

Polar Single Glazed Design Guide

Revision 4

Think partitioning,
think Komfort



Contents

At a glance

System outline

System specification

System performance

Junction drawings

Component Identification



At a glance

Dimension:

Height - up to 3000mm

Fire ratings:

N/A

Acoustics:

Up to 39dB (Rw),

Structure:

Up to severe duty

Deflection head:

+/-15mm, +/-25mm

Door options:

Timber doors

Single glazed doors

Double glazed Sonik doors

Door frame options:

Aluminum door frame

Timber door frame

Glass type options:

10 & 12mm Toughened (Doors & Screens)

15mm Toughened (Screen)

10.8 & 12.8mm Acoustic (Screens)

Weight (including nominal head & base)*:

Toughened glass:

10mm = 25 kg/m²

12mm = 30 kg/m²

15mm = 37.5kg/m²

Acoustic glass:

10.8mm = 25.36 kg/m²

12.8mm = 29.80 kg/m²

Blinds

Manifestations

Graphics

SwitchGlass

Kross Glaze

Paint/finishes

Polyester powder coat

Satin anodised aluminium

Special anodised finish

*Dependent on system configuration / specification



System Outline

Available in either straight lines, faceted or curved form, Polar Single Glazed is designed with the minimum of components, thus facilitating speed of installation without compromising structural stability and rigidity. The patented bubble joint ensures a virtually frameless system with no vertical posts between modules, corners or three-way junctions.

Door sets can be framed, frameless or sliding, single or double glazed, with door frames in either aluminium or timber to provide a wide range of design options within the system.

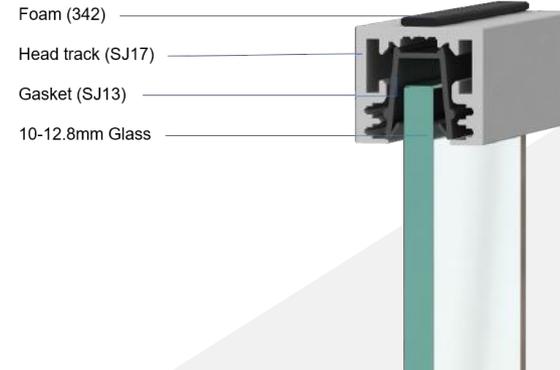


System Specification

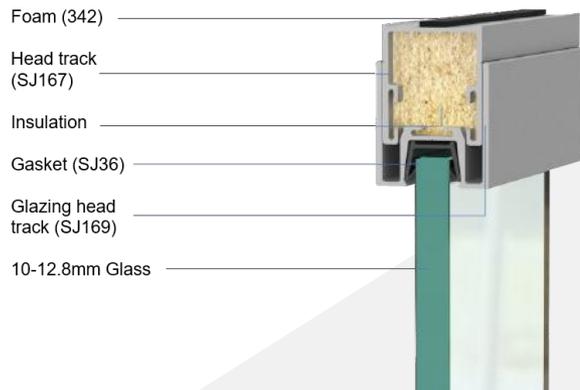
Polar Single Glazed partitioning can be integrated with solid partitioning and with other Komfort systems through the use of optional head components.

Deflection head details are designed to accommodate movement in the structural slab when live loads are applied, making them an increasingly vital component in internal partitioning. Deflection heads are available as a 2-part option with an inbuilt deflection tolerance of either +/- 15mm or +/- 25mm to accommodate most commercial interior projects.

Standard head



2-Part +/- 15mm deflection head



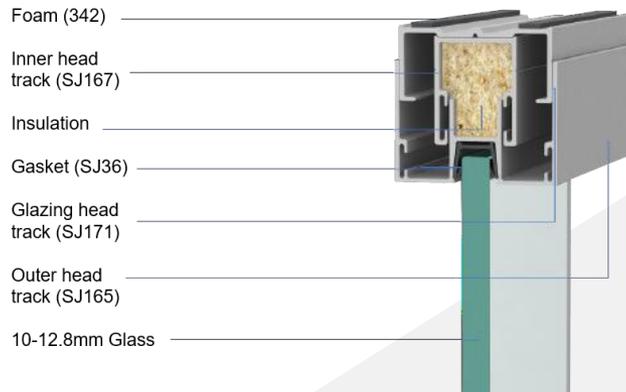
2-Part +/- 25mm deflection head



System Specification

Deflection heads are also available as a 3-part option with an inbuilt deflection tolerance of either +/- 15mm or +/- 25mm to accommodate most commercial interior projects.

3-Part +/- 15mm deflection head



3-Part +/- 25mm deflection head

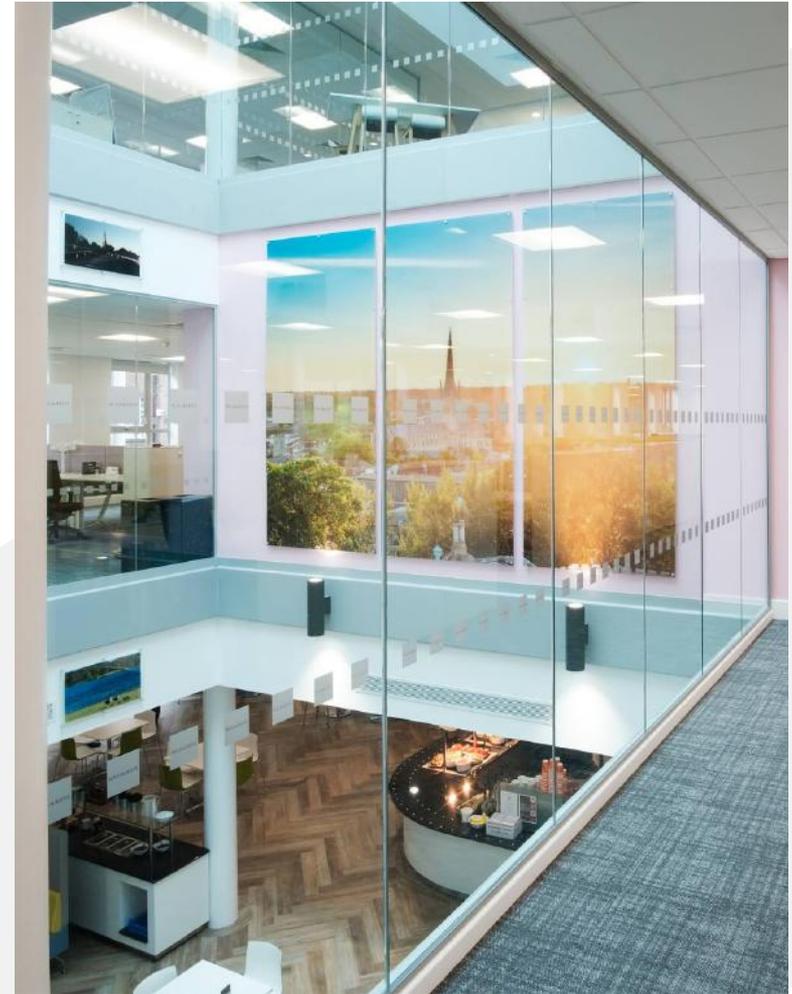


System Performance

Acoustic Performance

Test Specimen Description	Test Standard	Test Result	Certificate no.
Polar Single glazed using 10mm toughened glass with bubble joint construction	Sound Reduction (to BS EN ISO 140-3)	33 dB (Rw)	P0_S2
Polar Single glazed using 10.8mm acoustic glass with bubble joint construction	Sound Reduction (to BS EN ISO 140-3)	38 dB (Rw)	P0_S11
Polar Single glazed using 12mm toughened glass with silicone or bubble joint construction	Sound Reduction (to BS EN ISO 140-3)	33 dB (Rw)	P0_S1
Polar Single glazed using 12.8mm acoustic glass with bubble joint construction	Sound Reduction (to BS EN ISO 140-3)	38 dB (Rw)	P0_S25
Polar Single glazed using 15mm toughened glass with silicone joint construction	Sound Reduction (to BS EN ISO 140-3)	35 dB (Rw)	P0_S10

It should be noted that in an on-site acoustic test. A partition or doorset a 3dB to 8dB 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 / voids above and below the partition which will result in a 'flanking' path for audible sound.

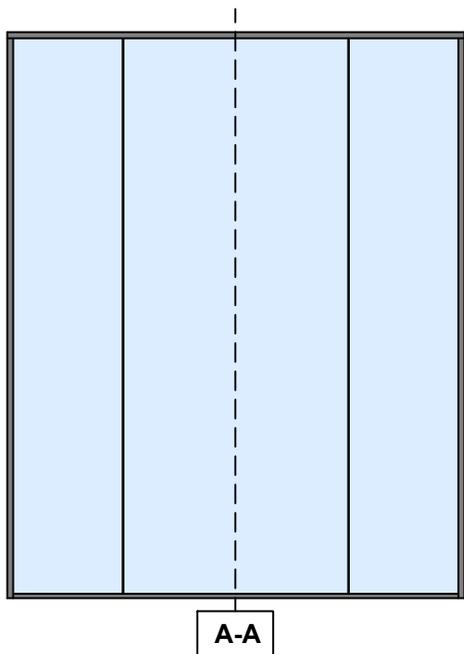


System Performance

Structural Performance

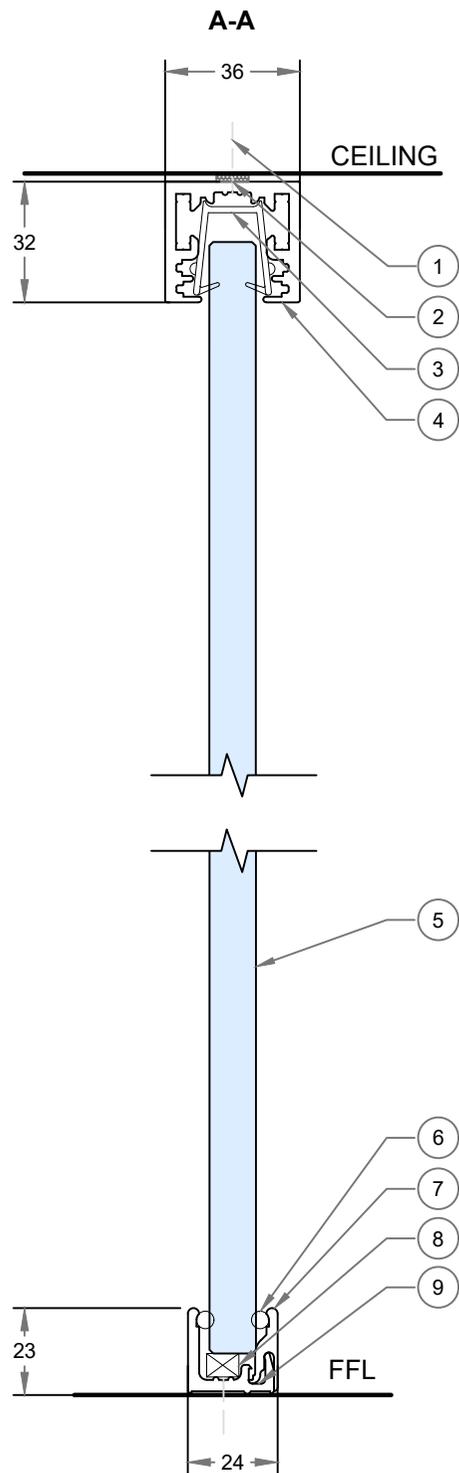
Test Specimen Description	Test Standard	Test Result	Certificate no.
Polar Single glazed using 10mm toughened glass – dry joint	Strength & Robustness (to BS 5234)	Heavy	P0_STR2
Polar Single glazed using 10mm toughened glass – bubble joint	Strength & Robustness (to BS 5234)	Heavy	P0_STR9
Polar Single glazed using 12mm toughened glass – dry joint	Strength & Robustness (to BS 5234)	Severe	P0_STR1
Polar Single glazed using 12mm toughened glass – bubble joint	Strength & Robustness (to BS 5234)	Severe	P0_STR8





FOR ALTERNATIVE HEAD TRACK
 OPTIONS SEE DRAWINGS
 'PSG-VS-03 & 'PSG-VS-04'.

Maximum Glazed Module Possible:		
Unit	Height	Width
Module Size	3000 mm*	1200 mm
Glass Size	2973 mm	1196 mm



POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	SJ13
4	SJ17
5	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
6	SJ11 FOR 12-12.8mm GLASS SJ12 FOR 10-10.8mm GLASS
7	SJ3
8	PSUN15 GLAZING PACKER
9	SJ2

NOTES:

*3300mm MAXIMUM HEIGHT CAN BE ACHIEVED USING 15mm TOUGHENED SAFETY GLASS WITH SILICONE JOINT (SJ2 COMPONENT WILL NEED TO BE REPLACED WITH SJ2L FOR THIS, AND SJ13 COMPONENT IS NOT REQUIRED AT ALL IN THIS CONFIGURATION)

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed
-  Vertical Screen
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO: PSG-VS-01 DATE: 16.05.18

SCALE: 1:2 ISSUE NO: 1

POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	821
4	SJ13
5	SJ8
6	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
7	SJ11 FOR 12-12.8mm GLASS SJ12 FOR 10-10.8mm GLASS
8	SJ3
9	PSUN15 GLAZING PACKER
10	SJ2

NOTES:

*3300mm MAXIMUM HEIGHT CAN BE ACHIEVED USING 15mm TOUGHENED SAFETY GLASS WITH SILICONE JOINT (SJ2 COMPONENT WILL NEED TO BE REPLACED WITH SJ2L FOR THIS, AND SJ13 COMPONENT IS NOT REQUIRED AT ALL IN THIS CONFIGURATION)

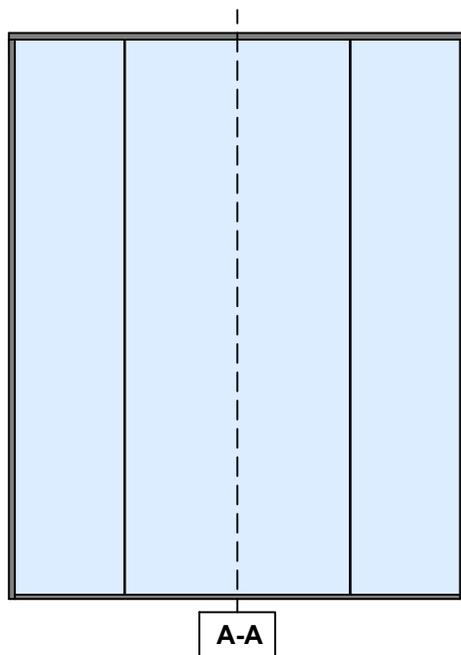
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

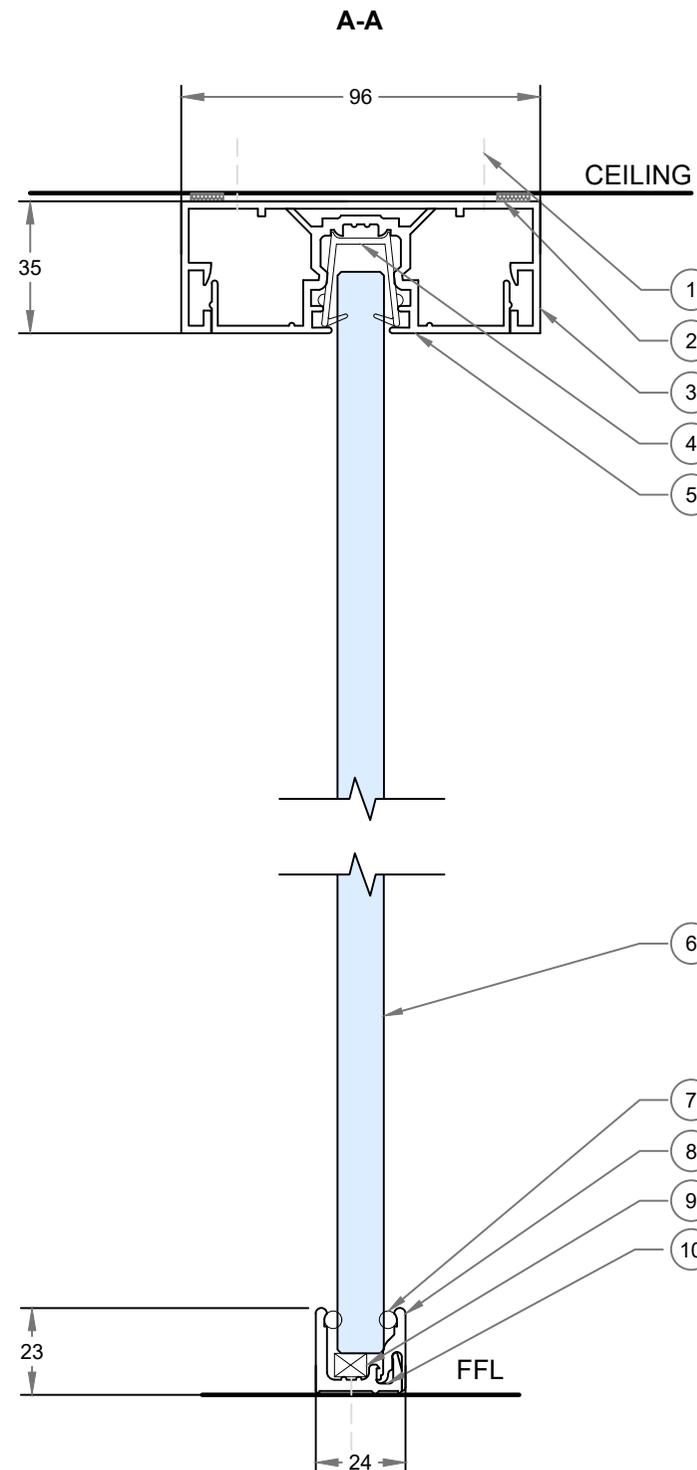
-  Single Glazed
-  Vertical Screen
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO: PSG-VS-02 DATE: 16.05.18

SCALE: 1:2 ISSUE NO: 1



FOR ALTERNATIVE HEAD TRACK
OPTIONS SEE DRAWINGS
'PSG-VS-03 & 'PSG-VS-04'.



Maximum Glazed Module Possible:		
Unit	Height	Width
Module Size	3000 mm*	1200 mm
Glass Size	2970 mm	1196 mm

POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	SJ167
3	342 FOAM
4	881S50
5	SJ169
6	SJ36L
7	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
8	SJ165
9	SJ171

NOTES:

THE DEFLECTION HEAD OPTIONS SHOWN CAN ALSO BE USED IN CONJUNCTION WITH SJ35 ALUMINIUM DOORFRAME WITH FULL HEIGHT GLAZED, TIMBER & SONIK DOORS. THEY CAN ALSO BE USED WITH SJ35 WITH GLAZED DOORS WITH A GLAZED OVERPANEL AND TIMBER DOOR WITH A TIMBER OVERPANEL.

ALL DIMENSIONS ARE NOMINAL & IN mm

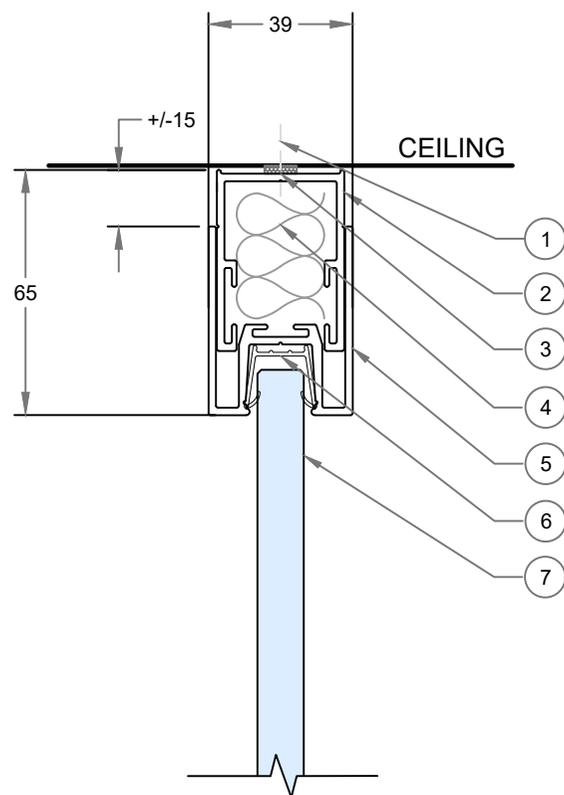
JUNCTION CATEGORY:

-  Single Glazed
-  Head Track Options
-  0 min Integrity
0 min Insulation
-  +/-15mm
Deflection

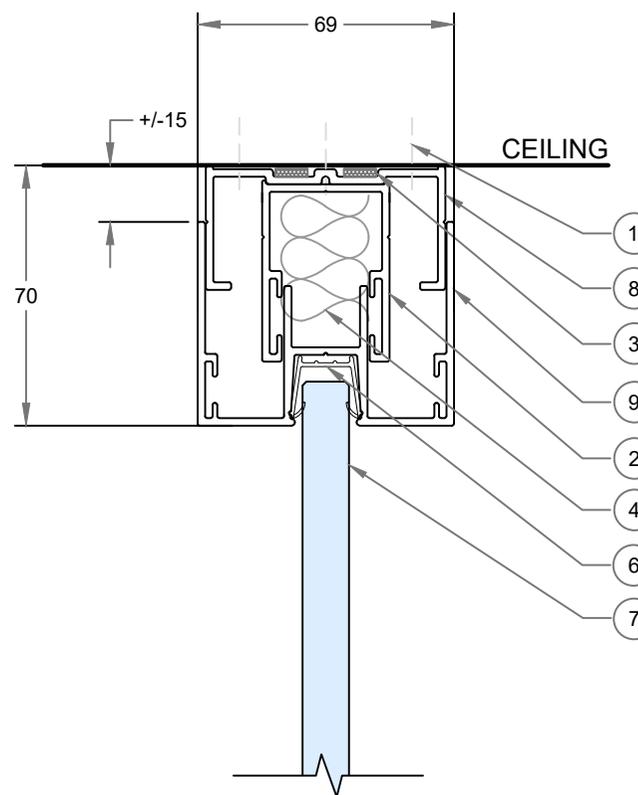
DRAWING NO: PSG-VS-03 DATE: 16.05.18

SCALE: 1:2 ISSUE NO: 1

2-PART +/- 15mm DEFLECTION HEAD



3-PART +/- 15mm DEFLECTION HEAD



POLAR SG

COMPONENT KEY:

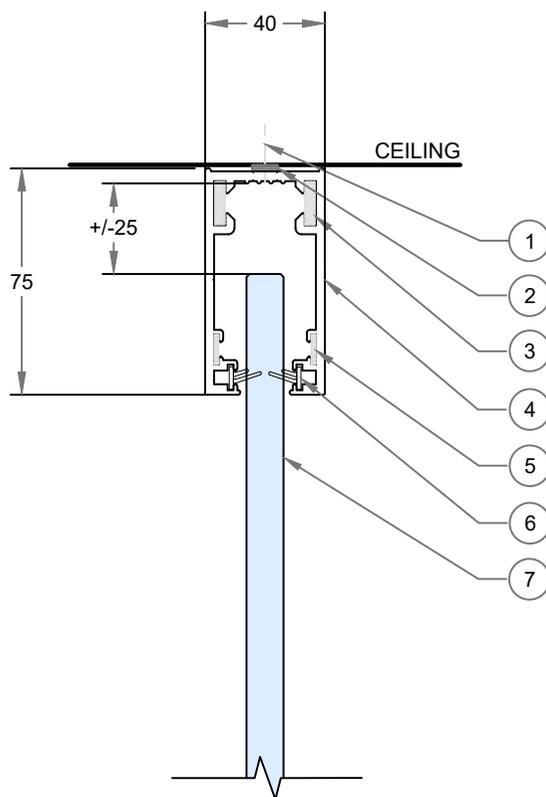
1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	884
4	SJ21
5	XK142
6	SJ39
7	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
8	SJ168
9	881S50
10	SJ170
11	SJ36L
12	SJ166
13	SJ172

NOTES:
THE DEFLECTION HEAD OPTIONS SHOWN CAN ALSO BE USED IN CONJUNCTION WITH SJ35 ALUMINIUM DOORFRAME WITH FULL HEIGHT GLAZED, TIMBER & SONIK DOORS. THEY CAN ALSO BE USED WITH SJ35 WITH GLAZED DOORS WITH A GLAZED OVERPANEL AND TIMBER DOOR WITH A TIMBER OVERPANEL.

