

# **Sliding Series** 105-125mm

10-2015-V.02

**All rights reserved.**

No part of this publication maybe reproduced, stored in a retrieval system or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without prior permission of Gulf Extrusions.

## Sliding Series 105 - 125mm

- |           |                            |           |
|-----------|----------------------------|-----------|
| 105 - A   | GULF EXTRUSIONS            | 03        |
| 105 - B   | QUALITY AND CERTIFICATIONS | 04 - 09   |
| 105 - C   | INTRODUCTION TO THE SYSTEM | 10        |
| 105 - D   | TESTING                    | 11        |
| 105/125-E | PROFILES                   | 13 - 47   |
| 105 - F   | PROFILE LIST               | 49 - 63   |
| 105 - G   | ACCESSORIES                | 65 - 68   |
| 105/125-H | ASSEMBLY DRAWINGS          | 69 - 103  |
| 105 - I   | 3D SECTIONS                | 105 - 109 |



# GULF EXTRUSIONS

Gulf Extrusions Co. LLC, the flagship company of the Al Ghurair Group of Companies, was founded in 1978, Dubai, UAE where it has over the years earned the reputation known as one of the most innovative and reliable companies in the Middle East.

Located close to its raw material supplier Dubai Aluminium Company Ltd (DUBAL), the world's largest single smelter site, Gulf Extrusions has become one of the largest extrusion plants in the region.

Gulf Extrusions quality products can be seen in many of today's progressive structures. The company was formed with the sole purpose to meet the increasing demands for aluminium extrusions in domestic, regional and international markets.

Gulf Extrusions six presses and highly skilled workforce are able to produce 60,000 metric tonnes per annum with a rated capacity of 24,000 tonnes for powder coated finish, 6,000 tonnes for anodized finish and can offer more than 18,000 profile designs. These extrusions cover numerous industries ranging from architectural to transportation, engineering to structural sections, components for household items, HVAC and customized products.

During the progressive stages of Gulf Extrusions, from its inception to expansion, the company not only has acquired a majority share in the local market, it has also made its presence felt globally throughout the GCC countries, Indian sub -continent, South East Asia, Australia, Africa, Europe and Canada.

Our commitment and utmost priority is to provide customers with the finest quality of aluminium extrusions.

Gulf Extrusions looks ahead to inevitable challenges and product advancements of the new era.

Quality is an inseparable element of all activities carried out at Gulf Extrusions. Gulf Extrusions is dedicated to respond and deliver on time, high quality, tailor-made and cost effective products. The management and staff are committed to implement a comprehensive and integrated Quality Management System in accordance with the International Quality Standards of ISO 9001 and ISO 14001.

### **INTERNATIONAL STANDARD COMPLIANCE**

Extrusions Dimensions Tolerances:

- BS EN 755 - 9:2008
- BS EN 12020 - 2:2008
- DIN 1748, DIN 17615
- ASTM B221

Powder Coated Finish:

- BS:6496 Clause: 10.4, 10.5, 10.6, 10.7 & 10.8
- ISO 2360 / 2813 / 2409 / 2931
- Minimum Film Thickness – 60 Microns

Anodizing Finish:

- BS EN 12373-1 2001 Clause 7 (BS:6161 Part 6)
- BS:3987 Clause 2, 3, 5, 6
- Appendix- A, B, C, D, E, F, G, H, J, K, L Minimum Film Thickness- 16 Microns



### **PRODUCT QUALITY CERTIFICATES**



Qualicoat (European Powder Coaters Association):

- A quality label for coating on metal for Architectural Applications
- A product license under the control of EWAA (European Wrought Aluminium Association) in Zurich Switzerland



Qualanod (European Anodizers Association):

- A quality label organization to guarantee high quality Aluminium Anodizing.
- A product license under the control of EWAA (European Wrought Aluminum Association) in Zurich Switzerland



- SASO



- ESMA



Management:

- ISO 9001 (Quality Management System)



- ISO/TS 16949:2009 (Management System)



Environment:

- ISO 14001 (Environment Management System)



Membership in International Organization:

- AAC member (Aluminium Anodizers Council - USA)
- AEC member (Aluminum Extruders Council - USA)
- DIN EN 15088

## CHEMICAL COMPOSITIONS

### ALLOY 6005A

Element	Minimum	Maximum
Si	0.50	0.90
Fe	-	0.35
Cu	-	0.30
Mn	-	0.50
Mg	0.40	0.70
Cr	-	0.30
Zn	-	0.20
Ti	-	0.10
Other Each	-	0.05
Other Total	-	0.15
Aluminium	Remainder	

### ALLOY 6060

Element	Minimum	Maximum
Si	0.30	0.60
Fe	0.10	0.30
Cu	-	0.10
Mn	-	0.10
Mg	0.35	0.60
Cr	-	0.05
Zn	-	0.15
Ti	-	0.10
Other Each	-	0.05
Other Total	-	0.15
Aluminium	Remainder	

### ALLOY 6063

Element	Minimum	Maximum
Si	0.20	0.60
Fe	-	0.35
Cu	-	0.10
Mn	-	0.10
Mg	0.45	0.90
Cr	-	0.10
Zn	-	0.10
Ti	-	0.10
Other Each	-	0.05
Other Total	-	0.15
Aluminium	Remainder	

### ALLOY 6082

Element	Minimum	Maximum
Si	0.70	1.30
Fe	-	0.50
Cu	-	0.10
Mn	0.40	1.00
Mg	0.60	1.20
Cr	0.04	0.15
Zn	-	0.20
Ti	-	0.10
Other Each	-	0.05
Other Total	-	0.15
Aluminium	Remainder	

### ALLOY 6061

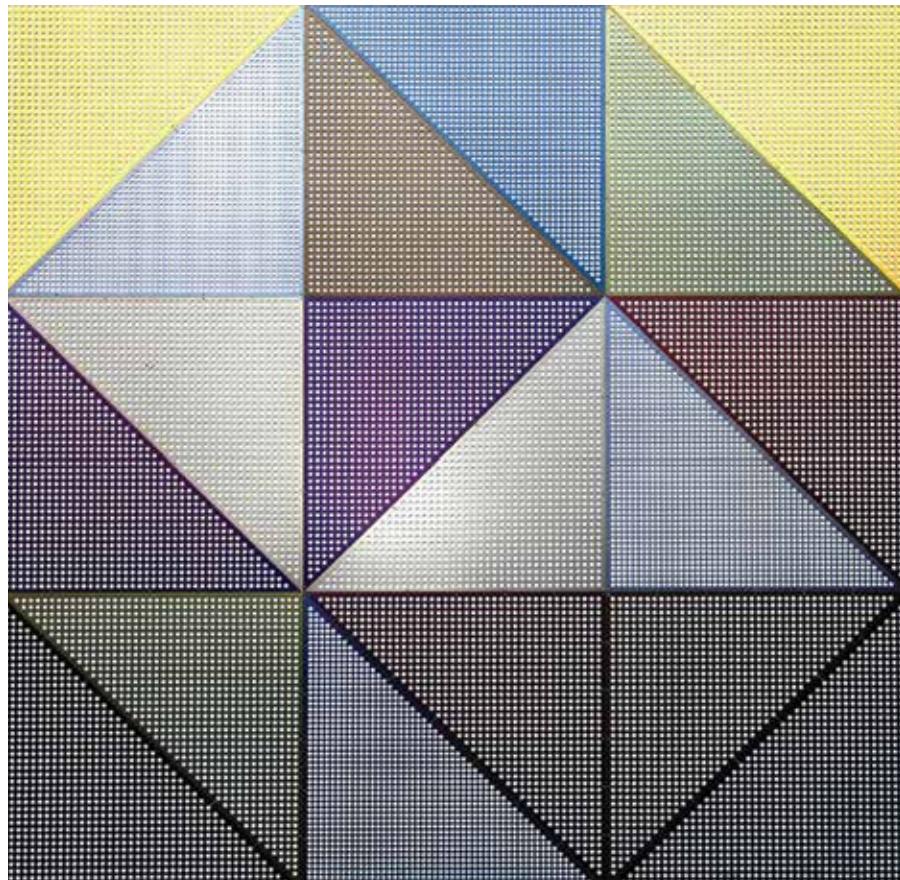
Element	Minimum	Maximum
Si	0.40	0.80
Fe	-	0.70
Cu	0.15	0.40
Mn	-	0.15
Mg	0.8	1.20
Cr	0.04	0.35
Zn	-	0.25
Ti	-	0.15
Other Each	-	0.05
Other Total	-	0.15
Aluminium	Remainder	

**ANODIZING**

A wide range of anodizing treatment options are possible for the aluminium profile sections of this system. The color choices from Gulf Extrusions range from Natural, Gold, and Bronze to Spectro colors (Red, Blue, Green, and Gray).

This surface treatment process involves first pre-treatment with scotch brite brushing for the unfinished profiles, and then subsequently fully immersing the aluminium profiles in an acidic electrolyte solution through which electric current is passed creating an anodic film on the profiles ranging from 5-30MICs.

The process is guaranteed and certified for use by QUALANOD - A quality label Organization to guarantee high quality aluminium anodizing and the company's ISO 9001 certification.



## Authorization to use the quality sign



This is to certify that

**Gulf Extrusions Co. Ltd**

P.O. Box 5598  
AE – Dubai

**Licence number: 2000**

is authorized to use the quality sign which is shown above according to the REGULATIONS FOR USE OF THE QUALANOD QUALITY LABEL FOR SULPHURIC ACID-BASED ANODIZING OF ALUMINIUM.

**Date of issue of the licence:** 10.03.2000

**Period of validity of the licence:** until 31.12.2015

Zurich, 17 November 2014

**QUALANOD**

Thomas Becker  
President

**CERTIFICATION BODY**

Josef Schoppig  
AC-Fiduciaire SA




---

Mailing address:  
QUALANOD, P.O. Box 1507, CH-8027 Zurich  
Domicile:  
QUALANOD c/o AC-Fiduciaire SA, Tödistrasse 47, CH-8002 Zurich

Phone: +41 (0)43 305 09 70  
Fax: +41 (0)43 305 09 98  
E-mail: info@qualanod.net  
Internet: www.qualanod.net

**POWDER COATING**

- Horizontal & Vertical Powder coating lines with an Annual Capacity of 24 000 MT  
Powder Coating BS: 6496 Clause: 10.4, 10.5, 10.6, 10.7, & 10.8  
ISO 2360/2813/2409/2931  
Minimum Film Thickness - 60 Microns

A wide choice of colors for powder coating can be used for the aluminium profile sections.

From Gulf Extrusions the following powder types are available

- Polyester Façade (PE-F)
- Super Durable Façade (SDF) & Hyper Durable Façade (HDF) (Where SDF & HDF are equivalent to Poly-Vinylidene DiFluoride (PVDF) in terms of corrosion performance)
- Anti Bacterial (recommended to be used in Hospitals)
- Anti Static (recommended for laboratories, electronics assembly buildings) and Heat Resistant in nature.

This surface treatment process involves the following pre-treatment

1. Degreasing
2. Washing
3. Etching
4. Washing
5. Chromatising
6. Double washing in dematerialized water

Once completed, powder is applied using an electrostatic spraying process with charged powder particles, followed by curing in an oven under a controlled temperature of 180-200C for paint polymerization where the paint layer is at least 60mic.

This whole process is certified for use from QUALICOAT - A quality label for coating on metal for Architectural Applications.

**GUARANTEE PERIOD:**

10 years for PE-F Quality

25 years for PE-SDF

**Authorization to use the quality sign**

This is to certify that

**Gulf Extrusions Co. Ltd**

P.O. Box 5598  
AE – Dubai

**Licence number: 1901**

is authorized to use the quality sign which is shown above according to the REGULATIONS FOR THE USE OF THE QUALICOAT QUALITY SIGN FOR PAINT, LACQUER AND POWDER COATINGS ON ALUMINIUM FOR ARCHITECTURAL APPLICATIONS.

**Date of issue of the licence:** 15.03.2000

**Period of validity of the licence:** until 31.12.2015

Zurich, 17 November 2014

QUALICOAT

M.C.Panam

Mohammed C. Panam  
President

CERTIFICATION BODY

Urin

Josef Schoppig  
AC-Fiduciaire SA



Mailing address:  
QUALICOAT, P.O. Box 1507, CH-8027 Zurich  
Domicile:  
QUALICOAT c/o AC-Fiduciaire SA, Tödistrasse 47, CH-8002 Zurich

Phone: +41 (0)43 305 09 70/79  
Fax: +41 (0)43 305 09 98  
E-mail: info@qualicoat.net  
Internet: www.qualicoat.net

# INTRODUCTION TO THE SYSTEM

105 mm GulfEx Series is a design concept to combine esthetics and performance. Full solution package is supported to fulfill the requirements to cover the needed applications. According to the American National Standard It is designed for heavy duty use. The results have been impressive. All profiles are available in all colors in order to meet today's modern architectural requirements. For better performance of the system, alignment cleats for the frame and shutter are used. Specially designed EPDM Gaskets are made available with the system to enhance the performance and create easy assembly. Other accessories such as rollers and handles come as part of the system.

**Sections:**

The sections in Gulf Extrusions line are produced by extruding aluminum on a wide range of presses starting with 800 tons to 4400 tons press. They are made of aluminum alloy 6060, 6063, 6082 and 6005 according to British Standard Specification for extrusion Dimension Tolerances BS EN 755-9:2008 and BS EN 12020-2:2008.

**Frame:**

Tubular with a width of 105mm, a wide range of frames are available to suit most of the required applications in the building codes. A 125mm frame is available to widen the use of the system. Fly screen rail is embedded in the frames. It is made for internal and external fly screen depending on the project requirements.

**Sash:**

Tubular straight, elegant and stylish. A wide range is available to cover all the needed applications and glass thickness.

**Assembly:**

Assembly of the frames is done by 45° cut whereas the sashes are custom 90° cut.

Al Futtaim Exova LLC  
 Dubai Investments Park  
 P.O. Box 34924, Dubai  
 United Arab Emirates

T: +971 (0)4 885 1001  
 F: +971 (0)4 885 4004  
 E: dubai.lab@exova.com  
 W: www.exova.com



Testing. Advising. Assuring.

## Confirmation of Testing Compliance

### FAÇADE TESTING & ADVISORY SERVICES DIVISION

Ref. AFE Report No: DLR0603 Date: April 2010

AFE COTC No: WQ09 12942 / C904

<b>System Supplier:</b>	<b>Installer:</b>
Gulf Extrusions Co.,	Gulf Extrusions Co.,
P. O. Box 5598,	P. O. Box 5598,
Dubai,	Dubai,
U.A.E	U.A.E

**Project:** System Development

**System:** Sliding Window 105mm Series

Al Futtaim Exova (AFE) tested components from the above-mentioned system at their Dubai laboratory on the date shown for the following parameters:

- › Air Infiltration ASTM E283-04
- › Water Penetration ASTM E331-00 (Static)
- › Wind Resistance ASTM E330-02 (Serviceability)
- › Wind Resistance ASTM E330-02 (Safety)
- › Performance grade ANSI/AAMA/NWWDA 101/I.S.2.97

At the time of test, the system was found to comply with specification requirements for all the parameters tested. This confirmation of testing compliance relates only to the system described above, installed and tested at AFE Dubai laboratory, as fully detailed in test report referenced above.

Signed:

Test Engineer

Signed:

