

Polar 100 Design Guide

Issue 5 | May 2022

Think partitioning,
think Komfort



Polar 100 Design Guide

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Polar 100 Overview

Dimensions

Screen Height up to 3.0m*
Doorset Height up to 3.0m

Acoustic Performance

Double Glazed up to 53dB (R_{w})*
Speech Privacy Potential up to 'High'*

Structural Performance

1.5kN/m up to 3.0m* (BS 6180:2011)
Severe Duty up to 3.0m* (BS 5234-2:1992)

Fire Performance

None

Deflection Head

+/-25mm

Glass Options

10mm & 12mm Toughened
13.5mm Toughened Laminated
10.8mm, 12.8mm & 14.8mm Acoustic Laminated

Doorset Options

10mm & 12mm Glass Doors
44mm & 54mm Timber Doors
Sonik 52, 70 & 70R Doors

Optional Extras and Finishes

- ✘ Blinds
- ✓ Manifestations
- ✓ Graphics
- ✓ Switch Glass
- ✓ Kross Glaze
- ✓ Curved Glass*
- ✓ Polyester Powder Coat Finish
- ✘ Satin Anodised Finish
- ✓ Special Anodised Finish

* Dependent on configuration and specification



Polar 100 Introduction

Polar 100 is an elegant 100mm wide double glazed system with a range of glass configurations available. The frameless bubble jointed glazing and minimal trackwork provides contemporary aesthetics in any working environment, allowing an abundance of light to fill the space to naturally brighten any room.

For any busy environment, this system allows designers to get imaginative with space by creating private meeting rooms, boardrooms, quiet areas and more. Increase flexibility and create the perfect working environment.

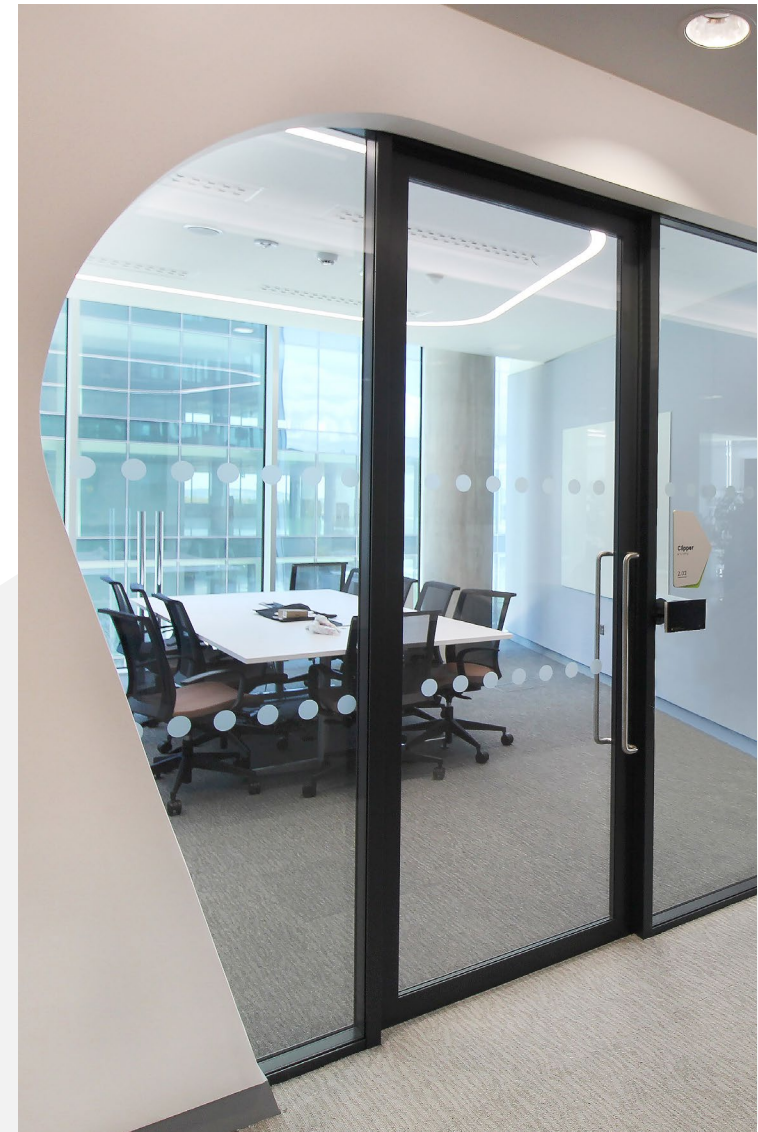


Polar 100 Specification

Polar 100 can accommodate 10-14.8mm glass in toughened, toughened laminated and acoustic laminated to meet a range performance and budgetary requirements, all glass options can be configured as double glazed or offset single glazed.

Boasting acoustic performance up to 53dB (R_w), with structural performance up to severe duty and 1.5kN/m line loads.

The system includes an aluminium door frame and is compatible with Komfort's Sonik, single glazed and timber door options, either full height or with a glazed over panel. Other features include a deflection head for +/-25mm and integration components into drywall or Komfort's Komfire and 100 systems.

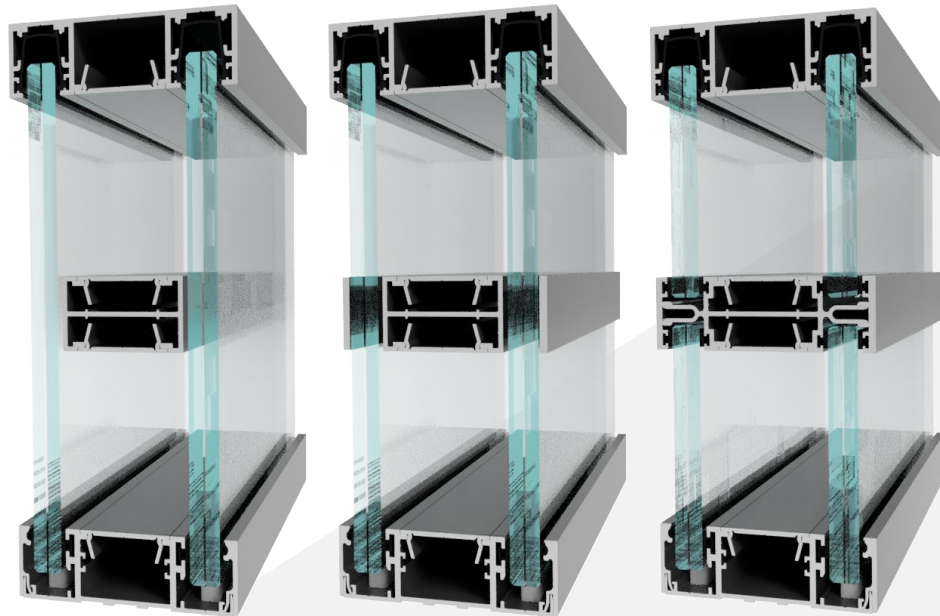


Polar 100 Specification

The intricate design of Polar 100 allows for a range of Kross Glaze options to suit a range of aesthetic requirements. Starting with the internal Kross Glaze bars, to create a minimalist floating structure between the glass with no visible fixings.

The internal bar can also be combined with applied external bars to create the illusion of individual glass panes without compromising the performance of the system. With foam applied to the internal bar this addition improves the acoustic performance by up to 2dB (R_w).

The system also includes an option for split glazing with a post and transom profile with external trim.

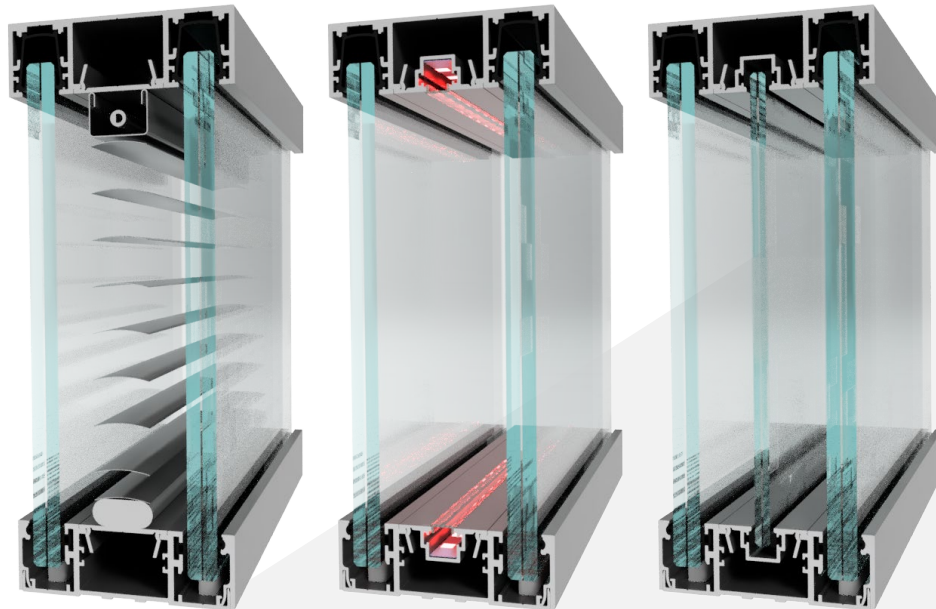


Polar 100 Specification

The intricate design of Polar 100 also includes an optional third glazing channel, which can be used for an additional third pane of glass, a feature panel or even LED lighting strips for a halo effect. Please contact your local Project Specification Manager or our Technical Department to discuss any design requirements.

Visual privacy can be just as important as audible privacy in a busy work environment, Polar 100 offers integral 25mm venetian blinds with ghost posts, manifestation, graphics and Switch Glass.

All aluminium components for the screen and door frames will be powder coated to any RAL or BS colour code, please ask for availability. If a specialist finish is required on the aluminium, please contact your local Project Specification Manager or our Technical Department.



Polar 100 Acoustic Performance

Airborne sound insulation laboratory testing of Polar 100 double glazed partitioning in accordance with BS EN ISO 10140-1:2016 and BS EN ISO 10140-2:2010.

Acoustic Performance of Polar 100 Double Glazed Screens		
Glass Configuration	dB Rating	Certificate
12mm & 10mm Toughened Glass with Bubble Joints	45dB (R_{W})	K100-AP-01
12mm Tough. & 10.8mm Aco. Lam. Glass with Bubble Joints	46dB (R_{W})	K100-AP-02
12.8mm Aco. Lam. & 12mm Tough. Glass with Bubble Joints	47dB (R_{W})	K100-AP-04
12.8mm & 10.8mm Acoustic Lam. Glass with Bubble Joints	48dB (R_{W})	K100-AP-03
14.8mm & 10.8mm Acoustic Lam. Glass with Bubble Joints	49dB (R_{W})	K100-AP-07
12.8mm & 12.8mm Acoustic Lam. Glass with Bubble Joints	50dB (R_{W})	K100-AP-05
14.8mm & 12.8mm Acoustic Lam. Glass with Bubble Joints	51dB (R_{W})	K100-AP-06
12.8mm & 12.8mm Acoustic Laminated Glass with Internal & Applied Kross Glaze	52dB (R_{W})	K100-AP-09
12.8mm & 12.8mm Acoustic Laminated Glass with Transom Kross Glaze	52dB (R_{W})	K100-AP-11
14.8mm & 12.8mm Acoustic Laminated Glass with Internal & Applied Kross Glaze	53dB (R_{W})	K100-AP-08
12.8mm, 6.8mm & 12.8mm Acoustic Laminated Glass Triple Glazed with Bubble Joints	48dB (R_{W})	K100-AP-10

It should be noted that in an on-site acoustic test, a glazed partition can result in a 3dB to 5dB lesser performance than under laboratory conditions. This can be further affected by ambient noise levels on the receiving side of the test sample and by poorly insulated abutments and voids above and below the partition which will result in a 'flanking' path for audible sound.



Polar 100 Speech Privacy Potential

Examples of Speech Privacy Potential for Polar 100 double glazed screens are given below with varying degrees of background noise levels for office environments.

Speech Privacy Potential of Polar 100 Double Glazed Screens				
Glass Type & Sound Level Difference	Privacy of Speech from the Next Room with Background Noise Level			
	25dBA	30dBA	35dBA	40dBA
10+12mm Toughened 41dB (D_w)*	66 - Basic	71 - Basic	76 - Good	81 - Good
12.8+10.8mm Acoustic Lam. 44dB (D_w)*	69 - Basic	74 - Basic	79 - Good	84 - Good
14.8+10.8mm Acoustic Lam. 45dB (D_w)*	70 - Basic	75 - Good	80 - Good	85 - High
12.8+12.8mm Acoustic Lam. 46dB (D_w)*	71 - Basic	76 - Good	81 - Good	86 - High
14.8+12.8mm Acoustic Lam. 47dB (D_w)*	72 - Basic	77 - Good	82 - Good	87 - High
14.8+12.8mm w/Kross Glaze 49dB (D_w)*	74 - Basic	79 - Good	84 - Good	89 - High

* The examples of weighted sound level difference (D_w) data shown is assumed as a nominal 4dB less than the weighted sound reduction index (R_w) from laboratory testing, as with an on-site acoustic test a glazed partition can result in a 3dB to 5dB lesser performance than under laboratory conditions. This can be further affected by ambient noise levels on the receiving side of the test sample and by poorly insulated abutments and voids above and below the partition which will result in a 'flanking' path for audible sound.

Speech Privacy Potential Explained

Speech Privacy Potential (SPP) is the value and rating of speech intelligibility between two rooms. The privacy of the partition is determined by the intelligibility of speech outside of the room that is generated within the room. A partition can provide a high degree of speech privacy, even if speech is audible, provided that speech is not intelligible. The poorer the speech intelligibility, the more private the room.

It must be noted that the aim of creating privacy between rooms lies in reducing speech intelligibility to a level at which speech cannot be understood, rather than reducing speech level to inaudibility.

Speech Privacy Potential is calculated from the addition of two factors; the background noise level of the receiving room, expressed in terms of dBA, and the acoustic separation of the partition between the rooms, expressed as the field performance sound insulation of the partition in dB (D_w).

The values and corresponding degrees of privacy ratings are shown in the table below.

$$\text{dB } (D_w) + \text{dBA} = \text{SPP}$$

Rating	SPP	Description of Privacy
High	85 <	Raised voices are barely audible and unintelligible
Good	75-84	Normal speech is barely audible, raised voices are mostly unintelligible
Basic	65-74	Normal speech can be overheard some of the time, raised voices can be heard
Poor	< 65	Normal speech can be heard most of the time

Polar 100 Structural Performance

Strength and robustness analysis of Polar 100 double-glazed partitions in accordance with BS 5234-2:1992 (Annex A and Annex G)†.

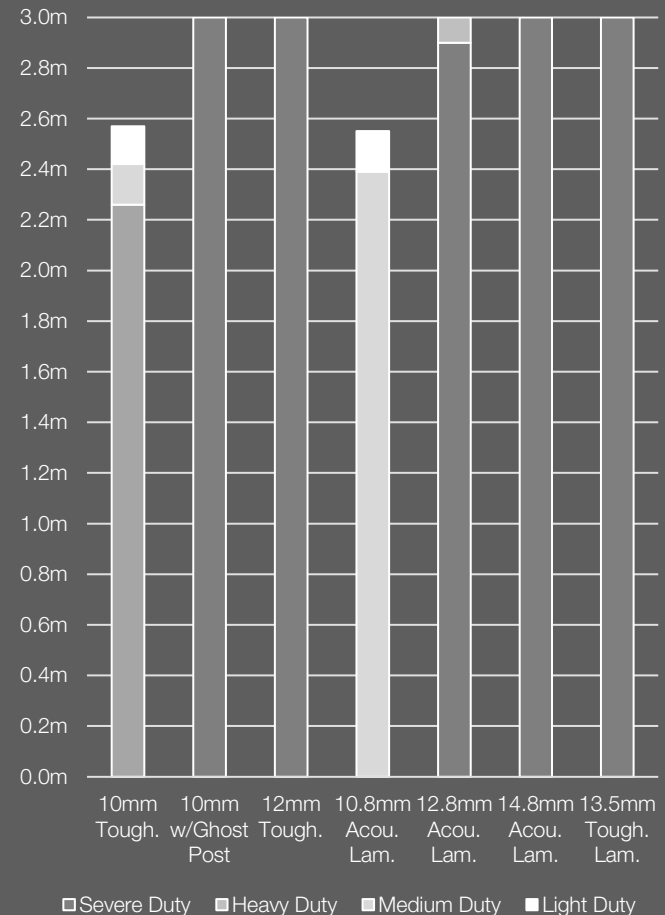
Structural Performance of Polar 100 Glazed Partitions to BS 5234-2:1992			
Loaded Glass & Joint Type	Duty Grade	Max. Height	Certificate
10mm Toughened with Bubble Joints	Heavy	2260mm	K100-SP-03
	Medium	2420mm	
	Light	2570mm	
12mm Toughened with Bubble Joints	Severe	3000mm	K100-SP-01
10.8mm Acoustic Lam. with Bubble Joints	Medium	2390mm	K100-SP-06
	Light	2550mm	
12.8mm Acoustic Lam. with Bubble Joints	Severe	2900mm	K100-SP-04
	Heavy	3000mm	
14.8mm Acoustic Lam. with Bubble Joints	Severe	3000mm	K100-SP-05
13.5mm Toughened Lam. with Bubble Joints	Severe	3000mm	K100-SP-07
10mm Toughened with Ghost Posts	Severe	3000mm	K100-SP-02

Polar 100 structural performance is assessed based on Polar 54 test data and Finite Element Analysis of supported glass by independent consultants.

† The resulting data relates to BS 5234:2 1992 Annex A for the determination of partition stiffness and Annex G for the determination of resistance to crowd pressure.

Duty ratings are graded in four categories; Light Duty for domestic accommodation, Medium Duty for office accommodation, Heavy Duty for public circulation and industrial areas, Severe Duty for major circulation and heavy industrial areas.

Glass Height Limitations BS 5234-2



Polar 100 Structural Performance

Strength and robustness analysis of Polar 100 double-glazed partitions in accordance with BS 6180:2011 when used as a barrier.







Structural Performance of Polar 100 Glazed Partitions to BS 6180:2011			
Loaded Glass & Joint Type	Line Load	Max. Height	Certificate
12mm Toughened with Bubble Joints	0.74kN/m	3000mm	K100-SP-01
14.8mm Acoustic Lam. with Bubble Joints	0.74kN/m	2500mm	K100-SP-05
13.5mm Toughened Lam. with Bubble Joints	0.74kN/m	2450mm	K100-SP-07
10mm Toughened with Ghost Posts	1.5kN/m	3000mm	K100-SP-02
12mm Toughened with Ghost Posts	1.5kN/m	3000mm	K100-SP-08



Polar 100 structural performance is assessed based on Polar 54 test data and Finite Element Analysis of supported glass by independent consultants.

Polar 100 Structural Fixings Guide

The table below provides guidance for structural fixings into a range of typical substrates when installing Polar 100 double glazed partitions.

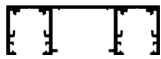



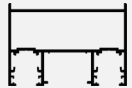









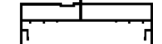
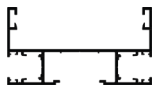


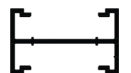
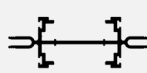

Structural Fixings Guide for Polar 100 Glazed Partitions					
Substrate	Fixing Type		Minimum Engagement	Line Load	Maximum Centres
Timber		No.8 (4mm) Wood Screw	25mm	0.74kN	400mm
				1.5kN	250mm
Tin <0.8mm		Drywall Screw	25mm	0.74kN	500mm
				1.5kN	300mm
Tin >0.8mm		Jack Point Screw	25mm	0.74kN	800mm
				1.5kN	500mm
Concrete or Screed		No.8 (4mm) Wood Screw & Rawlplug	25mm	0.74kN	500mm
				1.5kN	300mm
Concrete or Screed		Hilti HUS3-P M6 Screw	42mm	0.74kN	1000mm
				1.5kN	600mm
Concrete or Screed		Rawlplug M8 x 80	70mm	0.74kN	600mm
				1.5kN	400mm
Steel <3mm		5.5x19mm Low Profile Head Screw	12mm	0.74kN	800mm
				1.5kN	500mm
Steel 4-12mm		5.5x25mm Low Profile Head Screw	12mm	0.74kN	800mm
				1.5kN	500mm

It should be noted that any substrate interfacing a Polar system must be built and certified to withstand equal or greater loads than those specified for the partition. All trackwork must be fixed directly to a substantial structural element without any form of packing.


















Please be aware that the build-up of substrates/grounds on each project may differ and that the fixings shown are for a guidance only. For this reason, we recommend that any structural calculations should be site specific.




Polar 100 Component Identification

Trackwork & Door Frame Components								
Part Code	ID	Description	Part Code	ID	Description	Part Code	ID	Description
K100HT		Head Track	K100FT		Floor Track	K100DF		Door Frame
K54GB		32mm Glazing Bead	K100DH		Deflection Head	K100DHC		Deflection Head Channel
K100TI		Track Infill	K100TGI		Triple Glazed Infill	K100GP		Ghost Post
K54GI		Glazing Infill	K54BI		Base Infill	K100WGB		Wrap Around Glazing Bead
K30K100		Komfire 100 Glazing Insert	825		Komfire 100 Head Track	K100WDF		100mm Drywall Wrap Around Door Frame
K100PWA100		100mm Drywall Perpendicular Wrap Around Adaptor	K54TJ100		100mm Tape & Joint Adaptor Post	109		32mm x 3mm Flat
K100KGI		Kross Glaze Internal	K100KGP		Kross Glaze Post	K100KGT		Kross Glaze Trim

Polar 100 Component Identification

Glazing Gaskets, Foams & Tapes								
Part Code	ID	Description	Part Code	ID	Description	Part Code	ID	Description
SJ20		Glazing Channel Gasket for 10-14.8mm Glass	K54DS		Door Frame Buffer Seal	K54BG4B		4mm Dia. Hollow Base Gasket for 12-12.8mm Glass
K54BG5B		5mm Dia. Hollow Base Gasket for 10-10.8mm Glass	SJ26.10B		E Gasket for 10-10.8mm Glass	SJ26.12B		E Gasket for 12-12.8mm Glass
SJ34		Bubble Dry Joint for 10-12.8mm Glass	K35BJ		Bubble Dry Joint for 14.8mm Glass	174		6mm x 1mm Foam for 14.8mm Glass
175		6mm x 2mm Foam for 14.8mm Glass	342		12mm x 6mm Foam Rubber	K54KGF		18mm x 4mm Foam Rubber
344B		6mm x 3mm Foam Rubber	K100GPI10C		Ghost Post Insert for 10-14.8mm Glass	K100GPT		Ghost Post Trim for 10-14.8mm Glass
K100LCT		LED Cover Trim	TAPE19.1C		Tesa 62932 500um Double Sided PE Foam Tape			

Polar 100 Component Identification

Cleats, Brackets & Fixings								
Part Code	ID	Description	Part Code	ID	Description	Part Code	ID	Description
K54SC		Narrow Stealth Cleat	K100DFB		Door Frame Floor Bracket	K100GPPF		Ghost Post Fixing Plate
K30C180		Straight Junction Cleat	K30C90		90° Corner Junction Cleat	K30C135		135° Corner Junction Cleat
K100KGFB		Kross Glaze Fixing Bracket	K100KG90		90° Kross Glaze Cleat	K100KG135		135° Kross Glaze Cleat
311		38mm x No 8 CSK Doorframe Screw	DFHS.75		Self-Drilling Drywall Screw 4.2 x 75mm	DF16042		42mm Drywall Screw
DF21013		13mm Wafer Head Self-Drilling Screw						

Polar 100





COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-10.8mm (CFT or A/Lam) GLASS
6	K100TI
7	12-12.8mm (CFT or A/Lam) GLASS
8	K100FT
9	SJ26.10B
10	K54BG5B
11	K54GB
12	PSUN PACKERS
13	SJ26.12B
14	K54BG4B

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

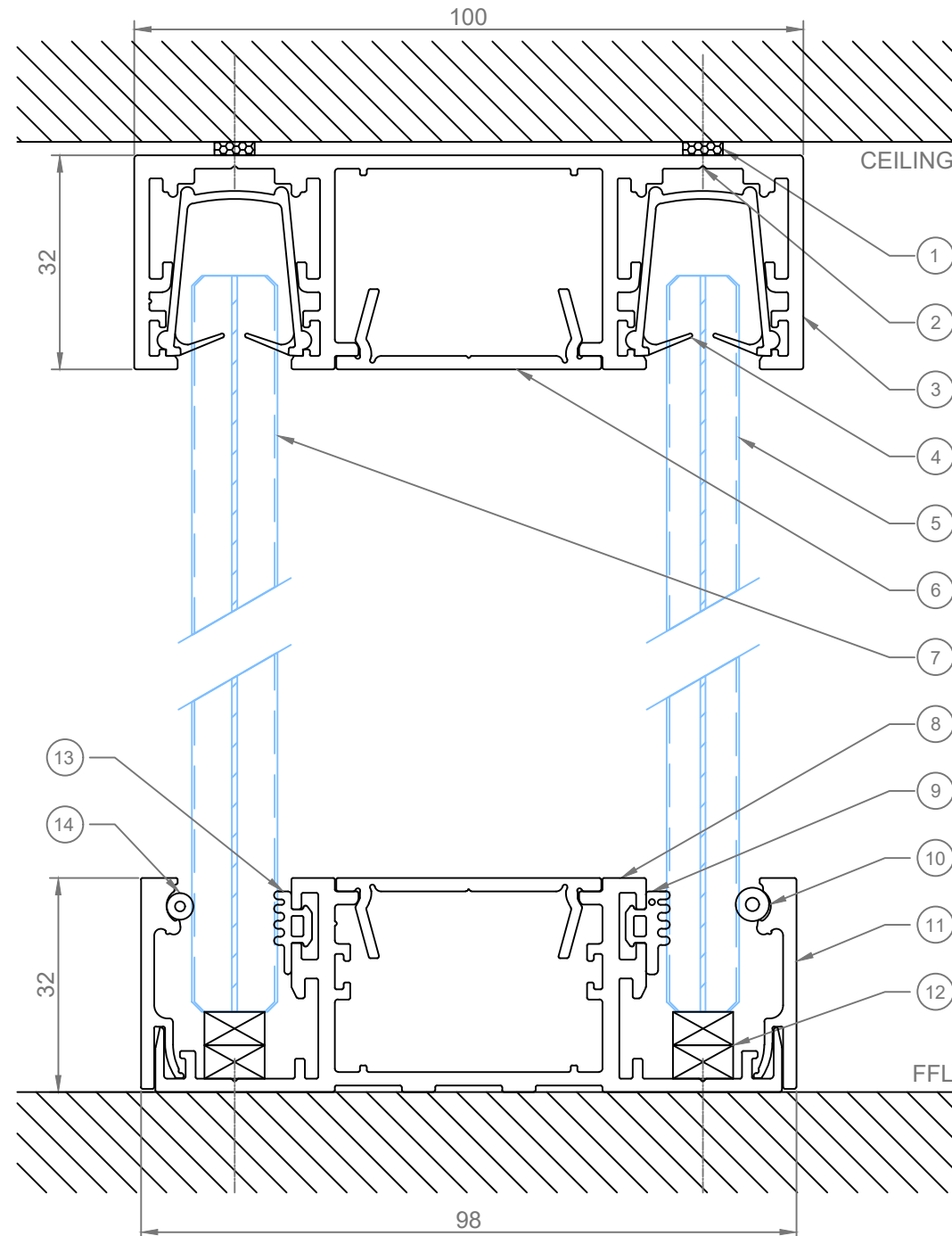
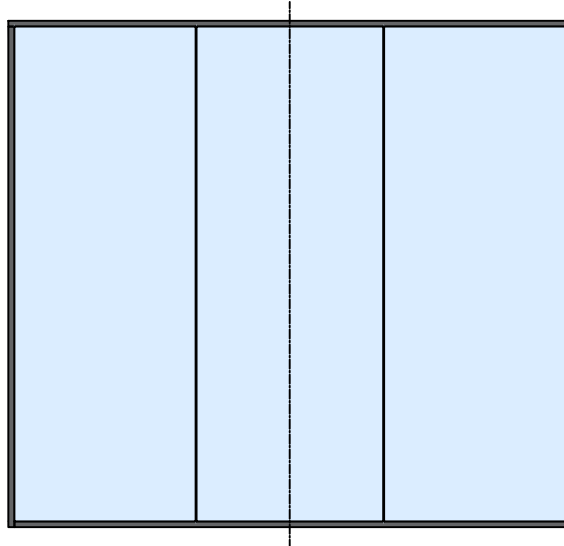
-  Double Glazed
-  Vertical Screen
10-12.8mm Glass
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO:
K100-VS-01

DATE:
11/06/21

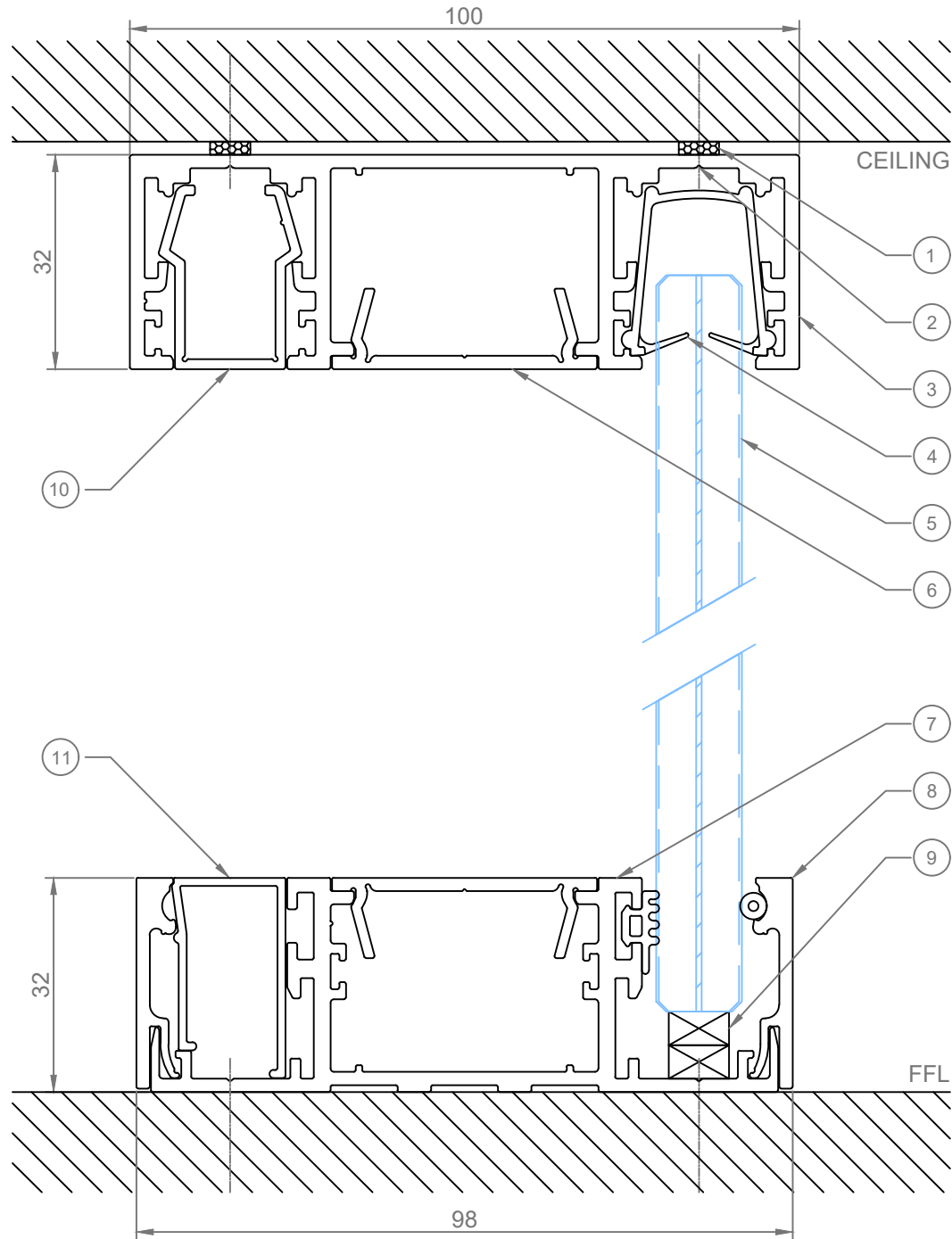
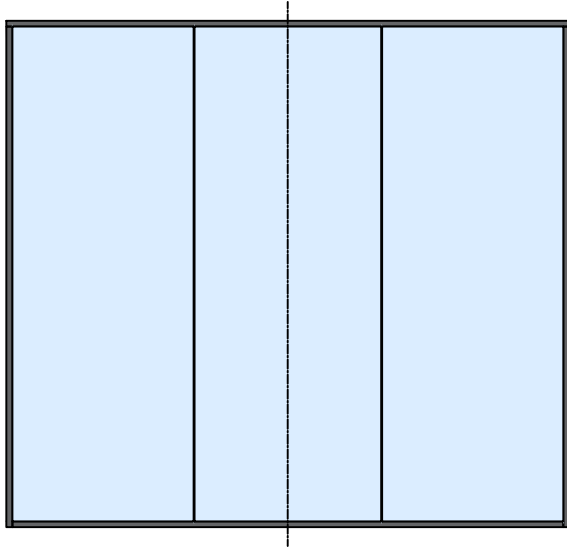
SCALE:
1:1

ISSUE NO:
2



Glazed Module Parameters

Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		







Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-148mm (CFT or Lam.) GLASS
6	K100TI
7	K100FT
8	K54GB
9	PSUN PACKERS
10	K54GI
11	K54BI

NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

- JUNCTION CATEGORY:
-  Offset Single Glazed
 -  Vertical Screen
10-14.8mm Glass
 -  0 min Integrity
0 min Insulation
 -  +/- 0 mm Deflection

Glazed Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

DRAWING NO: K100-VS-12 DATE: 11/06/21

SCALE: 1:1 ISSUE NO: 1





Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	825
4	SJ20
5	K30KI100
6	10-14.8mm (CFT or Lam.) GLASS

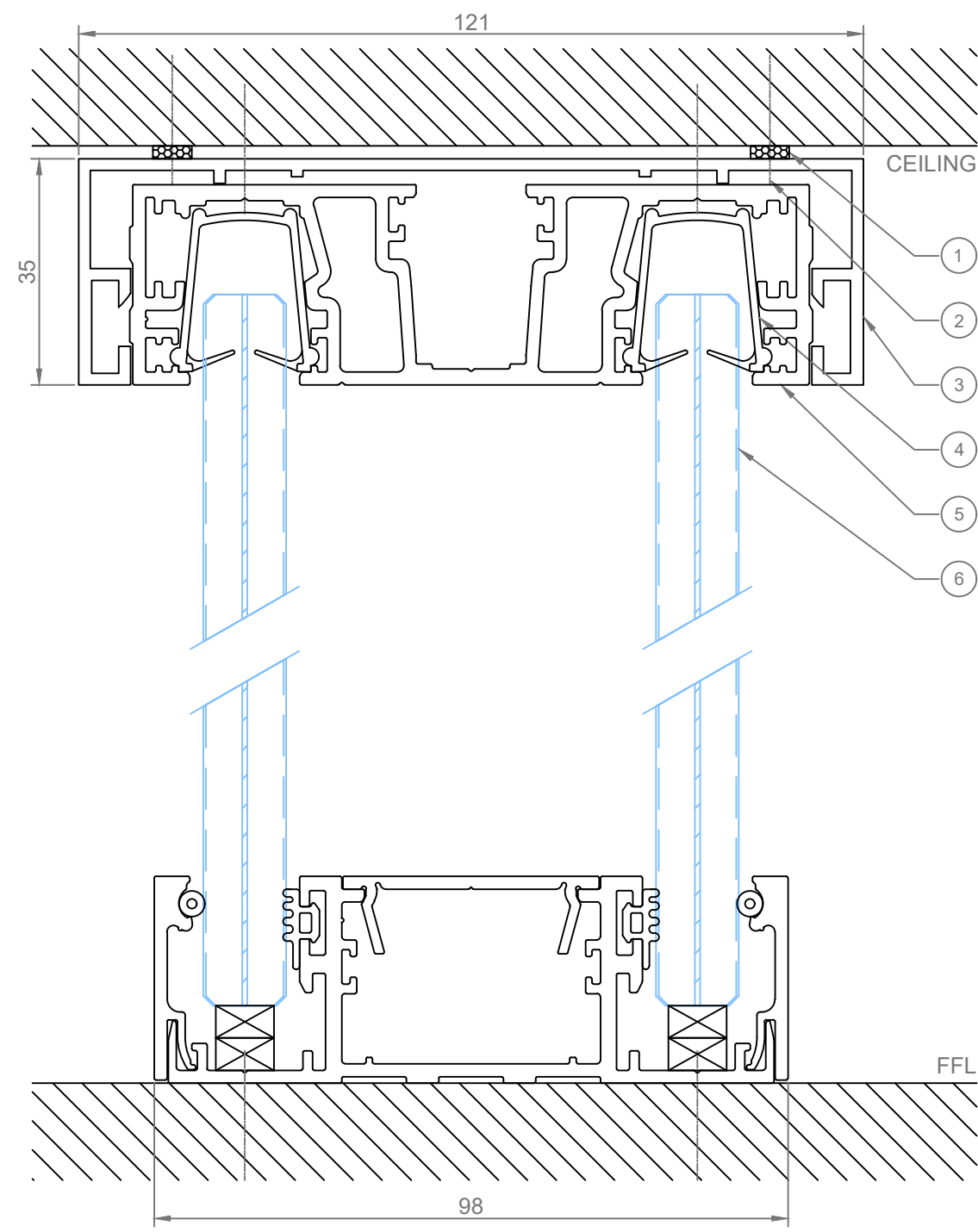
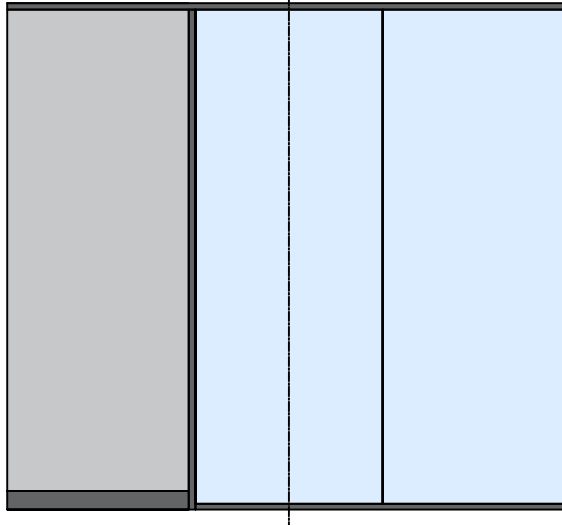
NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

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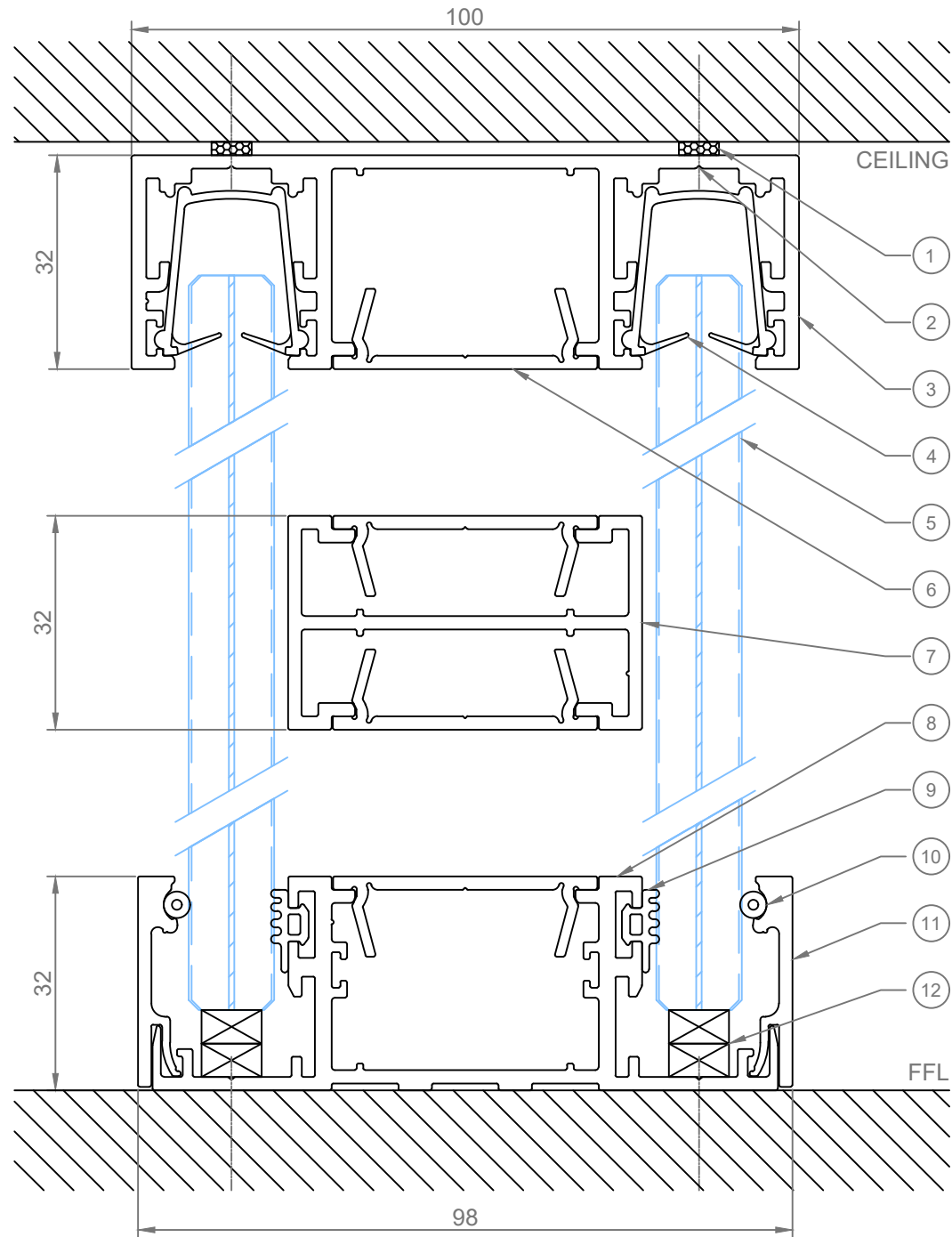
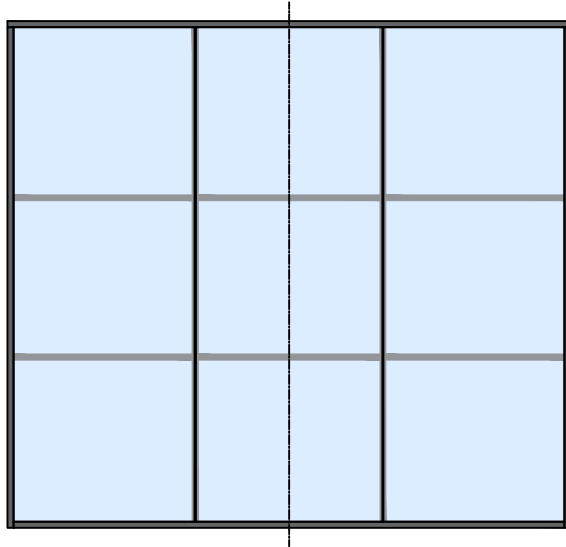
	Double Glazed
	Vertical Screen Komfire 100 Integration
	0 min Integrity 0 min Insulation
	0 mm Deflection

DRAWING NO: K100-VS-14 DATE: 11/06/21

SCALE: 1:1 ISSUE NO: 1



Glazed Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		



Glazed Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-14.8mm (CFT or Lam.) GLASS
6	K100TI
7	K100KGI
8	K100FT
9	SJ26.10B / SJ26.12B / 174
10	K54BG4B / K54BG5B / 175
11	K54GB
12	PSUN PACKERS

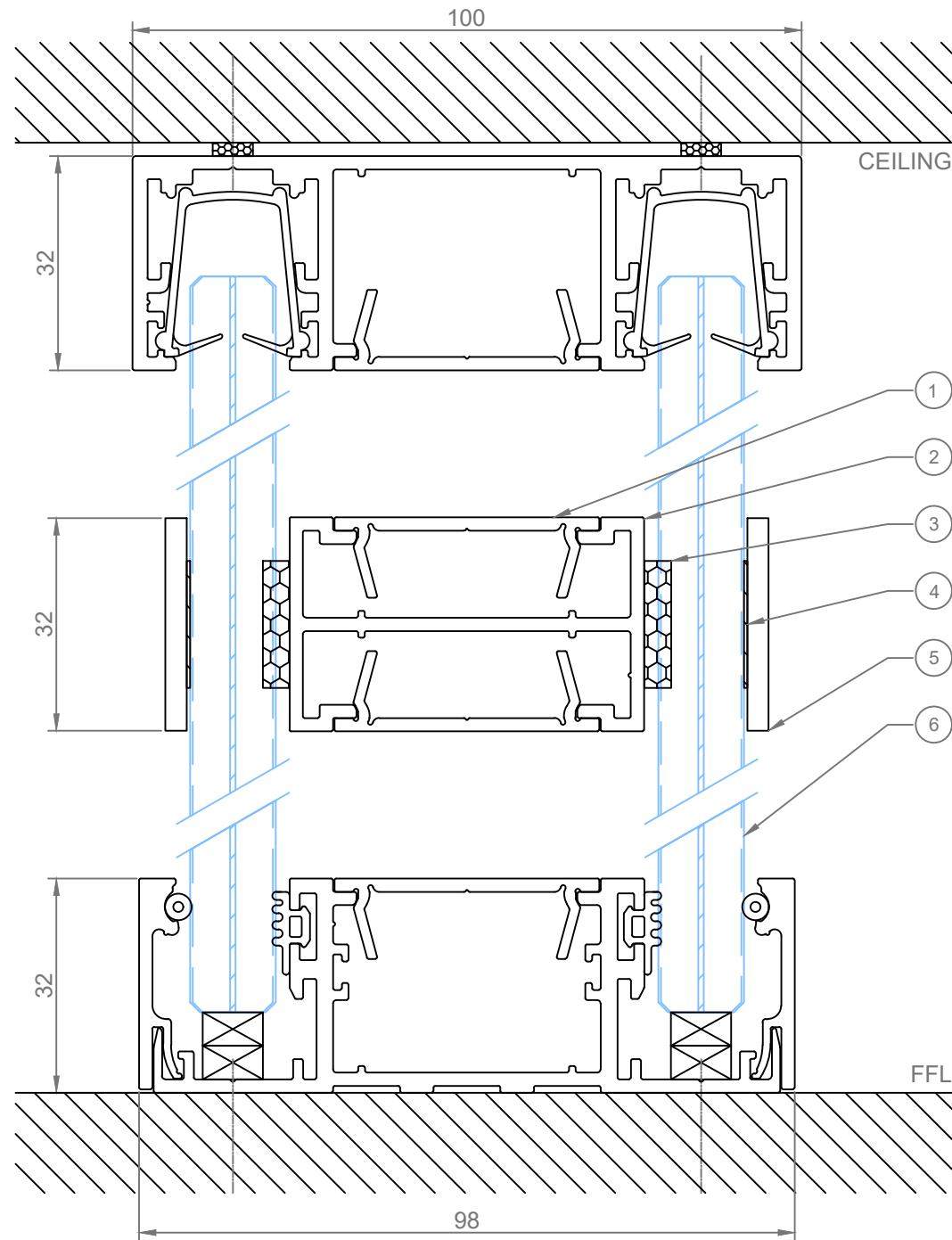
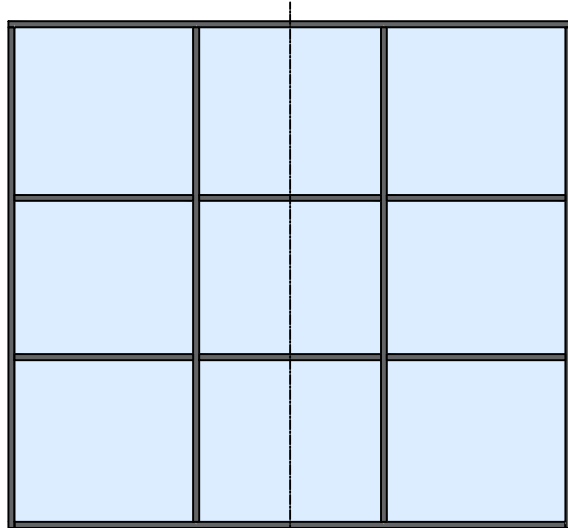
NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

- Double Glazed
- Vertical Screen Internal Cross Glaze
- 0 min Integrity
0 min Insulation
- +/- 0 mm Deflection

DRAWING NO: K100-VS-06 DATE: 11/06/21

SCALE: 1:1 ISSUE NO: 2



Glazed Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100

COMPONENT KEY:

1	K100TI
2	K100KGI
3	K54KGF
4	TAPE19.1C
5	109
6	10-14.8mm (CFT or Lam.) GLASS

NOTES:

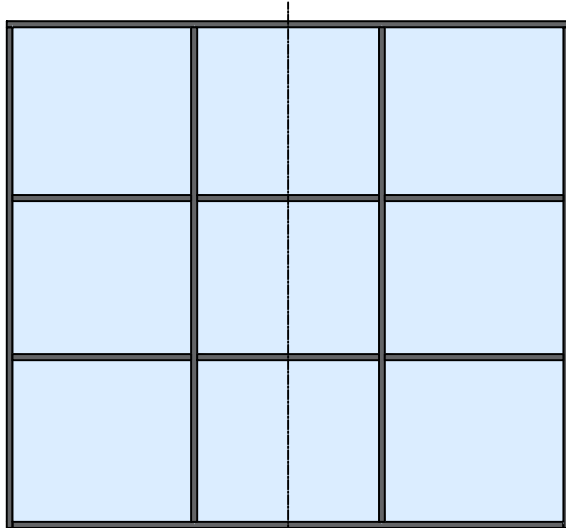
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

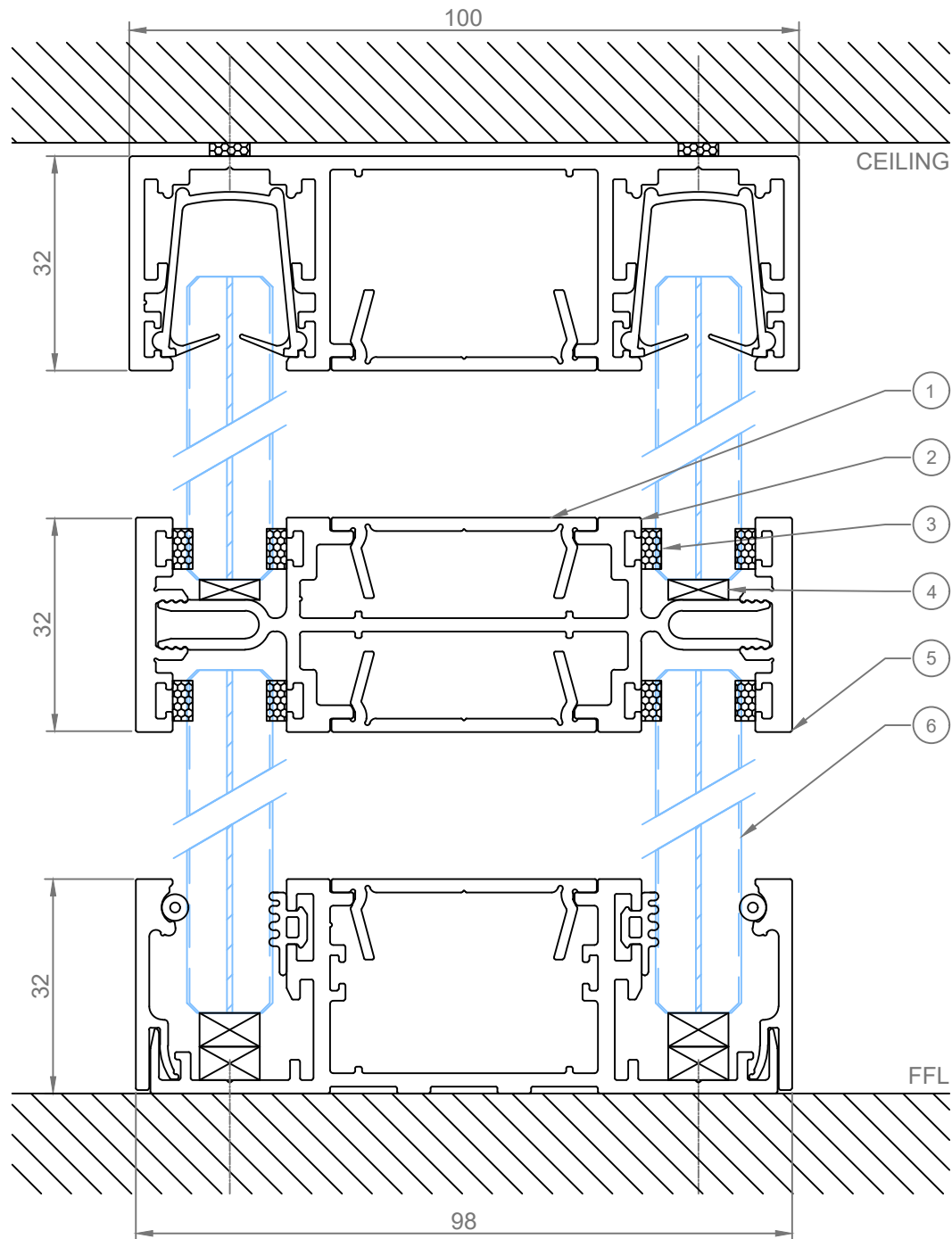
-  Double Glazed
-  Vertical Screen Applied Kross Glaze
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO: K100-VS-07 DATE: 11/06/21

SCALE: 1:1 ISSUE NO: 2



Glazed Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		



Polar 100

COMPONENT KEY:





1	K100TI
2	K100KGP
3	344B
4	PSUN PACKER
5	K100KGT
6	10-12.8mm (CFT or A/Lam) GLASS

NOTES:

MAXIMUM LOADING TO TRANSOM IS 100KG - THEREFORE EACH GLASS PANEL CAN BE NO GREATER THAN 50KG

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Vertical Screen
Transom Cross Glaze
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO:
K100-VS-08

DATE:
14/06/21

SCALE:
1:1

ISSUE NO:
3





Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-14.8mm (CFT or Lam.) GLASS
6	K100TI
7	BLINDS
8	K100FT
9	SJ26.10B / SJ26.12B / 174
10	K54BG4B / K54BG5B / 175
11	K54GB
12	PSUN PACKERS

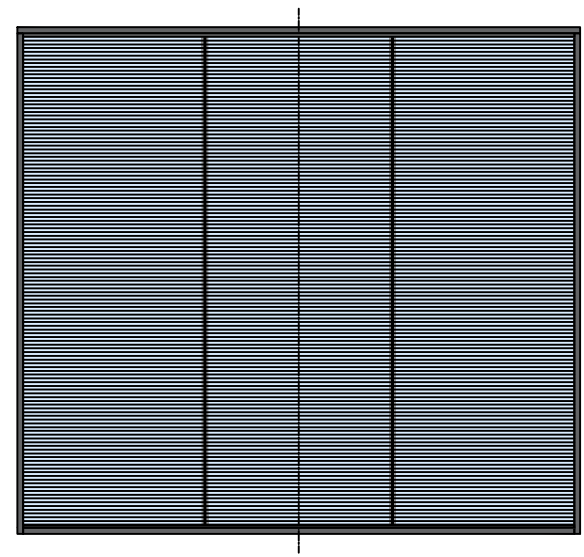
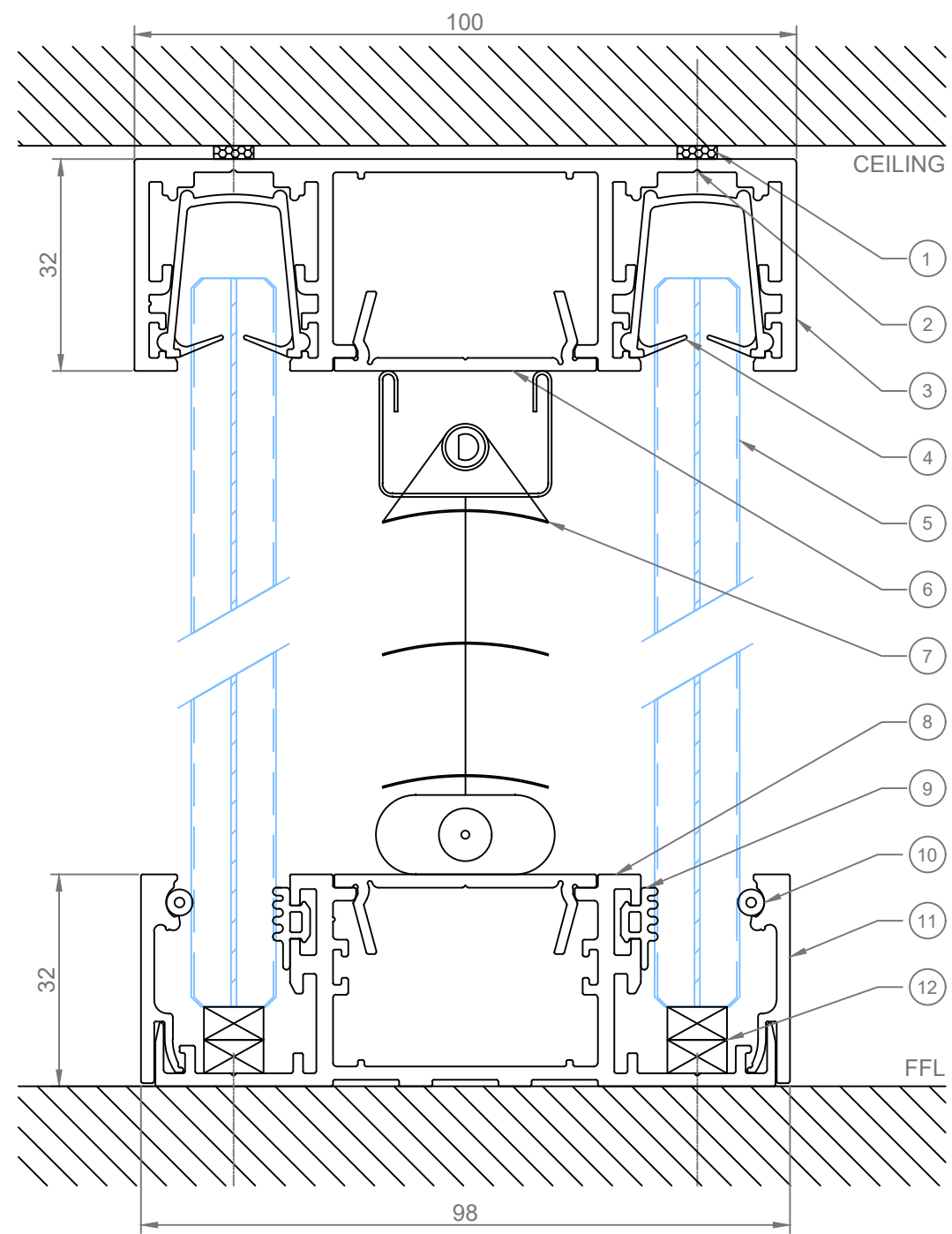
NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

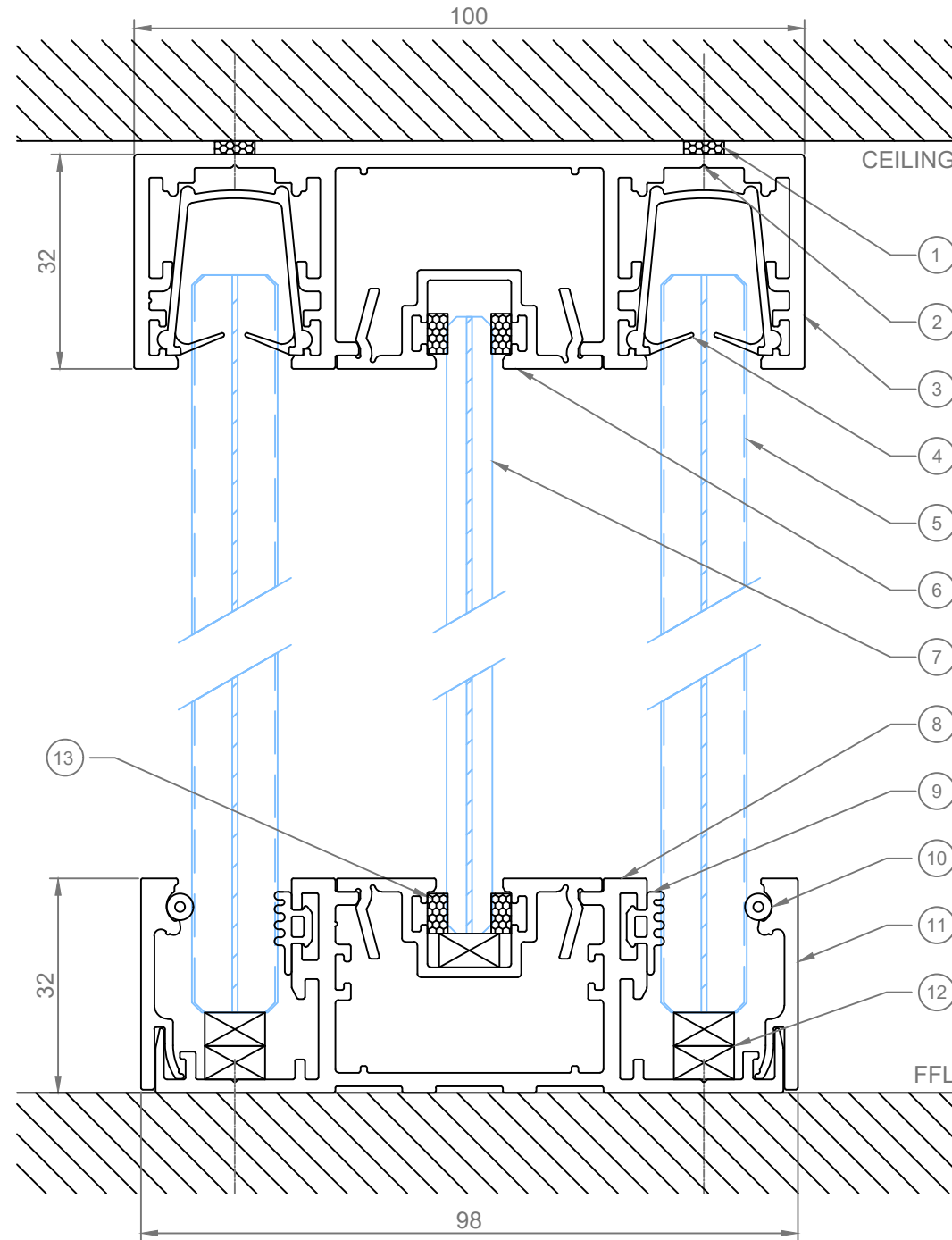
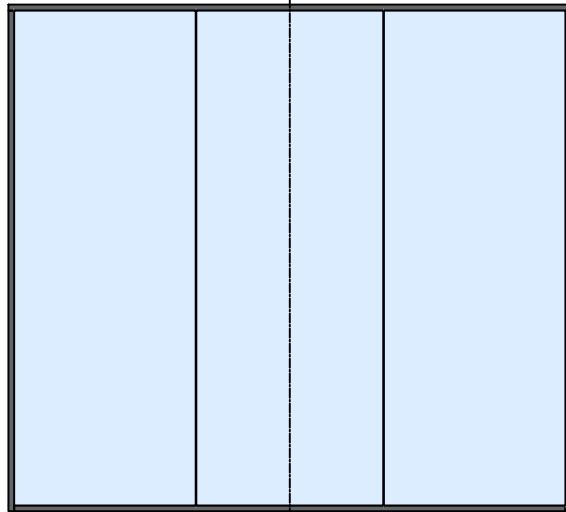
	Double Glazed
	Vertical Screen Integral Blinds
	0 min Integrity 0 min Insulation
	0 mm Deflection

DRAWING NO: K100-VS-03 DATE: 11/06/21

SCALE: 1:1 ISSUE NO: 2



Glazed Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		



Glazed Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100





COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-14.8mm (CFT or Lam.) GLASS
6	K100TGI
7	6-6.8mm (CFT or A/Lam) GLASS
8	K100FT
9	SJ26.10B / SJ26.12B / 174
10	K54BG4B / K54BG5B / 175
11	K54GB
12	PSUN PACKERS
13	344B

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

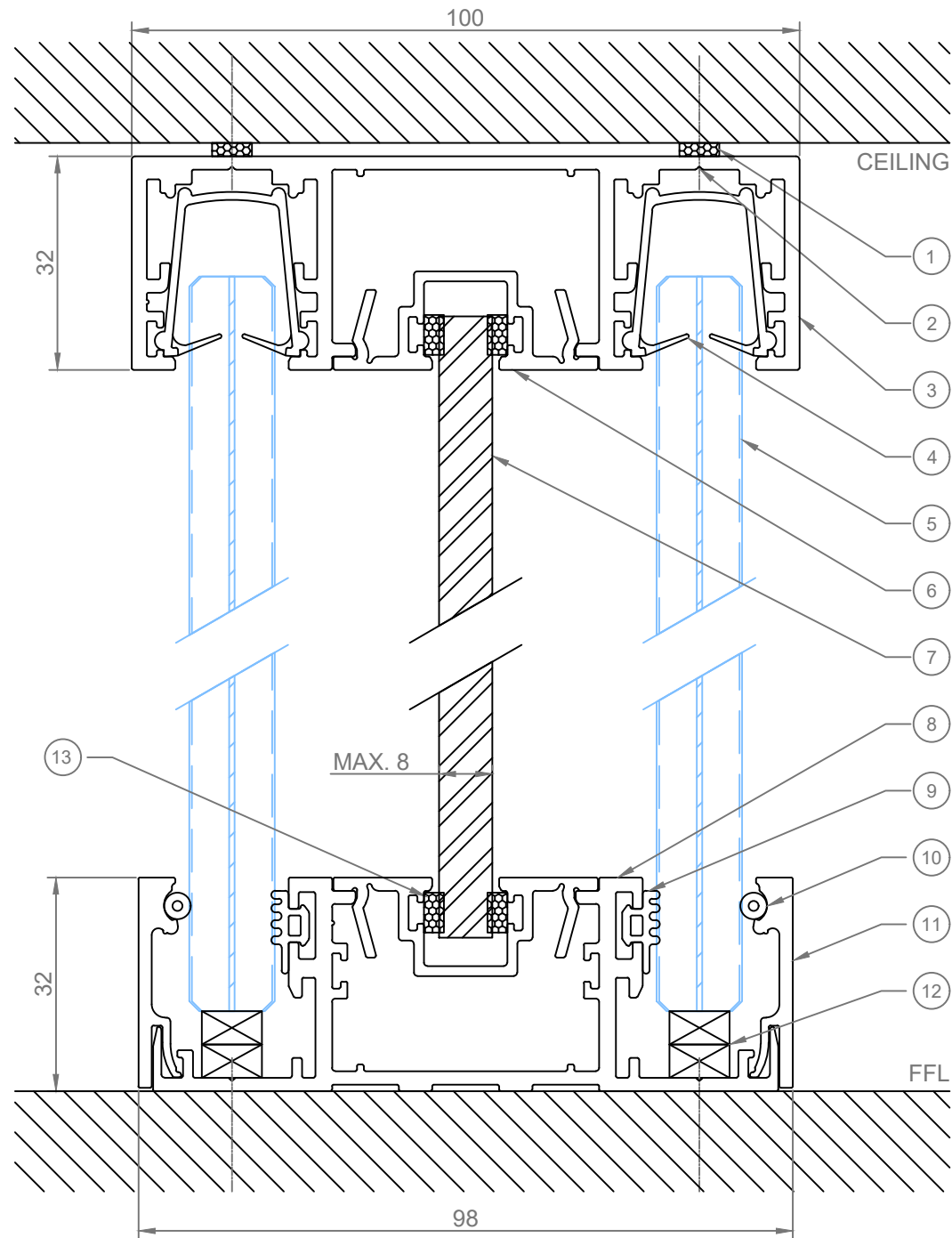
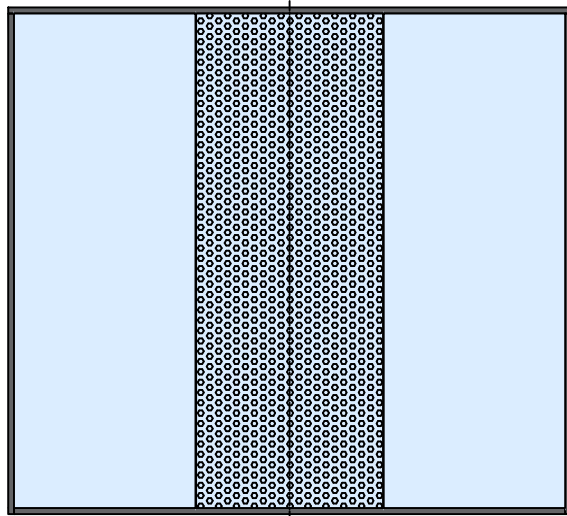
-  Triple Glazed
-  Vertical Screen Triple Glazed
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
K100-VS-04