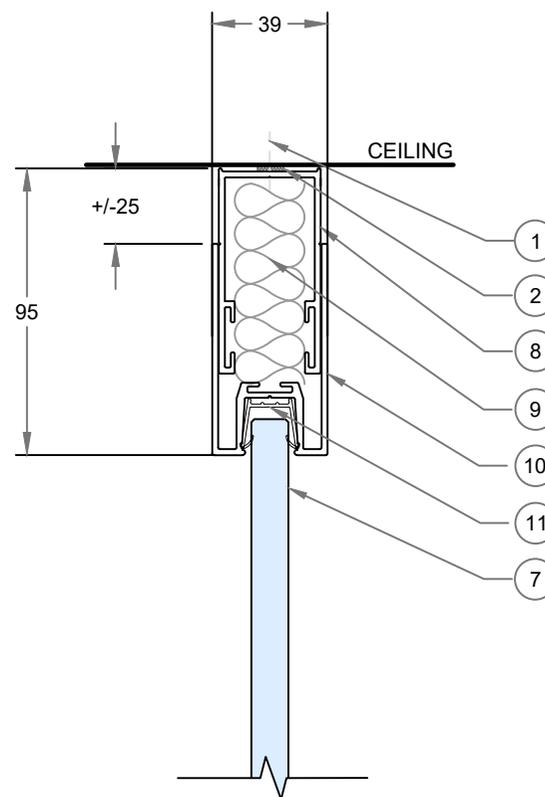
JUNCTION CATEGORY:

-  Single Glazed
-  Head Track Options
-  0 min Integrity
0 min Insulation
-  +/-25mm
Deflection

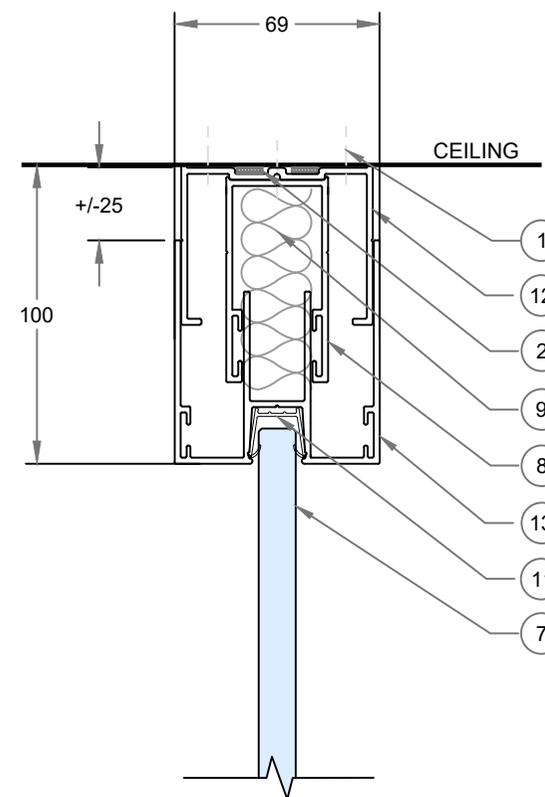
1-PART +/- 25mm DEFLECTION HEAD



2-PART +/- 25mm DEFLECTION HEAD



3-PART +/- 25mm DEFLECTION HEAD



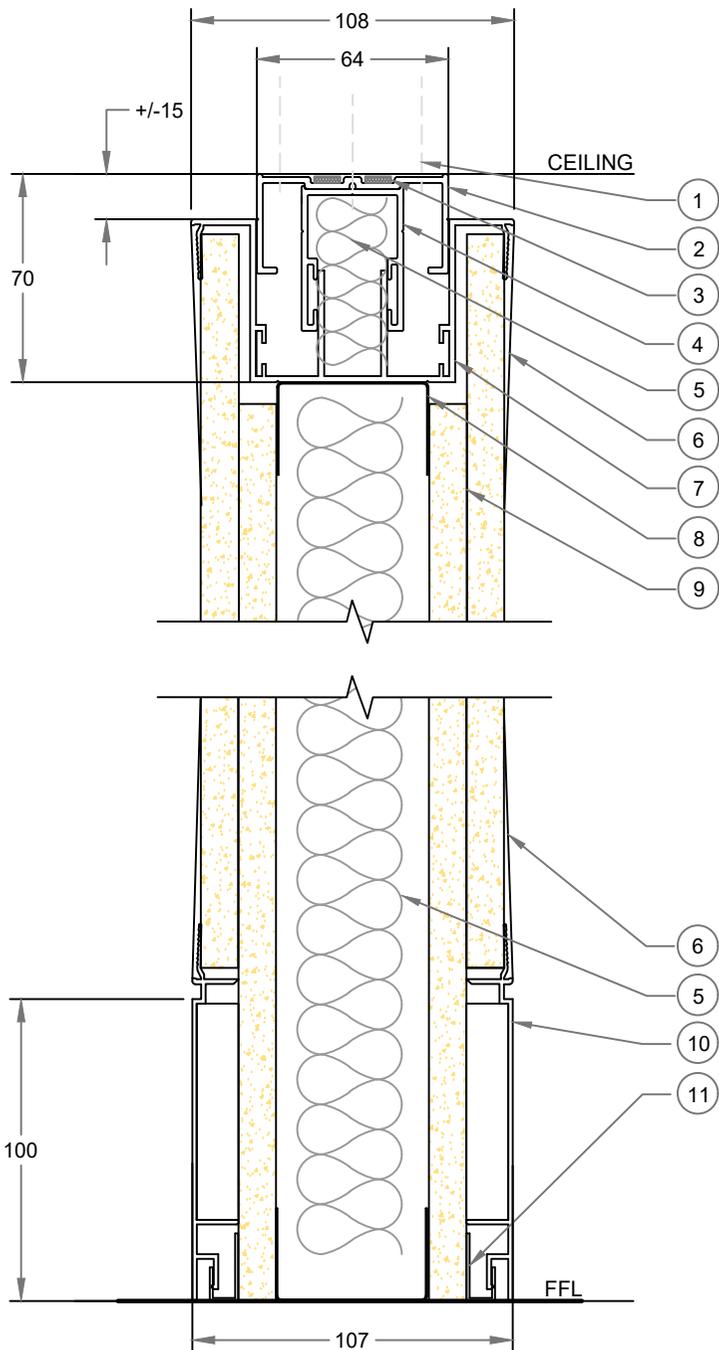
DRAWING NO:
PSG-VS-04

DATE:
17.05.18

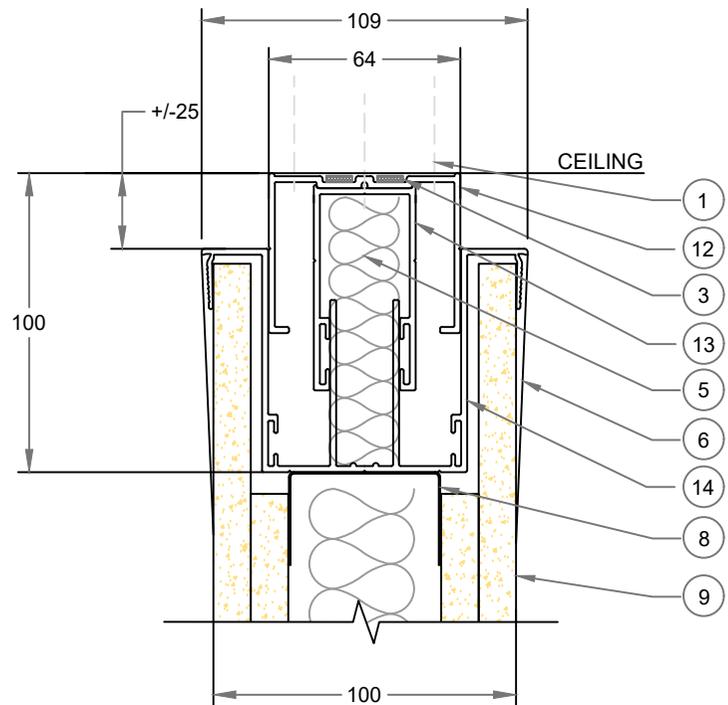
SCALE:
1:2.5

ISSUE NO:
1

3-PART +/- 15mm DEFLECTION HEAD



3-PART +/- 25mm DEFLECTION HEAD



POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	SJ165
3	342 FOAM
4	SJ167
5	881S50
6	PLASTER SKIM
7	PSQ60
8	835
9	12.5mm PLASTERBOARD
10	PSQ3
11	PSQ36
12	SJ166
13	SJ168
14	PSQ61

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

- Solid Partition
- Vertical Solid with Head Track Options.
- 0 min Integrity
0 min Insulation
- +/-15mm & +/-25mm Deflection

DRAWING NO: PSG-VS-05 DATE: 17.05.18

SCALE: 1:2.5 ISSUE NO: 1

POLAR SG

COMPONENT KEY:

1	342 FOAM
2	SJ17
3	SJ13
4	881S50
5	853
6	12.5mm PLASTERBOARD
7	WALL
8	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
9	GLAZING PACKER
10	SJ2
11	SJ11 FOR 12-12.8mm GLASS SJ12 FOR 10-10.8mm GLASS
12	SJ3
13	SJ44
14	SILICONE SEAL

NOTES:

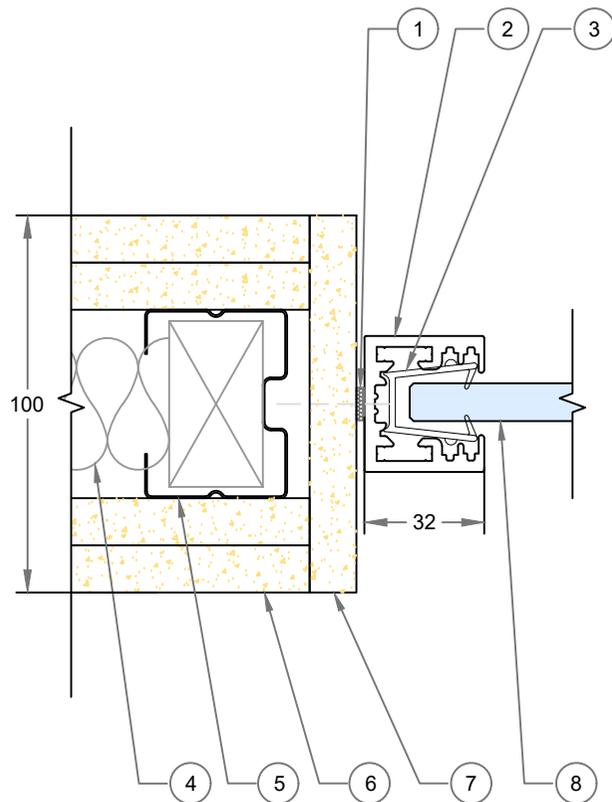
SAME COMPONENTS USED IN EACH PLASTERBOARD SECTION SHOWN

ALL DIMENSIONS ARE NOMINAL & IN mm

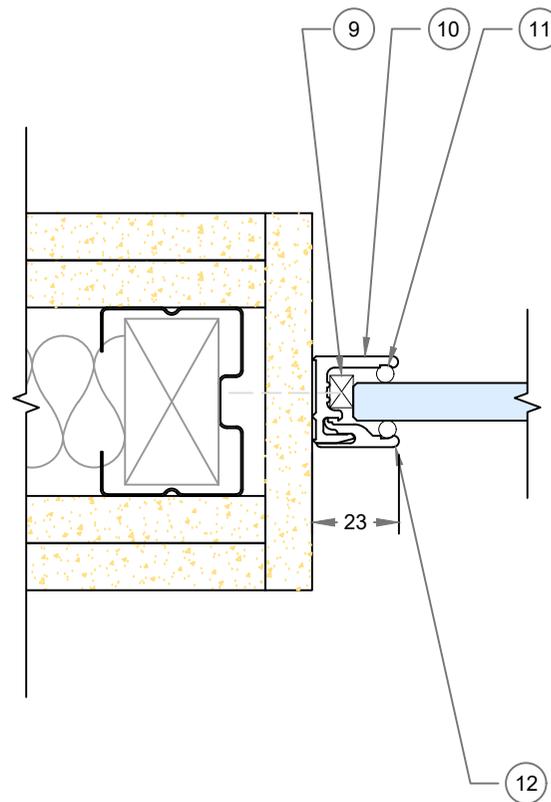
JUNCTION CATEGORY:

-  Wall Abutments
-  Horizontal Screen
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

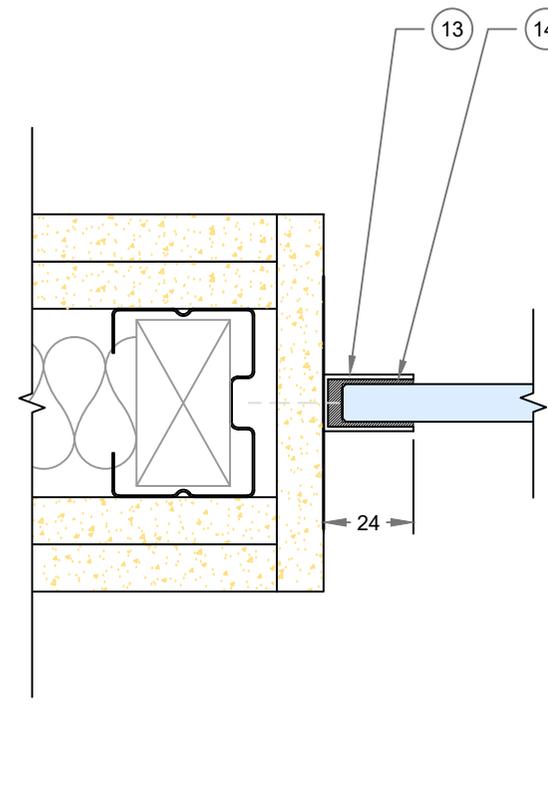
WALL ABUTMENT DETAILS



STANDARD WALL ABUTMENT



2-PART WALL ABUTMENT



**WALL ABUTMENT TO SUIT
1-PART DEFLECTION HEAD**

DRAWING NO: PSG-HS-01 DATE: 18.05.18

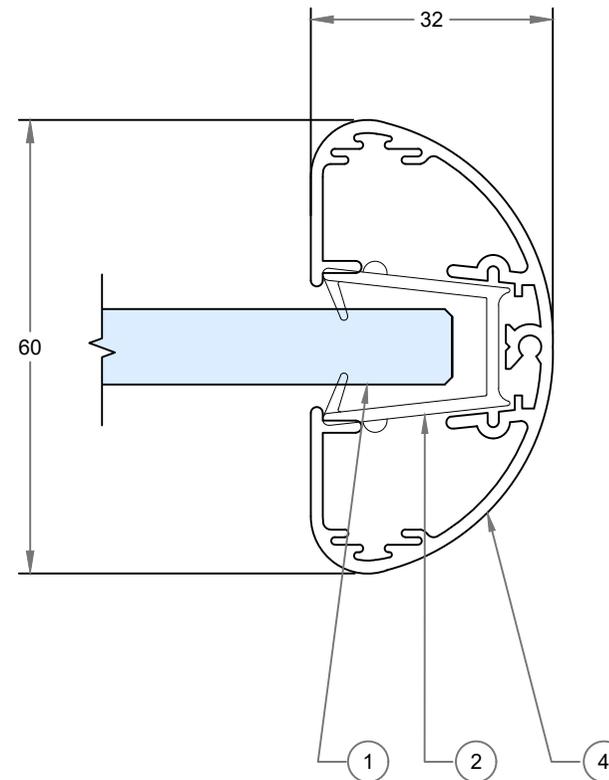
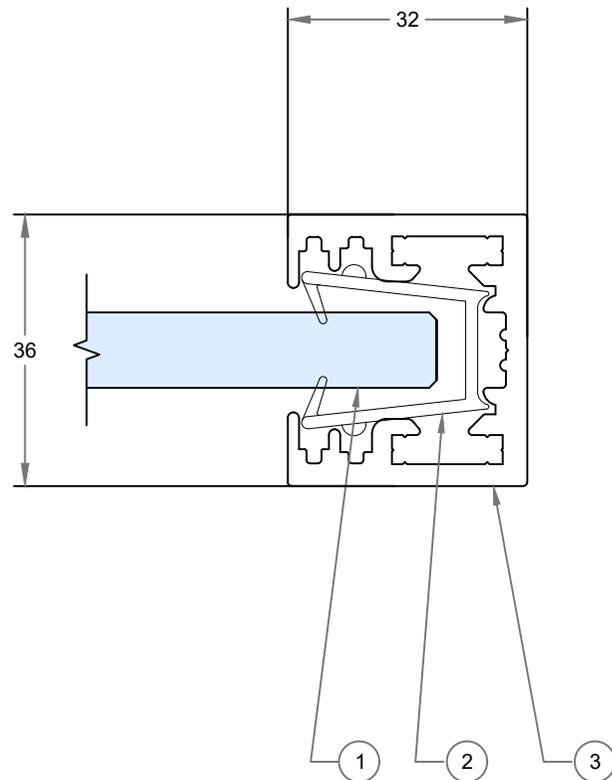
SCALE: 1:2 ISSUE NO: 1

POLAR SG

COMPONENT KEY:

1	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
2	SJ13
3	SJ17
4	SJ10

FAIR END DETAILS



NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:



Fair End Details



Horizontal Screen



0 min Integrity
0 min Insulation



+/- 0 mm
Deflection

DRAWING NO:
PSG-HS-02

DATE:
18.05.18

SCALE:
1:1

ISSUE NO:
1

POLAR SG

COMPONENT KEY:

1	881S50
2	12.5mm PLASTERBOARD
3	SJ4
4	331
5	853
6	SJ13
7	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
8	SJ45

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Solid/Glass Reducer
-  Horizontal Screen
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

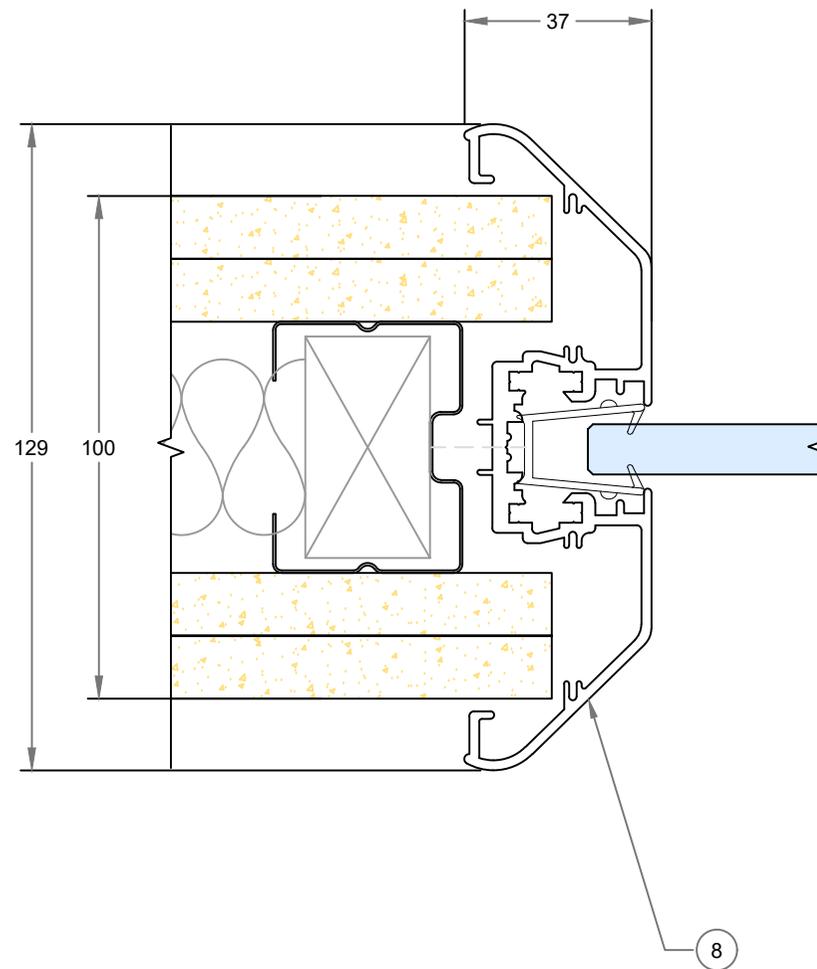
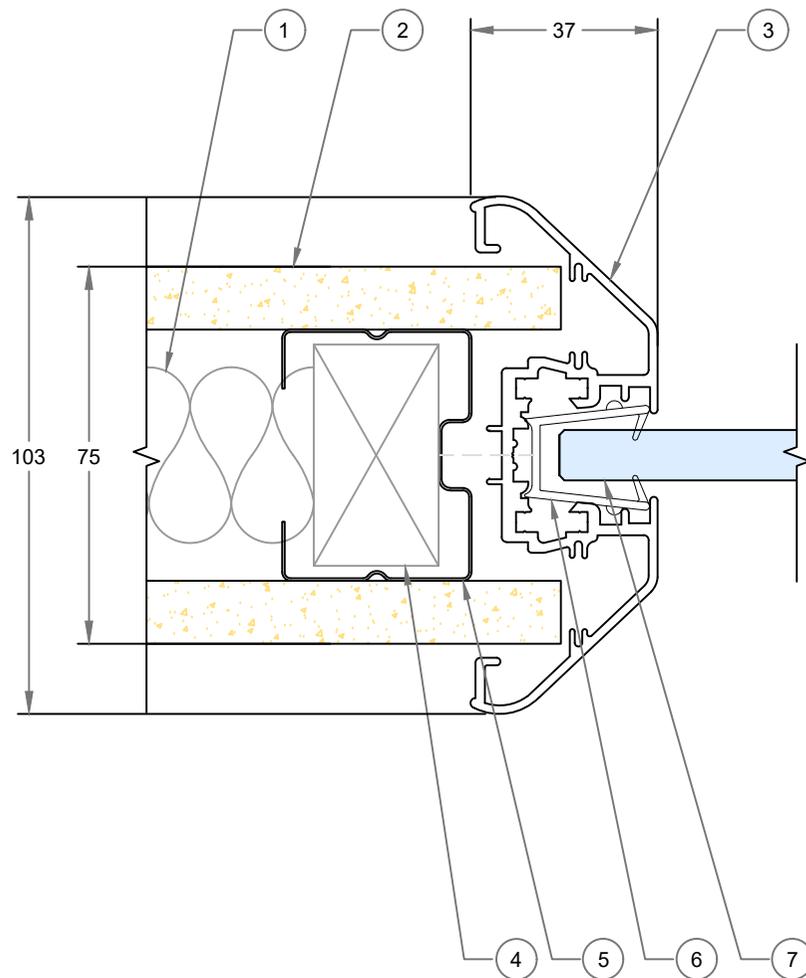
DRAWING NO:
PSG-HS-03