Manager

Company Commercial License No: 546636

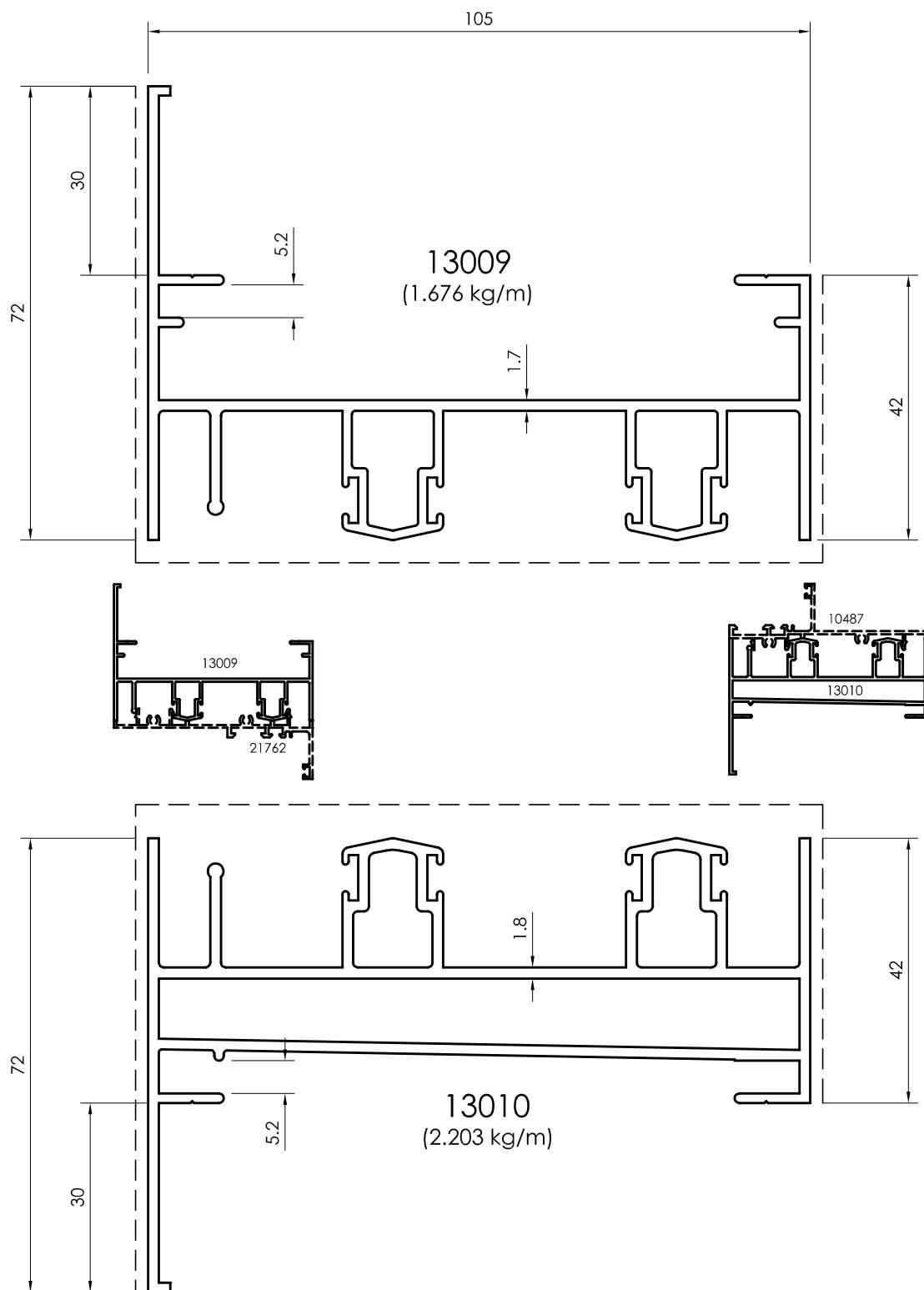




# PROFILES

**Frame Profiles - 105mm**

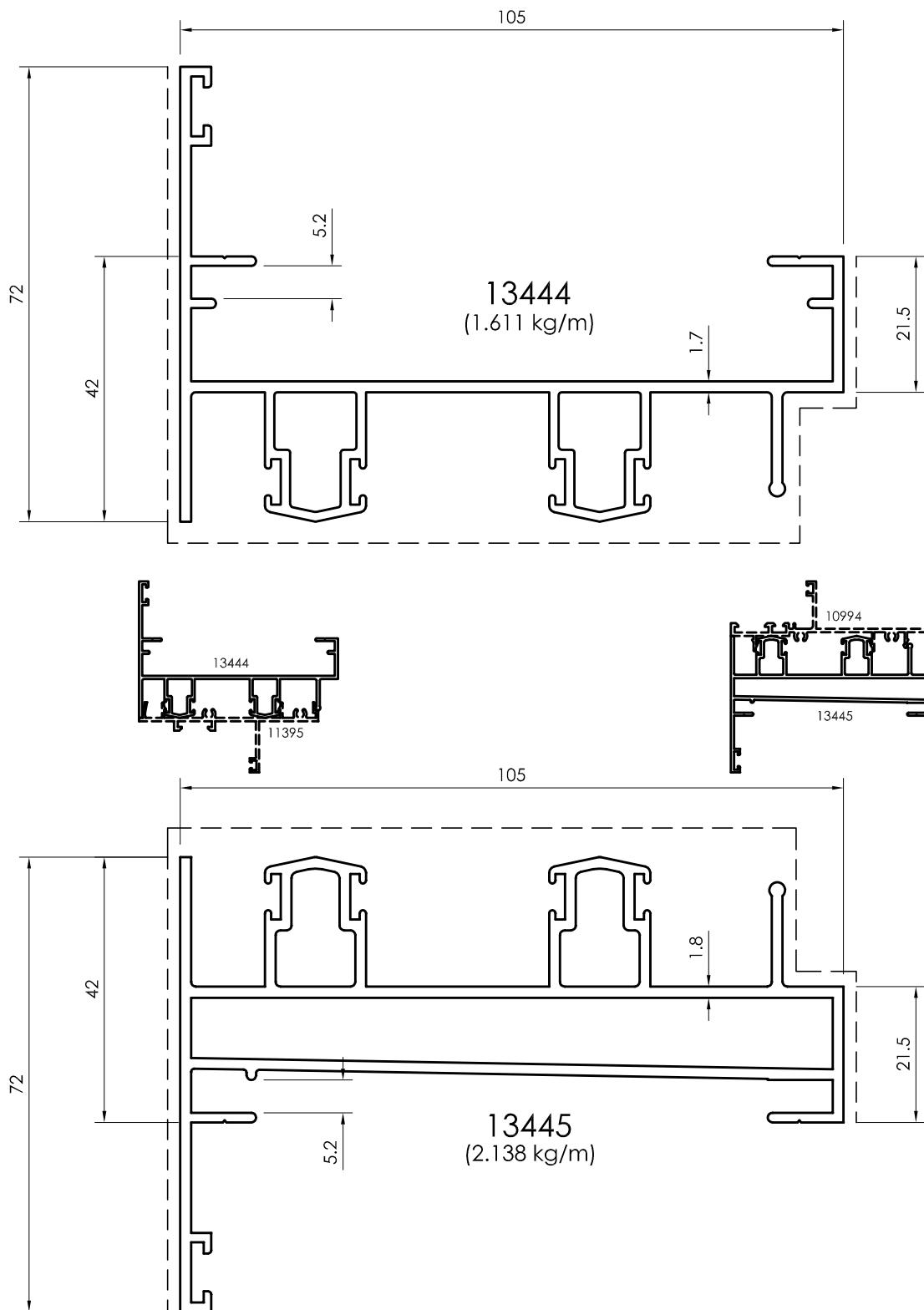
Fly Screen Inside



All dimensions in mm  
Visible area \_\_\_\_\_

**Frame Profiles - 105mm**

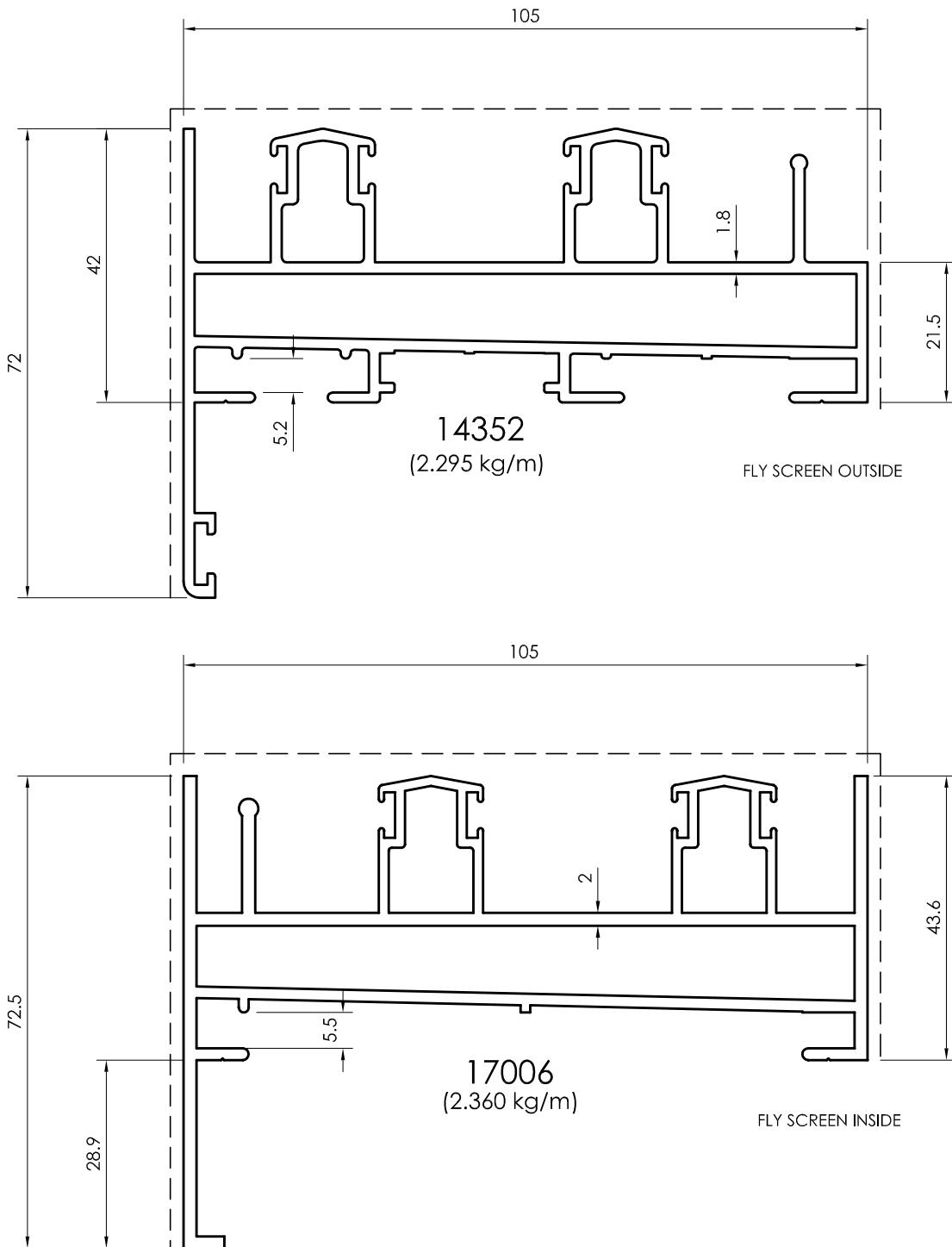
Fly Screen Outside



All dimensions in mm  
— Visible area

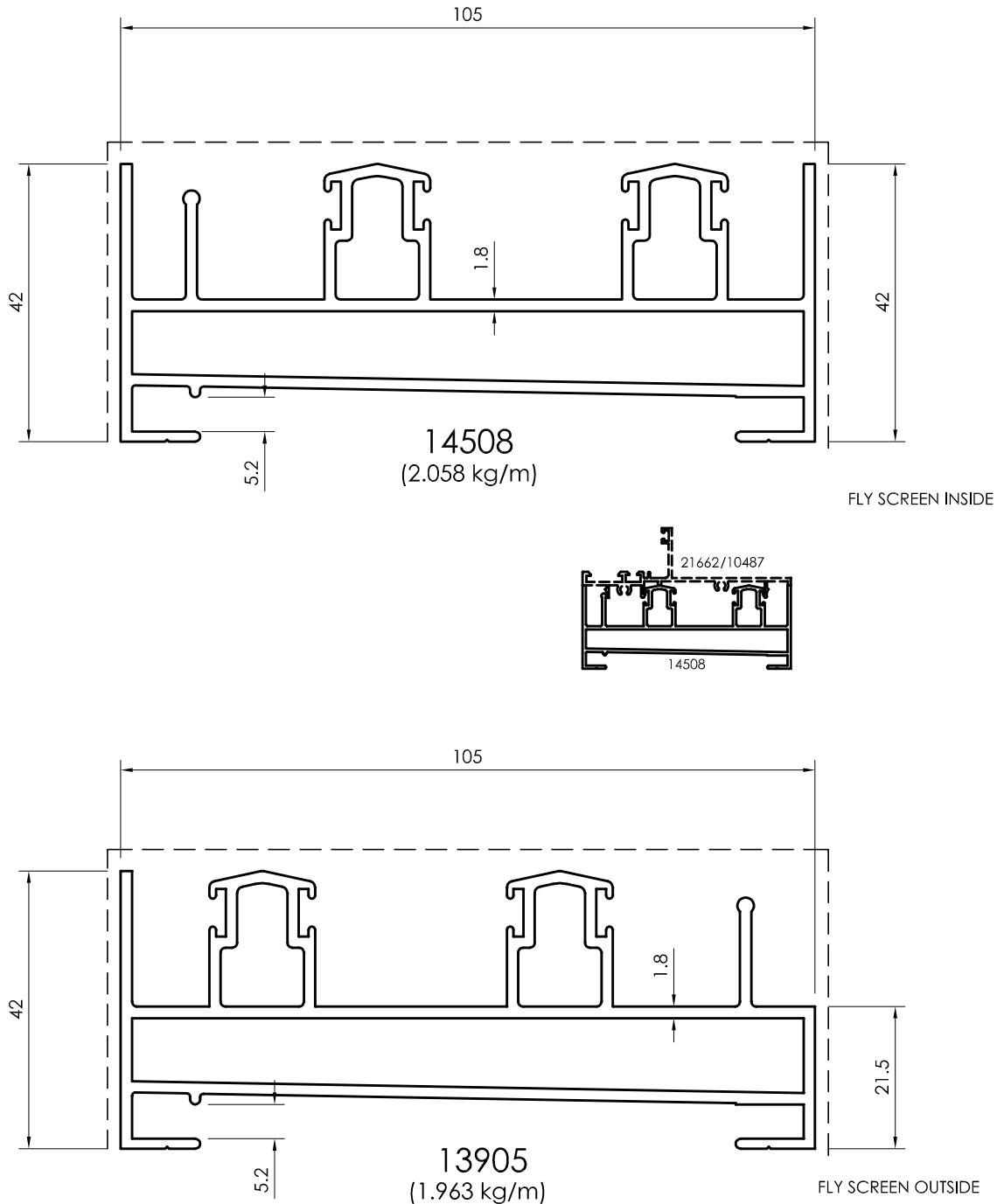
**Frame Profiles - 105mm**

Fly Screen In &amp; Outside



All dimensions in mm  
Visible area \_\_\_\_\_

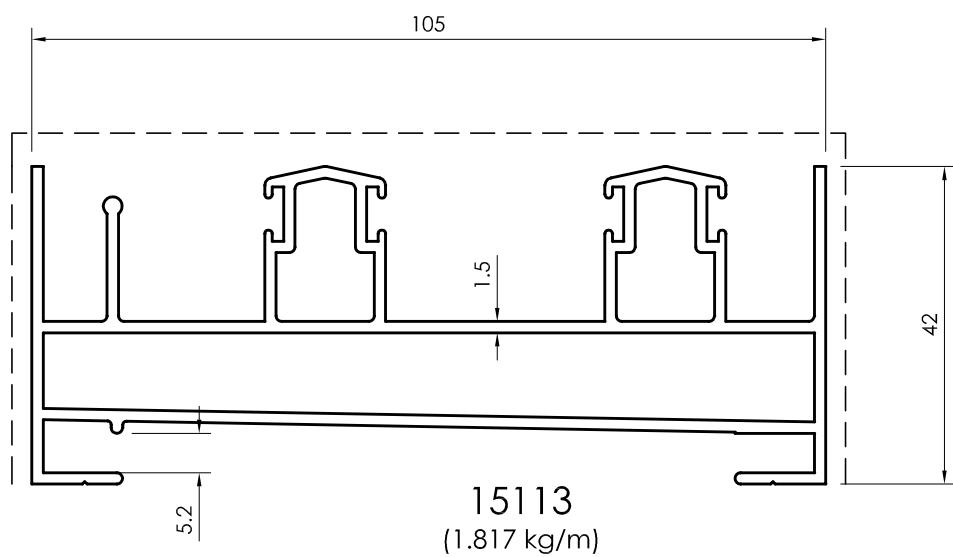
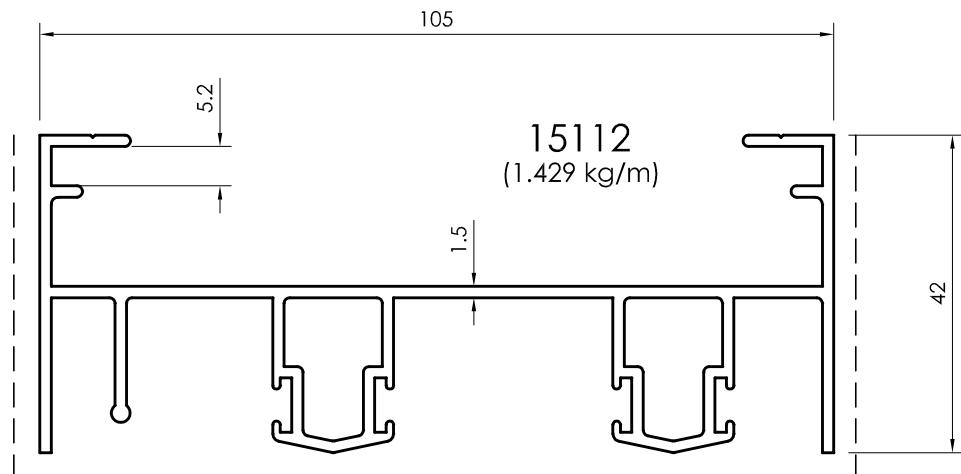
**Frame Profiles - 105mm**  
Fly Screen In & Outside



All dimensions in mm  
— Visible area

**Frame Profiles - 105mm**

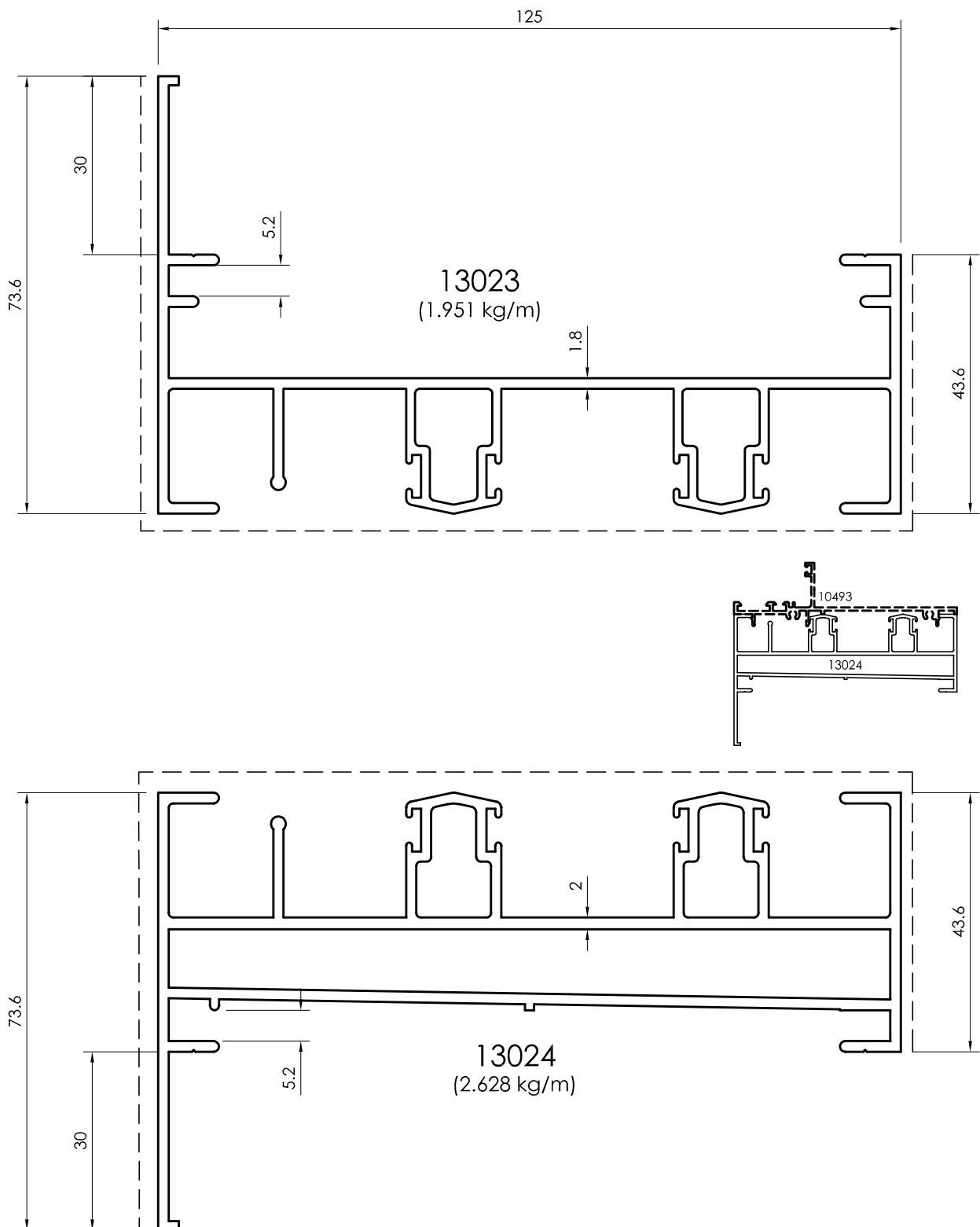
Fly Screen Inside



All dimensions in mm  
Visible area \_\_\_\_\_

**Frame Profiles - 105mm**

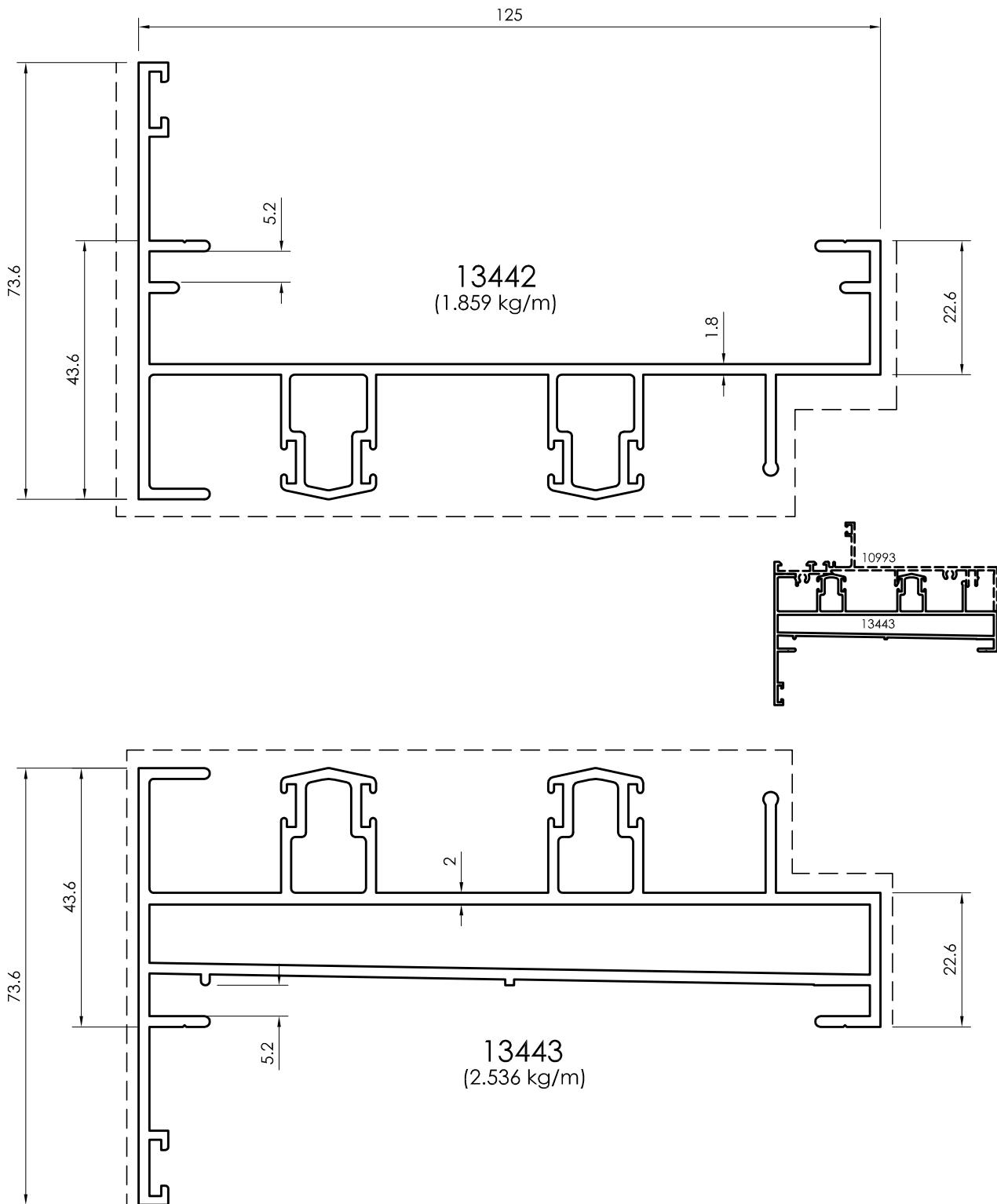
Fly Screen Inside



All dimensions in mm  
--- Visible area

**Frame Profiles - 125mm**

Fly Screen Outside

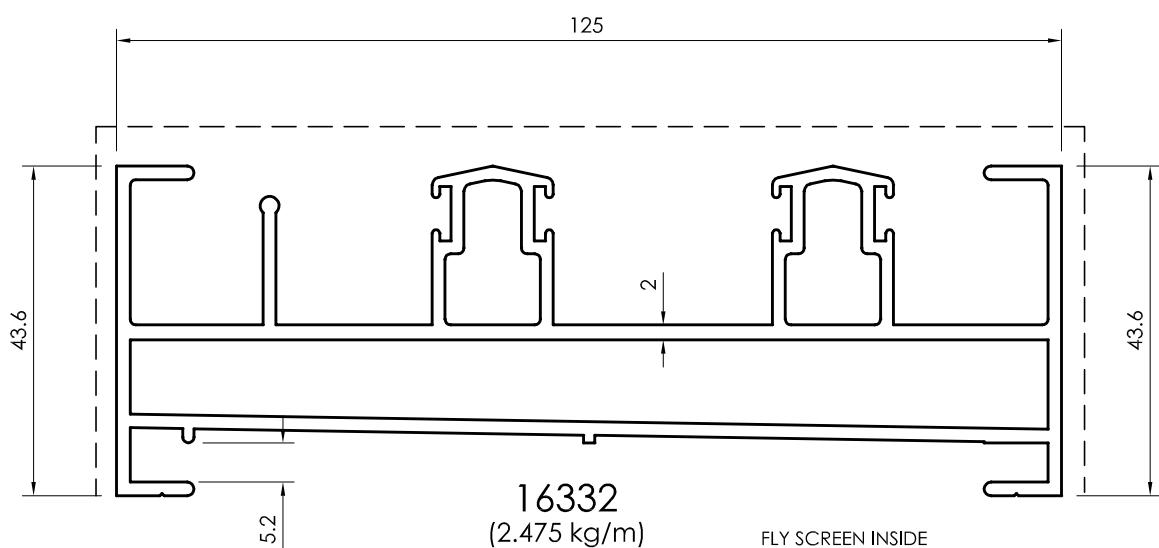
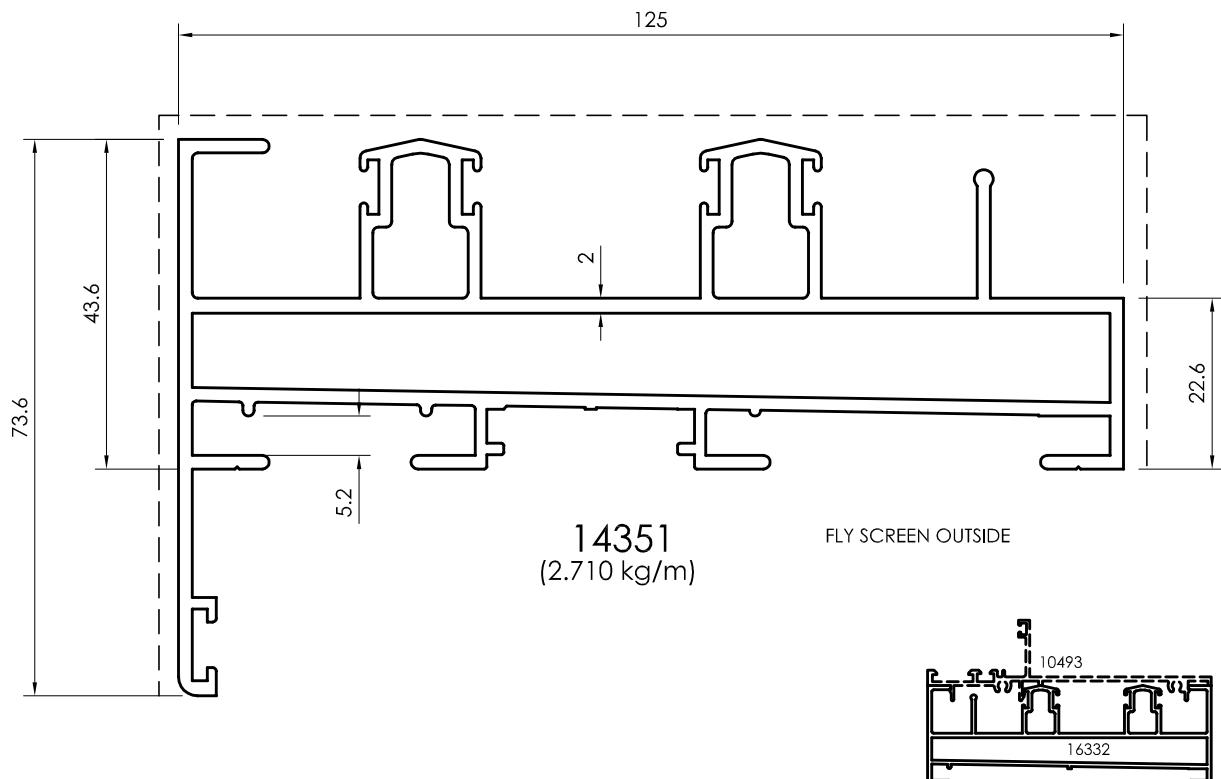