DATE:
11/06/21

SCALE:
1:1

ISSUE NO:
3



Glazed Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100





COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-14.8mm (CFT or A/Lam) GLASS
6	K100TGI
7	FEATURE INFILL PANEL
8	K100FT
9	SJ26.10B / SJ26.12B / 174
10	K54BG4B / K54BG5B / 175
11	K54GB
12	PSUN PACKERS
13	344B

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Vertical Screen
Integral Feature Panel
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO:
K100-VS-05

DATE:
11/06/21

SCALE:
1:1

ISSUE NO:
3





Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-14.8mm (CFT or Lam.) GLASS
6	K100TGI
7	K100LCT
8	K100FT
9	LED STRIP
10	K54GB

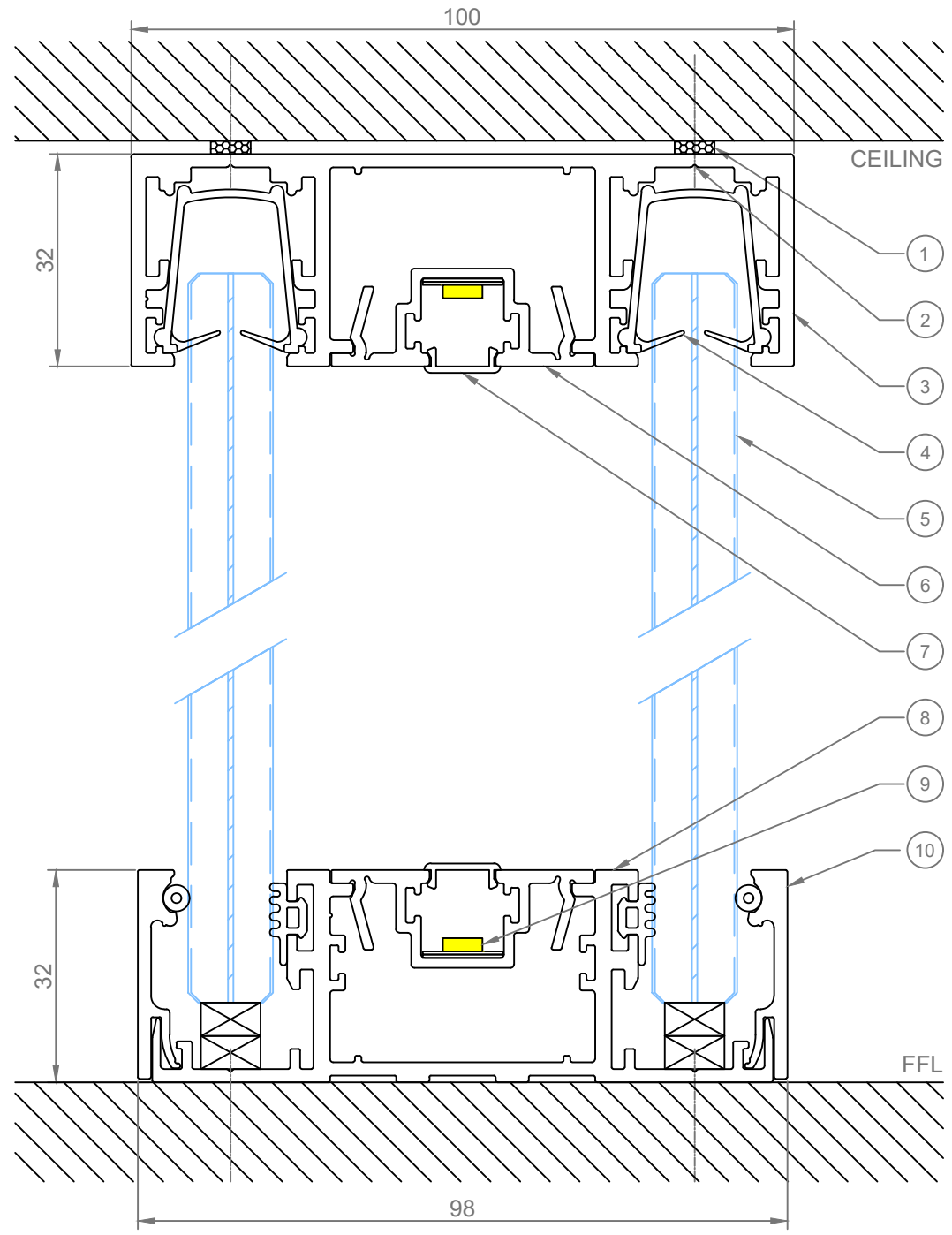
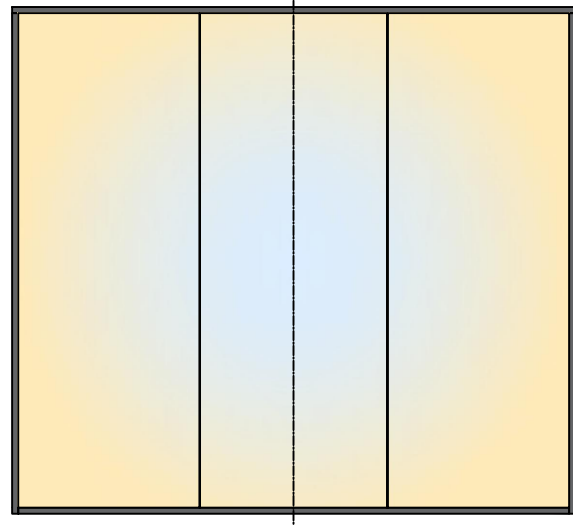
NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

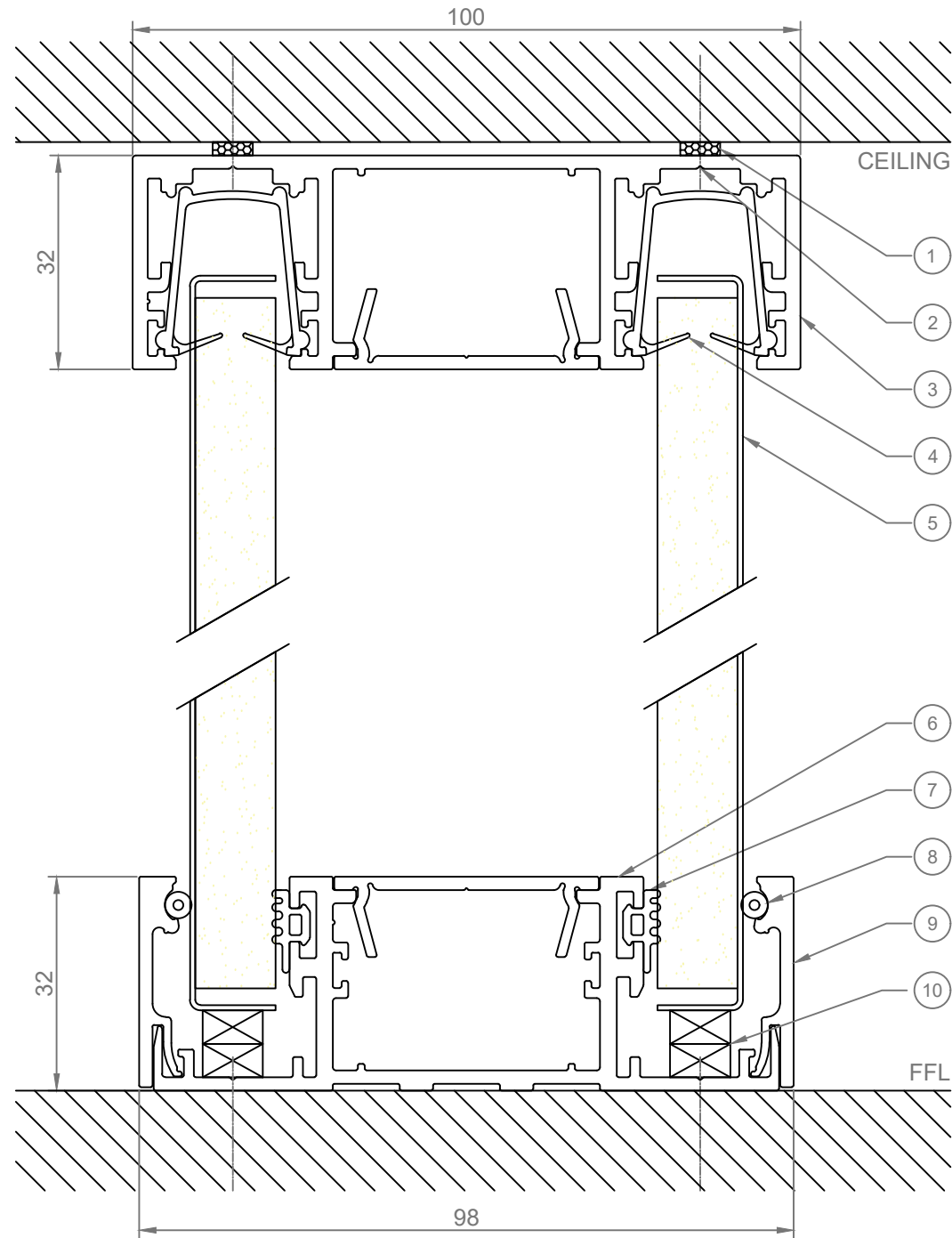
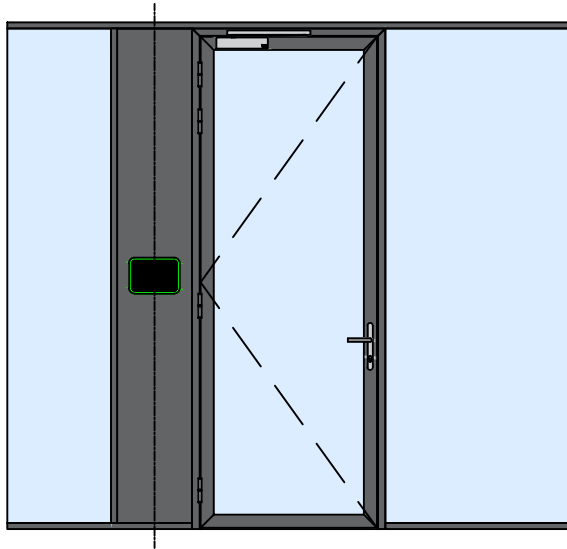
	Double Glazed
	Vertical Screen LED Strip Lighting
	0 min Integrity 0 min Insulation
	0 mm Deflection

DRAWING NO: K100-VS-13 DATE: 11/06/21

SCALE: 1:1 ISSUE NO: 1



Glazed Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		



Tech Panel Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100

COMPONENT KEY:





1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	POLAR.TECH
6	K100FT
7	SJ26.10B / SJ26.12B
8	K54BG4B / K54BG5B
9	K54GB
10	PSUN PACKERS

NOTES:

ALL TECH PANELS ARE MADE TO ORDER

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Vertical Screen Tech Panel
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
K100-VS-09

DATE:
14/06/21

SCALE:
1:1

ISSUE NO:
3





Polar 100

COMPONENT KEY:

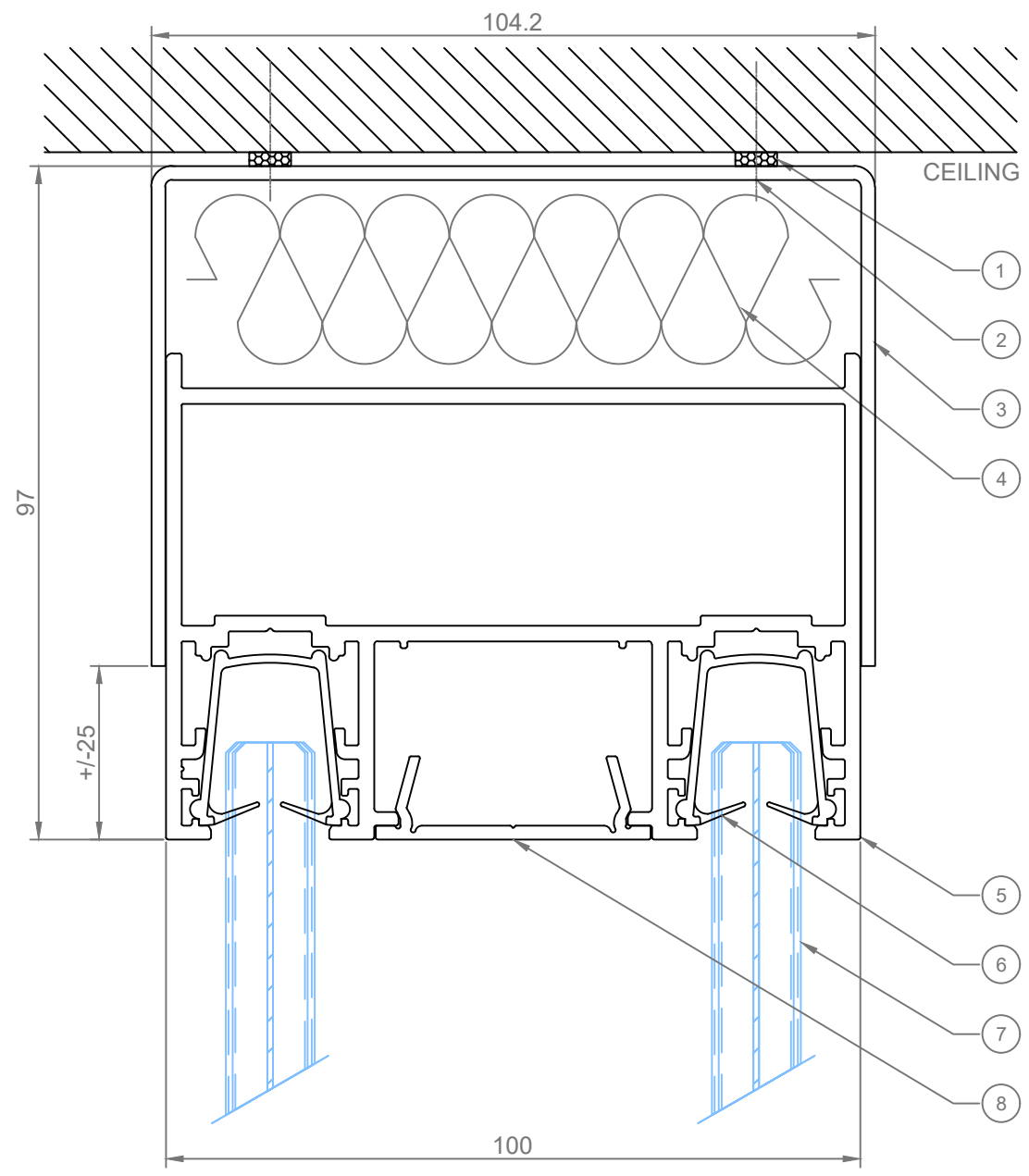
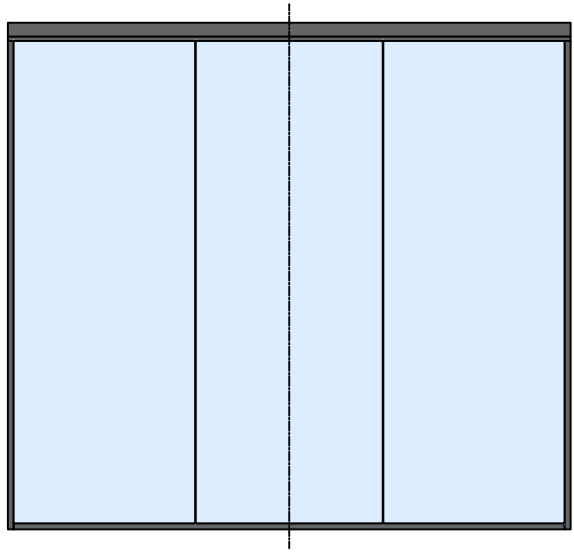
1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100DHC
4	881S50
5	K100DH
6	SJ20
7	10-14.8mm (CFT or A/Lam) GLASS
8	K100TI

NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

	Double Glazed
	Deflection Head Over Screen
	0 min Integrity 0 min Insulation
	+/-25 mm Deflection

DRAWING NO: K100-VS-10	DATE: 11/06/21
SCALE: 1:1	ISSUE NO: 2







Polar 100

COMPONENT KEY:

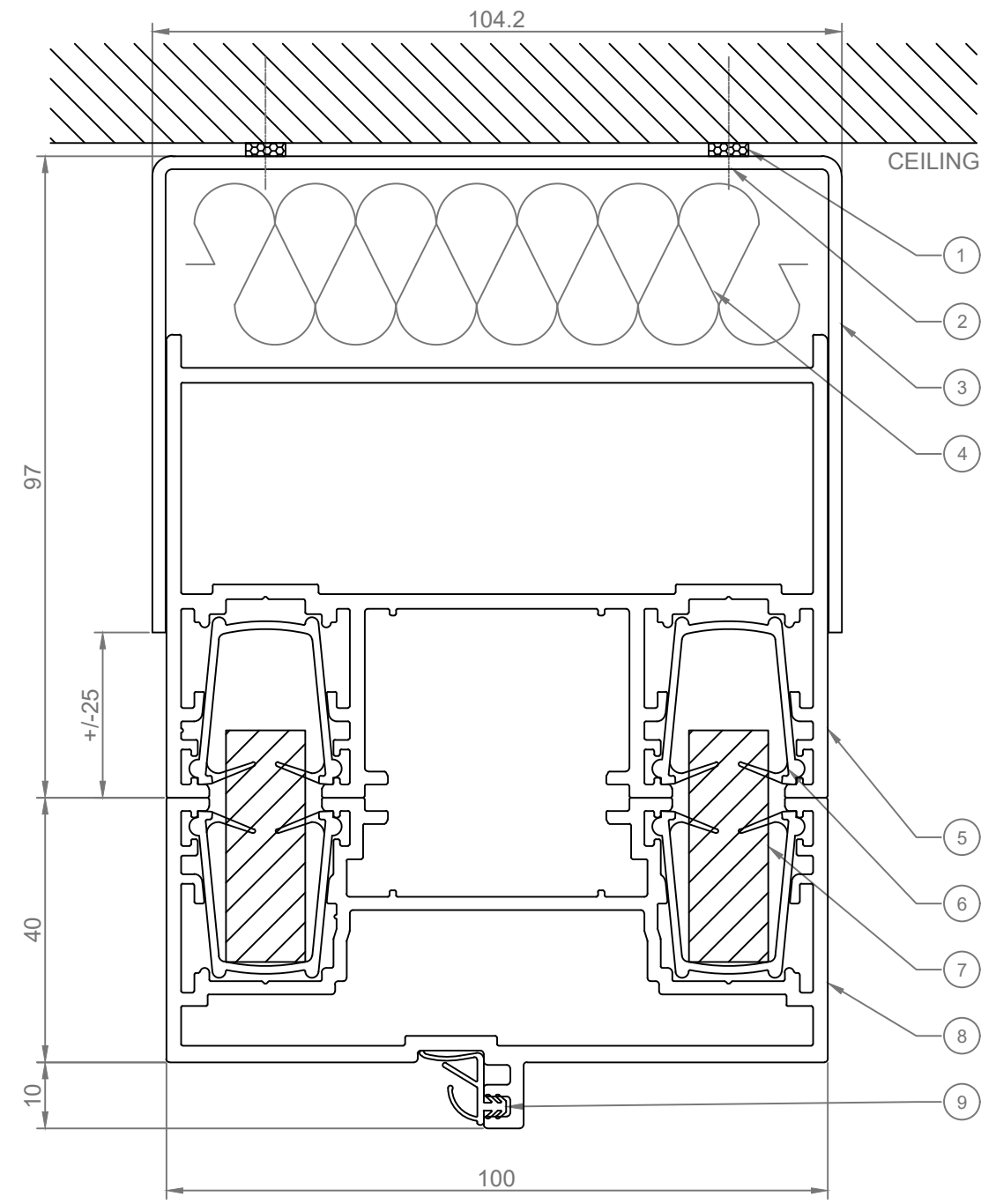
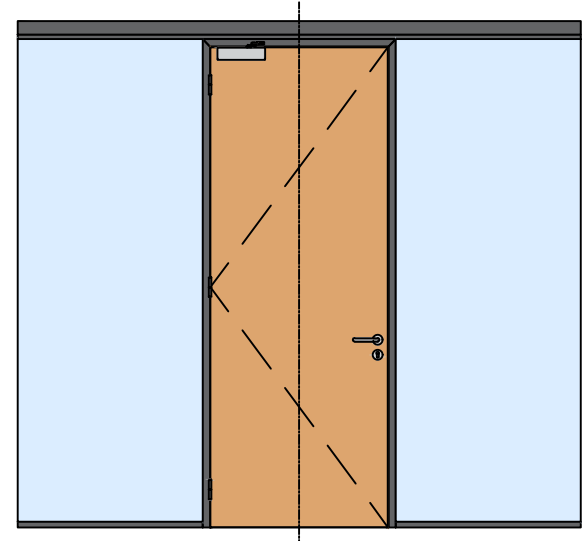
1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100DHC
4	881S50
5	K100DH
6	SJ20
7	SJ69
8	K100DF
9	K54DS

NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

	Double Glazed
	Deflection Head Over Door Frame
	0 min Integrity 0 min Insulation
	+/-25 mm Deflection

DRAWING NO: K100-VS-11	DATE: 11/06/21
SCALE: 1:1	ISSUE NO: 2






Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	825
4	12.5mm PLASTERBOARD
5	785
6	K100WDF
6	K54DS

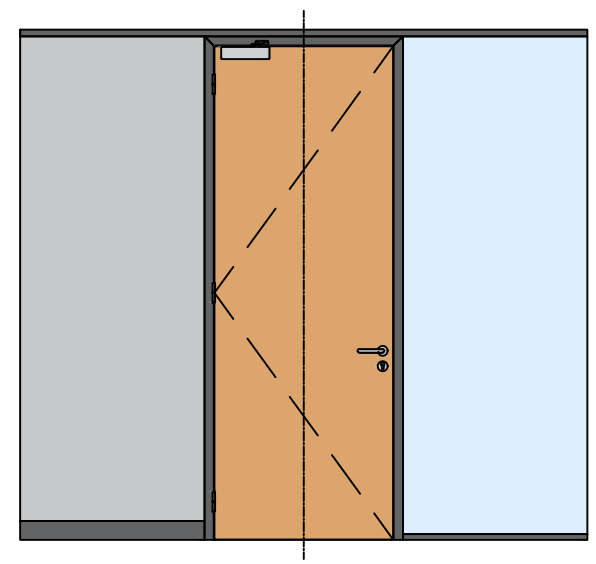
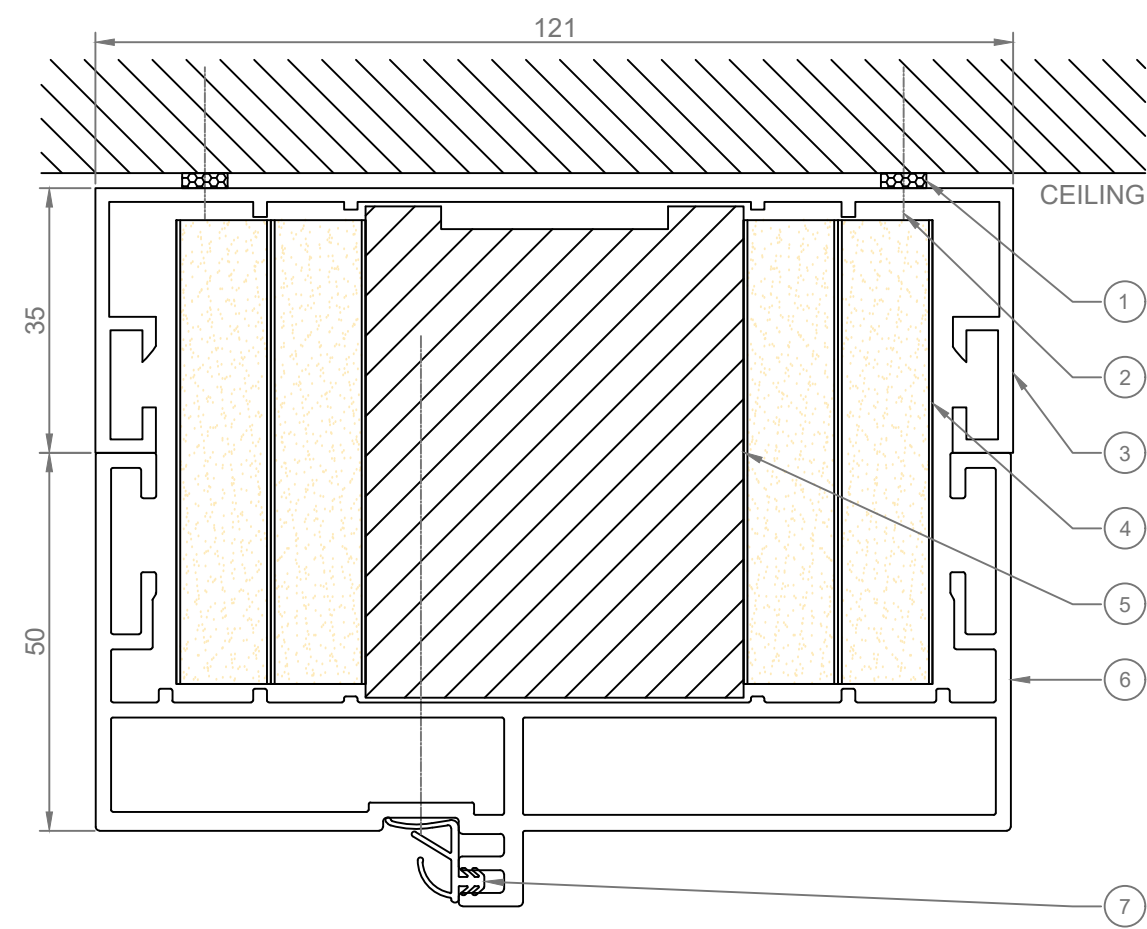
NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Vertical Screen Komfire 100 Integration
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO: **K100-VS-15** DATE: **11/06/21**

SCALE: **1:1** ISSUE NO: **1**



Polar 100





COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-14.8mm (CFT or Lam.) GLASS
6	K100TI

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

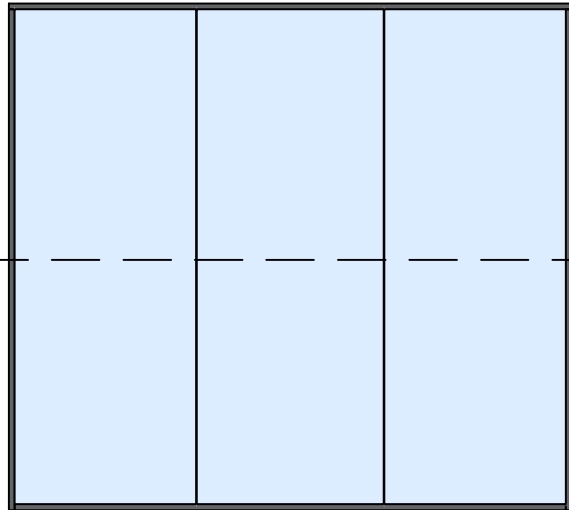
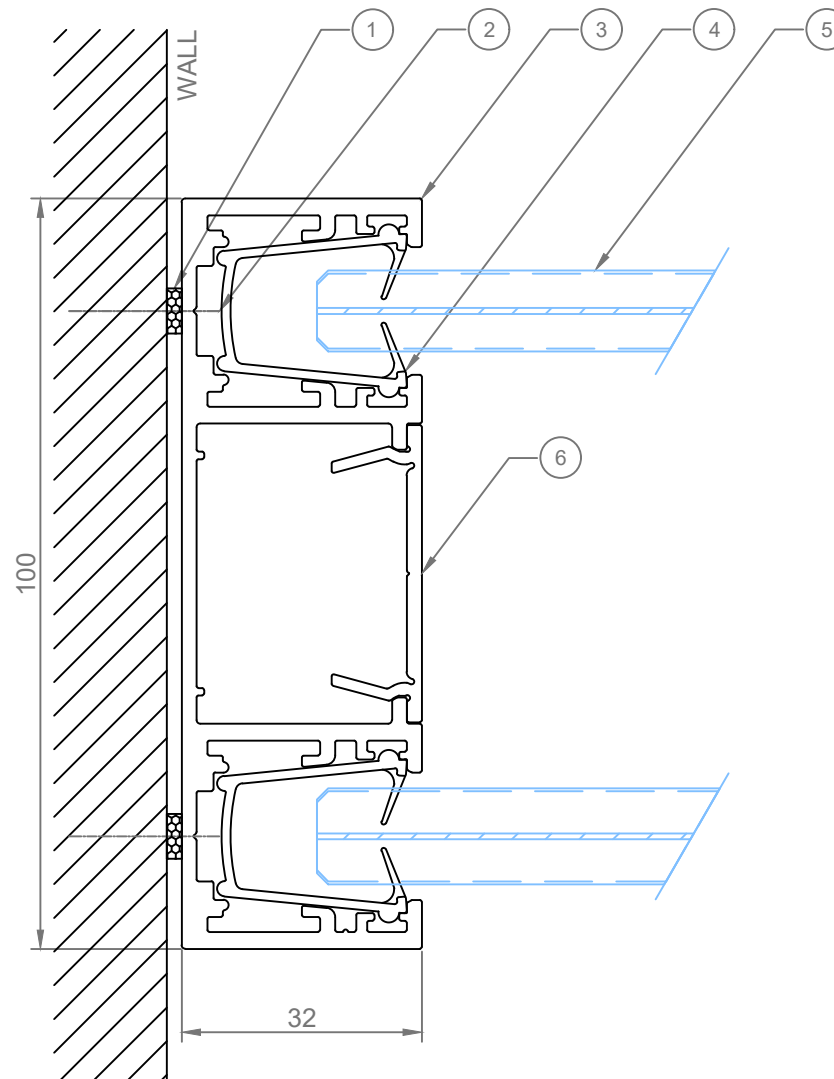
-  Double Glazed
-  Horizontal Screen Wall Abutment
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
K100-HS-01

DATE:
11/06/21

SCALE:
1:1

ISSUE NO:
3



Glazed Module Parameters

Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100





COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K54BG5B
4	SJ26.10B
5	10-10.8mm (CFT or A/Lam) GLASS
6	K100TI
7	K100FT
8	12-12.8mm (CFT or A/Lam) GLASS
9	K54GB
10	K54BG4B
11	SJ26.12B

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Screen Wall Abutment
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:

K100-HS-02

DATE:

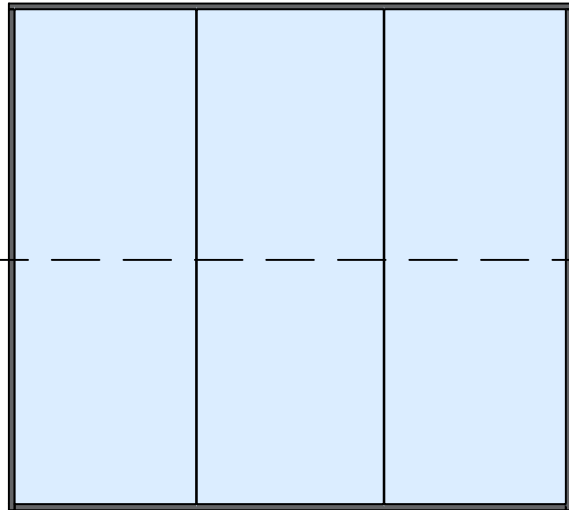
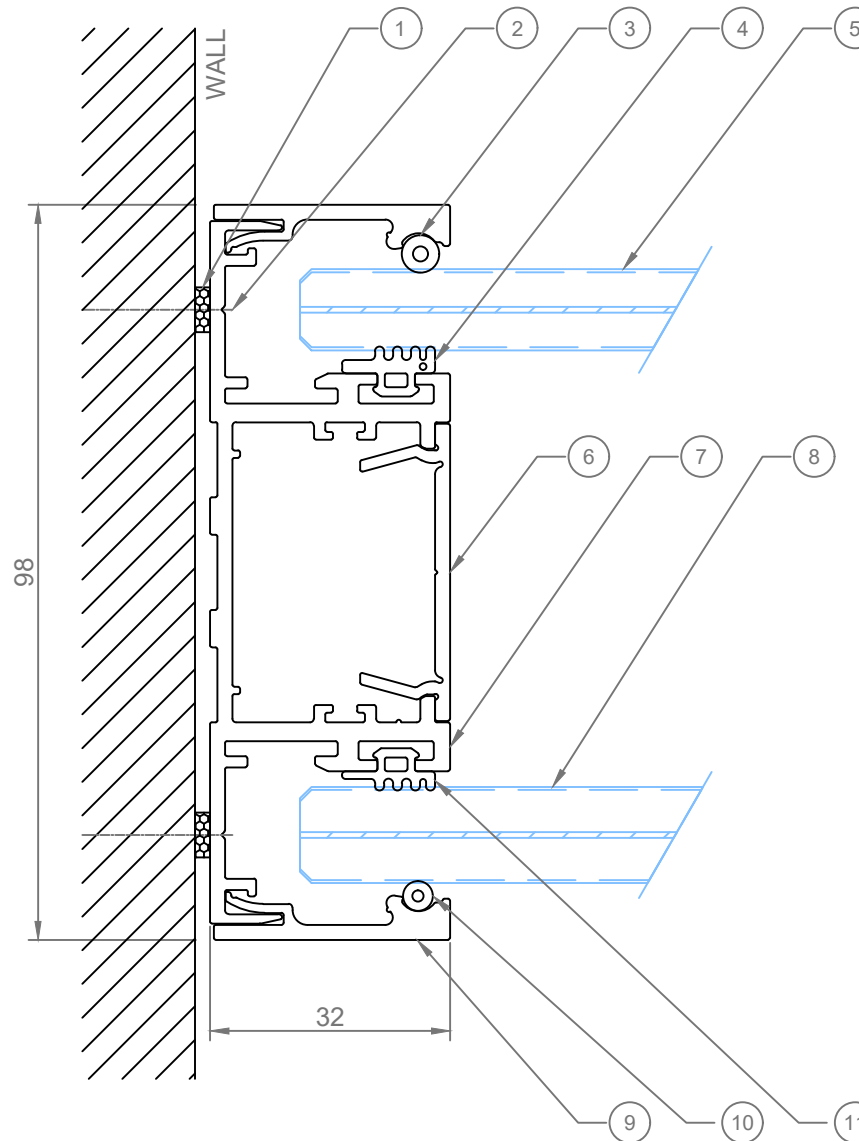
11/06/21

SCALE:

1:1

ISSUE NO:

3



Glazed Module Parameters

Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100





COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	175
4	174
5	14.8mm (A/Lam) GLASS
6	K100TI
7	K100FT
8	13.5mm (T/Lam) GLASS
9	K54GB

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

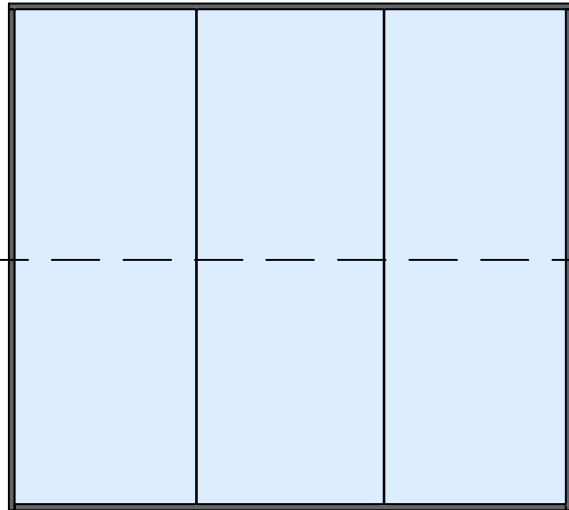
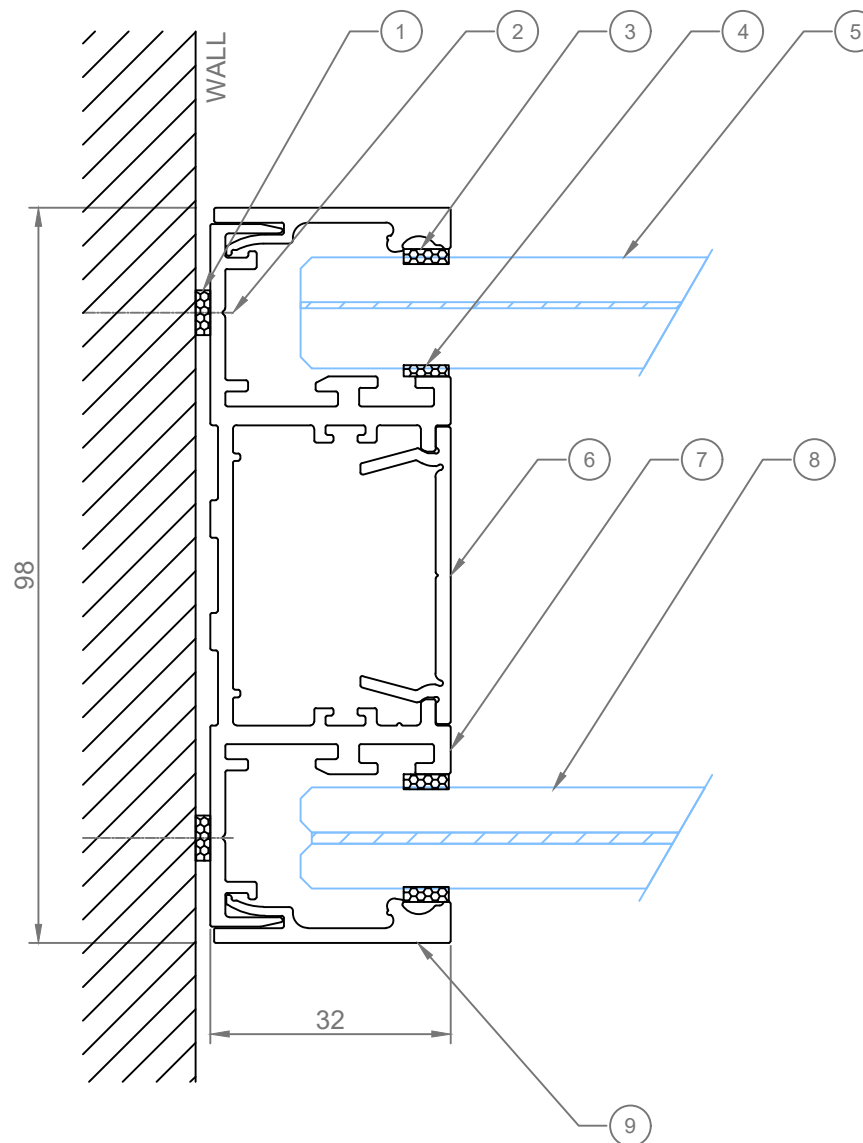
-  Double Glazed
-  Horizontal Screen Wall Abutment
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
K100-HS-15

DATE:
11/06/21

SCALE:
1:1

ISSUE NO:
1



Glazed Module Parameters





Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100

COMPONENT KEY:

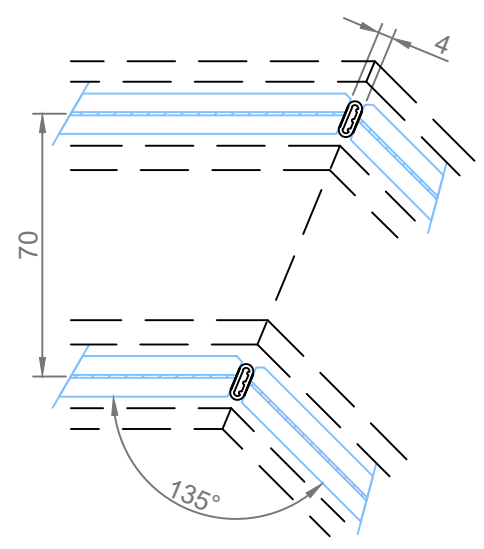
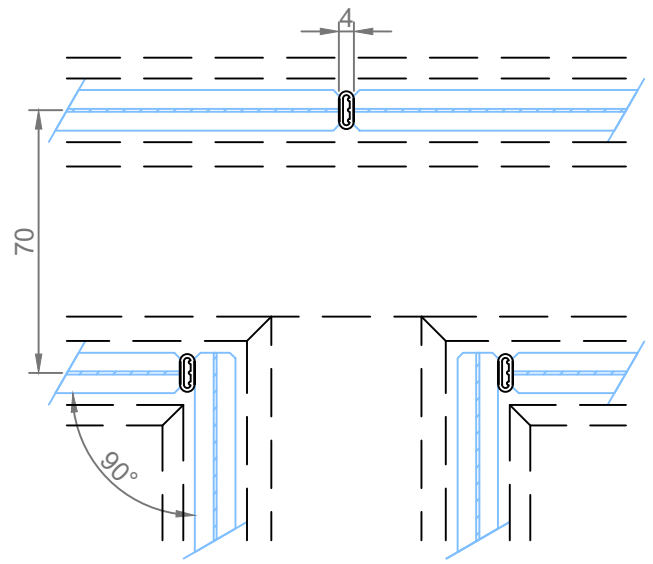
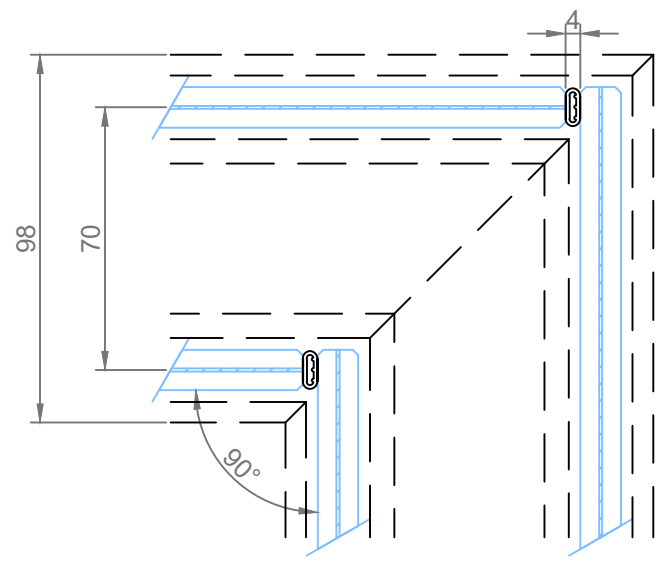
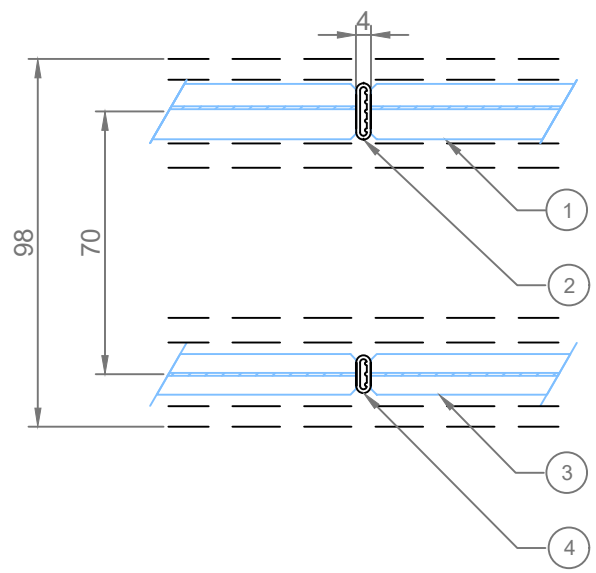
1	13.5-14.8mm (A or T/Lam) GLASS
2	K35BJ
3	10-12.8mm (CFT or A/Lam) GLASS
4	SJ34

NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

- JUNCTION CATEGORY:
-  Double Glazed
 -  Horizontal Screen Glazing Joints
 -  0 min Integrity
0 min Insulation
 -  +/- 0 mm Deflection

DRAWING NO: K100-HS-06 DATE: 15/06/21

SCALE: 1:2 ISSUE NO: 3







Polar 100

COMPONENT KEY:

1	10-14.8mm (CFT or Lam.) GLASS
2	SJ34/K35BJ
3	SILICONE JOINT

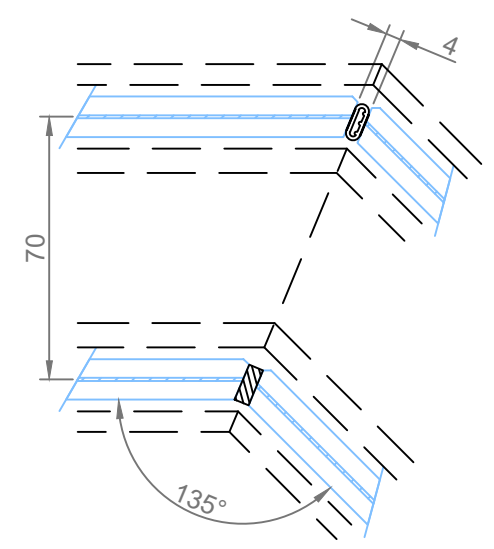
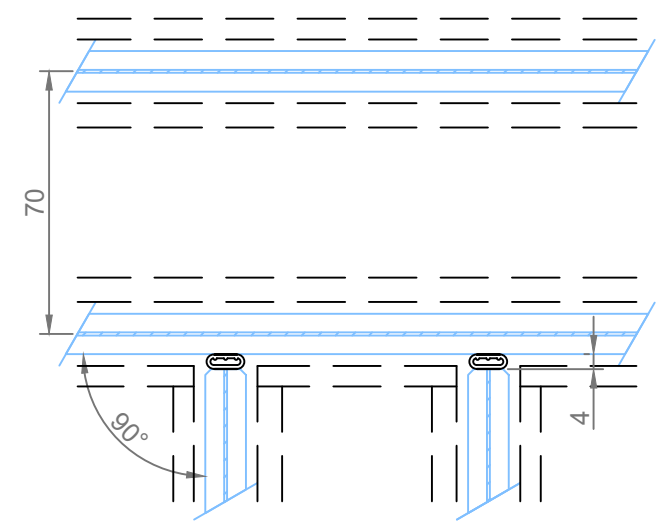
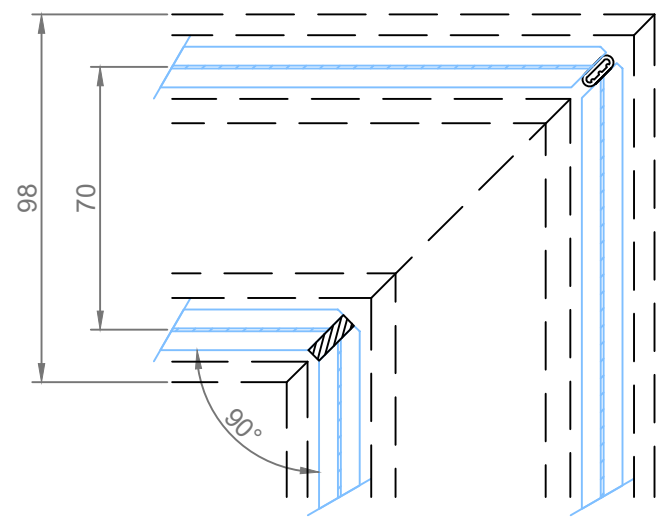
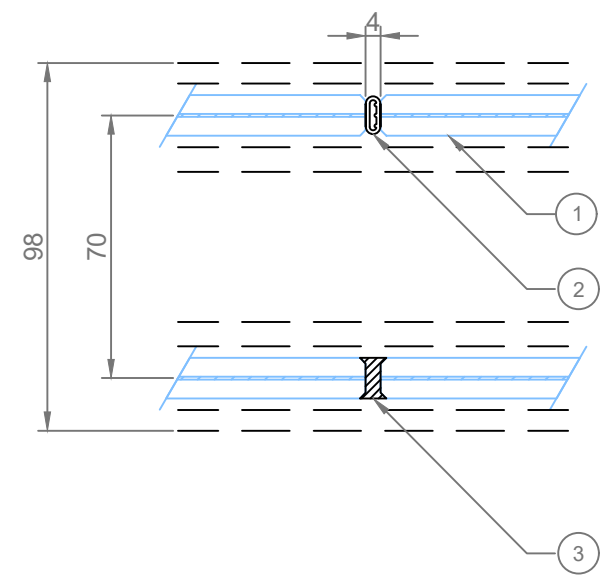
NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

	Double Glazed
	Horizontal Screen Glazing Joints
	0 min Integrity 0 min Insulation
	0 mm Deflection

DRAWING NO: K100-HS-07 DATE: 15/06/21

SCALE: 1:2 ISSUE NO: 3



Polar 100

COMPONENT KEY:

1	K100GPT
2	K100GP
3	K100GP110C/12C
4	10-14.8mm (CFT or Lam.) GLASS
5	SJ34/K35BJ

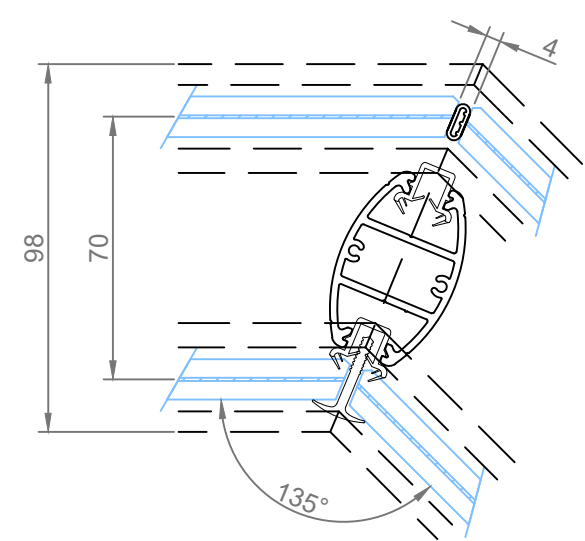
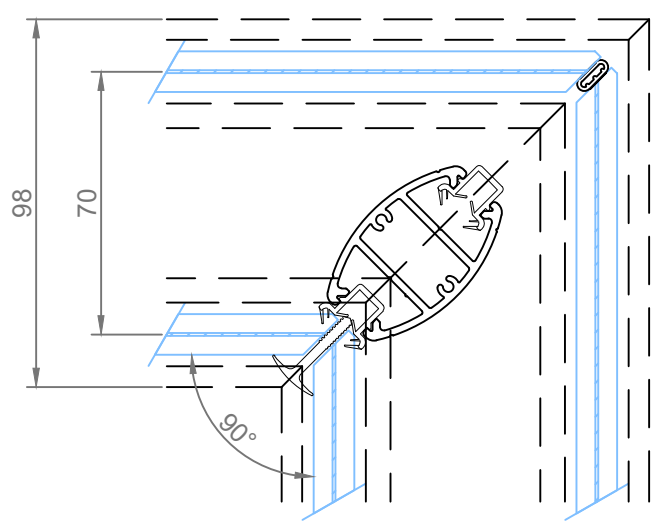
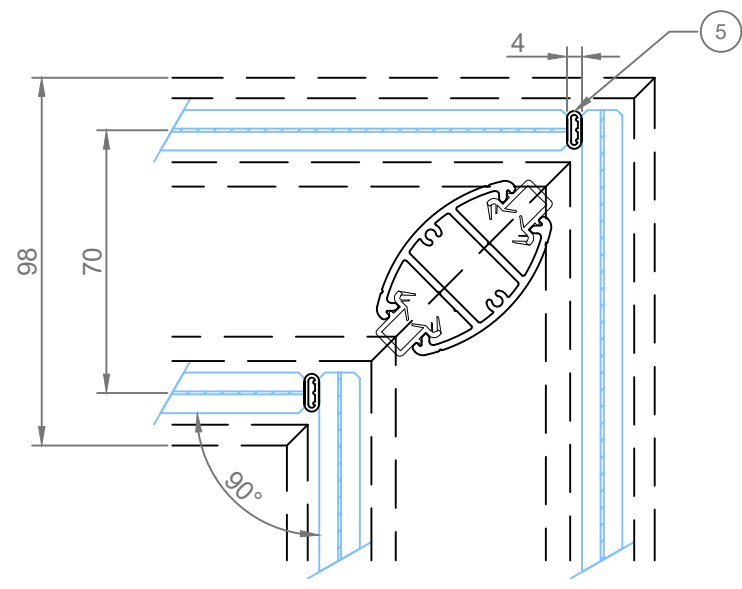
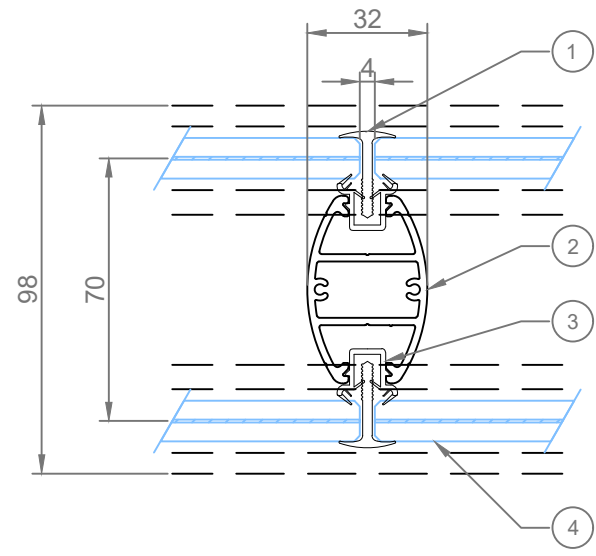
NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Screen Glazing Joints
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO: K100-HS-08 DATE: 15/06/21

SCALE: 1:2 ISSUE NO: 4



Polar 100





COMPONENT KEY:

1	BLINDS
2	BLIND CONTROL KNOB
3	K100GP
4	10-14.8mm (CFT or Lam.) GLASS
5	K100GPT
6	K100GP110C/12C

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

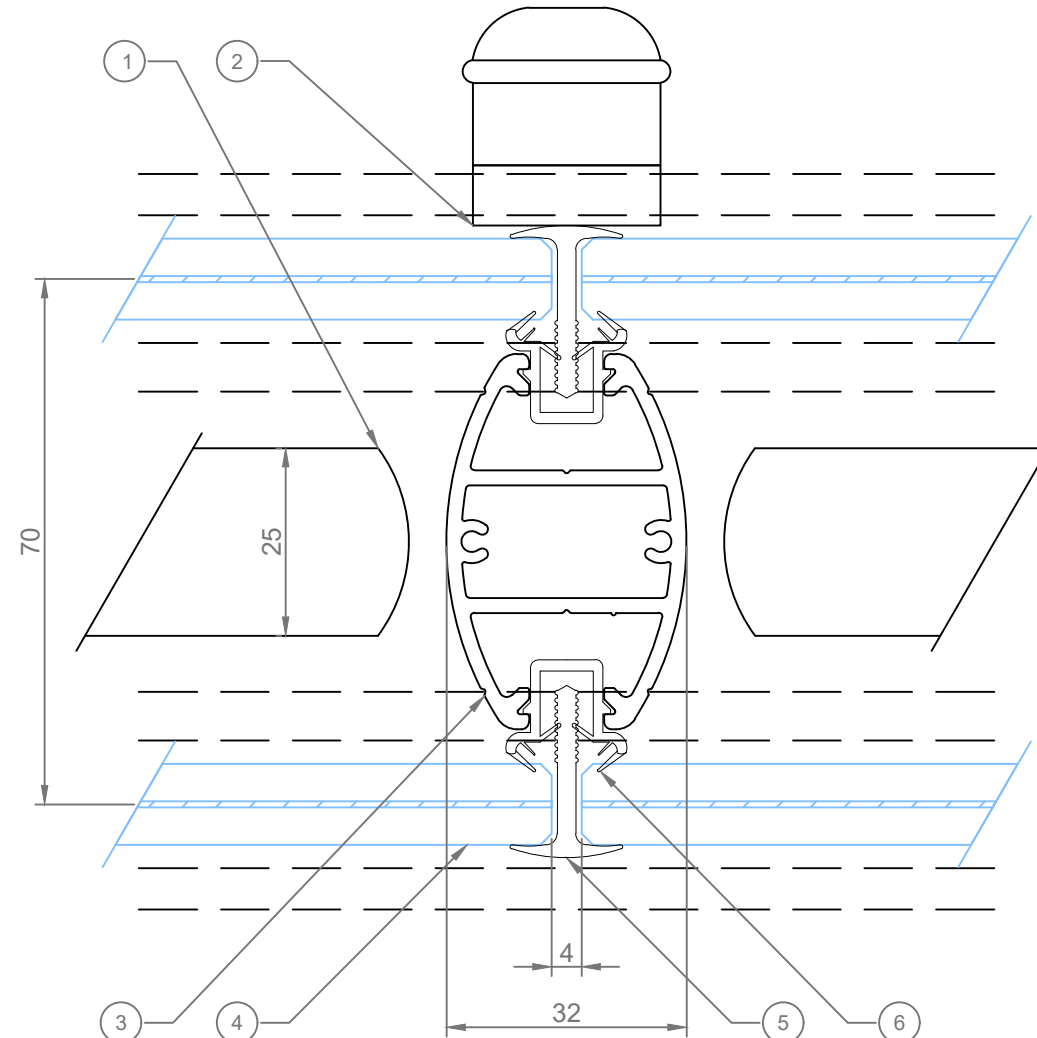
-  Double Glazed
-  Horizontal Screen Integral Blinds
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO:
K100-HS-09

DATE:
15/06/21

SCALE:
1:1

ISSUE NO:
4



Glazed Module Parameters

Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100

COMPONENT KEY:

1	10-14.8mm (CFT or Lam.) GLASS
2	SJ34/K35BJ
3	K100TI
4	K100KGI

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Screen Internal Cross Glaze
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO:

K100-HS-10

DATE:

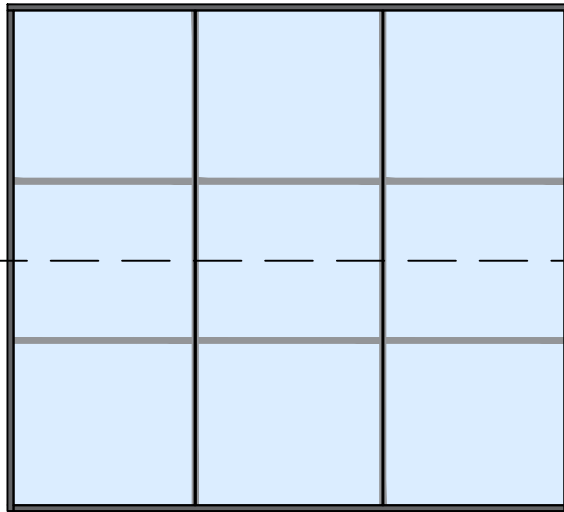
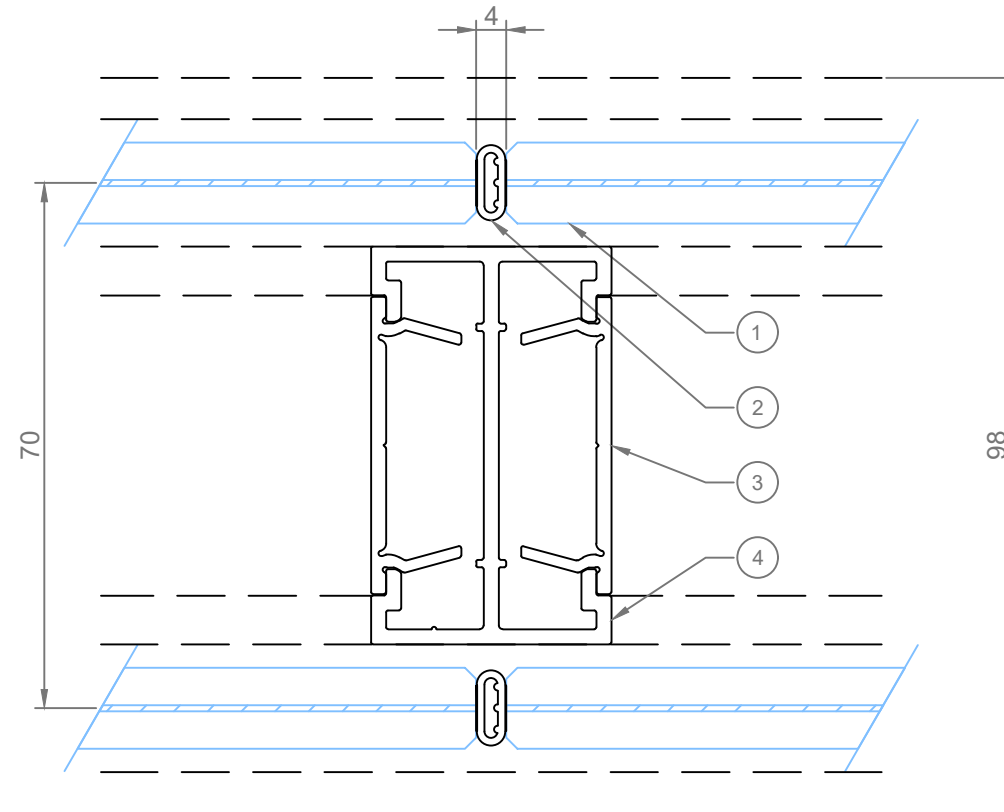
15/06/21

SCALE:

1:1

ISSUE NO:

3



Glazed Module Parameters

Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100

COMPONENT KEY:

1	10-14.8mm (CFT or Lam.) GLASS
2	SJ34/K35BJ
3	K100TI
4	K100KGI
5	K54KGF
6	TAPE19.1C
7	109

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Screen Applied Kross Glaze
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:

K100-HS-11

DATE:

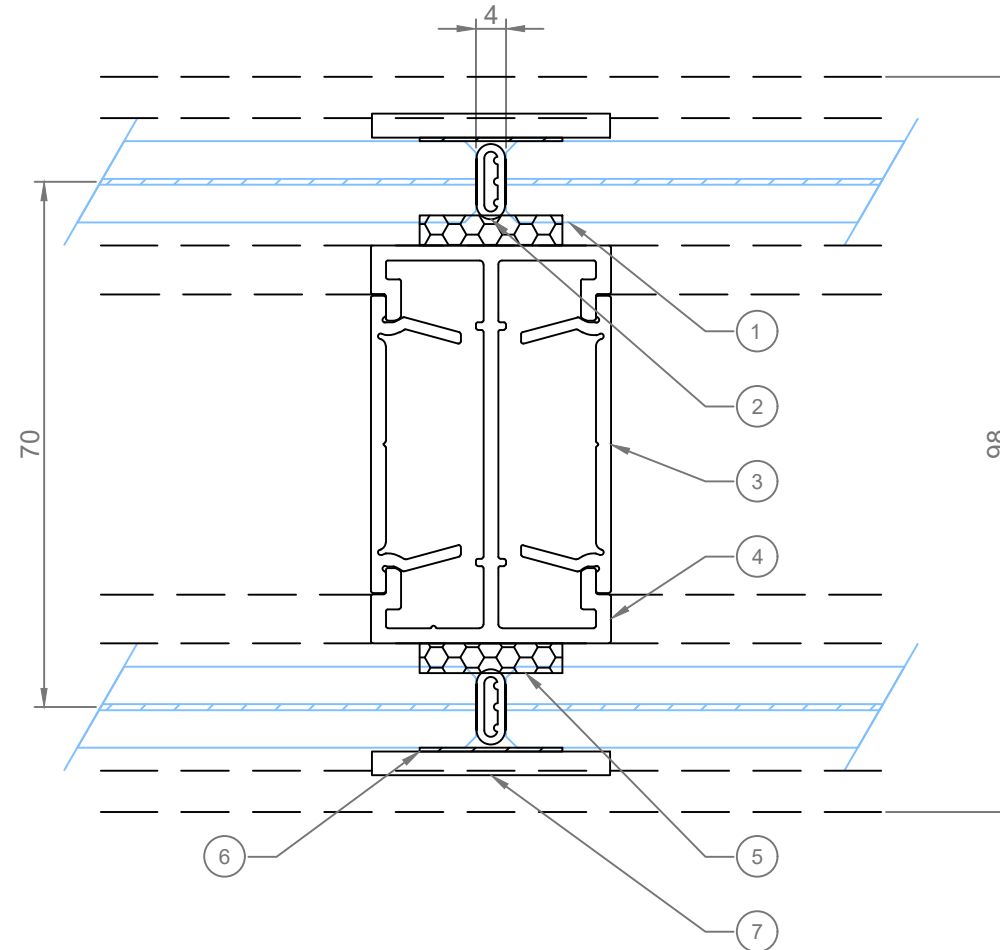
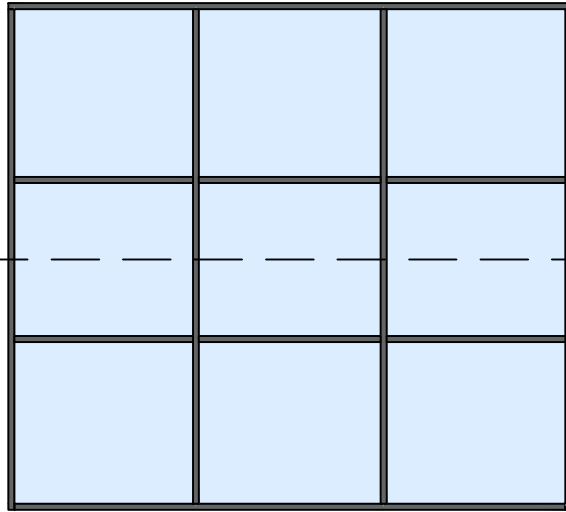
15/06/21