DATE:
18.05.18

SCALE:
1:1.5

ISSUE NO:
1

**ANGLED WRAP-AROUND SOLID/GLASS REDUCERS:
(75mm & 100mm)**

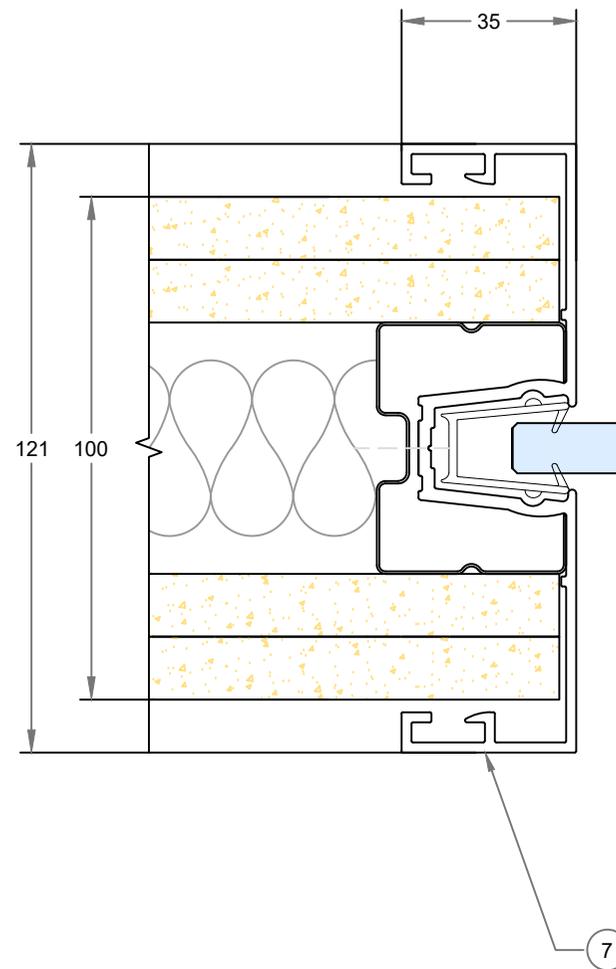
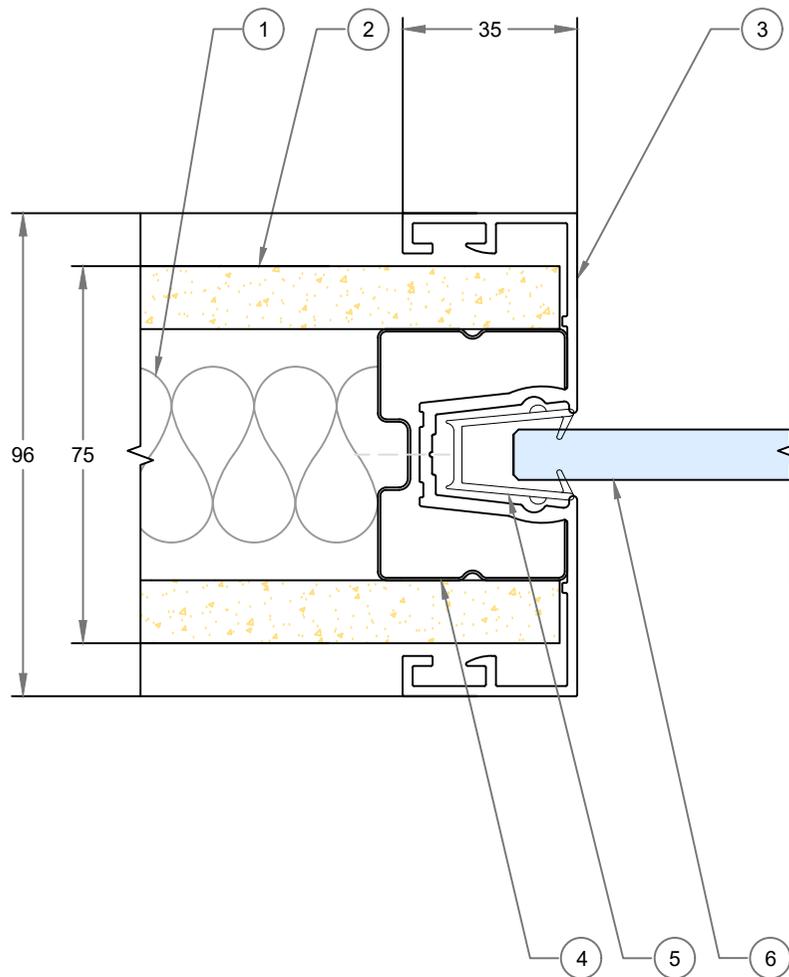


POLAR SG

COMPONENT KEY:

1	881S50
2	12.5mm PLASTERBOARD
3	SJ75
4	853
5	SJ13
6	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
7	SJ76

**SQUARE WRAP-AROUND SOLID/GLASS REDUCERS:
(75mm & 100mm)**



NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:



Solid/Glass Reducer



Horizontal Screen



0 min Integrity
0 min Insulation



0 mm
Deflection

DRAWING NO:
PSG-HS-04

DATE:
22.05.18

SCALE:
1:1.5

ISSUE NO:
1

POLAR SG

COMPONENT KEY:

1	881S50
2	PLASTER SKIM
3	12.5mm PLASTERBOARD
4	853
5	331
6	PSQ5
7	SJ13
8	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:



Solid/Glass Reducer



Horizontal Screen



0 min Integrity
0 min Insulation



+/- 0 mm
Deflection

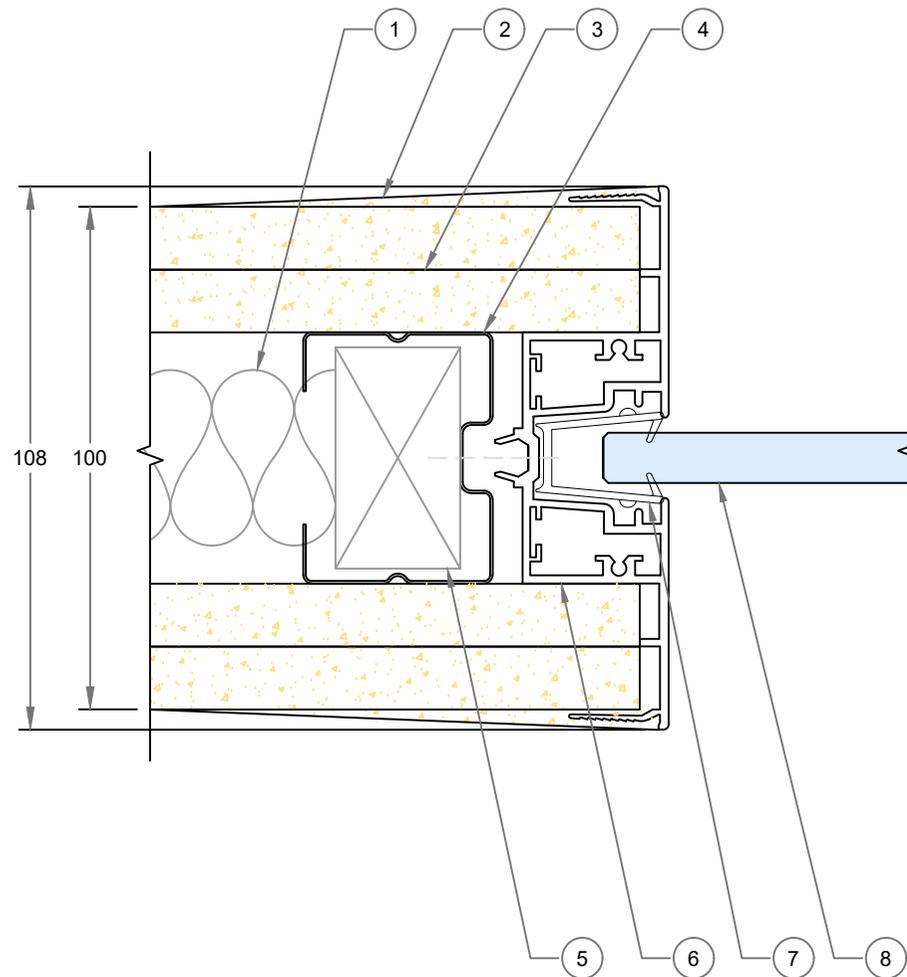
DRAWING NO:
PSG-HS-05

DATE:
22.05.18

SCALE:
1:1.5

ISSUE NO:
1

TAPE AND JOINT SOLID/GLASS REDUCER: (100mm)



GLASS TO GLASS JOINT OPTIONS - MULTI DRY JOINTS

POLAR SG

COMPONENT KEY:

1	SJ34
2	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS

NOTES:

GLASS EDGES BEVELLED TO SUIT THE REQUIRED ANGLE OF JOINTS.

ALL DIMENSIONS ARE NOMINAL & IN mm.

JUNCTION CATEGORY:

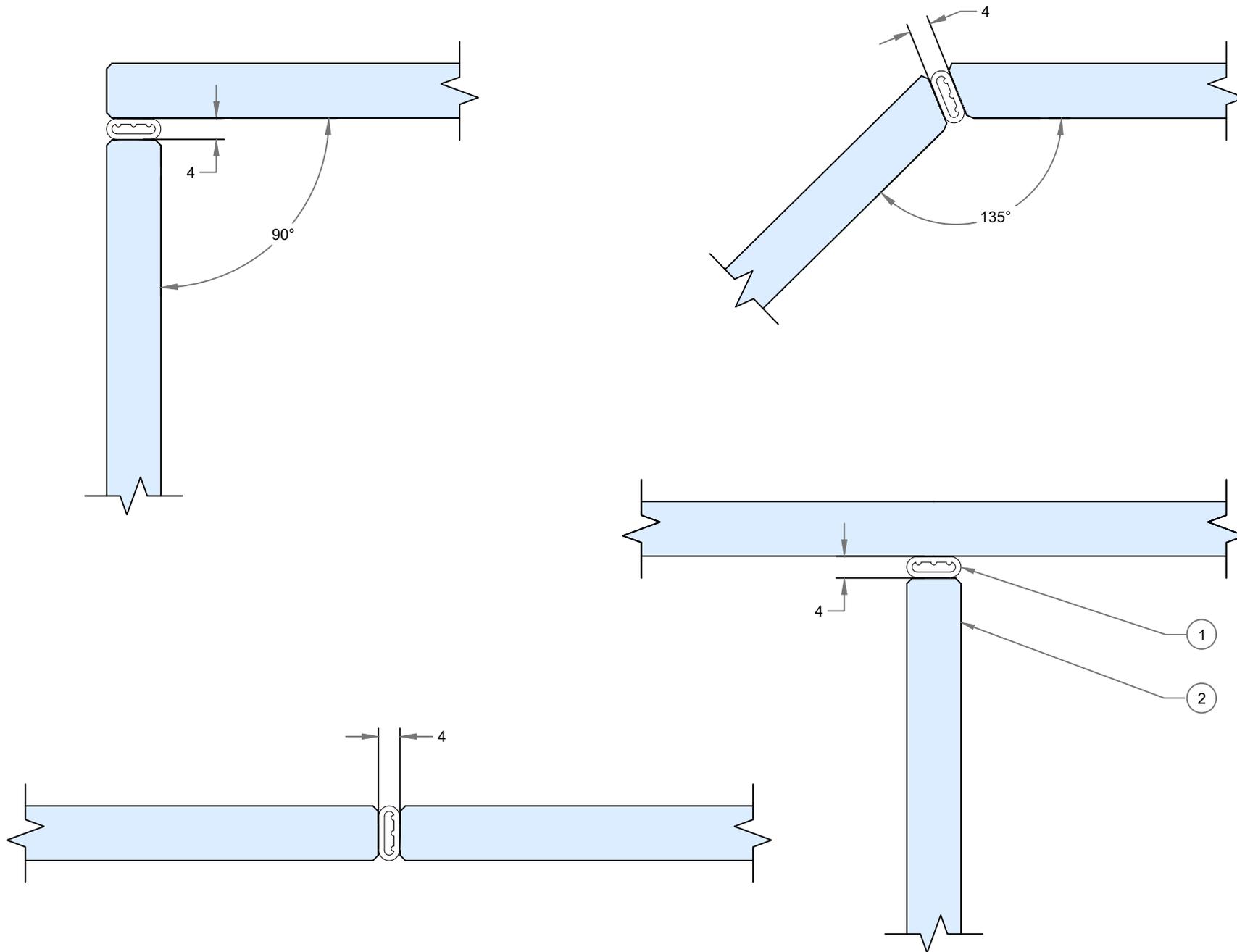
-  Single Glazed
-  Glass to Glass Jointing
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO:
PSG-HS-06

DATE:
24.05.18

SCALE:
1:1

ISSUE NO:
1



GLASS TO GLASS JOINT OPTIONS - SILICONE JOINTS

POLAR SG

COMPONENT KEY:

1	SILICONE SEAL
2	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS

NOTES:

GLASS EDGES BEVELLED TO SUIT THE REQUIRED ANGLE OF JOINTS.

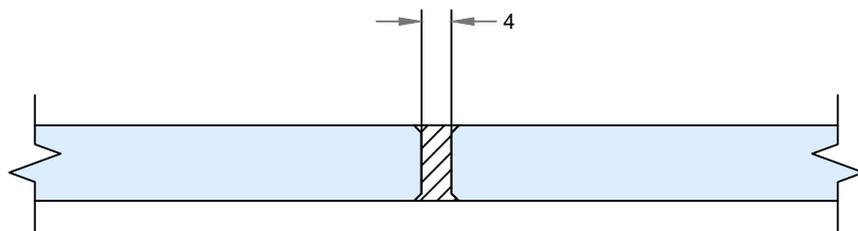
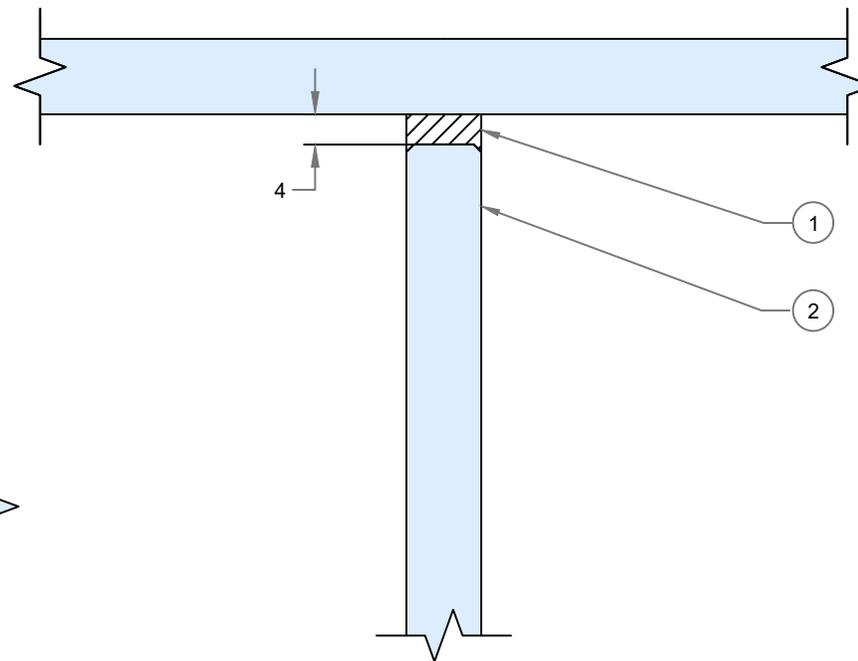
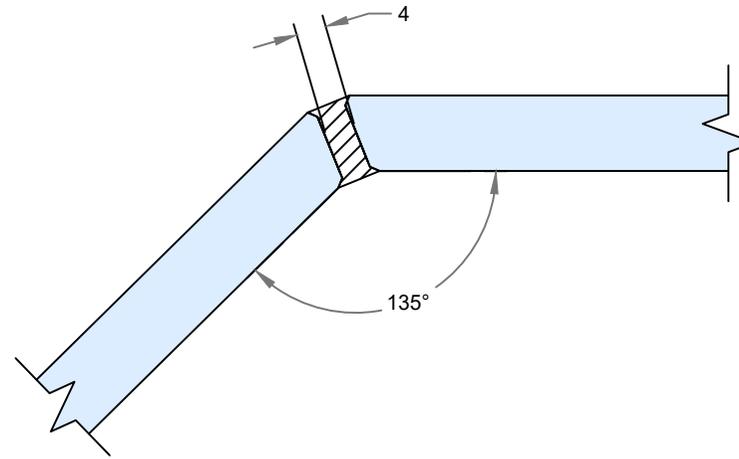
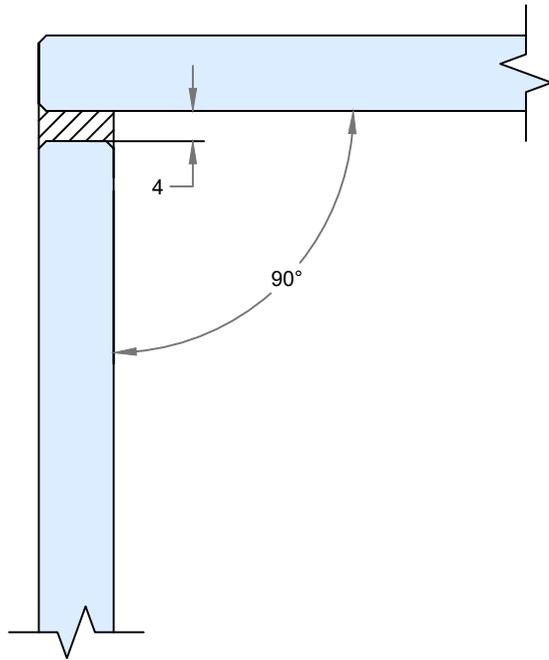
ALL DIMENSIONS ARE NOMINAL & IN mm.

JUNCTION CATEGORY:

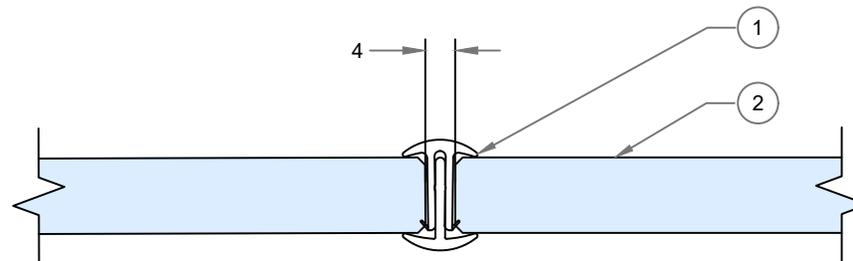
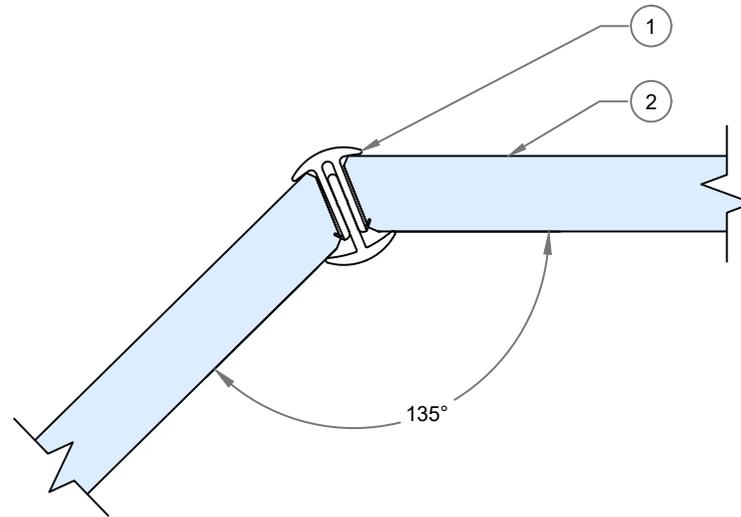
-  Single Glazed
-  Glass to Glass Jointing
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO: PSG-HS-07 DATE: 24.05.18

SCALE: 1:1 ISSUE NO: 1



GLASS TO GLASS JOINT OPTIONS - NARROW DRY JOINTS



POLAR SG

COMPONENT KEY:

1	SJ31/SJ32
2	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS

NOTES:

GLASS EDGES BEVELLED TO SUIT THE REQUIRED ANGLE OF JOINTS.

ALL DIMENSIONS ARE NOMINAL & IN mm.

JUNCTION CATEGORY:



Single Glazed



Glass to Glass Jointing



0 min Integrity
0 min Insulation



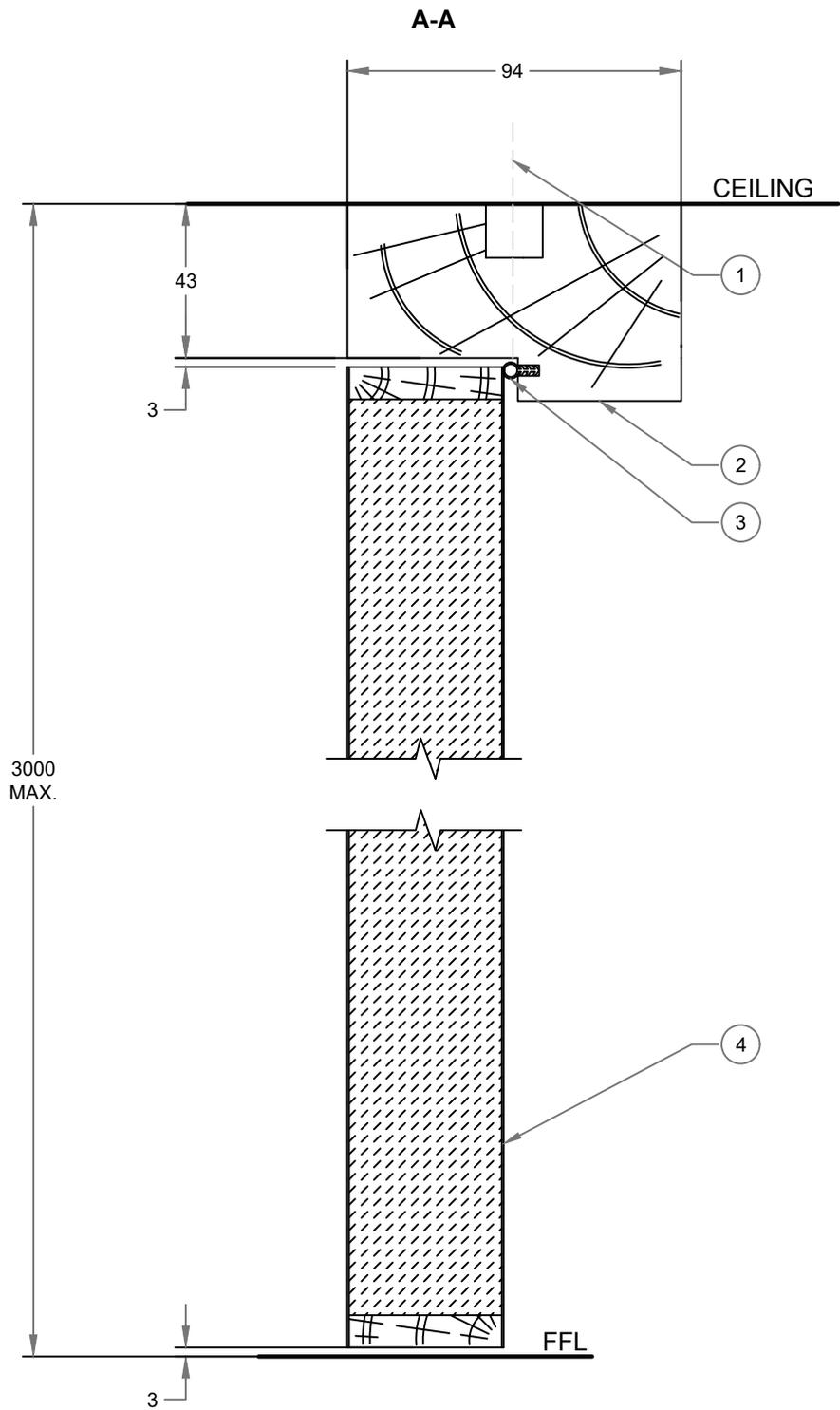
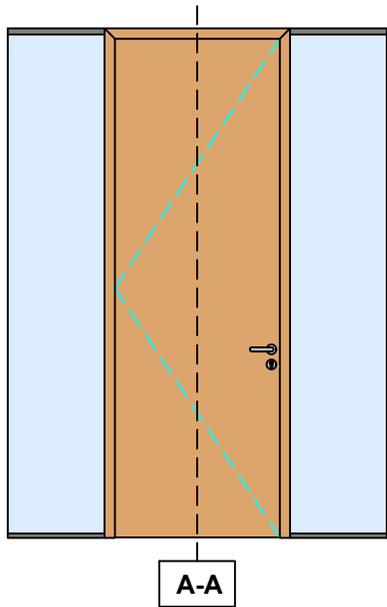
+/- 0 mm
Deflection

