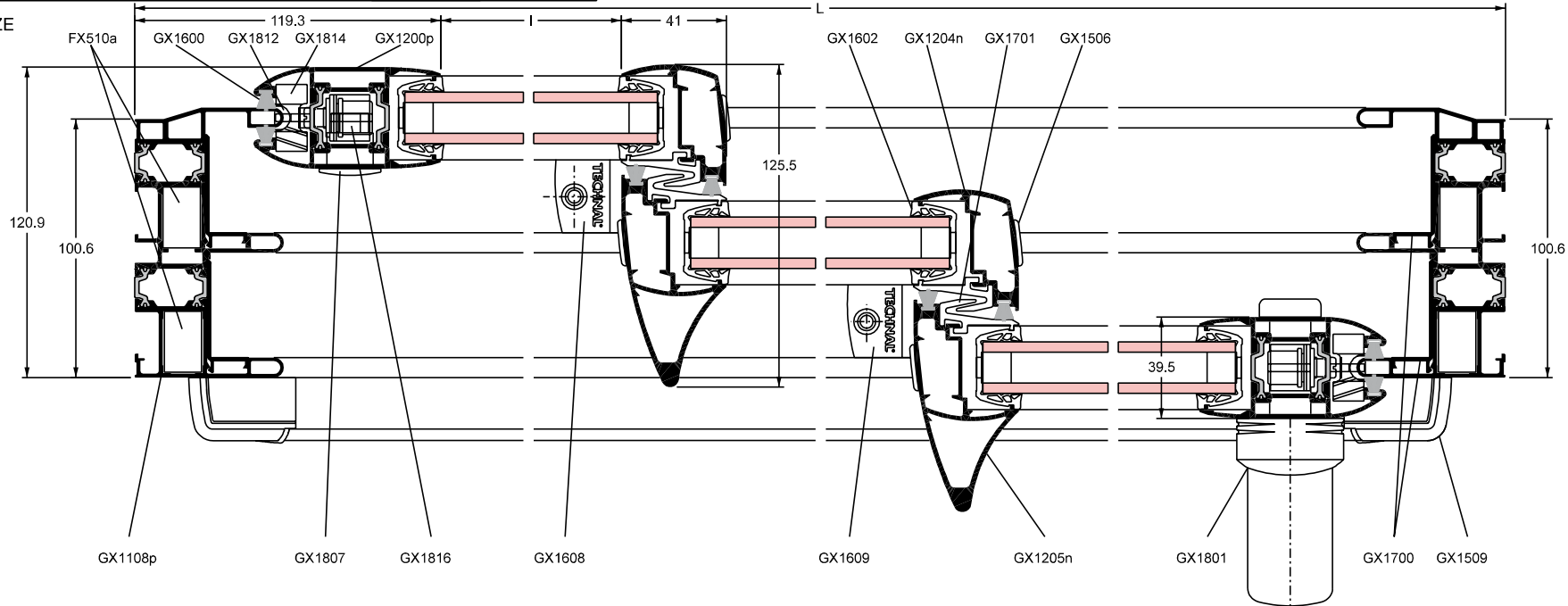


3 LEAF, 3 TRACKS - LEFT HAND LEAF ON EXTERNAL TRACK

REF	DESCRIPTION	PREPARATION	QTY	CUTTING	GLAZING SIZES
SECTIONS	GX1109p	OPEN TRACK OUTER FRAME WITH CONDENSATION CHANNEL	1	L	H - 227mm L/3 - 80mm  Or sightline method l + 27mm h + 23mm
	GX1108p	CLOSED TRACK OUTER FRAME	2 1	H L	
	GX1200p	JAMB STILE	2	H-95	
	GX1204n	INTERLOCK STILE	2	H-95	
	GX1205n	REINFORCED INTERLOCK STILE	2	H-95	
	GX1203p	TOP AND BOTTOM RAIL	6	L/3-67.5	
	GX1701	POLYAMIDE INTERLOCK	4	H-95	
	GX1700	POLYAMIDE COVER	2	H-55.2	
			2	H-56.6	
			2	L-55.2	
			2	L-56.6	
ACCESSORIES	GX1130	ALUMINIUM TRACK	3	L-108.5	
	GX1136n	WEATHER BAR	1	L-30	
	GX1511	DRAINAGE DEFLECTOR	2		
	FX510a	CORNER CLEAT	8		
	GX1501	SCREW 4.8X50	12		
	GX1504	JAMB STILE END PLUG SET	2		
	GX1505	INTERLOCK STILE END PLUG SET	4		
	GX1507	REINFORCED INTERLOCK CAP SET	2		
	GX1506	INTERLOCK STILE GUIDE	8		
	GX1608	WOOLPILE BLOCK SET	1		
	GX1609	3 TRACKS WOOLPILE BLOCK SET	1		
	GX1509	CONDENSATION CHANNEL END CAP SET	1		
	GX1811	ADJUSTABLE ROLLER	6		
	GX1515	TRACK CORNER ALIGNMENT BLOCK	4		
	GX1606	PLUG	4		
	GX1513	LEAF STOP	4		
	GX1500	WEATHER BAR SCREW	1/300mm		
	GX1600	BRUSH PILE	8H+4L*		
	GX1602	20mm GLAZING GASKET	6H+2L*		
	GX1801	MULTI LOCK HANDLE	1		
	GX1807	LEVER LOCK	1		
	GX1816	4 POINT MULTI LOCK	2		
	GX1812	KEEP FOR CLOSED TRACK	8		
	GX1814	CENTRING STOP	8		



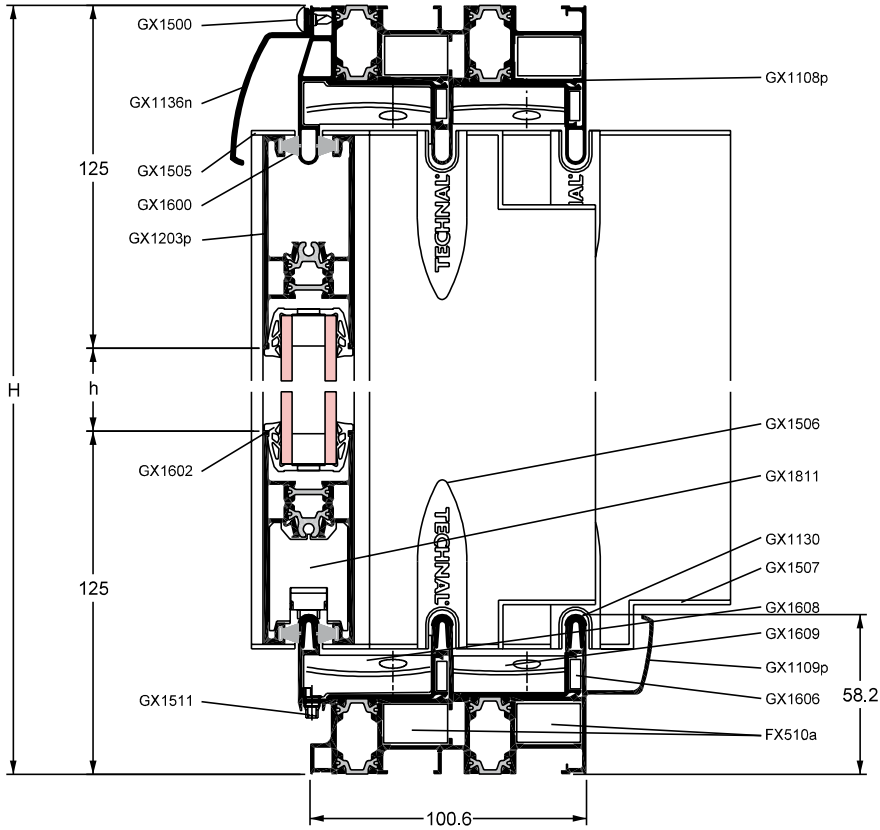
\*QTY REQUIRED - NOT CUTTING SIZE



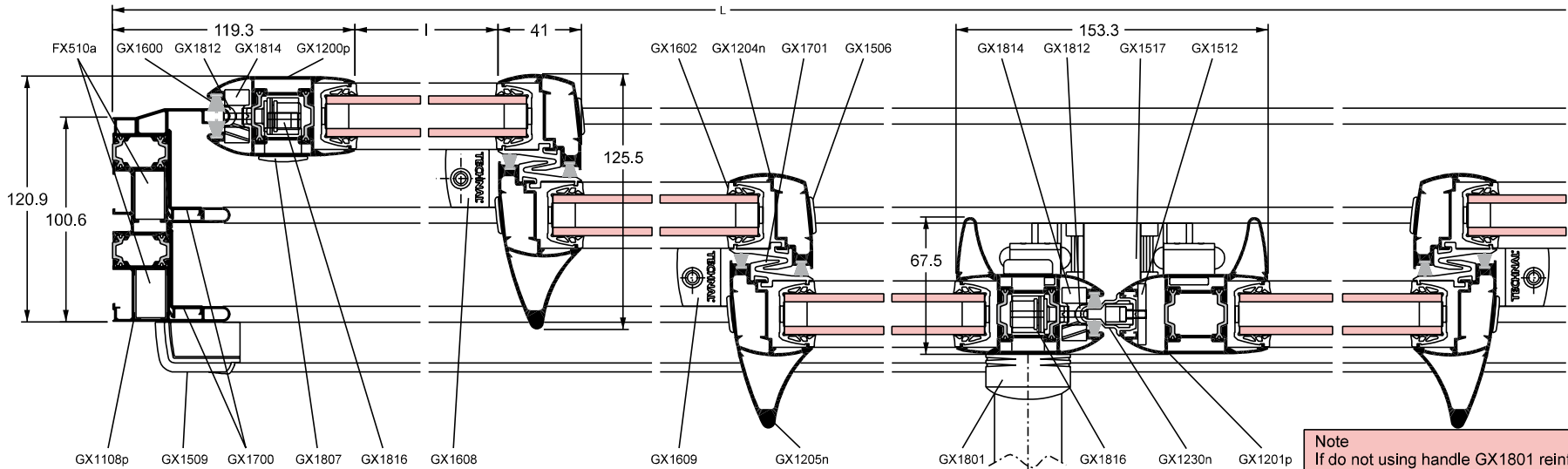
6 LEAF, 3 TRACKS - LEFT AND RIGHT HAND LEAF ON EXTERNAL TRACK

REF	DESCRIPTION	PREPARATION	QTY	CUTTING
SECTIONS	GX1109p	OPEN TRACK OUTER FRAME WITH CONDENSATION CHANNEL	1	L
	GX1108p	CLOSED TRACK OUTER FRAME	2 1	H L
	GX1200p	JAMB STILE	2	H-95
	GX1201p	REINFORCED JAMB STILE	2	H-95
	GX1204n	INTERLOCK STILE	4	H-95
	GX1205n	REINFORCED INTERLOCK STILE	4	H-95
	GX1203p	TOP AND BOTTOM RAIL	12	L/6-53.5
	GX1230n	MEETING STILE ADAPTOR	1	H-95
	GX1701	POLYAMIDE INTERLOCK	8	H-95
	GX1700	POLYAMIDE COVER	2 2 2 2	H-55.2 H-56.6 L-55.2 L-56.6
ACCESSORIES	GX1130	ALUMINIUM TRACK	3	L-108.5
	GX1136n	WEATHER BAR	1	L-30
	GX1511	DRAINAGE DEFLECTOR	4	
	FX510a	CORNER CLEAT	8	
	GX1501	SCREW 4.8X50	24	
	GX1504	JAMB STILE END PLUG SET	4	
	GX1505	INTERLOCK STILE END PLUG SET	8	
	GX1507	REINFORCED INTERLOCK CAP SET	4	
	GX1508	REINFORCED JAMB CAP SET	2	
	GX1506	INTERLOCK STILE GUIDE	16	
	GX1608	WOOLPILE BLOCK SET	2	
	GX1609	3 TRACKS WOOLPILE BLOCK SET	2	
	GX1517	LEAF RESTRICTOR	1	
	GX1512	FIXING FOR MEETING STILE ADAPTOR	6	
	GX1509	CONDENSATION CHANNEL END CAP SET	1	
	GX1811	ADJUSTABLE ROLLER	12	
	GX1515	TRACK CORNER ALIGNMENT BLOCK	4	
	GX1606	PLUG	8	
	GX1513	LEAF STOP	8	
	GX1500	WEATHER BAR SCREW	1/300mm	
	GX1600	BRUSH PILE	14H+4L*	
	GX1602	20mm GLAZING GASKET	12H+2L*	
	GX1801	MULTI LOCK HANDLE	1	
	GX1807	LEVER LOCK	2	
	GX1816	4 POINT MULTI LOCK	3	
	GX1812	KEEP FOR CLOSED TRACK	12	
	GX1814	CENTRING STOP	12	

GLAZING SIZES
H - 227mm L/6 - 66.5mm
Or sightline method l + 27mm h + 23mm



\*QTY REQUIRED - NOT CUTTING SIZE

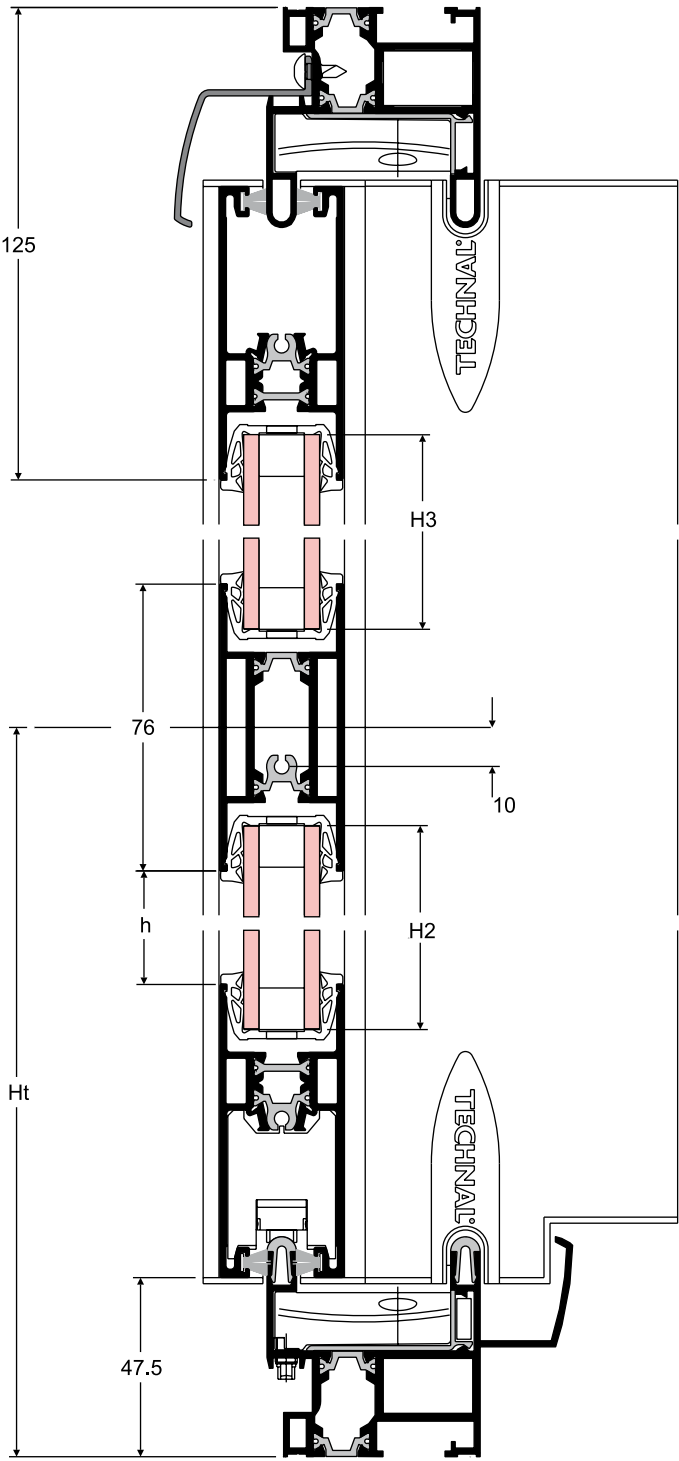


Note  
If do not using handle GX1801 reinforcing can be on the inside

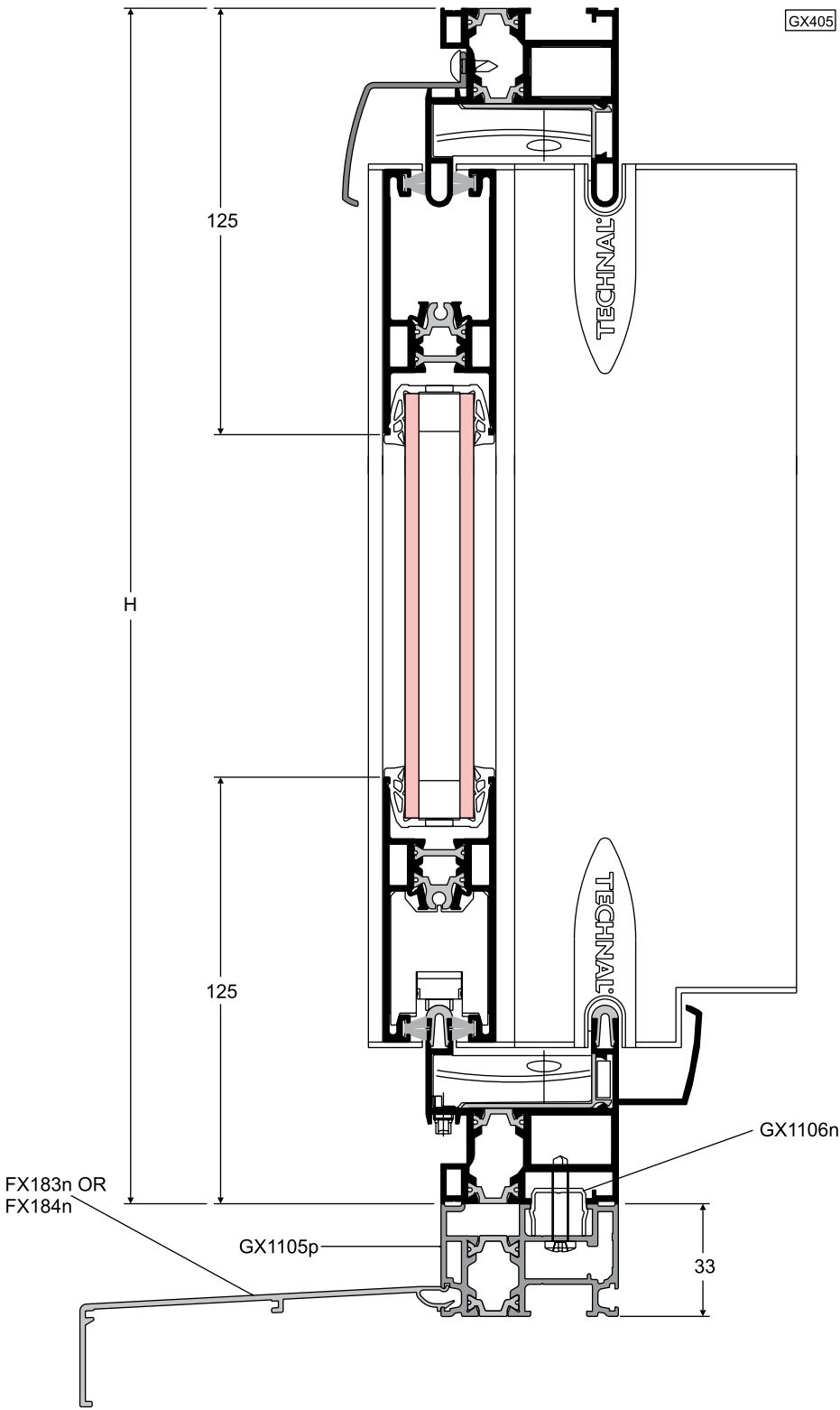
GX408b

GX1207p MID RAIL - GX1105p SUB CILL

GLAZING Ht WITH MIDRAIL  
H2=Ht - 140  
H3=H - Ht - 140  
WHERE Ht IS TO MIDRAIL CL



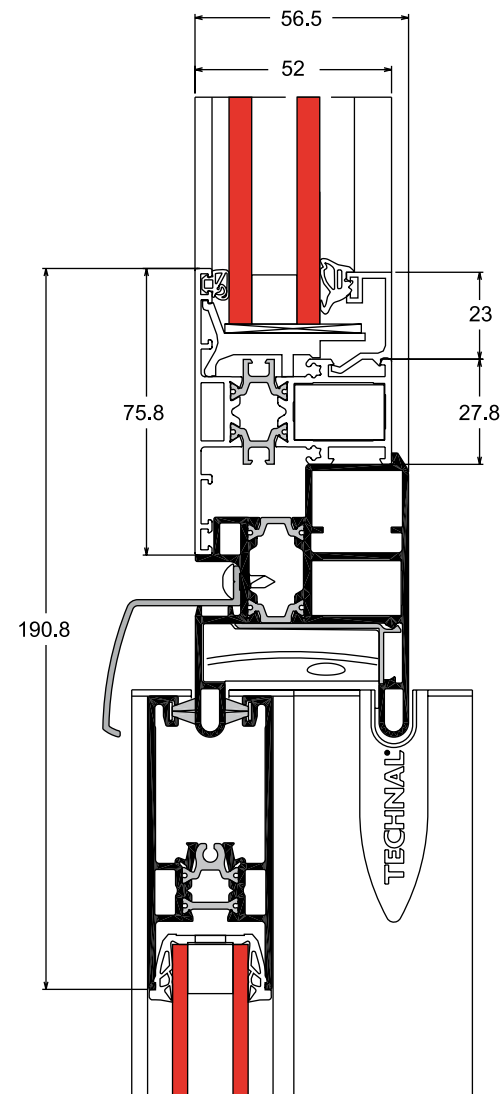
REF	DESCRIPTION	PREPARATION	QTY	CUTTING
GX1207p	MID RAIL		1	AS TOP/BOTTOM RAIL
GX1514	FIXING SET FOR MID RAIL		1	
GX1501	LEAF ASSEMBLY SCREW 4.8x50		2	



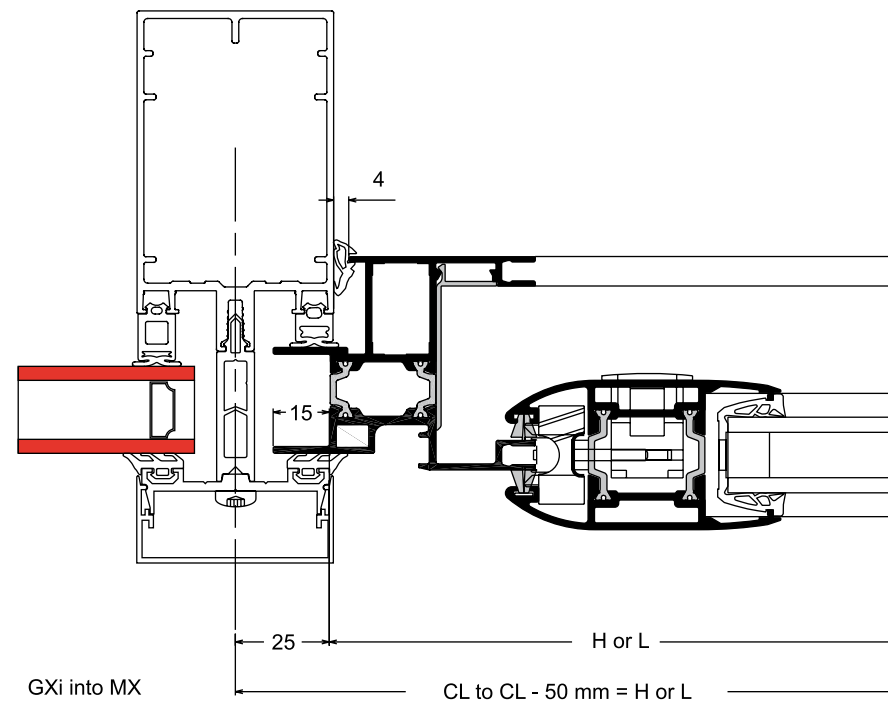
REF	DESCRIPTION	QTY	CUTTING
GX1105p	SUB CILL	1	AS OUTER FRAME W
GX1106n	LOCATION CLIP PROFILE FOR SUB SILL	1/500 +1	150mm
FX518a	ASSEMBLY SCREW SR4.2x28	1/500 +1	