SCALE:

1:1

ISSUE NO:

3



Glazed Module Parameters

Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Polar 100

COMPONENT KEY:

1	10-12.8mm (CFT or A/Lam) GLASS
2	K100KGP
3	K100TI
4	344B
5	K100KGT

NOTES:

MAXIMUM LOADING TO TRANSOM IS 100KG - THEREFORE EACH GLASS PANEL CAN BE NO GREATER THAN 50KG

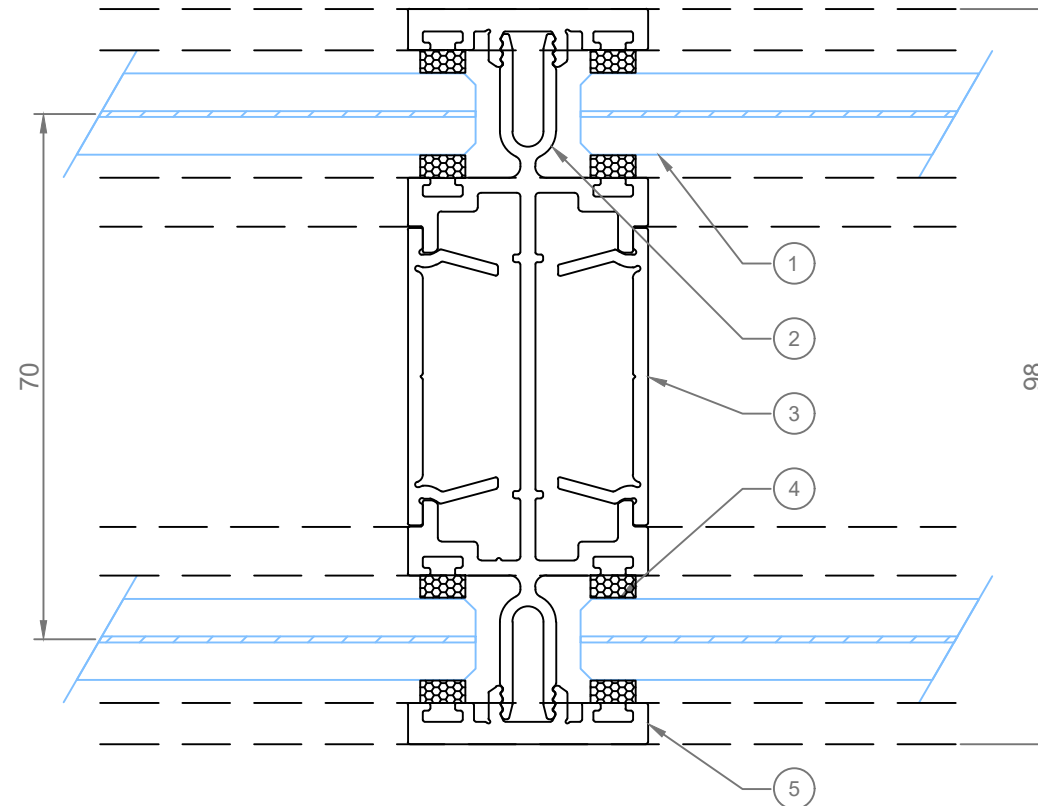
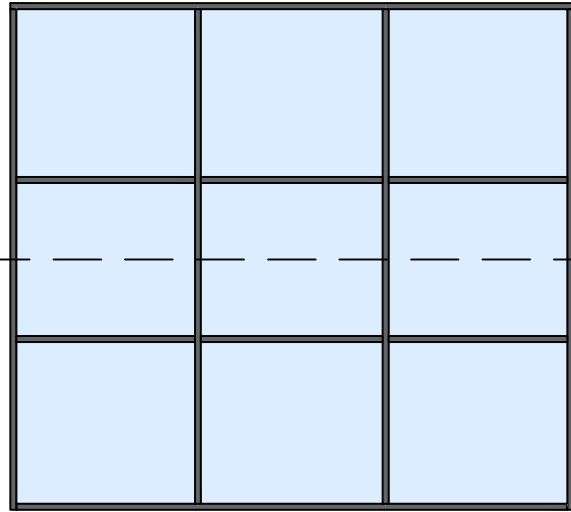
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Screen Mullion Cross Glaze
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO: K100-HS-12 DATE: 15/06/21

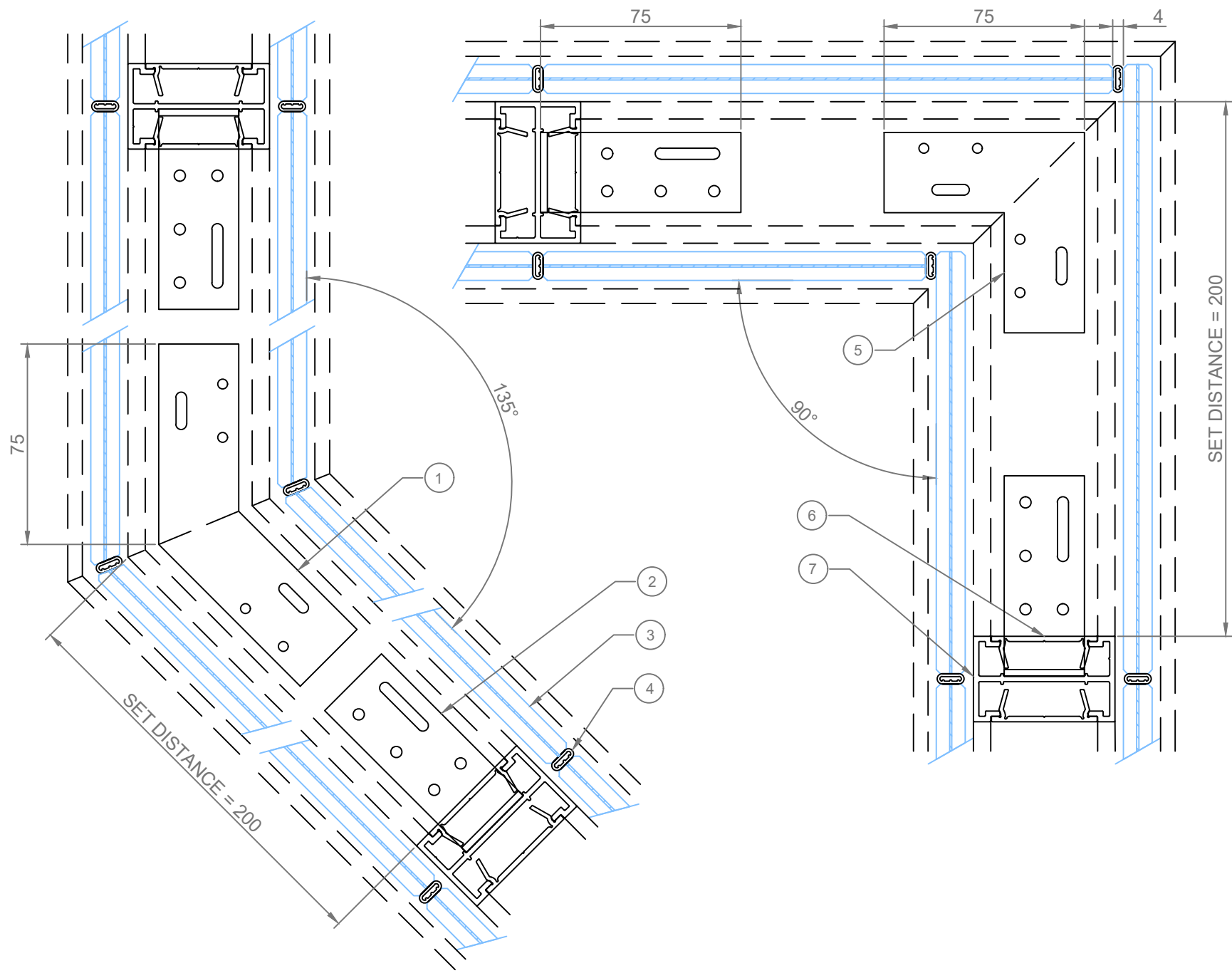
SCALE: 1:1 ISSUE NO: 3







Polar 100

COMPONENT KEY:

1	K100KG135
2	K100KGFB
3	10-14.8mm (CFT or Lam.) GLASS
4	SJ34
5	K100KG90
6	K100TI
7	K100KGI



NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

- JUNCTION CATEGORY:
-  Double Glazed
 -  Horizontal Screen
Cross Glaze Corners
 -  0 min Integrity
0 min Insulation
 -  +/- 0 mm
Deflection

DRAWING NO: K100-HS-19 DATE: 14/07/21
SCALE: 1:2 ISSUE NO: 1

Polar 100





COMPONENT KEY:

1	12.5mm PLASTERBOARD
2	881S50
3	853
4	331
5	K100WGB
6	SUITABLE STRUCTURAL FIXING
7	10-14.8mm (CFT or A/Lam) GLASS
8	K100TI
9	K100FT
10	SJ26.10B/SJ26.12B/175
11	K54BG5B/K545BG4B/175/174

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

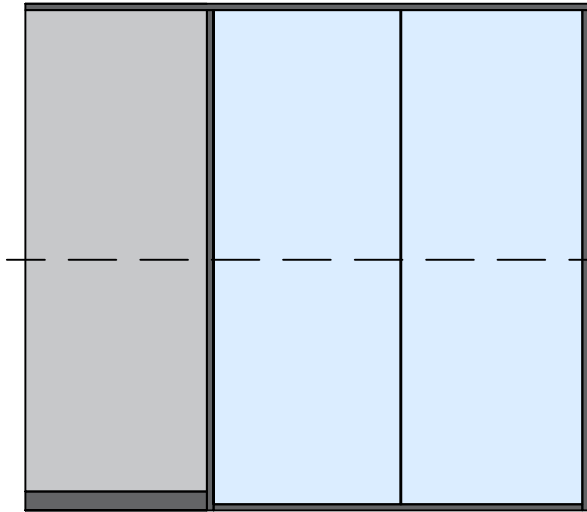
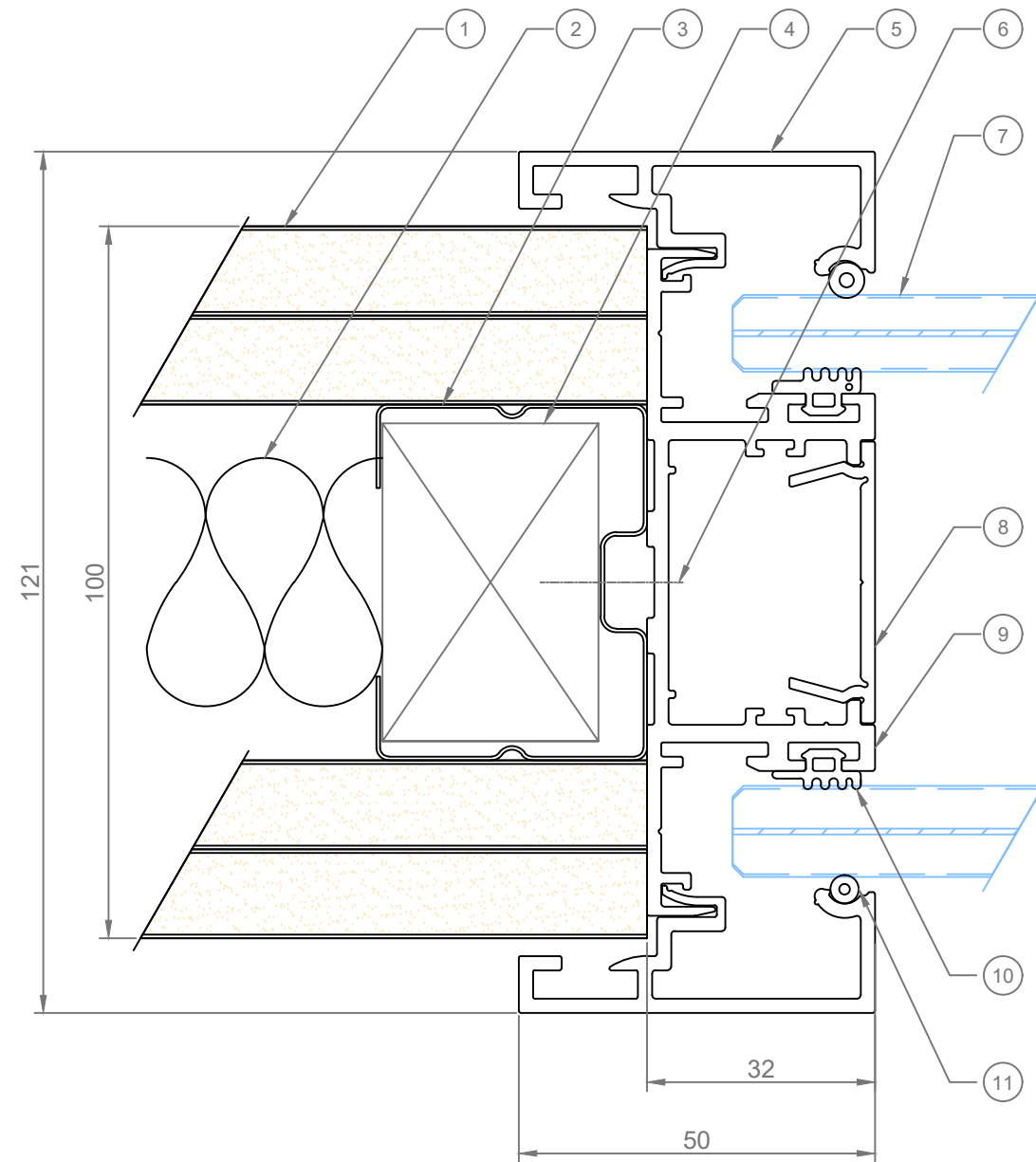
-  Double Glazed
-  Horizontal Screen Drywall Junction
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
K100-HS-05

DATE:
14/06/21

SCALE:
1:1

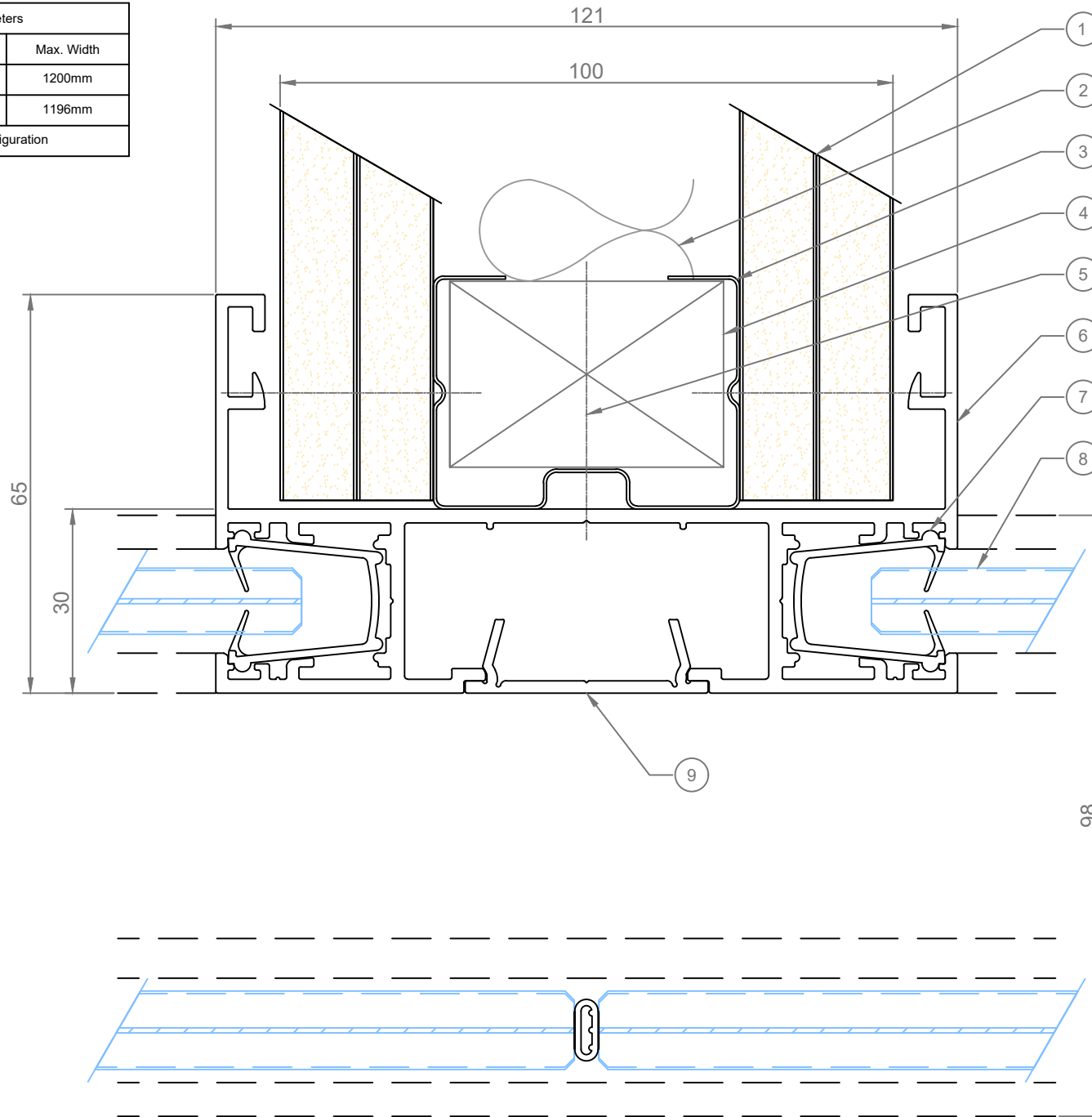
ISSUE NO:
2



Glazed Module Parameters

Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

Glazed Module Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		



Polar 100

COMPONENT KEY:

1	12.5mm PLASTERBOARD
2	881S50
3	853
4	331
5	SUITABLE STRUCTURAL FIXING
6	K100PWA100
7	SJ20
8	10-14.8mm (CFT or Lam.) GLASS
9	K100TI

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Screen
3-Way Drywall Adaptor
-  0 min Integrity
0 min Insulation
-  0 mm
Deflection

DRAWING NO:
K100-HS-04

DATE:
11/06/21

SCALE:
1:1

ISSUE NO:
2

Polar 100

COMPONENT KEY:

1	12.5mm PLASTERBOARD
2	881S50
3	853
4	331
5	SUITABLE STRUCTURAL FIXING
6	K100TJ100
7	K100TI
8	SJ20
9	10-14.8mm (CFT or Lam.) GLASS

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

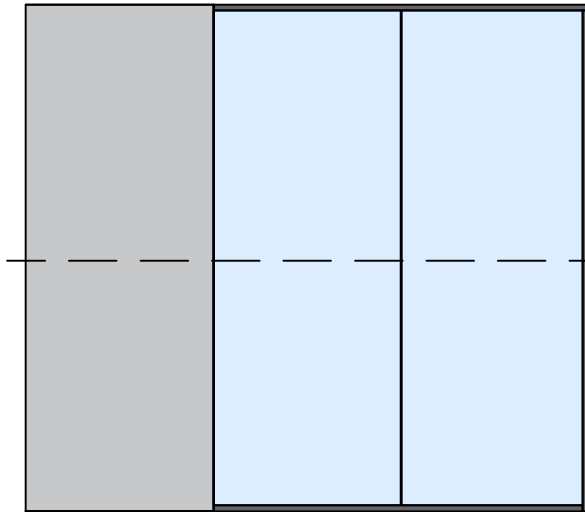
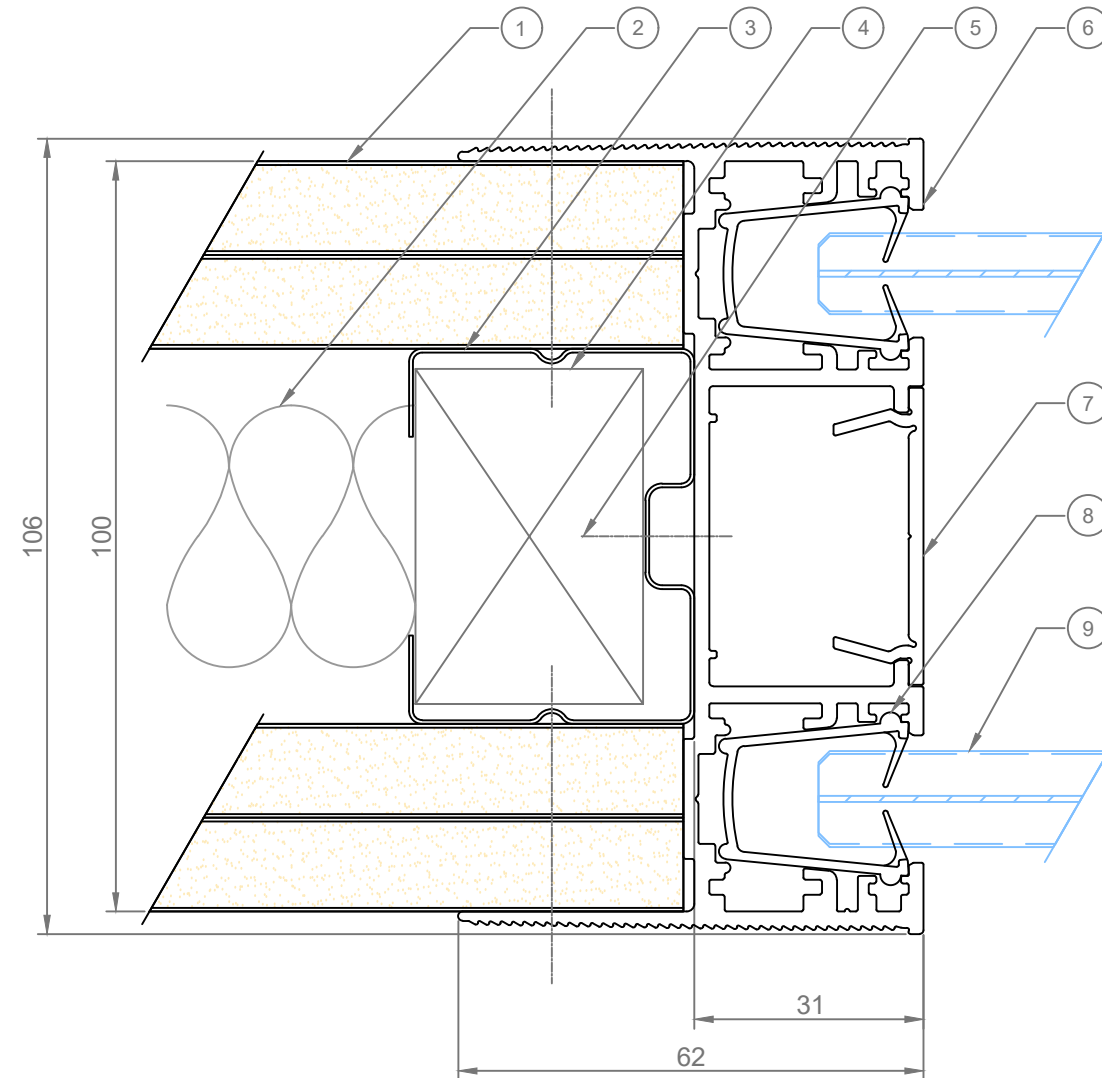
-  Double Glazed
-  Horizontal Screen
100mm Drywall Adaptor
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO:
K100-HS-03

DATE:
11/06/21

SCALE:
1:1

ISSUE NO:
2



Glazed Module Parameters

Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		





Polar 100

COMPONENT KEY:

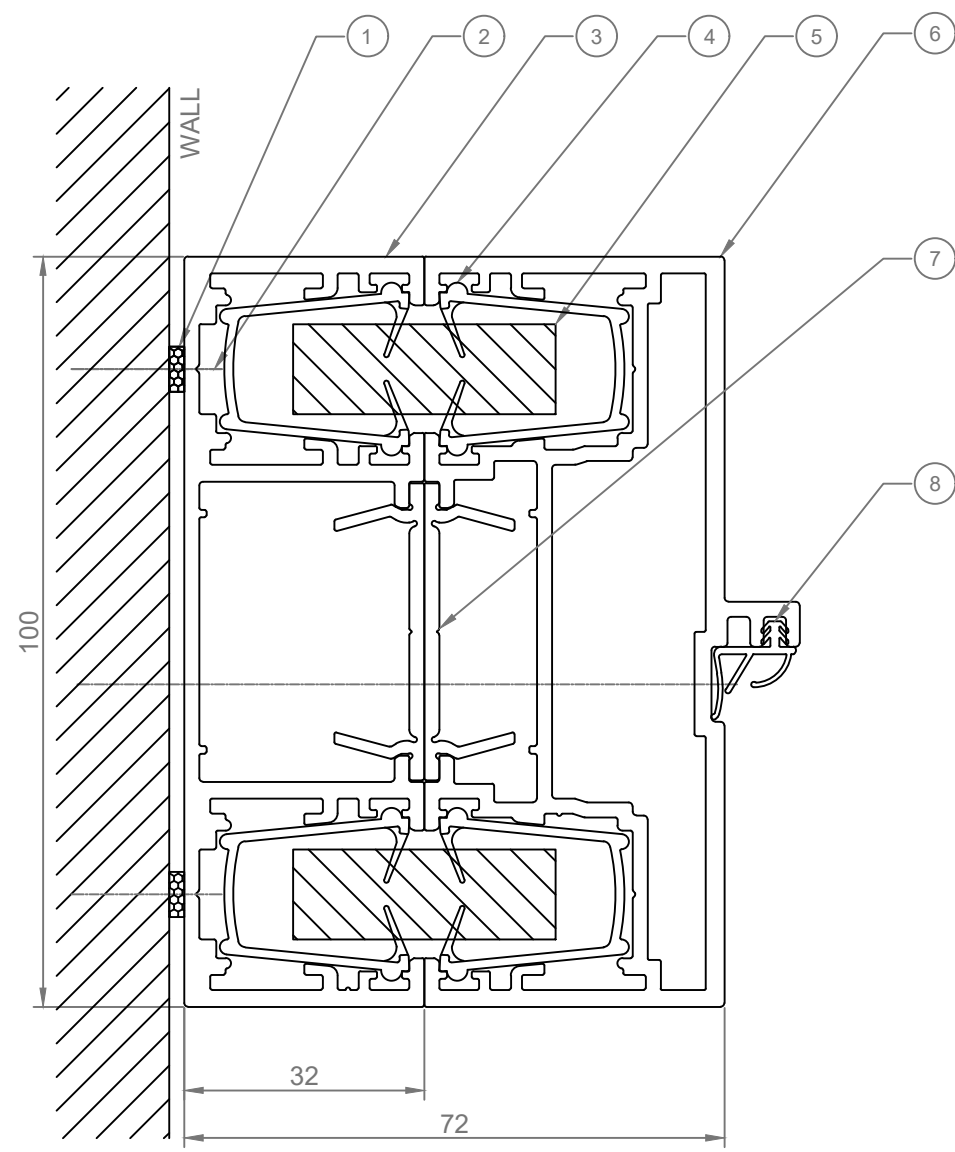
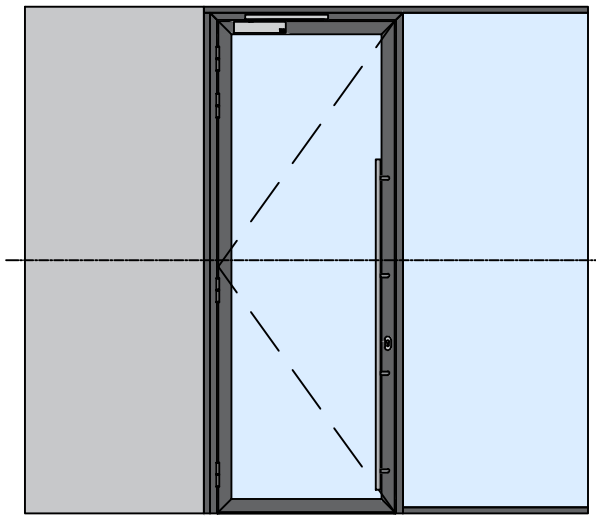
1	342
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	SJ69
6	K100DF
7	K100TI
8	K54DS

NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

	Double Glazed
	Horizontal Screen Door Frame to Wall
	0 min Integrity 0 min Insulation
	0 mm Deflection

DRAWING NO: K100-HS-13	DATE: 15/06/21
SCALE: 1:1	ISSUE NO: 2






Polar 100

COMPONENT KEY:

1	K100TI
2	K100DF
3	K54DS
4	SUITABLE STRUCTURAL FIXING
5	342 FOAM

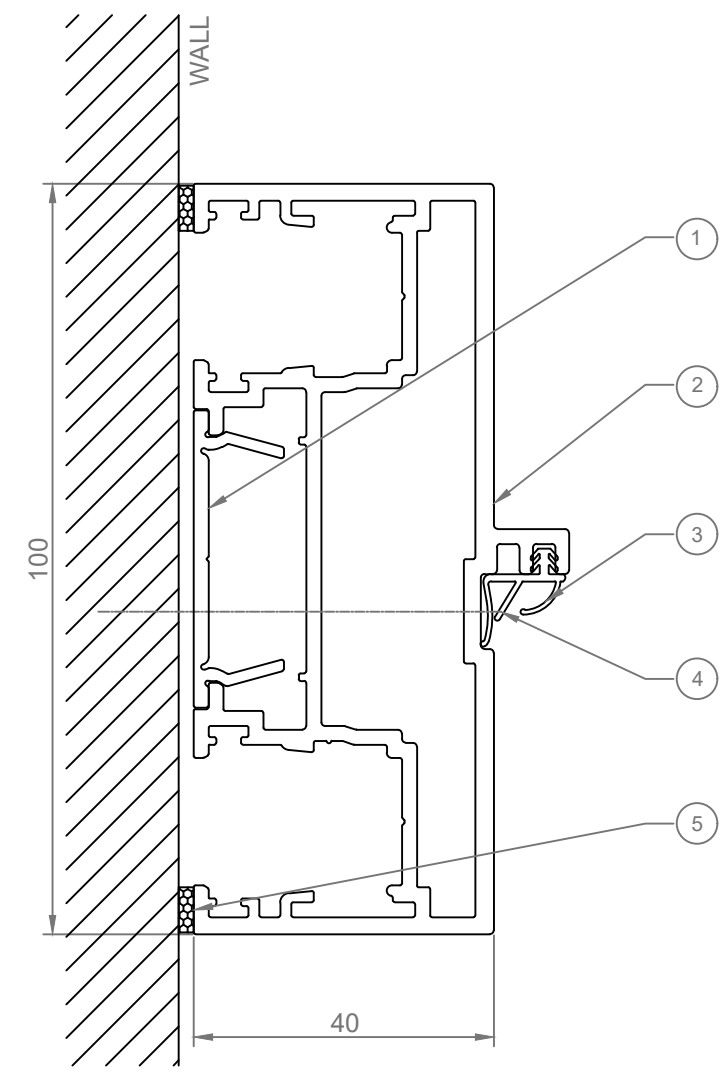
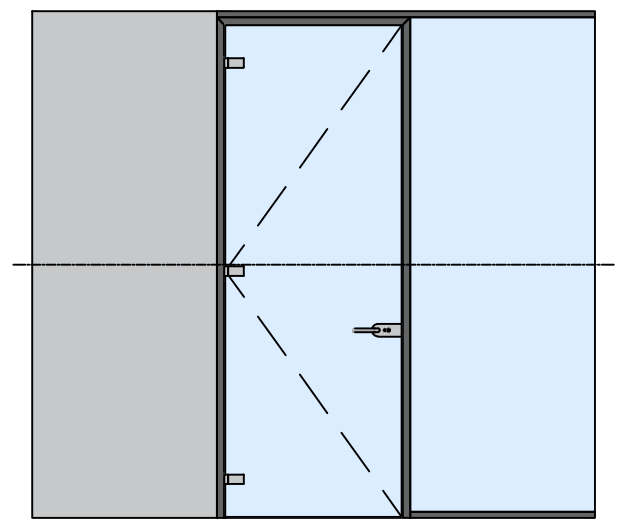
NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Screen Door Frame to Wall
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO: K100-HS-14 DATE: 15/06/21

SCALE: 1:1 ISSUE NO: 2



Polar 100

COMPONENT KEY:





1	K100KGT
2	10-12.8mm (CFT or Lam.) GLASS
3	K100TI
4	K100KGP
5	344B
6	POLAR.TECH
7	SJ20
8	K100DF
9	K54DS

NOTES:

TECH PANELS ARE MADE TO ORDER ITEMS

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

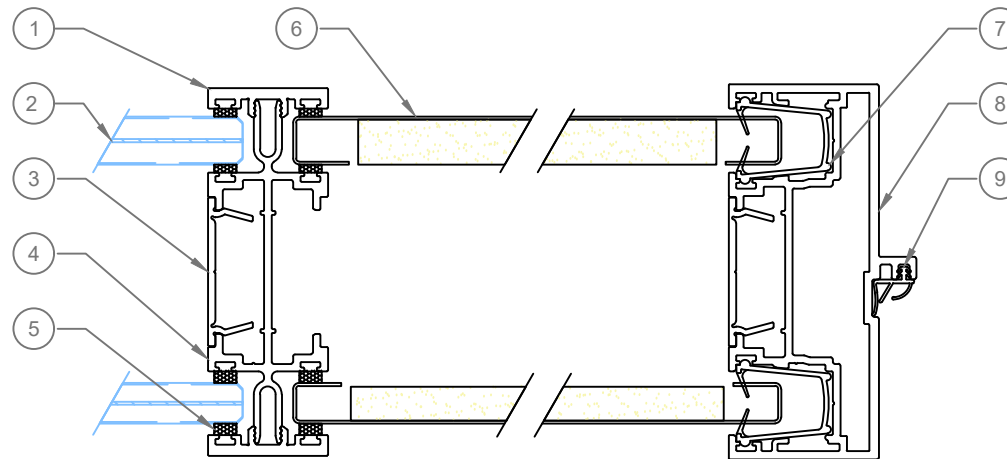
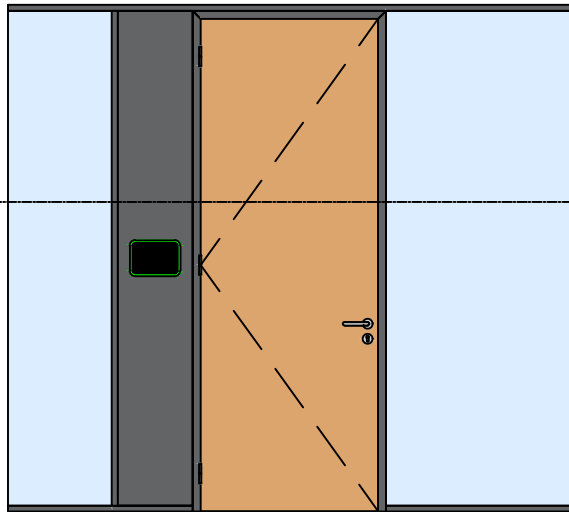
-  Double Glazed
-  Horizontal Screen Tech Panel
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
K100-HS-16

DATE:
16/06/21

SCALE:
1:2

ISSUE NO:
1



Tech Panel Parameters

Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		





Polar 100

COMPONENT KEY:

1	K100GPT
2	10-14.8mm (CFT or Lam.) GLASS
3	K100GP
4	K100GPI10C/K100GPI12C
5	POLAR.TECH
6	SJ20
7	K100DF
8	K54DS

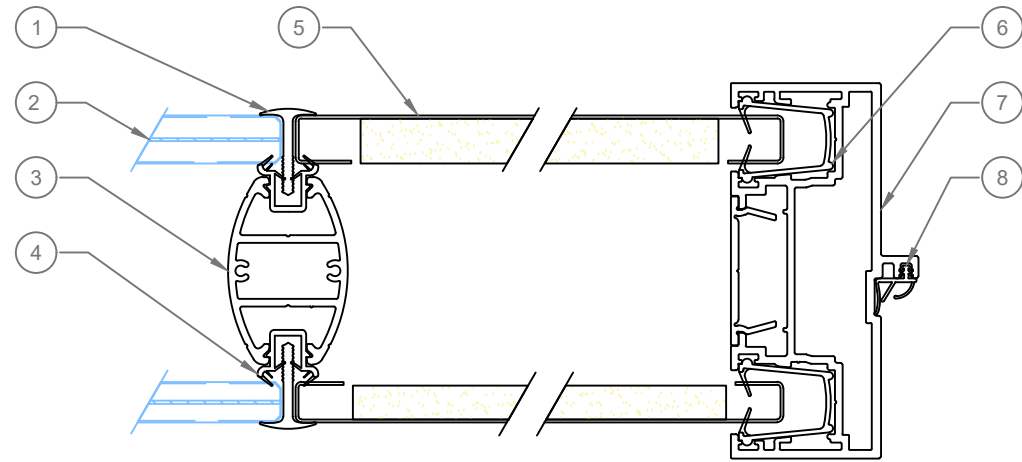
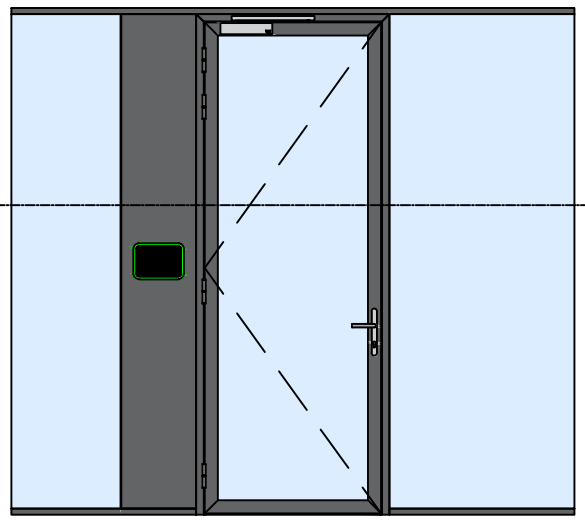
NOTES:
 TECH PANELS ARE MADE TO ORDER ITEMS
 ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Screen Tech Panel
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO: K100-HS-17 DATE: 16/06/21

SCALE: 1:2 ISSUE NO: 1

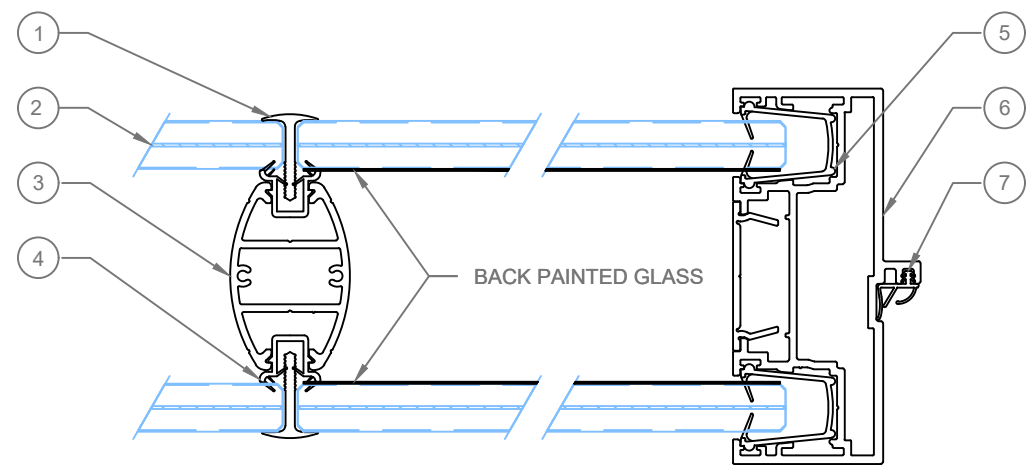
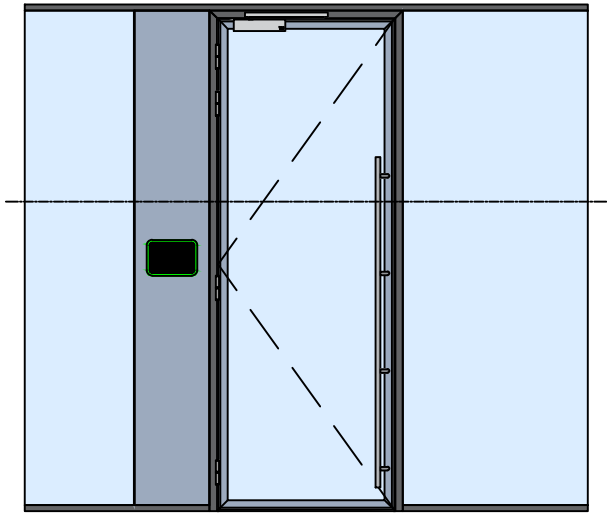


Tech Panel Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		





Polar 100

COMPONENT KEY:

1	K100GPT
2	10-14.8mm (CFT or Lam.) GLASS
3	K100GP
4	K100GPI10C/K100GPI12C
5	SJ20
6	K100DF
7	K54DS



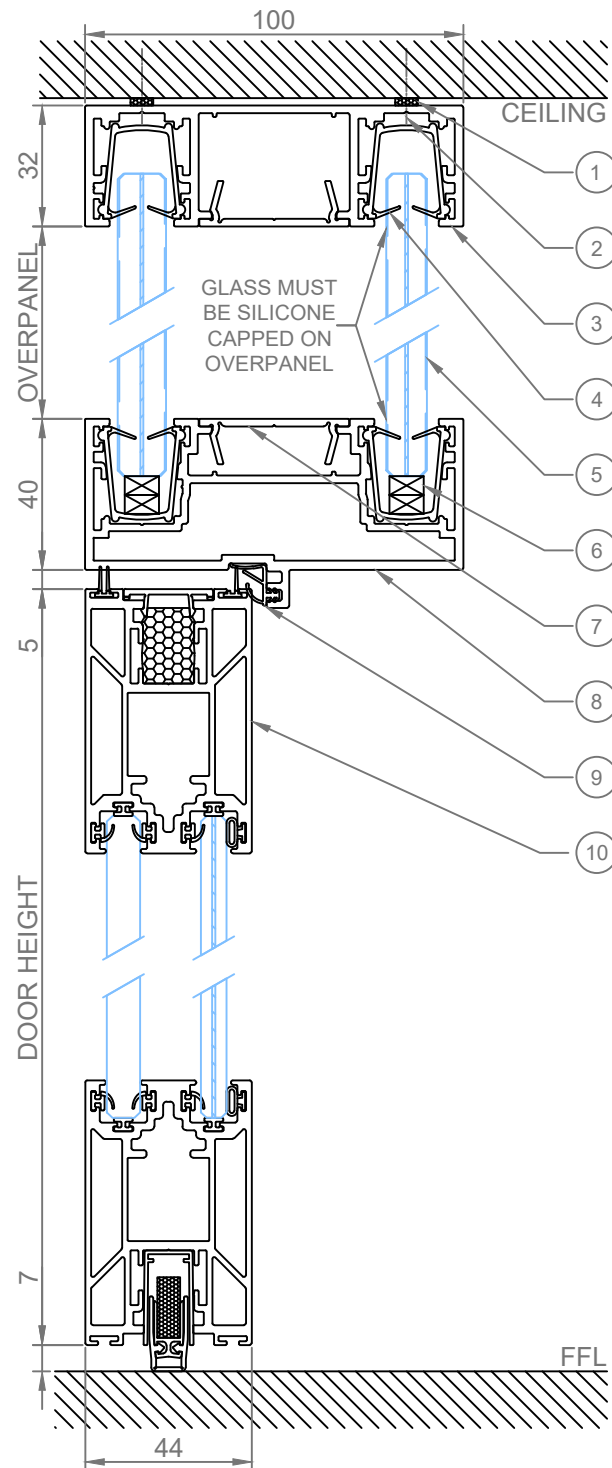
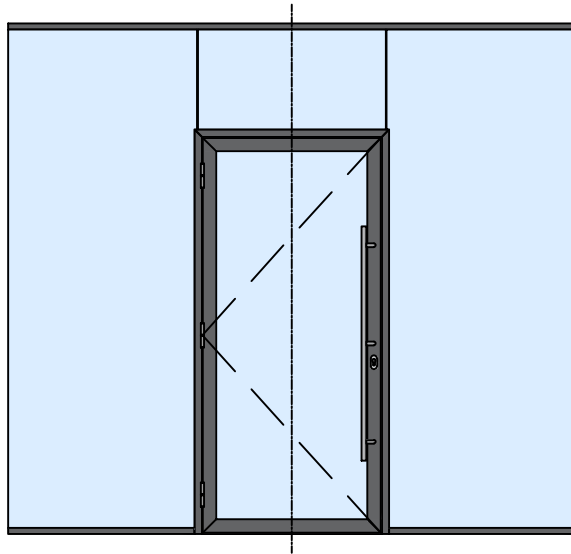
NOTES:
ALL DIMENSIONS ARE NOMINAL & IN mm

- JUNCTION CATEGORY:
-  Double Glazed
 -  Horizontal Screen Tech Panel
 -  0 min Integrity
0 min Insulation
 -  +/- 0 mm Deflection

Tech Panel Parameters		
Unit	Max. Height	Max. Width
Module Size	3000mm*	1200mm
Glass Size	2970mm*	1196mm
* Dependent on Glass Configuration		

DRAWING NO: K100-HS-18 DATE: 16/06/21

SCALE: 1:2 ISSUE NO: 1



Sonik Door with Glazed Overpanel Parameters		
* Please note that maximum overpanel height is based on it being no more than 25% of the actual door height.		
	Minimum	Maximum
Overpanel Height	200mm	Up to 583mm*
Door Height	1981mm	Up to 2716mm*
Overall Height	2265mm	Up to 3000mm^
^ Dependent on Screen Glass Configuration		
Maximum Door Weight = 120kg		

Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-14.8mm (CFT or Lam.) GLASS
6	PSUN PACKERS
7	K100TI
8	K100DF
9	K54DS
10	SONIK 52, 70 OR 70R DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

REFER TO SONIK DOOR DESIGN GUIDE FOR MORE INFORMATION

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

- Double Glazed
- Vertical Door Sonik with Over Panel
- 0 min Integrity
0 min Insulation
- 0 mm Deflection

DRAWING NO:
K100-VD-01

DATE:
11/05/22

SCALE:
1:2

ISSUE NO:
4

Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	SJ69
6	K100DF
7	K54DS
8	SONIK 52, 70 OR 70R DOOR


NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

REFER TO SONIK DOOR DESIGN GUIDE FOR MORE INFORMATION

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

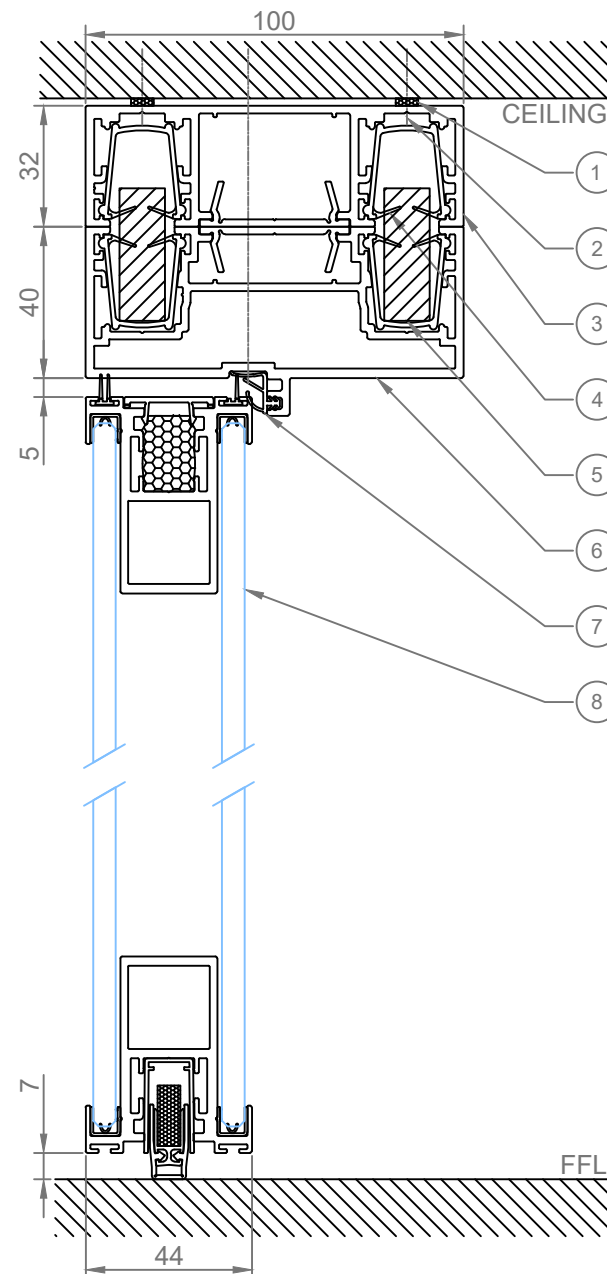
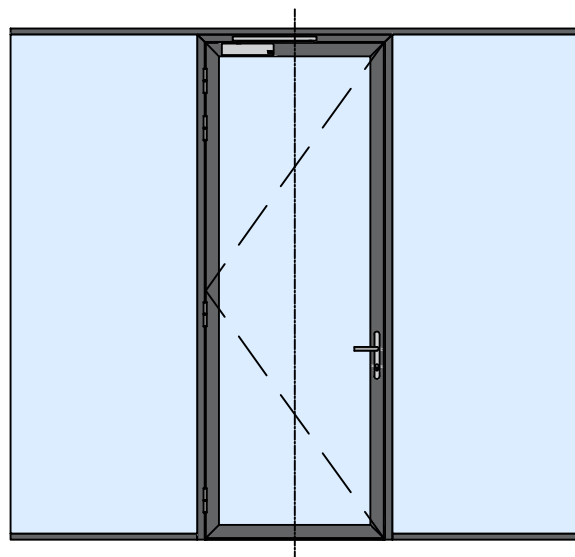
-  Double Glazed
-  Vertical Door Full Height Sonik
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO:
K100-VD-04

DATE:
11/05/22

SCALE:
1:2

ISSUE NO:
4



Full Height Sonik Door Parameters

	Minimum	Maximum
Door Height	1981mm	2916mm
Overall Height	2065mm	3000mm*
* Dependent on Screen Glass Configuration		
Maximum Door Weight = 120kg		

Polar 100

COMPONENT KEY:

1	342 FOAM
2	SJ20
3	K100DF
4	K100TI
5	SUITABLE STRUCTURAL FIXING
6	K54DS
7	SONIK 52, 70 OR 70R DOOR




NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

REFER TO SONIK DOOR DESIGN GUIDE FOR MORE INFORMATION

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

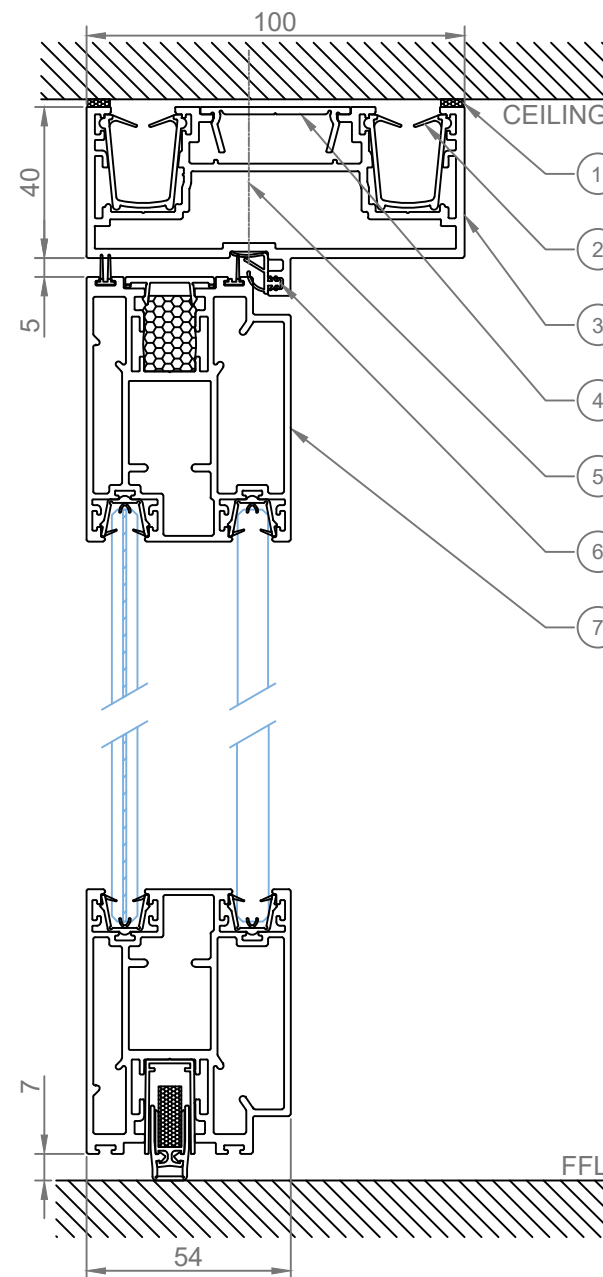
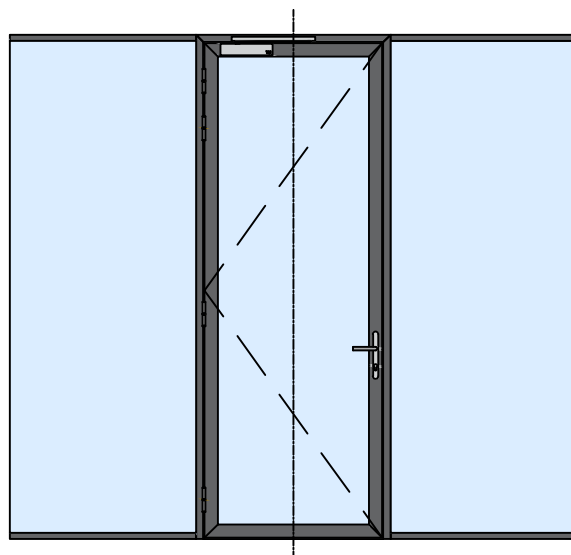
-  Double Glazed
-  Vertical Door Full Height Sonik
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO:
K100-VD-08

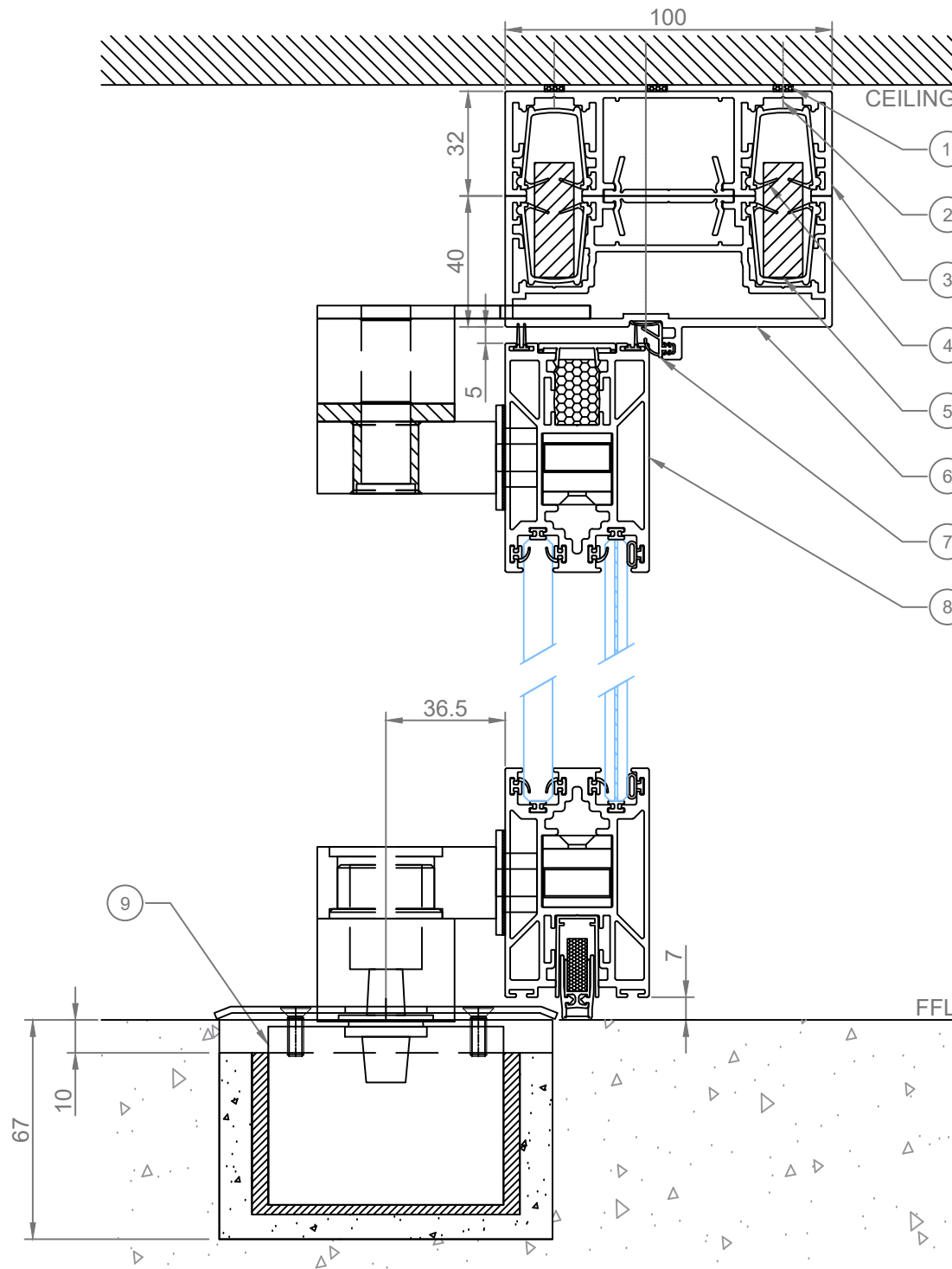
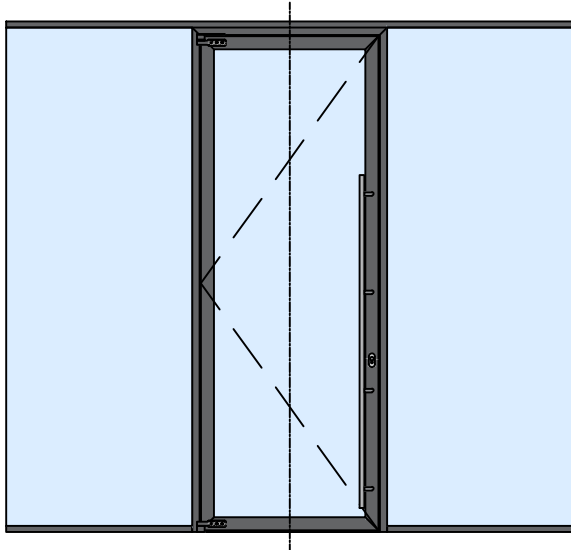
DATE:
11/05/22

SCALE:
1:2

ISSUE NO:
2



Full Height Sonik Door Parameters		
	Minimum	Maximum
Door Height	1981mm	2948mm
Overall Height	2033mm	3000mm*
* Dependent on Screen Glass Configuration		
Maximum Door Weight = 120kg		



Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	SJ69
6	K100DF
7	K54DS
8	SONIK 70 OR 70R DOOR
9	BTS75V or BTS80 FLOOR SPRING

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

REFER TO SONIK DOOR DESIGN GUIDE FOR MORE INFORMATION

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

- Double Glazed
- Vertical Door Sonik with Floor Spring
- 0 min Integrity
0 min Insulation
- +/- 0 mm Deflection

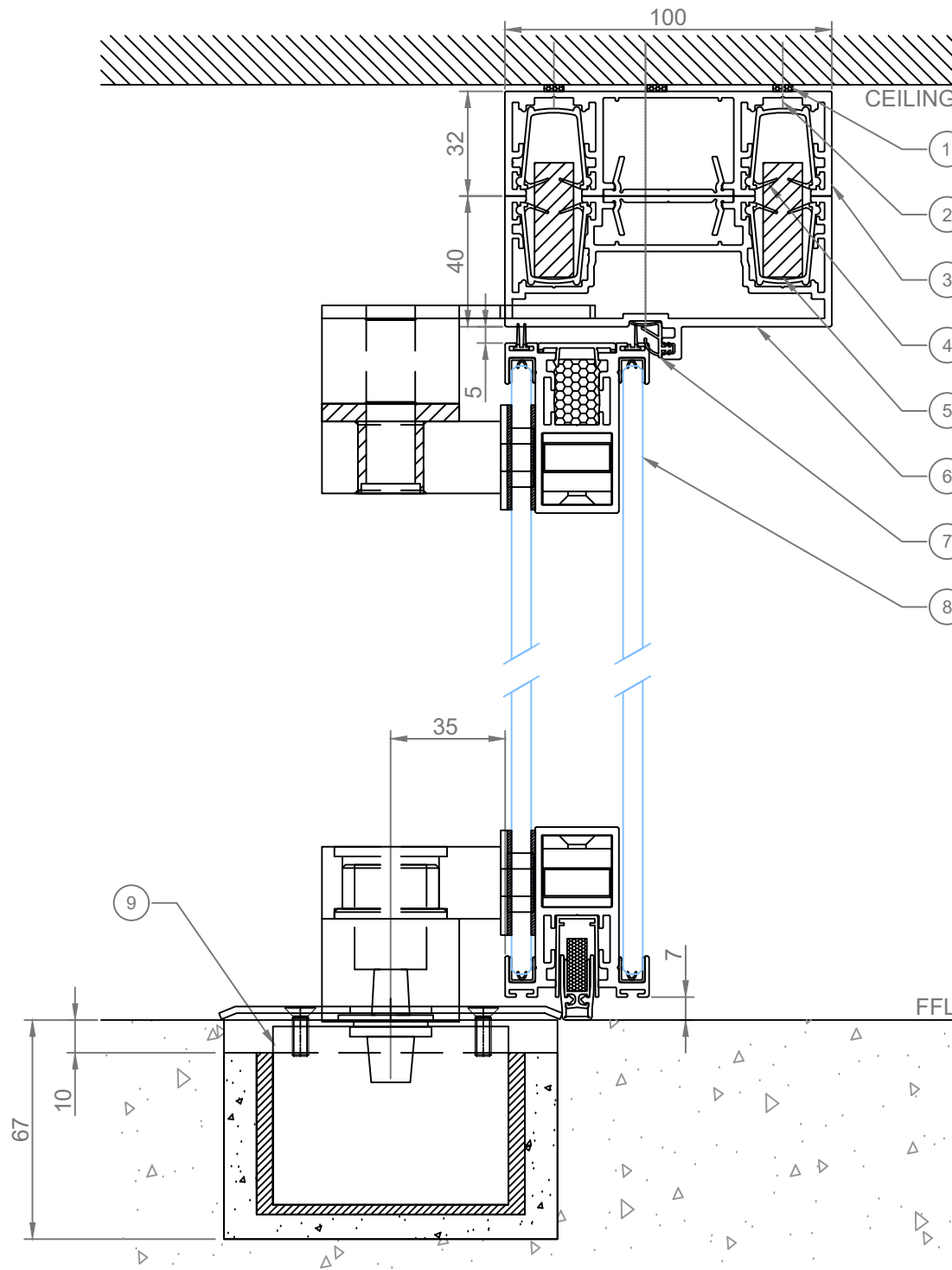
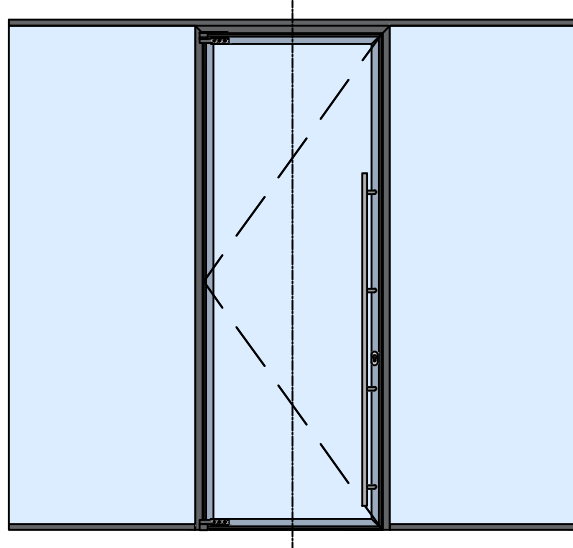
DRAWING NO:
K100-VD-11

DATE:
11/05/22

SCALE:
1:2

ISSUE NO:
2

Full Height Sonik Door Parameters		
	Minimum	Maximum
Door Height	1981mm	2916mm
Overall Height	2065mm	3000mm*
* Dependent on Screen Glass Configuration		
Maximum Door Weight = 120kg		



Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	SJ69
6	K100DF
7	K54DS
8	SONIK 52 DOOR
9	BTS75V or BTS80 FLOOR SPRING

NOTES:
 OTHER IRONMONGERY OPTIONS ARE AVAILABLE
 REFER TO SONIK DOOR DESIGN GUIDE FOR MORE INFORMATION
 ALL DIMENSIONS ARE NOMINAL & IN mm

- JUNCTION CATEGORY:
- Double Glazed
 - Vertical Door Sonik with Floor Spring
 - 0 min Integrity
0 min Insulation
 - 0 mm Deflection

DRAWING NO: K100-VD-12 DATE: 11/05/22

SCALE: 1:2 ISSUE NO: 2

Full Height Sonik Door Parameters		
	Minimum	Maximum
Door Height	1981mm	2916mm
Overall Height	2065mm	3000mm*
* Dependent on Screen Glass Configuration		
Maximum Door Weight = 120kg		

Polar 100

COMPONENT KEY:

1	K100DF
2	K54DS
3	SONIK 52, 70 OR 70R DOOR
4	SJ20
5	K100TI
6	10-14.8mm (CFT or Lam.) GLASS

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

REFER TO SONIK DOOR DESIGN GUIDE FOR MORE INFORMATION

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Door Sonik Single Doorset
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