DRAWING NO:
PSG-HS-08

DATE:
18.02.19

SCALE:
1:1

ISSUE NO:
2



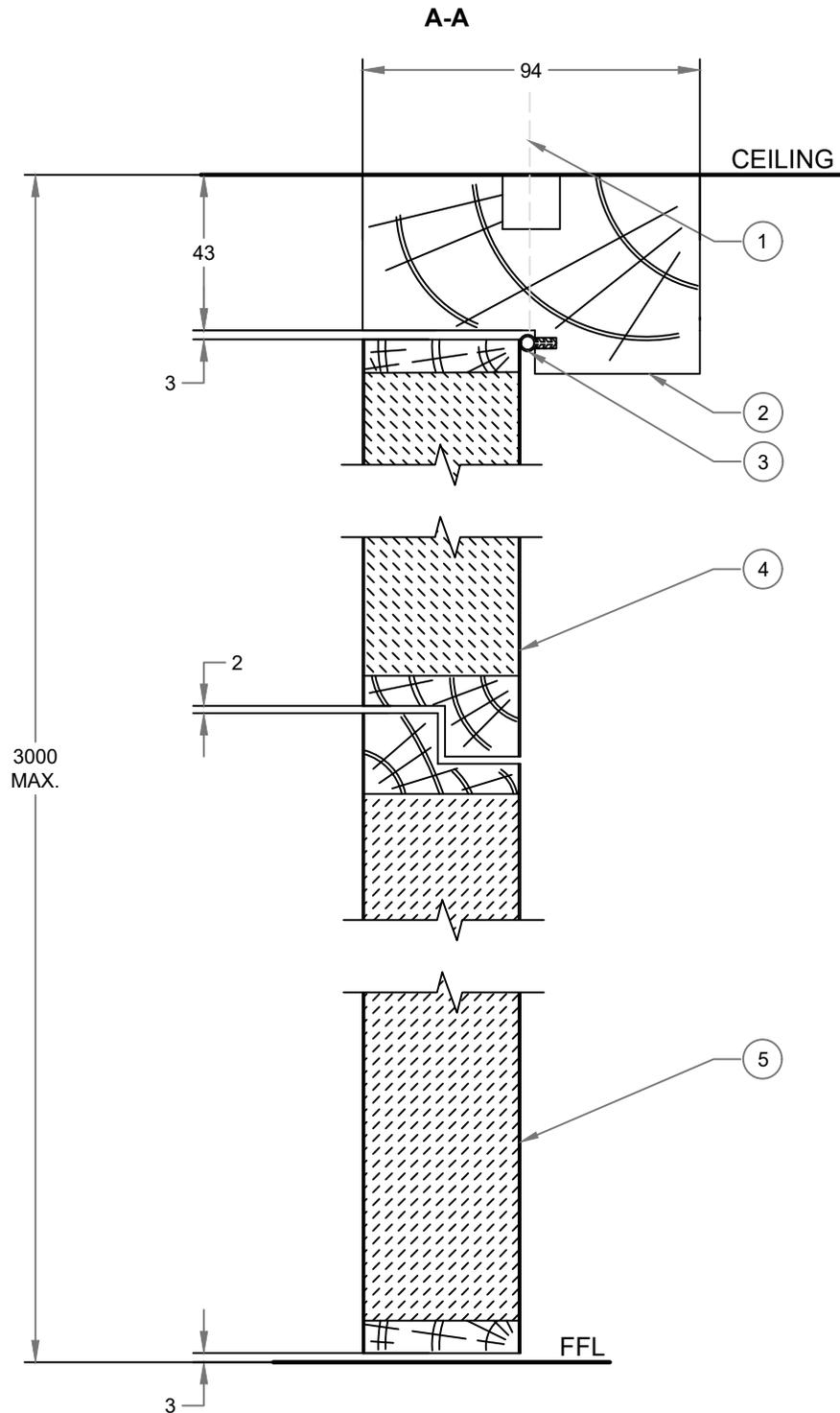
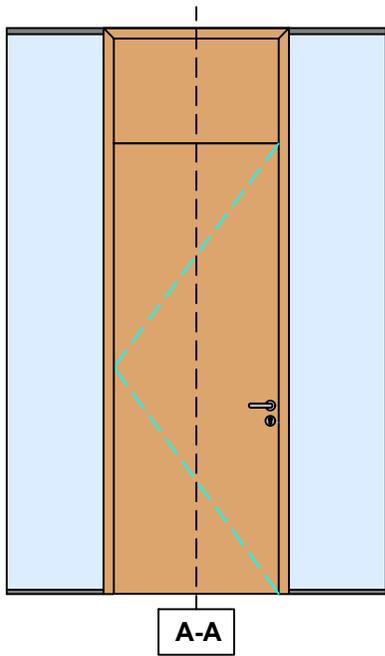
POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	P279
3	SJ37
4	44mm TIMBER DOOR

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

- JUNCTION CATEGORY:
-  Single Glazed with Timber Door
 -  Vertical Door
 -  0 min Integrity
0 min Insulation
 -  +/- 0 mm Deflection



POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	P279
3	SJ37
4	44mm TIMBER OVERPANEL
5	44mm TIMBER DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed with Timber Door & O/Panel
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO: PSG-VS-07 DATE: 19.06.18

SCALE: 1:2 ISSUE NO: 1

POLAR SG

COMPONENT KEY:

1	P279
2	582 HINGE
3	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
4	SILICONE MASTIC
5	SJ37
6	5032 LEVER HANDLE
7	44mm TIMBER DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

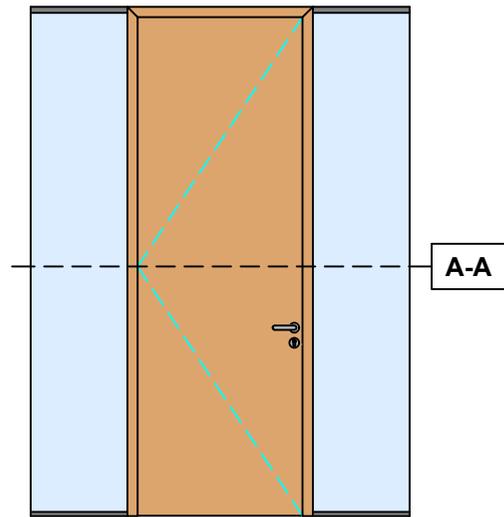
-  Single Glazed with Timber Door
-  Horizontal Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-HS-09

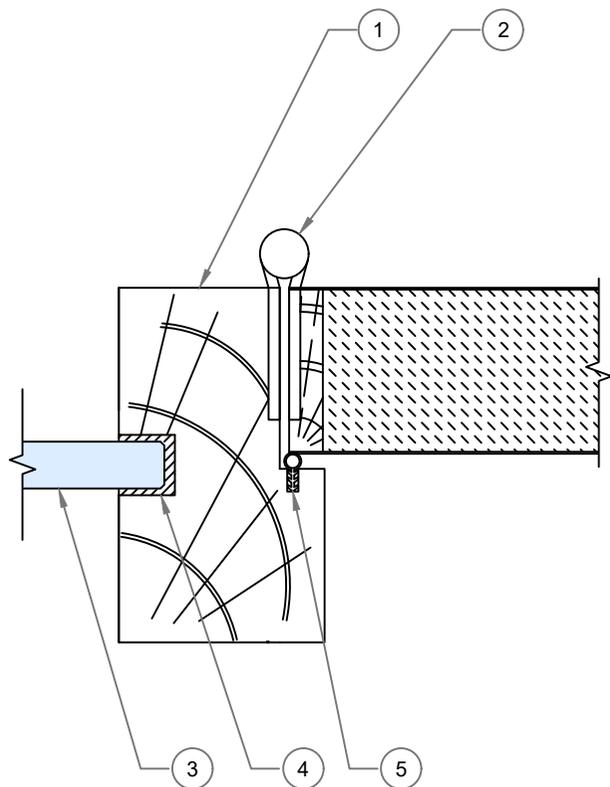
DATE:
23.05.18

SCALE:
1:2

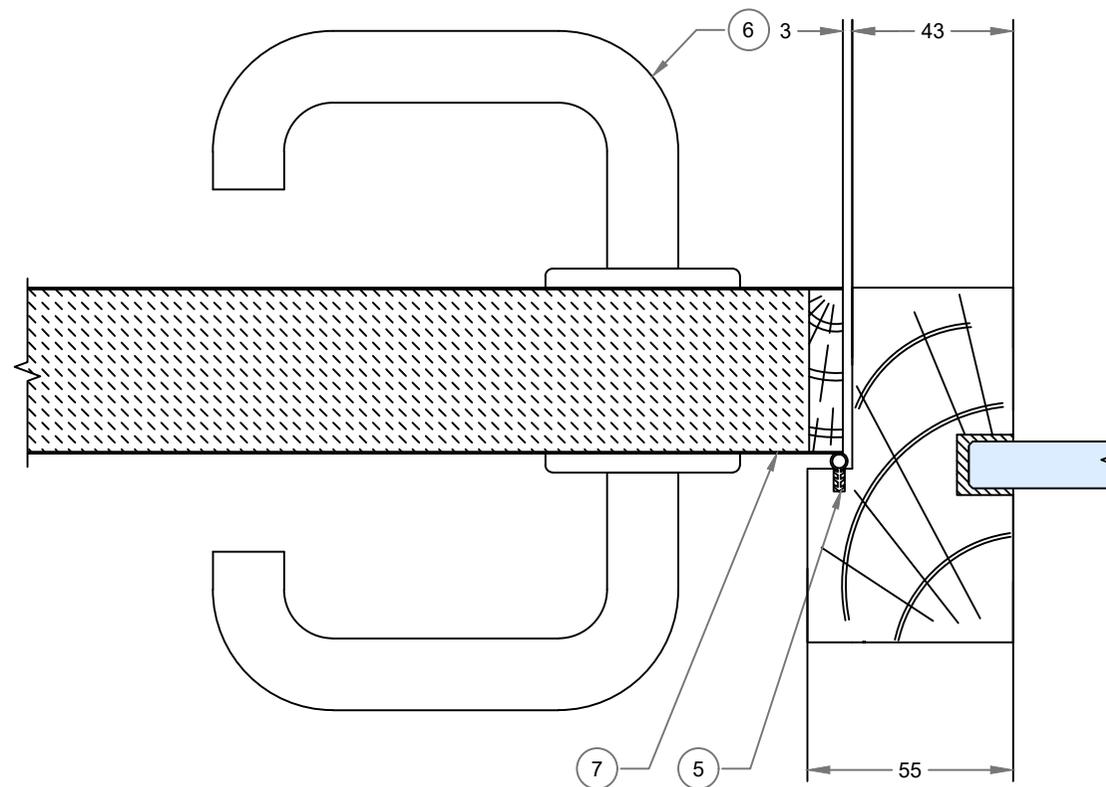
ISSUE NO:
1



A-A



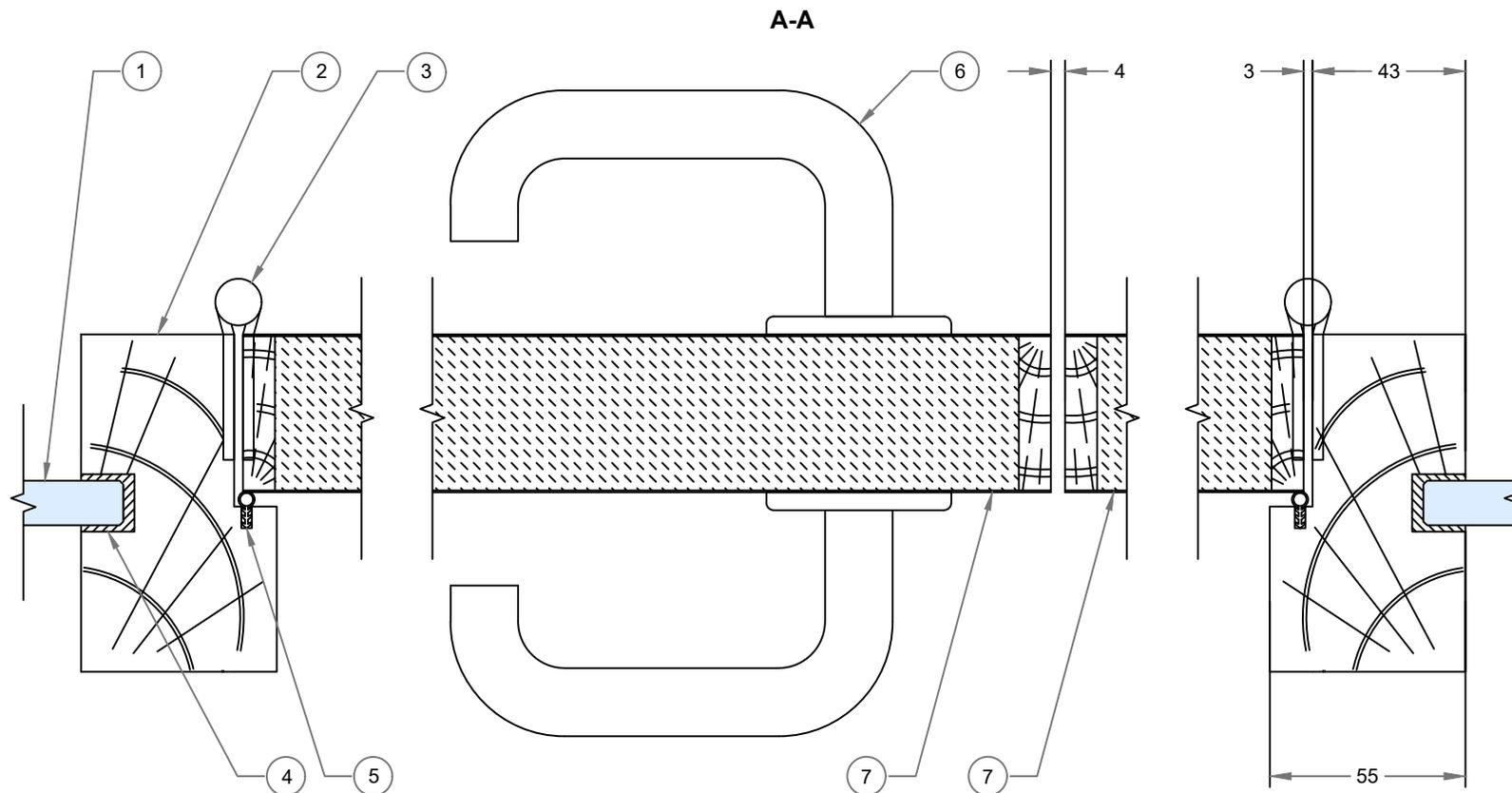
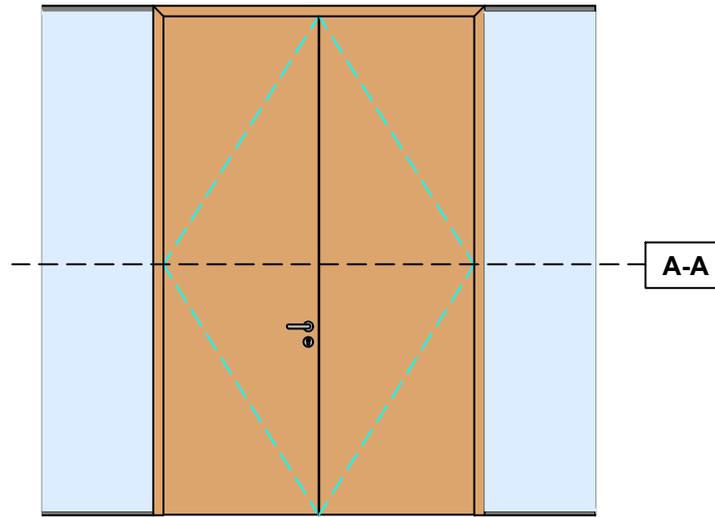
A-A



POLAR SG

COMPONENT KEY:

1	10-12.8mm TOUGHENED SAFETY GLASS
2	P279
3	582 HINGE
4	SILICONE MASTIC
5	SJ37
6	5032 LEVER HANDLE
7	44mm TIMBER DOOR



NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

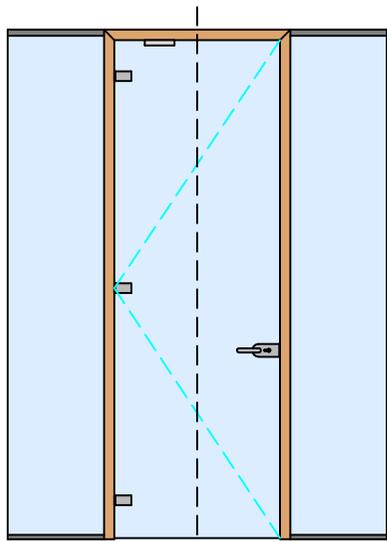
-  Single Glazed with Double Timber Door
-  Horizontal Door
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO:
PSG-HS-10

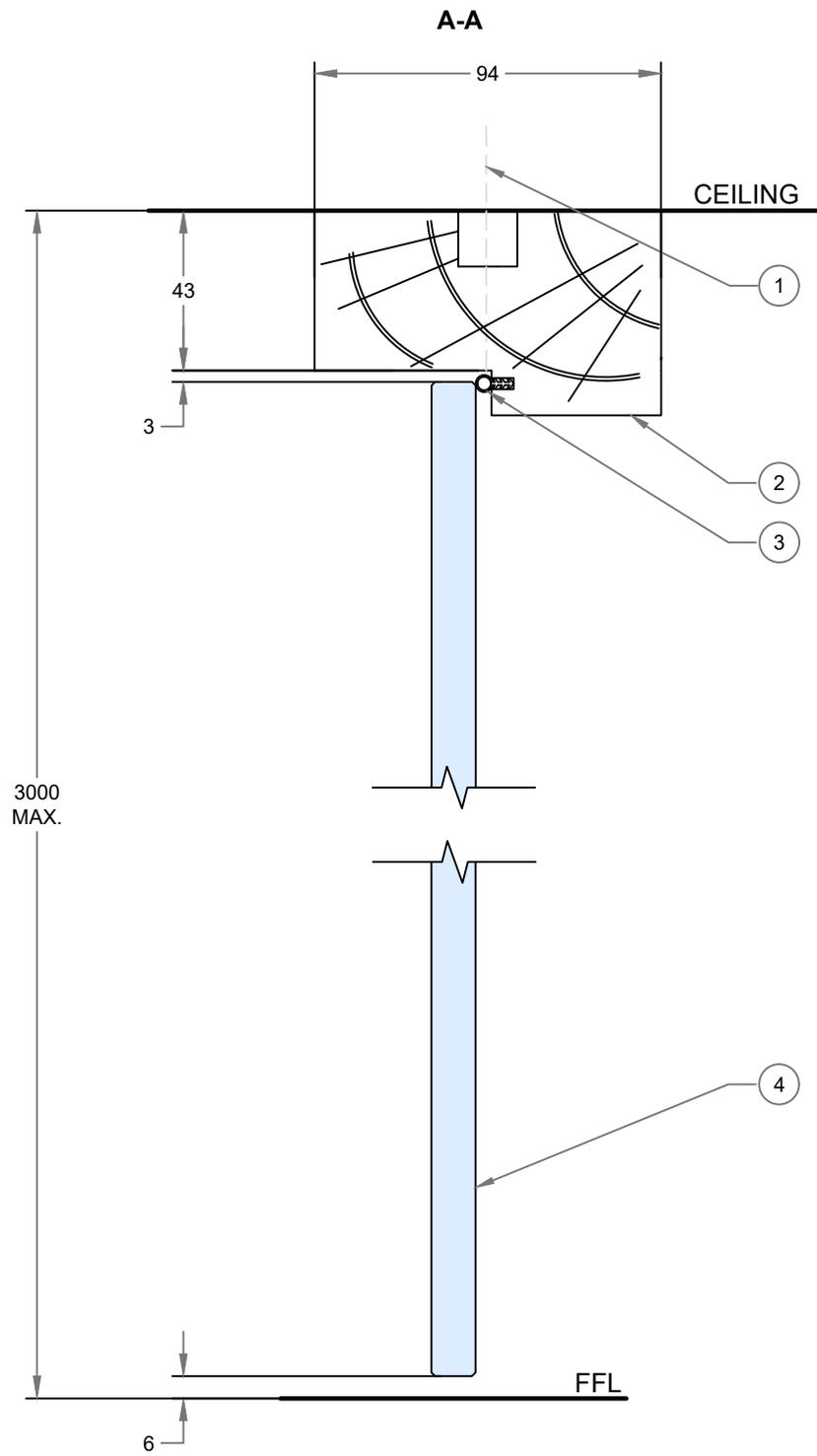
DATE:
19.06.18

SCALE:
1:2

ISSUE NO:
1



A-A



POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	P279
3	SJ37
4	10-12mm TOUGHENED GLASS DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed with Glazed Door
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  0 mm Deflection

DRAWING NO: PSG-VS-08 DATE: 19.06.18

SCALE: 1:2 ISSUE NO: 1

POLAR SG

COMPONENT KEY:

1	P279
2	K505 DOOR HINGE
3	SILICONE MASTIC
4	SJ37
5	K750 10.307.107 LEVER SET WITH ROSE
6	K310.15 10.212.107 PATCH LOCK SET
7	G918 EURO PROFILE CYLINDER
8	10-12mm TOUGHENED GLASS DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

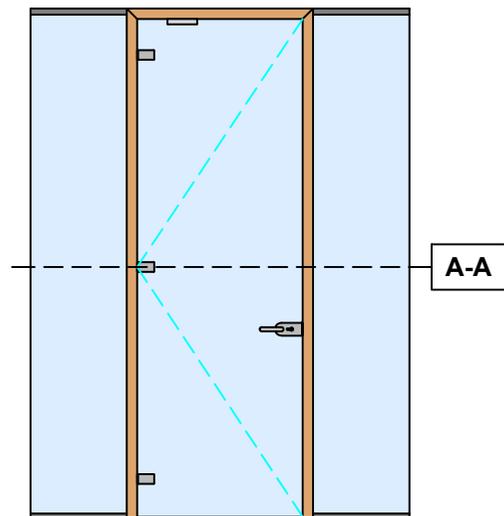
-  Single Glazed with Glazed Door
-  Horizontal Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-HS-11