All dimensions in mm

----- Visible area

**Frame Profiles - 125mm**

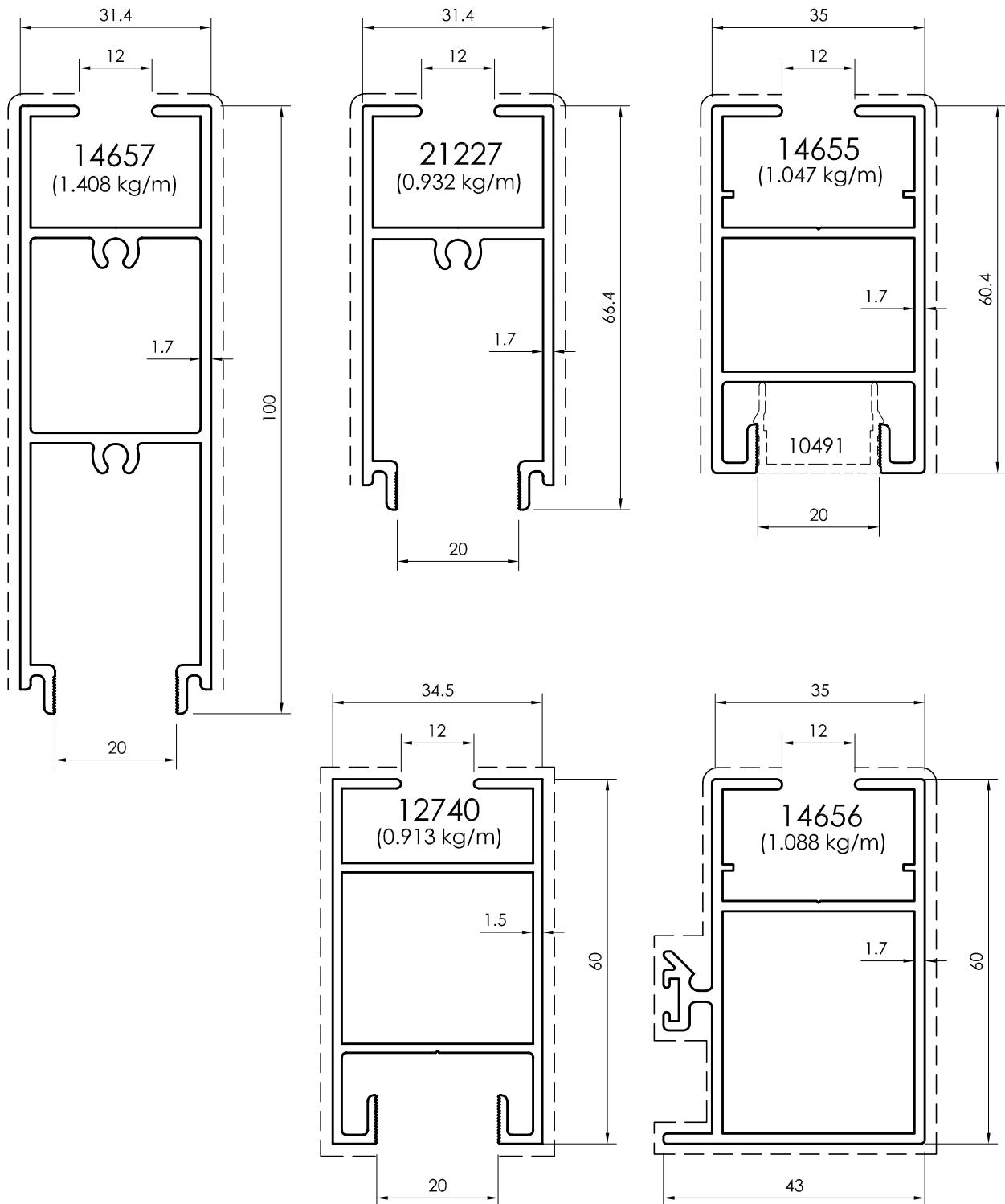
Fly Screen In &amp; Outside



All dimensions in mm  
— Visible area

**Sash / Interlock Profiles - 105mm / 125mm**

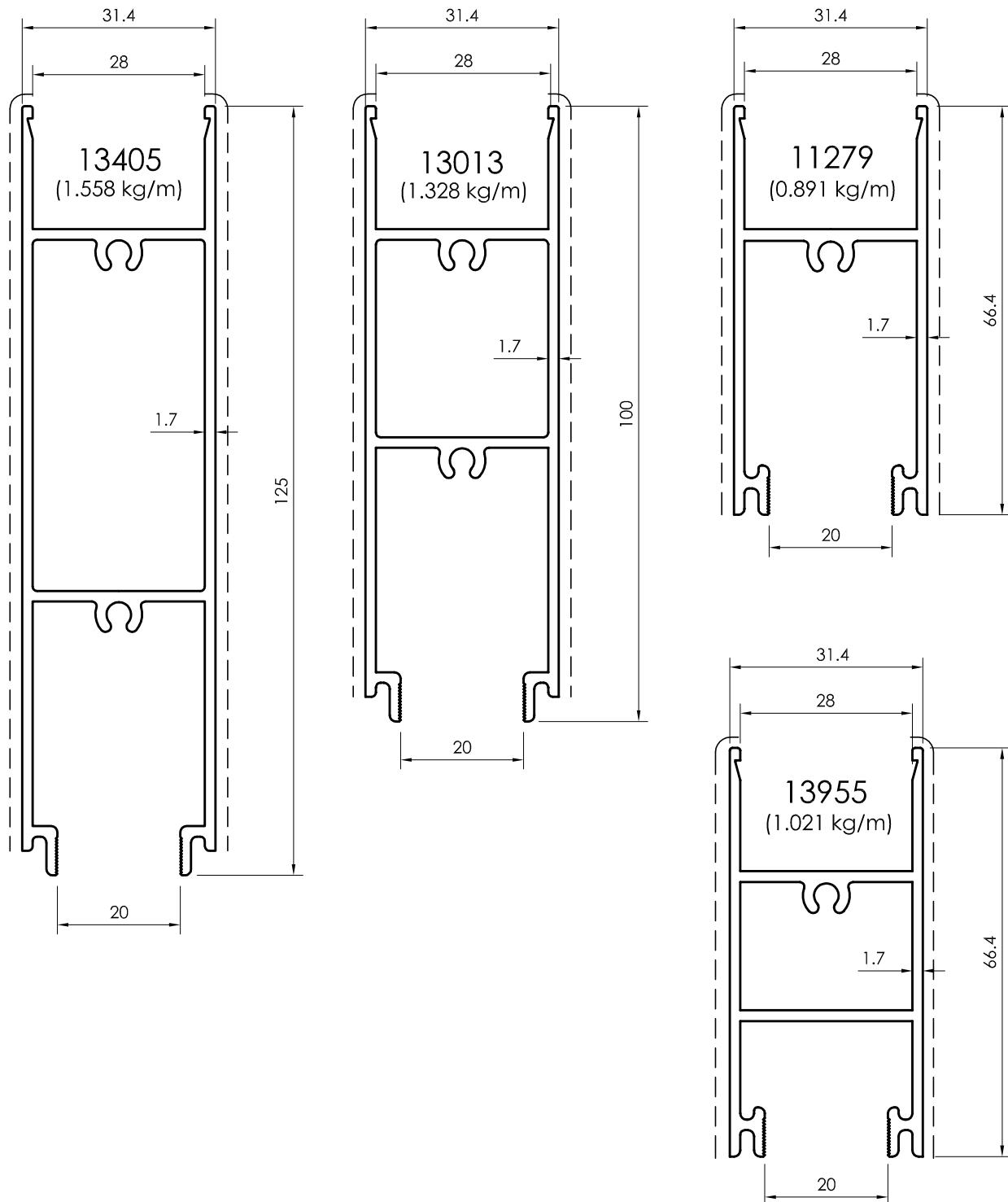
Used With Umbrellas Frame Profile



All dimensions in mm  
Visible area \_\_\_\_\_

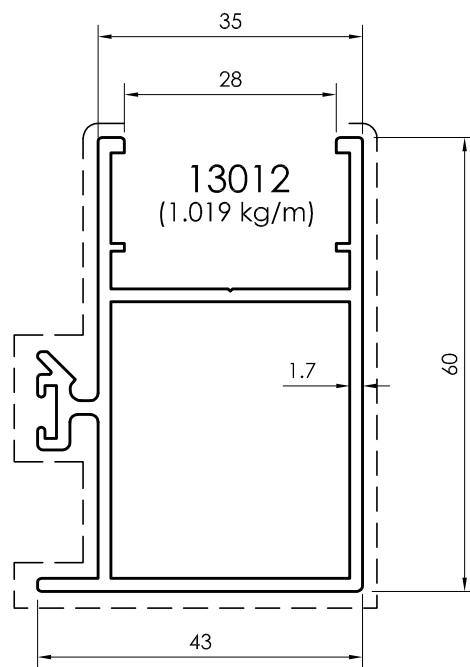
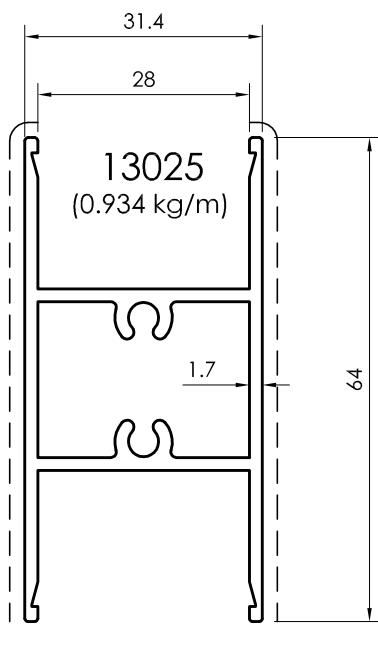
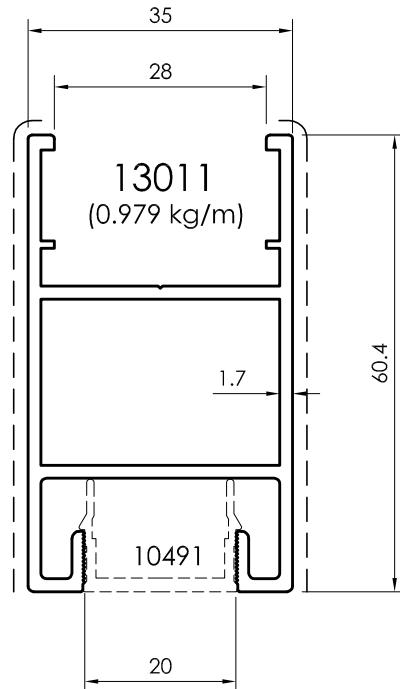
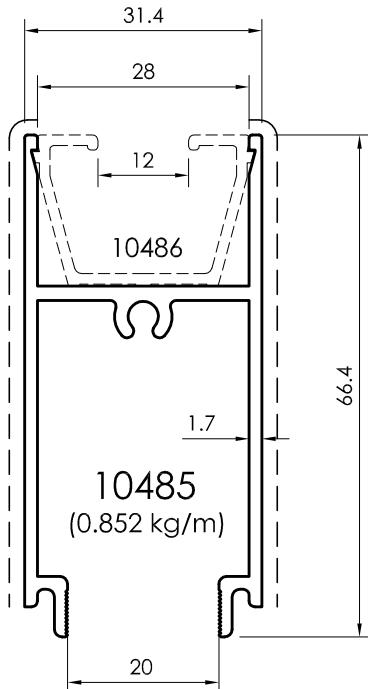
**Sash Profiles - 105mm / 125mm**

Used With Umbrellas Frame Profile

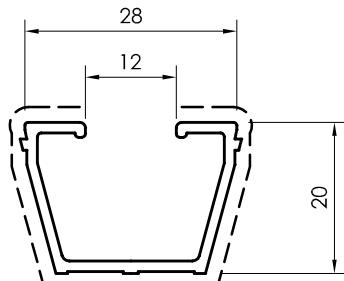


All dimensions in mm  
— Visible area

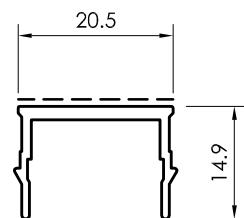
**Sash / Interlock Profiles - 105mm / 125mm**  
Used With Umbrellas Frame Profile



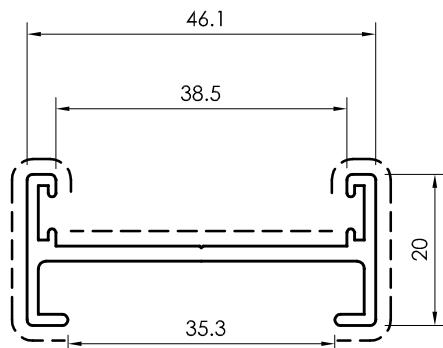
All dimensions in mm  
Visible area \_\_\_\_\_

**Complementary Profiles - 105mm / 125mm**

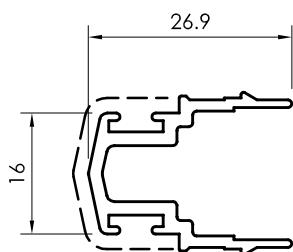
**10486**  
(0.282 kg/m)  
SASH SINGLE GLASS ADAPTOR



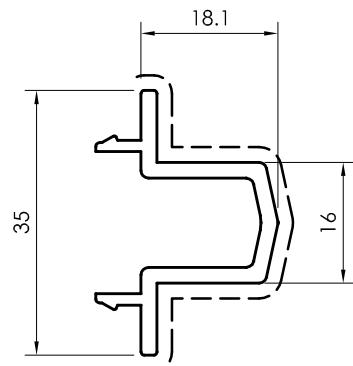
**10491**  
(0.181 kg/m)  
SASH COVER CAP



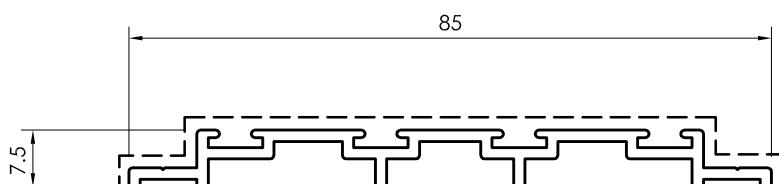
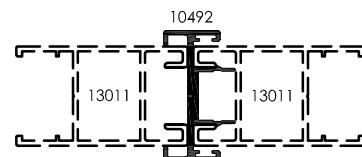
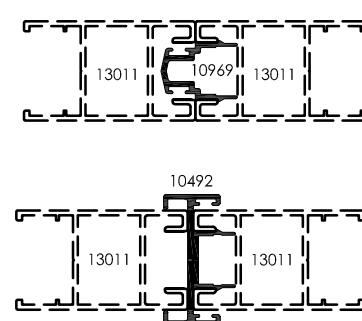
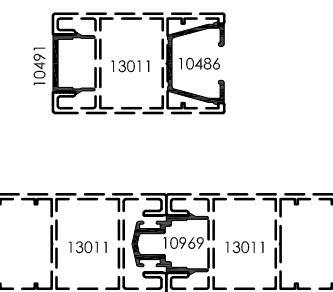
**10492**  
(0.468 kg/m)  
4 VENTS MID SECTION



**10969**  
(0.332 kg/m)  
4 VENTS MID SECTION



**21111**  
(0.413 kg/m)  
4 VENTS MID SECTION



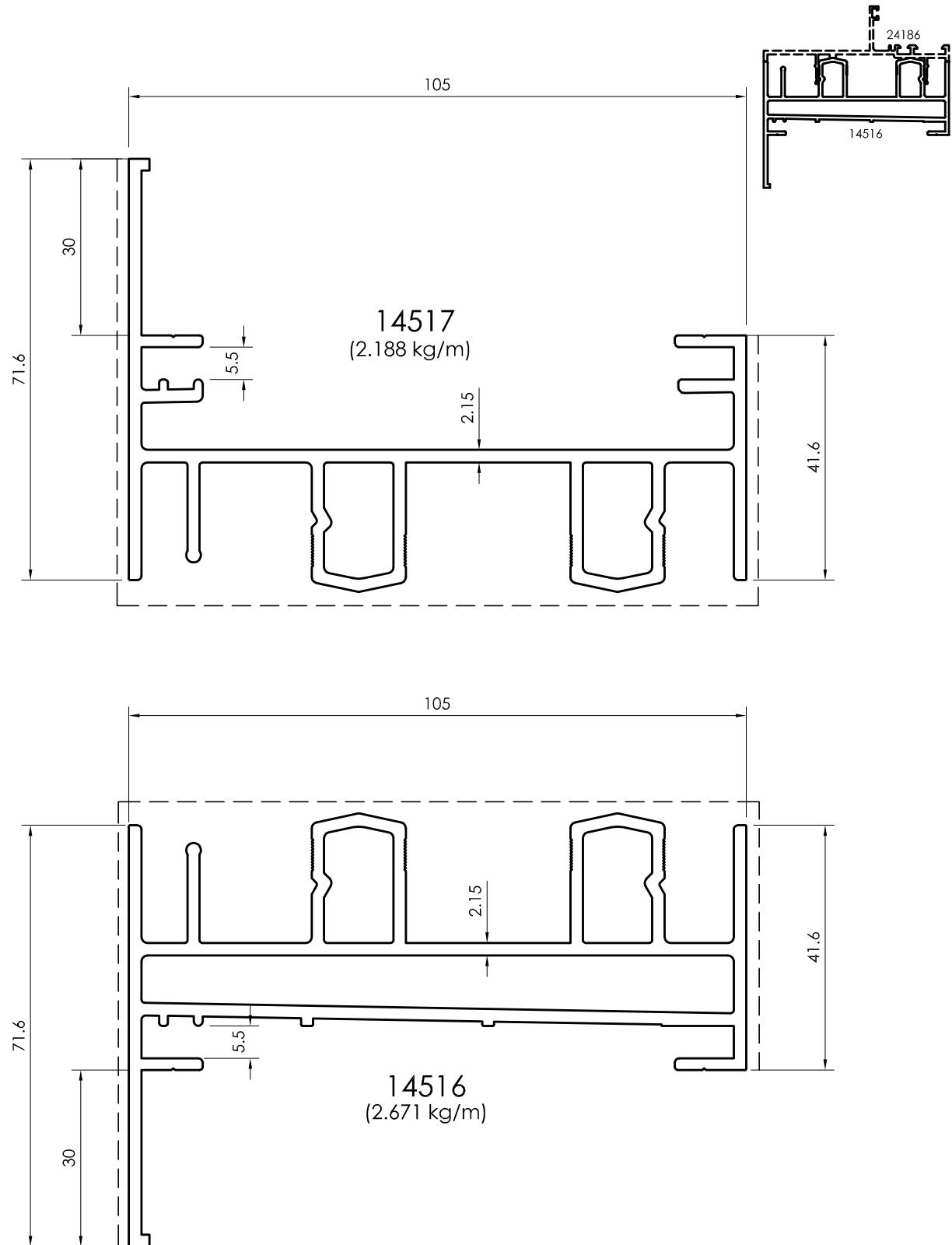
**10657**  
(0.515 kg/m)  
DUST PROOF PROFILE



All dimensions in mm  
— Visible area

### Frame Profiles - 105mm

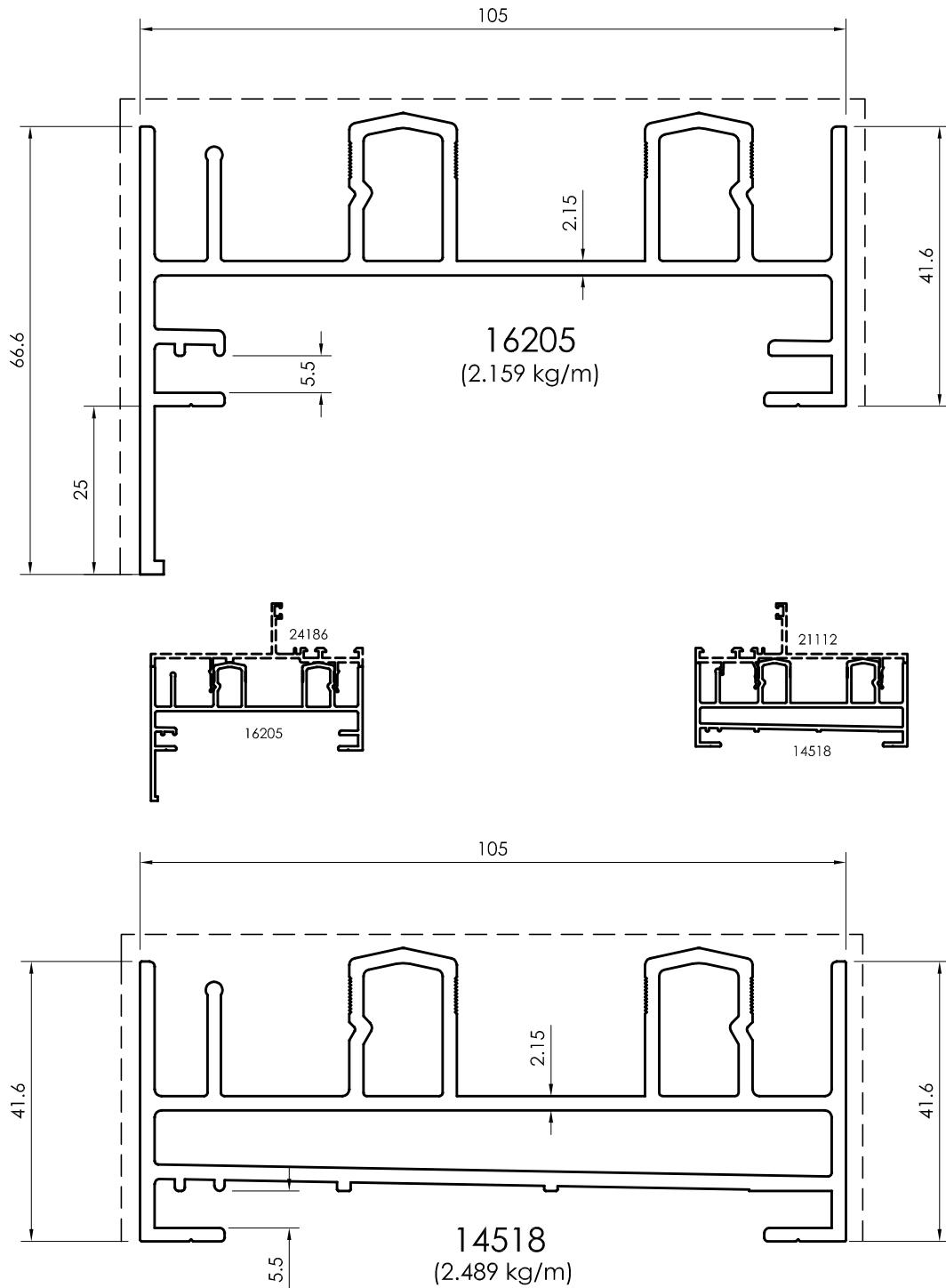
Fly Screen Inside



All dimensions in mm  
Visible area \_\_\_\_\_

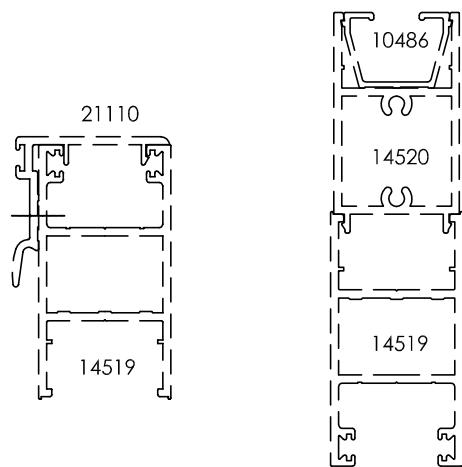
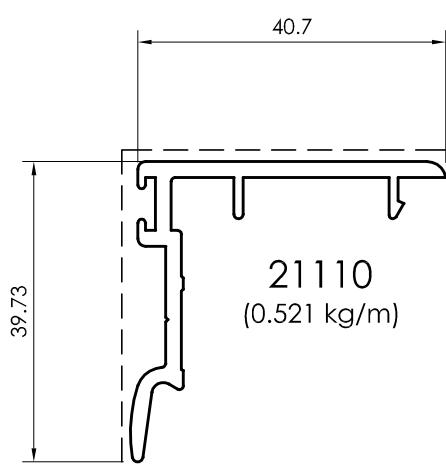
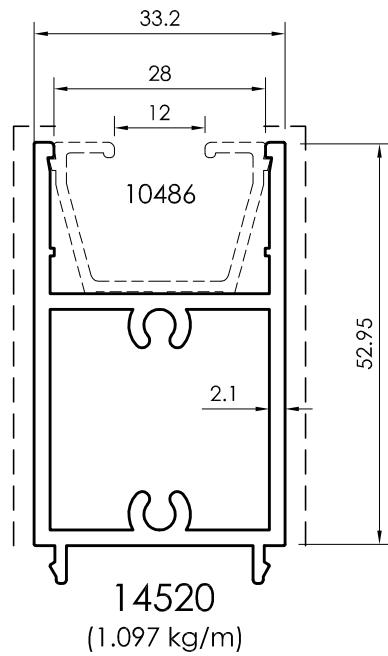
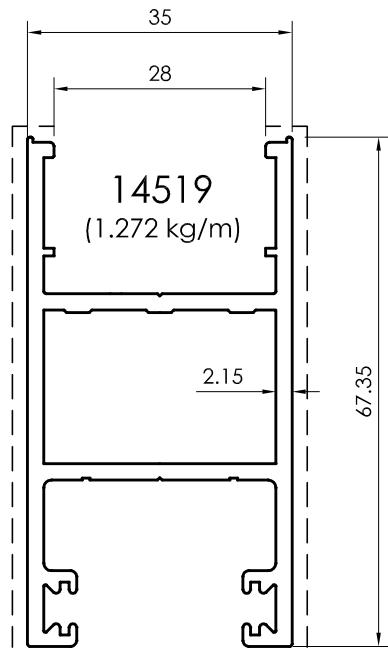
**Frame Profiles - 105mm**