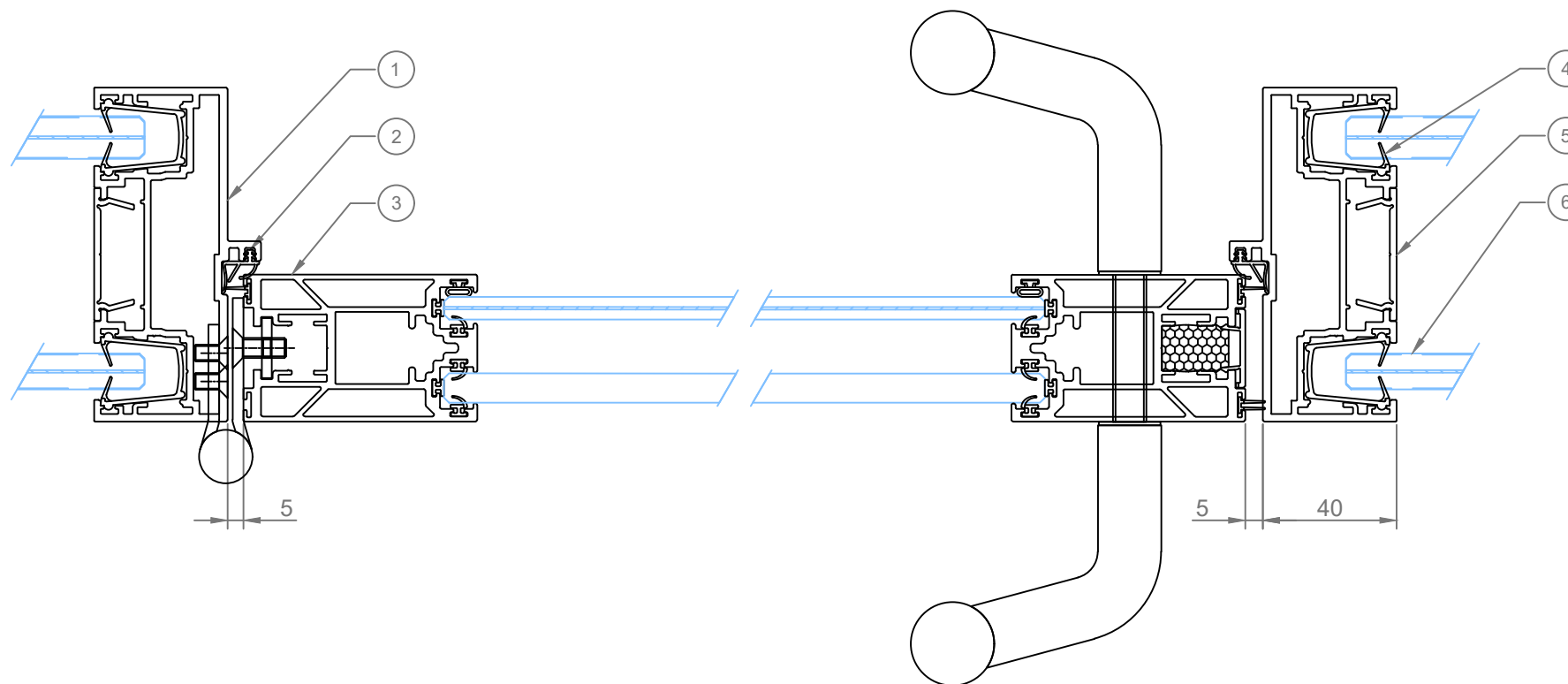
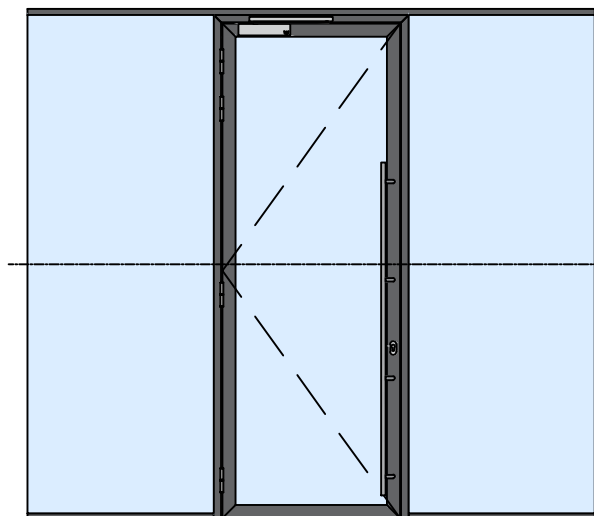
DRAWING NO:
K100-HD-01

DATE:
11/05/22

SCALE:
1:2

ISSUE NO:
3

Sonik Door Parameters	
Door Height	Door Width
2400mm or Less	1100mm or Less
2401mm to 2700mm	1000mm or Less
2701mm to 2948mm	900mm or Less
Maximum Door Weight = 120kg	
Track to Track Opening = Door Width + 90mm	



Polar 100

COMPONENT KEY:

1	K100DF
2	K54DS
3	SONIK 52, 70 OR 70R DOOR
4	SJ20
5	K100TI
6	10-14.8mm (CFT or Lam.) GLASS

NOTES:

SONIK DOORS MUST BE FULL HEIGHT IN DOUBLE DOORSETS

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

REFER TO SONIK DOOR DESIGN GUIDE FOR MORE INFORMATION

ALL DIMENSIONS ARE NOMINAL & IN mm

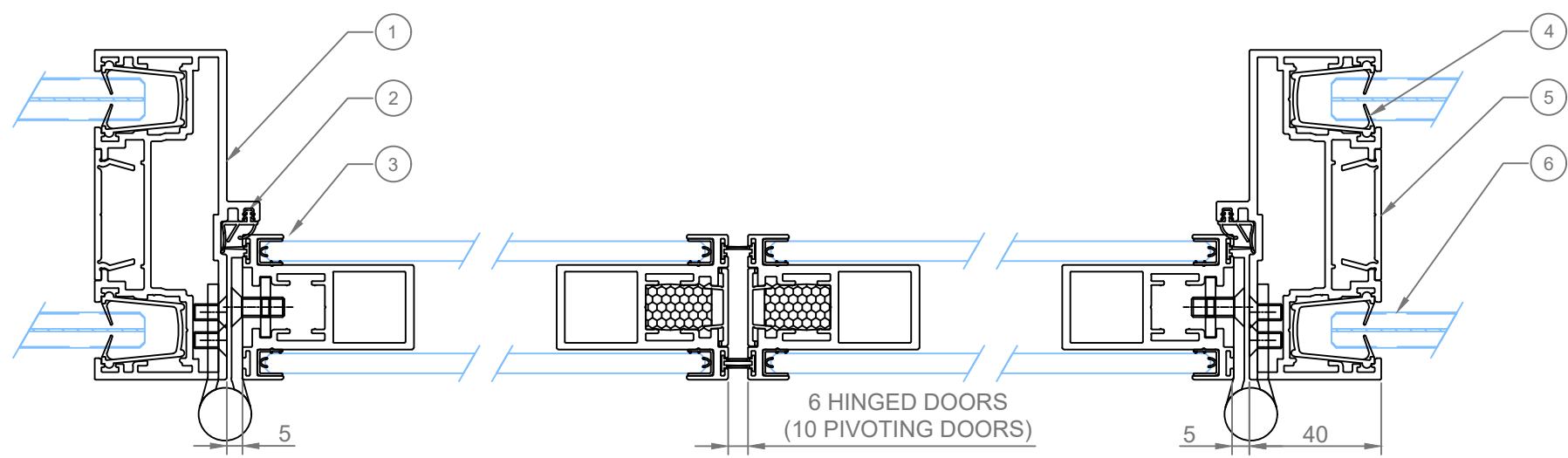
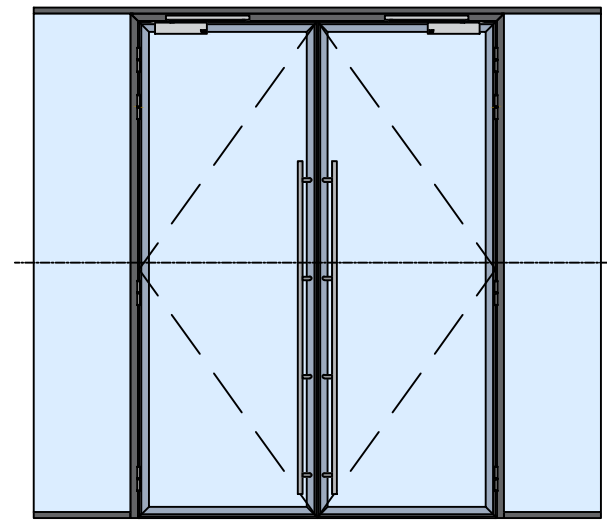
JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Door Sonik Double Doorset
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO: K100-HD-04 DATE: 11/05/22

SCALE: 1:2 ISSUE NO: 3

Sonik Door Parameters	
Door Height	Door Width
2400mm or Less	1100mm or Less
2401mm to 2700mm	1000mm or Less
2701mm to 2948mm	900mm or Less
Maximum Door Weight = 120kg	
Track to Track Opening	
Lift Off Hinges	Offset Pivots
Door Widths + 96mm	Door Widths + 100mm



Polar 100

COMPONENT KEY:

1	10-14.8mm (CFT or Lam.) GLASS
2	K100FT
3	SJ20
4	K100TI
5	K100DF
6	SONIK 70 OR 70R DOOR

NOTES:

MAXIMUM DOOR WEIGHT = 120KG

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

REFER TO SONIK DOOR DESIGN GUIDE FOR MORE INFORMATION

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Door Sonik with Floor Spring
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO:
K100-HD-08

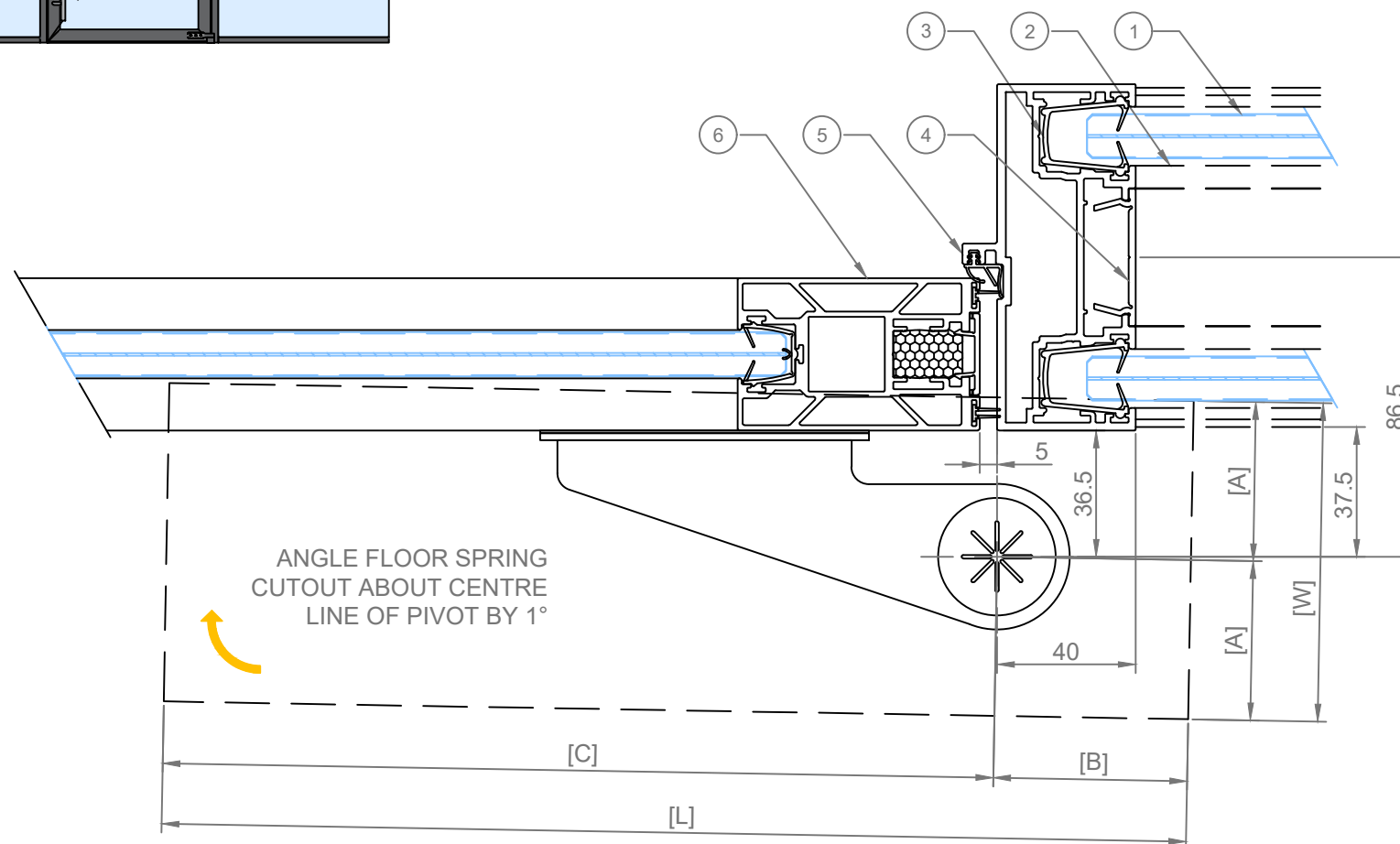
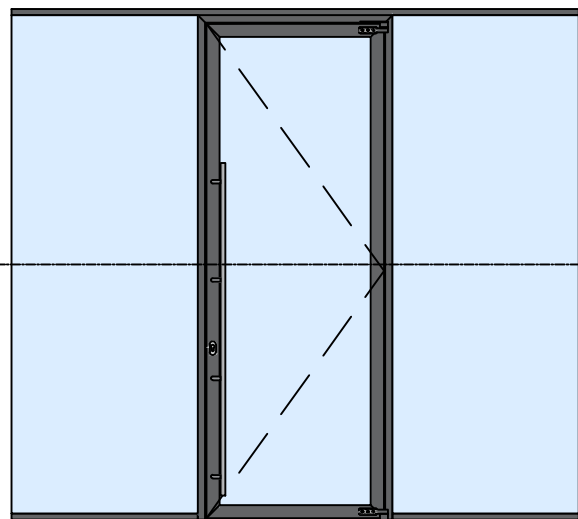
DATE:
11/05/22

SCALE:
1:2

ISSUE NO:
2

Setting Out Details for Sonik Doors on Offset Pivots with Floor Springs

Floor Spring	Floor Type Scenario	[W]	[L]	[A]	[B]	[C]
BTS75V	Raised Access Floor or Timber/Auxiliary Covering With Coffer Box	92mm	296mm	46mm	56mm	240mm
	Concrete or Solid Substrate Floor Spring Body Only	102mm	310mm	51mm	63mm	247mm



Polar 100

COMPONENT KEY:

1	10-14.8mm (CFT or Lam.) GLASS
2	K100FT
3	SJ20
4	K100TI
5	K100DF
6	SONIK 52 DOOR

NOTES:

MAXIMUM DOOR WEIGHT = 120KG

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

REFER TO SONIK DOOR DESIGN GUIDE FOR MORE INFORMATION

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Door Sonik with Floor Spring
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO:
K100-HD-09

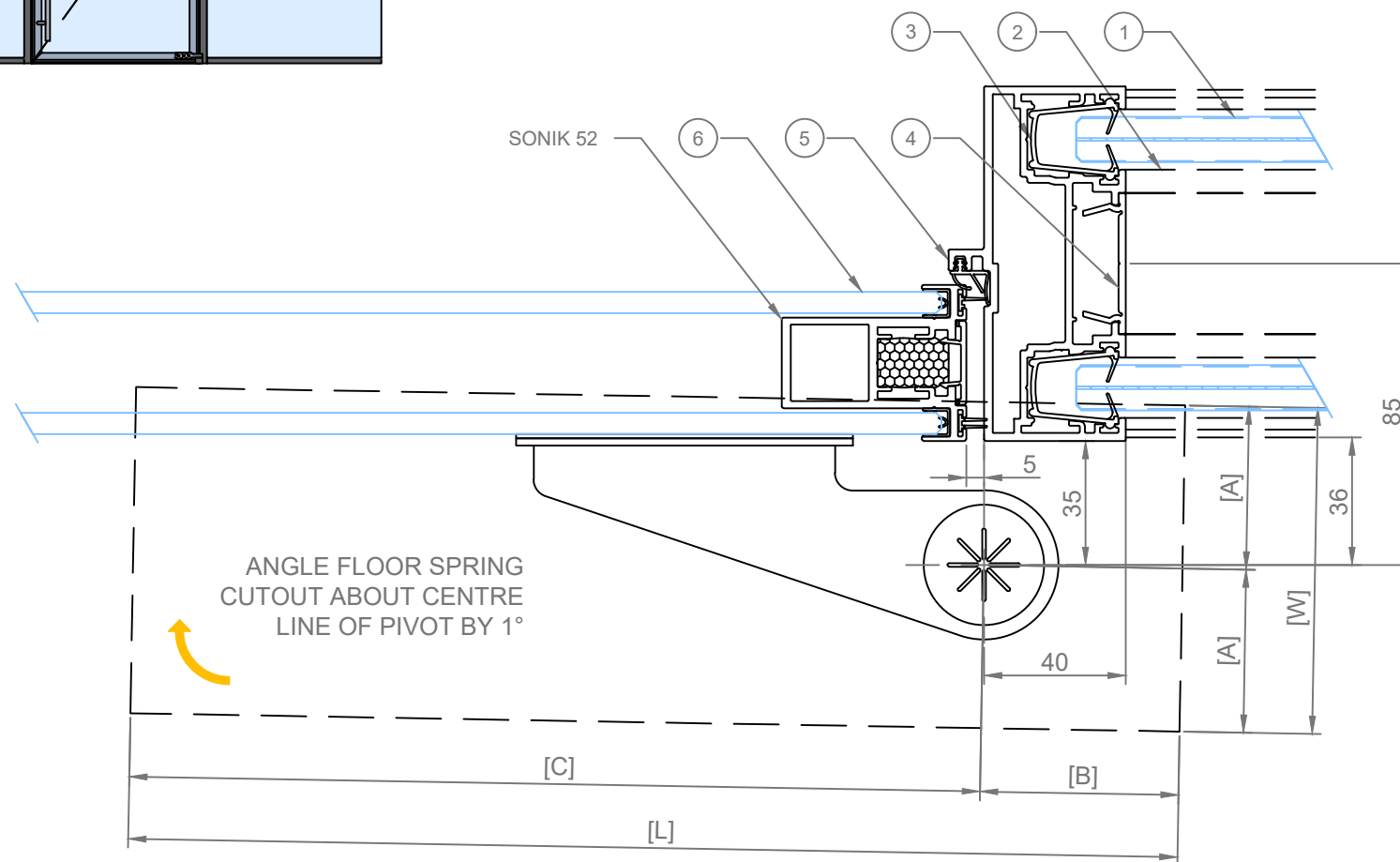
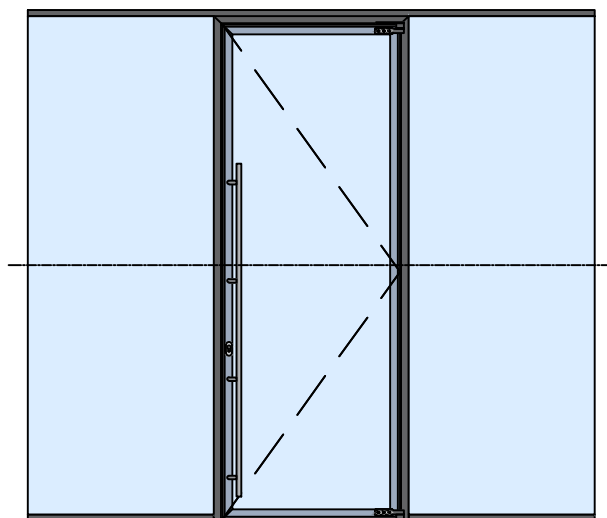
DATE:
11/05/22

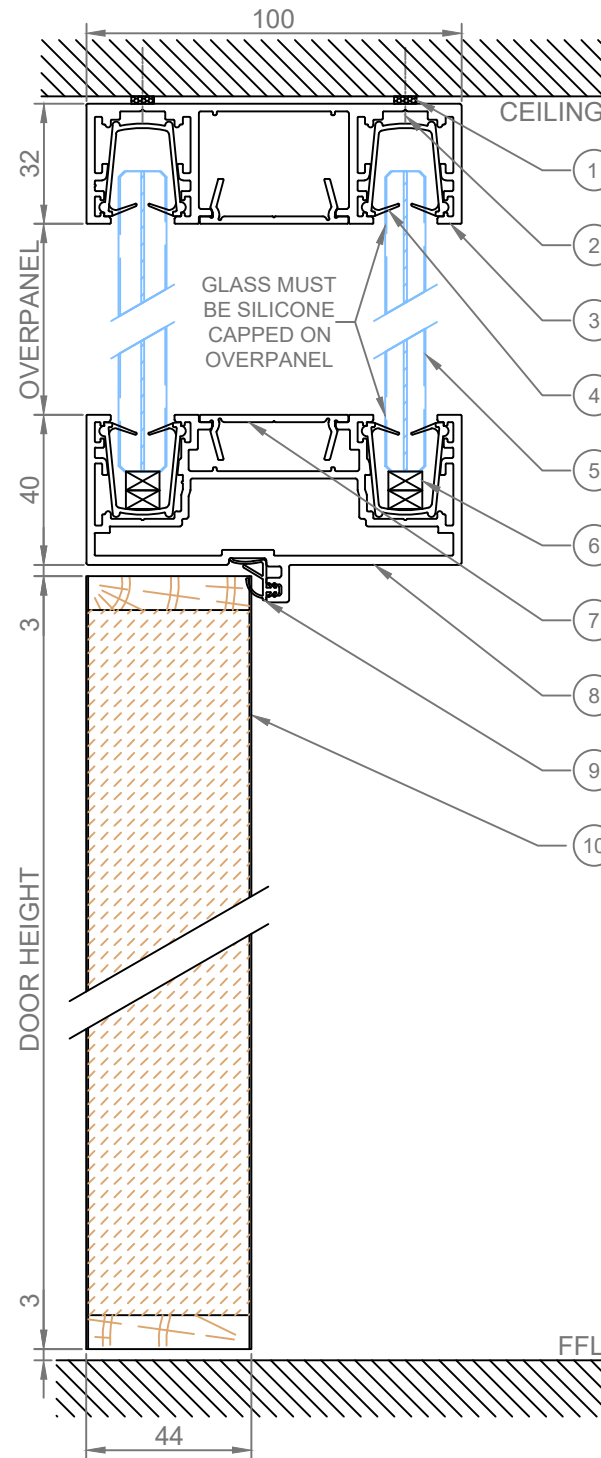
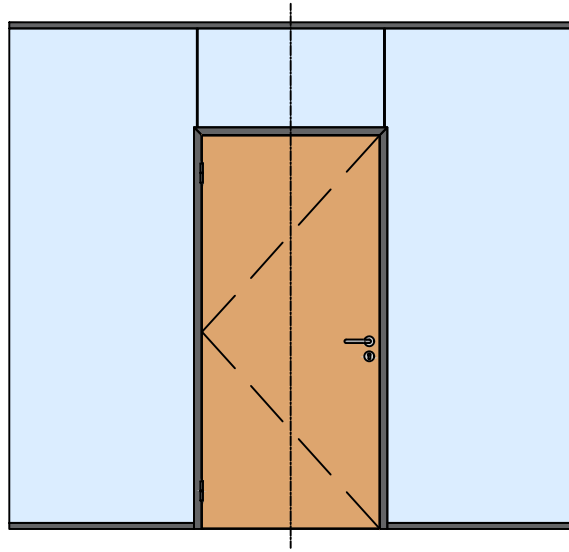
SCALE:
1:2

ISSUE NO:
2

Setting Out Details for Sonik Doors on Offset Pivots with Floor Springs

Floor Spring	Floor Type Scenario	[W]	[L]	[A]	[B]	[C]
BTS75V	Raised Access Floor or Timber/Auxiliary Covering With Coffe Box	92mm	296mm	46mm	56mm	240mm
	Concrete or Solid Substrate Floor Spring Body Only	102mm	310mm	51mm	63mm	247mm





Timber Door with Glazed Overpanel Parameters		
* Please note that maximum overpanel height is based on it being no more than 25% of the actual door height.		
	Minimum	Maximum
Overpanel Height	200mm	Up to 584mm*
Door Height	1981mm	Up to 2722mm*
Overall Height	2259mm	Up to 3000mm^
^ Dependent on Screen Glass Configuration		
Maximum Door Weight = 80kg		

Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-14.8mm (CFT or Lam.) GLASS
6	PSUN PACKERS
7	K100TI
8	K100DF
9	K54DS
10	44mm or 54mm TIMBER DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Vertical Door
Timber with Over Panel
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO:
K100-VD-02

DATE:
14/06/21

SCALE:
1:2

ISSUE NO:
3

Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	SJ69
6	K100DF
7	K54DS
8	44mm TIMBER OVER PANEL
9	44mm TIMBER DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

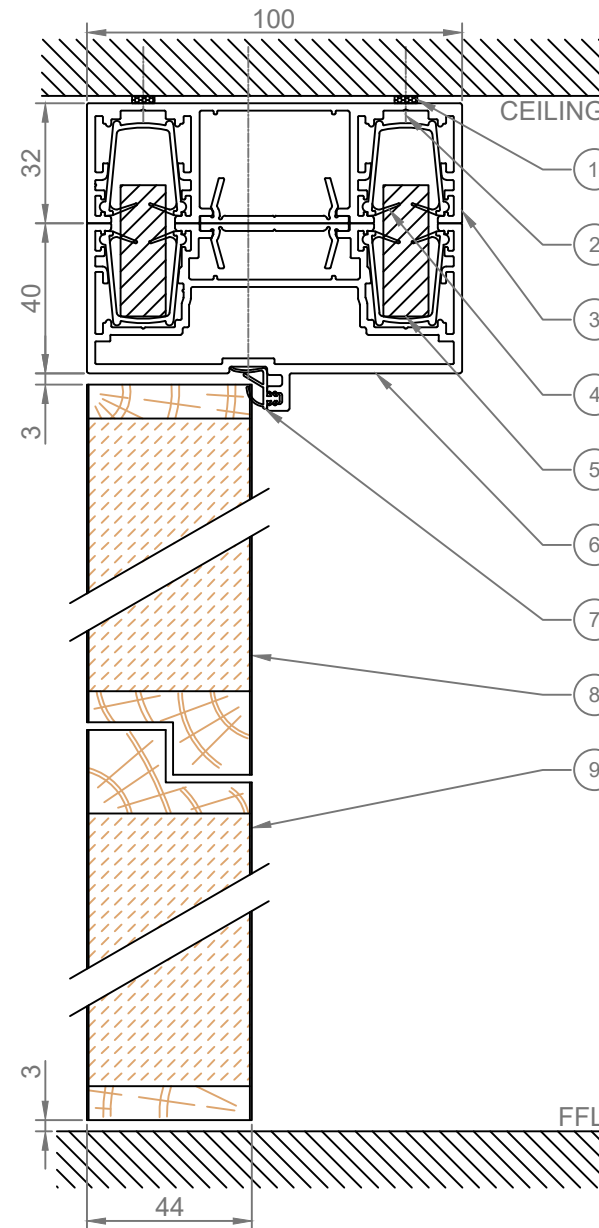
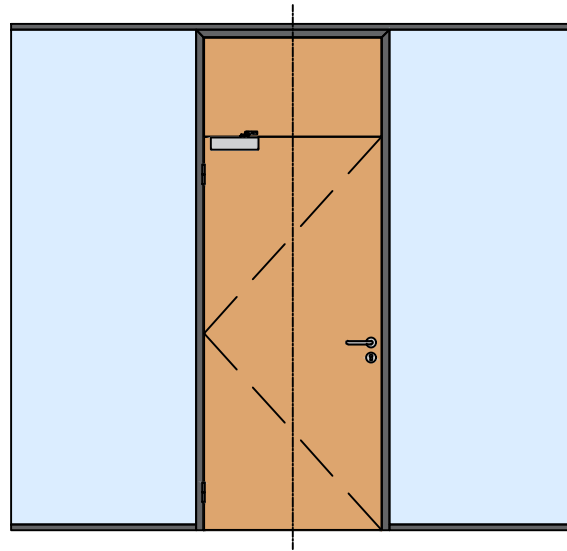
-  Double Glazed
-  Vertical Door
Timber with Over Panel
-  0 min Integrity
0 min Insulation
-  0 mm
Deflection

DRAWING NO:
K100-VD-06

DATE:
14/06/21

SCALE:
1:2

ISSUE NO:
3



Timber Door with Timber Overpanel Parameters		
* Please note that maximum overpanel height is based on it being no more than 25% of the actual door height.		
	Minimum	Maximum
Overpanel Height	250mm	Up to 584mm*
Door Height	1981mm	Up to 2670mm*
Overall Height	2311mm	3000mm [^]
[^] Dependent on Screen Glass Configuration		
Maximum Door Weight = 80kg		

Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	SJ69
6	K100DF
7	K54DS
8	44mm or 54mm TIMBER DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

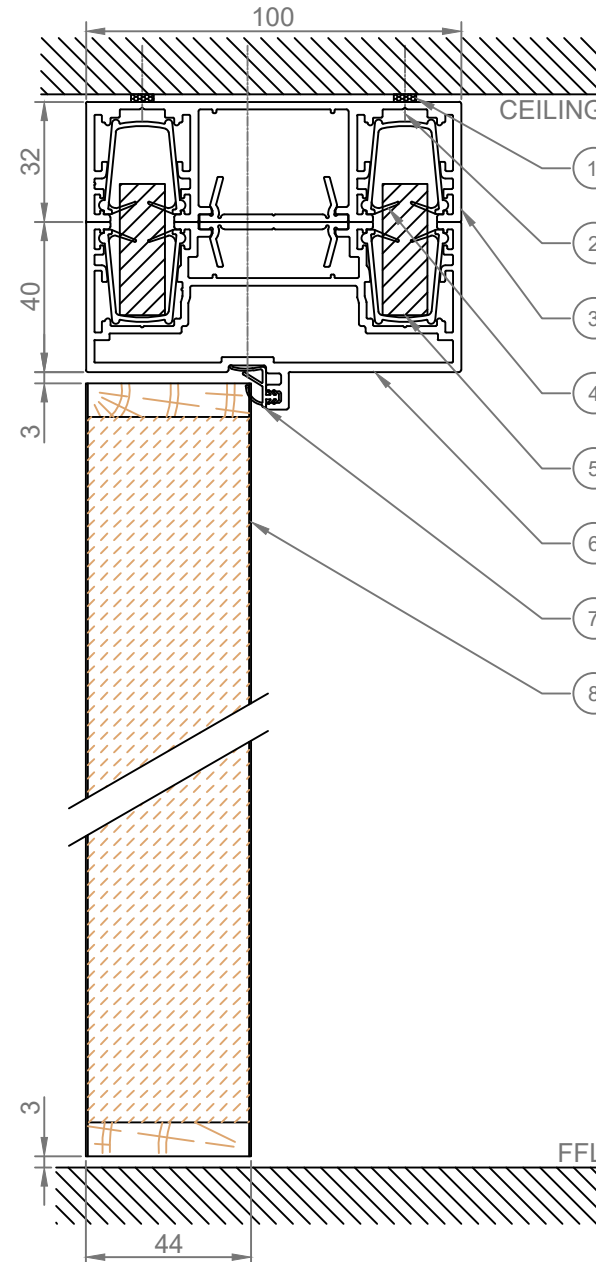
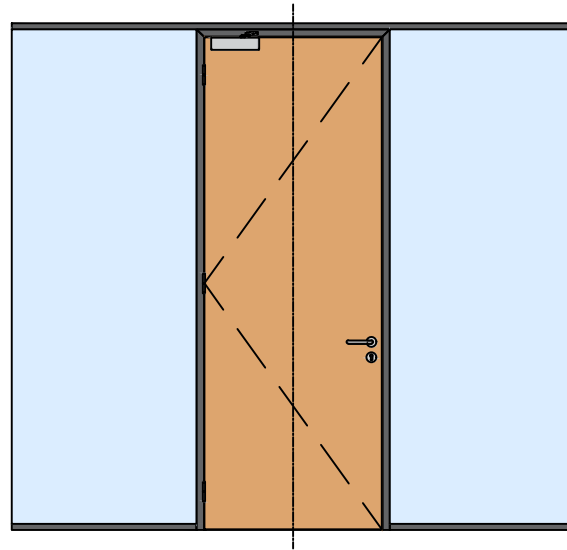
-  Double Glazed
-  Vertical Door Full Height Timber
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO:
K100-VD-05

DATE:
14/06/21

SCALE:
1:2

ISSUE NO:
3



Full Height Timber Door Parameters

	Minimum	Maximum
Door Height	1981mm	2922mm
Overall Height	2059mm	3000mm*
* Dependent on Screen Glass Configuration		
Maximum Door Weight = 80kg		

Polar 100

COMPONENT KEY:

1	342 FOAM
2	SJ20
3	K100DF
4	K100TI
5	SUITABLE STRUCTURAL FIXING
6	K54DS
7	44mm or 54mm TIMBER DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