## CURTAIN WALL INSERT DEDUCTIONS

5.075



GXi into FXi52

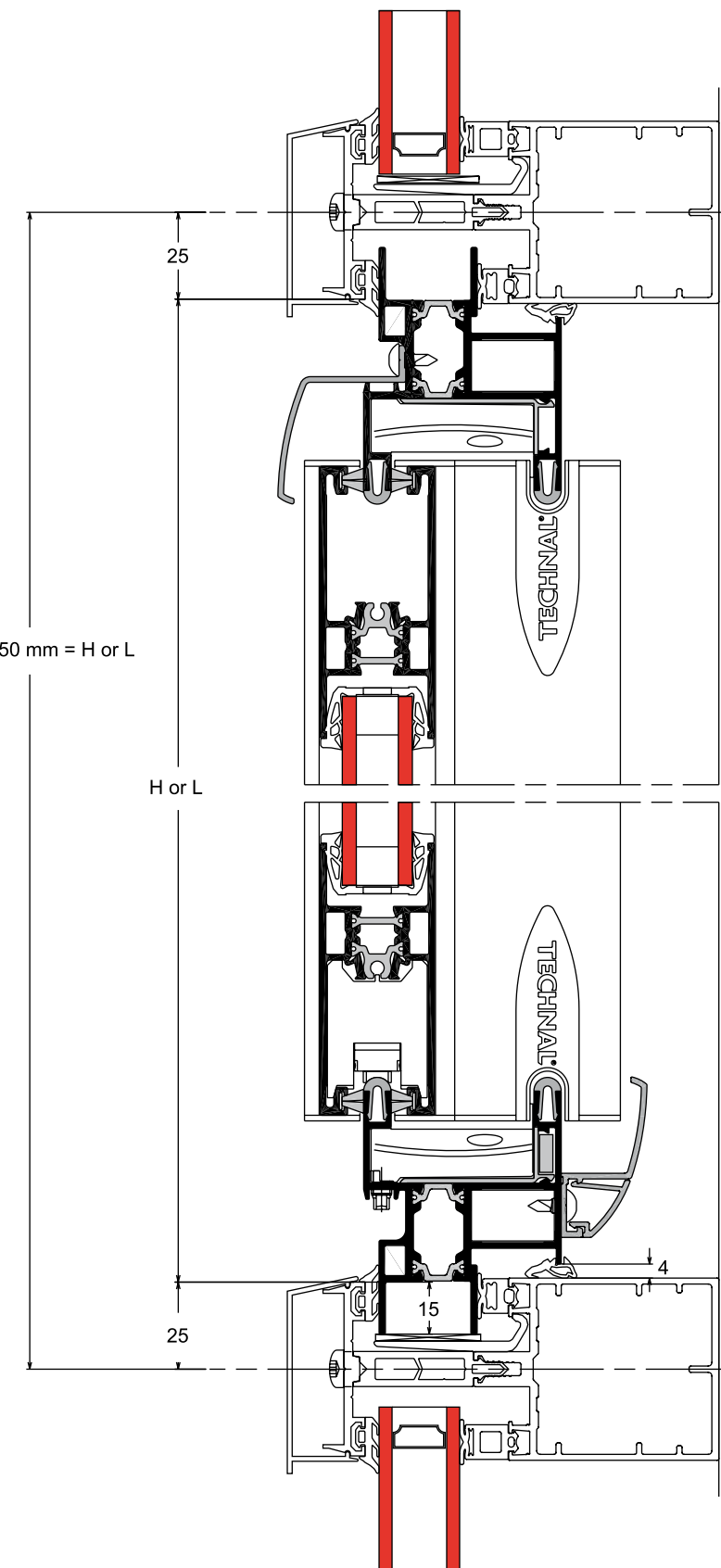


GXi into MX

CL to CL - 50 mm = H or L

5.075

CL to CL - 50 mm = H or L



GXi to MX

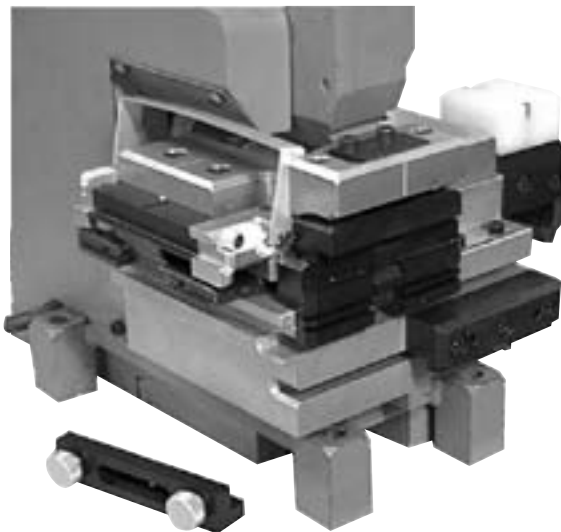
GX406b



# PERFOPACK® PUNCHING TOOLS

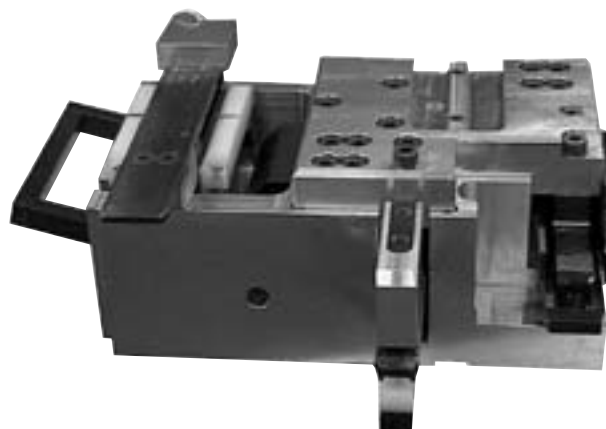
**GX1001t**

Punch Tool for Drainage



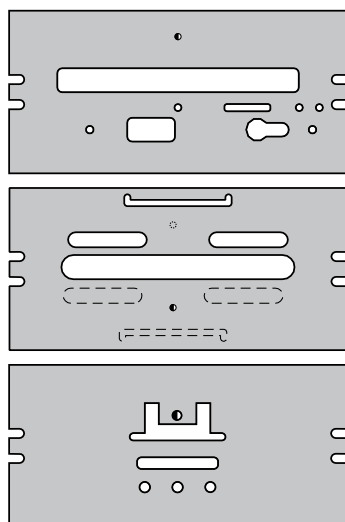
**GX1002t**

Punch Tool for Leaf Preparation



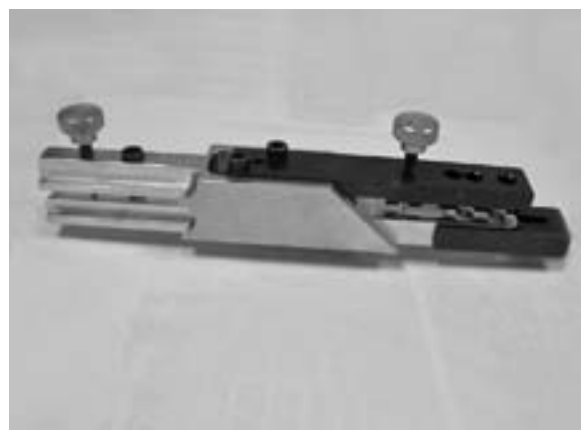
**GX1003t**

Router Template



**FX004t**

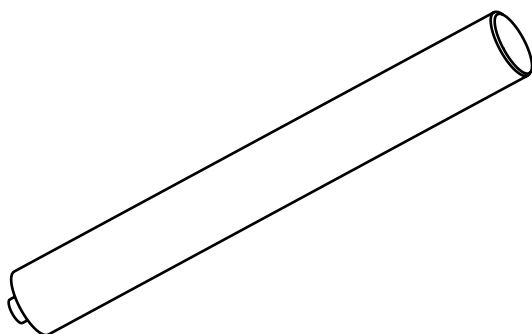
Drill Jig for Corner Cleat



6.005

**FX019t**

Pin Insertion Punch

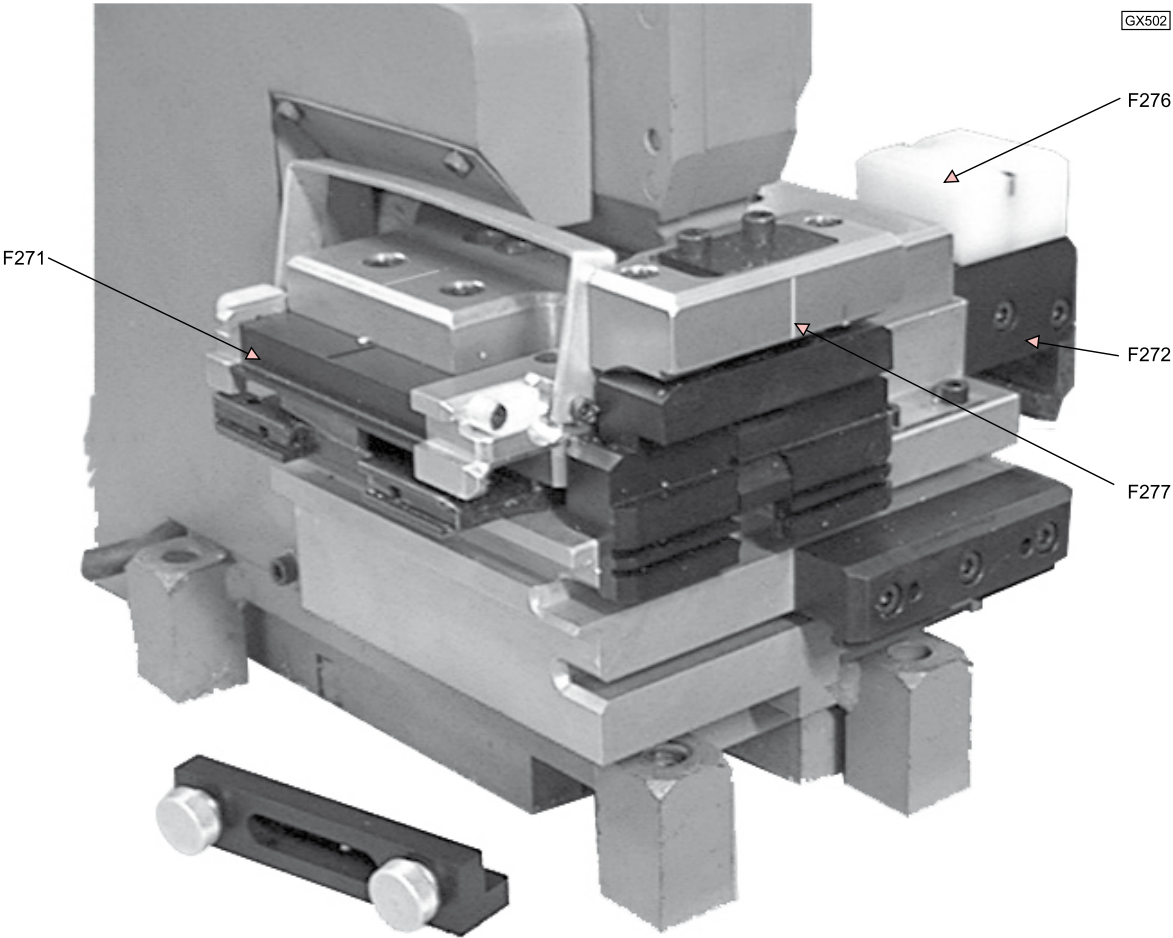


**FX023t**

Punch Tool for Corner Cleat



GX1001t PERFOPACK® PUNCHING TOOLS

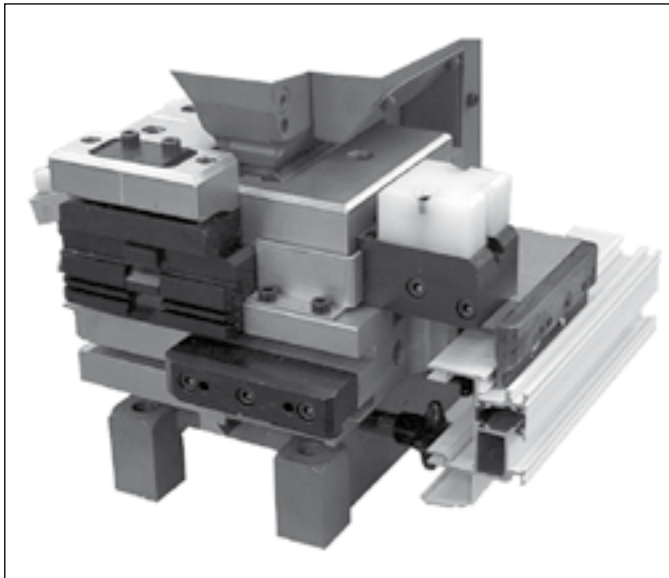
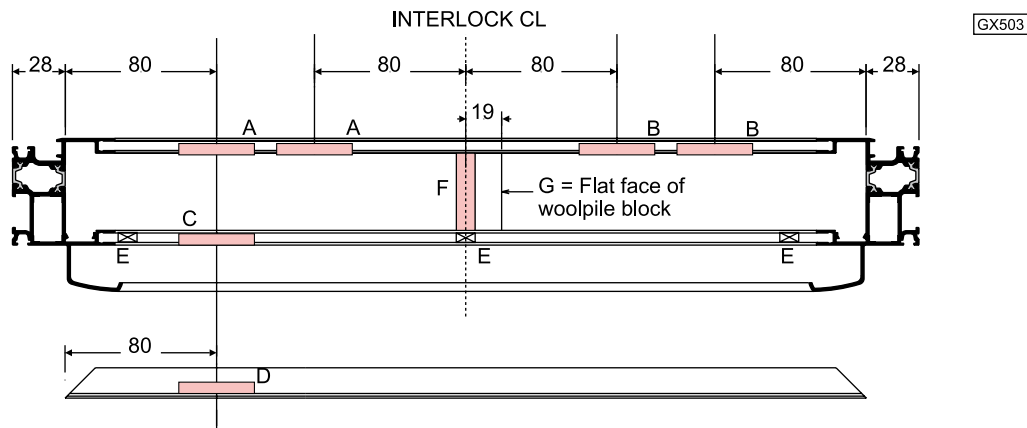


F271	SUPPORT AND PUNCH FOR GXi OUTERFRAME DRAINAGE
F272	SUPPORT AND PUNCH FOR GXi CONCEALED DRAINAGE
F276	SUPPORT AND PUNCH FOR PVC AND ALUMINIUM RAIL
F277	SUPPORT AND PUNCH FOR COVER STRIP

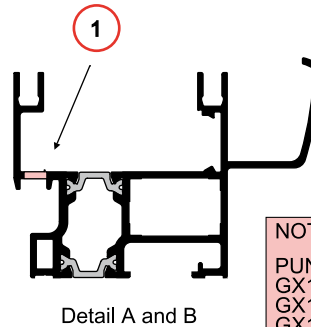
NOTE  
PUNCHES MUST BE LUBRICATED EVERY  
20 CUTTINGS USING MCW540



# GX1001t PERFOPACK® PUNCHING TOOLS



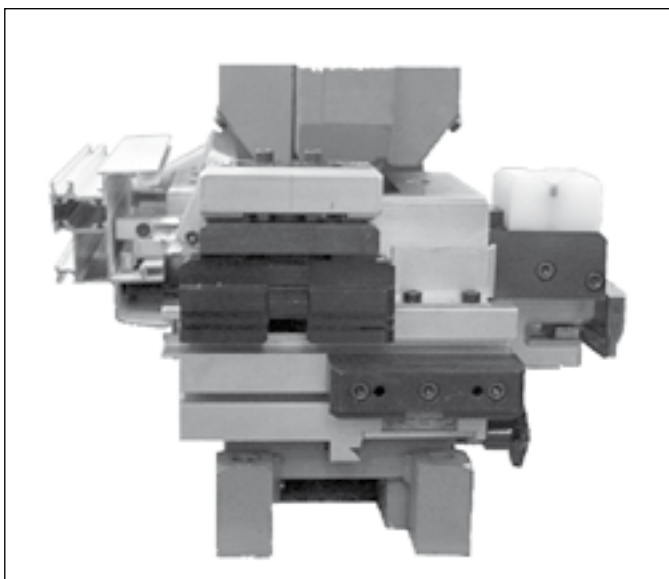
OPERATION



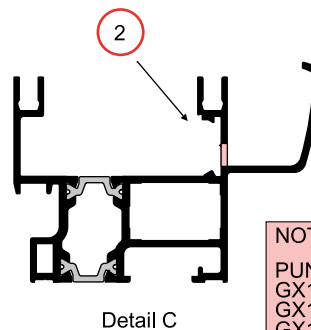
**NOTE**

PUNCHES GXi SECTIONS  
GX1100p  
GX1101p  
GX1103p  
GX1107p

6.015



OPERATION



**NOTE**

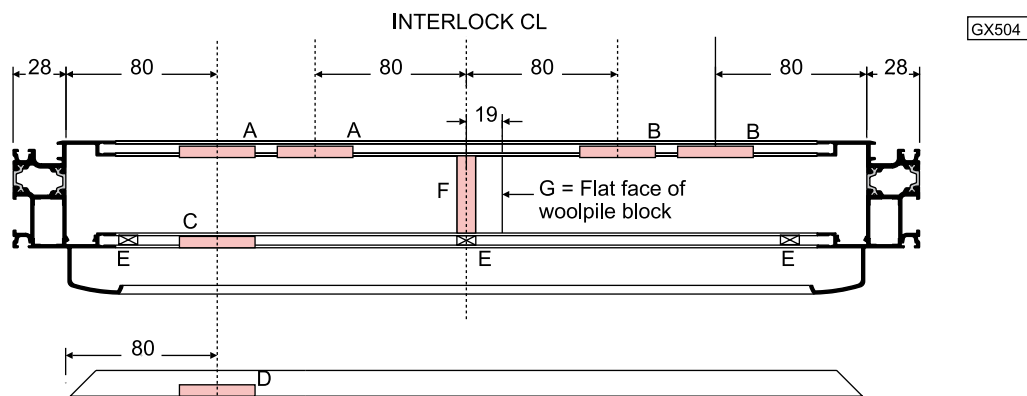
PUNCHES GXi SECTIONS  
GX1100p  
GX1101p  
GX1103p  
GX1104p  
GX1107p

**NOTE**

PUNCHES MUST BE  
LUBRICATED EVERY  
20 CUTTINGS USING  
MCW540

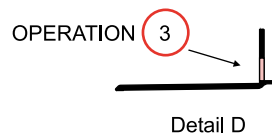
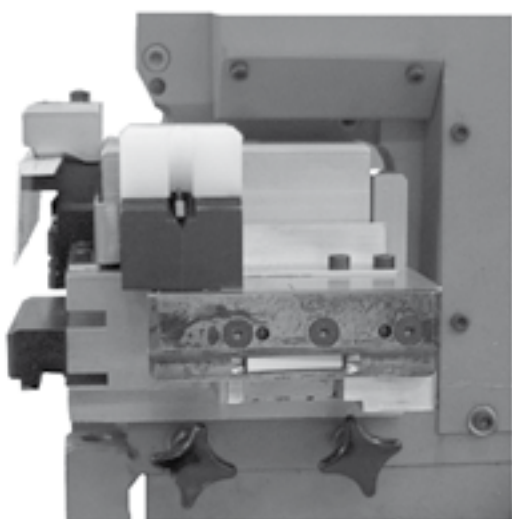


## GX1001t PERFOPACK® PUNCHING TOOLS

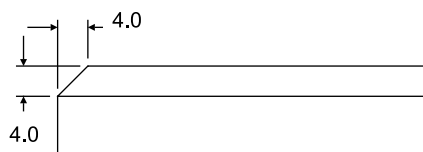


2 Leaf - Left Hand Leaf on Outside Track (see Chapter 7 for other combinations).

6.020



OPERATION 4

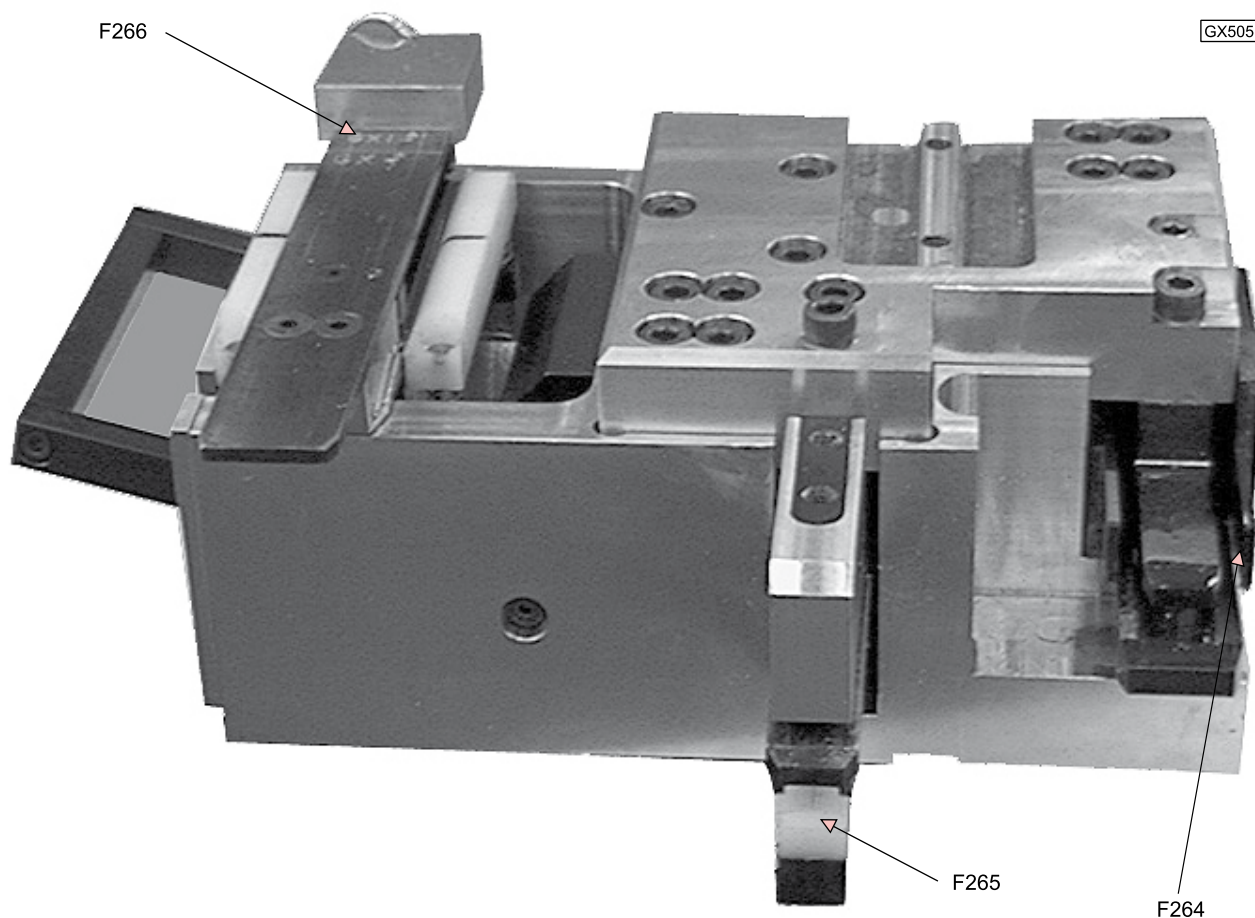


Machine aluminium track GX1130 and polyamide track GX1702 with punch tool GX1001t  
Machine Stainless steel track GX1132 manually

### NOTE

PUNCHES MUST BE LUBRICATED EVERY 20 CUTTINGS USING MCW540

# GX1002t PERFOPACK® PUNCHING TOOLS



6.025

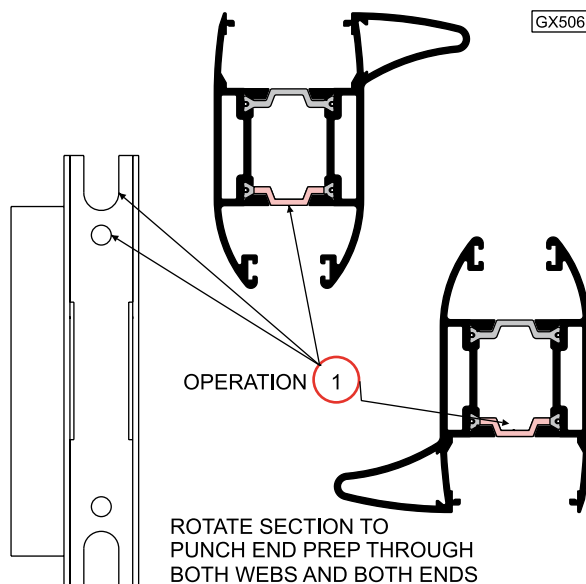
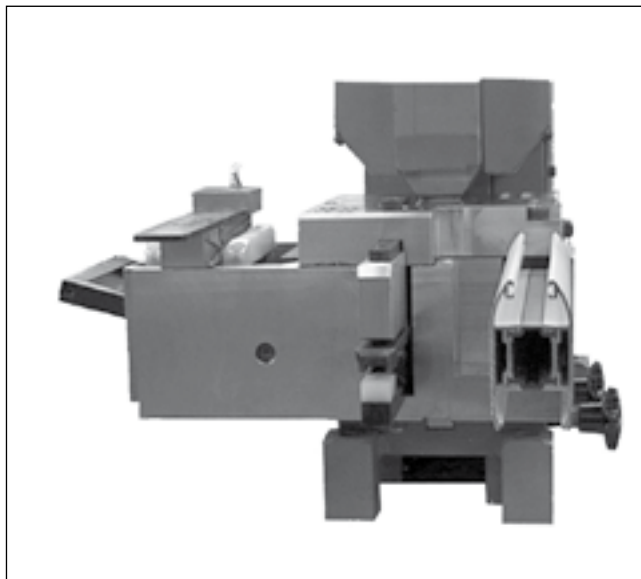
**NOTE**  
PUNCHES MUST BE LUBRICATED EVERY  
20 CUTTINGS USING MCW540

F264	SUPPORT AND PUNCH FOR JAMB STILE END PREP
F265	SUPPORT AND PUNCH FOR INTERLOCK STILE
F266	SUPPORT AND PUNCH TO REMOVE GASKET NIBS

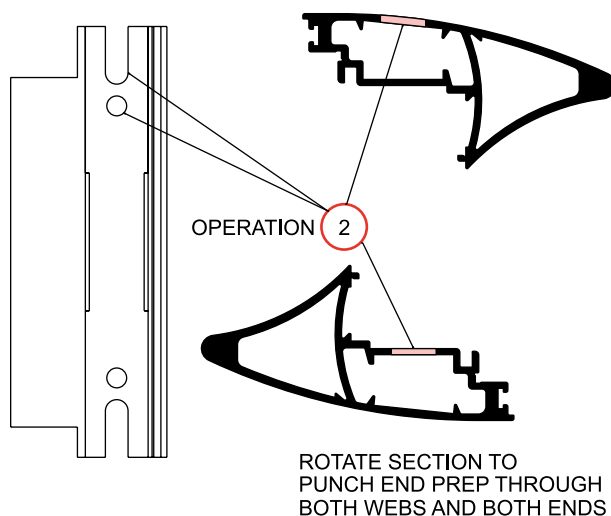
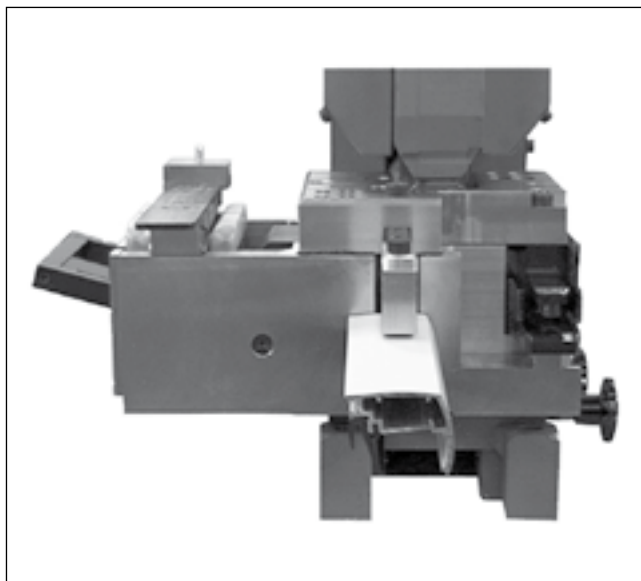
## GX1002t PERFOPACK® PUNCHING TOOLS

Use punch tool GX1002t for end preps. Reinforcement should be machined by hand see page 7.045

6.030



NOTE  
PUNCHES GXi SECTIONS  
GX1200p  
GX1201p  
GX1208p

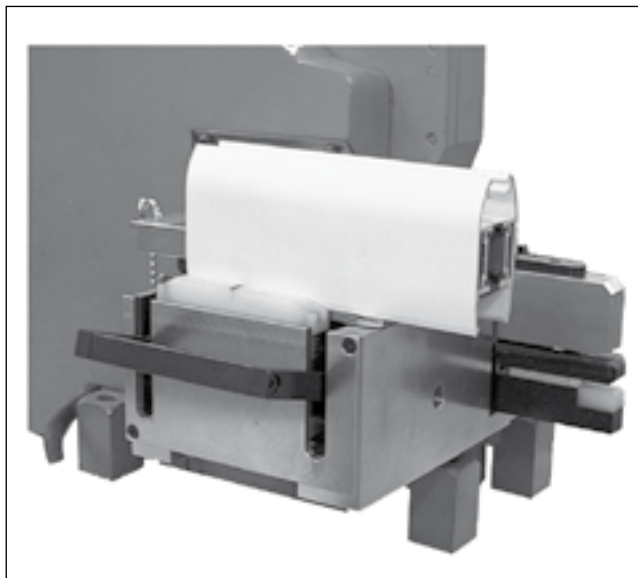


NOTE  
PUNCHES GXi SECTIONS  
GX1204n  
GX1205n  
GX1206n  
GX1209n

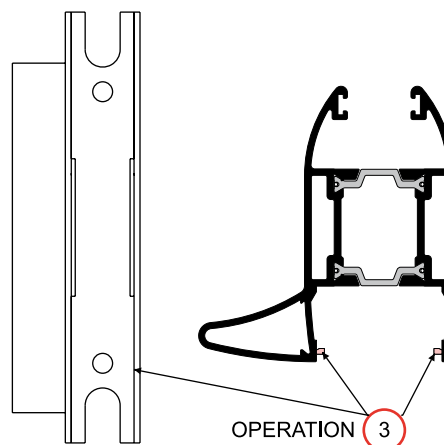
NOTE  
PUNCHES MUST BE LUBRICATED EVERY 20 CUTTINGS USING MCW540

## GX1002t PERFOPACK® PUNCHING TOOLS

Use punch tool GX1002t for end preps. Reinforcement should be machined by hand see page 7.045