Fly Screen Inside

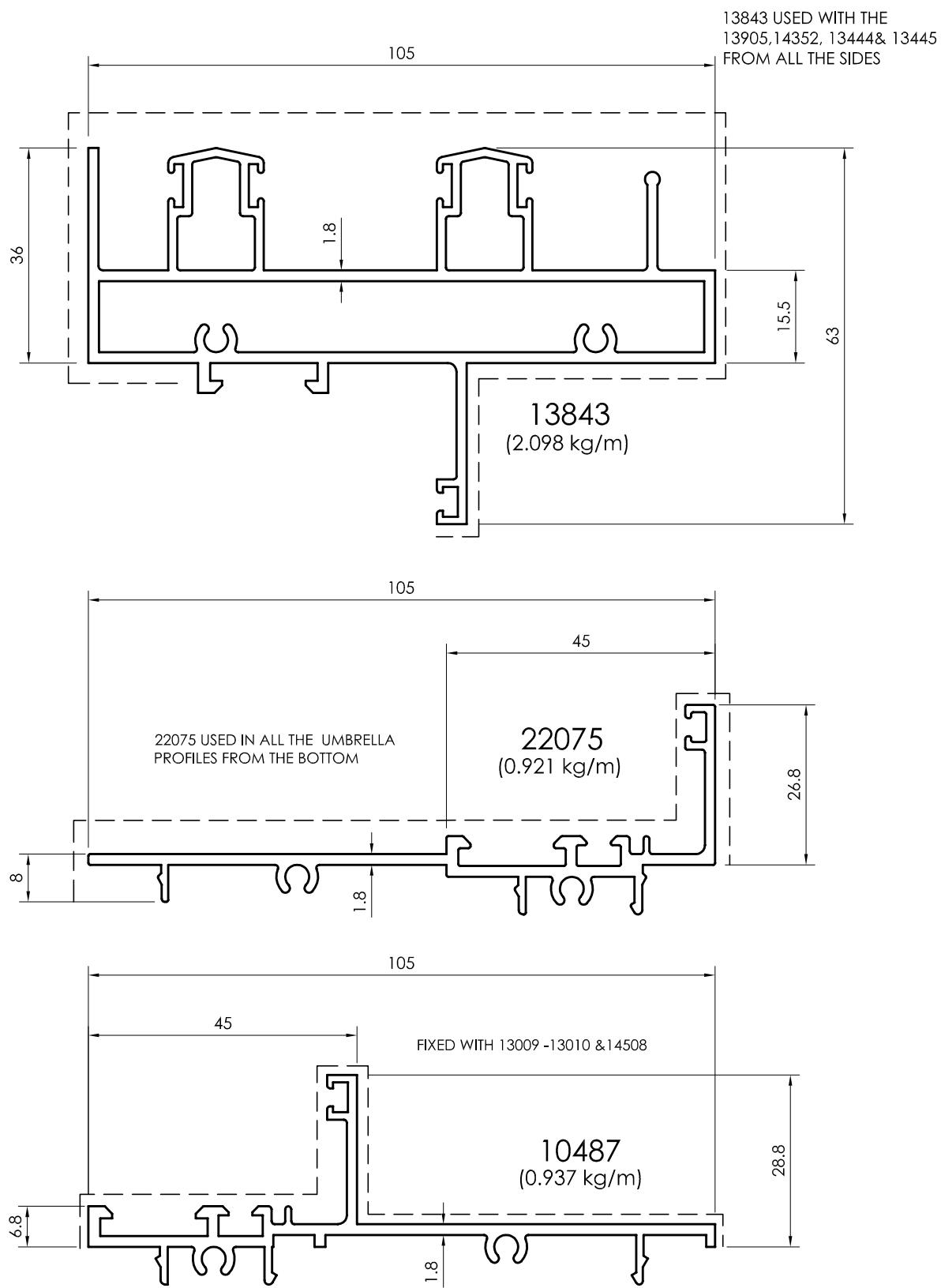


All dimensions in mm  
 ——— Visible area

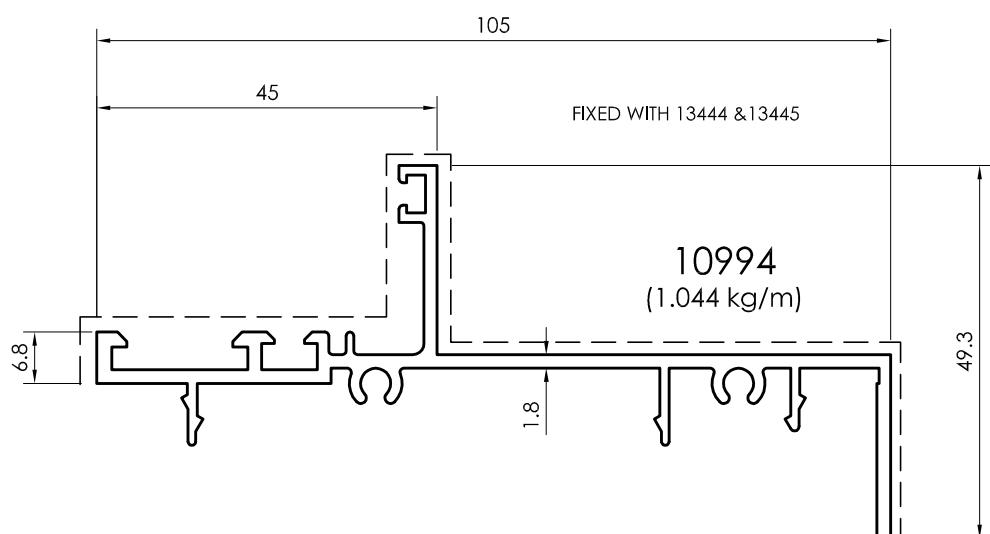
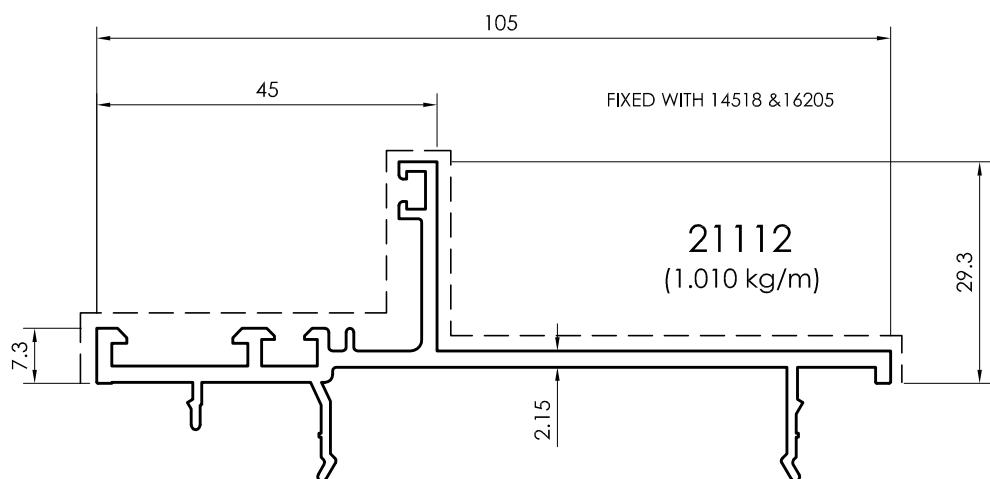
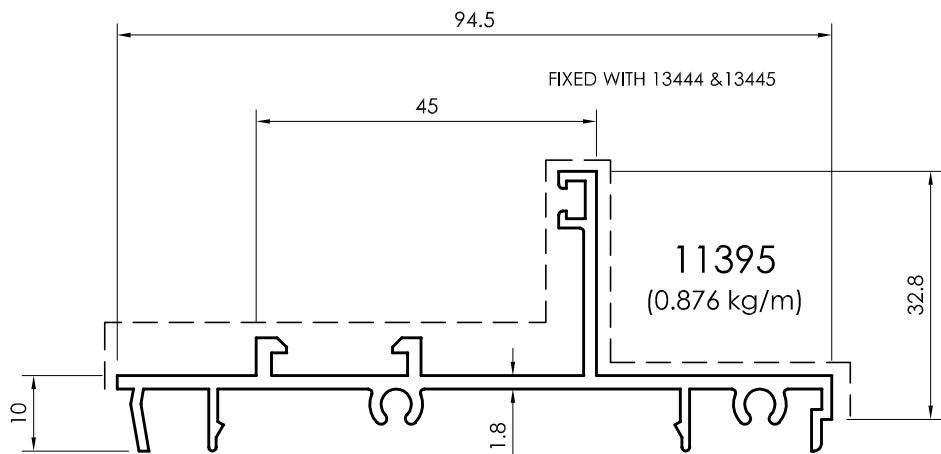
**Sash / Interlock Profiles - 105mm / 125mm**  
Used With Umbrellas Frame Profile



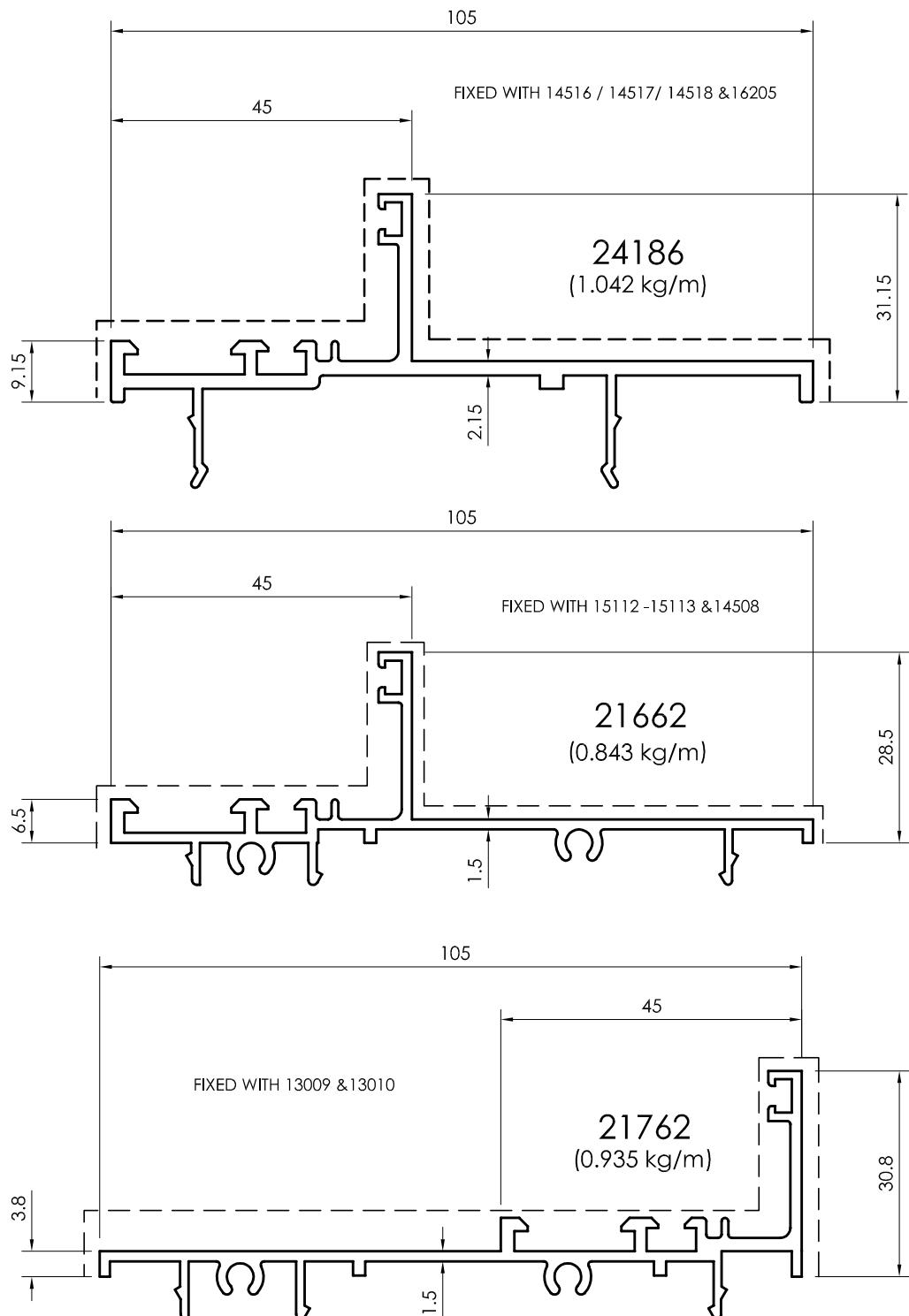
All dimensions in mm  
Visible area \_\_\_\_\_

**Adaptor Profiles - 105mm**

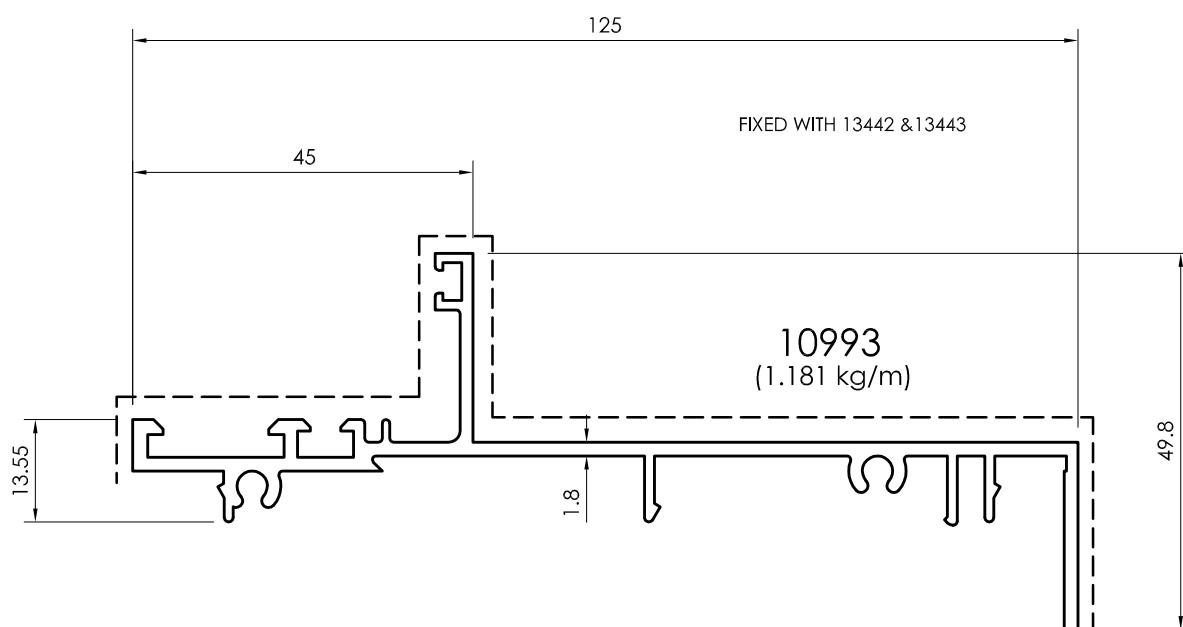
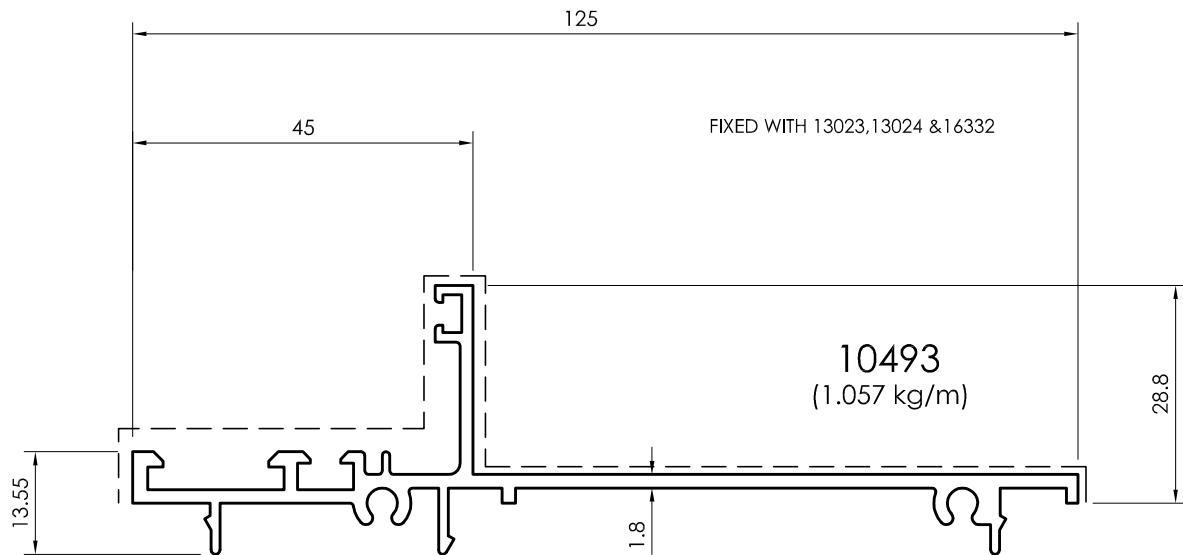
### Adaptor Profiles - 105mm



All dimensions in mm  
Visible area \_\_\_\_\_

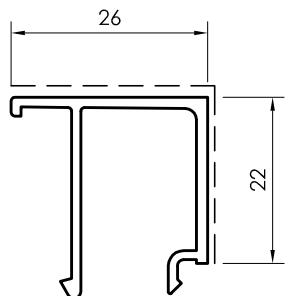
**Adaptor Profiles - 105mm**

All dimensions in mm  
— Visible area

**Adaptor Profiles - 125mm**

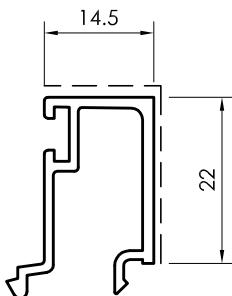
All dimensions in mm

----- Visible area

**Glazing Beads Profiles**

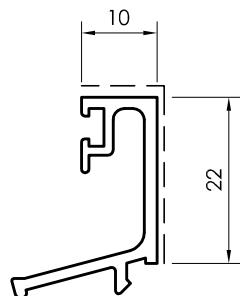
**10371**  
(0.298 kg/m)

FOR GLASS 6MM & 8MM



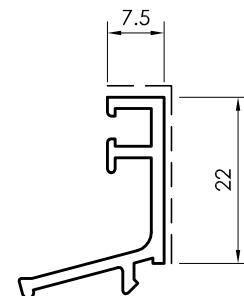
**10377**  
(0.282 kg/m)

FOR GLASS 18MM & 20MM



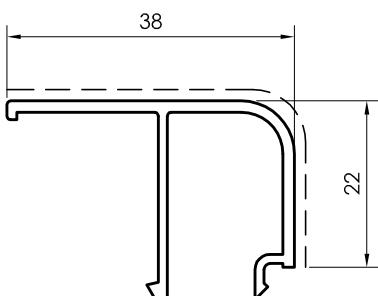
**10464**  
(0.271 kg/m)

FOR GLASS 24MM



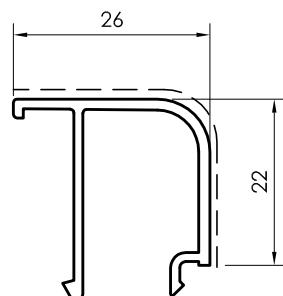
**11321**  
(0.251 kg/m)

FOR GLASS 28MM



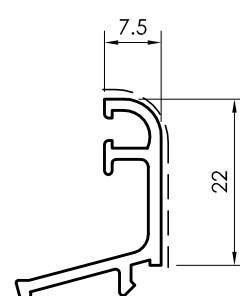
**11547**  
(0.340 kg/m)

FOR SHEET 1.0MM & 2.0MM



**11730**  
(0.286 kg/m)

FOR GLASS 6MM & 8MM



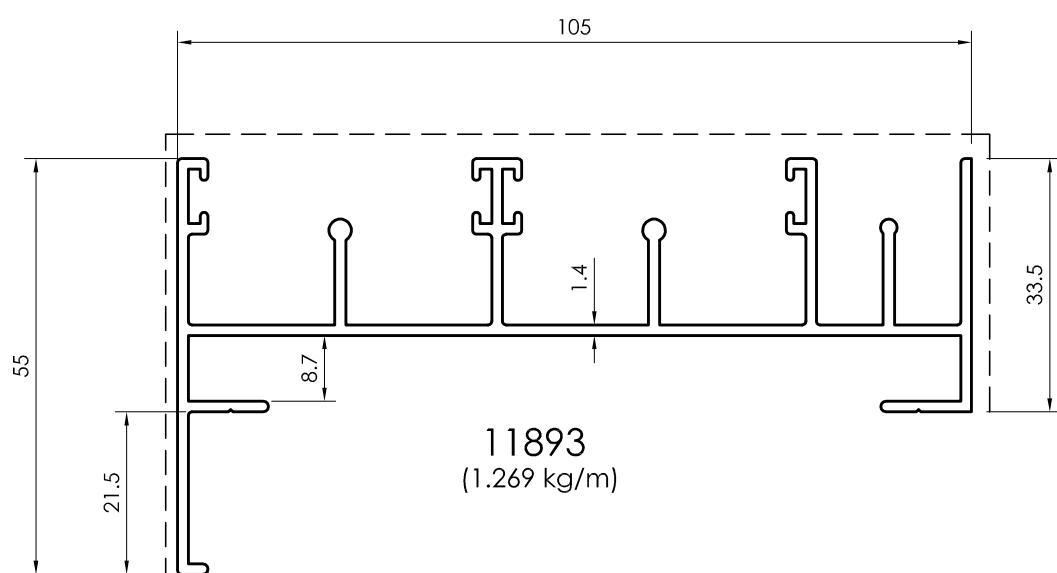
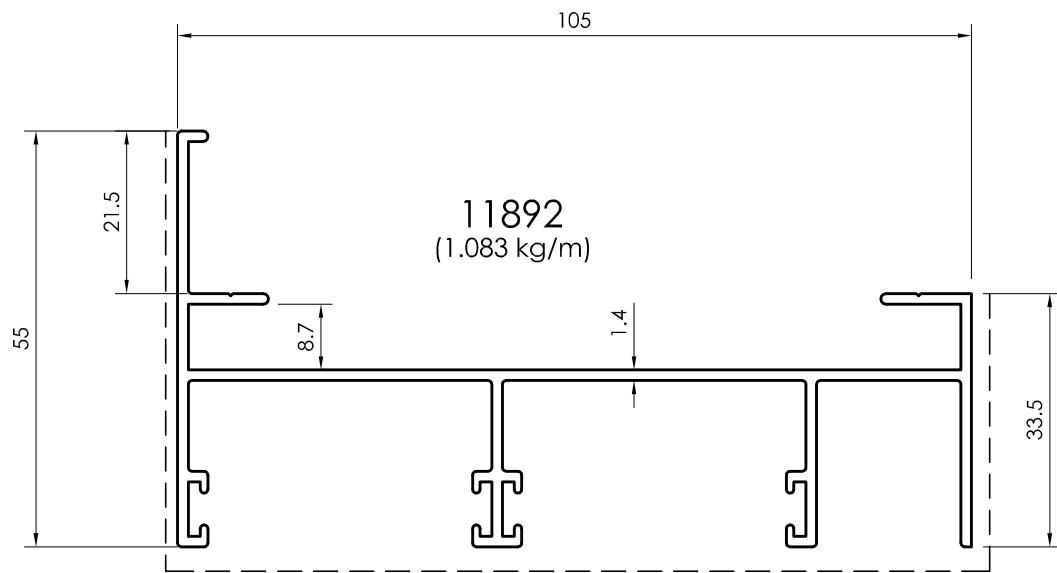
**11729**  
(0.242 kg/m)

FOR GLASS 28MM

All dimensions in mm  
— Visible area

**Frame Profiles - 105mm**

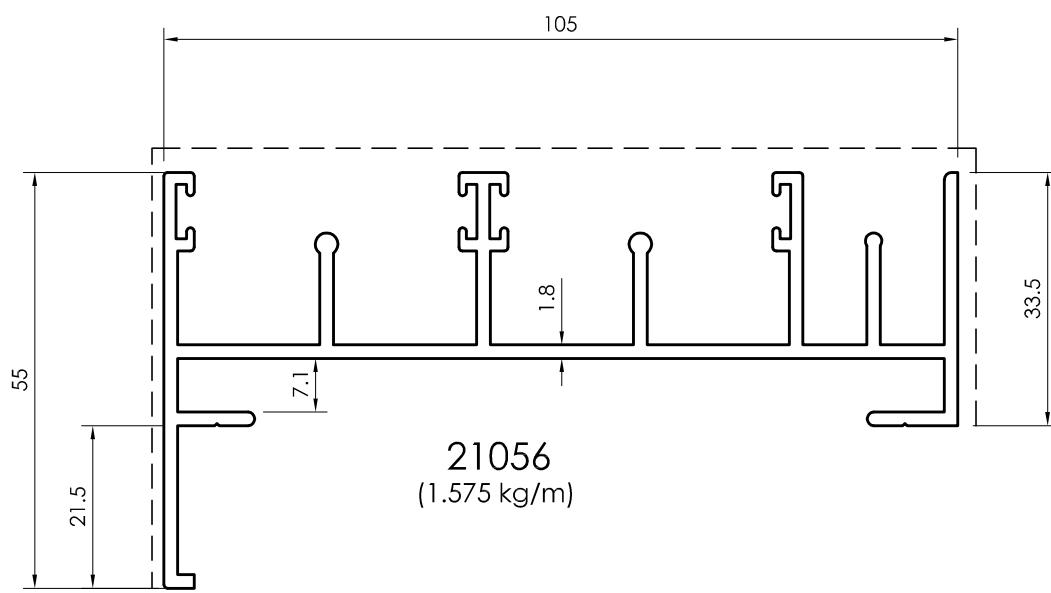
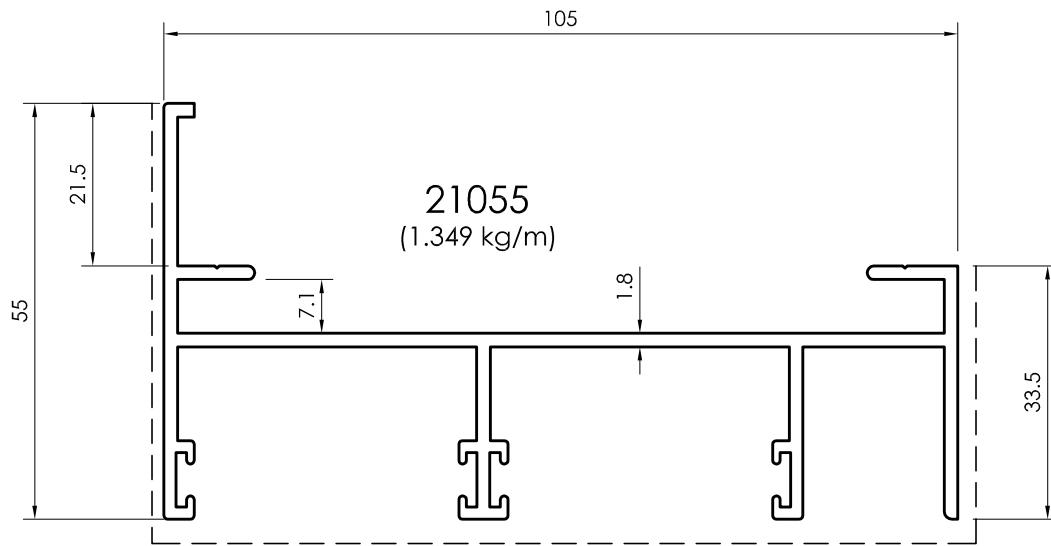
Fly Screen Outside