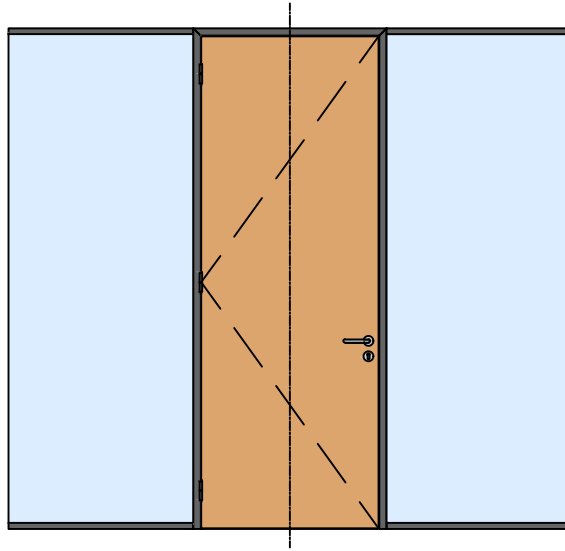
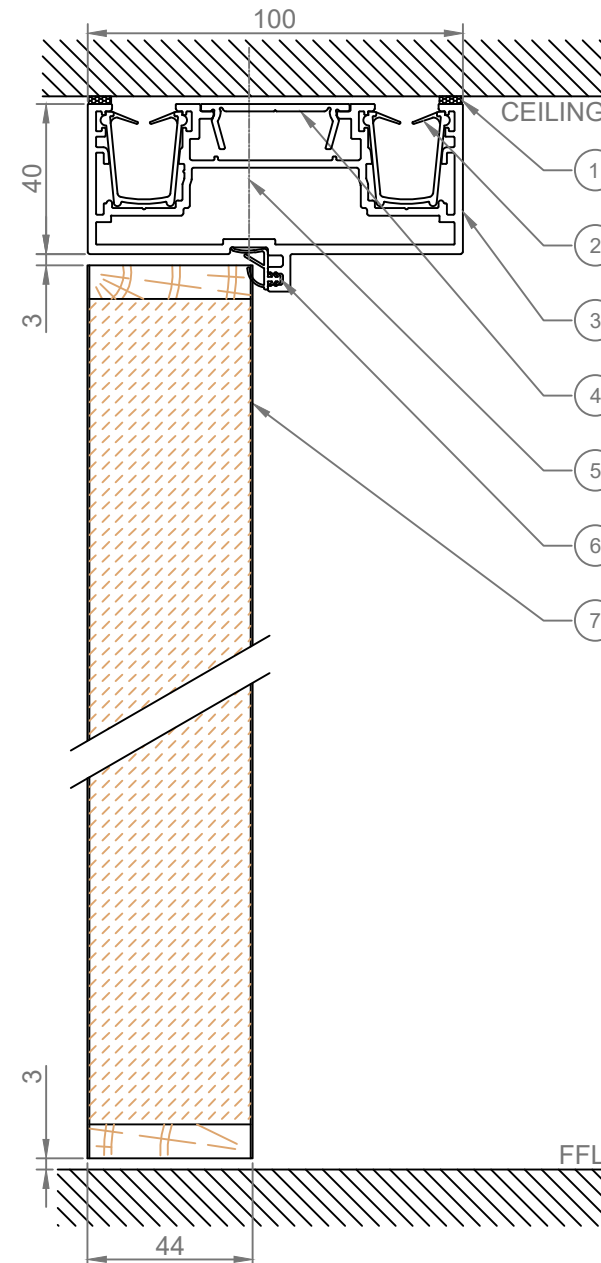
-  Double Glazed
-  Vertical Door Full Height Timber
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
K100-VD-09

DATE:
14/06/21

SCALE:
1:2

ISSUE NO:
1







Full Height Timber Door Parameters		
	Minimum	Maximum
Door Height	1981mm	2954mm
Overall Height	2027mm	3000mm*
* Dependent on Screen Glass Configuration		
Maximum Door Weight = 80kg		

Polar 100

COMPONENT KEY:

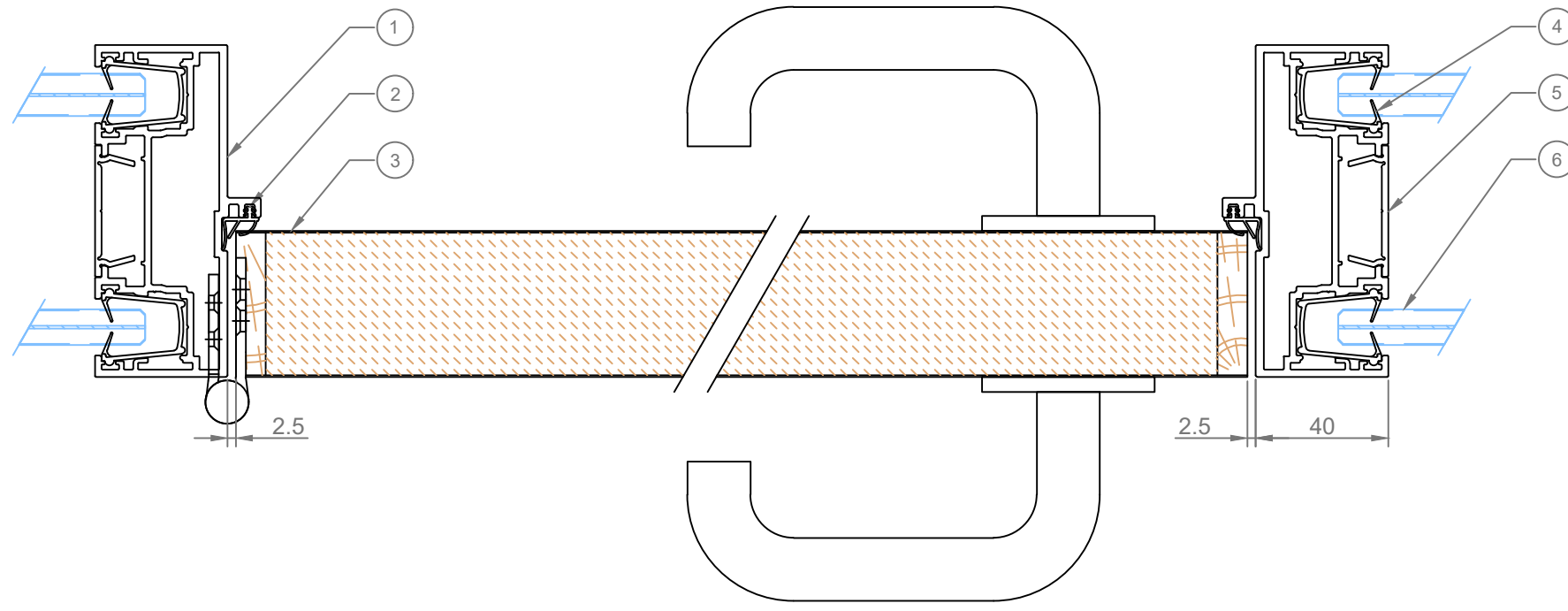
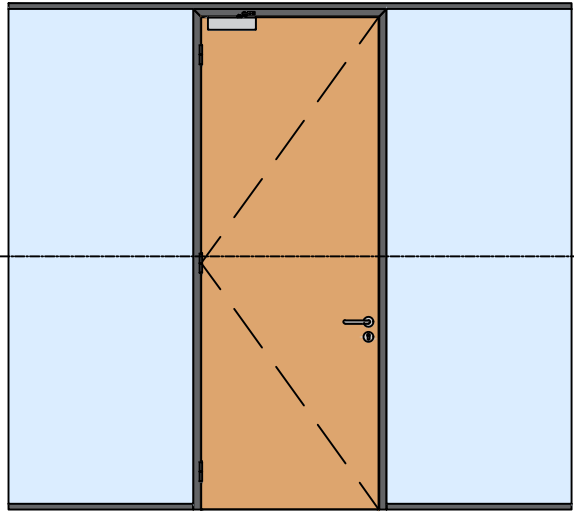
1	K100DF
2	K54DS
3	44mm or 54mm TIMBER DOOR
4	SJ20
5	K100TI
6	10-14.8mm (CFT or Lam.) GLASS

NOTES:
 OTHER IRONMONGERY OPTIONS ARE AVAILABLE
 ALL DIMENSIONS ARE NOMINAL & IN mm

- JUNCTION CATEGORY:
-  Double Glazed
 -  Horizontal Door Timber Single Doorset
 -  0 min Integrity
0 min Insulation
 -  +/- 0 mm Deflection

DRAWING NO: K100-HD-02 DATE: 14/06/21
 SCALE: 1:2 ISSUE NO: 2

Timber Door Parameters
Minimum Door Width = 838mm
Maximum Door Weight = 80kg
Track to Track Opening = Door Width + 85mm







Polar 100

COMPONENT KEY:

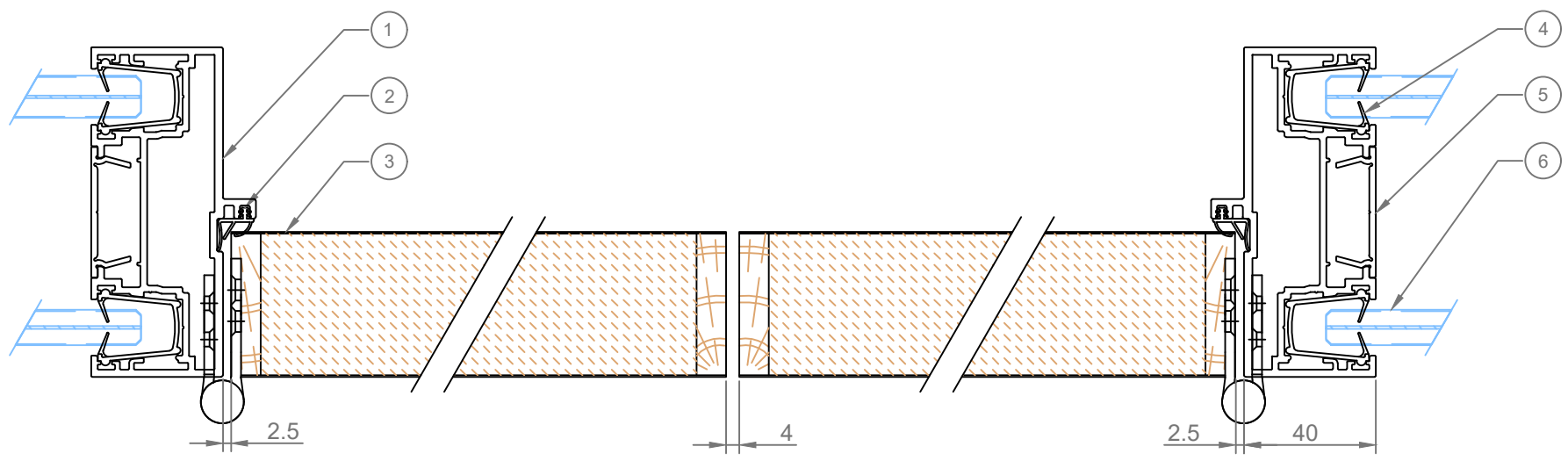
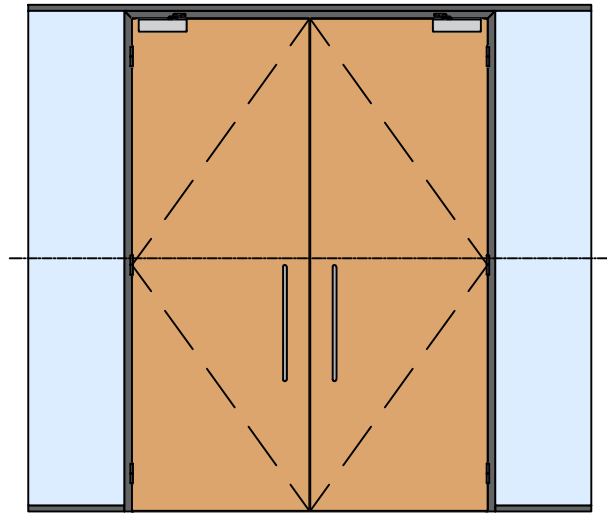
1	K100DF
2	K54DS
3	44mm or 54mm TIMBER DOOR
4	SJ20
5	K100TI
6	10-14.8mm (CFT or Lam.) GLASS

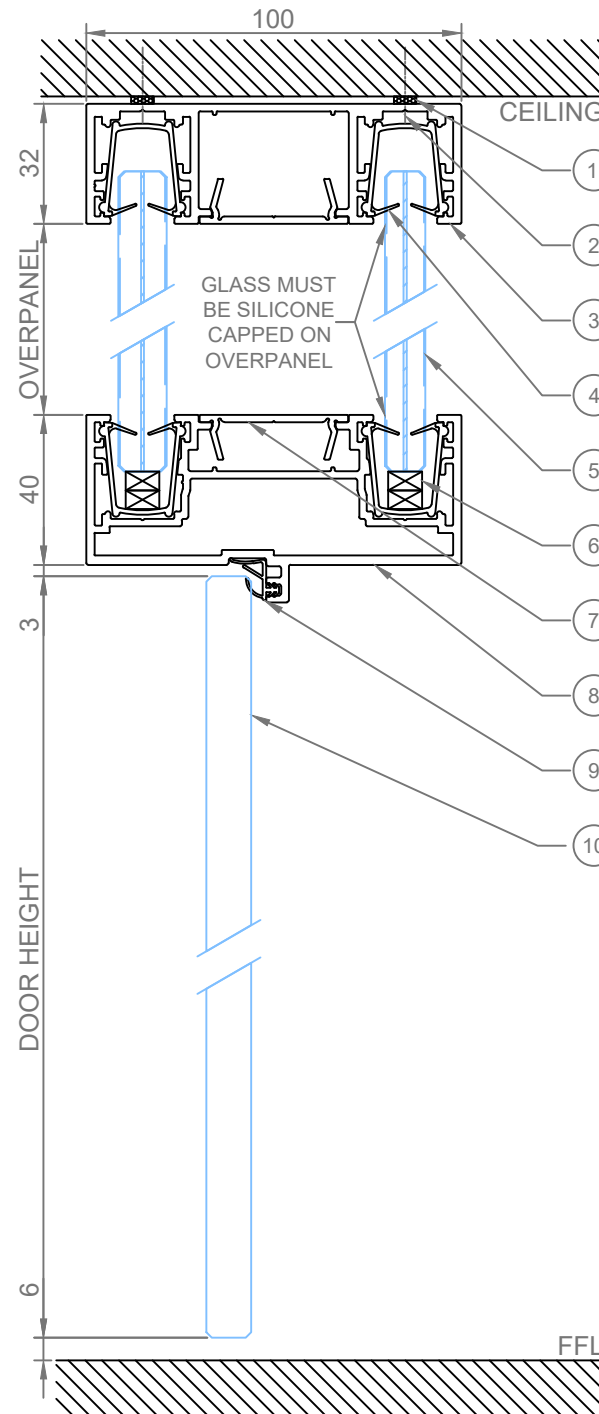
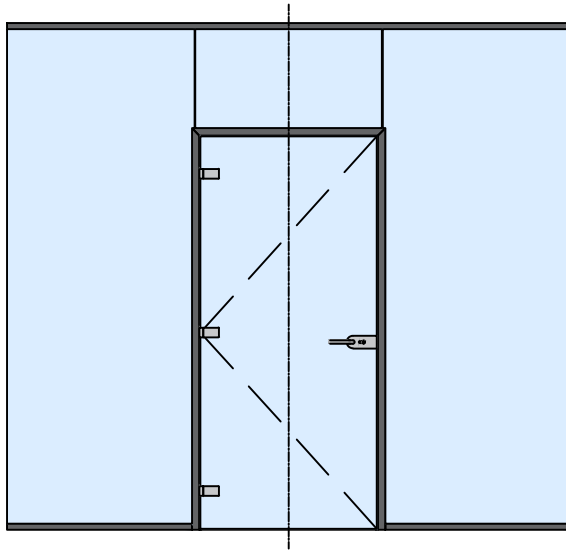
NOTES:
 TIMBER DOORS MUST BE FULL HEIGHT IN DOUBLE DOORSETS
 OTHER IRONMONGERY OPTIONS ARE AVAILABLE
 ALL DIMENSIONS ARE NOMINAL & IN mm

- JUNCTION CATEGORY:
-  Double Glazed
 -  Horizontal Door Timber Double Doorset
 -  0 min Integrity
0 min Insulation
 -  +/- 0 mm Deflection

DRAWING NO: K100-HD-05 DATE: 14/06/21
 SCALE: 1:2 ISSUE NO: 2

Timber Door Parameters
Minimum Door Width = 838mm
Maximum Door Weight = 80kg
Track to Track Opening = Door Widths + 89mm





Framed Glass Door with Glazed Overpanel Parameters		
* Please note that maximum overpanel height is based on it being no more than 25% of the actual door height.		
	Minimum	Maximum
Overpanel Height	200mm	Up to 583mm*
Door Height	1981mm	Up to 2700mm*
Overall Height	2262mm	Up to 3000mm^
^ Dependent on Screen Glass Configuration		
Maximum Door Weight = 80kg		

Polar 100

COMPONENT KEY:

1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	10-14.8mm (CFT or Lam.) GLASS
6	PSUN PACKERS
7	K100TI
8	K100DF
9	K54DS
10	10-12mm CFT GLASS DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Vertical Door Glass with Over Panel
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
K100-VD-03

DATE:
14/06/21

SCALE:
1:2

ISSUE NO:
3

Polar 100

COMPONENT KEY:




1	342 FOAM
2	SUITABLE STRUCTURAL FIXING
3	K100HT
4	SJ20
5	SJ69
6	K100DF
7	K54DS
8	10-12mm CFT GLASS DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

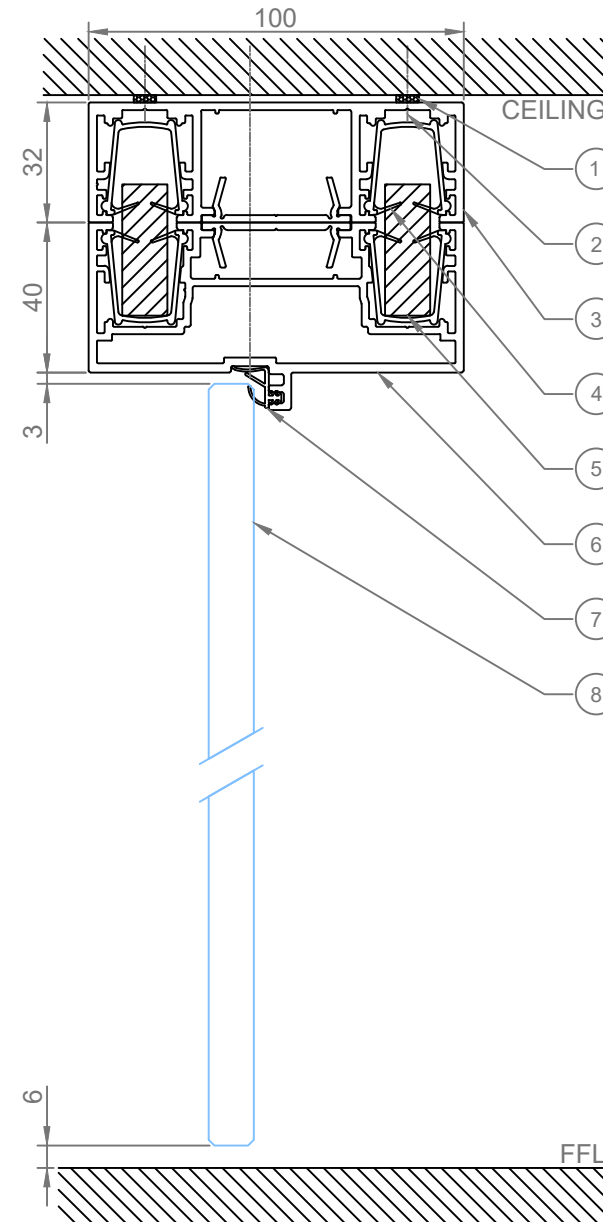
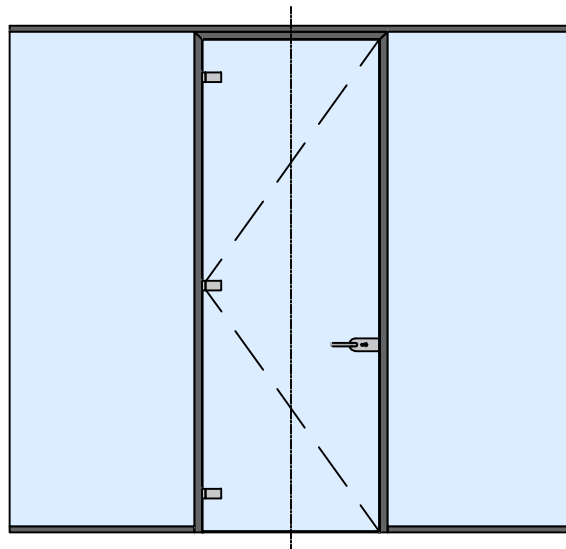
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Vertical Door Full Height Glass
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO: K100-VD-07 DATE: 14/06/21

SCALE: 1:2 ISSUE NO: 3



Full Height Framed Glass Door Parameters

	Minimum	Maximum
Door Height	1981mm	2700mm
Overall Height	2062mm	2781mm*
* Dependent on Screen Glass Configuration		
Maximum Door Weight = 80kg		

Polar 100

COMPONENT KEY:




1	342 FOAM
2	SJ20
3	K100DF
4	K100TI
5	SUITABLE STRUCTURAL FIXING
6	K54DS
7	10-12mm CFT GLASS DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

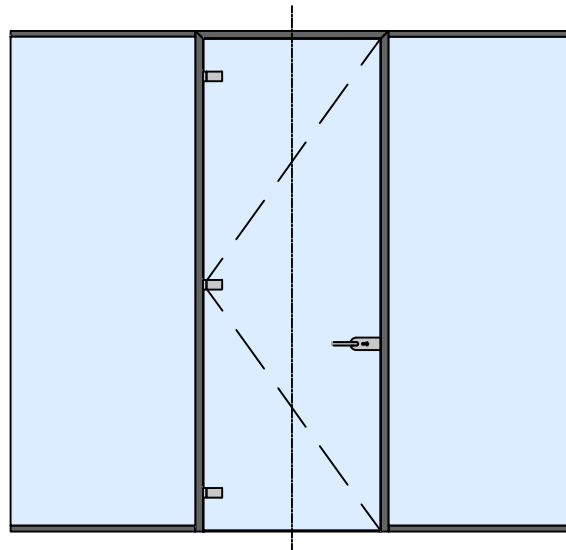
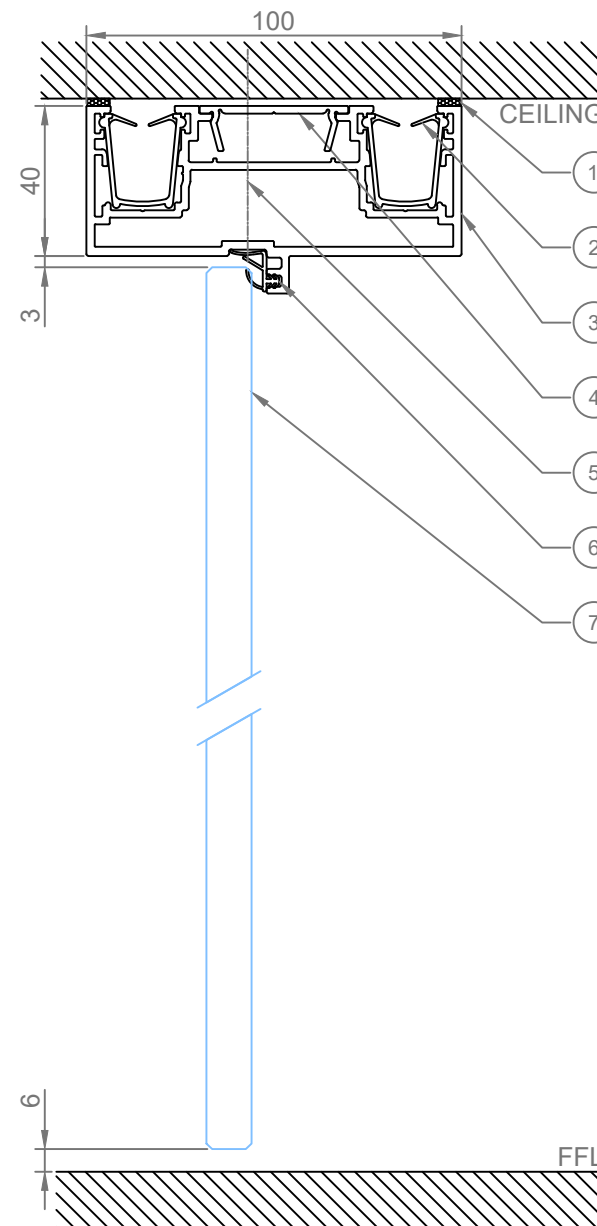
-  Double Glazed
-  Vertical Door Full Height Glass
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
K100-VD-10

DATE:
14/06/21

SCALE:
1:2

ISSUE NO:
1



Full Height Framed Glass Door Parameters

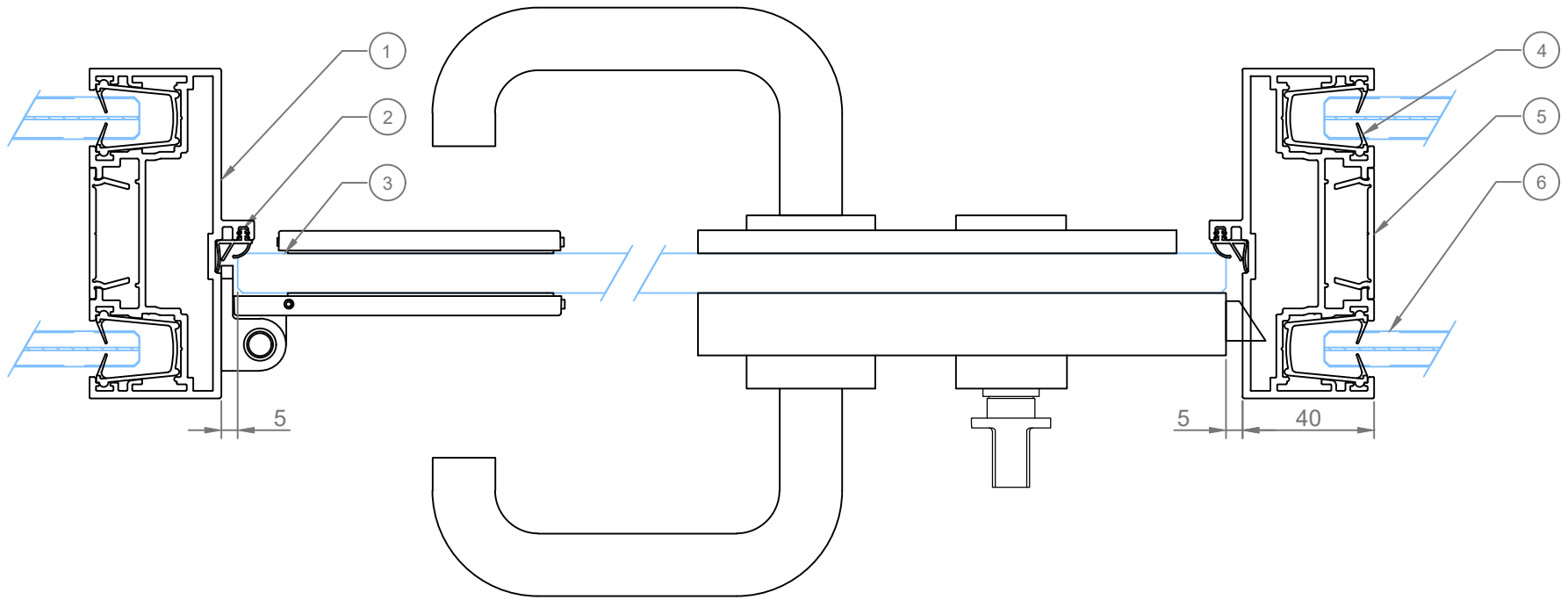
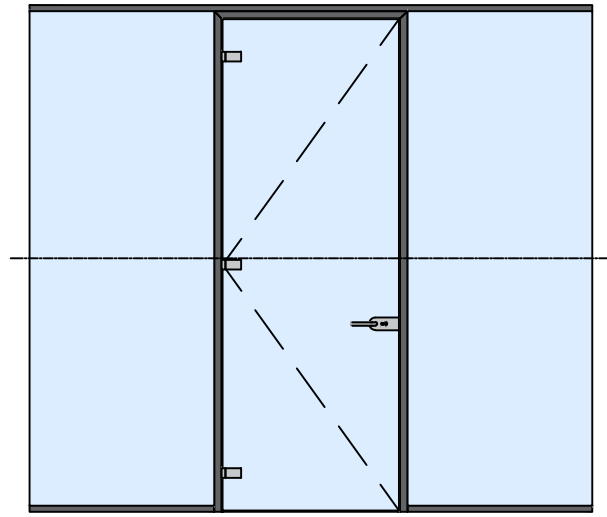
	Minimum	Maximum
Door Height	1981mm	2951mm
Overall Height	2030mm	3000mm*
* Dependent on Screen Glass Configuration		
Maximum Door Weight = 80kg		

Polar 100





COMPONENT KEY:

1	K100DF
2	K54DS
3	10-12mm CFT GLASS DOOR
4	SJ20
5	K100TI
6	10-14.8mm (CFT or Lam.) GLASS

Frame Glass Door Parameters
Maximum Door Width = 926mm
Maximum Door Weight = 80kg
Track to Track Opening = Door Width + 90mm



NOTES:
 OTHER IRONMONGERY OPTIONS ARE AVAILABLE
 ALL DIMENSIONS ARE NOMINAL & IN mm

- JUNCTION CATEGORY:
-  Double Glazed
 -  Horizontal Door Glass Single Doorset
 -  0 min Integrity
0 min Insulation
 -  +/- 0 mm Deflection





DRAWING NO: K100-HD-03 DATE: 14/06/21
 SCALE: 1:2 ISSUE NO: 2

Polar 100

COMPONENT KEY:

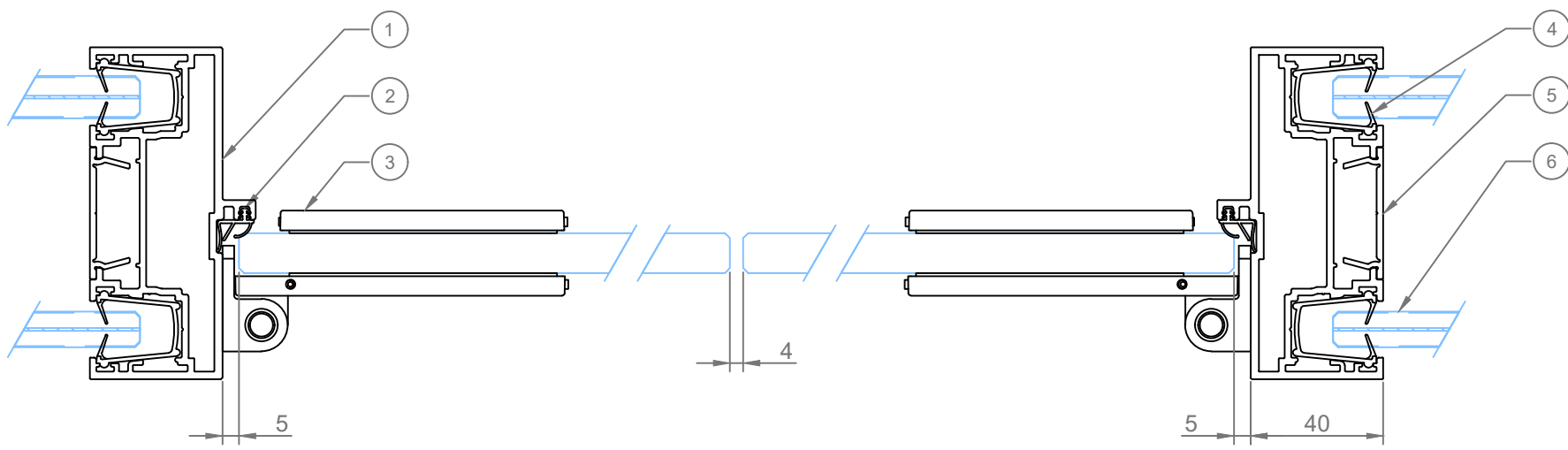
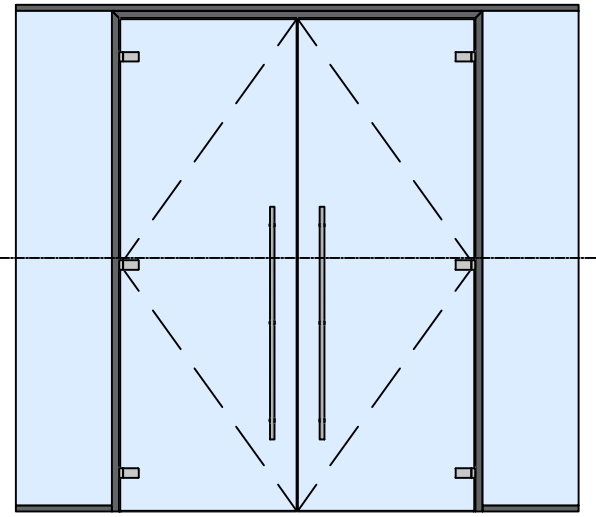
1	K100DF
2	K54DS
3	10-12mm CFT GLASS DOOR
4	SJ20
5	K100TI
6	10-14.8mm (CFT or Lam.) GLASS

NOTES:
 FRAMED GLASS DOORS MUST BE FULL HEIGHT IN DOUBLE DOORSETS
 OTHER IRONMONGERY OPTIONS ARE AVAILABLE
 ALL DIMENSIONS ARE NOMINAL & IN mm

- JUNCTION CATEGORY:
-  Double Glazed
 -  Horizontal Door Glass Double Doorset
 -  0 min Integrity
0 min Insulation
 -  +/- 0 mm Deflection

DRAWING NO: K100-HD-06 DATE: 14/06/21
 SCALE: 1:2 ISSUE NO: 2

Framed Glass Door Parameters
Maximum Door Width = 926mm
Maximum Door Weight = 80kg
Track to Track Opening = Door Widths + 94mm



Polar 100

COMPONENT KEY:

1	K100WF
2	K54DS
3	K30KI100
4	SJ20
5	10-14.8mm (CFT or Lam.) GLASS

NOTES:
 OTHER IRONMONGERY OPTIONS ARE AVAILABLE
 ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Double Glazed
-  Horizontal Door Komfire 100 Integration
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO: K100-HD-07 DATE: 14/07/21

SCALE: 1:2 ISSUE NO: 2