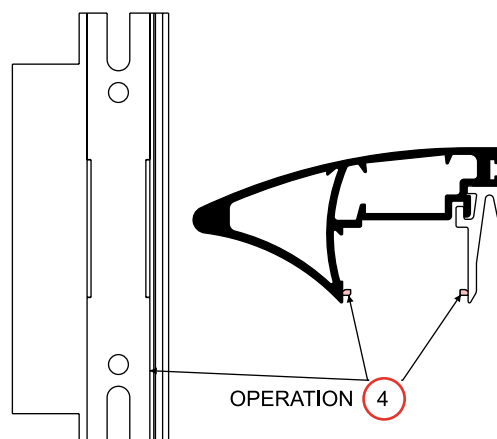
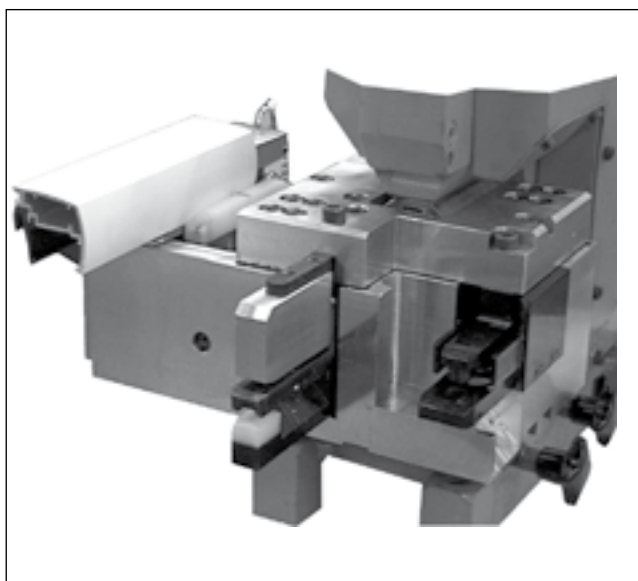


GX507



**NOTE**  
PUNCHES GXi SECTIONS  
GX1200p  
GX1201p  
GX1208p

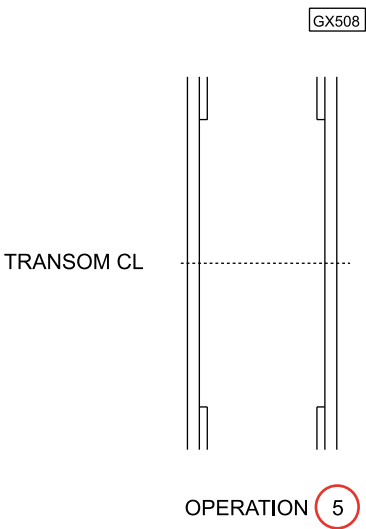
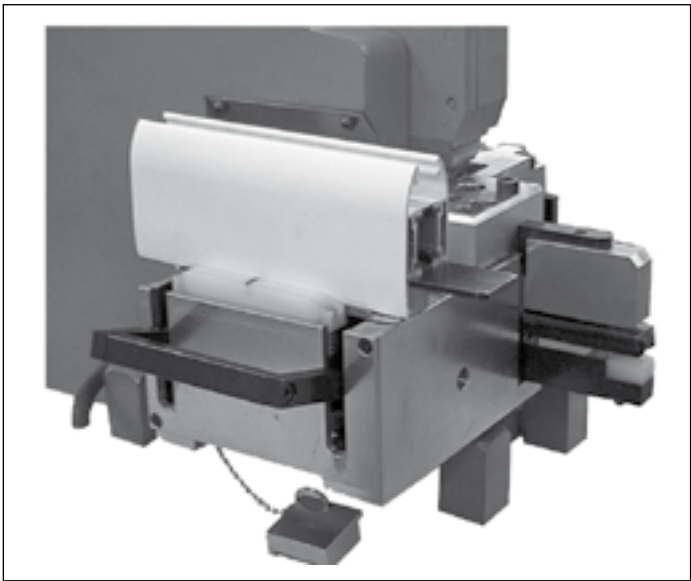
6.035



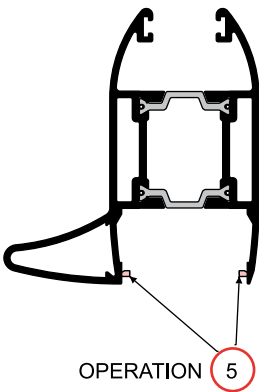
**NOTE**  
PUNCHES GXi SECTIONS  
GX1204n  
GX1205n  
GX1206n  
GX1209n

**NOTE**  
PUNCHES MUST BE LUBRICATED EVERY  
20 CUTTINGS USING MCW540

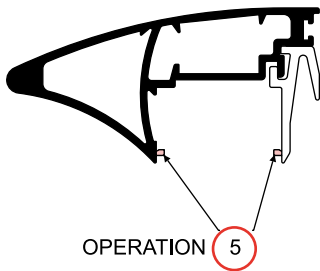
GX1002t PERFOPACK® PUNCHING TOOLS



6.040



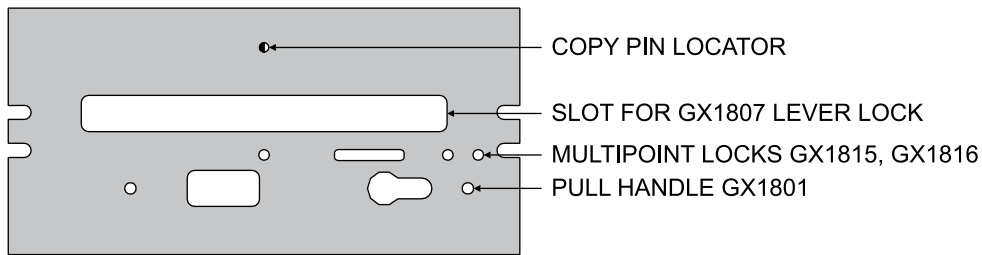
NOTE  
PUNCHES GXi SECTIONS  
GX1200p  
GX1201p  
GX1208p



NOTE  
PUNCHES GXi SECTIONS  
GX1204n  
GX1205n  
GX1206n  
GX1209n

NOTE  
PUNCHES MUST BE LUBRICATED EVERY  
20 CUTTINGS USING MCW540

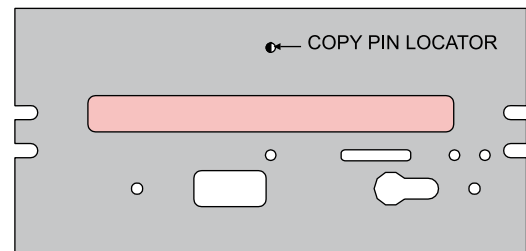
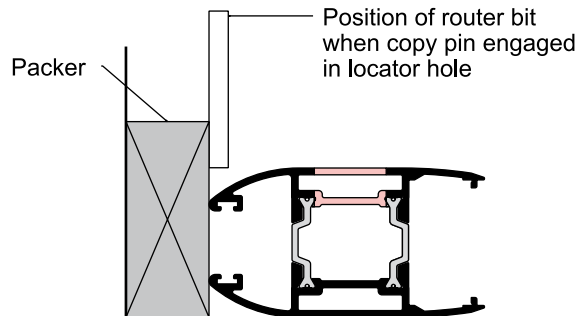
# GX1003t ROUTER TEMPLATE INSTRUCTIONS



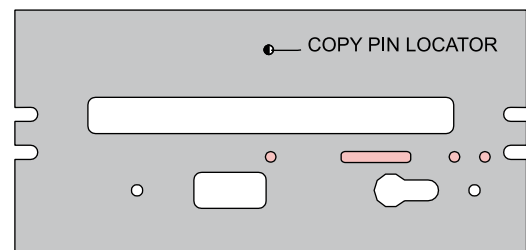
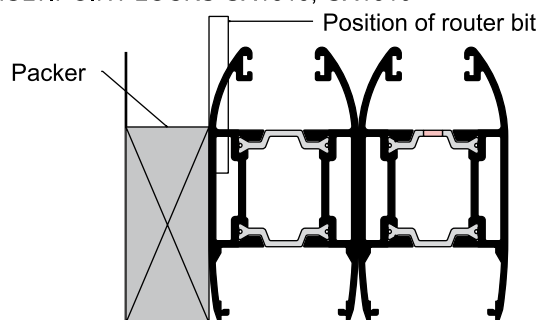
GX509

NOTE:  
5 mm ROUTER BIT,  
5 mm COPY PIN

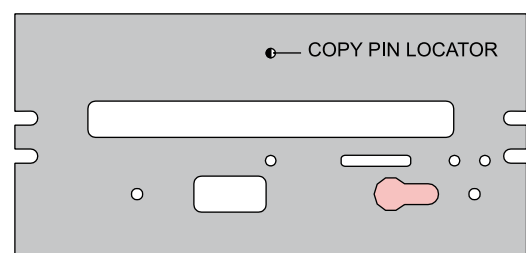
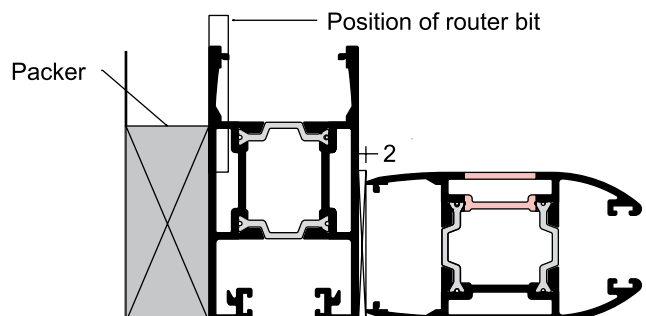
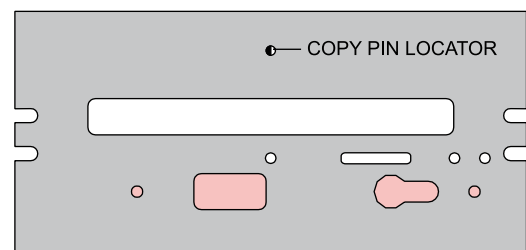
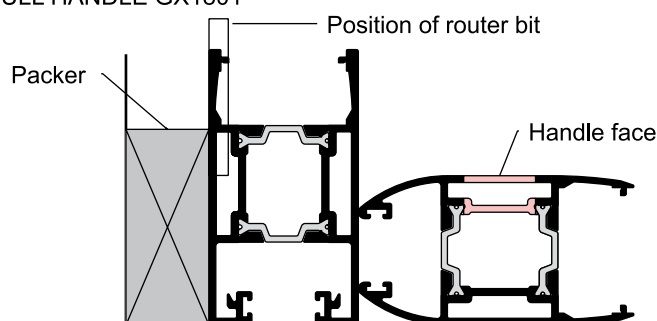
## SLOT FOR GX1807 LEVER LOCK



## MULTIPOINT LOCKS GX1815, GX1816

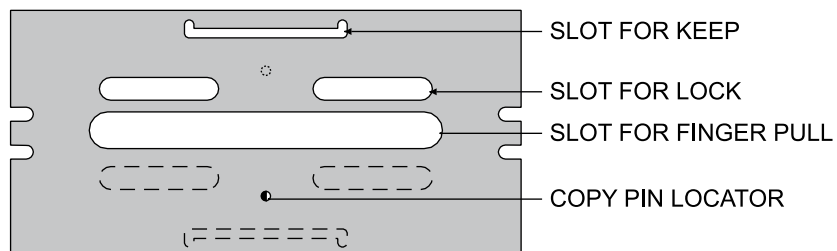


## PULL HANDLE GX1801



6.045

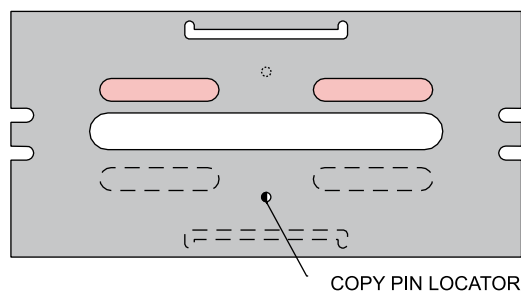
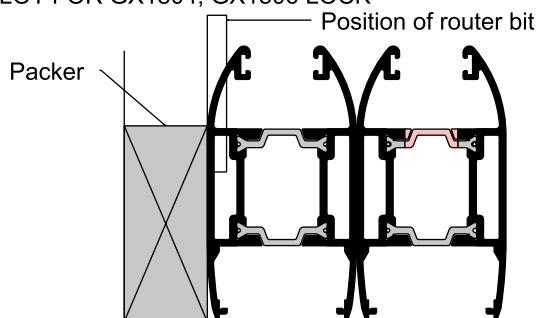
## GX1003t ROUTER TEMPLATE INSTRUCTIONS



GX510

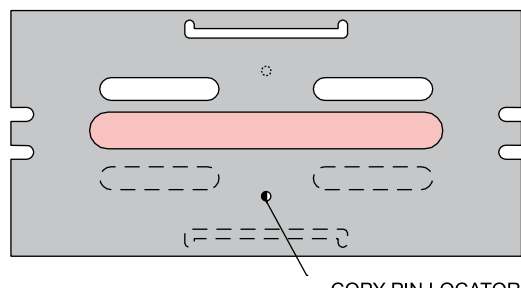
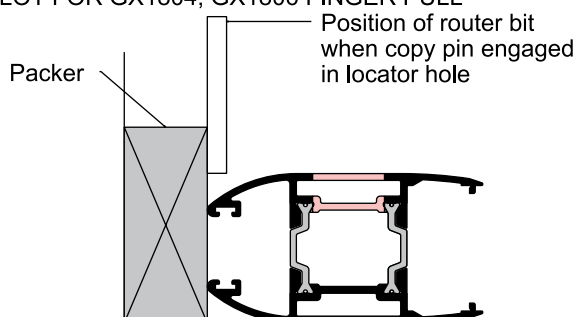
NOTE:  
5 mm ROUTER BIT,  
5 mm COPY PIN

### SLOT FOR GX1804, GX1806 LOCK

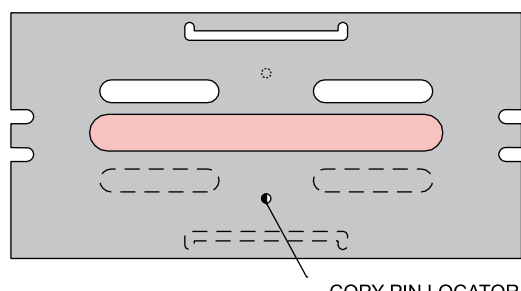
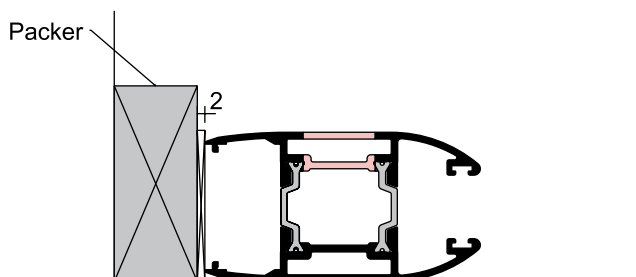


COPY PIN LOCATOR

### SLOT FOR GX1804, GX1806 FINGER PULL

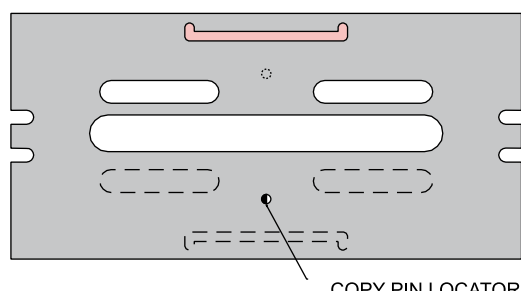
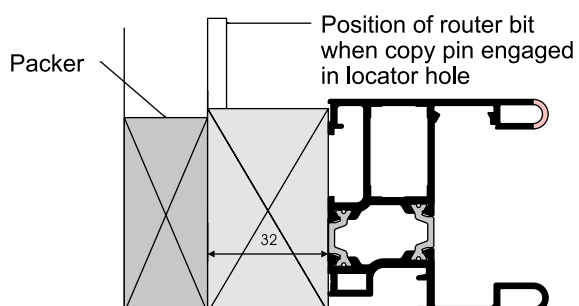


COPY PIN LOCATOR



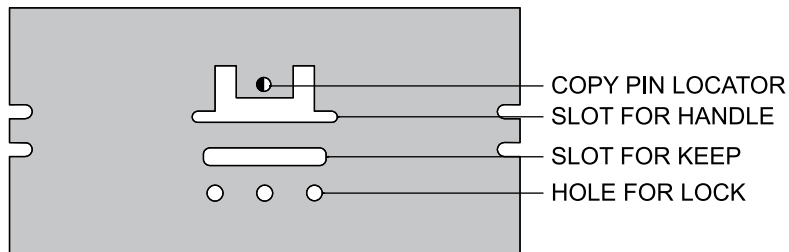
COPY PIN LOCATOR

### SLOT FOR GX1812 KEEP



COPY PIN LOCATOR

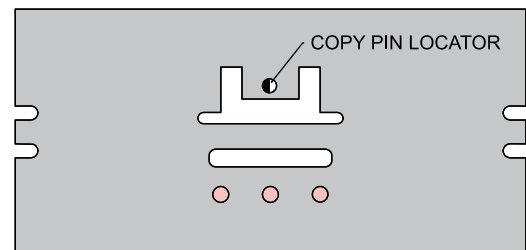
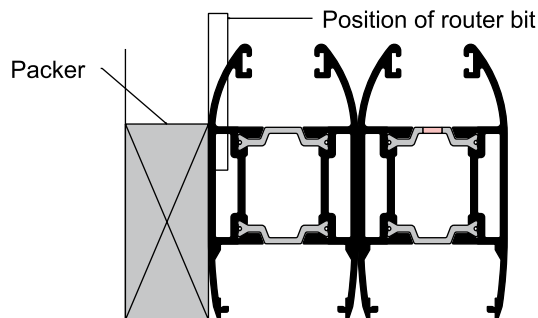
# GX1003t ROUTER TEMPLATE INSTRUCTIONS



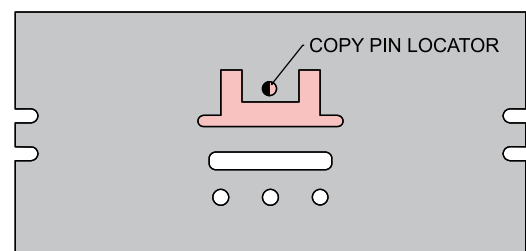
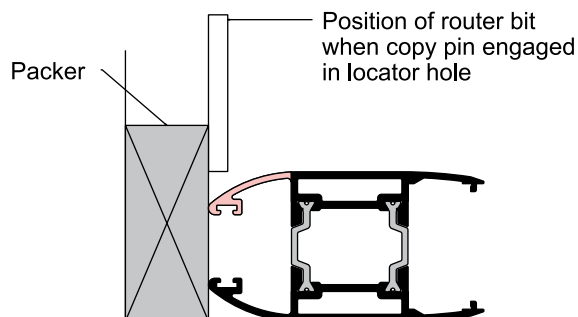
GX511

**NOTE:**  
5 mm ROUTER BIT,  
5 mm COPY PIN

## FIXING HOLES FOR GX1800 HALF MOON SEMI AUTOMATIC LOCK

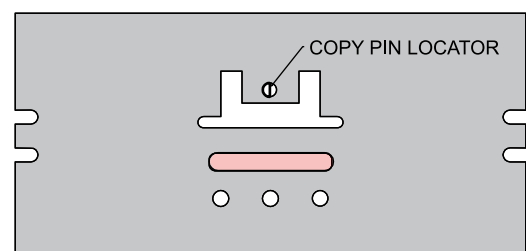
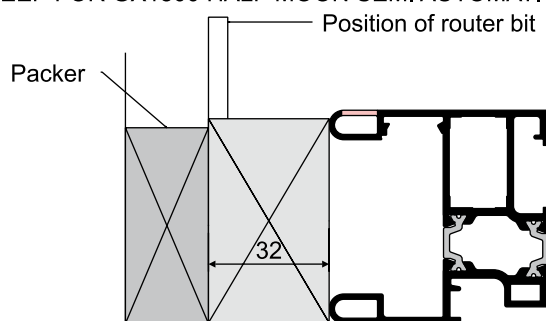


## MACHINING DETAIL FOR GX1800 HALF MOON SEMI AUTOMATIC LOCK



6.055

## KEEP FOR GX1800 HALF MOON SEMI AUTOMATIC LOCK



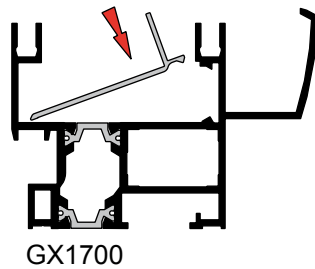




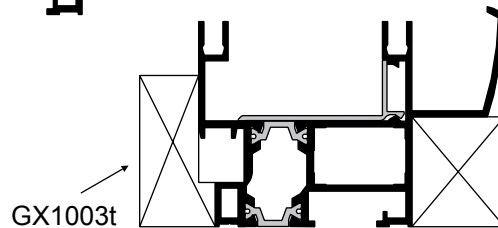
# **MACHINING & ASSEMBLY**

## GX1700 PREPARATION MACHINE TRACK ENDS

### GX1700 Preparation



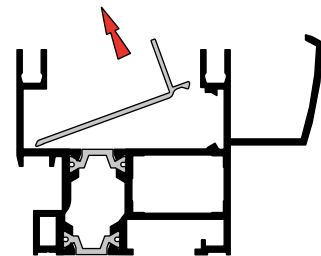
GX1700



GX1003t

**Note:**

Shim not supplied by Technal.

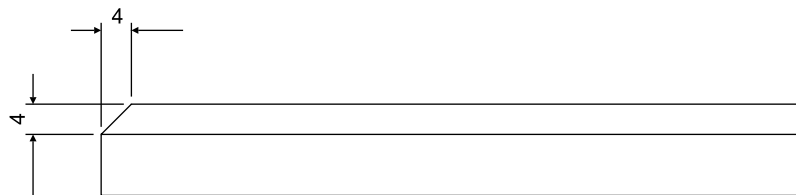


To mitre cut GX1700 polyamide cover strip to 45°

1. Clip polyamide cover strip GX1700 into outer frame.
2. Mitre cut assembly using shim ref GX1003t
3. Unclip cover strip.

7.005

### Machine Track

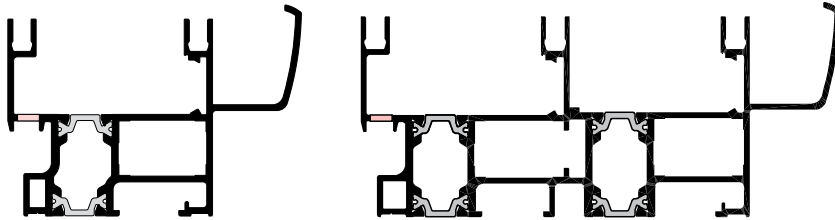


Machine aluminium track GX1130 and polyamide track GX1702 with punch tool GX1001t

GX601

Machine stainless steel track GX1132 manually.

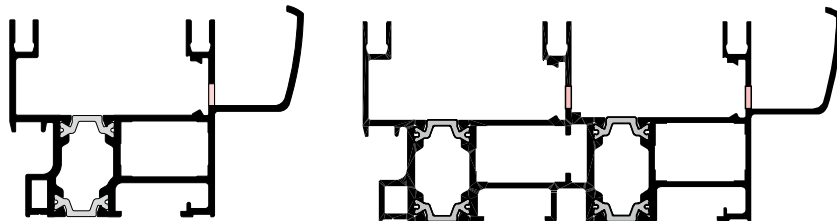
## KEY TO DETAILS USED IN OUTER FRAME DRAINAGE DRAWINGS ON PAGES 7.020 TO 7.035



### A & B

**A** - Slot 6x40mm (Perfopack GX1001t).

**B** - Slot 6x40mm (Perfopack GX1001t). Repeat at 250mm - 300mm centres thereafter.



7.010

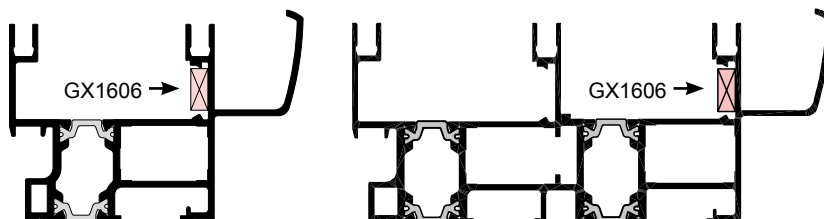
### C

Slot 6x40mm inside track channel (Perfopack GX1001t).



### D

Slot 6x40mm in GX1700 polyamide cover (Perfopack GX1001t).



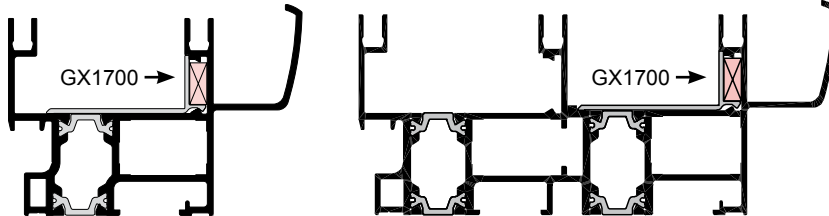
GX1606 →

GX1606 →

### E

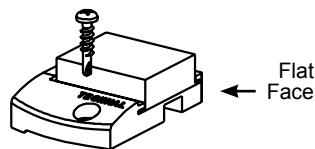
Insert GX1606 plugs sealed all round with a low modulus silicone sealant.

## KEY TO DETAILS USED IN OUTER FRAME DRAINAGE DRAWINGS ON PAGES 7.020 TO 7.035



**F**

Fit GX1700 polyamide cover, bed on low modulus silicone sealant where shown.

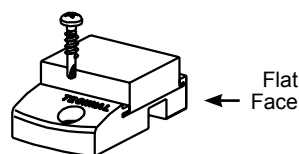


### **G - GX1608**

For 2 tracks and external woolpile for 3 tracks.

Line indicates flat face of GX1608 woolpile block.

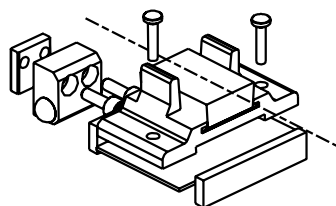
7.015



### **G - GX1609**

For 3 tracks internal woolpile.

Line indicates flat face of GX1609 woolpile block.

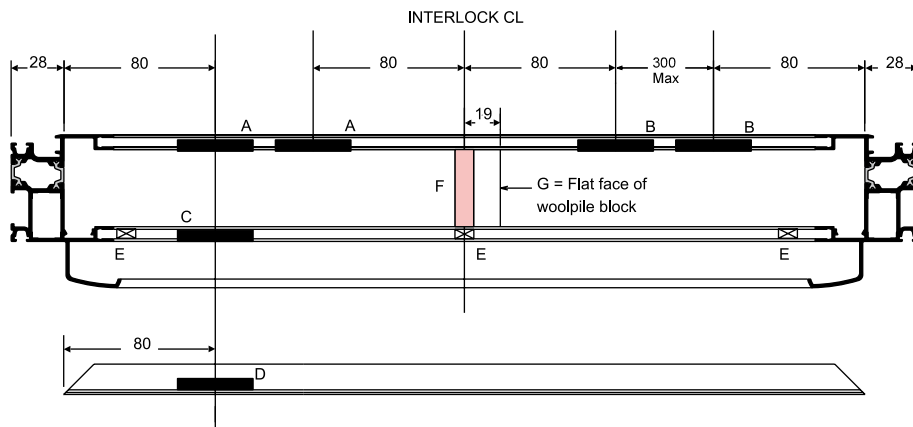
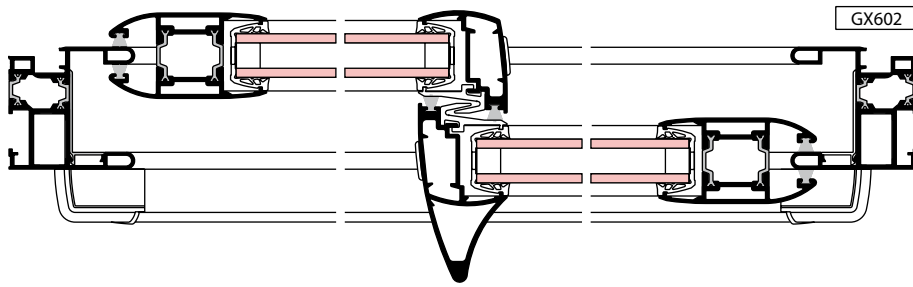


### **H - GX1517**

Line indicates axis of GX1517 stop plate.