All dimensions in mm  
Visible area \_\_\_\_\_

**Frame Profiles - 105mm**

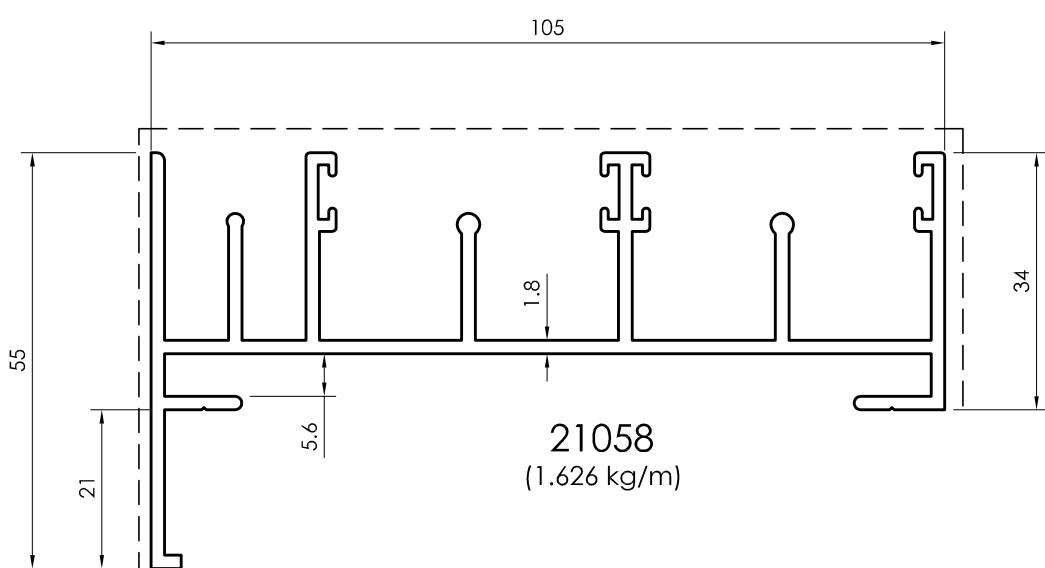
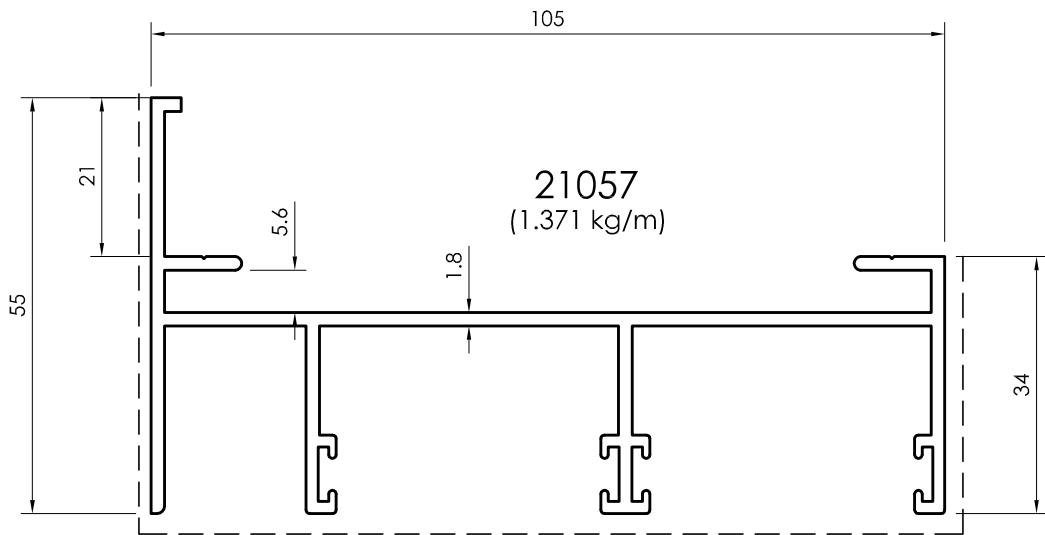
Fly Screen Outside



All dimensions in mm  
— Visible area

**Frame Profiles - 105mm**

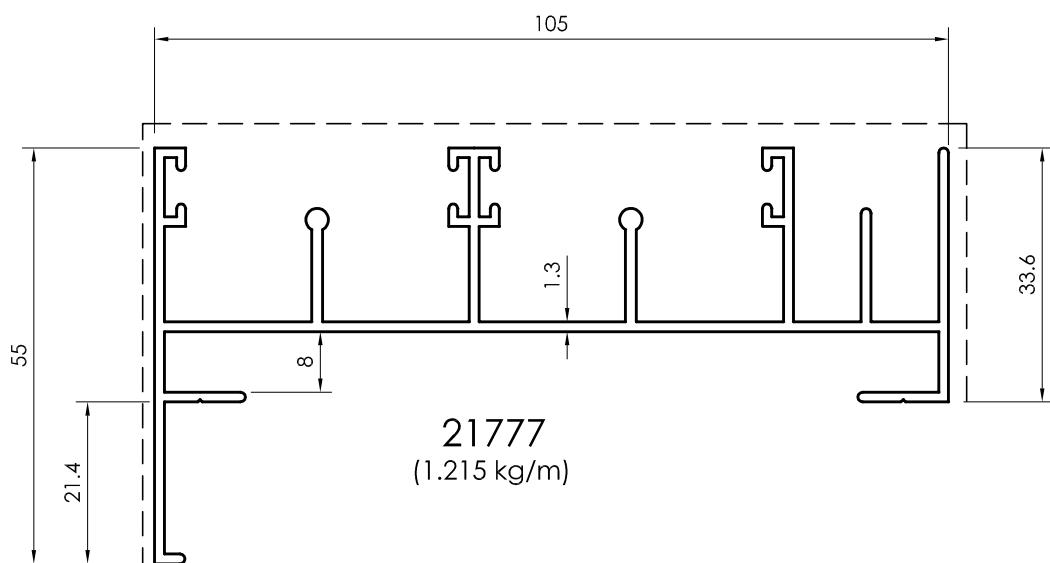
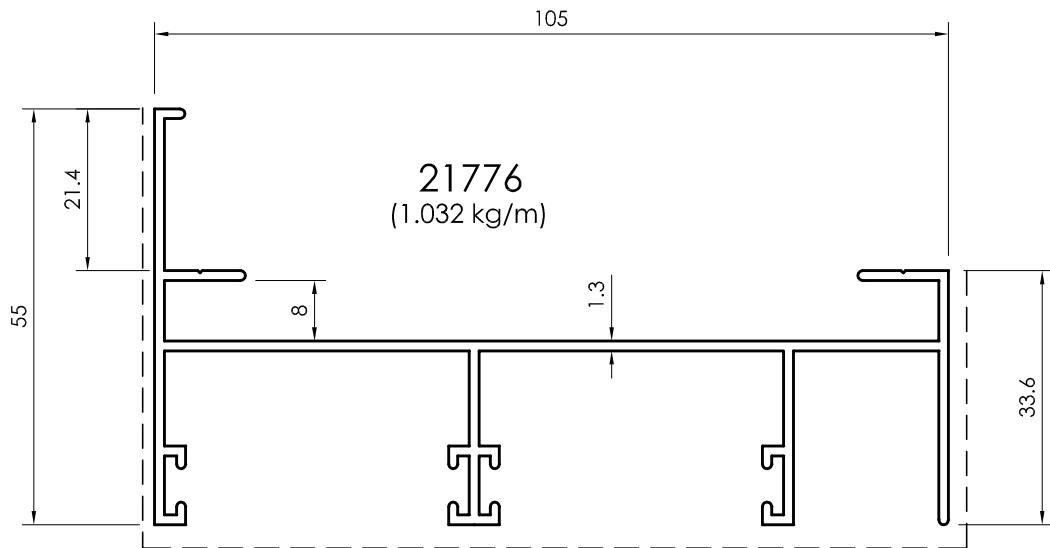
Fly Screen Inside



All dimensions in mm  
Visible area \_\_\_\_\_

**Frame Profiles - 105mm**

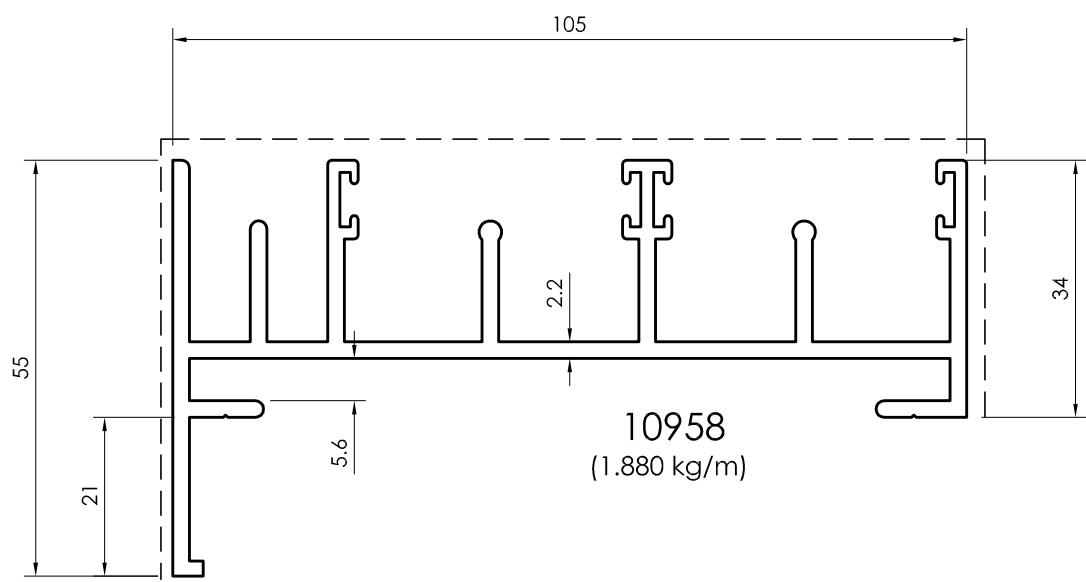
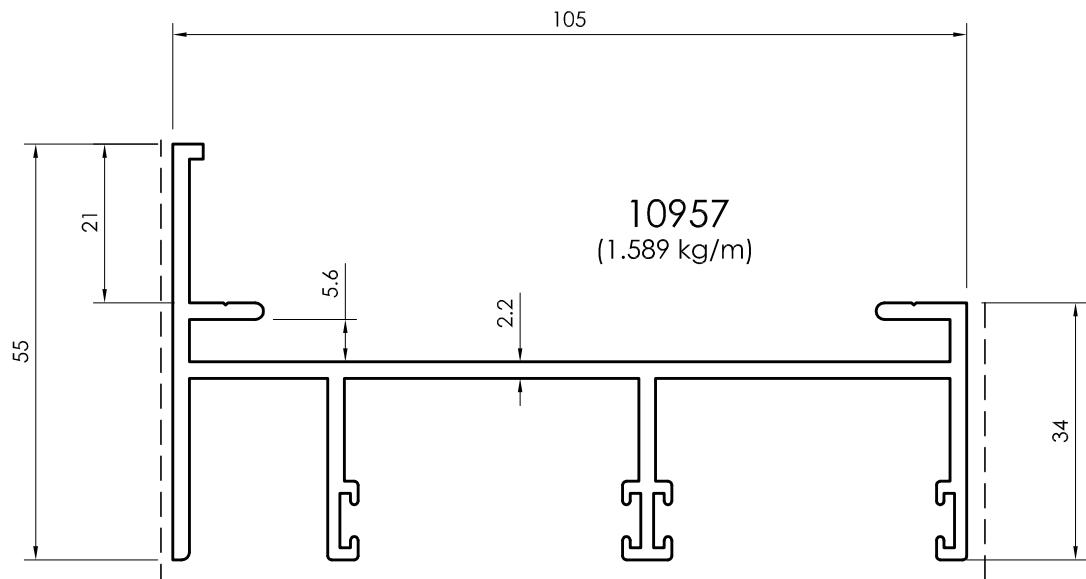
Fly Screen Outside



All dimensions in mm  
— Visible area

**Frame Profiles - 105mm**

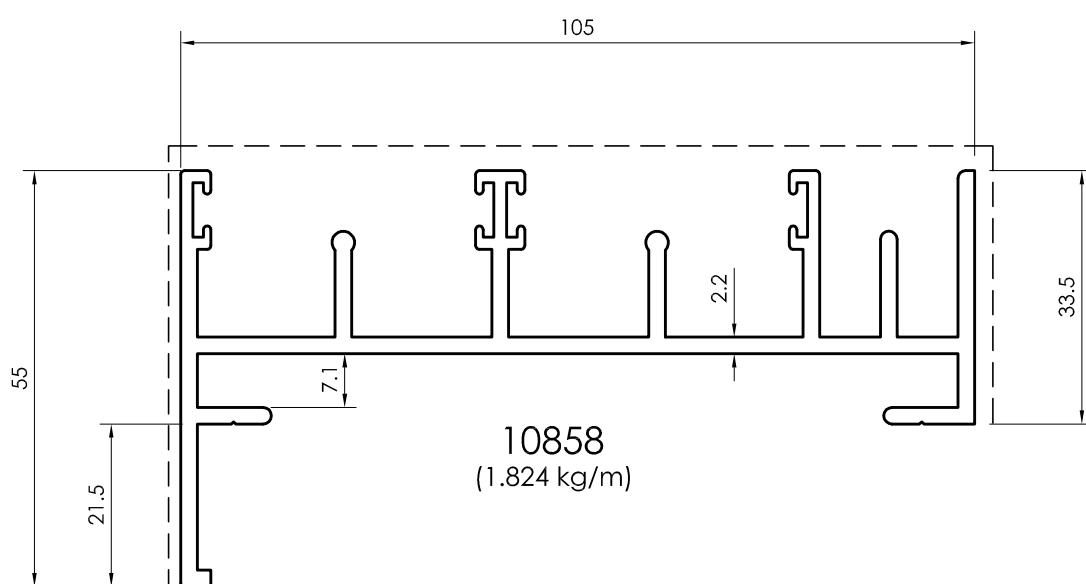
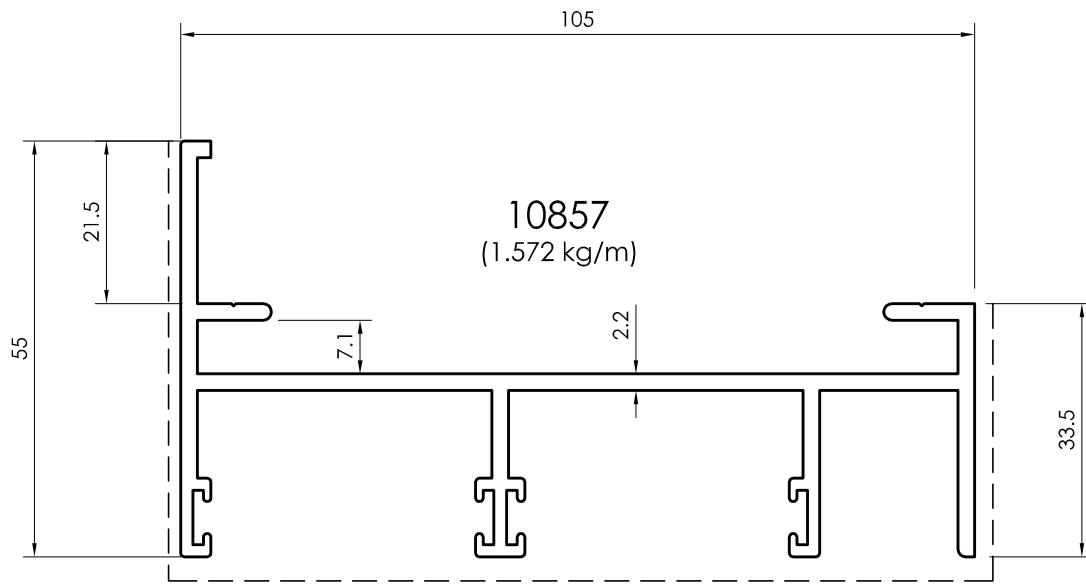
Fly Screen Inside



All dimensions in mm  
Visible area \_\_\_\_\_

**Frame Profiles - 105mm**

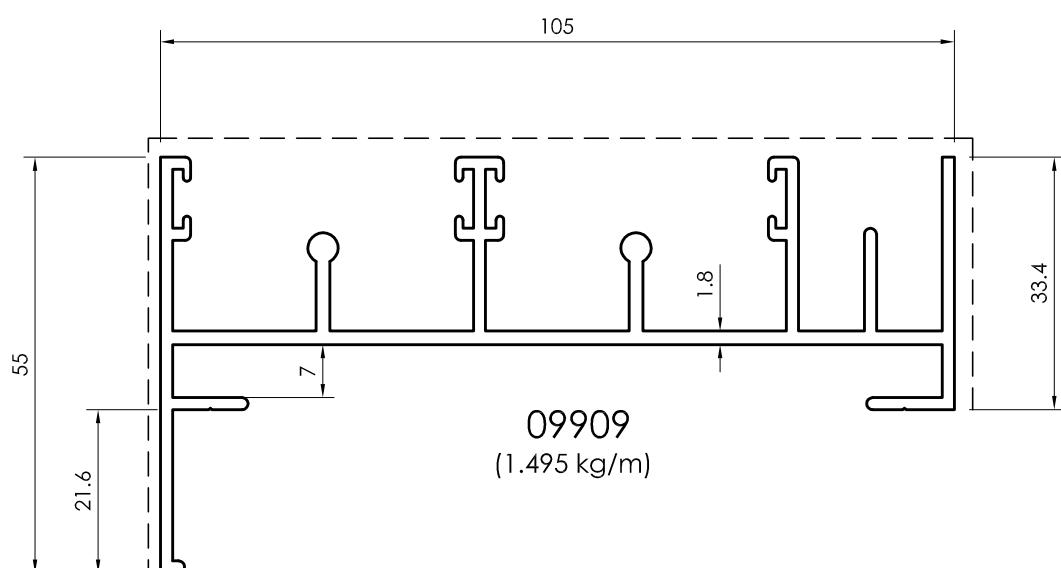
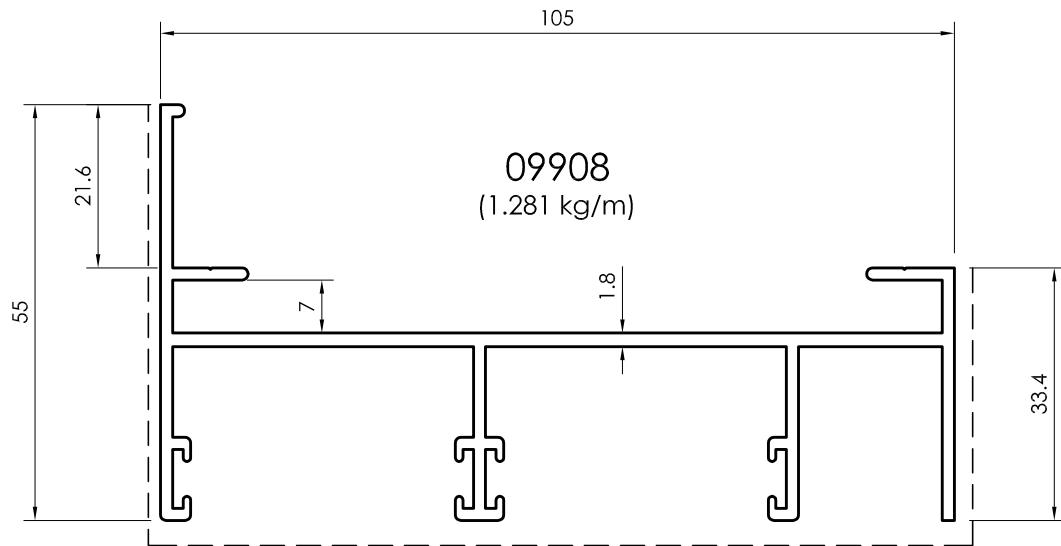
Fly Screen Outside



All dimensions in mm  
— Visible area

**Frame Profiles - 105mm**

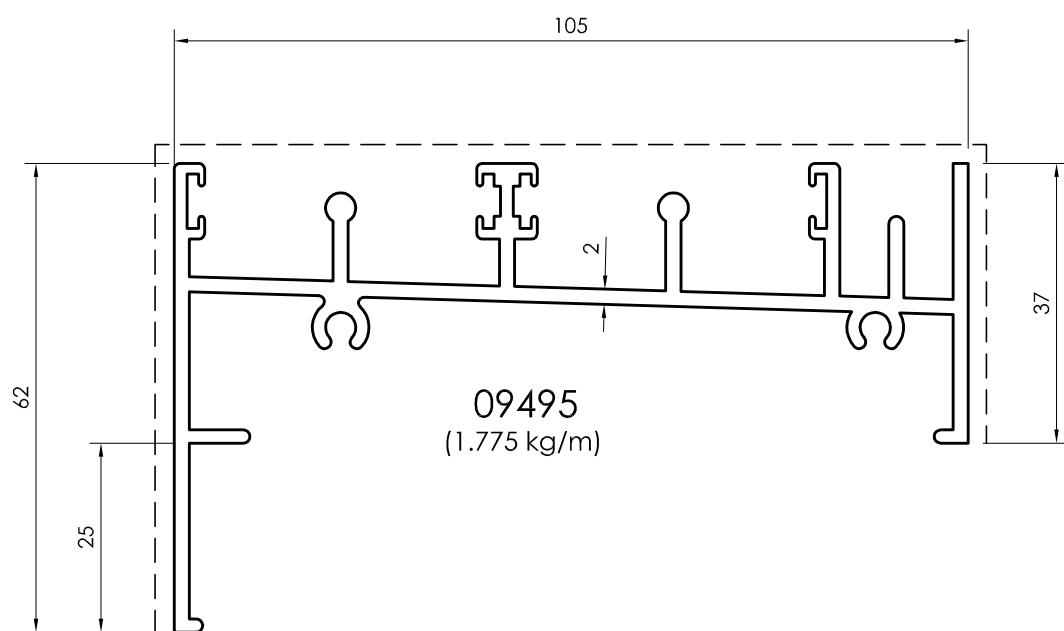
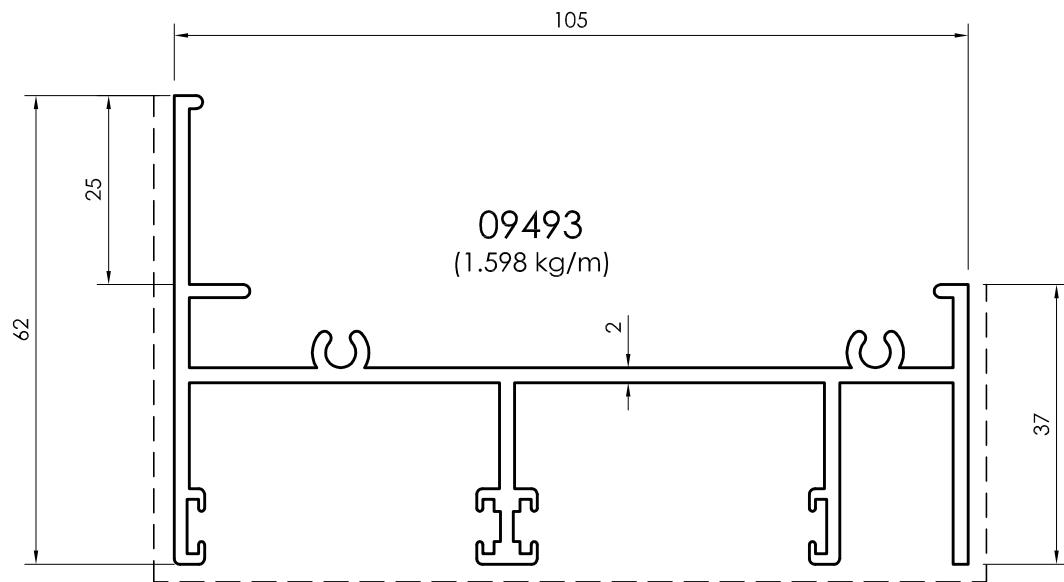
Fly Screen Outside