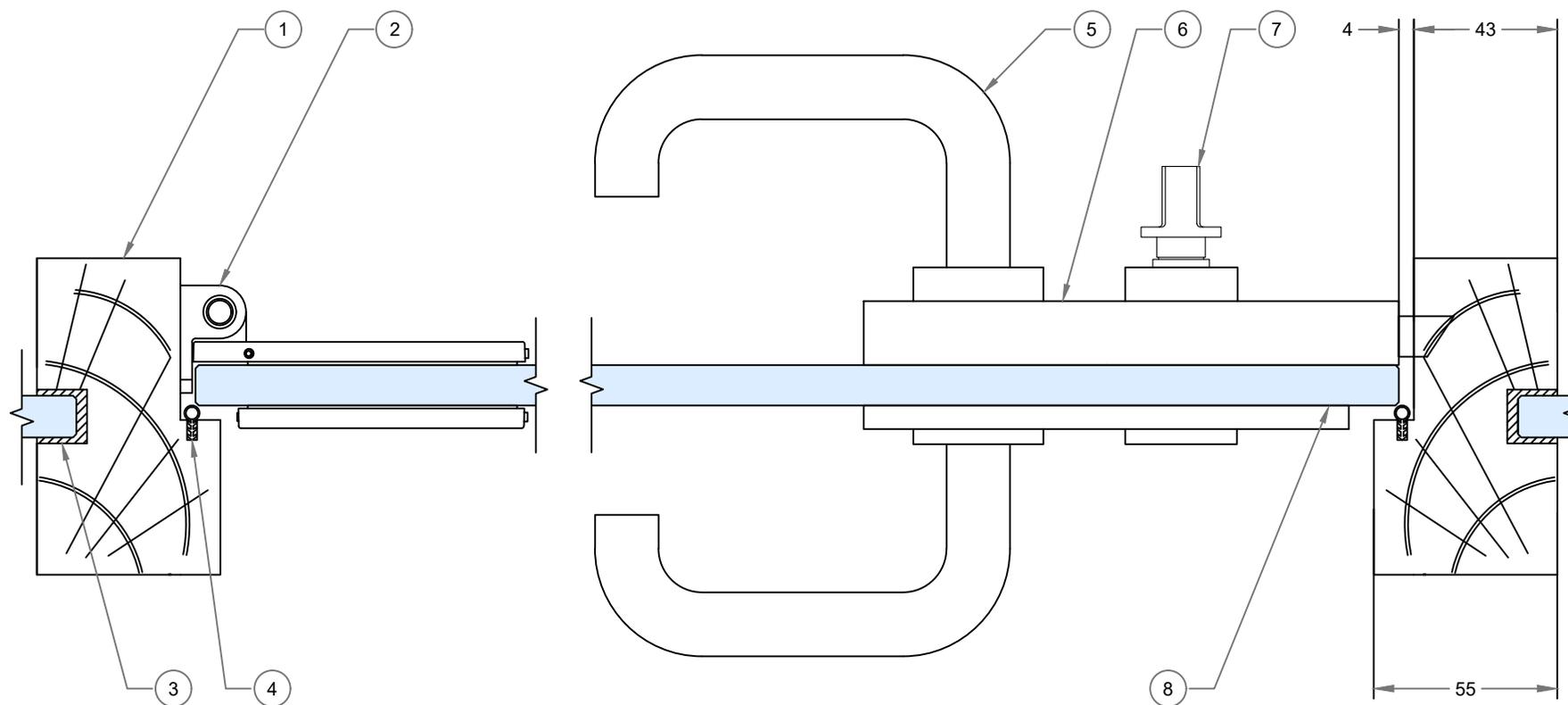
DATE:
19.06.18

SCALE:
1:2

ISSUE NO:
1



A-A

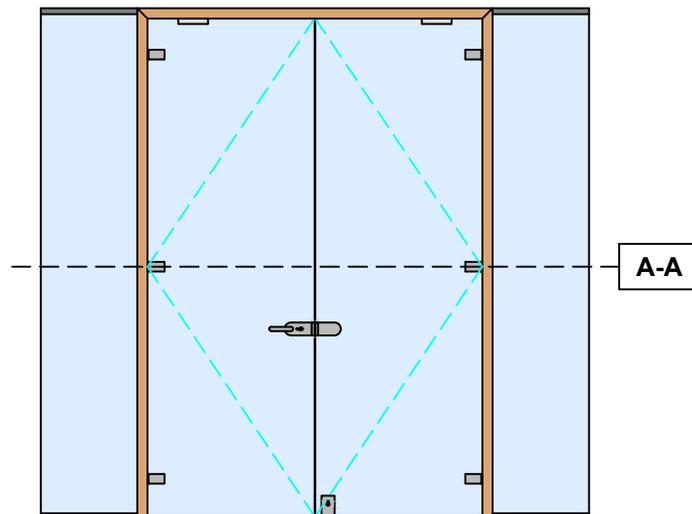


A-A

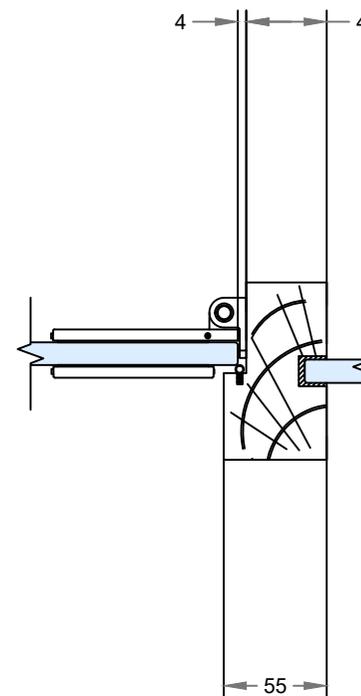
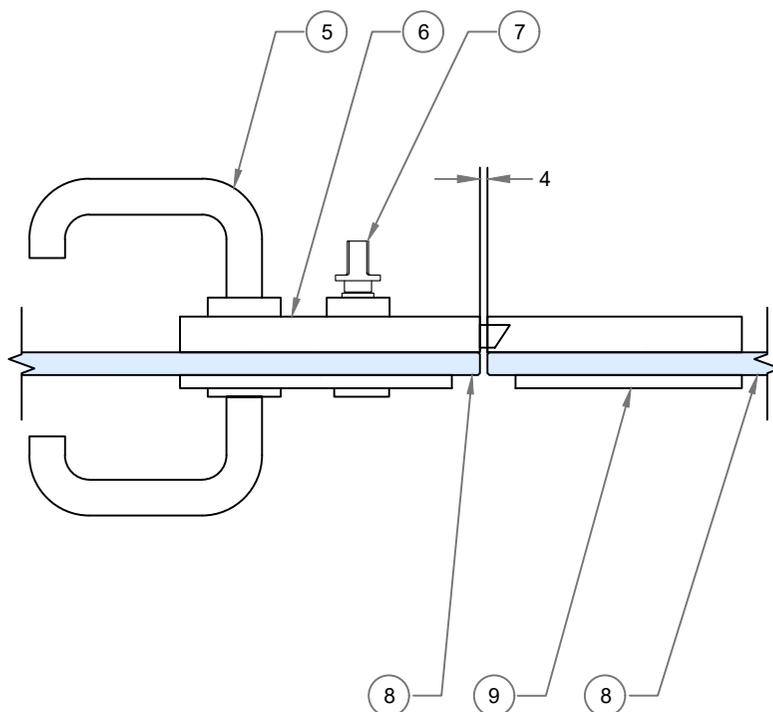
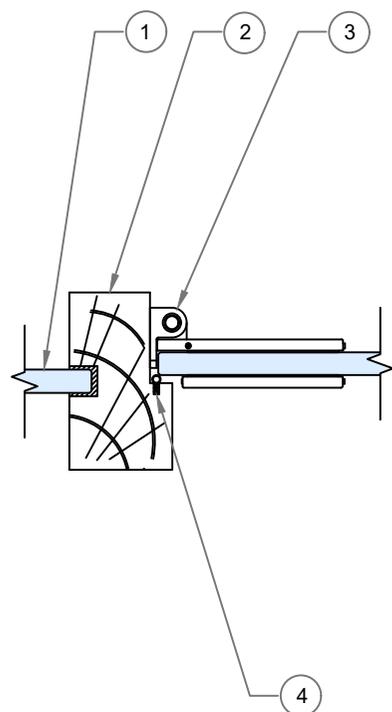
POLAR SG

COMPONENT KEY:

1	10-12.8mm TOUGHENED SAFETY GLASS
2	P279
3	K505 DOOR HINGE
4	SJ37
5	K750 10.307.107 LEVER SET WITH ROSE
6	K310.15 10.212.107 PATCH LOCK SET
7	G918 EURO PROFILE CYLINDER
8	10-12mm TOUGHENED GLASS DOOR
9	K527.15I STRIKE BOX



A-A



NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

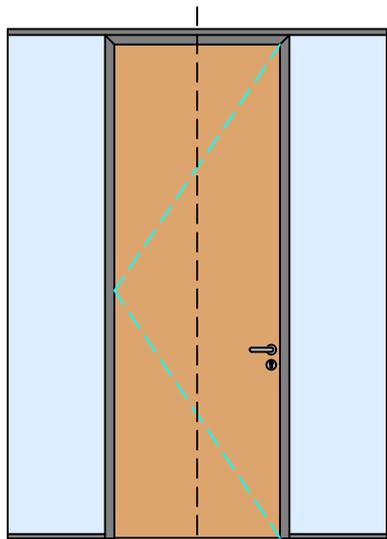
-  Single Glazed with Glazed Door
-  Horizontal Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-HS-12

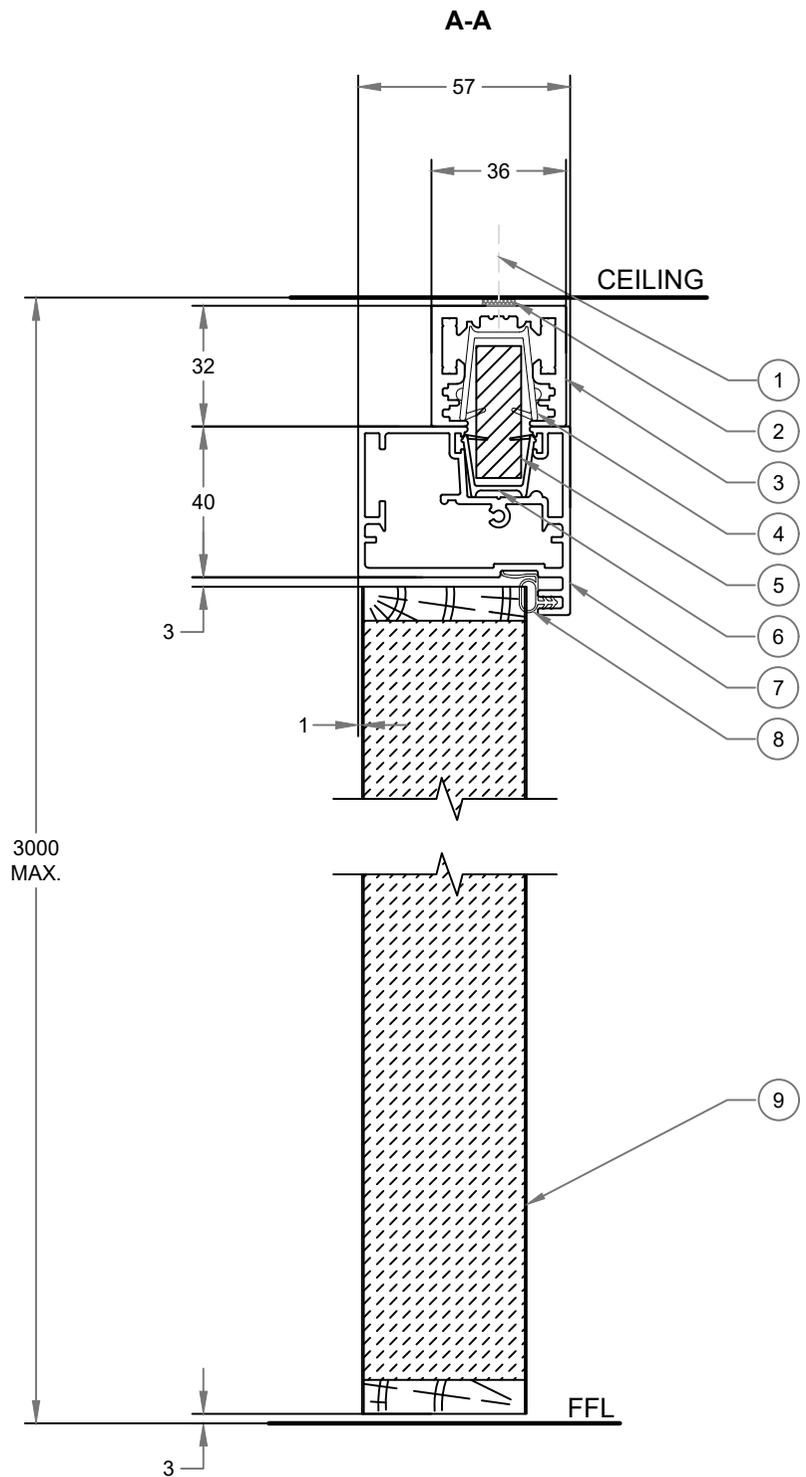
DATE:
20.06.18

SCALE:
1:4

ISSUE NO:
1



A-A



POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	SJ17*
4	SJ13
5	SJ69
6	SJ36
7	SJ35
8	PSQ21
9	44mm TIMBER DOOR

NOTES:
 *821 WITH SJ8 CAN BE USED AS AN ALTERNATIVE TO SJ17 (SEE PSG-VS-02).
 OTHER IRONMONGERY OPTIONS ARE AVAILABLE.
 ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed with Timber Door
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO: PSG-VS-09 DATE: 18.06.18

SCALE: 1:2 ISSUE NO: 1

POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	SJ17*
4	SJ13
5	SJ69
6	SJ36
7	SJ35
8	PSQ21
9	44mm TIMBER OVERPANEL
10	44mm TIMBER DOOR

NOTES:

*821 WITH SJ8 CAN BE USED AS AN ALTERNATIVE TO SJ17 (SEE PSG-VS-02).

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

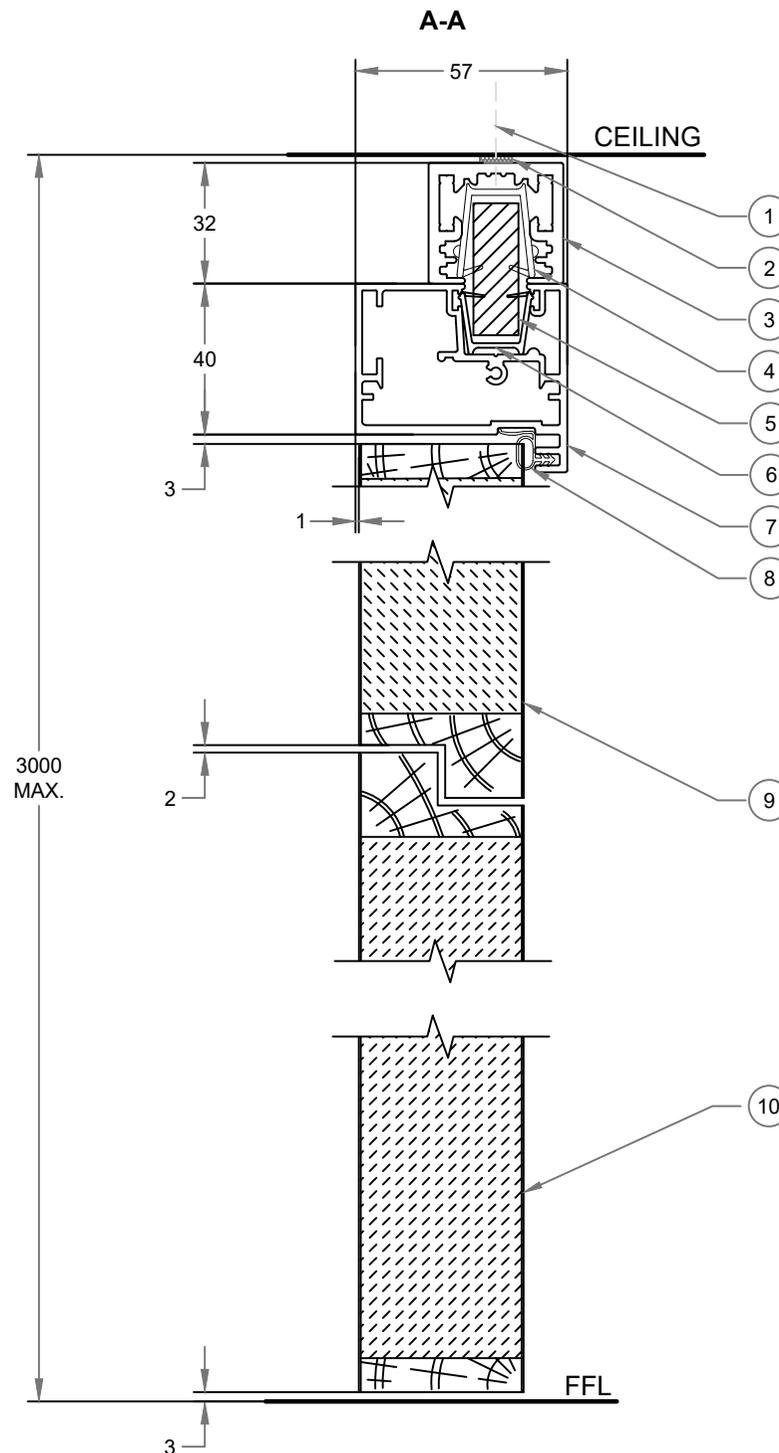
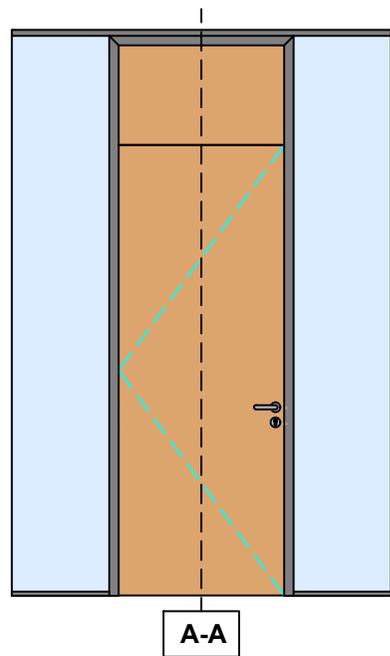
-  Single Glazed with Timber Door & Overpanel
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-VS-10

DATE:
21.06.18

SCALE:
1:2

ISSUE NO:
1



POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	SJ13
4	SJ17*
5	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
6	PSUN15 GLAZING PACKER
7	SJ36
8	SJ35
9	PSQ21
10	44mm TIMBER DOOR

NOTES:

*821 WITH SJ8 CAN BE USED AS AN ALTERNATIVE TO SJ17 (SEE PSG-VS-02).

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

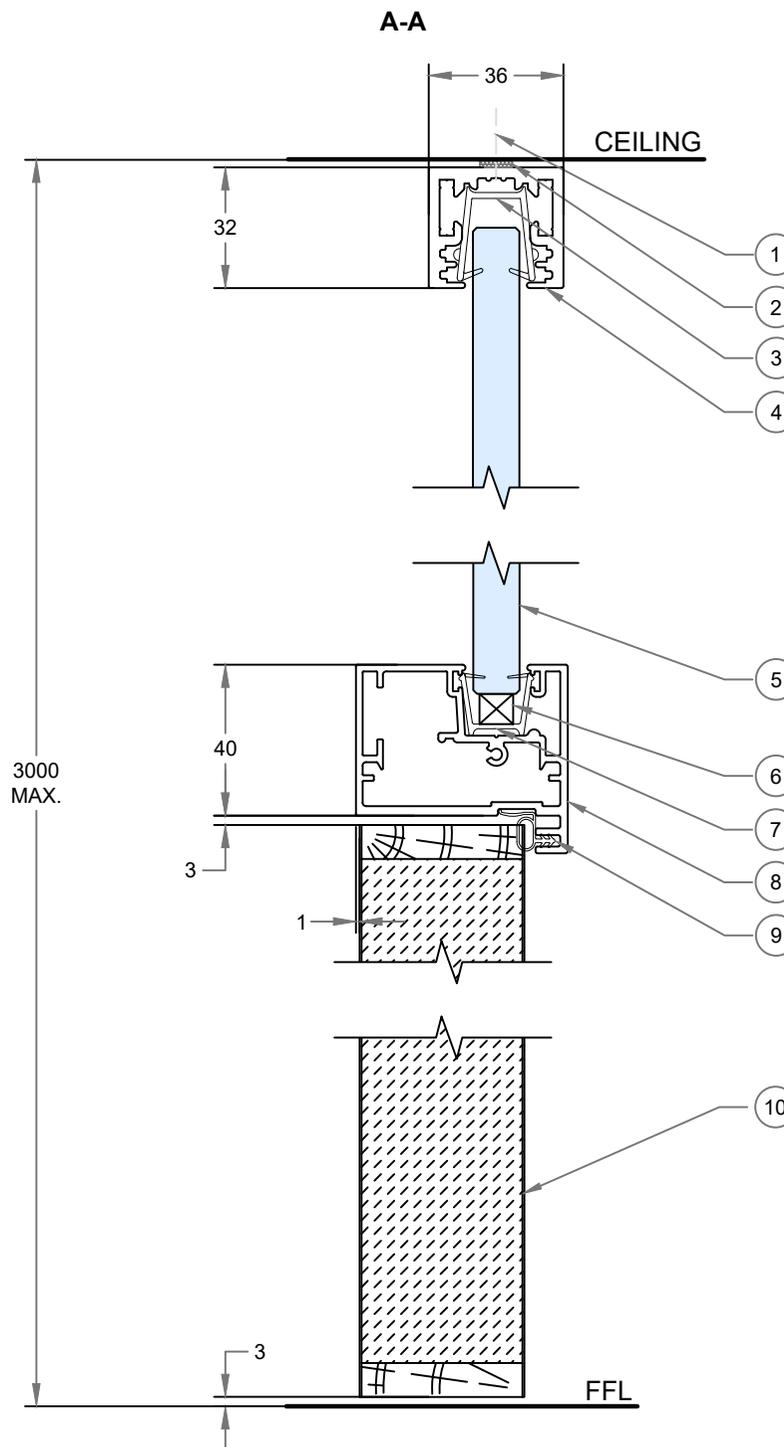
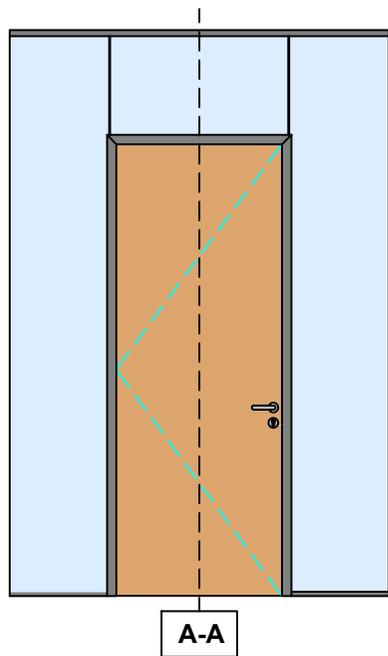
-  Single Glazed with Timber Door & Overpanel
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-VS-11

DATE:
21.06.18

SCALE:
1:2

ISSUE NO:
1



POLAR SG

COMPONENT KEY:

1	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
2	SJ35
3	582 HINGE
4	SJ36
5	PSQ21
6	5032 LEVER HANDLE
7	44mm TIMBER DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

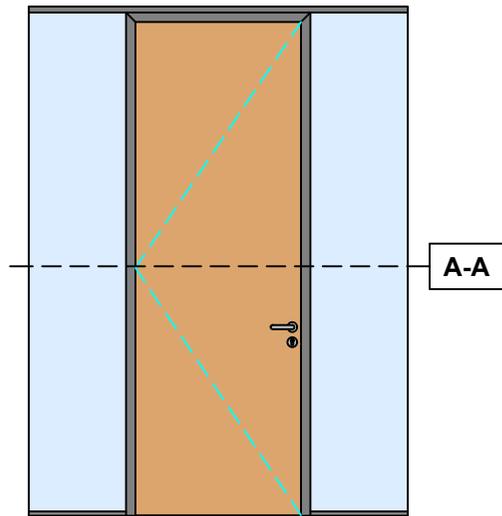
-  Single Glazed with Timber Door
-  Horizontal Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-HS-13