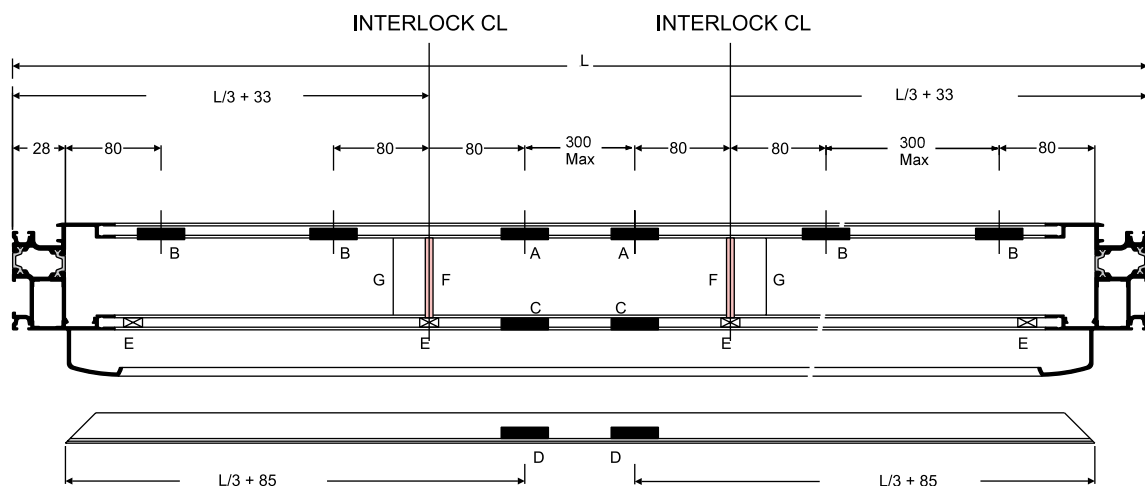
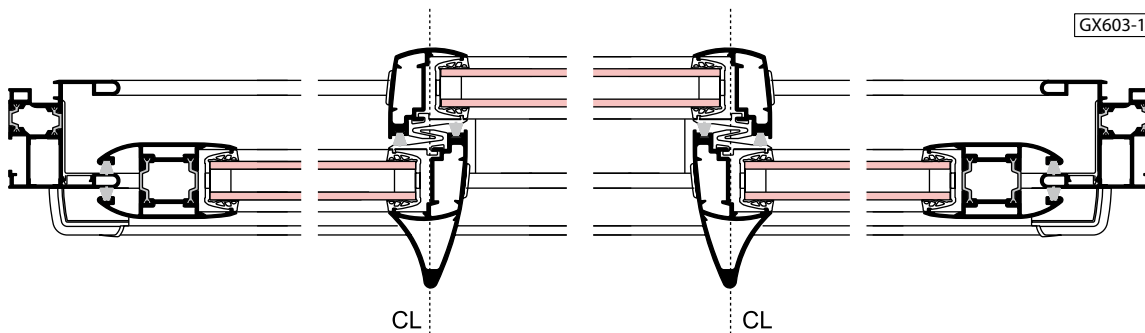
# OUTER FRAME DRAINAGE

## 2 Leaf - Left Hand Leaf on External Track



7.020

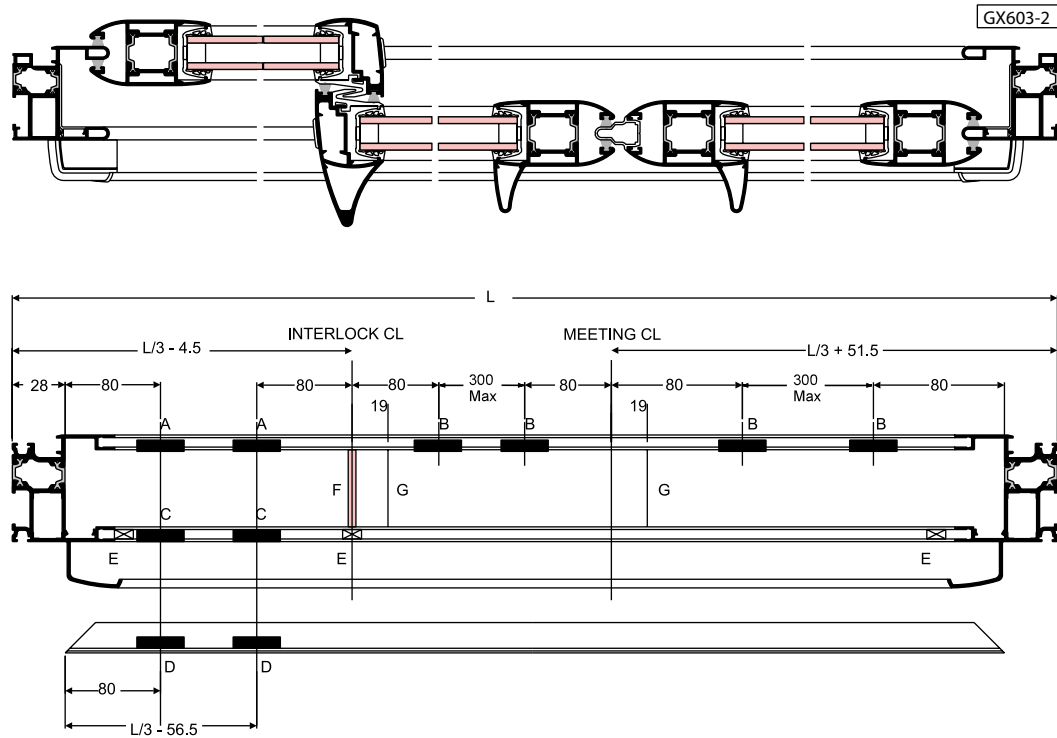
## 3 Leaf - Central Leaf on External Track



For key to details used see pages 7.010 and 7.015

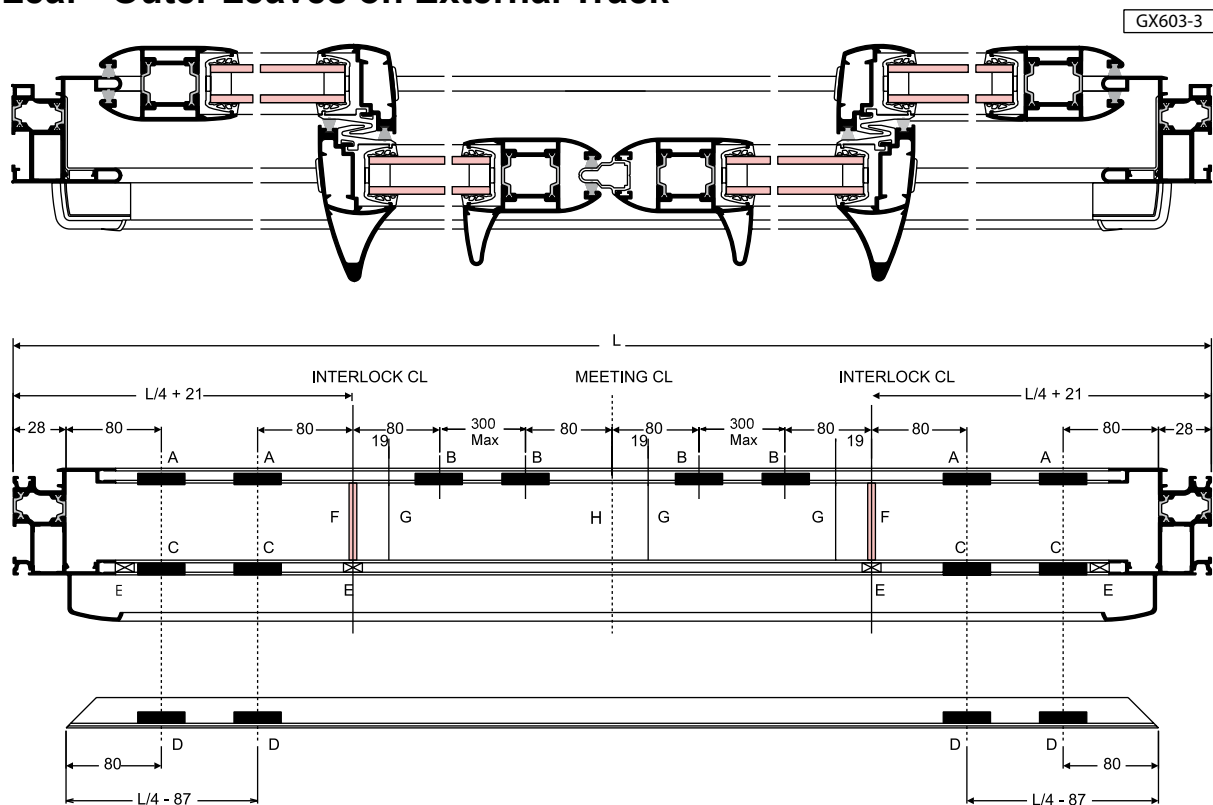
## OUTER FRAME DRAINAGE

### 3 Leaf - Left Hand Leaf on External Track



7.025

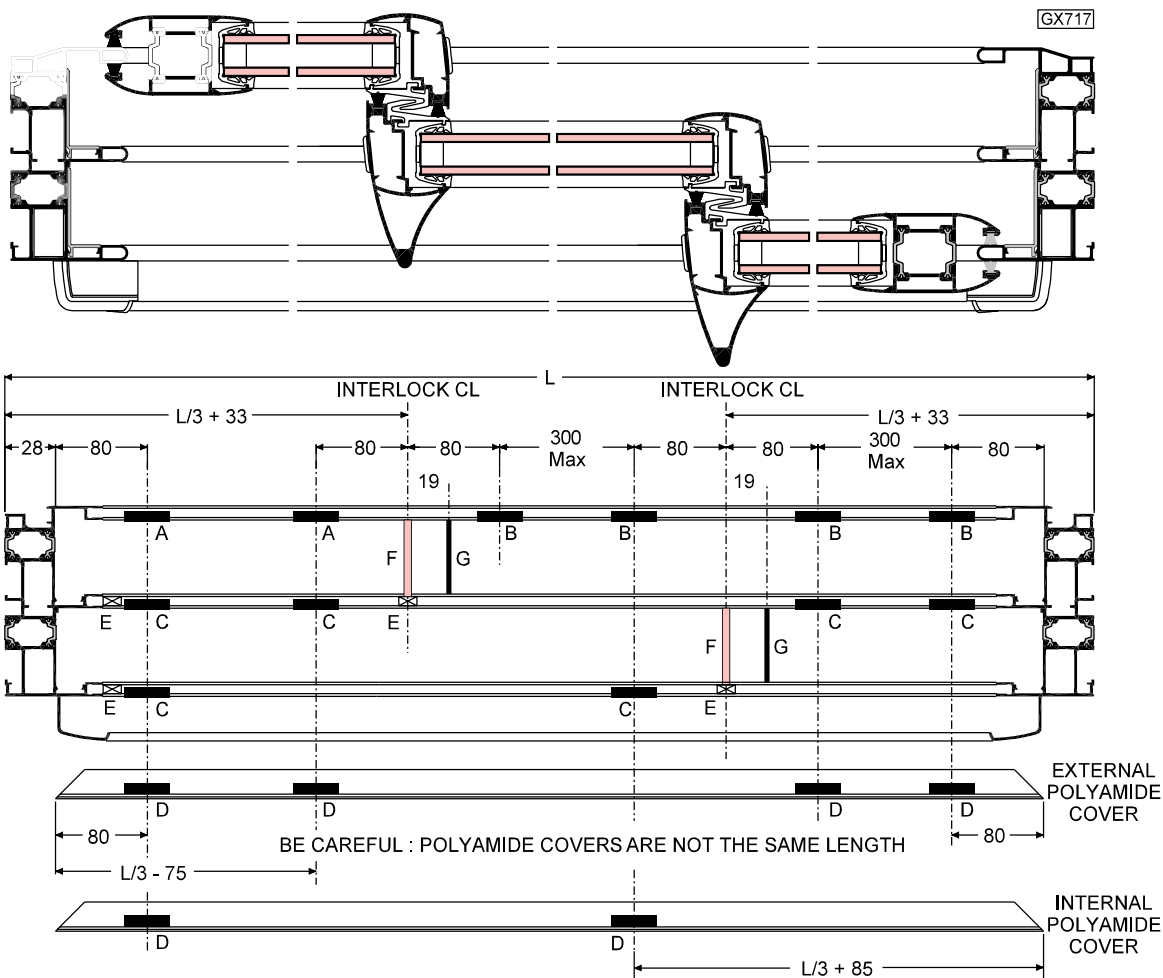
### 4 Leaf - Outer Leaves on External Track



For key to details used see pages 7.010 and 7.015

# OUTER FRAME DRAINAGE

## 3 Leaf, 3 Tracks - Left Hand Leaf on External Track



For key to details used see pages 7.010 and 7.015

## OUTER FRAME DRAINAGE

### 6 Leaf, 3 Tracks - Left & Right Hand Leaves on External Track



7.035

INTERNAL  
POLYAMIDE  
COVER

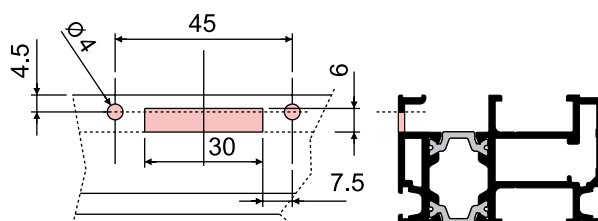
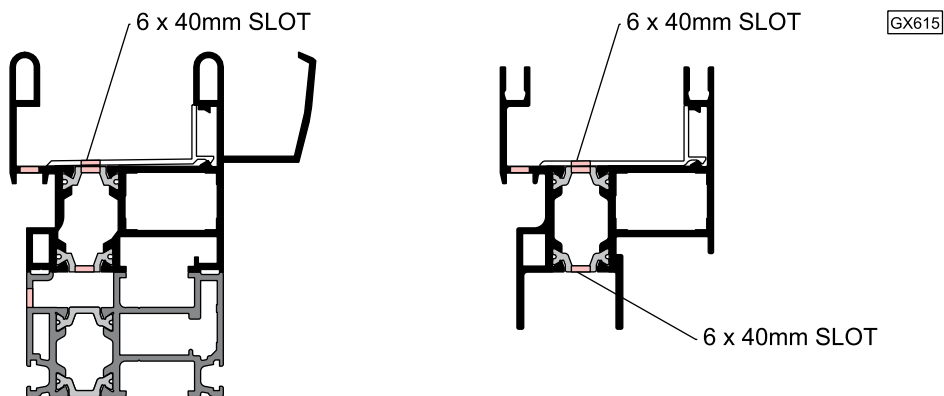
BE CAREFUL : POLYAMIDE COVERS ARE NOT THE SAME LENGTH

**For key to details used see pages 7.010 and 7.015**

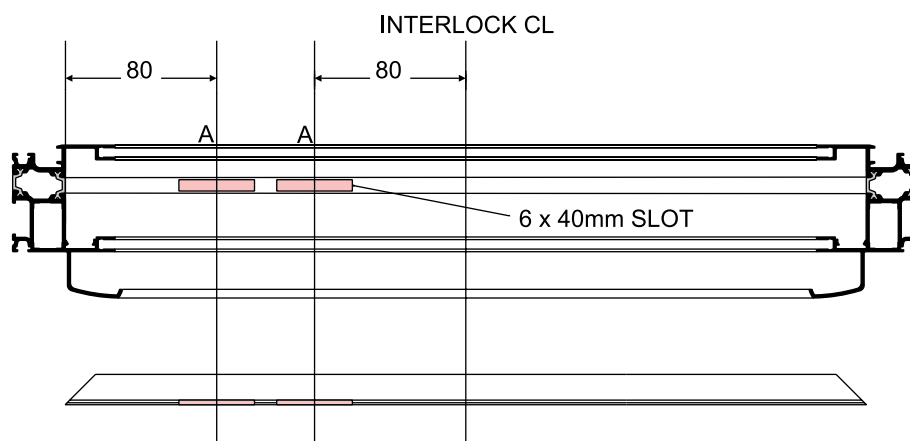


## ALTERNATIVE DRAINAGE FOR GX1105p & GX1107p

Line alternative slots with slot A (see previous pages), repeat at 500mm centres.

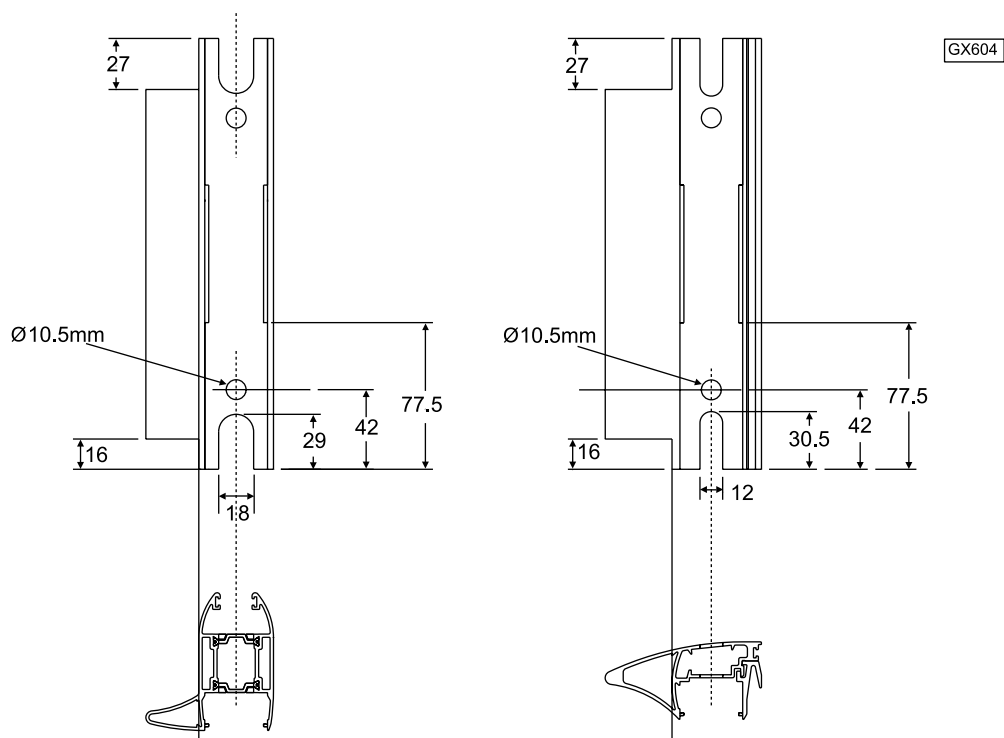


For Example: 2 Leaf - Left hand leaf on outside track, see previous pages for other combinations.



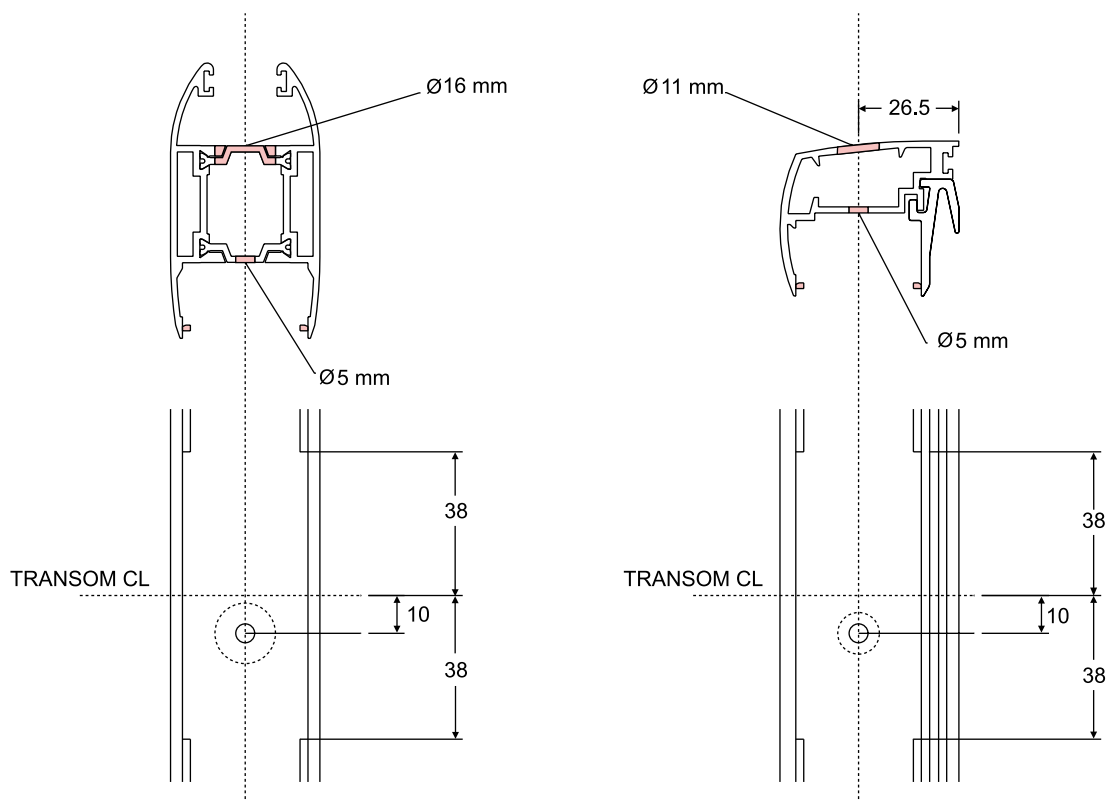
# STILE PREPARATION

## End Preparation



Use punch tool GX1002t for end preparation.  
Reinforcement should be machined by hand

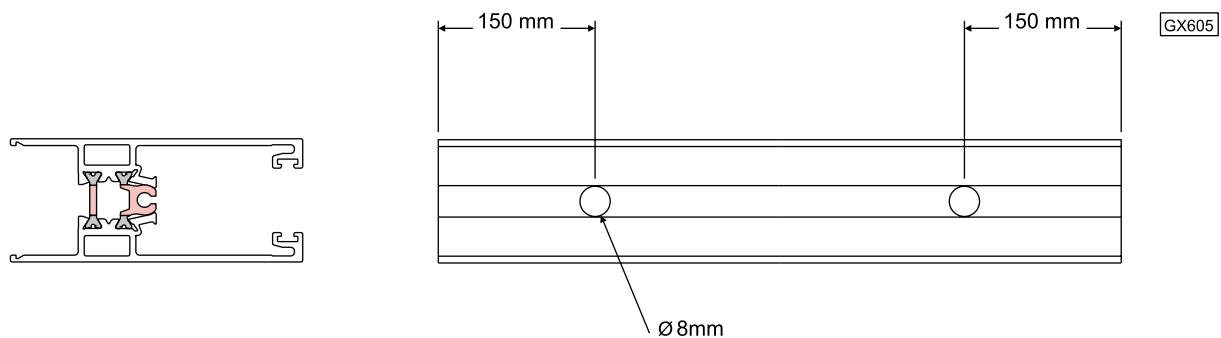
## For Intermediate Transom



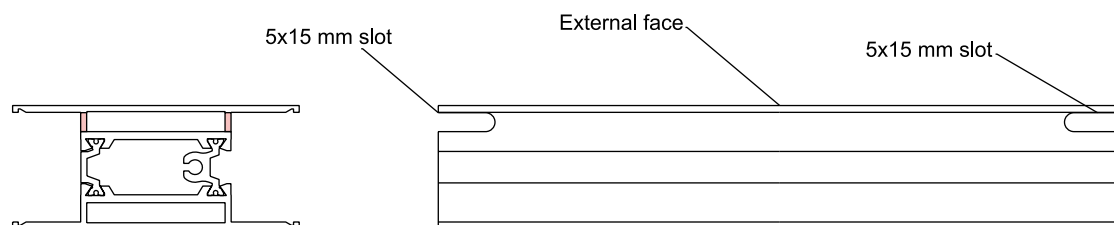
Use punch tool GX1002t to remove gasket nibs

## RAIL PREPARATION

### Drainage for Bottom Rail

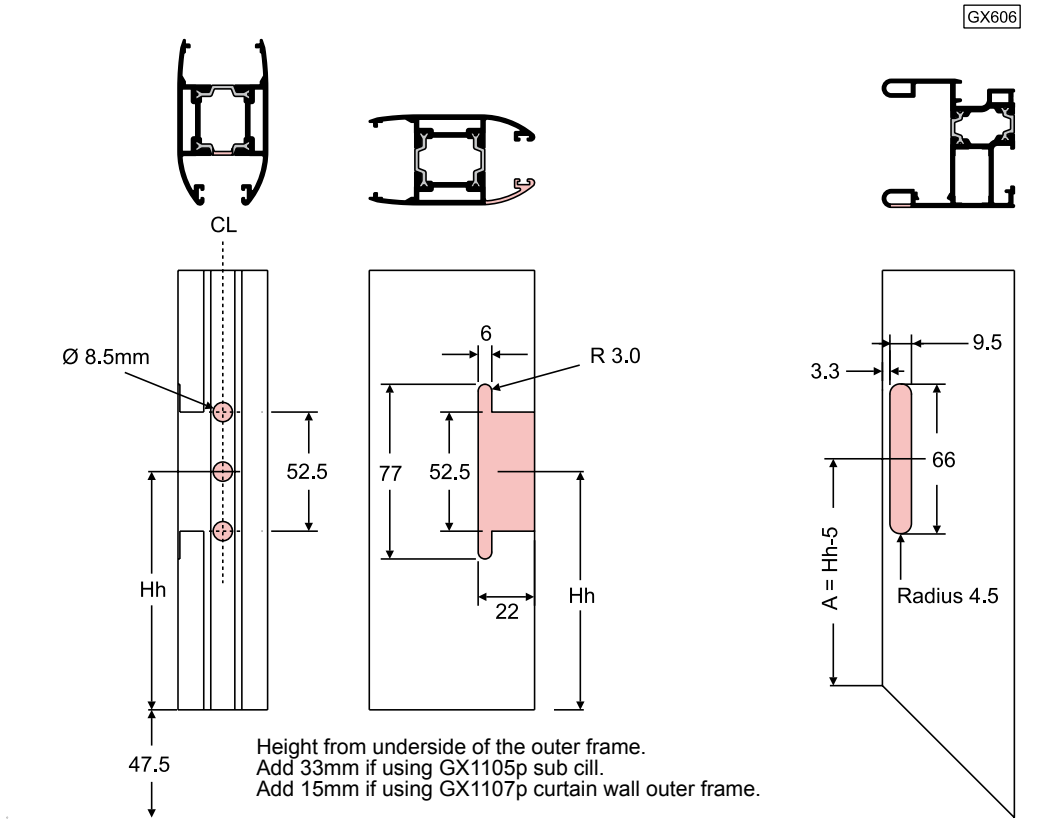


### Drainage for Transom



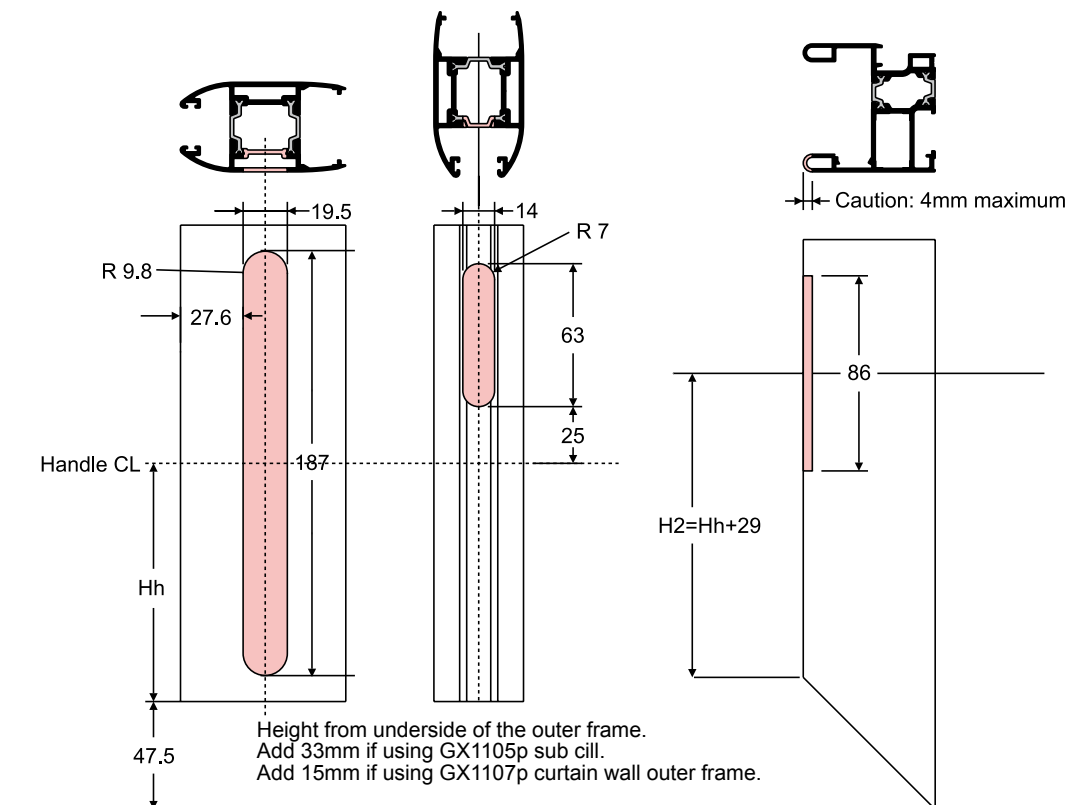
# MACHINE FOR LOCKS & HANDLES

## GX1800 Half Moon Semi-Automatic Lock



7.055

## GX1804, GX1105, GX1806





## GX1801 Multilock Handle - GX1815 2 Point Lock

If using GX1201p reinforced jamb stile with GX1801 handle, reinforcing must be external.