All dimensions in mm  
Visible area \_\_\_\_\_

**Frame Profiles - 105mm**

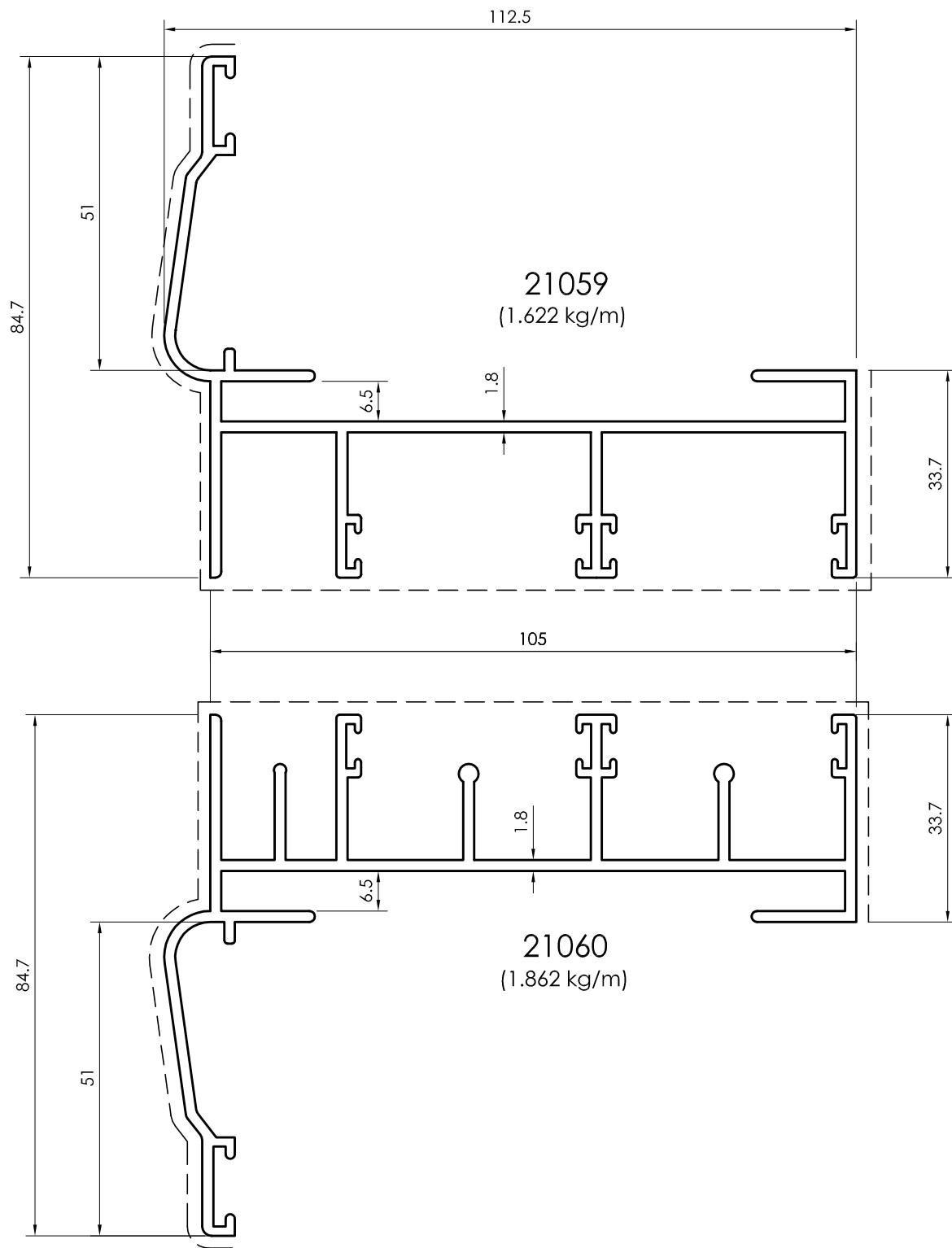
Fly Screen Outside



All dimensions in mm  
— Visible area

**Frame Profiles - 105mm**

Fly Screen Inside

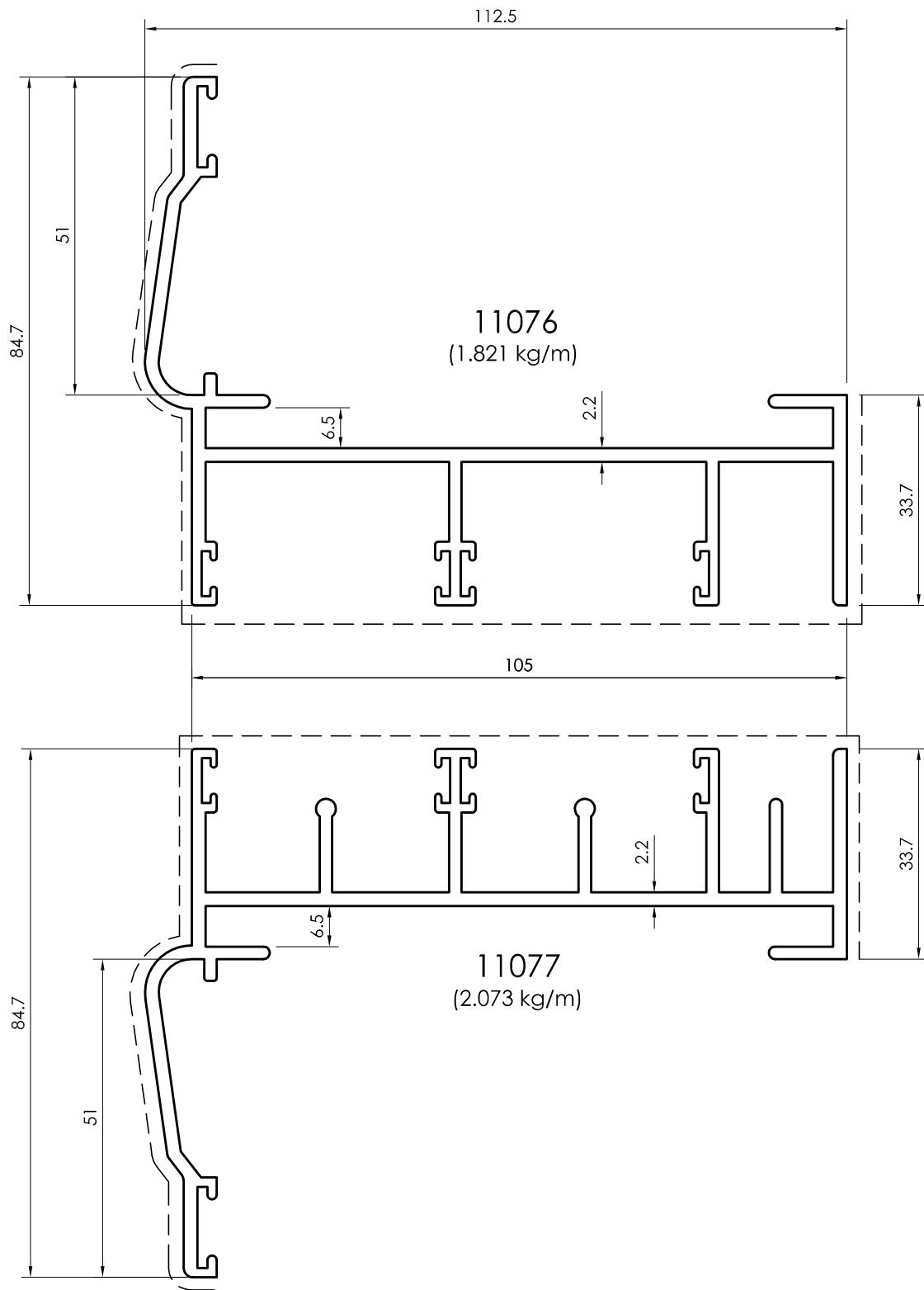


All dimensions in mm

Visible area \_\_\_\_\_

**Frame Profiles - 105mm**

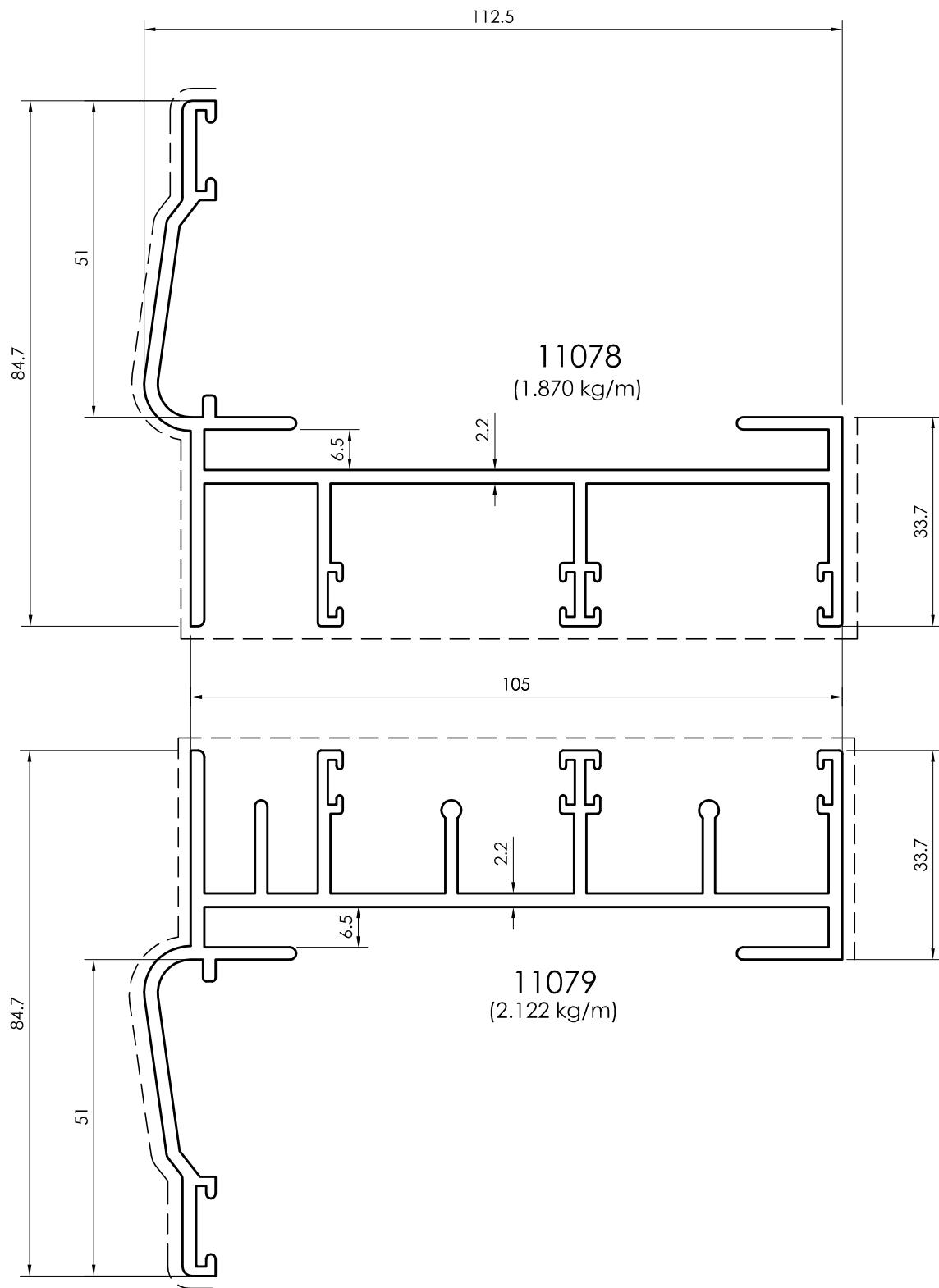
Fly Screen Outside



All dimensions in mm  
— Visible area

**Frame Profiles - 105mm**

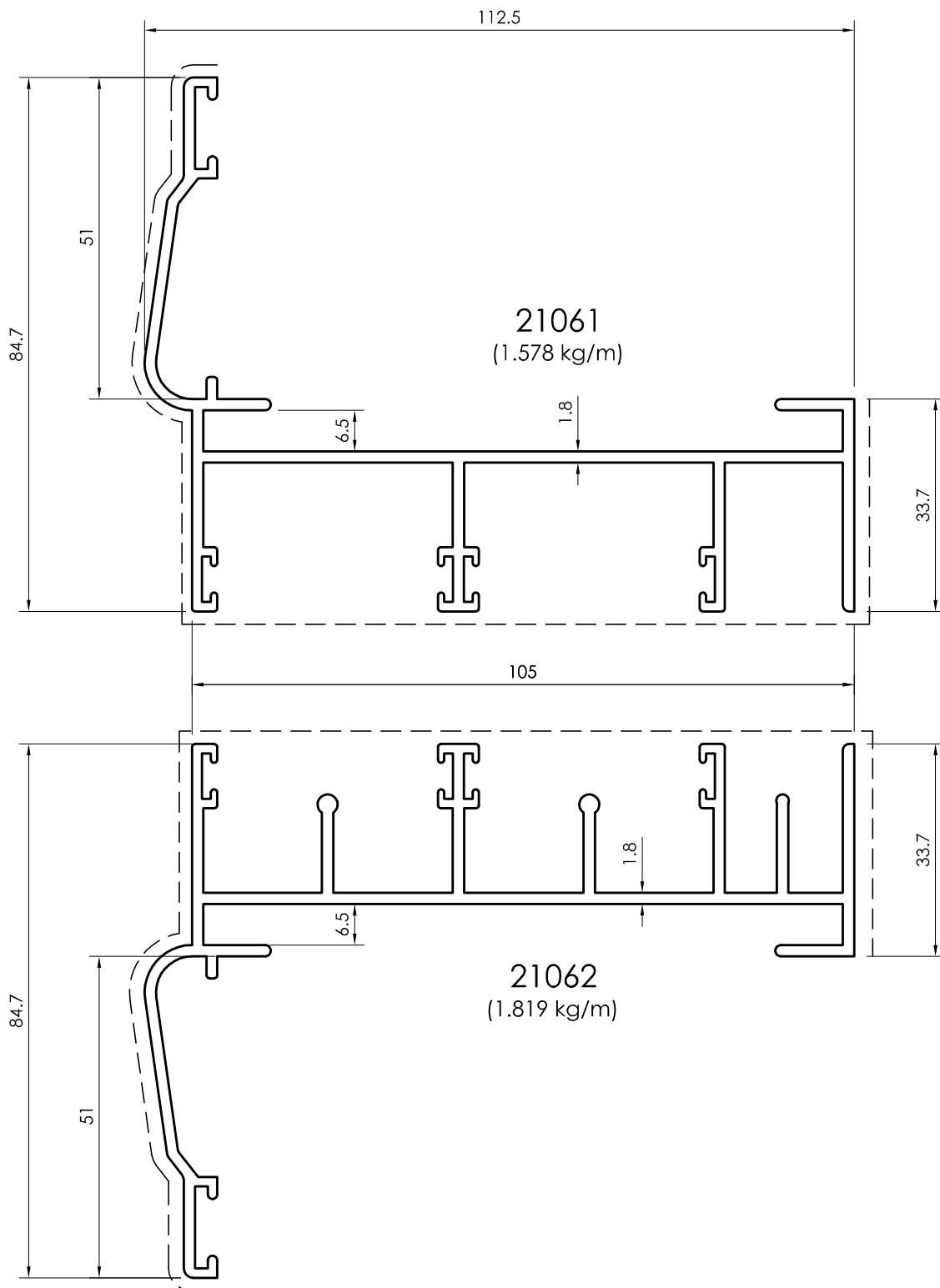
Fly Screen Inside



All dimensions in mm  
Visible area \_\_\_\_\_

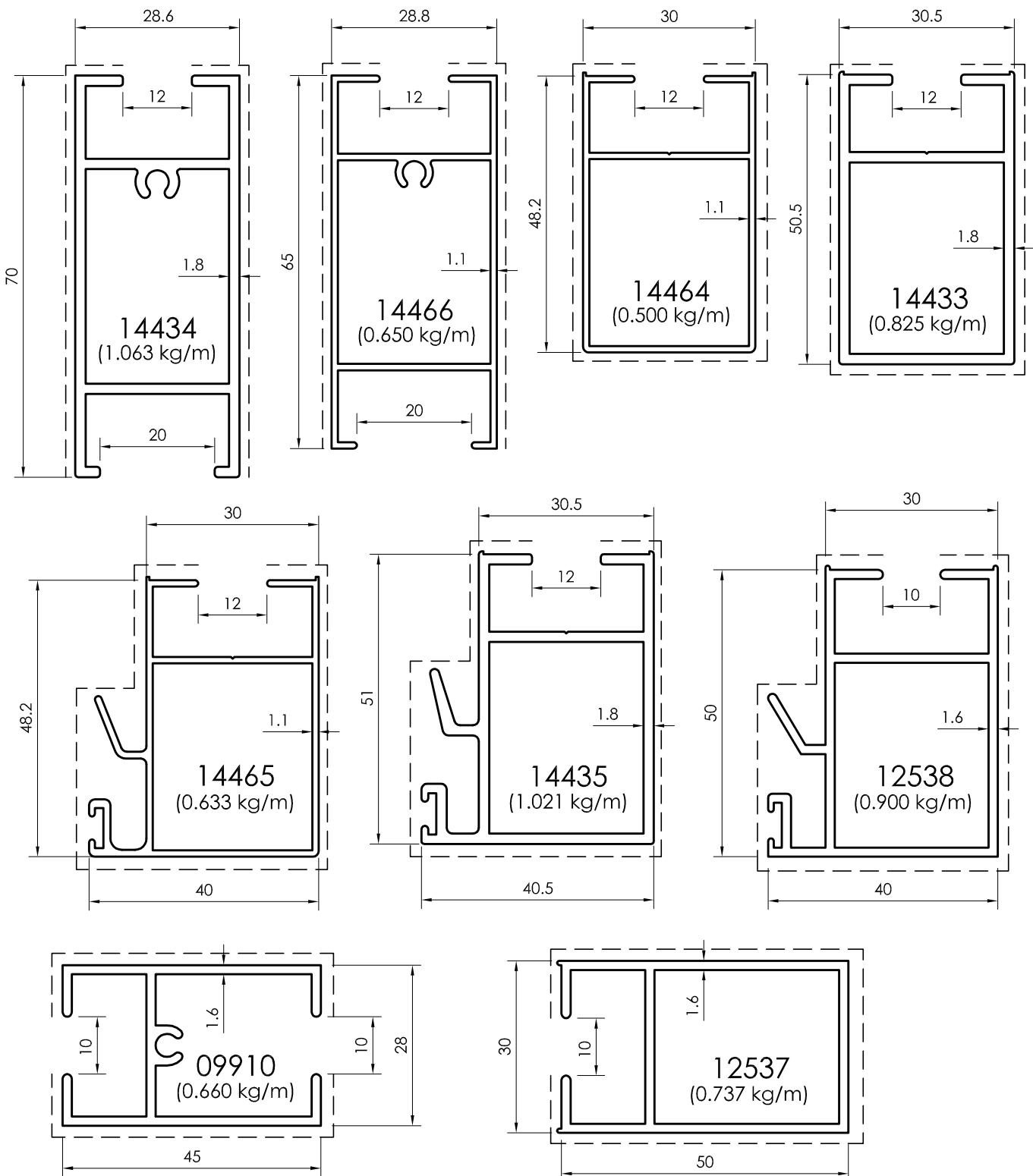
**Frame Profiles - 105mm**

Fly Screen Outside

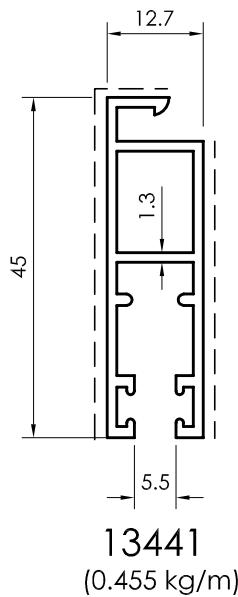


All dimensions in mm  
--- Visible area

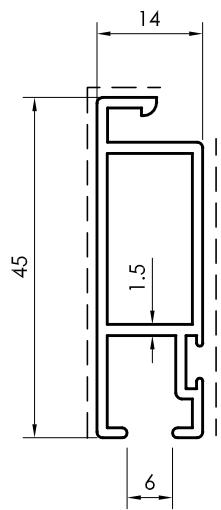
**Sash / Interlock Profiles - 105mm**  
Used With Umbrellas Frame Profile



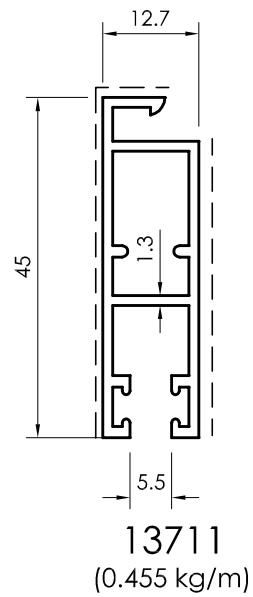
All dimensions in mm  
Visible area \_\_\_\_\_

**Fly screen / Angle**

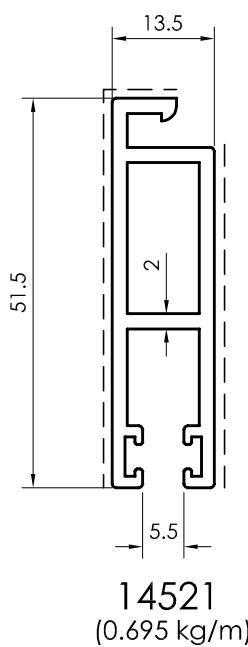
**13441**  
(0.455 kg/m)



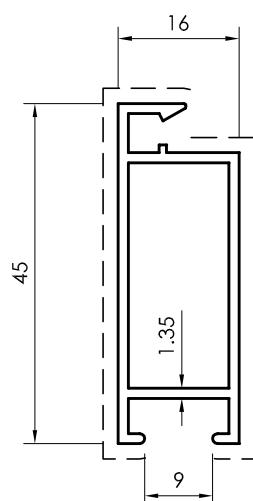
**12745**  
(0.457 kg/m)



**13711**  
(0.455 kg/m)



**14521**  
(0.695 kg/m)



**12724**  
(0.447 kg/m)

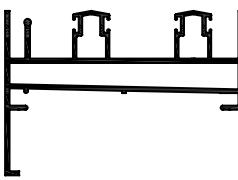
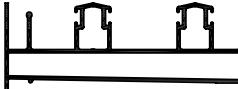
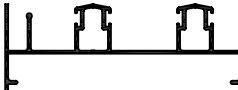
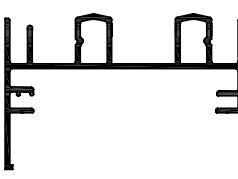
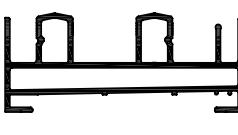
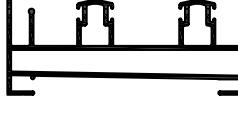
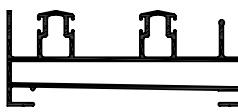
12724 used with non  
umbrella frame profiles

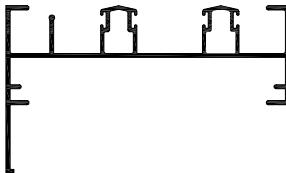
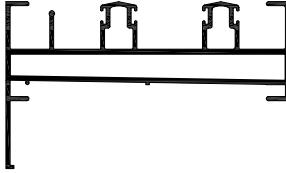
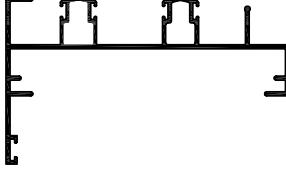
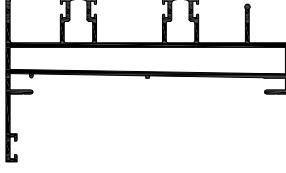
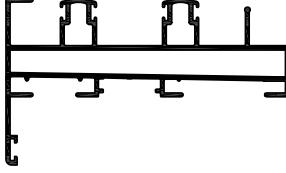
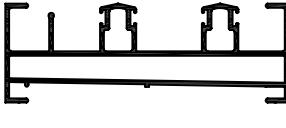
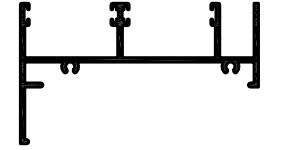
All dimensions in mm  
— Visible area