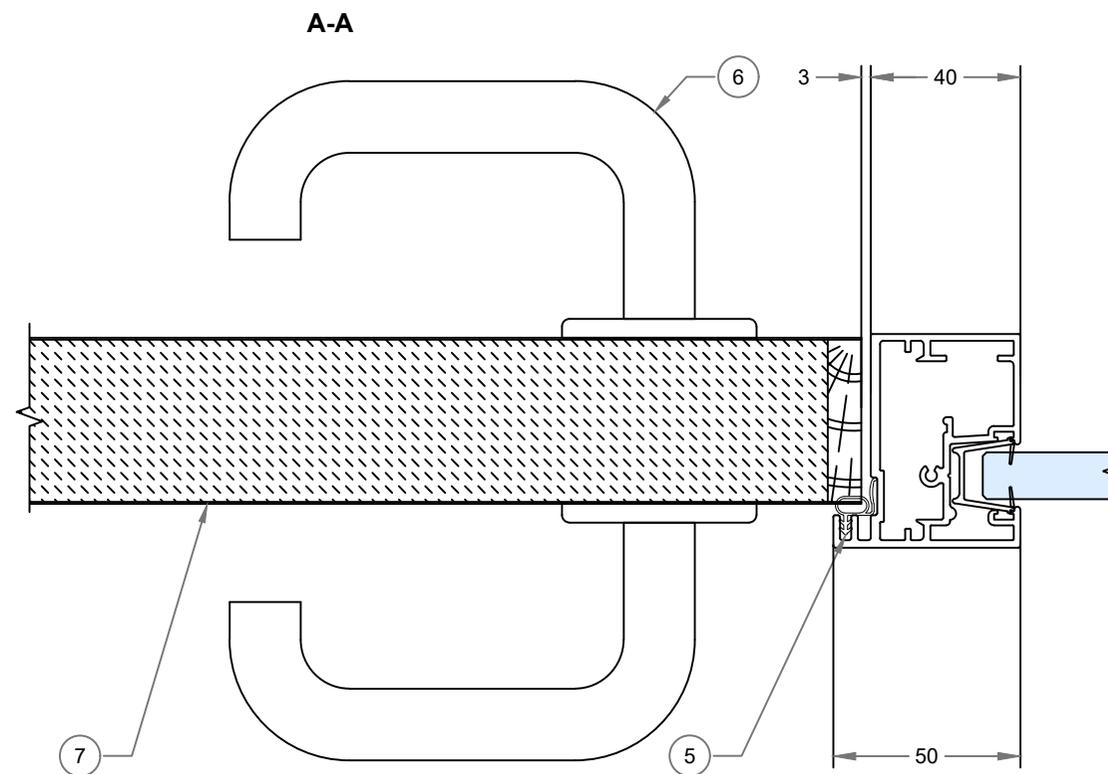
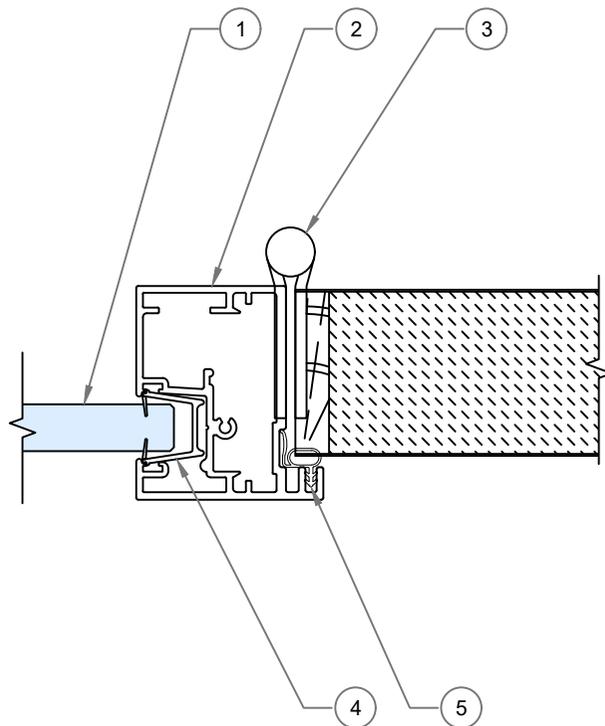
DATE:
23.05.18

SCALE:
1:2

ISSUE NO:
1



A-A

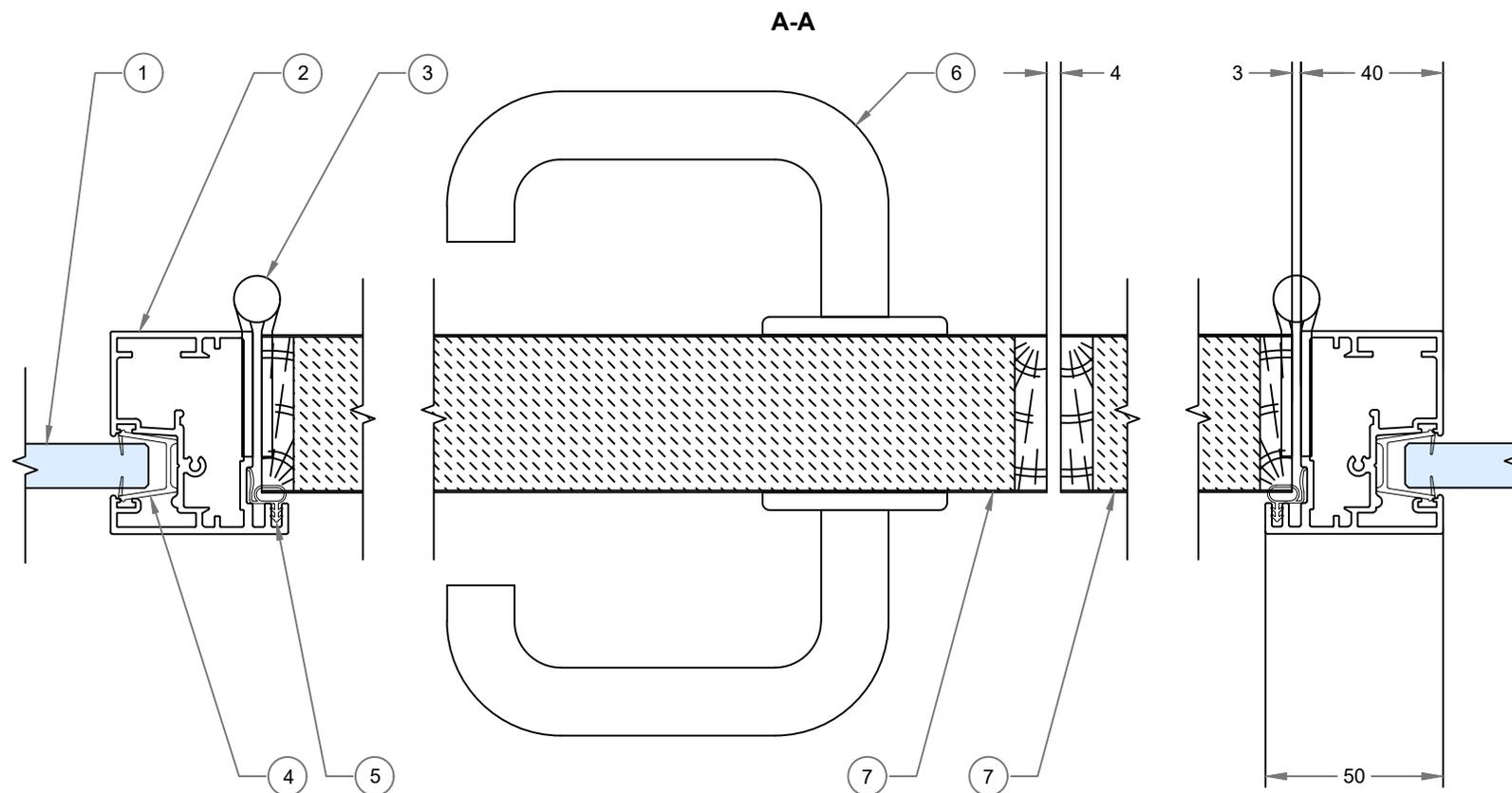
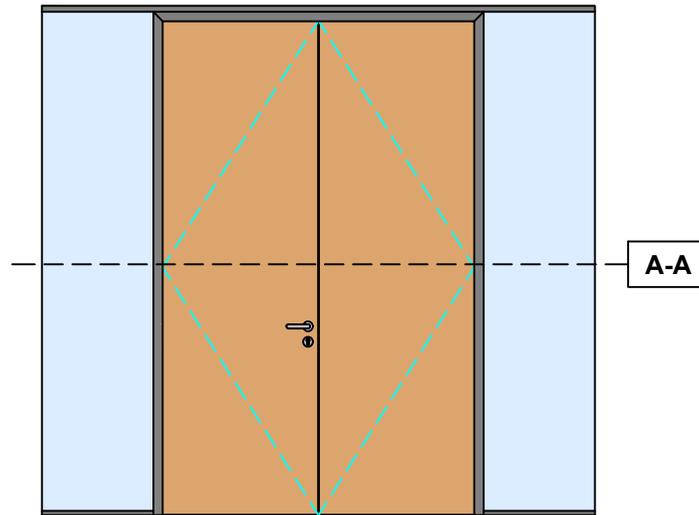


A-A

POLAR SG

COMPONENT KEY:

1	10-12.8mm TOUGHENED SAFETY GLASS
2	SJ35
3	582 HINGE
4	SJ36
5	PSQ21
6	5032 LEVER HANDLE
7	44mm TIMBER DOOR



NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed with Double Timber Door
-  Horizontal Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-HS-14

DATE:
21.06.18

SCALE:
1:2

ISSUE NO:
1

POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	SJ17*
4	SJ13
5	SJ69
6	SJ36
7	SJ35
8	PSQ21
9	10-12mm TOUGHENED GLASS DOOR

NOTES:

*821 WITH SJ8 CAN BE USED AS AN ALTERNATIVE TO SJ17 (SEE PSG-VS-02).

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed with Glazed Door
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:

PSG-VS-12

DATE:

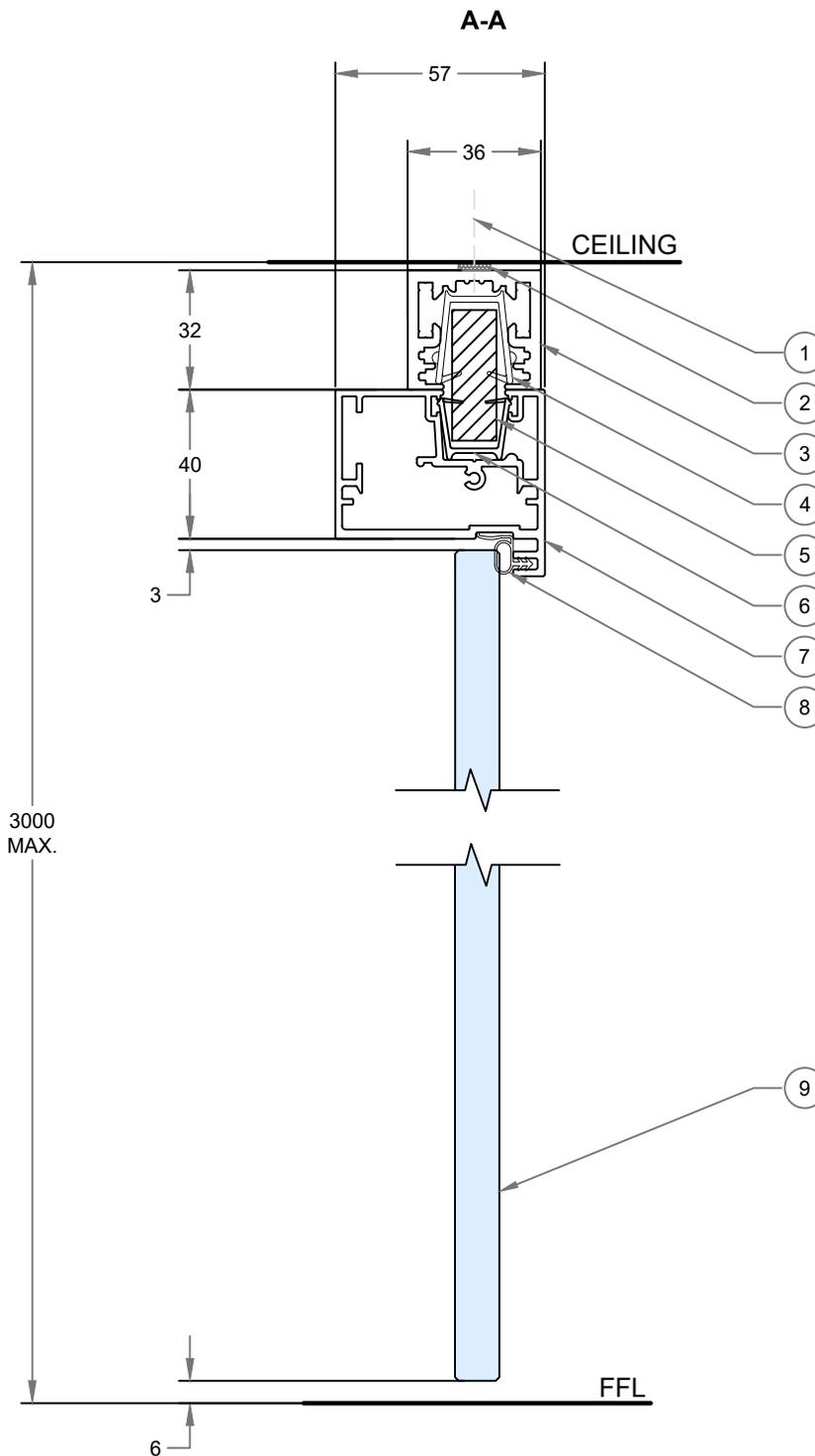
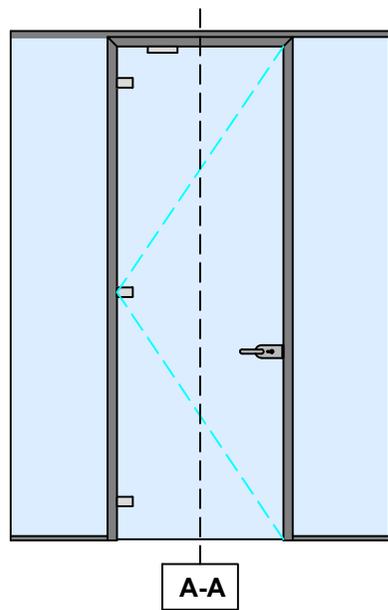
22.06.18

SCALE:

1:2

ISSUE NO:

1



POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	SJ17*
4	SJ13
5	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
6	PSUN15 GLAZING PACKER
7	SJ36
8	SJ35
9	PSQ21
10	10-12mm TOUGHENED GLASS DOOR

NOTES:

*821 WITH SJ8 CAN BE USED AS AN ALTERNATIVE TO SJ17 (SEE PSG-VS-02).

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

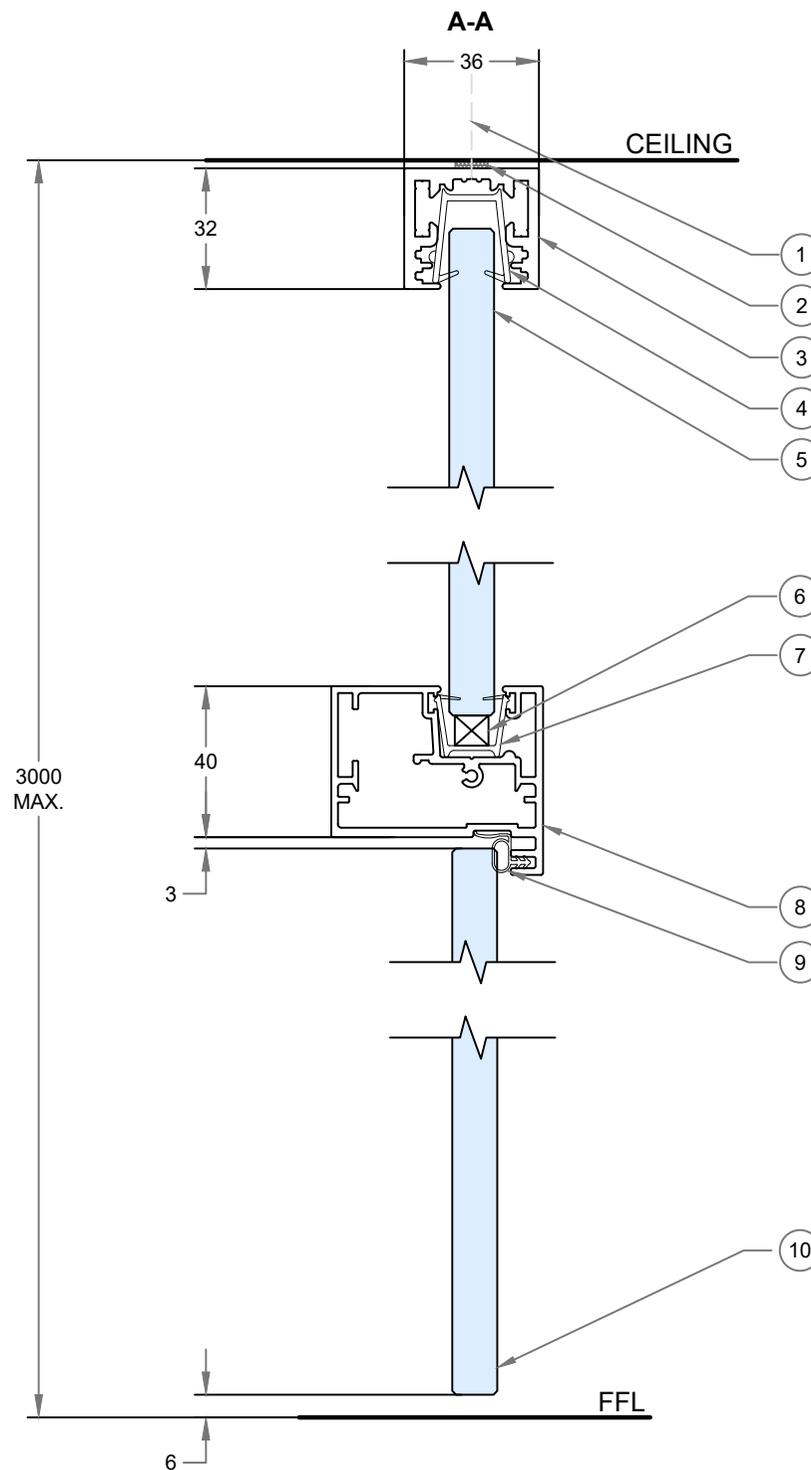
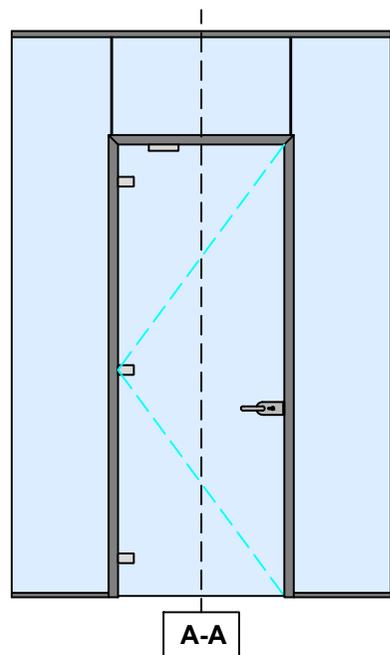
-  Single Glazed with Glazed Door & Overpanel
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-VS-13

DATE:
22.06.18

SCALE:
1:2

ISSUE NO:
1



POLAR SG

COMPONENT KEY:

1	SJ35
2	K505 DOOR HINGE
3	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
4	SJ36
5	PSQ21
6	K750 10.307.107 LEVER SET WITH ROSE
7	K350.15 10.212.107 PATCH LOCK SET
8	G918 EURO PROFILE CYLINDER
9	10-12mm TOUGHENED GLASS DOOR

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed with Glazed Door
-  Horizontal Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:

PSG-HS-15

DATE:

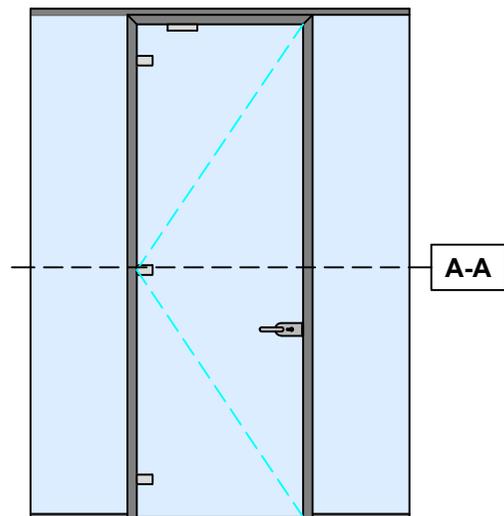
25.06.18

SCALE:

1:2

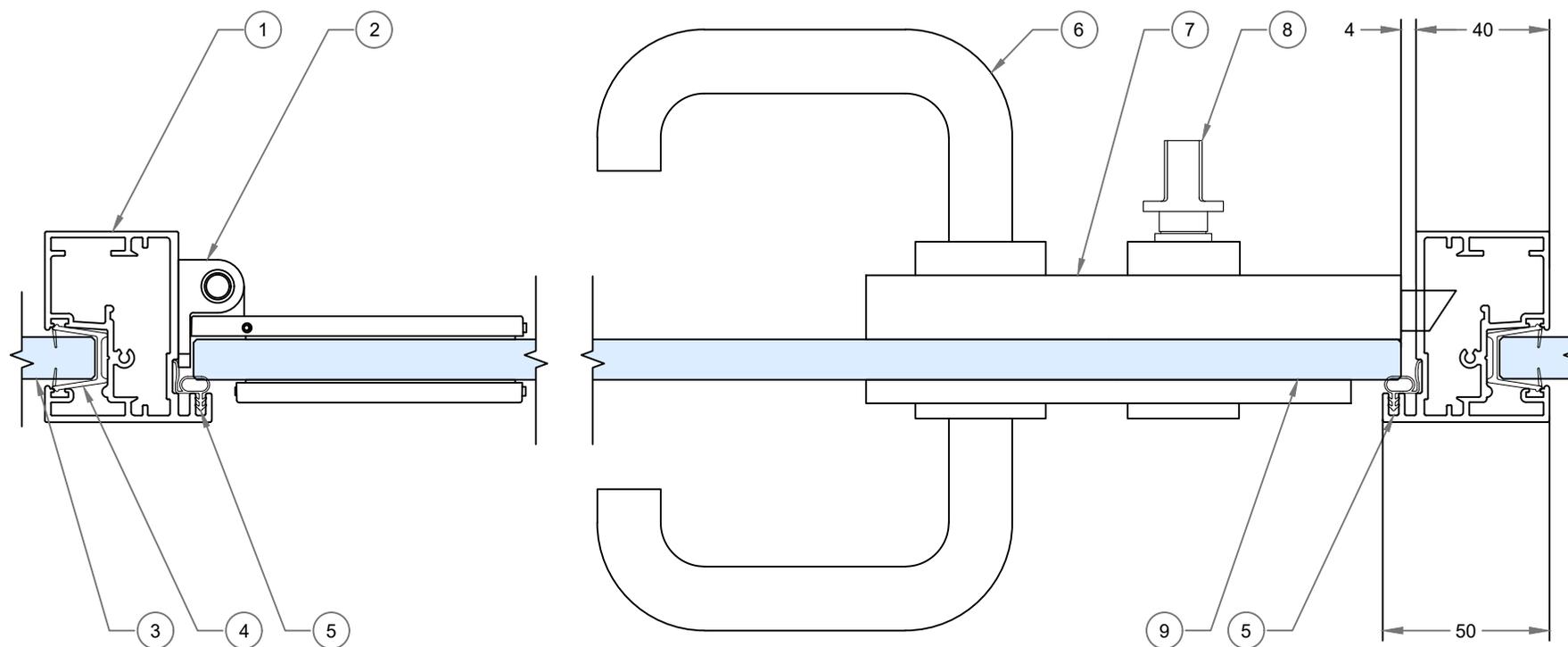
ISSUE NO:

1



A-A

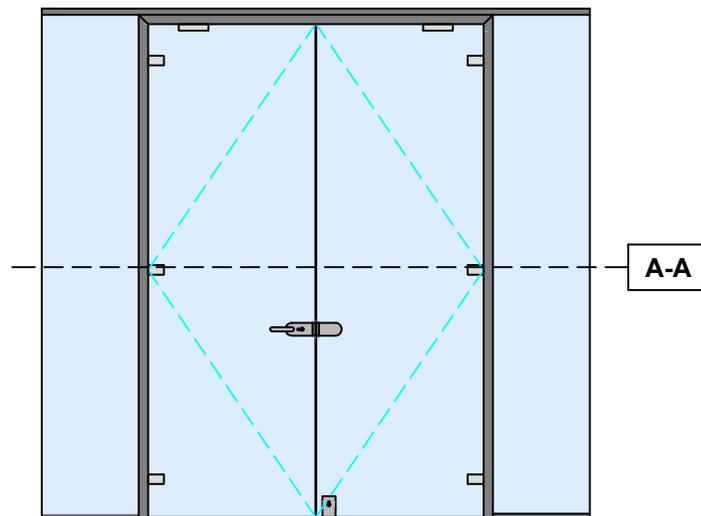
A-A



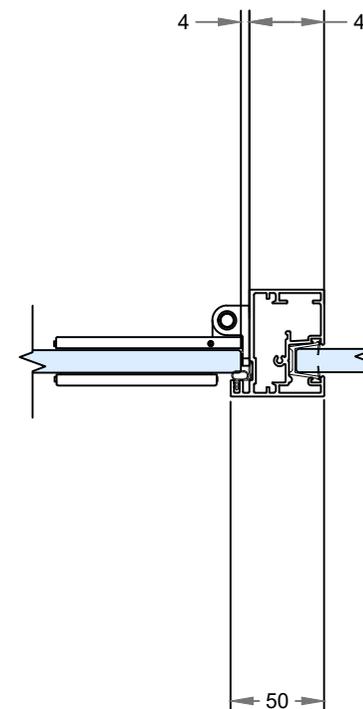
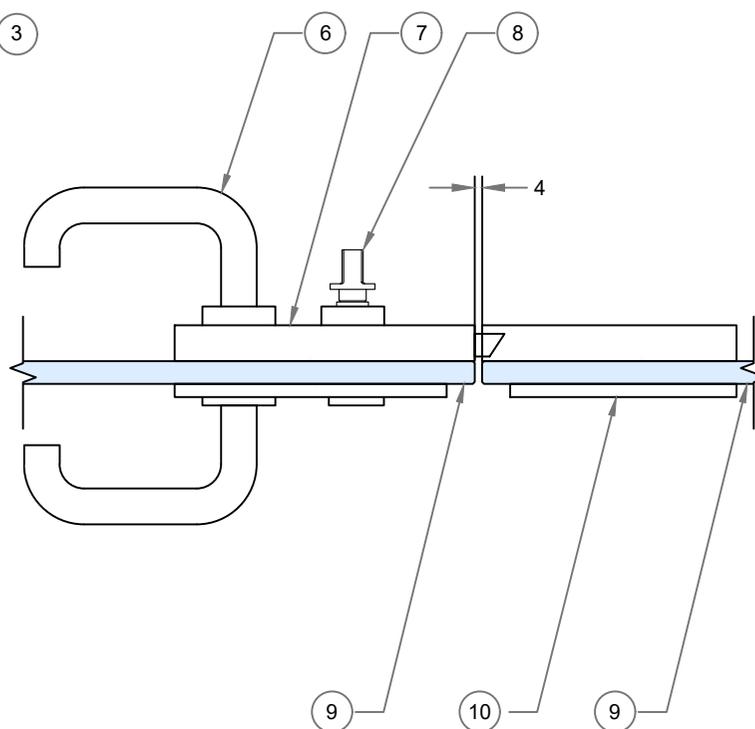
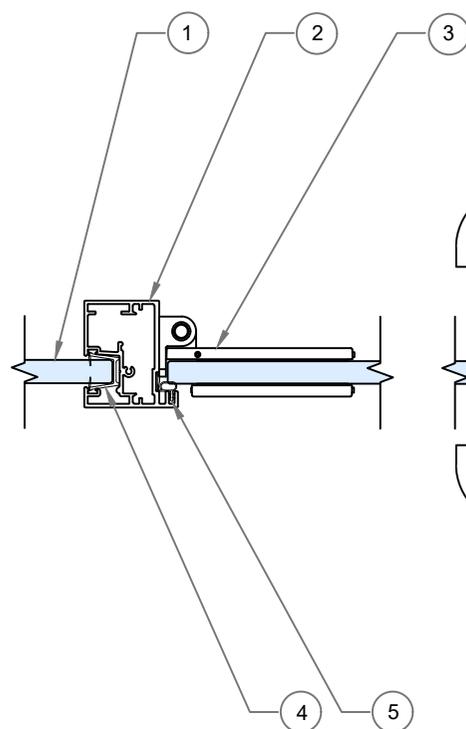
POLAR SG

COMPONENT KEY:

1	10-12.8mm TOUGHENED SAFETY GLASS
2	SJ35
3	K505 DOOR HINGE
4	SJ36
5	PSQ21
6	K750 10.307.107 LEVER SET WITH ROSE
7	K310.15 10.212.107 PATCH LOCK SET
8	G918 EURO PROFILE CYLINDER
9	10-12mm TOUGHENED GLASS DOOR
10	K527.15I STRIKE BOX



A-A



NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

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

DRAWING NO:
PSG-HS-16

DATE:
25.06.18

SCALE:
1:4

ISSUE NO:
1

POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	SJ17*
4	SJ13
5	SJ69
6	SJ36
7	SJ35
8	PSQ21
9	44mm DOUBLE GLAZED SONIK DOOR (DGD52)
10	DROPDOWN THRESHOLD SEAL

NOTES:

*821 WITH SJ8 CAN BE USED AS AN ALTERNATIVE TO SJ17 (SEE PSG-VS-02).

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

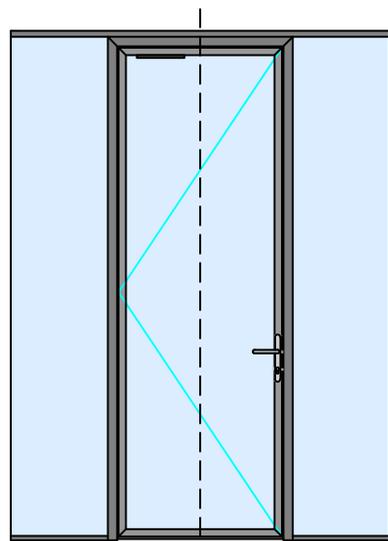
-  Single Glazed with Sonik Door
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-VS-14

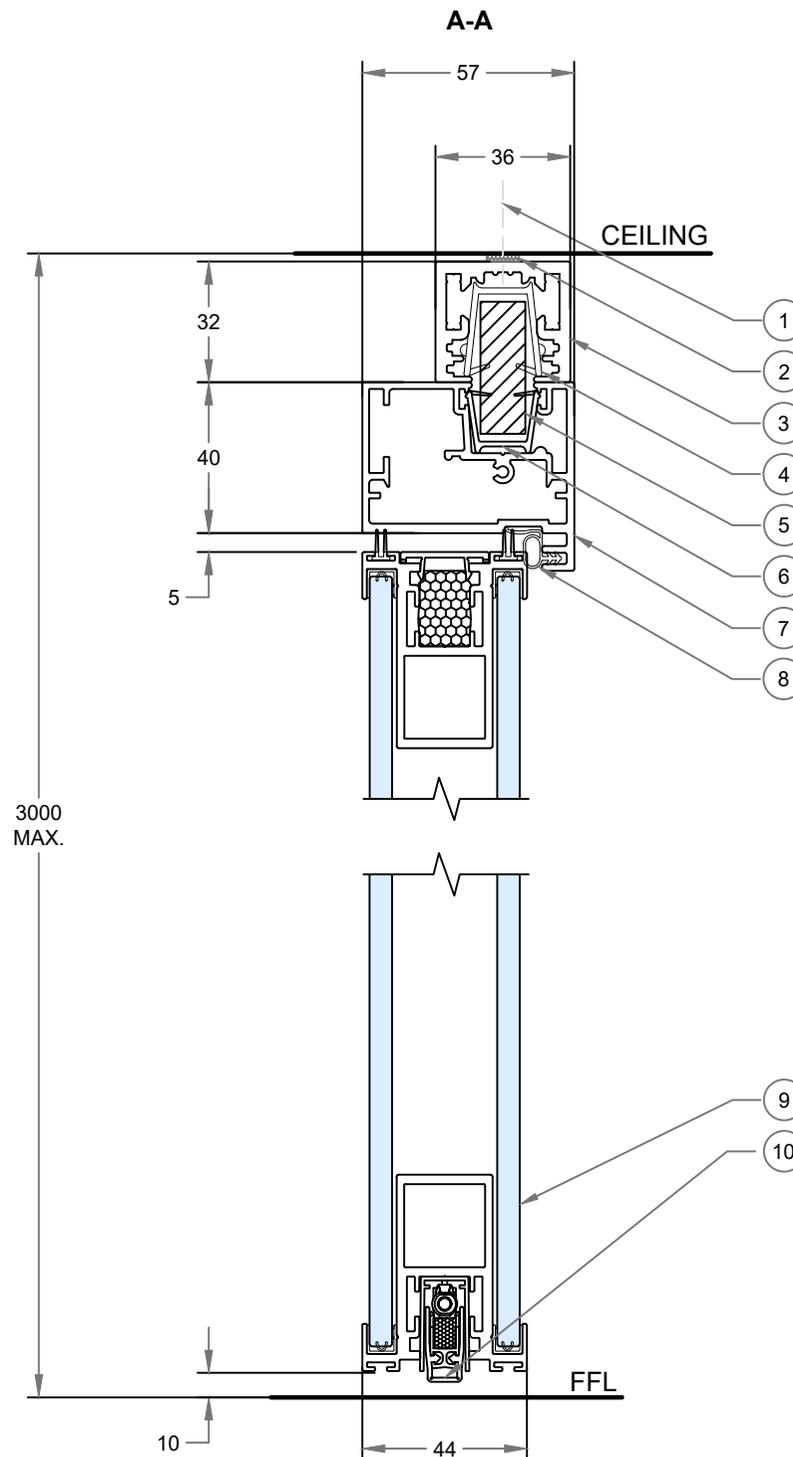
DATE:
25.06.18

SCALE:
1:2

ISSUE NO:
1



A-A



POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	SJ13
4	SJ17**
5	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
6	PSUN15 GLAZING PACKER
7	SJ36
8	SJ35
9	PSQ21
10	44mm DOUBLE GLAZED SONIK DOOR (DGD52)
11	DROPDOWN THRESHOLD SEAL

NOTES:

*MAXIMUM OVERPANEL HEIGHT IS BASED ON IT BEING NO MORE THAN 25% OF THE ACTUAL DOOR HEIGHT.

**821 WITH SJ8 CAN BE USED AS AN ALTERNATIVE TO SJ17 (SEE PSG-VS-02).

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed with Sonik Door & Overpanel
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:

PSG-VS-15

DATE:

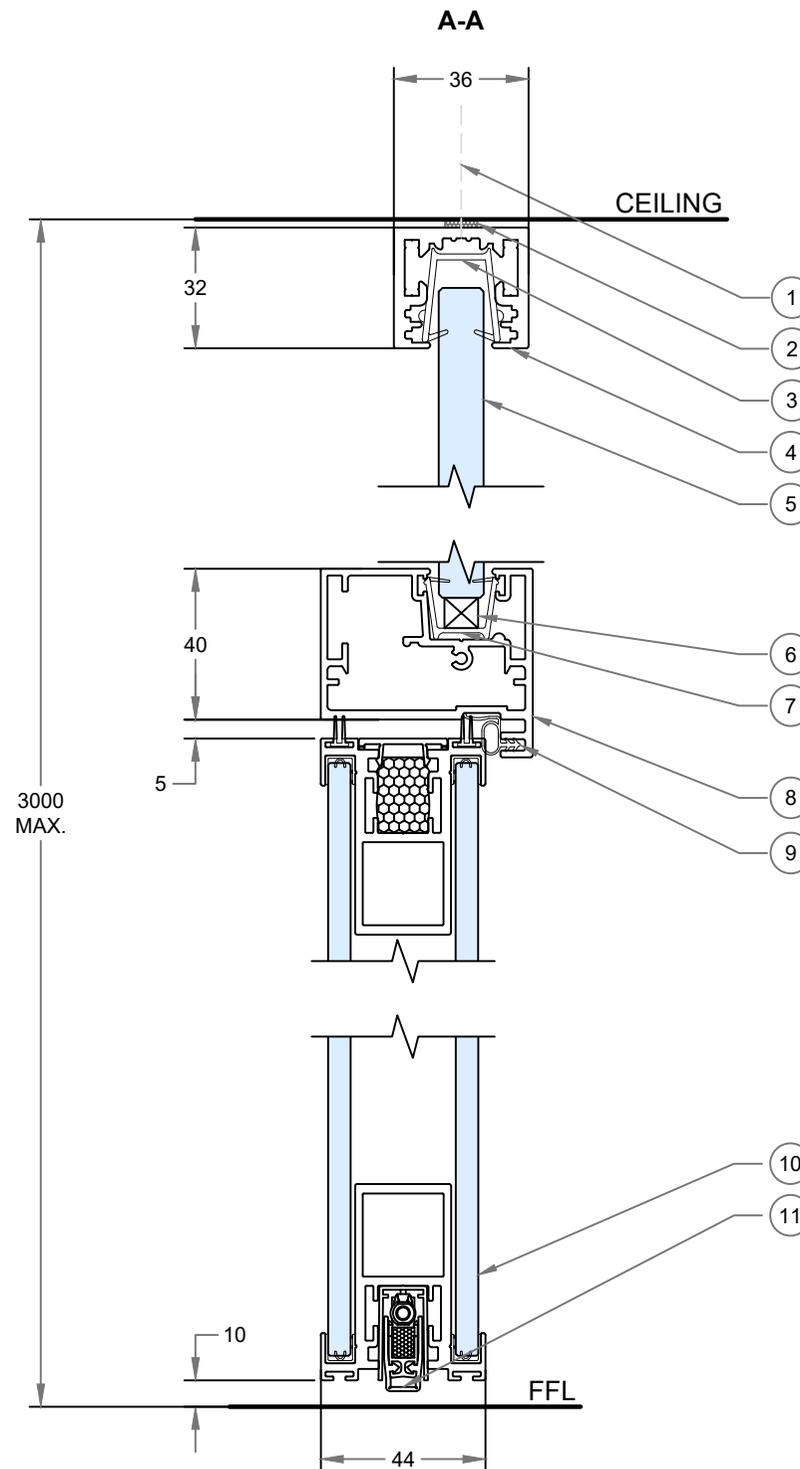
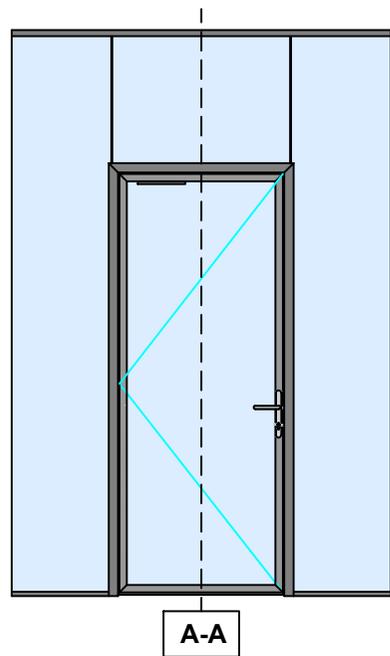
25.06.18

SCALE:

1:2

ISSUE NO:

1



POLAR SG

COMPONENT KEY:

1	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
2	SJ35
3	K4.126.R.BSS DOOR HINGE
4	SJ36
5	PSQ21
6	60mm BACKSET ROUND BACK HANDLE WITH LOCK
7	44mm DOUBLE GLAZED SONIK DOOR (DGD52)

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

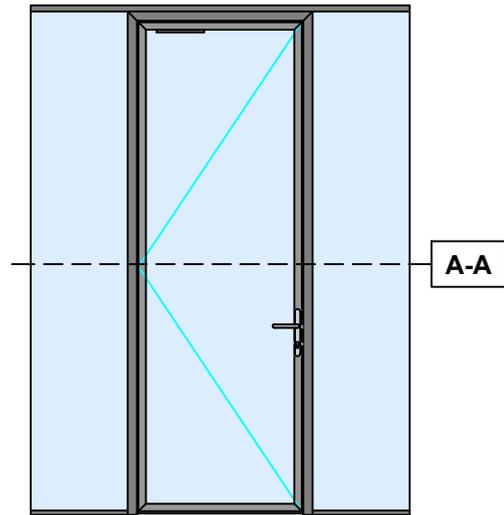
-  Single Glazed with Sonik Door
-  Horizontal Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm
Deflection

DRAWING NO:
PSG-HS-17

DATE:
28.06.18

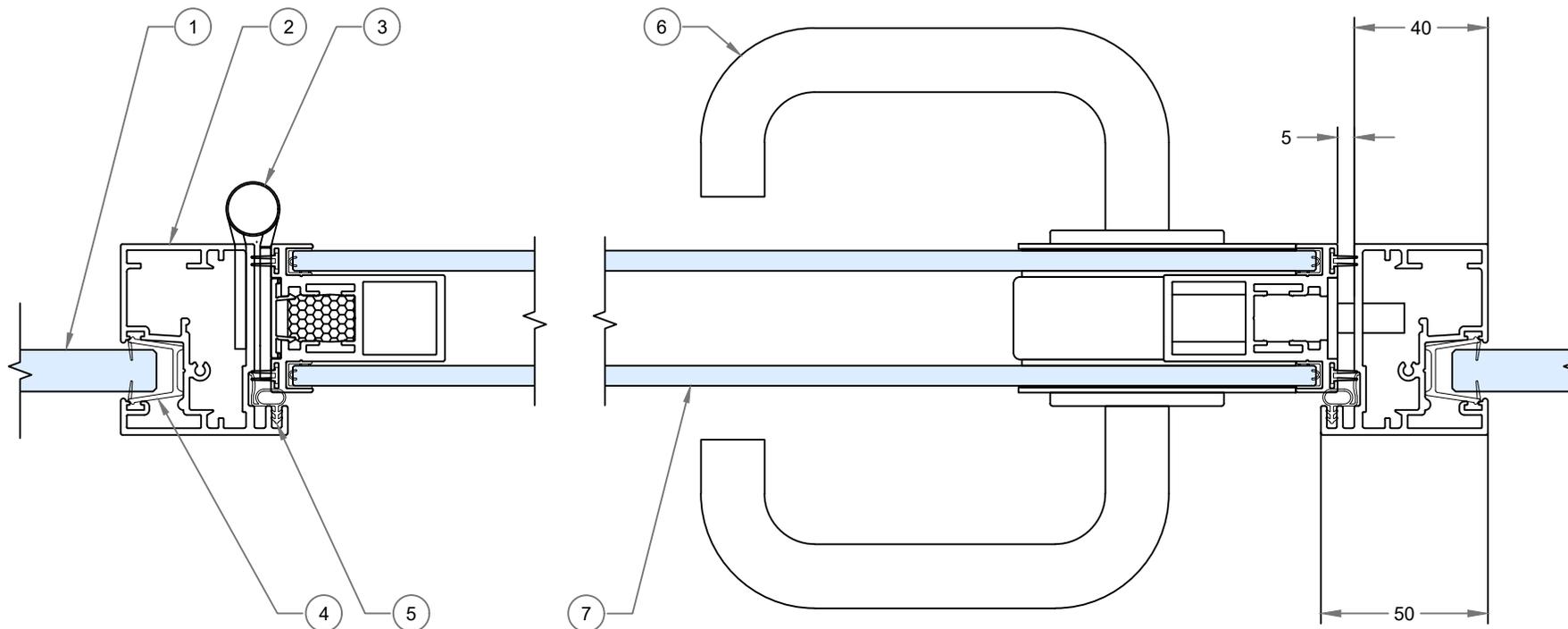
SCALE:
1:2

ISSUE NO:
1



A-A

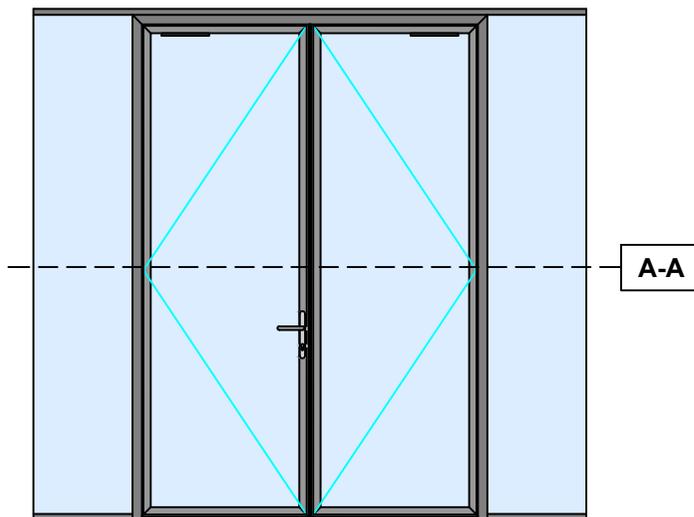
A-A



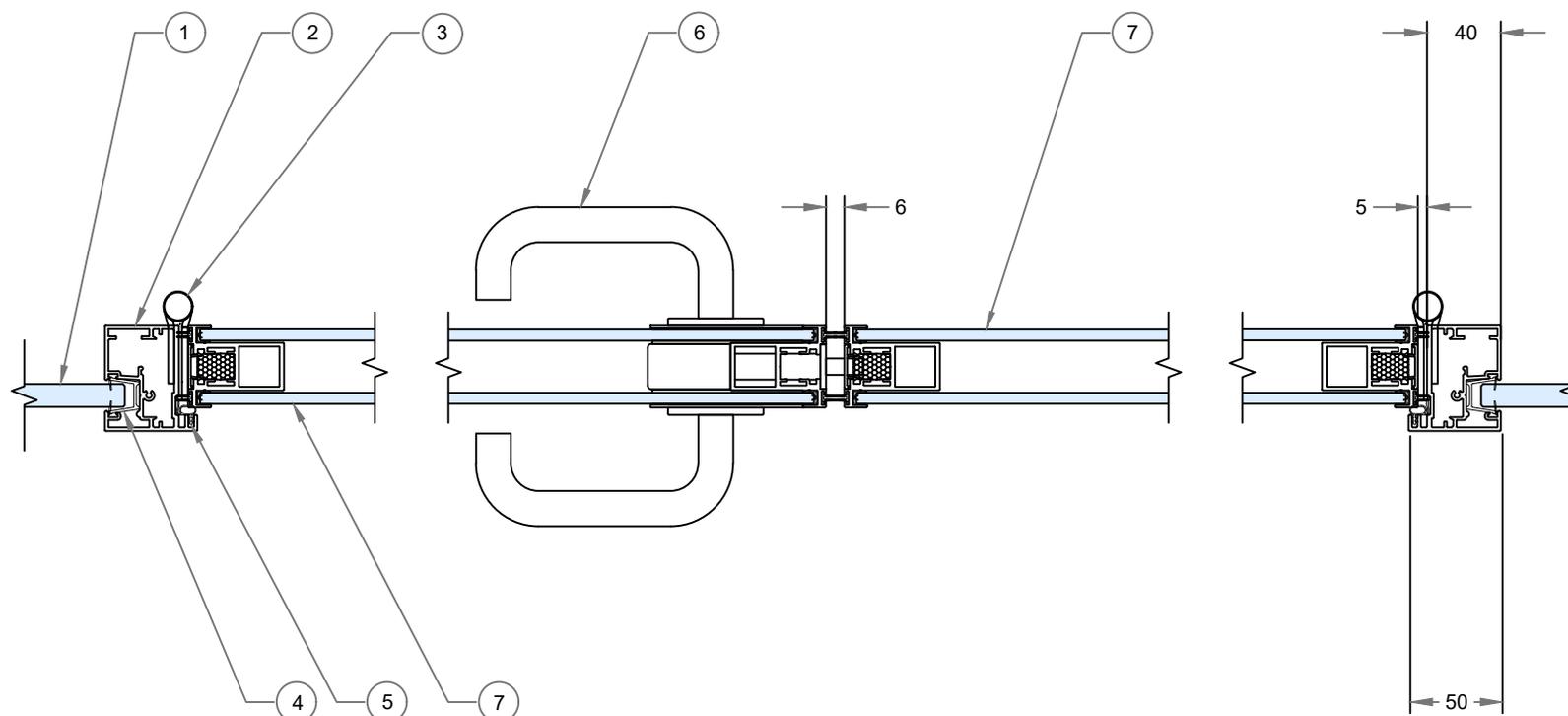
POLAR SG

COMPONENT KEY:

1	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
2	SJ35
3	K4.126.R.BSS DOOR HINGE
4	SJ36
5	PSQ21
6	60mm BACKSET ROUND BACK HANDLE WITH LOCK
7	44mm DOUBLE GLAZED SONIK DOOR (DGD52)
8	G918 EURO PROFILE CYLINDER



A-A



NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

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

DRAWING NO:
PSG-HS-18

DATE:
28.06.18

SCALE:
1:4

ISSUE NO:
1

POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	SJ17
4	SJ23
5	SJ22
6	K20 PATCH HINGE
7	10-12mm TOUGHENED GLASS DOOR
8	K10 PATCH HINGE
9	BTS 75 FLOOR SPRING
10	COFFER75 COFFER BOX