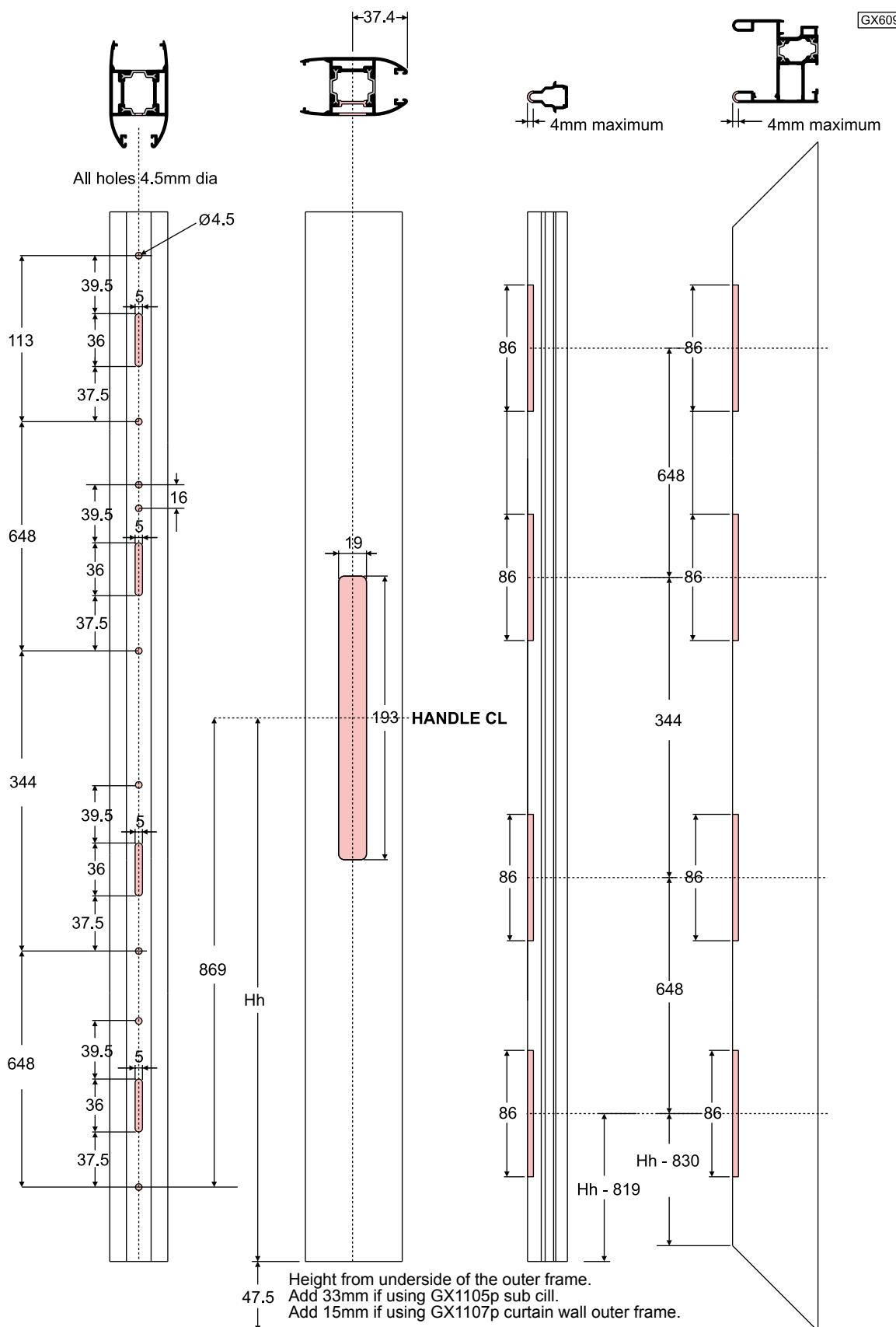


Height from underside of the outer frame.  
Add 33mm if using GX1105p sub cill.  
Add 15mm if using GX1107p curtain wall outer frame.

## MACHINE FOR HARDWARE

### GX1807 Lever Lock - GX1816 4 Point Multilock

Minimum Leaf Height 1940, Minimum Handle Height 960.

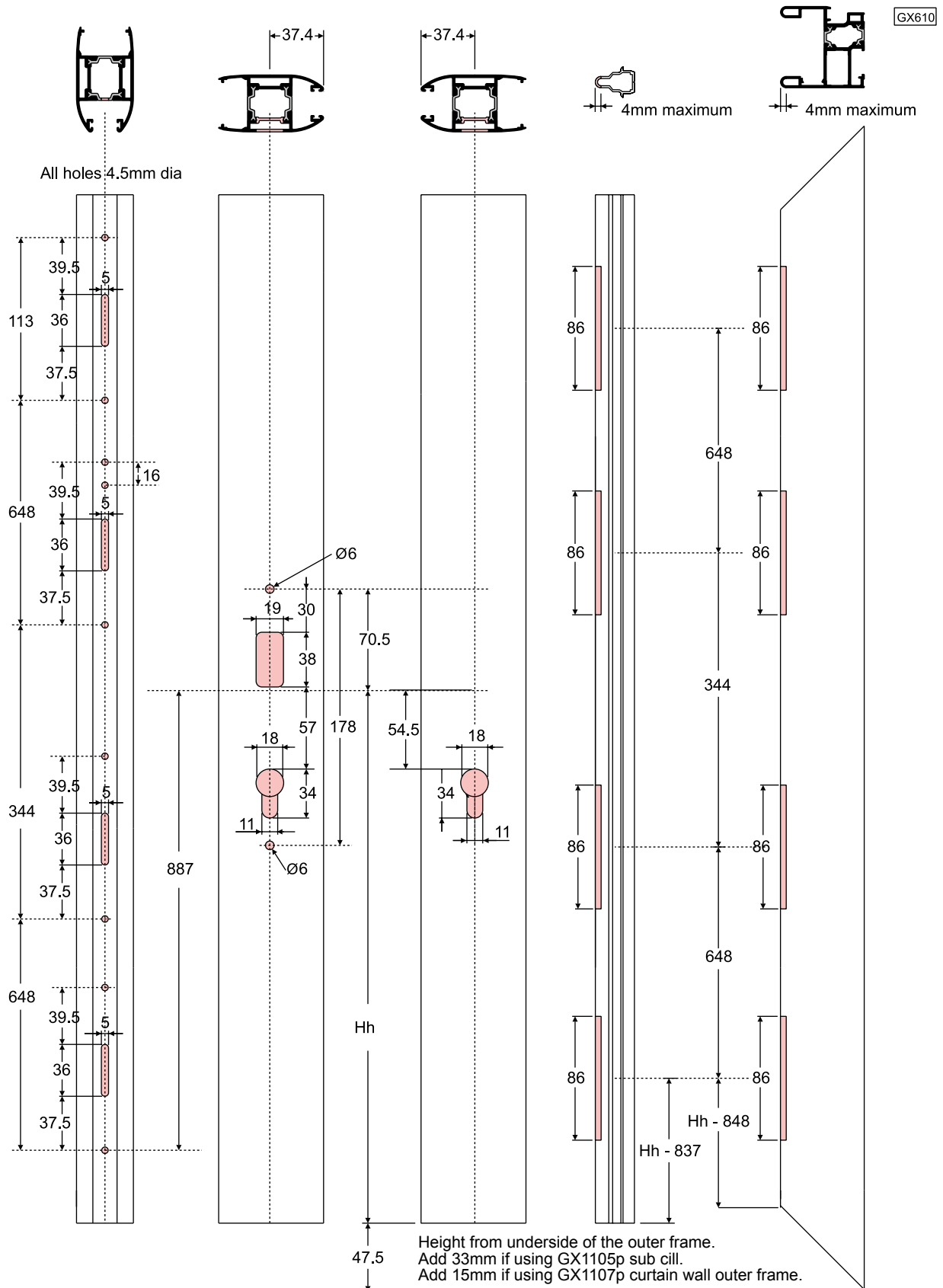


# MACHINE FOR HARDWARE

## GX1801 Multilock Handle - GX1816 4 Point Multilock

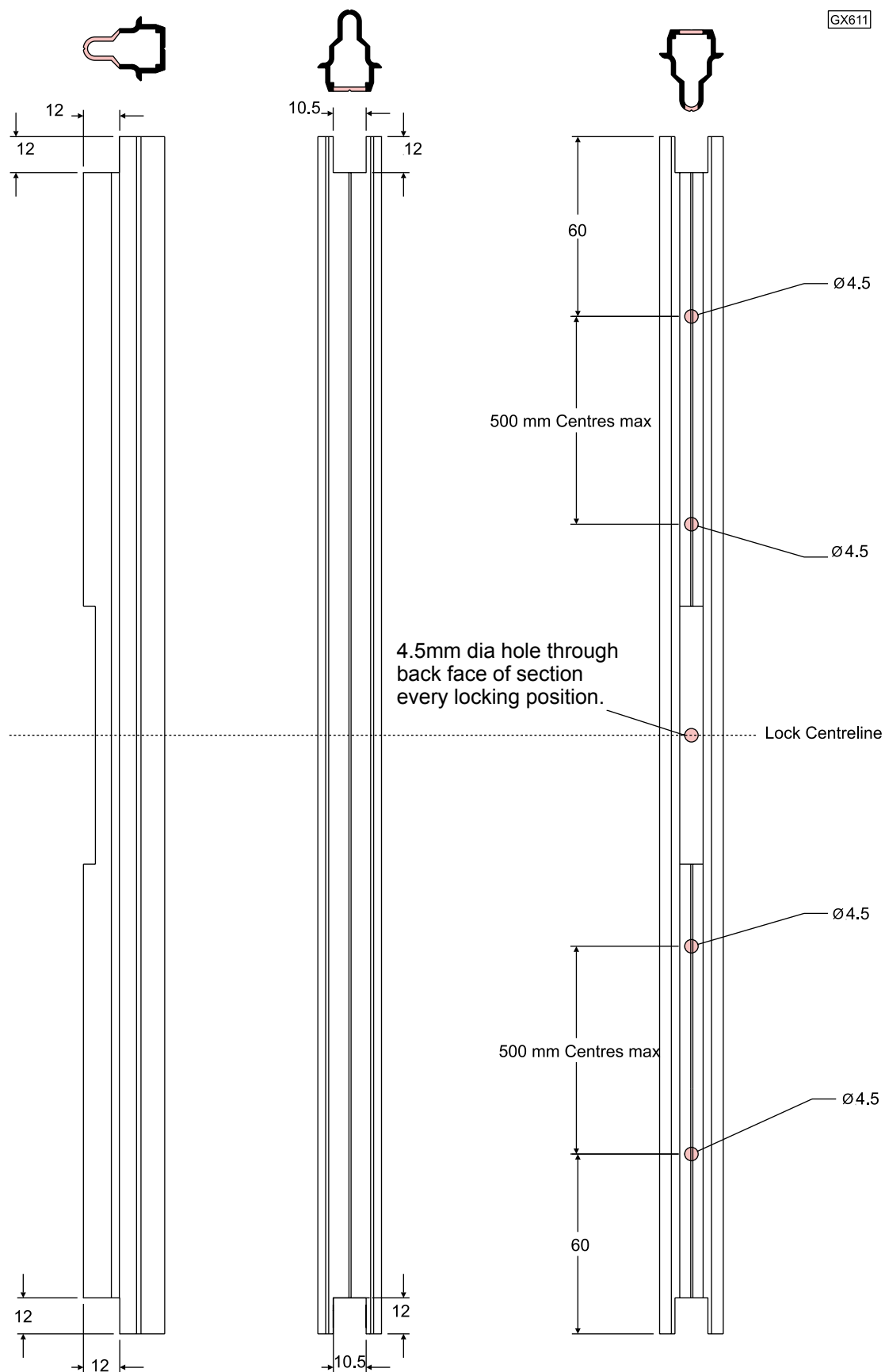
Minimum Leaf Height 1940, Minimum Handle Height 960.

If using GX1201p reinforced jamb stile with GX1801 handle, reinforcing must be external.





## MACHINE FOR GX1230n MEETING STILE ADAPTOR

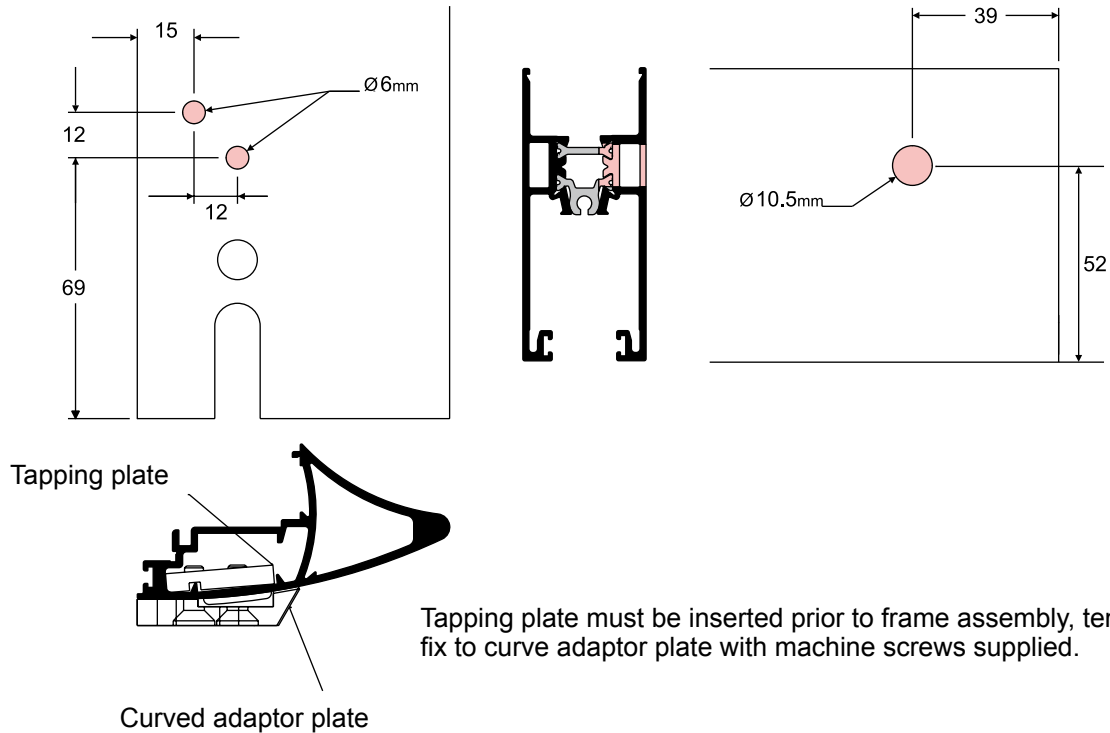


GX611

7.080

## MACHINE FOR STOPS & RESTRICTORS

### GX1808 Interlock Plunger Lock

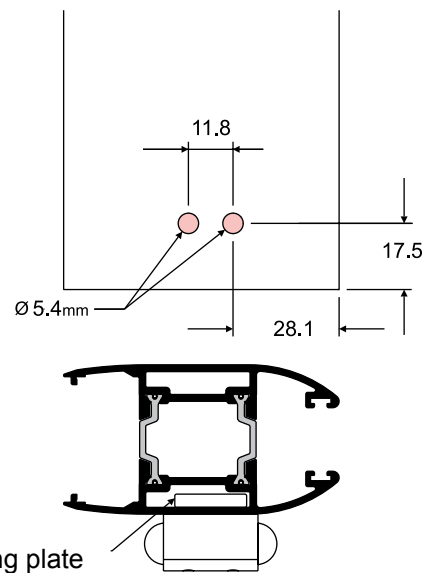


7.085

### GX1517 Leaf Restrictor

Stile tapping plate must be inserted prior to frame assembly.

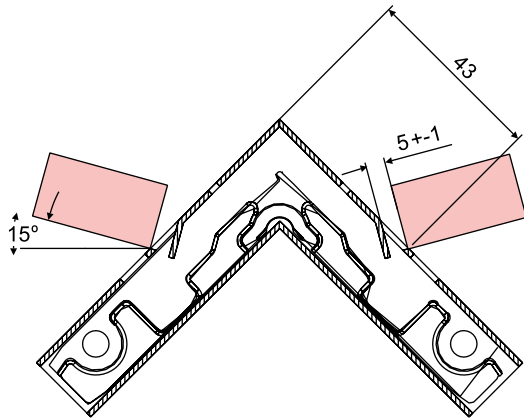
1. Drill 2 x no. 5.4mm dia clearance holes in the stile, continue through inner web.
2. Fix buffer via tapping plate to stile.



#### Note:

GX1517 may only be used where the opening sash is on the internal track.

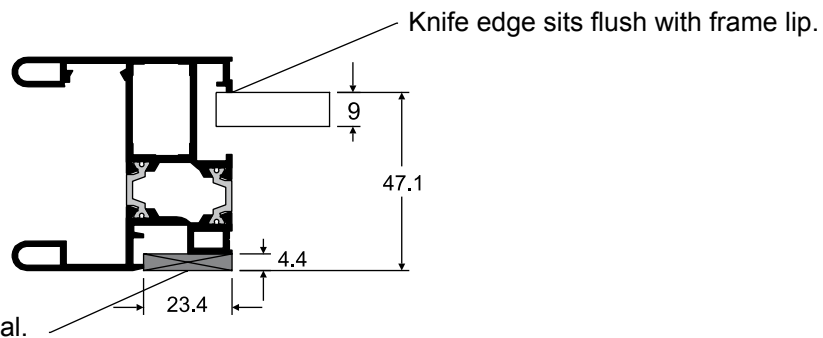
## ASSEMBLE FIXED FRAME



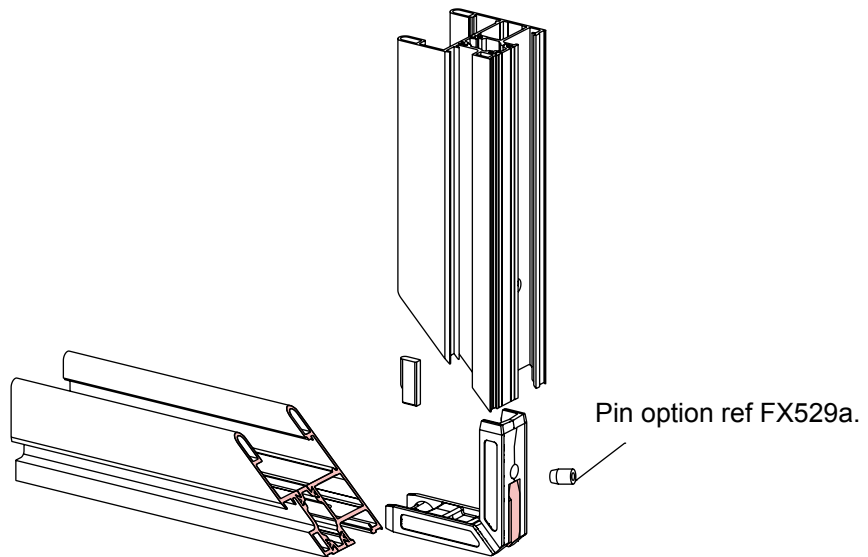
GX701

### Note:

9mm knives must be used so that the cleat expands in the hollow

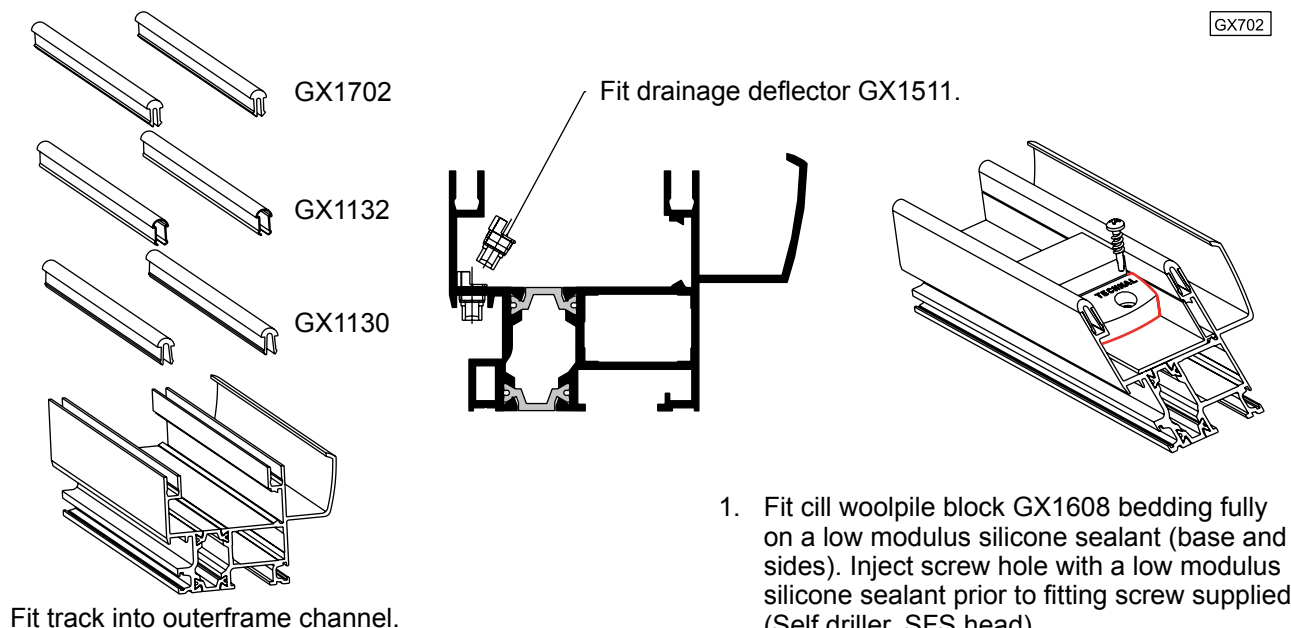


Not supplied by Technal.



1. Apply FX613g adhesive to the cleat hollow and insert into section.
2. Butter mitred end of section with a low modulus silicone sealant.
3. Insert GX1515 track corner alignment block.
4. Offer sections together and either pin or crimp ensuring correct alignment each time.

## TRACK & WOOLPILE BLOCKS



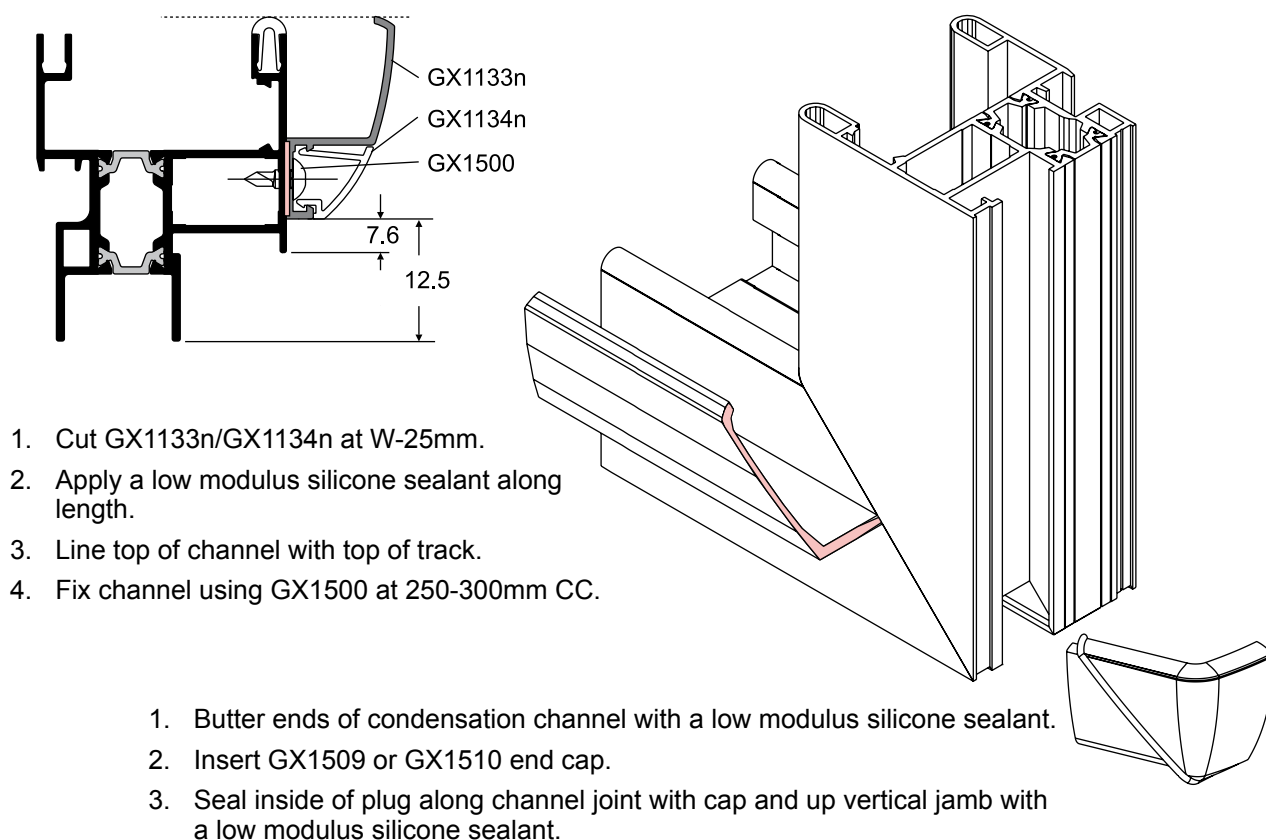
### Note:

120 Kg max leaf weight on GX1702 polyamide track.  
200 Kg max leaf weight on GX1130 and GX1132.  
(2.5 Kg x mm thickness of glass x W x H)

1. Fit cill woolpile block GX1608 bedding fully on a low modulus silicone sealant (base and sides). Inject screw hole with a low modulus silicone sealant prior to fitting screw supplied (Self driller, SFS head).
2. Inject mastic into central hole to fill void under. Peel backing tape off woolpile and fit.
3. Fit head woolpile block without sealant.