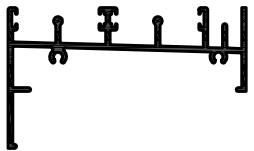
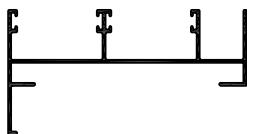
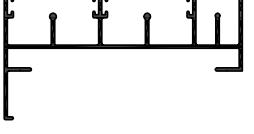
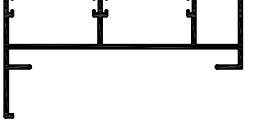
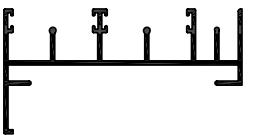
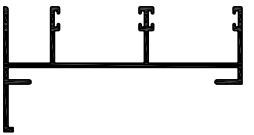
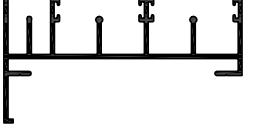


# PROFILE LIST

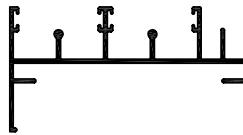
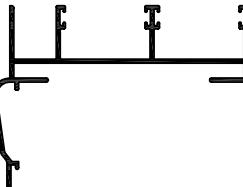
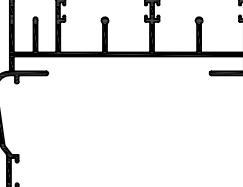
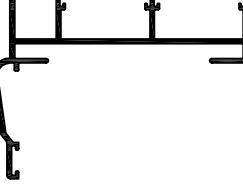
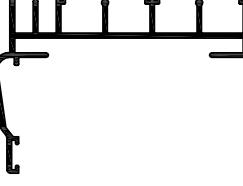
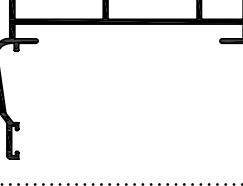
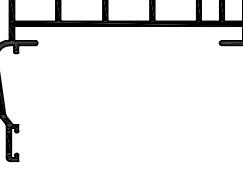
Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
13009		14	1.676	91.687	14.936	16.266	2.957
13010		14	2.203	106.83	17.293	19.321	3.575
13444		15	1.611	80.919	16.30	13.133	3.322
13445		15	2.138	96.653	18.294	16.20	3.874
14517		26	2.188	19.508	119.718	3.892	21.189
14516		26	2.671	21.119	129.791	4.399	23.298
14352		16	2.295	98.22	19.436	16.462	4.203

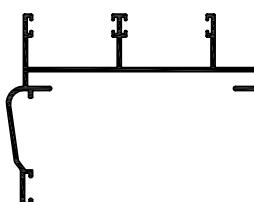
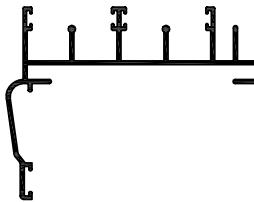
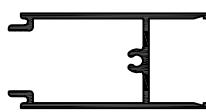
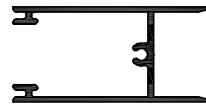
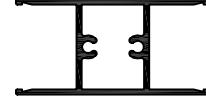
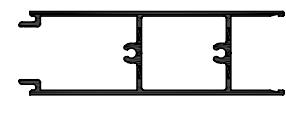
Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
17006		16	2.360	20.225	118.882	4.251	21.041
15113		18	1.817	9.334	83.111	4.393	15.636
15112		18	1.429	6.536	72.236	2.711	13.519
16205		27	2.159	16.914	117.265	3.695	20.991
14518		27	2.489	12.451	113.075	5.422	21.415
14508		17	2.058	93.15	10.178	17.527	4.795
13905		17	1.963	83.061	9.616	14.891	4.421

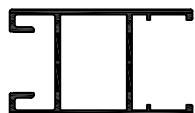
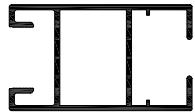
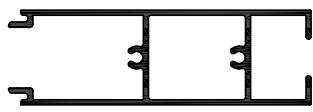
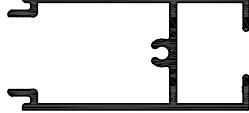
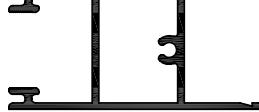
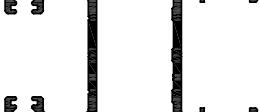
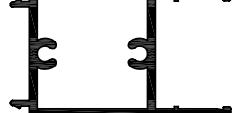
Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
13023		19	1.951	148.68	17.939	22.333	3.435
13024		19	2.628	175.16	21.250	26.772	4.283
13442		20	1.859	127.74	19.088	17.325	3.787
13443		20	2.536	155.67	21.764	21.925	4.516
14351		21	2.710	157.70	23.258	22.194	4.929
16332		21	2.475	13.331	154.492	6.112	24.453
09493		41	1.598	9.479	86.304	2.419	15.778

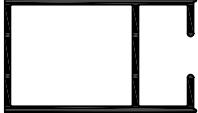
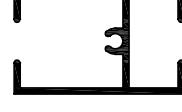
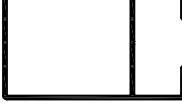
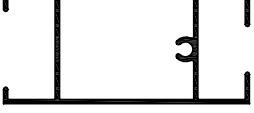
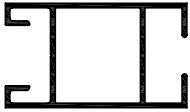
Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
09495		41	1.775	10.095	92.692	2.327	16.583
11892		34	1.083	5.533	59.024	1.590	10.500
11893		34	1.269	5.854	65.603	1.650	11.974
21055		35	1.349	6.700	73.174	1.979	13081
21056		35	1.575	7.116	81.143	2.049	14.875
21057		36	1.371	6.994	72.972	2.116	12.622
21058		36	1.626	7.494	81.229	2.207	14.012

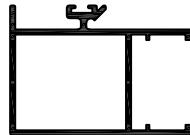
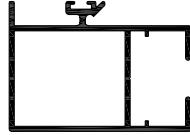
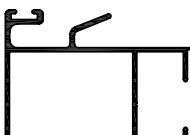
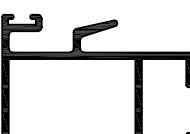
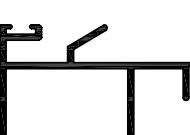
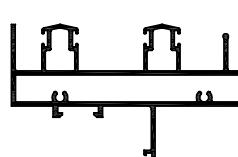
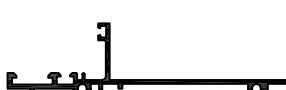
Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
21776		37	1.032	5.400	55.770	1.566	9.873
21777		37	1.215	5.7100	61.985	1.616	11.269
10957		38	1.589	7.681	85.001	2.340	14.597
10958		38	1.880	8.259	94.294	2.445	16.162
10857		39	1.572	7.441	85.653	2.211	15.370
10858		39	1.824	7.923	94.533	2.294	17.379
09908		40	1.281	6.077	67.918	1.784	12.171

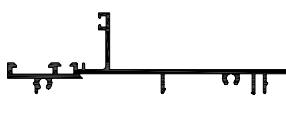
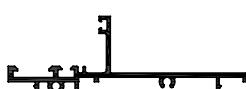
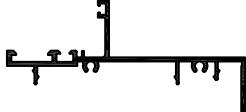
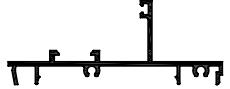
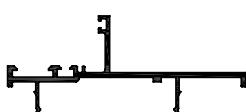
Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
09909		40	1.495	6.376	74.949	1.832	13.675
21059		42	1.622	22.480	93.647	3.953	14.486
21060		42	1.862	23.850	101.643	4.079	15.922
11078		44	1.870	25.257	107.914	4.459	16.558
11079		44	2.122	26.775	116.359	4.604	18.073
11076		43	1.821	25.216	108.621	4.443	17.170
11077		43	2.073	26.705	119.019	4.581	19.441

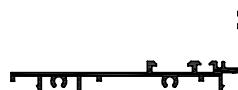
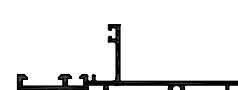
Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
21061		45	1.578	22.439	93.491	3.936	14.795
21062		45	1.819	23.778	103.301	4.056	16.934
13405		23	1.558	10.119	73.964	6.445	11.757
10485		24	0.852	5.424	10.386	3.455	3.067
11279		23	0.891	5.733	11.827	3.652	3.484
13025		24	0.934	5.333	8.382	3.397	2.619
13013		23	1.328	8.248	37.015	5.250	7.248

Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
13011		24	0.979	7.392	11.109	4.224	3.350
14655		22	1.047	7.654	13.612	4.374	4.388
14657		22	1.408	8.585	43.383	5.468	8.068
21227		22	0.932	5.768	13.068	3.673	3.574
13955		23	1.021	12.189	6.044	3.454	3.849
14519		28	1.272	9.718	16.260	5.552	4.575
14520		28	1.097	10.968	6.630	3.457	3.994

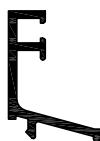
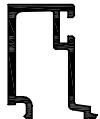
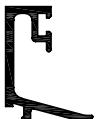
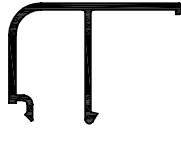
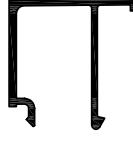
Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
14434		46	1.063	17.825	5.331	4.807	3.728
14433		46	0.825	8.922	4.610	3.470	3.023
12537		46	0.737	4.006	7.848	2.670	3.063
09910		46	0.660	4.791	3.102	2.003	2.216
14464		46	0.500	2.792	5.024	1.861	2.042
14466		46	0.650	9.651	3.364	2.793	2.336
12740		22	0.913	12.561	6.558	4.165	3.801

Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
13012		24	1.019	9.138	12.572	4.112	3.722
14656		22	1.088	9.426	15.179	4.202	4.791
14465		46	0.633	4.545	6.203	2.212	2.250
14435		46	1.021	7.232	10.629	3.406	3.772
12538		46	0.900	6.238	9.364	2.944	3.323
13843		29	2.098	76.365	13.965	13.808	3.617
10493		32	1.057	51.459	1.608	7.525	0.648

Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
10993		32	1.181	68.644	2.528	10.809	0.963
10487		29	0.937	28.432	1.599	4.859	0.649
10994		30	1.044	39.903	2.437	7.343	0.936
11395		30	0.876	23.788	1.839	4.789	0.712
21112		30	1.010	1.955	32.537	0.780	5.730
22075		29	0.921	1.567	34.199	0.639	8.532
24186		31	1.042	2.086	33.340	0.825	5.801

Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
21762		31	0.935	1.804	38.359	0.706	9.247
21662		31	0.843	1.518	25.410	0.622	4.300
10969		25	0.332	0.587	0.631	0.546	0.384
21111		25	0.413	1.232	0.721	0.703	0.580
10492		25	0.468	5.398	0.370	2.342	0.359
10486		25	0.282	1.070	0.575	0.730	0.557
10491		25	0.181	0.389	0.125	0.362	0.116

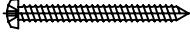
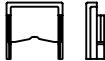
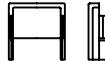
Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
21110		28	0.521	2.736	2.807	0.942	0.975
10657		25	0.515	11.213	0.083	2.638	0.180
13441		47	0.455	0.418	3.102	0.625	1.361
12745		47	0.457	0.503	3.191	0.679	1.414
14521		47	0.695	0.689	5.992	0.969	2.306
13711		47	0.455	3.113	0.418	1.352	0.625
12724		47	0.447	3.387	0.685	1.487	0.797

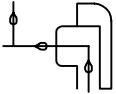
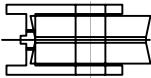
Profile Reference	Profile Section	Page	Weight KG/M	IX cm <sup>4</sup>	IY cm <sup>4</sup>	WX cm <sup>3</sup>	WY cm <sup>3</sup>
11321		33	0.251	0.241	0.696	0.170	0.497
10377		33	0.282	0.742	0.385	0.488	0.326
10464		33	0.271	0.812	0.254	0.597	0.186
11729		33	0.242	0.631	0.233	0.435	0.166
11730		33	0.286	0.795	0.697	0.481	0.453
11547		33	0.340	0.9412	1.480	0.522	0.614
10371		33	0.298	0.746	0.840	0.471	0.495



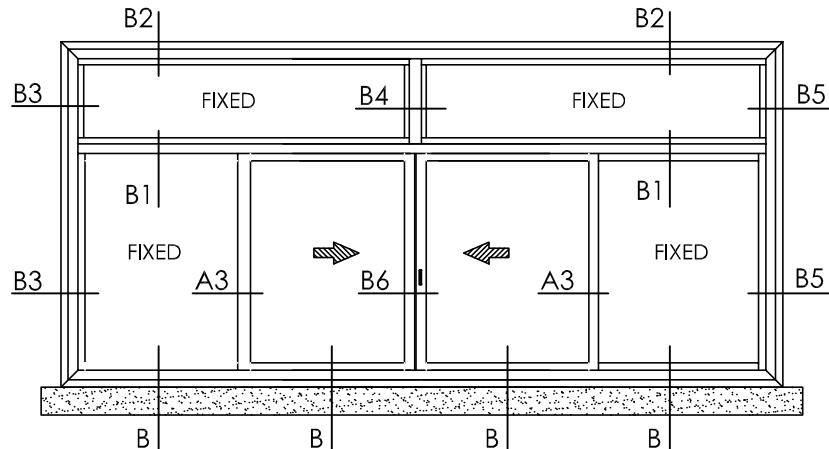
# ACCESSORIES

Gasket / Accessories Reference	Section	Description	Unit
GE-G-002		FRONT GLAZING GASKET USED WITH THE FRAME & SASH PROFILE	Linear Meter
GE-G-010		GLAZING BEAD GASKET	Linear Meter
GE-G-011		GLAZING BEAD GASKET	Linear Meter
GE-G-008		FRONT GLAZING GASKET USED WITH SASH PROFILE	Linear Meter
BRUSH 6.0MM HIGH (6.5 - 6.8 WIDE)		10MM FIN TYPE BRUSH FLY SCREEN PROFILE	Linear Meter
BRUSH 8.0MM HIGH (6.5 - 6.8 WIDE)		8.0MM NORMAL BRUSH AND DUST PROOF PROFILE 10657	Linear Meter
BRUSH 3.0MM HIGH (6.5 - 6.8 WIDE)		3.0MM NORMAL BRUSH FOR SASH AND FOR INTERLOCK PROFILE	Linear Meter

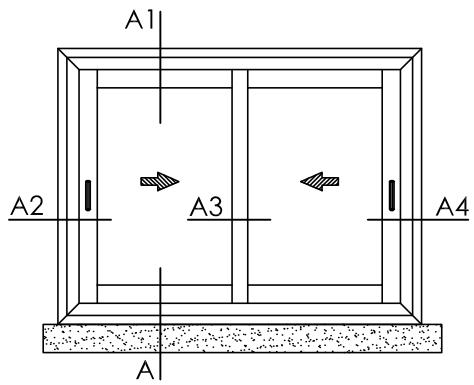
Gasket / Accessories Reference	Section	Description	Unit
SCR-60		B 4.8 X 60 - DIN 7981 - A2 FOR TOP FIXED FRAME	Piece
SCR-45		B 4.2 X 45 - DIN 7981 - A2 FOR SASH CORNER ASSEMBLY	Piece
SCR-19		B 4.2 X 19 - DIN 7982 - A2 FOR LABYRINTH FASTENING	Piece
SCR-20		M 5 X 20 - DIN 965 - A2 FOR ROLLER FASTENING	Piece
END CAP BEC-13012 (BOTTOM END CAP)		PLASTIC END CAP TO COVER MILLED PART AT THE BOTTOM OF THE INTERLOCK PROFILE 13012	Piece
END CAP TEC-13012 (TOP END CAP)		PLASTIC END CAP TO COVER MILLED PART AT THE TOP OF THE INTERLOCK PROFILE 13012	Piece
SUC-120		DRAINAGE VALVE	Piece

Gasket / Accessories Reference	Section	Description	Unit
SUP-120		DEFLECTOR	Piece
FLUSH HANDLE		SUITABLE FLUSH TYPE HANDLE WITH LOCKING ARRANGEMENT (COUNTERPLATE + NIB)	Piece
HOS-503		3MM THICK HOLDING STRIP FOR FASTENING ROLLER ON SASH PROFILE USING 2 M5X20 SCREWS	Piece
NED-105		NEEDLE BEARING ROLLER HOUSED IN AN ALUMINIUM CHANNEL TO BE USED AT THE BOTTOM OF THE SASH PROFILE	Piece

# ASSEMBLY DRAWINGS

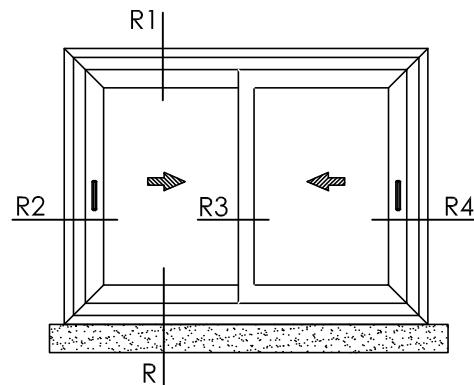


4 - VENT WINDOW (105MM)



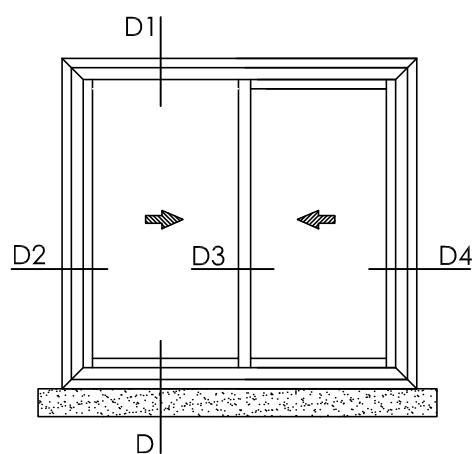
2 - SLIDING WINDOW (105MM)

CUT 90

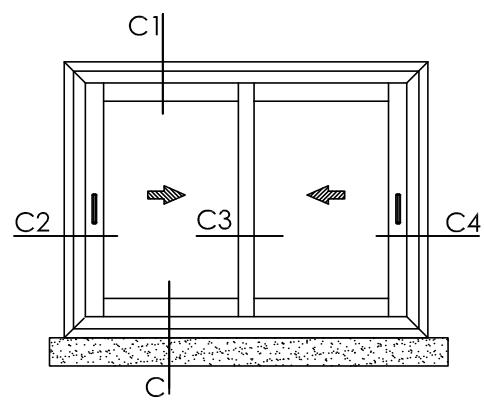


2 - SLIDING WINDOW (105MM)

CUT 45



2-SLIDING DOOR (125MM)



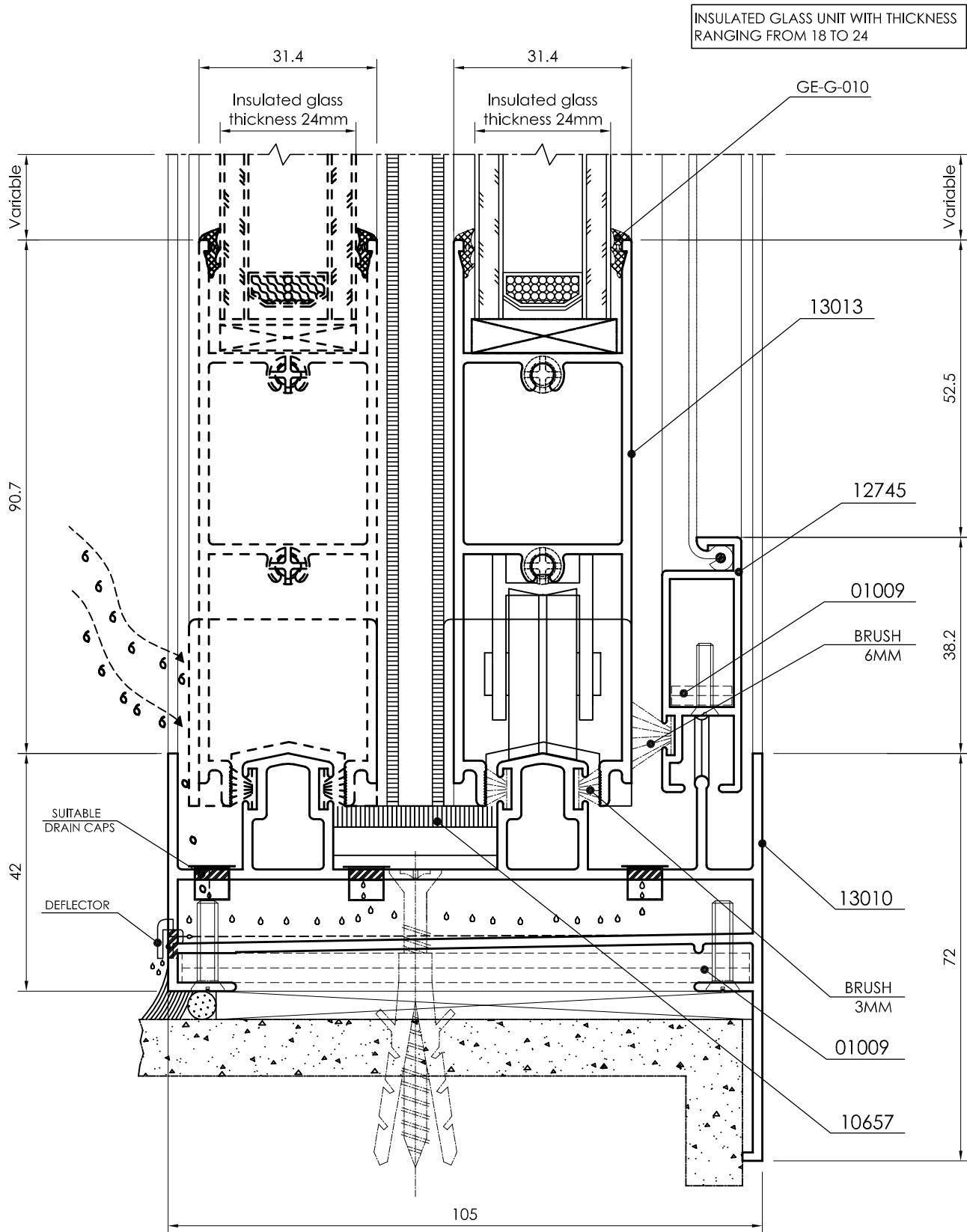
2 - SLIDING WINDOW (105MM)

CUT 90

All dimensions in cross sections are shown in mm  
Profile are not necessarily shown to scale