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed with Frameless Glazed Door
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:

PSG-VS-16

DATE:

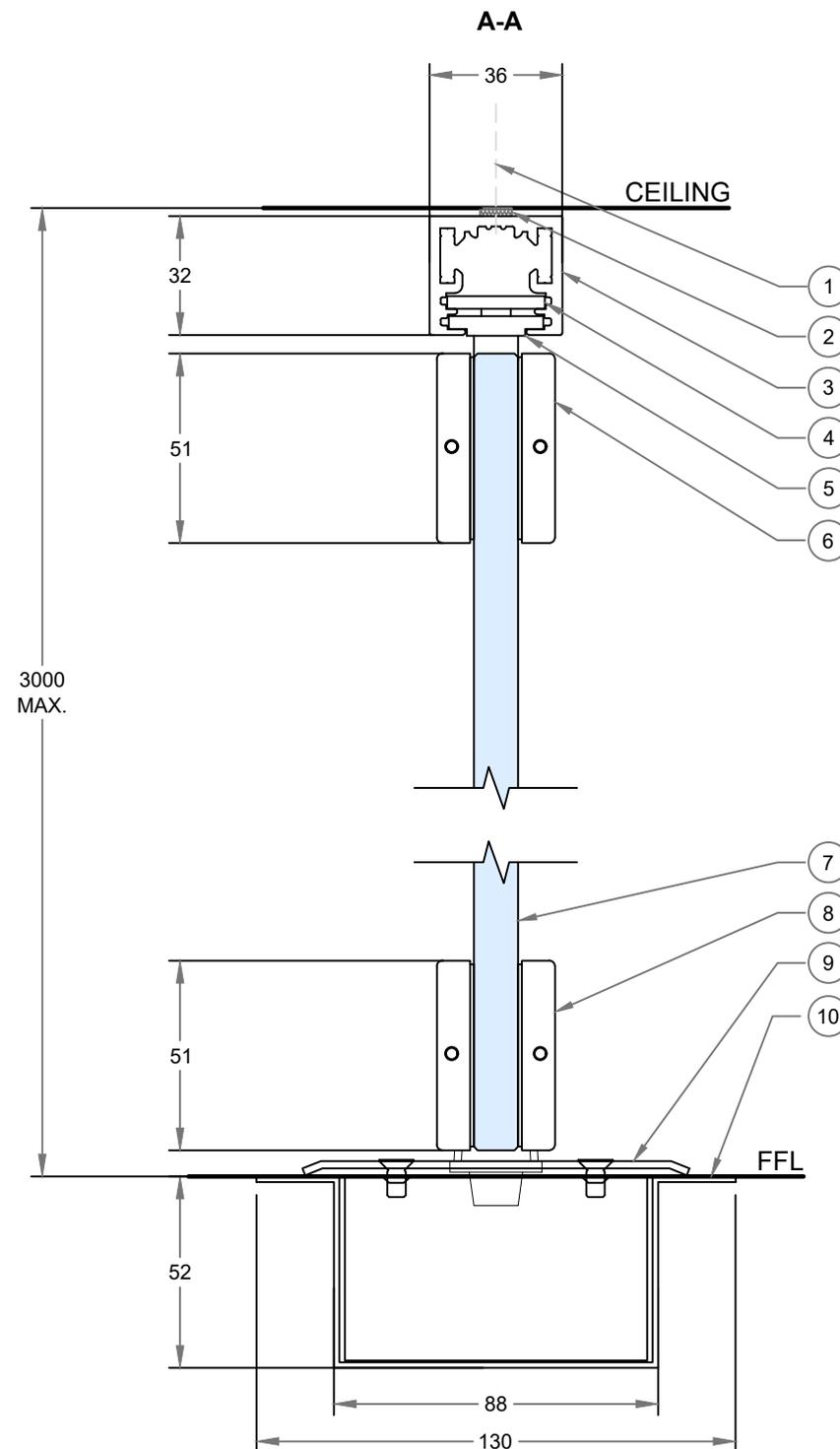
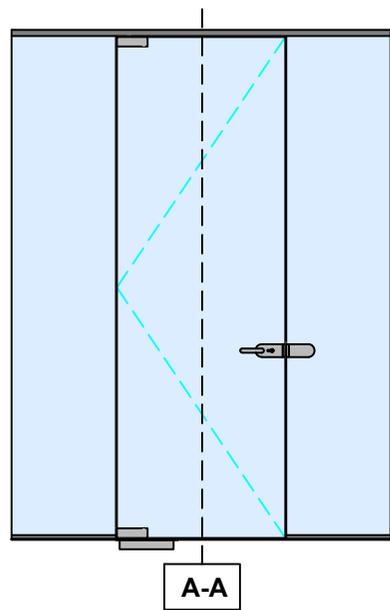
29.06.18

SCALE:

1:2

ISSUE NO:

1



POLAR SG

COMPONENT KEY:

1	SUITABLE STRUCTURAL FIXING
2	342 FOAM
3	SJ13
4	SJ17*
5	10-12mm TOUGHENED GLASS 10.8-12.8mm ACOUSTIC GLASS
6	K40PV PATCH FITTING
7	K20 PATCHHINGE
8	10-12mm TOUGHENED GLASS DOOR
9	K10 PATCH HINGE
10	BTS 75 FLOOR SPRING
11	COFFER75 COFFER BOX

NOTES:

*821 WITH SJ8 CAN BE USED AS AN ALTERNATIVE TO SJ17 (SEE PSG-VS-02).

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

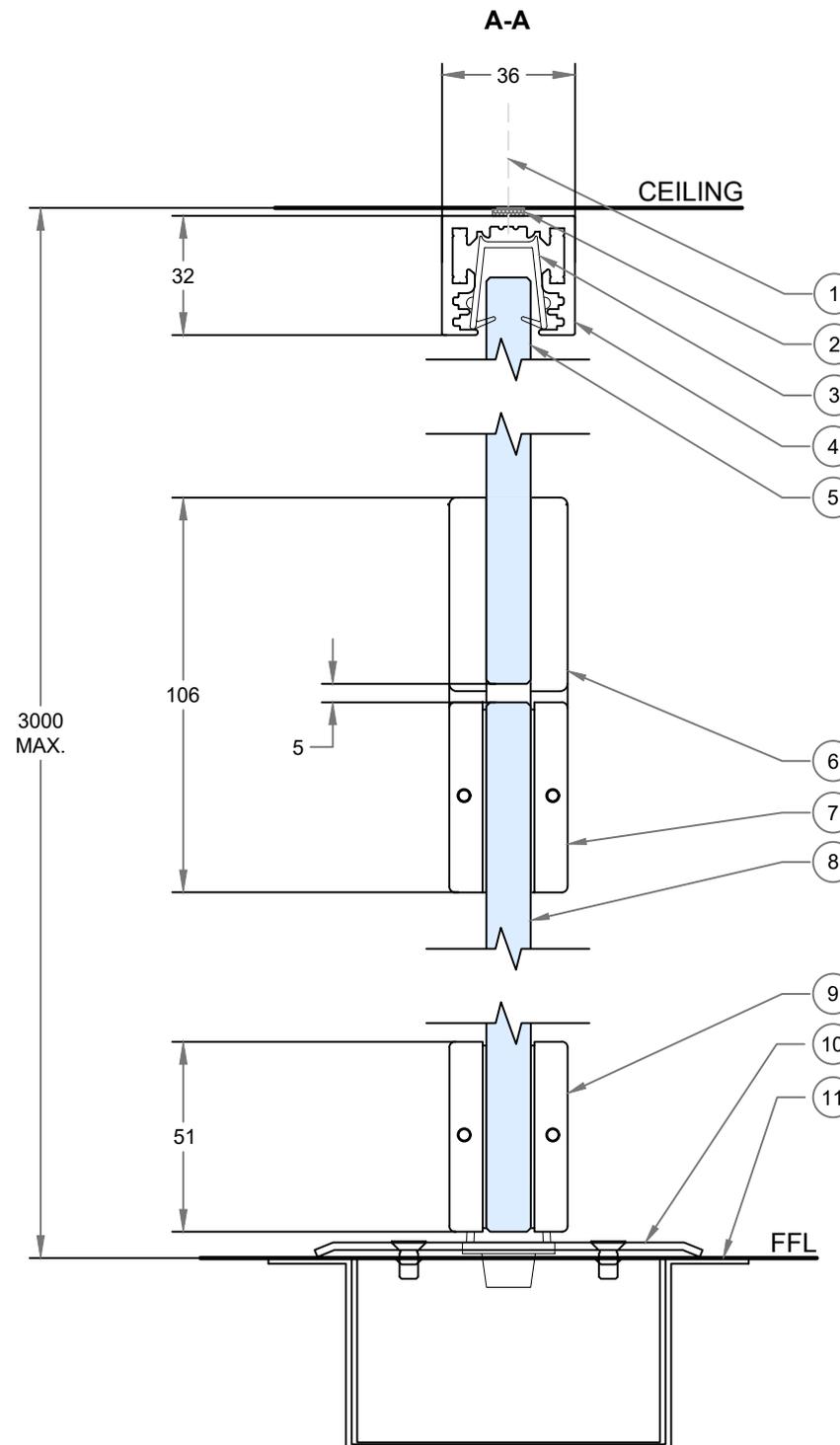
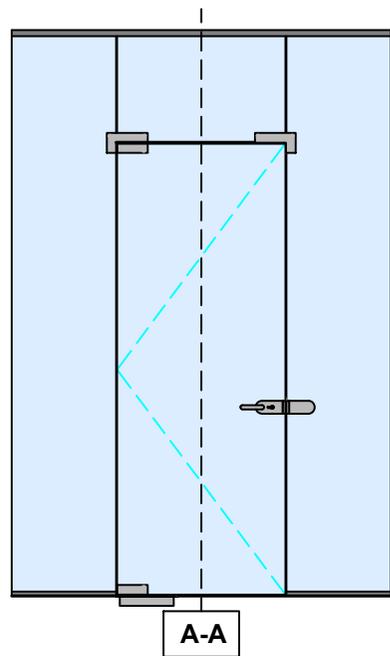
-  Single Glazed with Frameless Glazed Door & Overpanel
-  Vertical Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-VS-17

DATE:
29.06.18

SCALE:
1:2

ISSUE NO:
1



POLAR SG

COMPONENT KEY:

1	K10 PATCH HINGE
2	BTS 75 FLOOR SPRING
3	COFFER75 COFFER BOX
4	10-12mm TOUGHENED GLASS DOOR
5	K750 10.307.107 LEVER SET WITH ROSE
6	G918 EURO PROFILE CYLINDER
7	K310.15 10.212.107 PATCH LOCK SET
8	K527.15I STRIKE BOX

NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

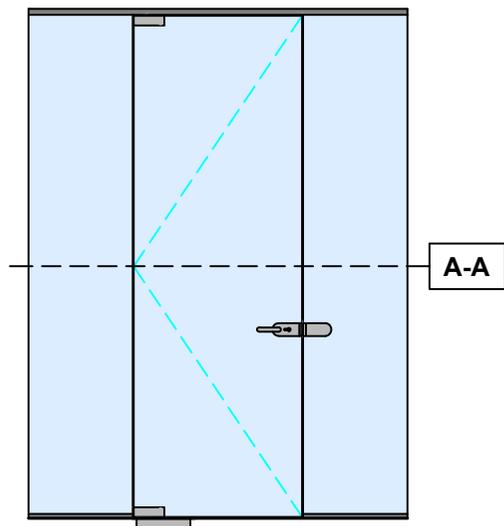
ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

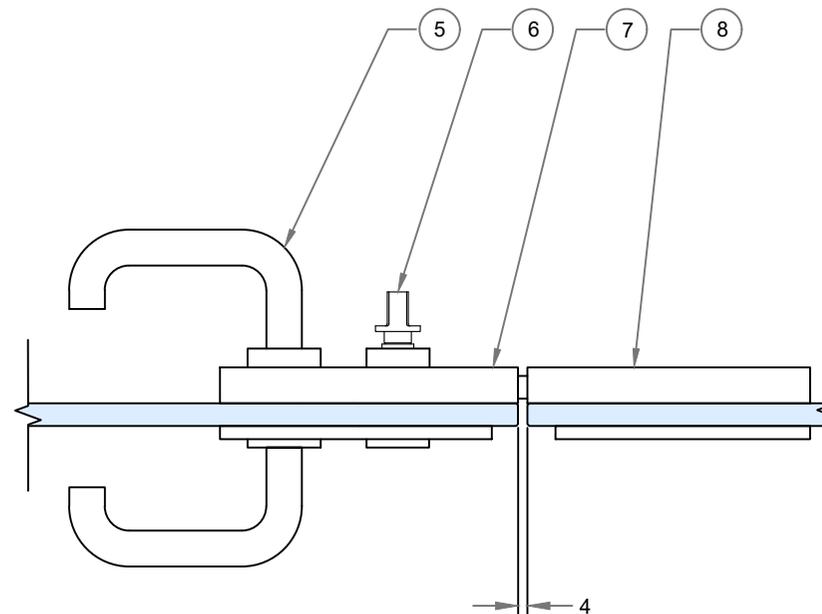
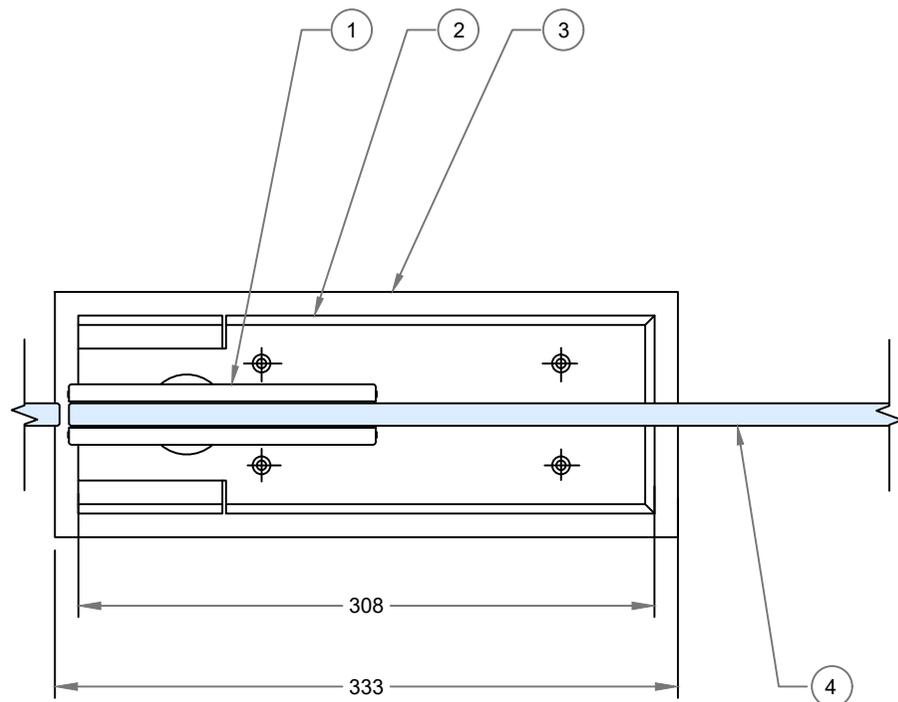
-  Single Glazed with Frameless Glazed Door
-  Horizontal Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO: PSG-HS-19 DATE: 29.06.18

SCALE: 1:4 ISSUE NO: 1



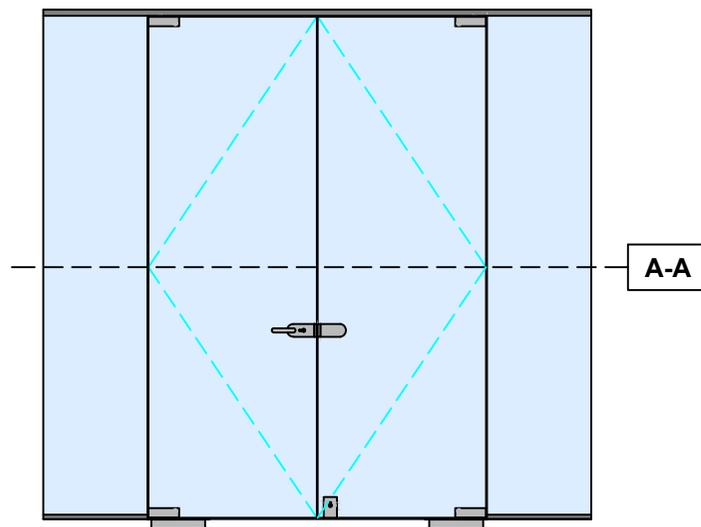
A-A



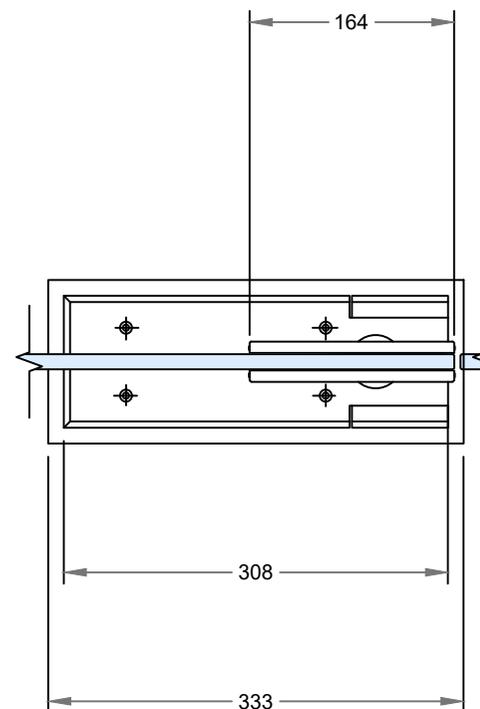
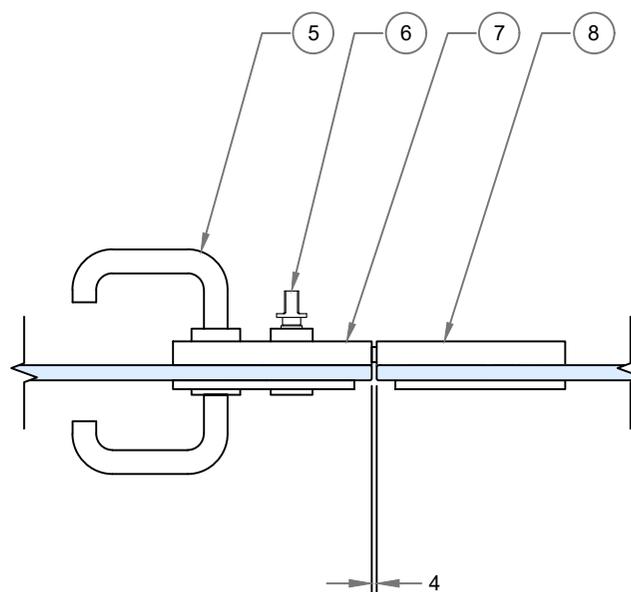
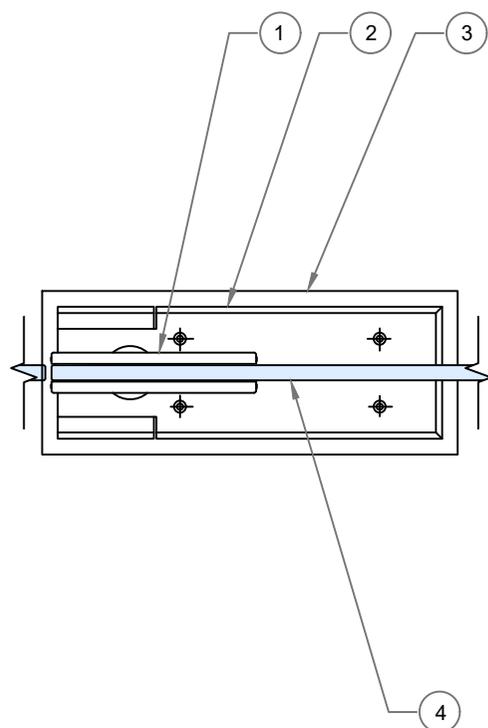
POLAR SG

COMPONENT KEY:

1	K10 PATCH HINGE
2	BTS 75 FLOOR SPRING
3	COFFER75 COFFER BOX
4	10-12mm TOUGHENED GLASS DOOR
5	K750 10.307.107 LEVER SET WITH ROSE
6	G918 EURO PROFILE CYLINDER
7	K310.15 10.212.107 PATCH LOCK SET
8	K527.15I STRIKE BOX



A-A



NOTES:

OTHER IRONMONGERY OPTIONS ARE AVAILABLE.

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed with Double Frameless Glazed Door
-  Horizontal Door
-  0 min Integrity
0 min Insulation
-  +/- 0 mm Deflection

DRAWING NO:
PSG-HS-20

DATE:
02.07.18

SCALE:
1:6

ISSUE NO:
1

POLAR SG

COMPONENT KEY:

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed
-  Component ID
-  N/A
-  N/A

DRAWING NO:
PSG-CO-01

DATE:
26.07.18

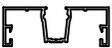
SCALE:
NTS

ISSUE NO:
1

ALUMINIUM COMPONENTS					
CODE	COMPONENT I.D	DESCRIPTION	CODE	COMPONENT I.D	DESCRIPTION
SJ17		Square Micro Head Channel	SJ170		Deflection Head Channel
SJ3		Base Channel Leg	SJ166		Deflection Head Channel
SJ2		Base Channel	SJ172		Deflection Head Channel
821		Head/Abutment Channel	PSQ60		Deflection Head Channel
SJ8		Glazing Pocket Channel	835		Head/Floor Track
SJ167		Deflection Head Channel	PSQ3		Skirting
SJ169		Deflection Head Channel	PSQ36		Skirting Channel
SJ165		Deflection Head Channel	PSQ61		Deflection Head Channel
SJ171		Deflection Head Channel	853		Vertical Stud
SJ21		Deflection Head Channel	SJ44		Wall Abutment Channel
SJ168		Deflection Head Channel	SJ10		Radius Fair End Post
SJ4		Angled Solid/Glass Reducer	SJ45		Angled Solid/Glass Reducer

POLAR SG

COMPONENT KEY:

ALUMINIUM COMPONENTS (Continued)					
CODE	COMPONENT I.D	DESCRIPTION	CODE	COMPONENT I.D	DESCRIPTION
SJ75		Squared Solid/Glass Reducer	PSQ5		Tape and Joint Solid/Glass Reducer
SJ76		Squared Solid/Glass Reducer	SJ35		Doorframe

PLASTIC / FOAM / BRUSH COMPONENTS					
CODE	COMPONENT I.D	DESCRIPTION	CODE	COMPONENT I.D	DESCRIPTION
342		Head Track Foam - Grey	SJ39		Glazing Gasket
SJ13		Glazing Channel Gasket	SJ34		Bubble Dry Joint
SJ11/SJ12		4mm/5mm Base Channel Gasket	SJ31/SJ32		Two Part Dry Joint
PSUN15		1, 3 & 6mm Clear Glazing Packers	881S50		50mm Insulation Roll
SJ36L		Glazing Channel Gasket	SJ37		Door Frame Buffer Seal
SJ36		Glazing Channel Gasket	PSQ21		Door Frame Buffer Seal

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

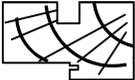
-  Single Glazed
-  Component ID
-  N/A
-  N/A

DRAWING NO: PSG-CO-02 DATE: 18.02.19

SCALE: NTS ISSUE NO: 2

POLAR SG

COMPONENT KEY:

MISCELLANEOUS COMPONENTS					
CODE	COMPONENT I.D	DESCRIPTION	CODE	COMPONENT I.D	DESCRIPTION
331		Softwood for 50mm Stud	884		Base Track Inner Gasket - Black
P279		Timber Door Frame	XK142		Base Track Outer Gasket For 12-12.8mm Glass - Black or Clear
565		Drop Down Threshold Seal	SJ69		Softwood Packer

NOTES:

ALL DIMENSIONS ARE NOMINAL & IN mm

JUNCTION CATEGORY:

-  Single Glazed
-  Component ID
-  N/A
-  N/A

DRAWING NO: PSG-CO-03 DATE: 27.07.18

SCALE: NTS ISSUE NO: 1