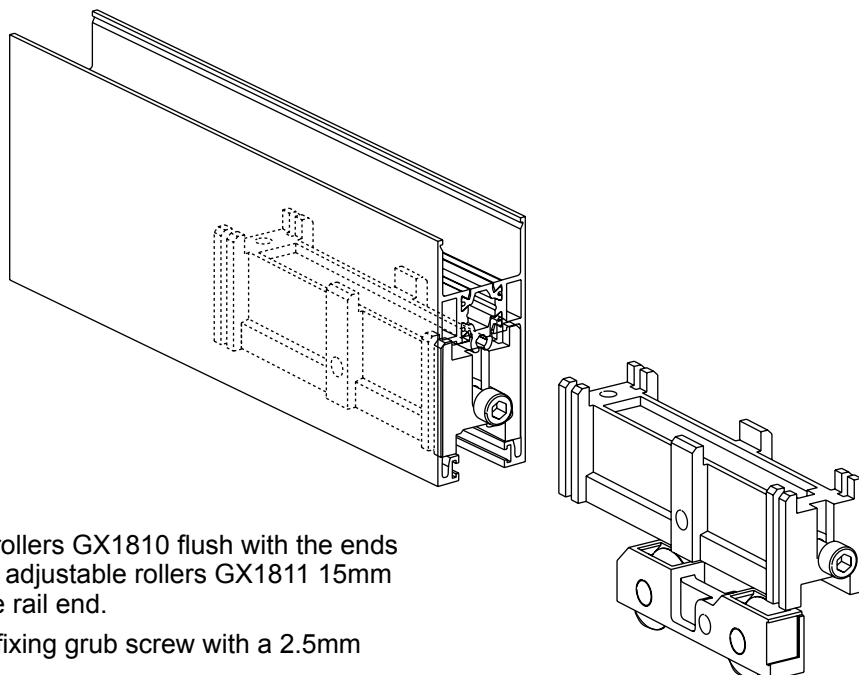
7.095

## Condensation Channel GX1133n End Plugs GX1509 & GX1510

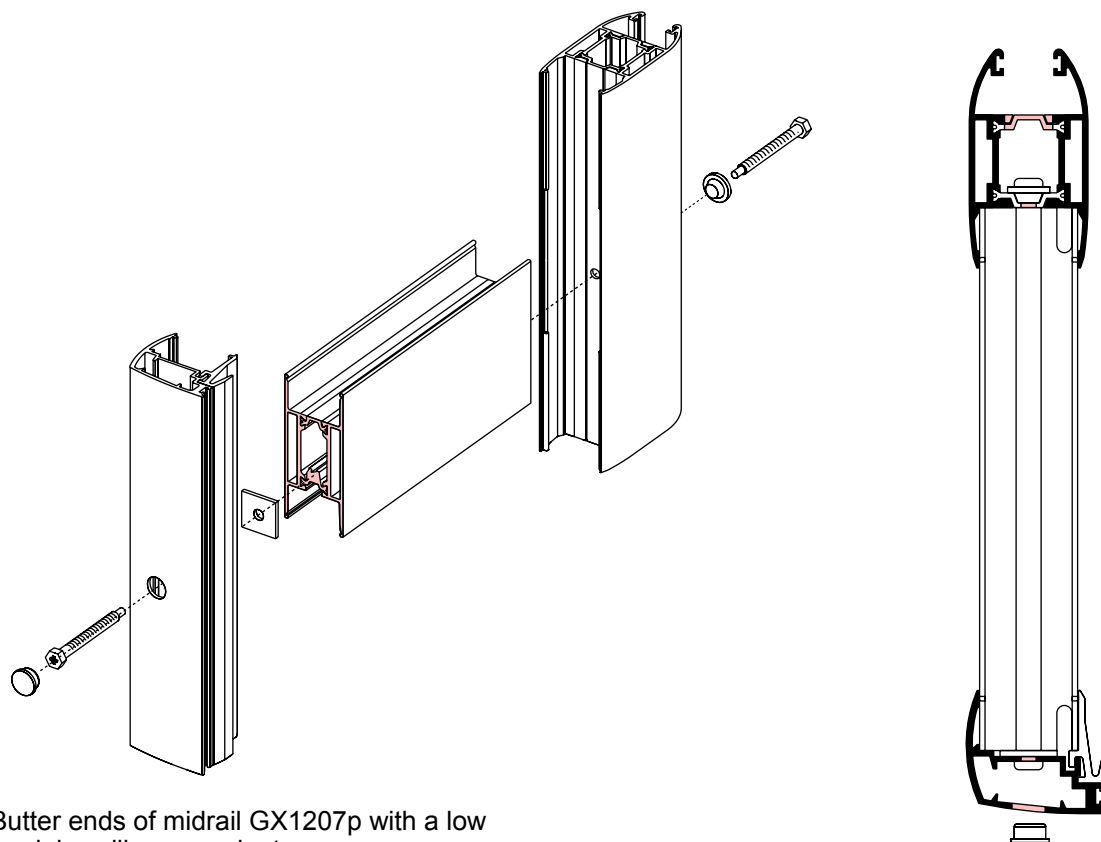


## ASSEMBLE LEAF FRAME

GX703

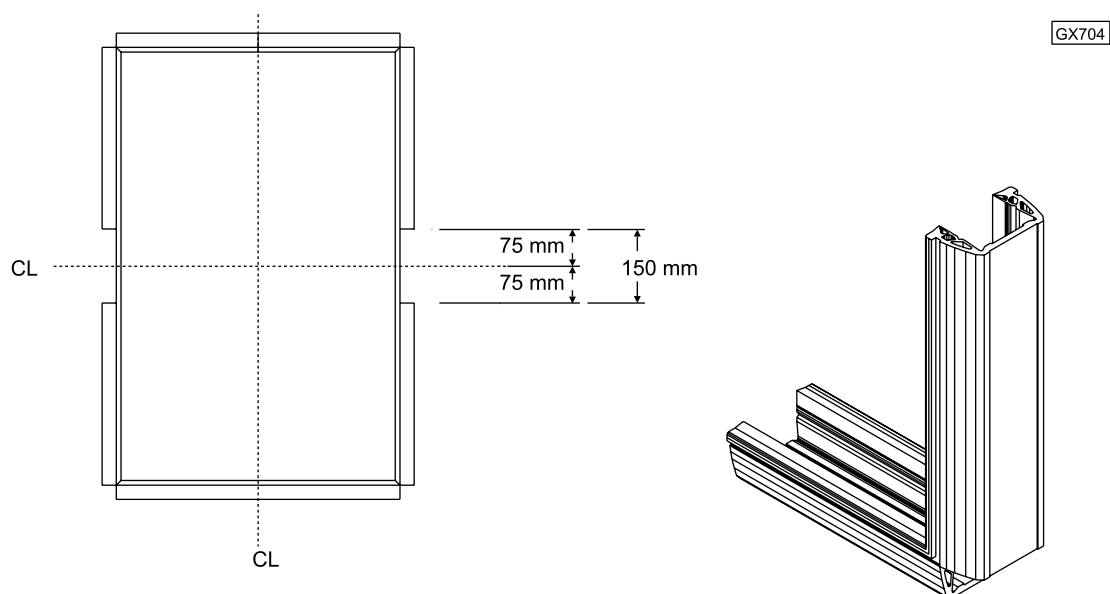


1. Fit standard rollers GX1810 flush with the ends of the rail. Fit adjustable rollers GX1811 15mm back from the rail end.
2. Fully tighten fixing grub screw with a 2.5mm allen key.



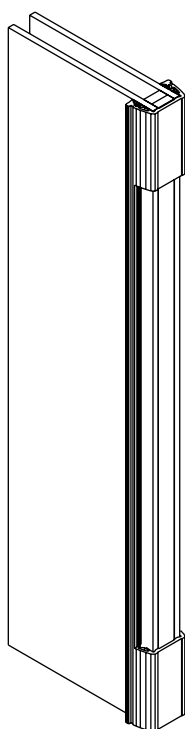
1. Butter ends of midrail GX1207p with a low modulus silicone sealant.
2. Fit to stiles with GX1514 fixing set and 2 no. GX1501 assembly screws (SFS head).

## ASSEMBLE LEAF FRAME

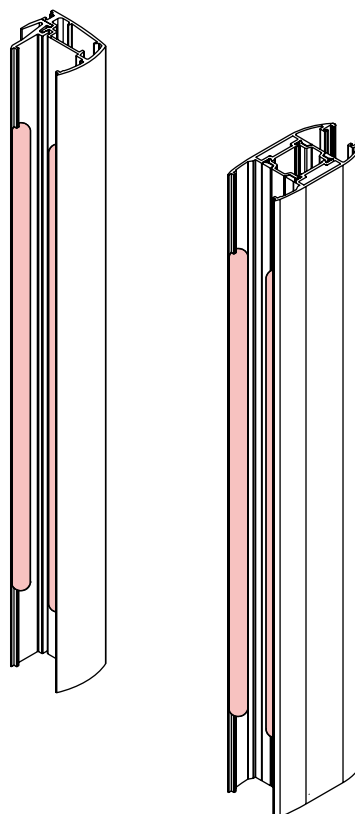


Slit gasket corners to lip and fully seal with a low modulus silicone sealant.

7.105

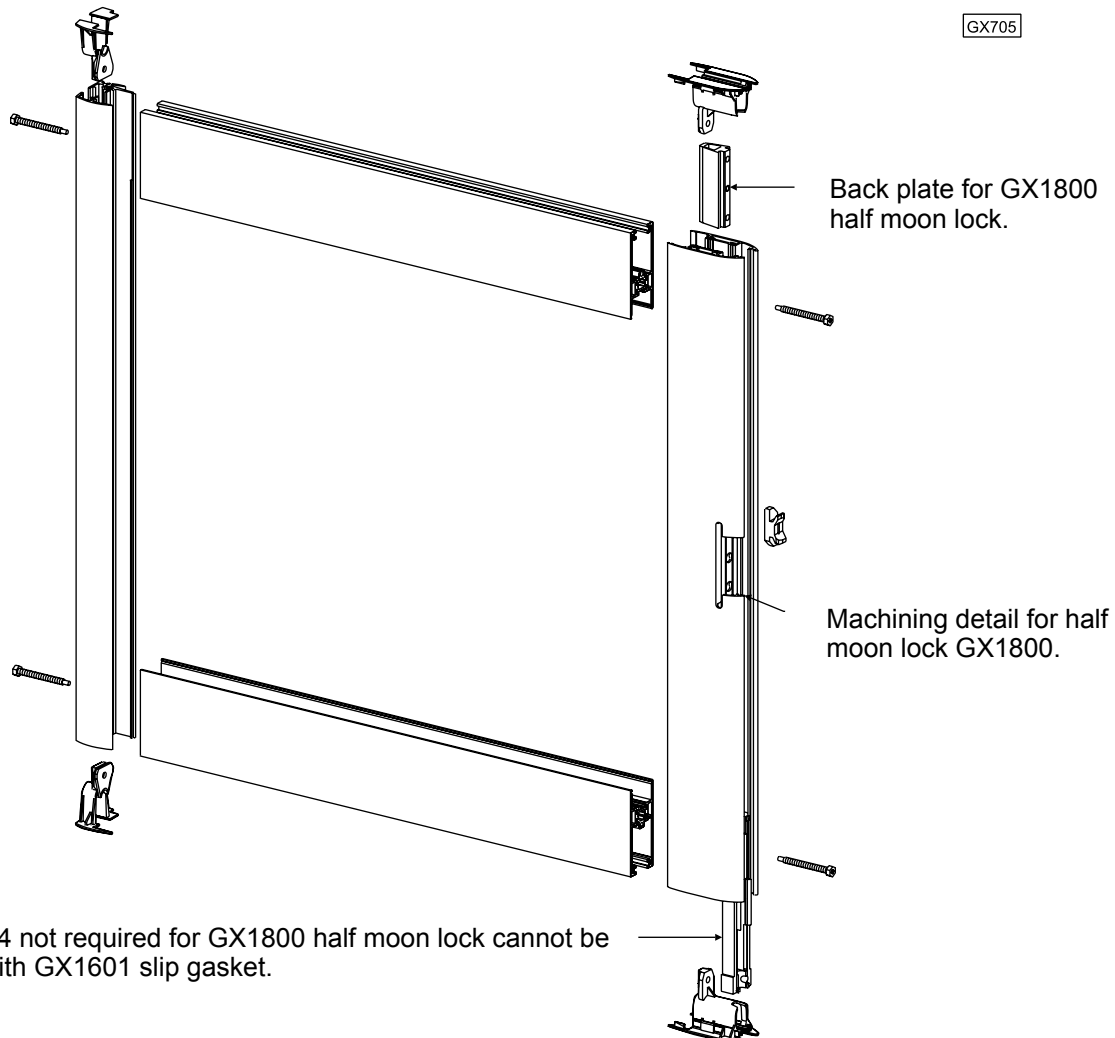


Remove 150mm of gasket on vertical centre line.



Add 150mm bead of low modulus silicone sealant on vertical centre line to all vertical jambs.

## ASSEMBLE LEAF FRAME

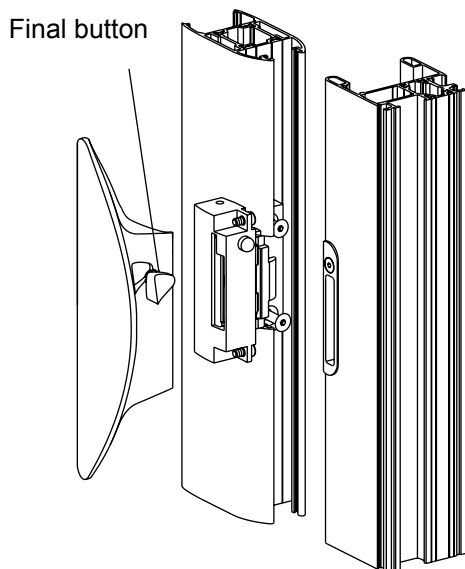


### To assemble frame.

1. Fit brush pile/gasket GX1600 or GX1601 to rails and stiles.
2. If fitting half moon lock GX1800 slide back plate into stile slide chamber, tighten grub screw when in position with 2.5mm allen key. Otherwise fit GX1814 (number dependent on lock set).
3. Butter stile ends with a low modulus silicone sealant and insert GX1504 and GX1505 stile end plugs ensuring seal.
4. Butter rail ends with low modulus silicone sealant and assemble leaf frame with GX1501 assembly screws (SFS head).

## FIT LOCKS & HANDLES

### GX1800 Half Moon Semi-Automatic Lock

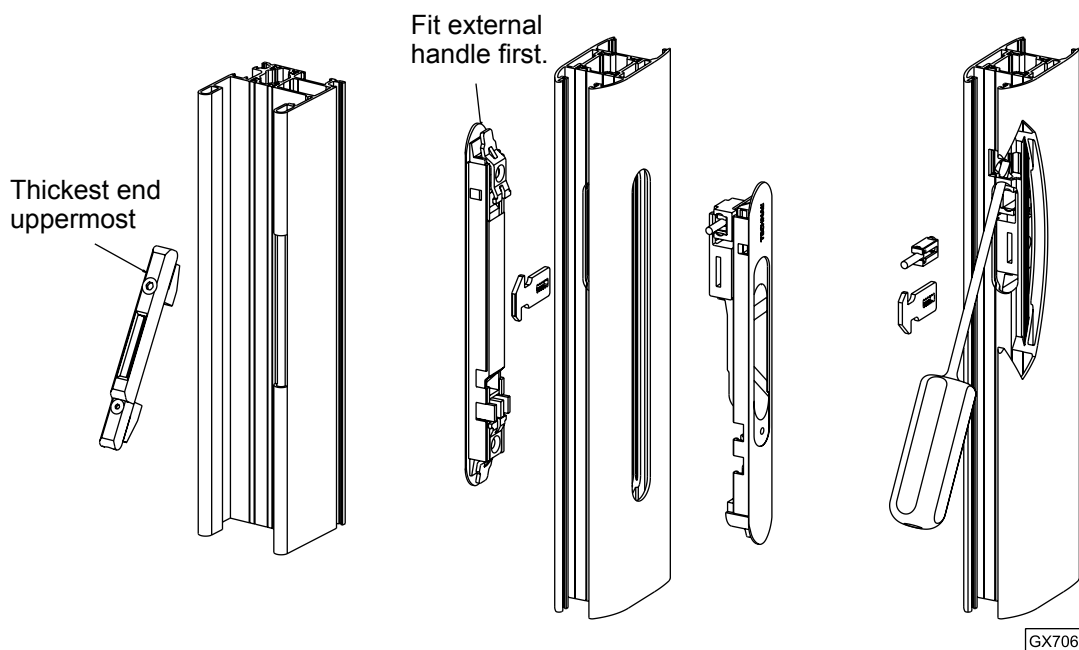


#### To fit half moon handle and lock GX1800

1. Fit lock mechanism to stile using 2xM5 screws and a 3mm allen key.
2. Fit strike plate onto outer frame using M4 screw and 2.5mm allen key, adjust to suit keep.
3. Remove red button from lock with lock in open position.
4. Screw handle into position with 2 x M4 screws.
5. Fit final button.

7.115

## Keeps & Thumb Pulls



#### To fit keeps

1. Offer top of keep in first and push upwards.
2. Offer in bottom of keep and set into position.
3. Tighten machine screws.

#### To fit thumb pulls

1. Offer bottom of handle in first and press down top.
2. If using locking handles fit security device.
3. Fit bolt and adjust to suit keep.

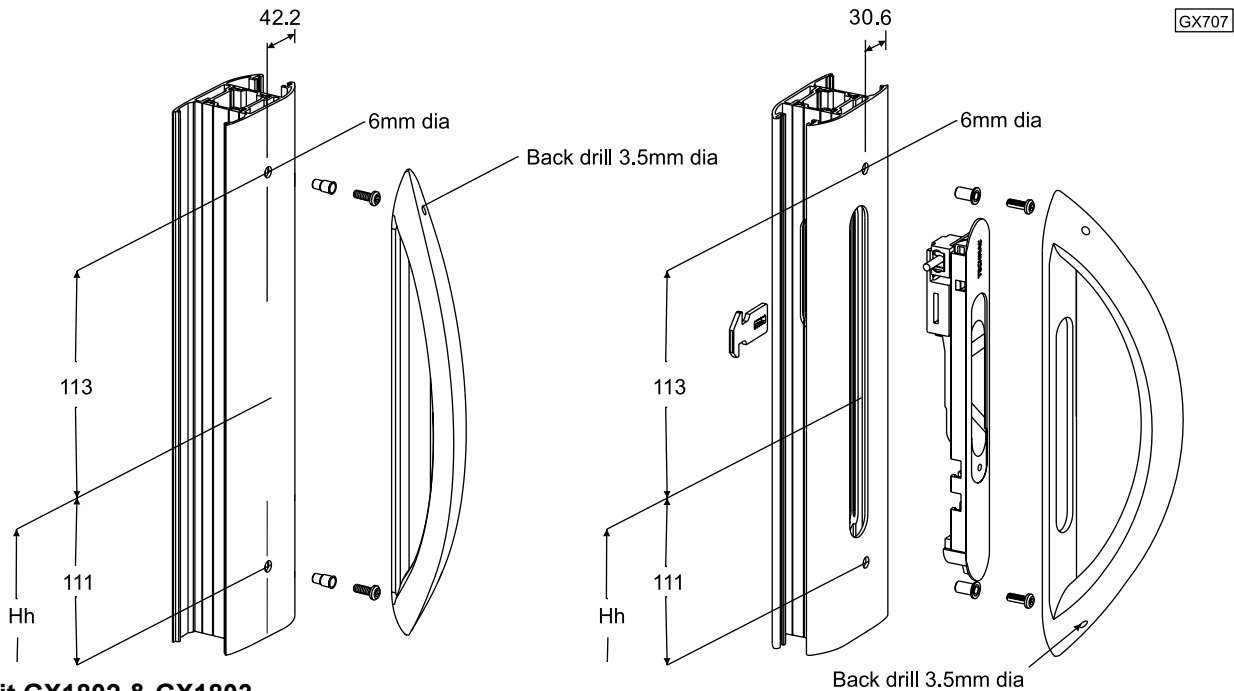
#### To remove thumb pulls

1. Remove security device and bolt.
2. Slide lever downwards with a flat head screwdriver.
3. Lift out handle top first.



# FIT LOCKS & HANDLES

## GX1802 & GX1803 Handles



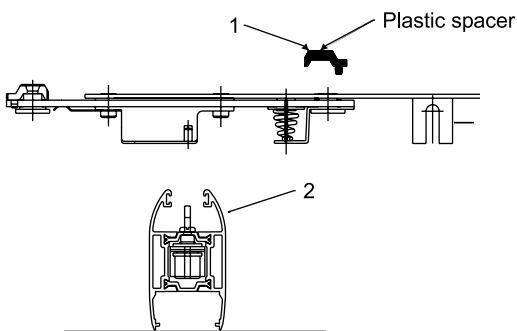
### To fit GX1802 & GX1803.

1. Fit riv-nut to stile.
2. Back drill handle.
3. Position screws into stile.
4. Hook handle over screws.
5. Tighten screws with a 2.5mm allen key via back drilled holes.

## GX1815 & GX1816 Locks

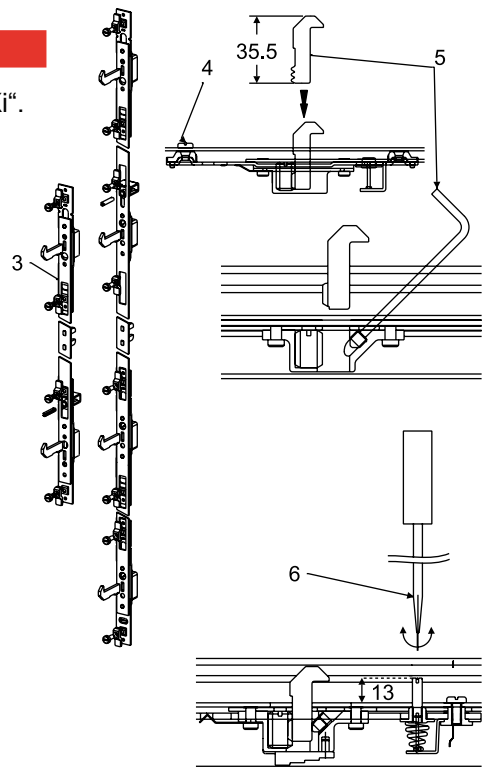
### Note:

Insert rod prior to assembling frame. Use hook packet marked "GXi".



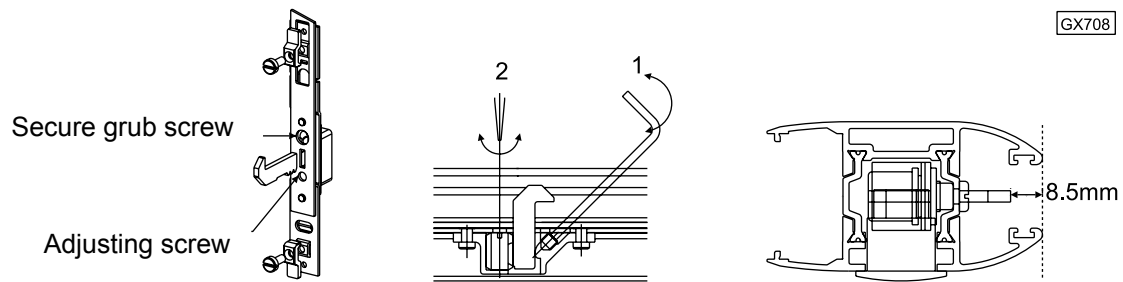
### To fit 2 point multilock GX1815 and 4 point multilock GX1816.

1. Clip plastic spacers above and below hook lock.
2. Sit stile on a bench resting on the gasket fins.
3. Insert rod into section the right way up (adjusting screw sits below hook slot).
4. Insert machine screws and tighten.
5. Temporarily fit GXi hooks with 2.5mm allen key into securing grub screw.
6. Screw safety device into position to extend 13mm.



## **FIT LOCKS & HANDLES**

### **GX1815 & GX1816 Locks Continued**



#### **To position / adjust hook locks**

1. Release securing grub screw with a 2.5mm allen key.
2. Adjust hook projection using a flat screw driver to turn adjusting screw.
3. Position hook 8.5mm from section nose, further adjustment may be done on site.
4. Tighten securing grub screw.

#### **Note:**

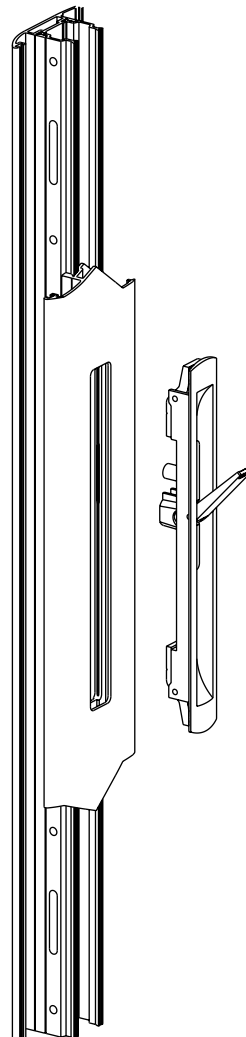
If hook is not positioned at 8.5mm site adjustment will be essential.

7.125

### **GX1807 Lever Lock**

#### **To fit lever lock GX1807**

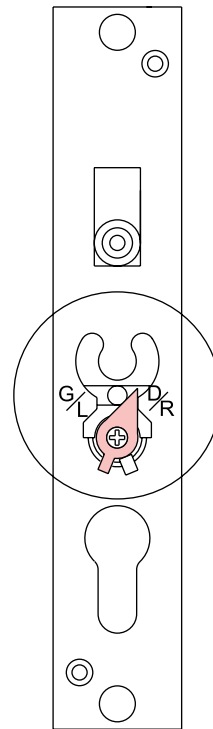
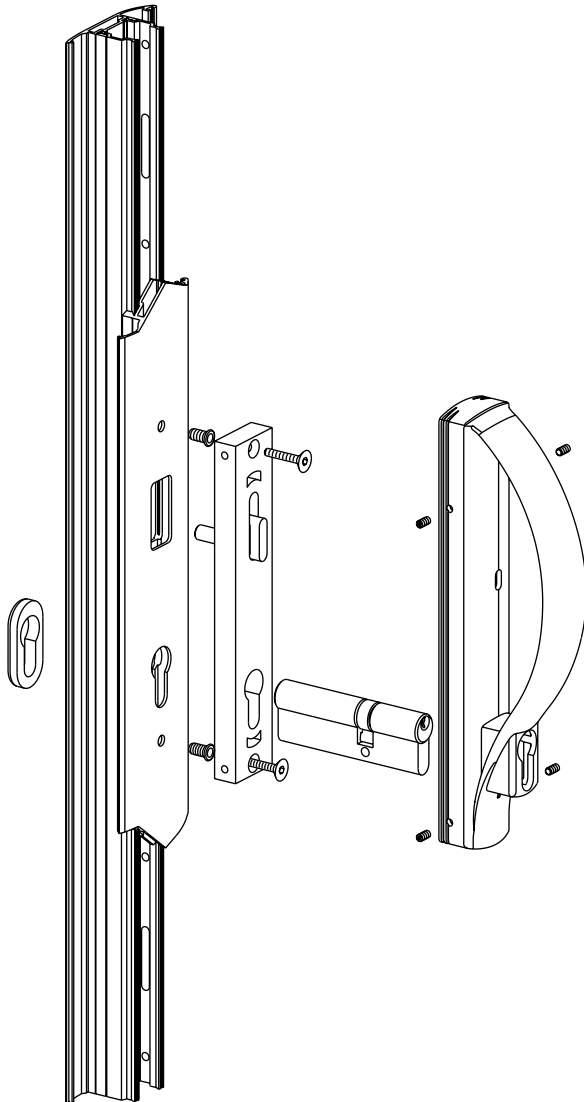
1. Offer bottom of handle in first and press down top.
2. Insert and allow top to spring back.



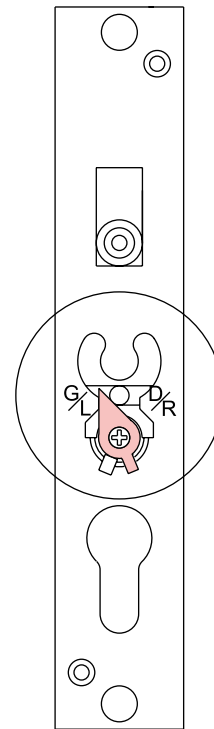
## FIT LOCKS &amp; HANDLES

## GX1801 Multilock Handle

GX709



Lock on service leaf  
- on the left view  
from inside.



Lock on service leaf -  
on the right view from  
inside.

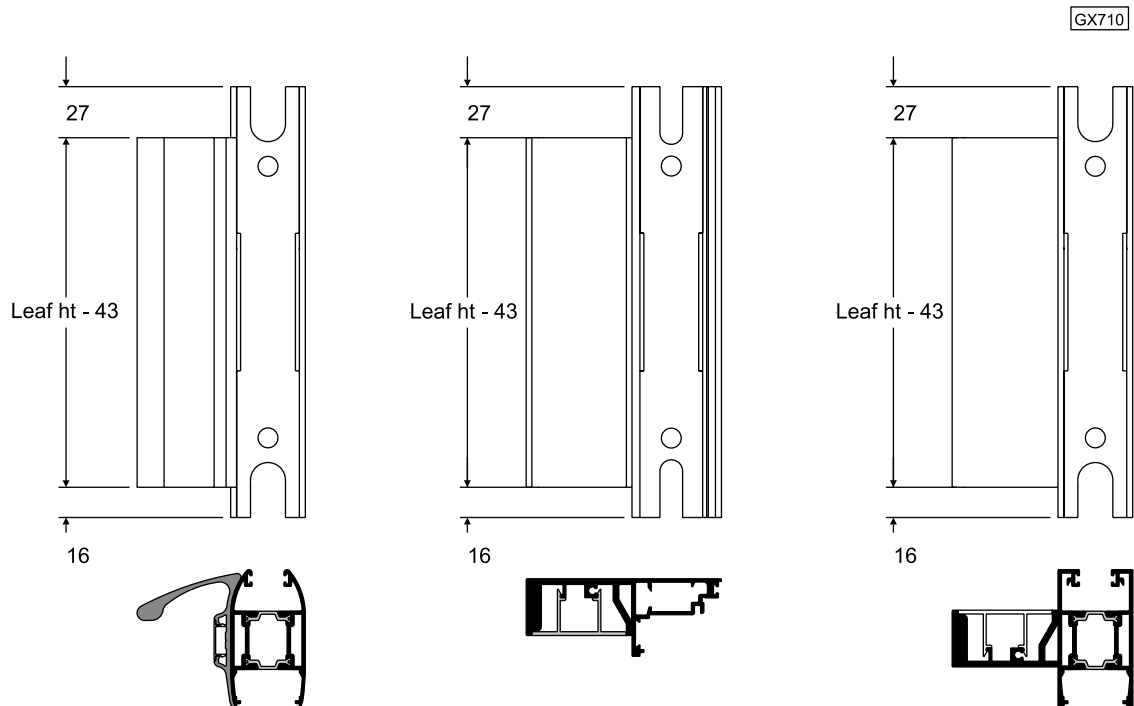
**To fit lock body**

1. Fit riv-nuts supplied if using hand tool (for battery tools use riv-nut for M4 length 12mm or longer).
2. Fit lock body with machine screws supplied.
3. Tighten with allen key.

**To fit handle**

1. Offer up handle and fix using 4 no. grub screws supplied.
2. Tighten with allen key.

## **FIT STILE REINFORCEMENT**



### **To fit reinforcement**

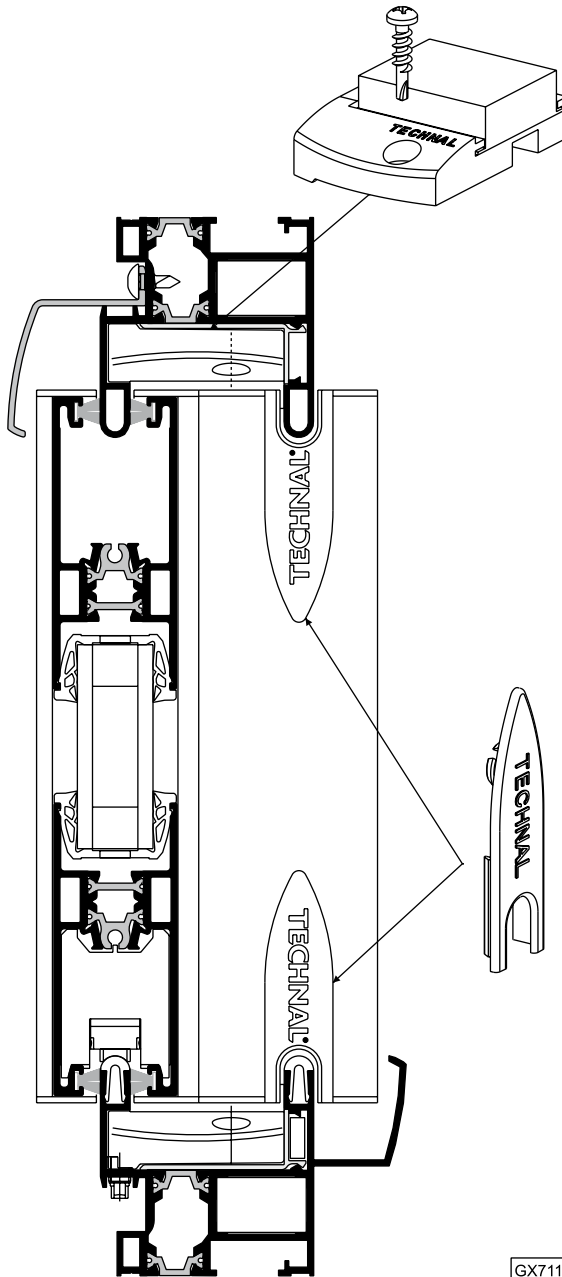
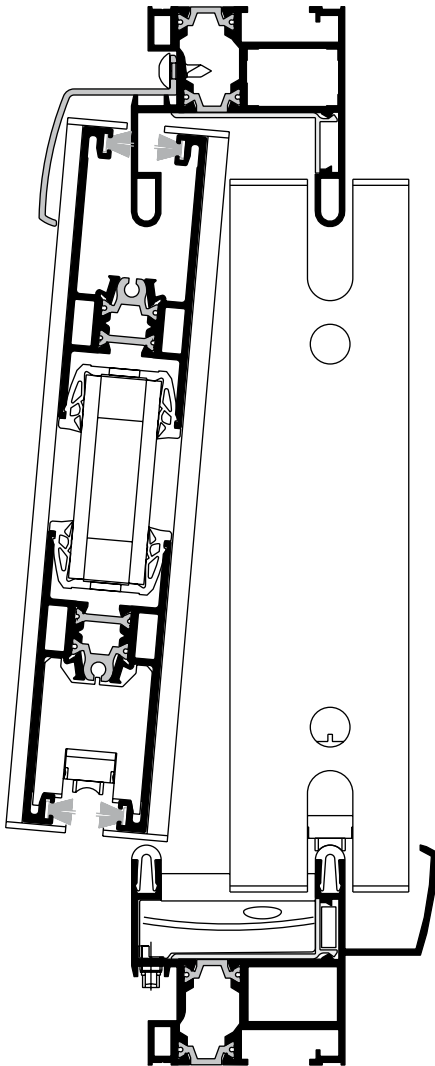
1. Cut reinforcement and cover plate to Leaf Height - 43mm.
2. Fix with No.8 SS pan heads 250-300mm centres.
3. Fit cover plate to finish.

### **Note:**

CAUTION: Check hardware for suitability on stile faces fitted with reinforcement. Eg. To fit GX1801 handle with reinforcement fitted externally or the same stile the handle should be used internally with a half cylinder.

## FIT LEAF INTO OUTER FRAME

7.140



GX711

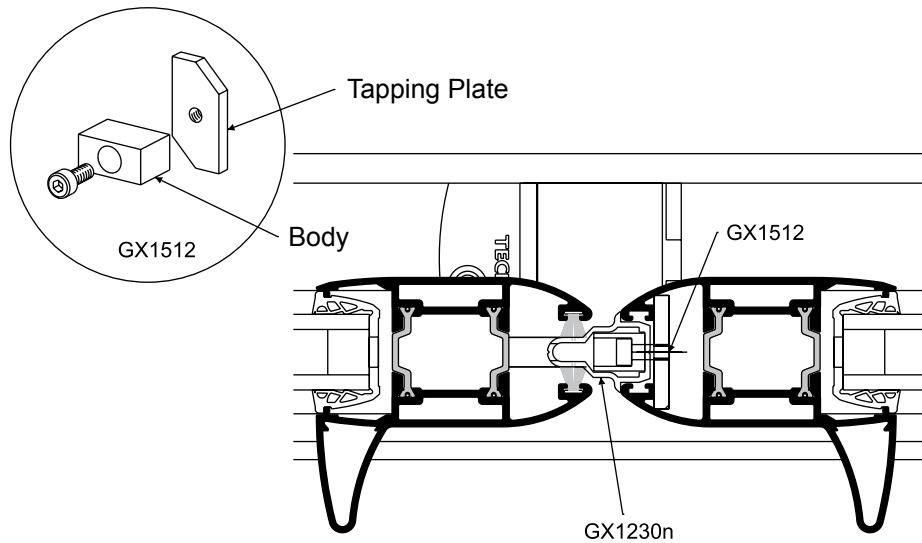
### To fit sashes on track.

1. Ensure head woolpile block and central stile guides are **not** fitted.
2. Offer sash in head first and lift bottom of sash over track.
3. Lower sash until the dead load is fully taken by the track.
4. If using GX1811 adjustable rollers adjust the position of the sash as necessary.
5. Fit central stile guides and head woolpile block.
6. Check operation of locks and adjust accordingly.

To remove the door reverse the fitting sequence.

## **FIT GX1230n MEETING STILE ADAPTOR**

GX714



7.145

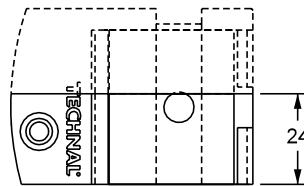
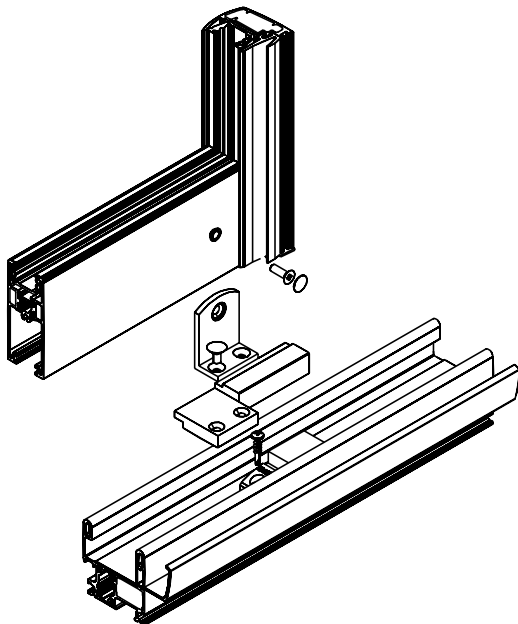
### **To fit GX1230n meeting stile adaptor**

1. Slide body of GX1512 with machine screw into hollow of GX1230n.
2. Allow screw to drop through 4.5mm dia predrilled holes.
3. Offer tapping plate untill engaged - do not tighten, plate must be able to rotate.
4. Repeat steps 1 to 3 untill all pre drilled holes have a GX1512 fitted.
5. Offer up GX1230n to jamb section and tighten screws ensuring that the plate has rotated in the section behind the woolpile groove.

# FIT STOPS & RESTRICTORS

## GX1516 FIXING SET FOR FIXED LEAF

GX712b



### To fit GX1516

Caution: Ensure roller is positioned 70mm from the rail end.

GX1516 may only be used where the fixed leaf is on the outside track

1. Cut down GX1608 central woolpile block to 24mm
2. Bed woolpile block on low modulus silicone sealant and fix with self driller supplied (SFS head) position tight to GX1700 Polyamide cover.
3. Bed main body of GX1516 on low modulus silicone sealant and fix using screws provided via the fixing angle.
4. Spot through the fixing angle to position fixing hole and drill 7mm dia hole, fit rivnut supplied.
5. Fix door leaf using machine screw supplied and finish with screw caps supplied.

## GX1517 LEAF RESTRICTOR

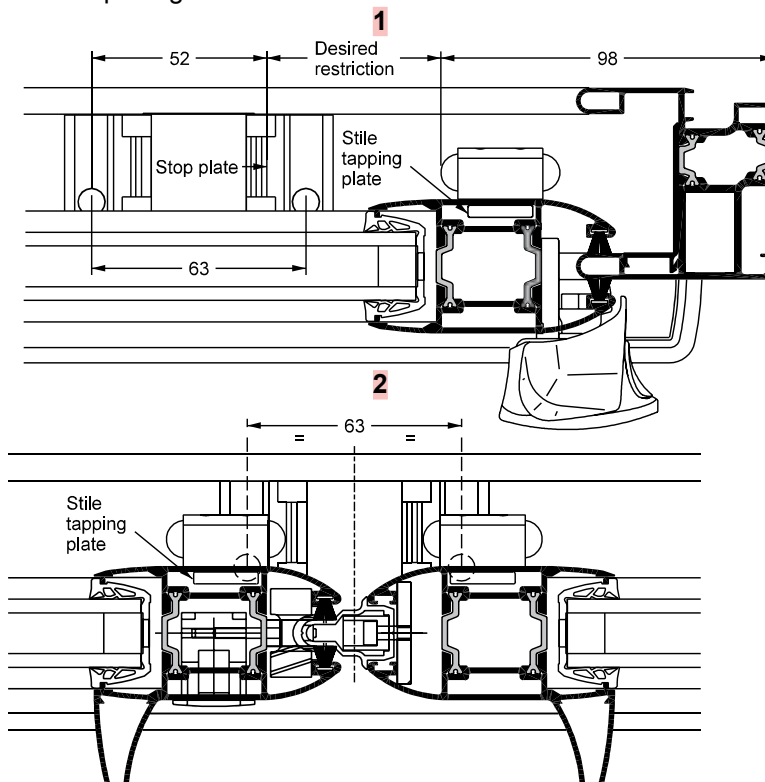
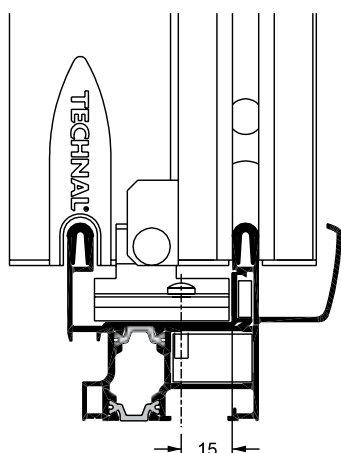
### To fit GX1517

Caution: Stile tapping plate must be inserted prior to frame assembly.

1. Establish restricted opening dim and fix stop plate or
2. Fix stop plate on the axis of the two jamb stile profiles.

Put low modulus silicone in screws holes before fixing stop plate.

Note: GX1517 may only be used where the opening sash is on the internal track.



## FIT STOPS & RESTRICTORS

### GX1518 ALTERNATIVE FIXING SET FOR FIXED LEAF

GX716-b

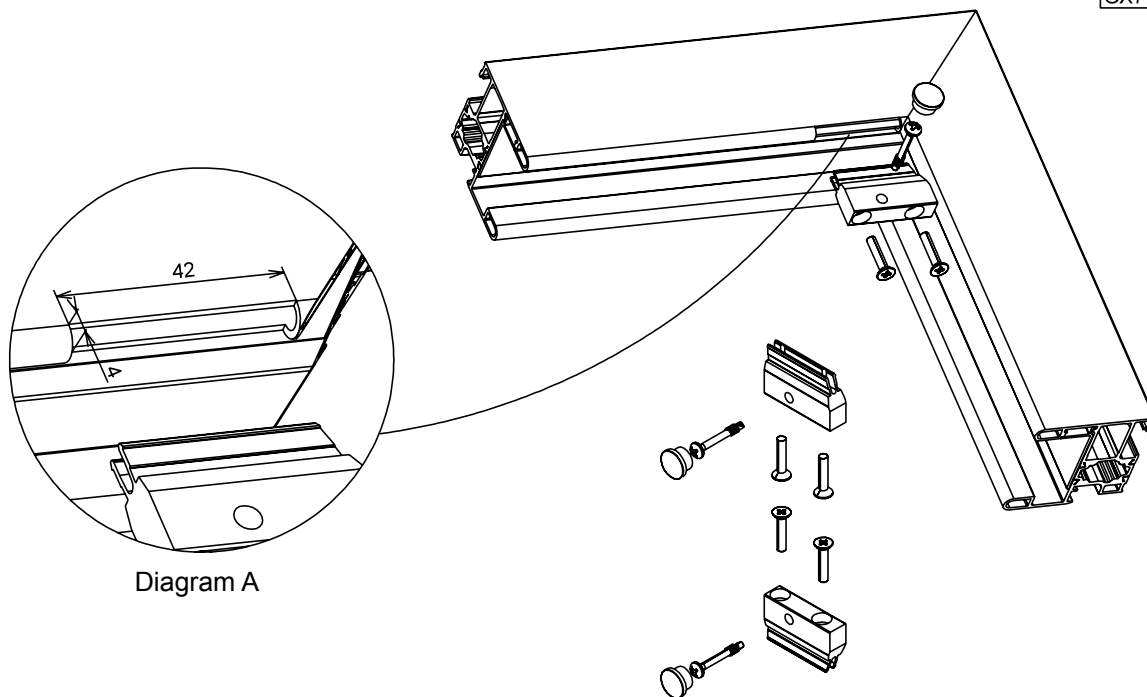


Diagram A

7.155

#### To fit GX1518 fixing set

##### Preparation

1. Machine a 42 mm x 4 mm slot in the closed track outer frame at the head, before the outer frame is assembled (diagram A).
2. Cut down track insert, for outer frame still, by 46 mm.
3. On panel to be fixed, drill 4.5 mm dia. clearance hole from inner face of jamb stile, through two walls only. The hole centre positioned on dimensions in diagram B (note 20 mm dimension includes the stile end plug thickness).

4. Counter bore hole in outer wall only, to 10 mm dia.

##### Assembly (to be completed after outer frame has been installed)

5. Insert blocks, of fixing set, into top and bottom outer frame and screw in position with screws provided.
6. Slide panel to be fixed to closed position.
7. Fix panel, with self drilling screws supplied (SFS head), through holes drilled in stile section.
8. Insert screw cover caps.

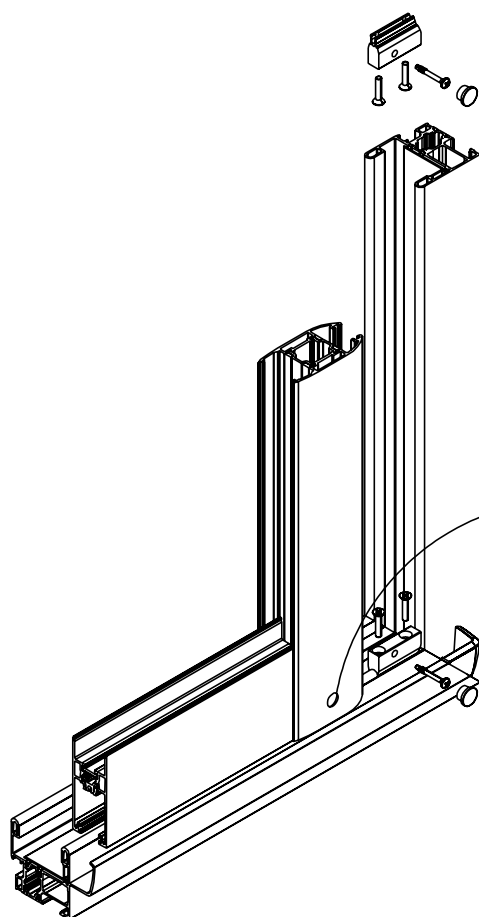
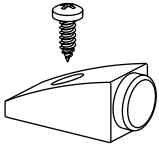


Diagram B  
Repeat at the top



## FIT STOPS &amp; RESTRICTORS

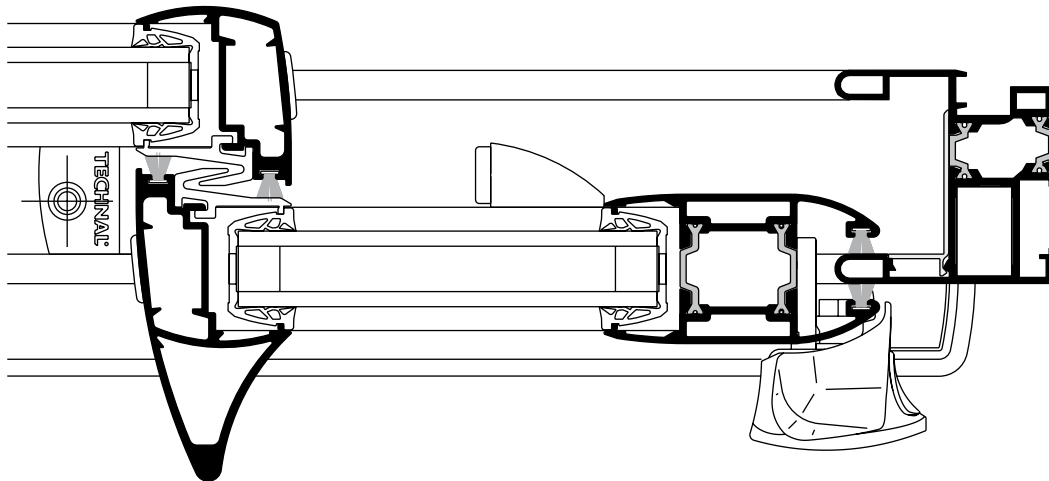
## GX1513 LEAF STOP



## To fit GX1513 leaf stop

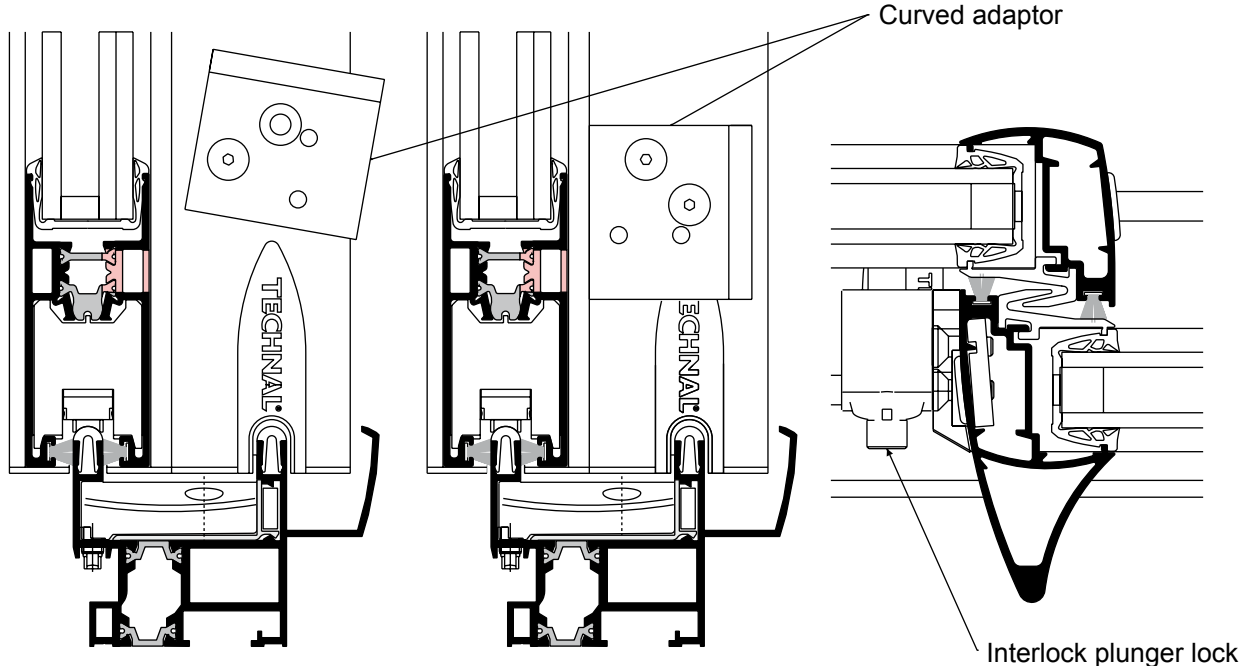
GX713

1. Offer up leaf stop to sit flush with the underside of the rail.
2. Spot through sash stop and drill 3.5 mm dia hole.
3. Fix using screw supplied.
4. Fix top leaf stop.



7.160

## GX1808 INTERLOCK PLUNGER LOCK

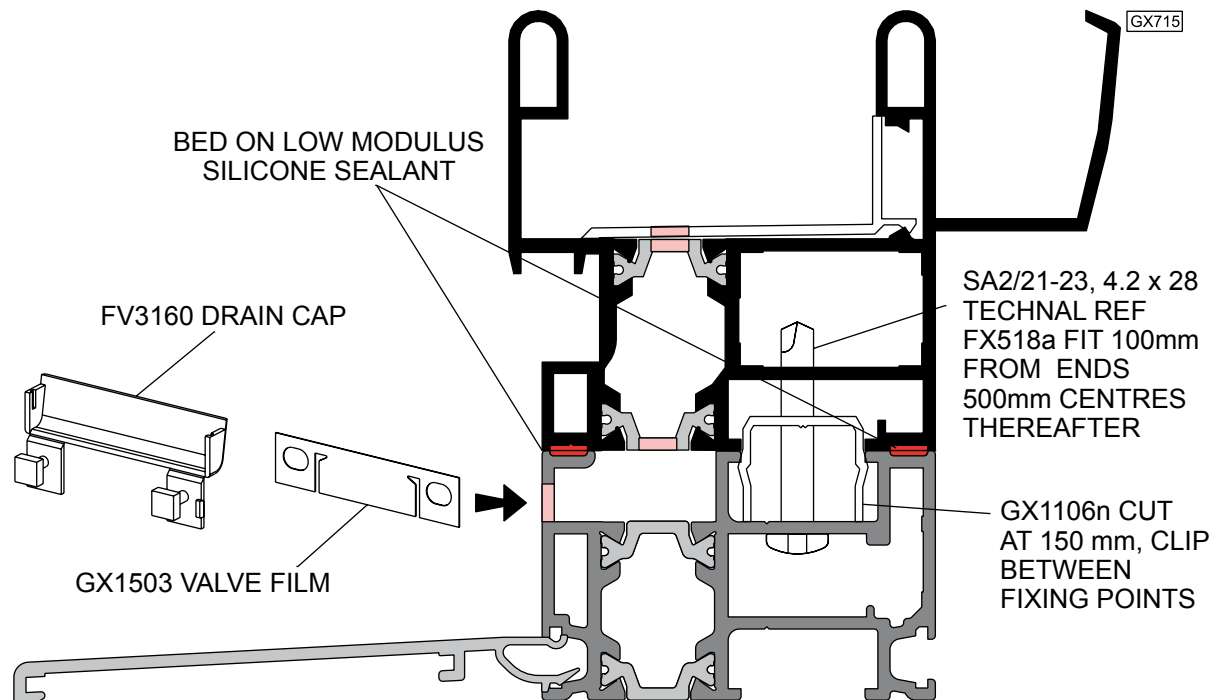


## To fit GX1808 interlock plunger lock

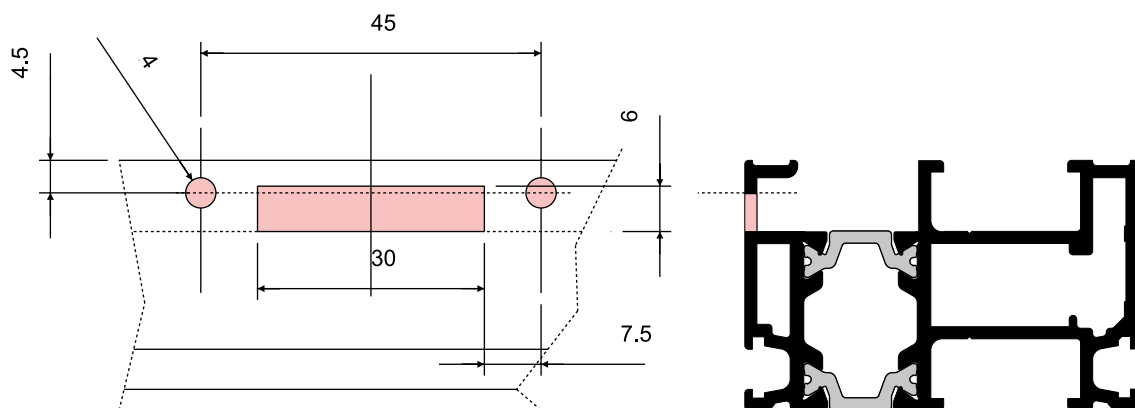
Caution: stile tapping plate must be inserted prior to frame assembly.

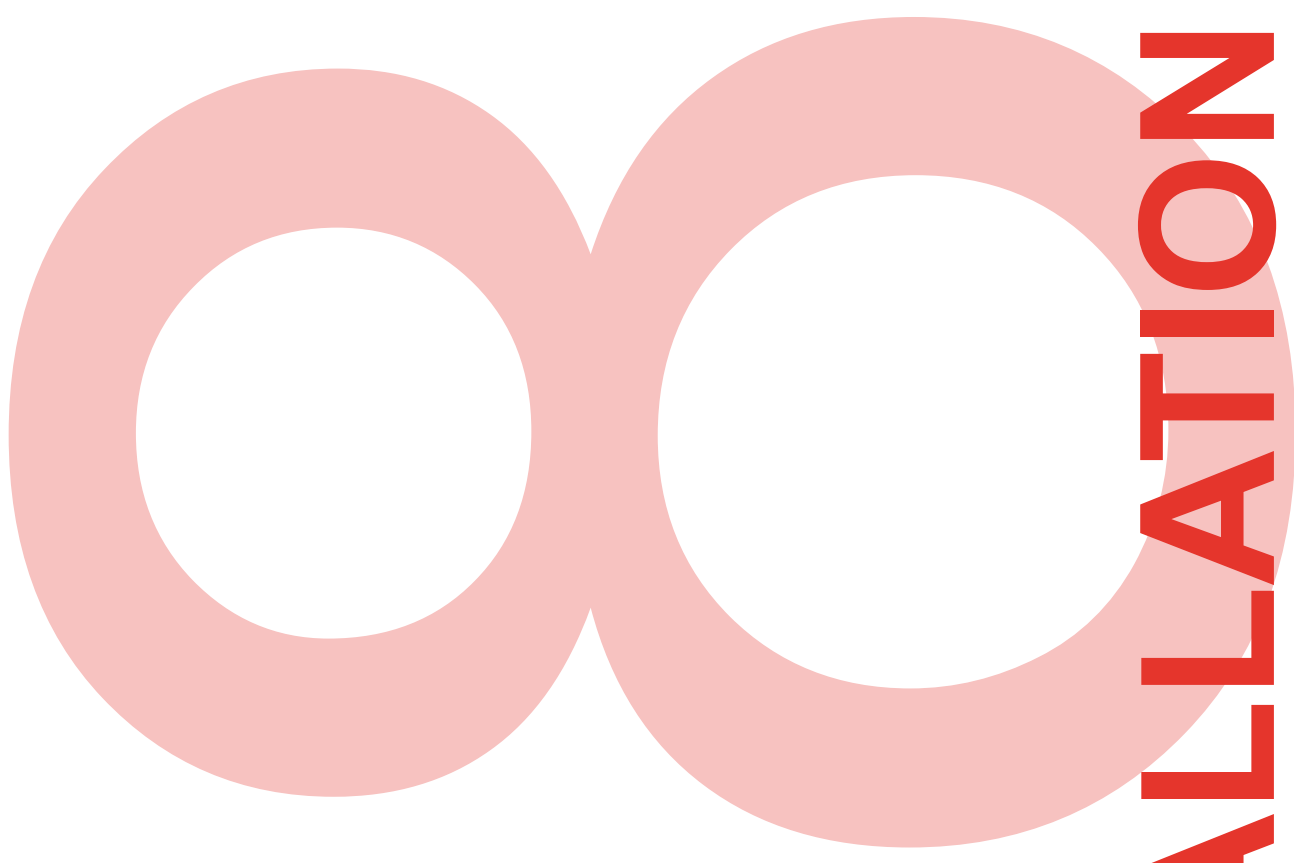
1. Remove bottom screw, loosen top screw and rotate curved adaptor to fit GX1506.
2. Reposition adaptor plate and fix via tapping plate to stile.
3. Fix plunger lock to adaptor plate using bolts supplied.

## FITTING GX1105P SUB CILL



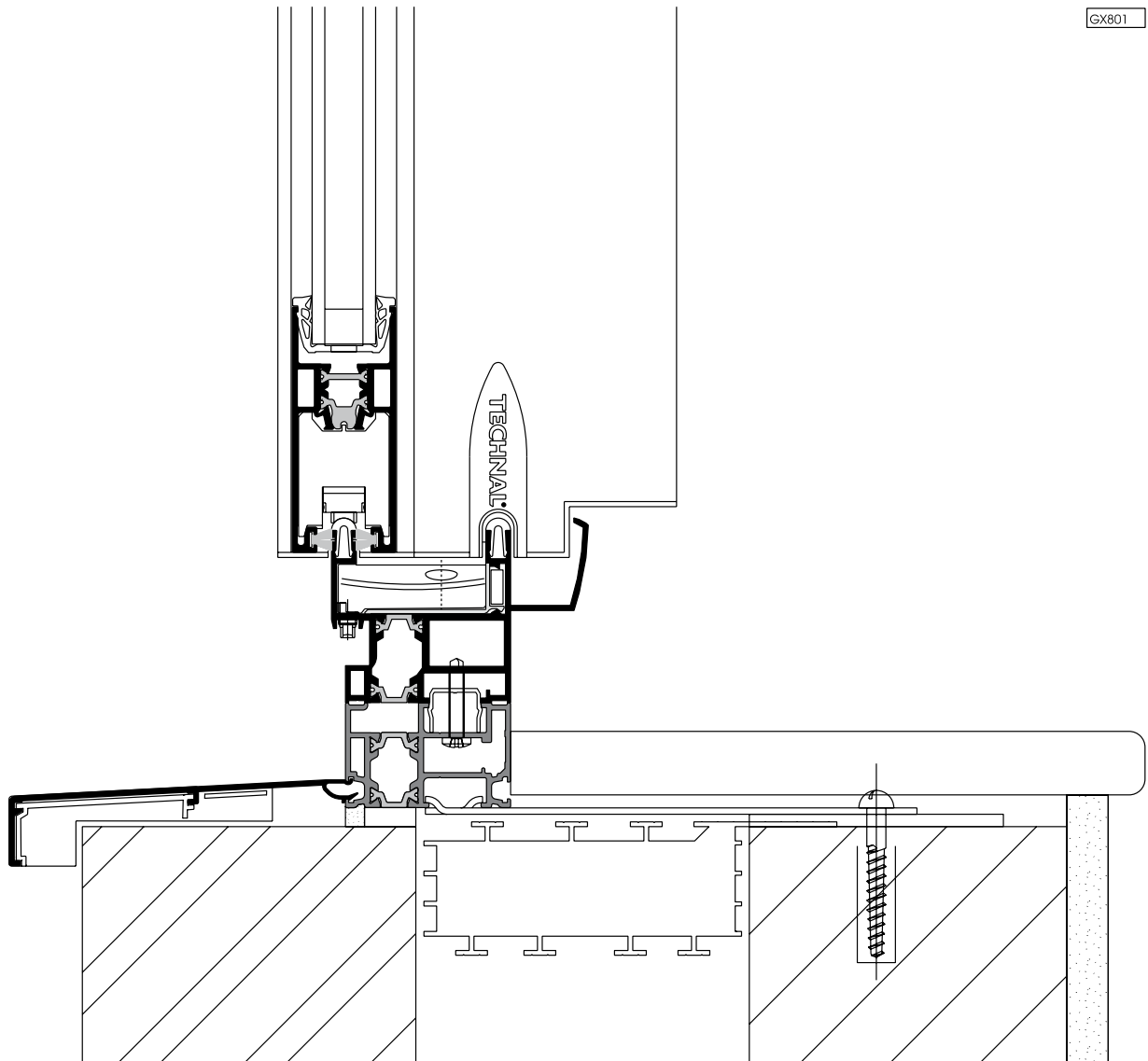
1. Clip GX1106n periodically along GX1105p sub-cill.
2. Bed outer frame on low modulus silicone sealant to GX1105p sub-cill.
3. Screw fix from under with SFS No. 8 screw Technal ref FX518a, via clearance hole through underside.
4. Fit GX1607 end seal to end of cill section, fully sealed with low modulus silicone sealant.
5. Attach valve film GX1503 to FV3160 drain cap and fit to front drainage slots.
6. Add clip in cill plate.





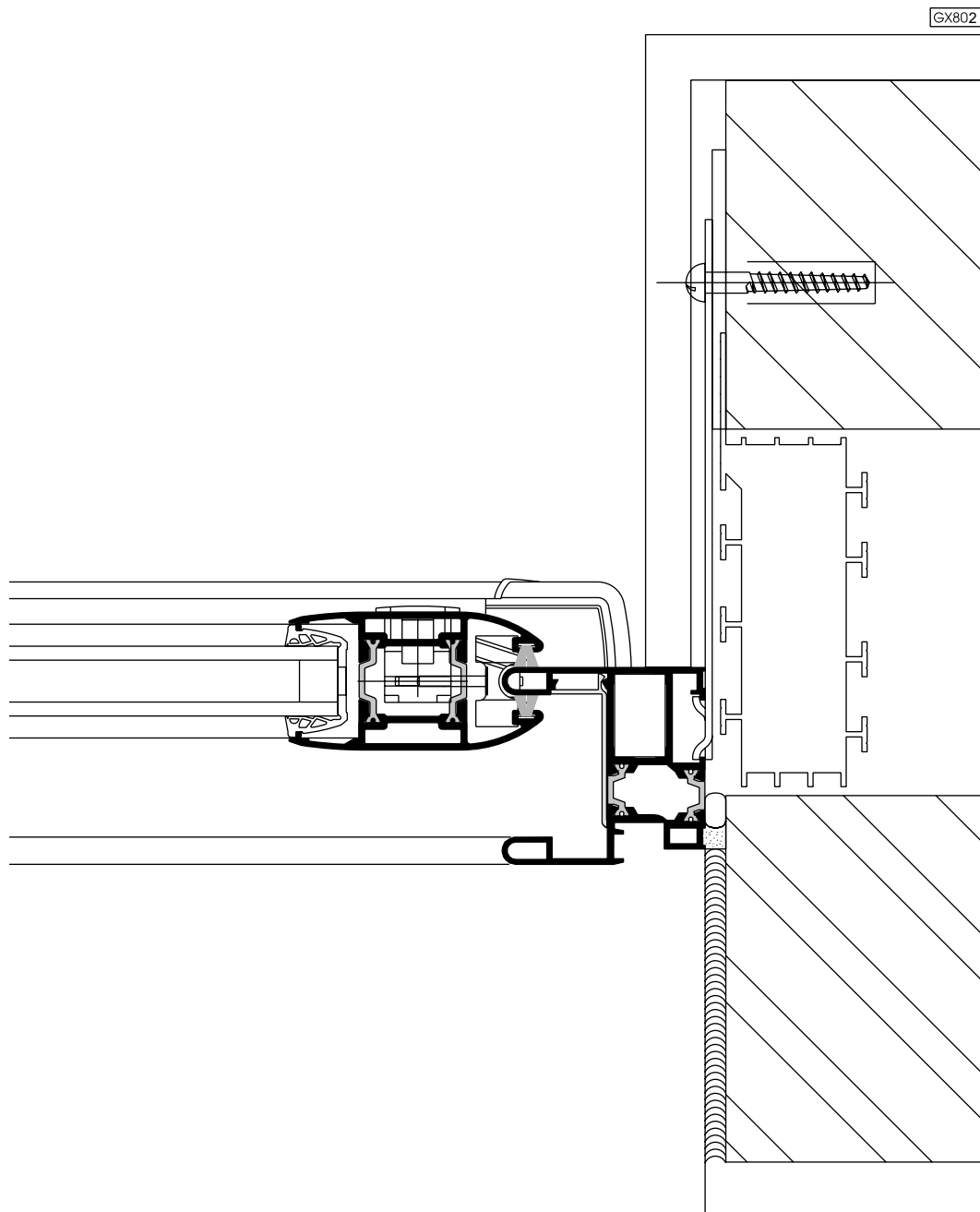
**SITE INSTALLATION**

## TYPICAL PERIMETER DETAILS



8.005

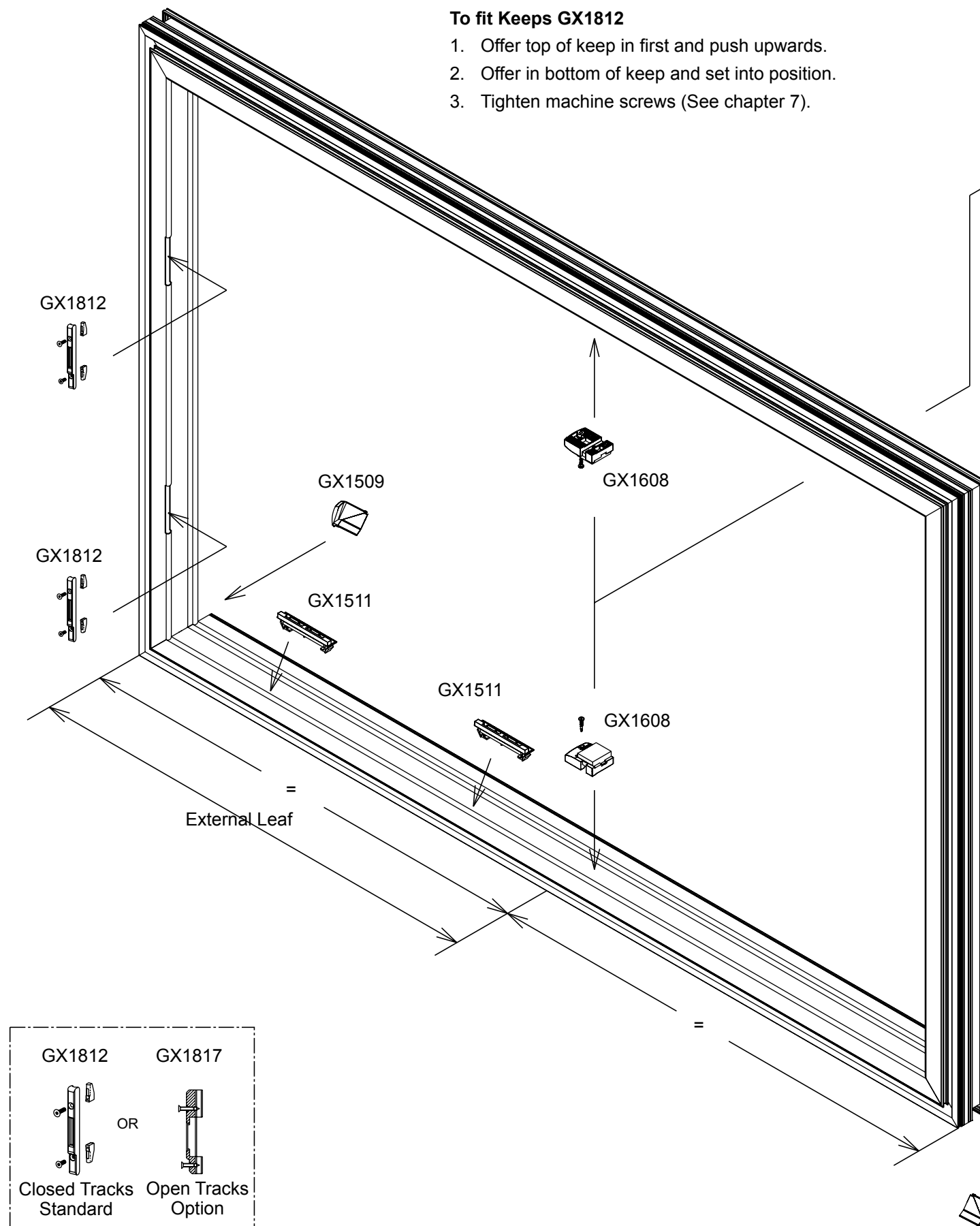
## TYPICAL PERIMETER DETAILS



8.010

# ACCESSORIES EXAMPLE FOR OUTER FRAME

8.015



## To fit Keeps GX1812

1. Offer top of keep in first and push upwards.
2. Offer in bottom of keep and set into position.
3. Tighten machine screws (See chapter 7).

GX1506

GX1608  
2 TRACKS

GX1609  
3 TRACKS

## To fit sashes on track

1. Ensure head woolpile block and central stile guides are not fitted
2. Offer sash in head first and lift bottom of sash over track
3. Lower sash until the dead load is fully taken by the track
4. If using GX1811 adjustable rollers adjust the position of the sash as necessary (See chapter 7)
5. Fit central stile guides GX1506 to leaf and head woolpile block
6. Check operation of locks and adjust accordingly

To remove the door reverse the fitting sequence

OPTION

## To fit GX1516 fixing set for fixed leaf

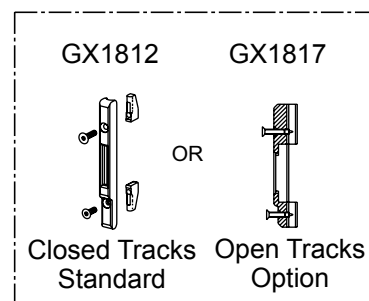
Caution: Ensure Roller is positioned 70mm from the rail end.  
GX1516 may only be used where the fixed leaf is on the outside track.

1. Cut down GX1608 central woolpile block to 24mm.
2. Bed woolpile block on low modulus silicone sealant and fix with self drillers supplied (SFS head) position tight to GX1700 Polyamide cover.
3. Bed main body of GX1516 on low modulus silicone sealant and fix using screws provided via the fixing angle.
4. Spot through the fixing angle to position fixing hole and drill 7mm dia hole, fit rivnut supplied.
5. Fix door leaf using machine screw supplied and finish with screw caps supplied.

OR

## To fit GX1518 fixing set for fixed leaf

1. The closed track outer frame on the top will be machined to 42 x 4 mm deep before the fixed frame is assembled.
2. The auxiliary track on the bottom will be cut short for the body of the fixing block.
3. Put GX1518 bodys in the cut out see no.1 on the top and on the bottom and fix with screws.
4. Close the leaf.
5. Drill 10mm dia hole in first wall of the leaf.
6. Fix the leaf using self drillers supplied (SFS head).
7. Finish with screw caps.



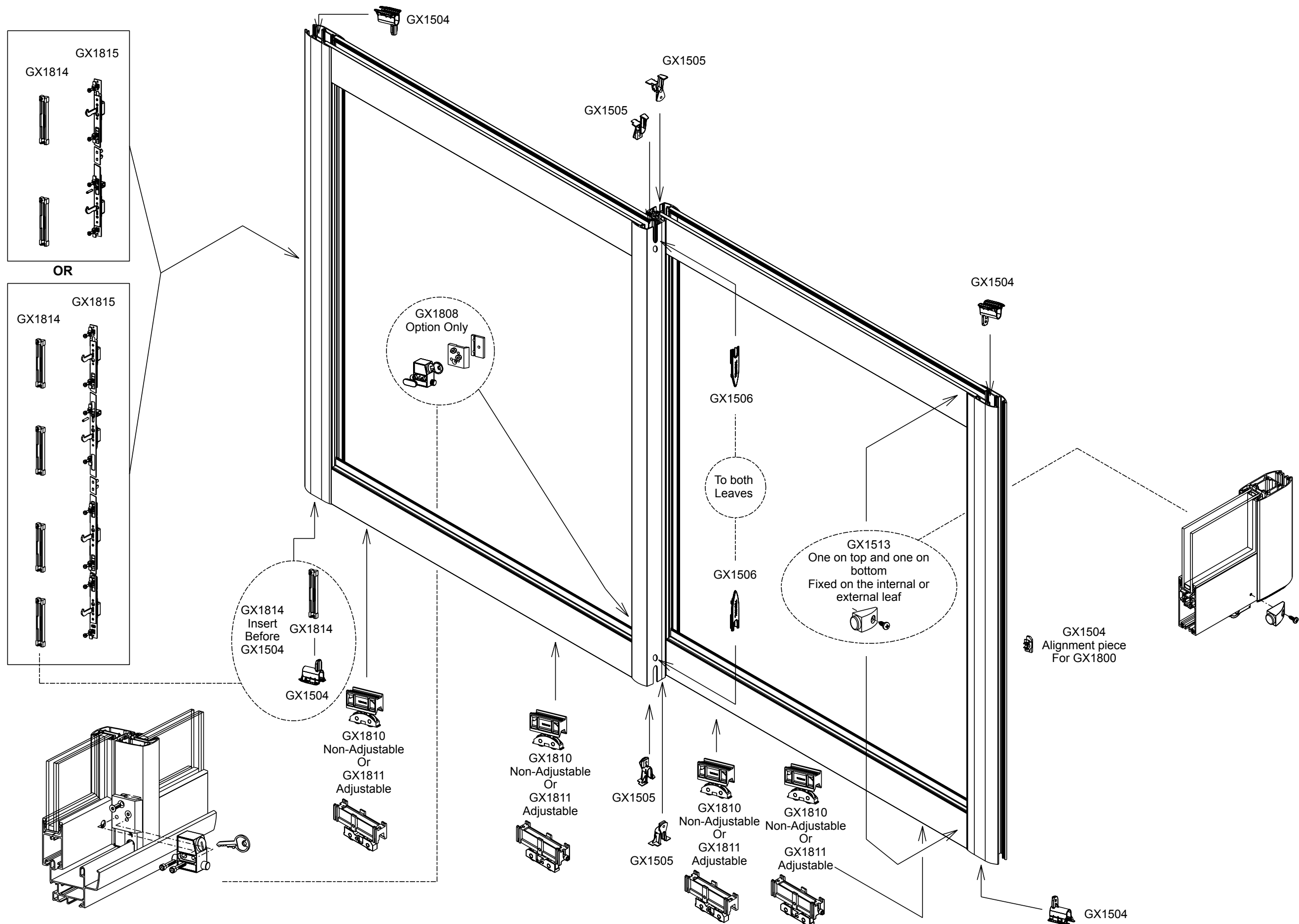
8.015

GX803

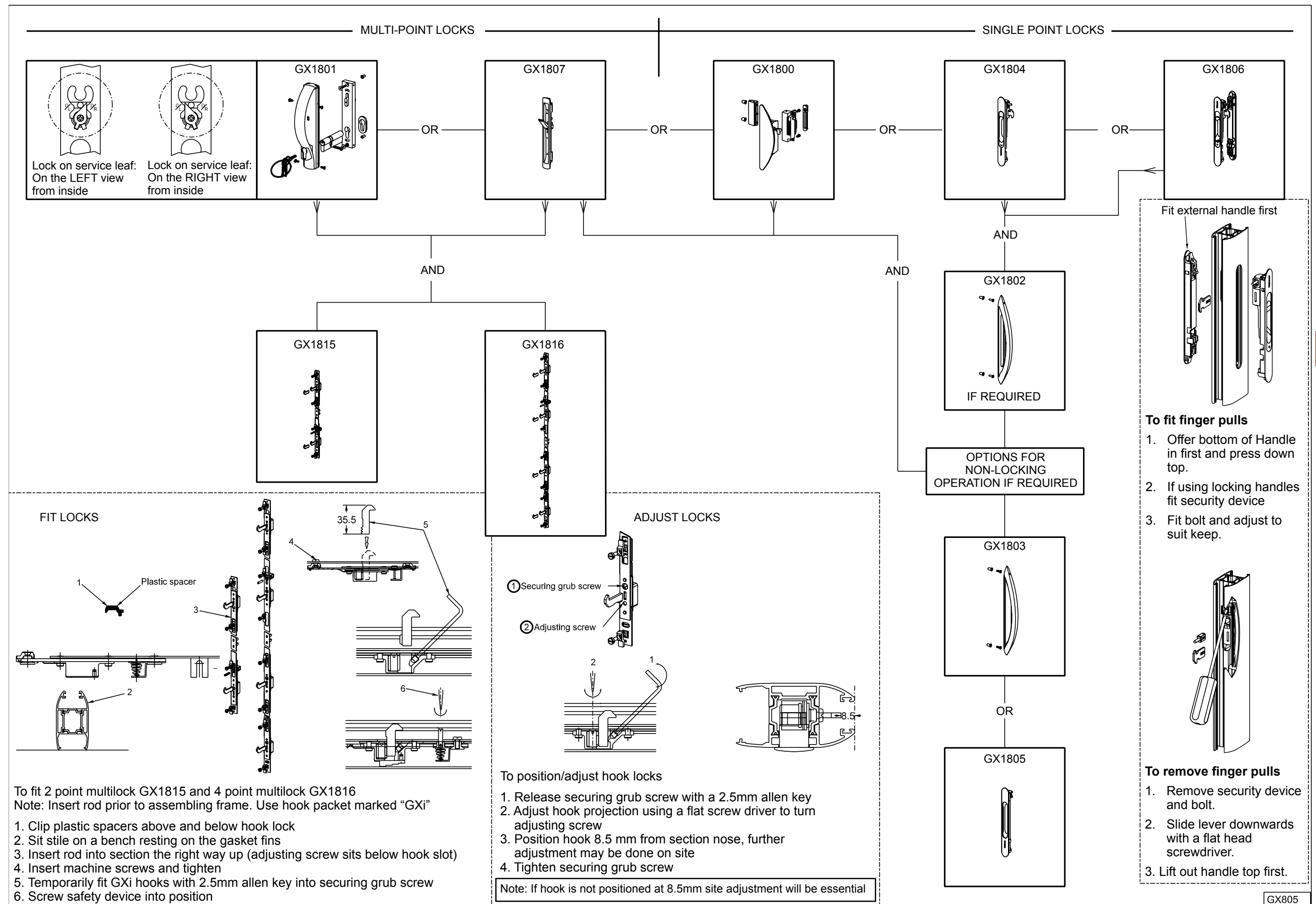
# ACCESSORIES EXAMPLE FOR LEAF

8.025

8.025



## LOCK OPTIONS AND ADJUSTMENTS



8.035

8.035



# *Windows*

HORIZONTAL SLIDER  
GXi

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	GX1205n + GX1205n	1.030
	GX1205n + GX1206n	1.035
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	GX1200p + GX1200p + GX1210n + GX1210n	1.065
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## **8**

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#### **NOTE**

The information in this manual presupposes an advanced level of knowledge in the user in the cutting, assembly and installation of aluminium components and related materials. This information should therefore not be taken as a complete instruction guide in these matters.

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