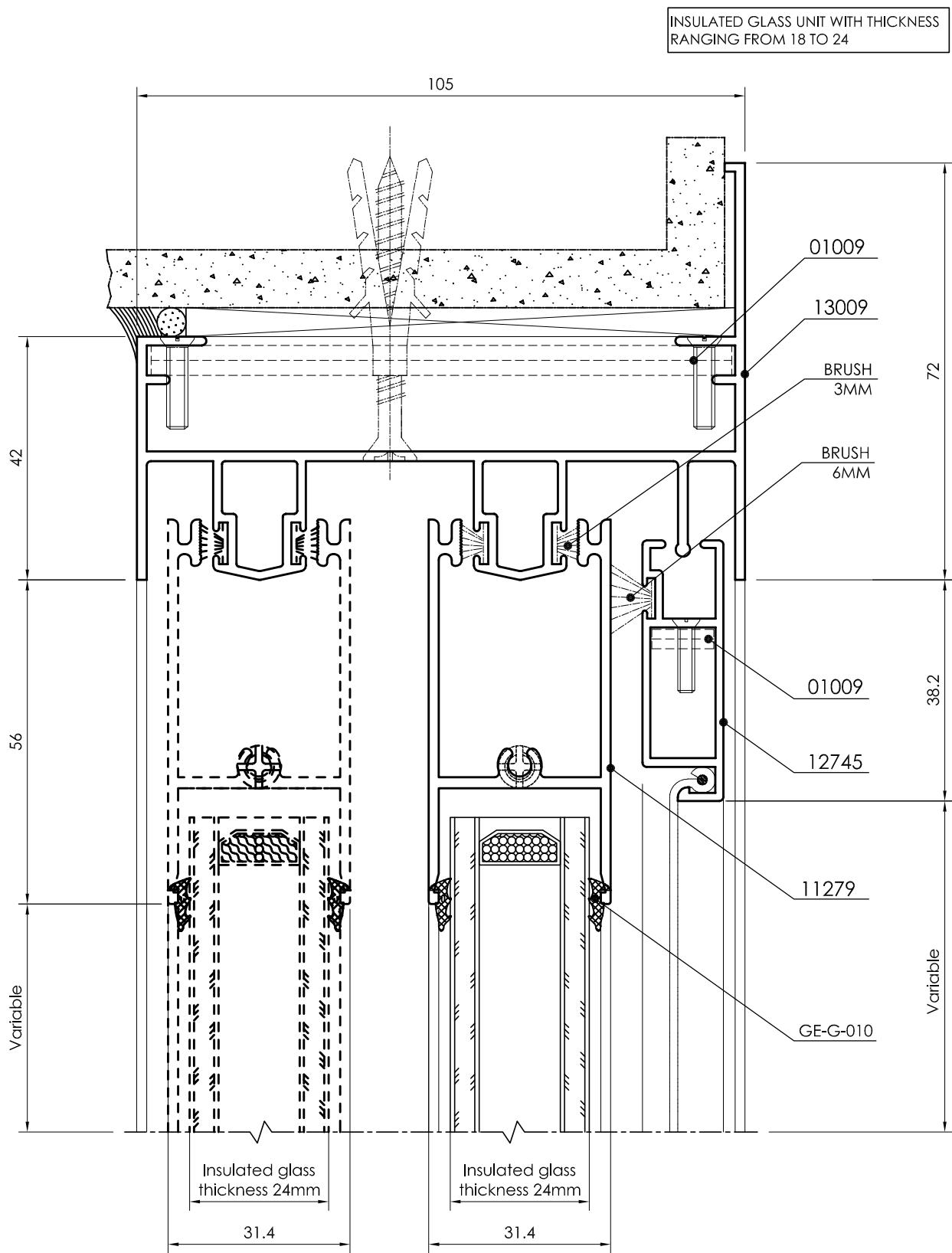
**Bottom Window Section**

Detail - A



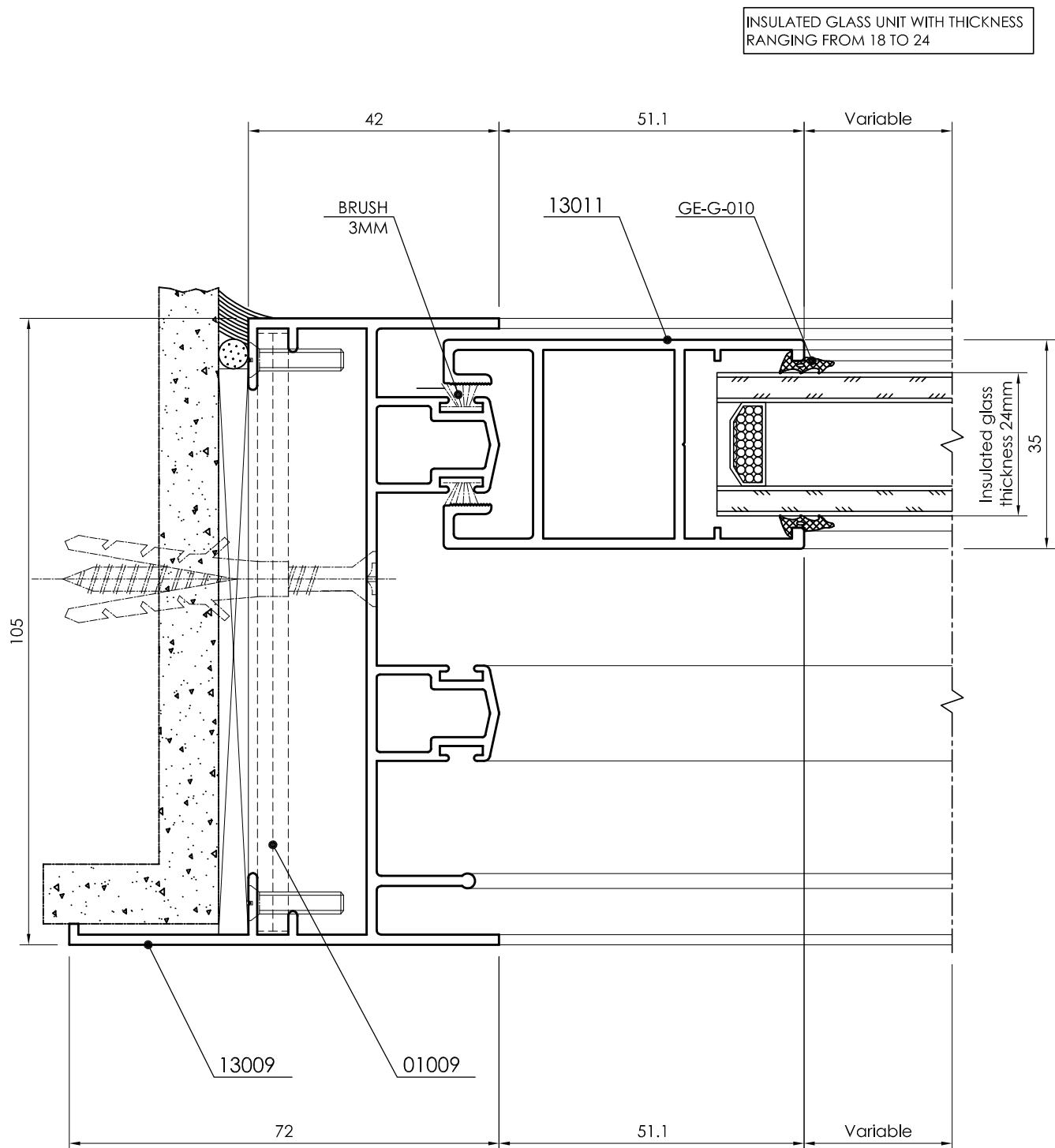
## Top Window Section

Detail - A1



**Left Window Section**

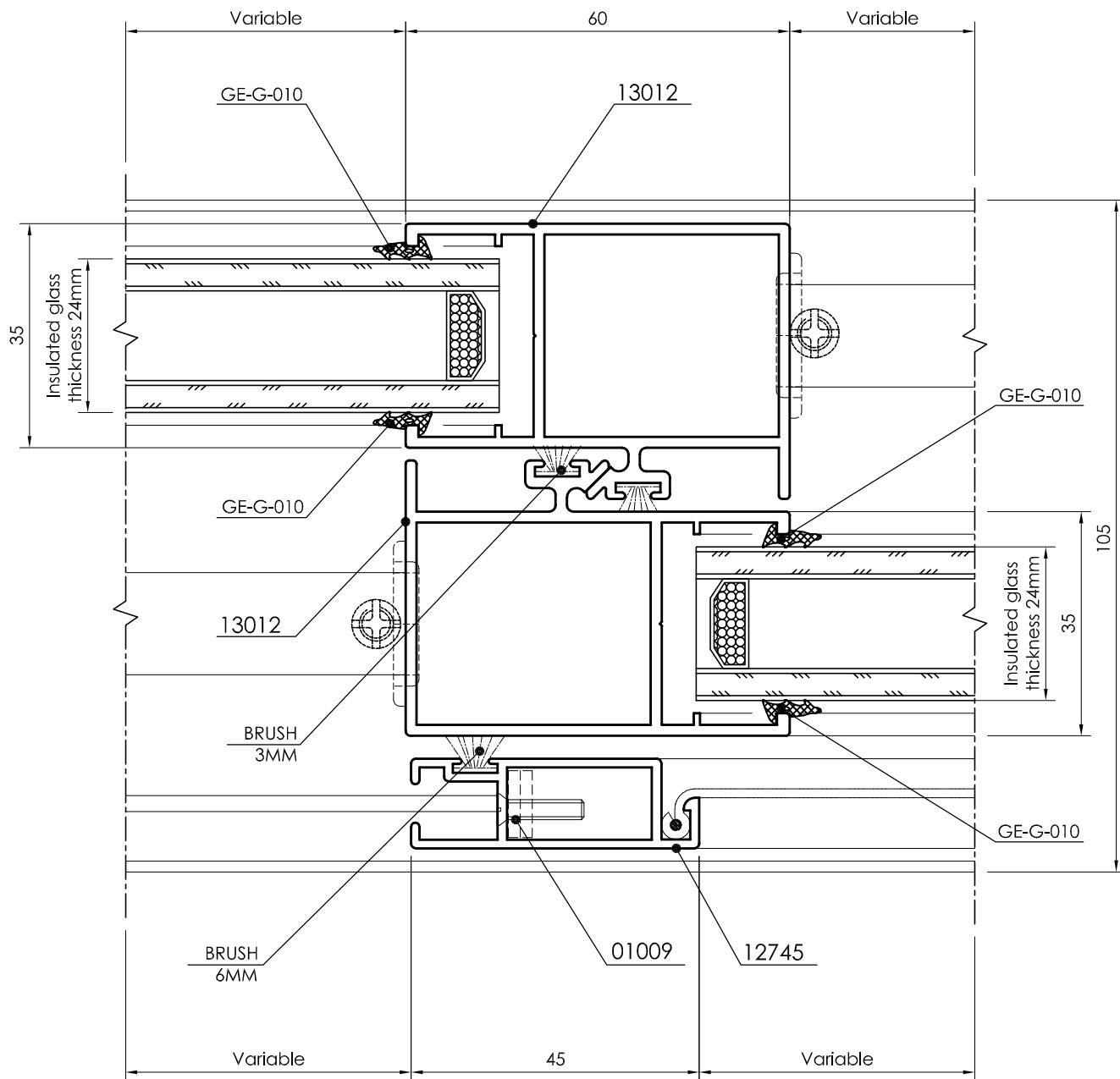
Detail - A2



**Interlock Section**

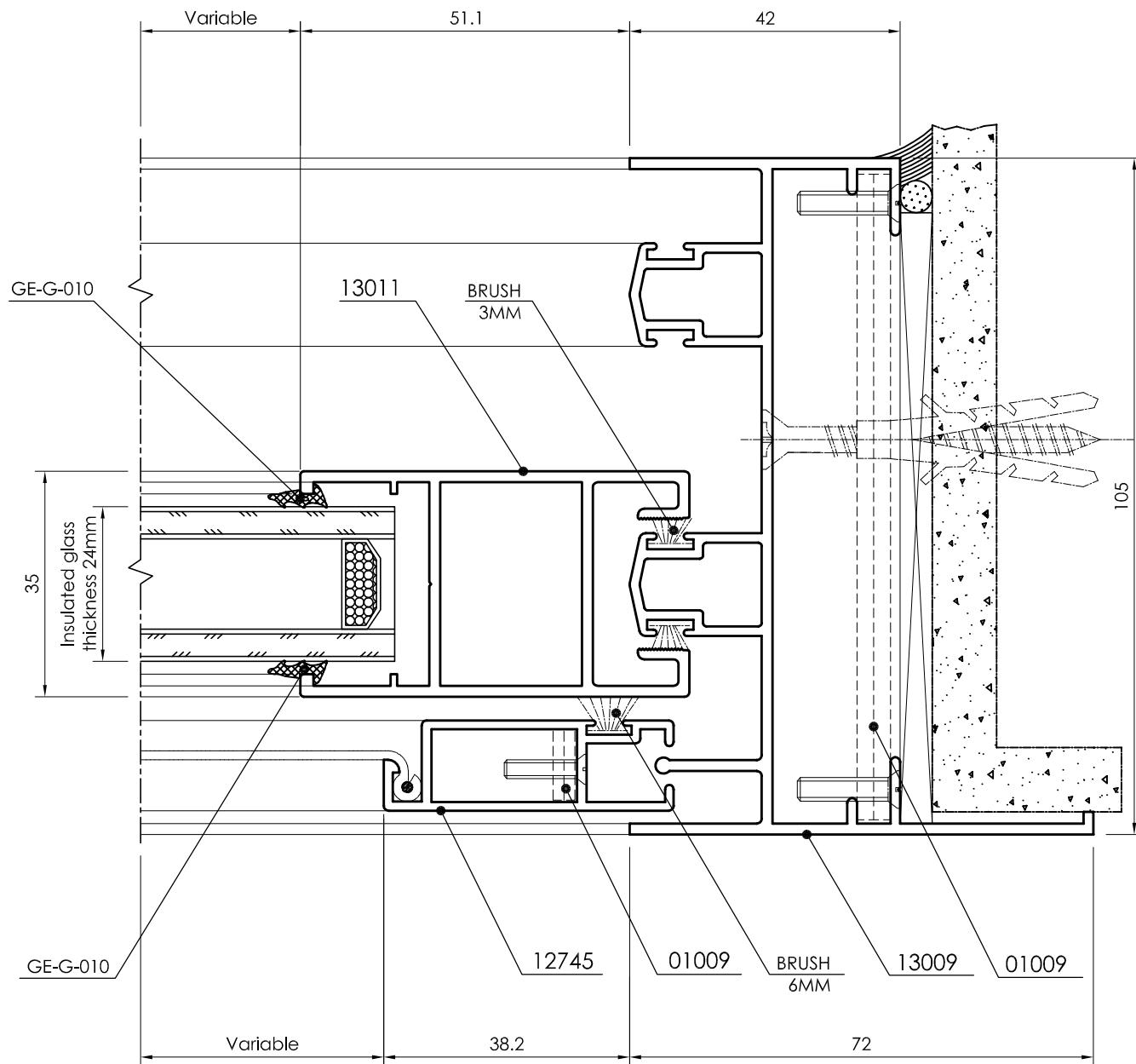
Detail - A3

INSULATED GLASS UNIT WITH THICKNESS  
RANGING FROM 18 TO 24



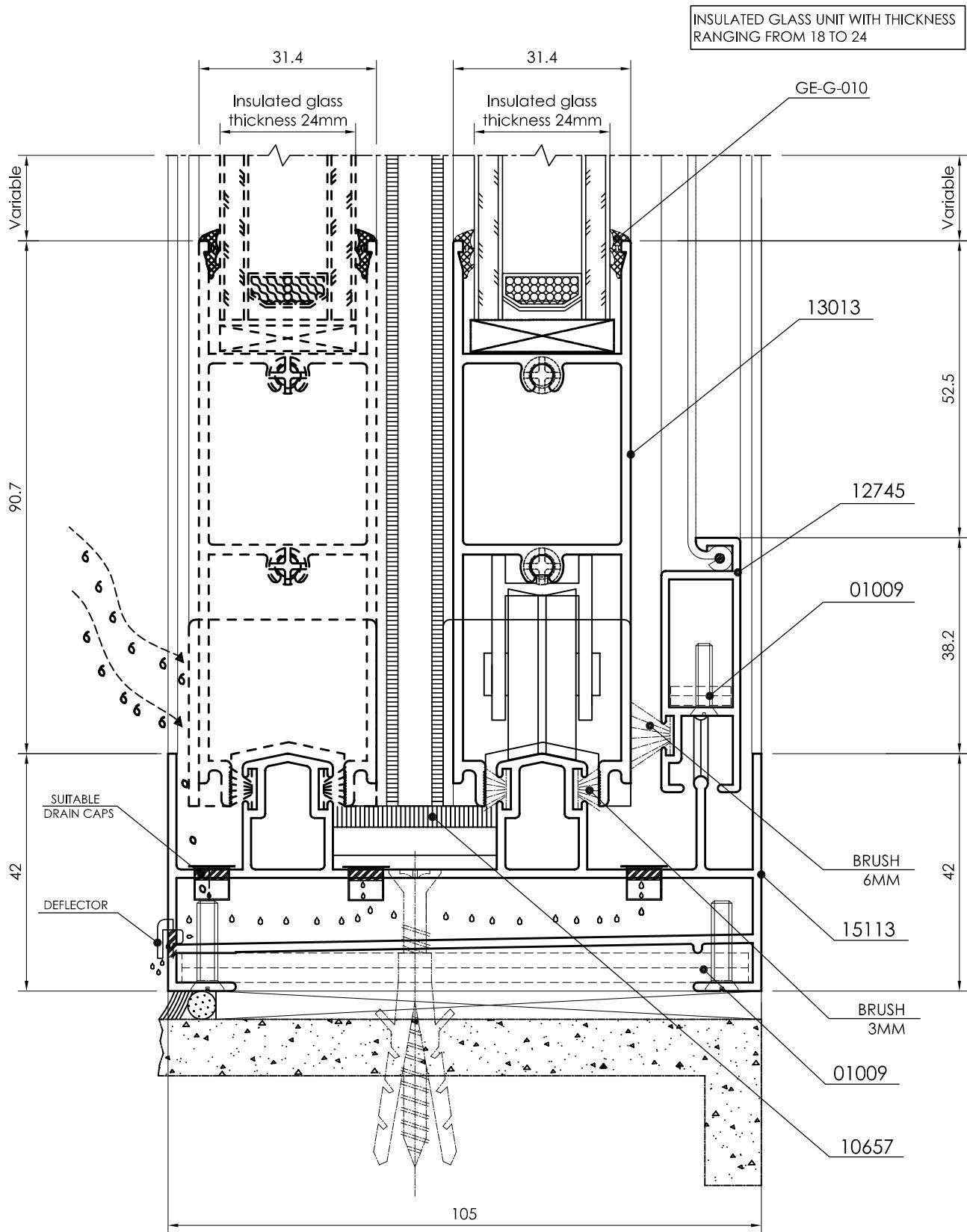
**Right Window Section**

Detail - A4



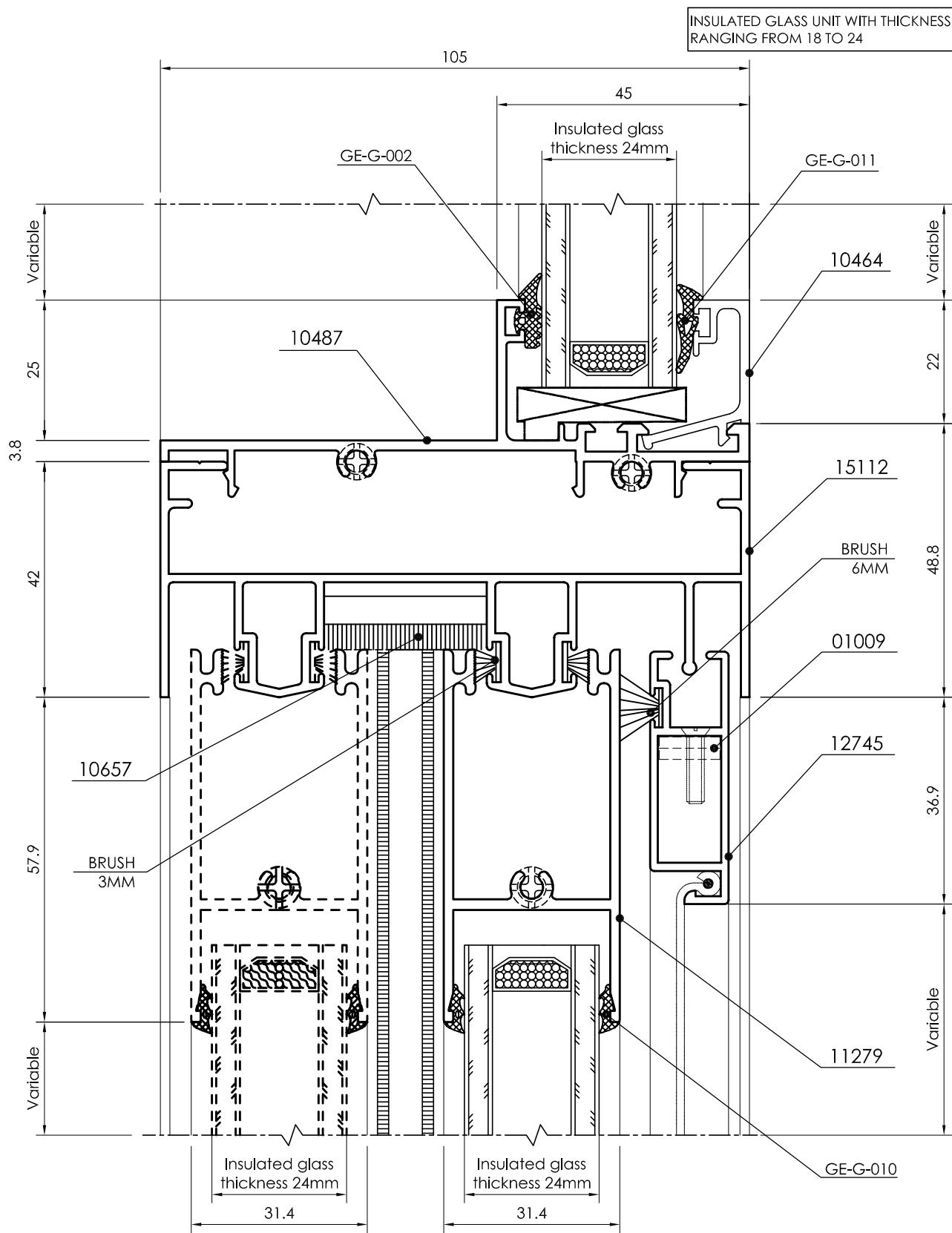
**Bottom Window Section**

Detail - B



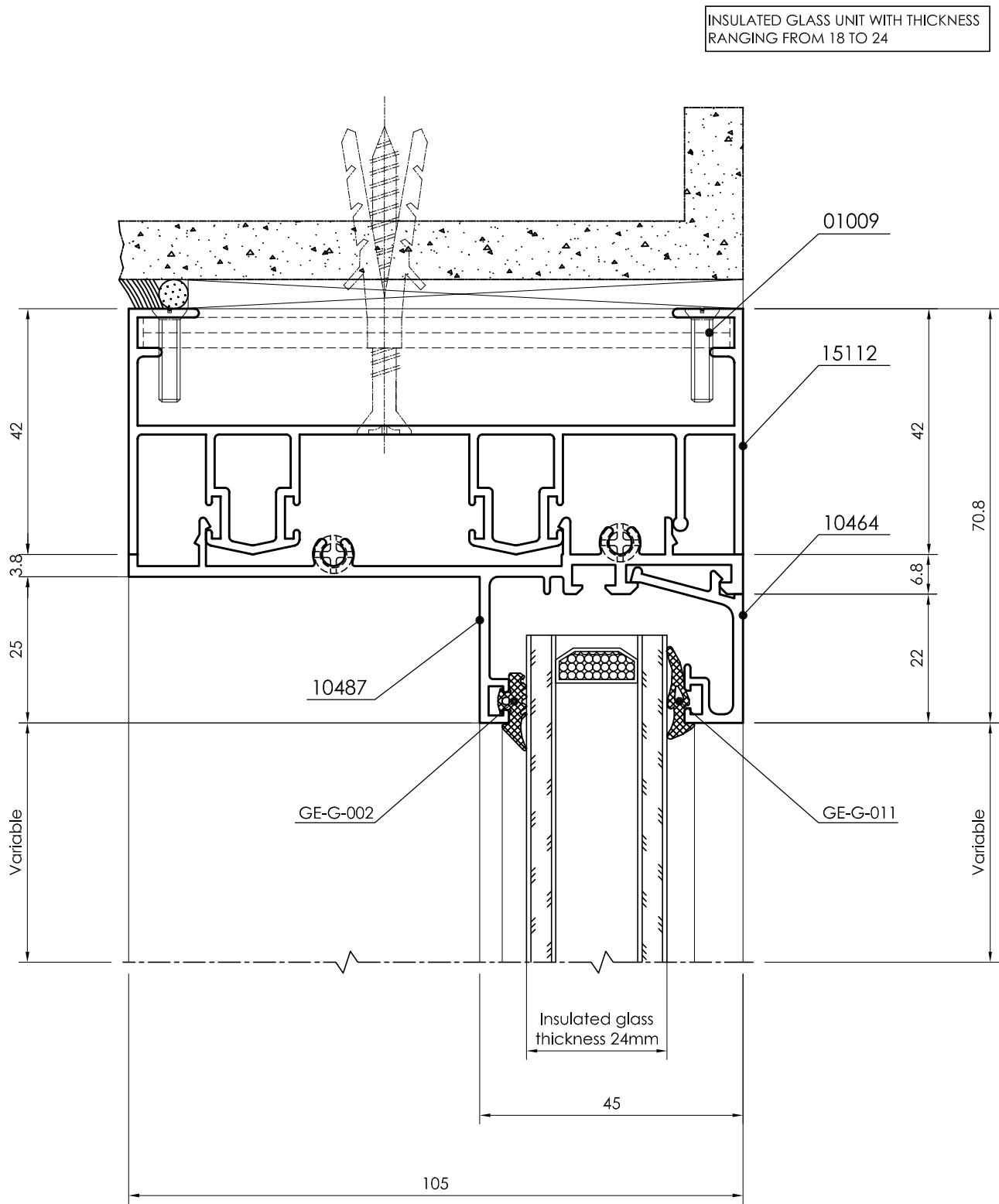
## Fixed Section

Detail - B1



**Top Fixed Section**

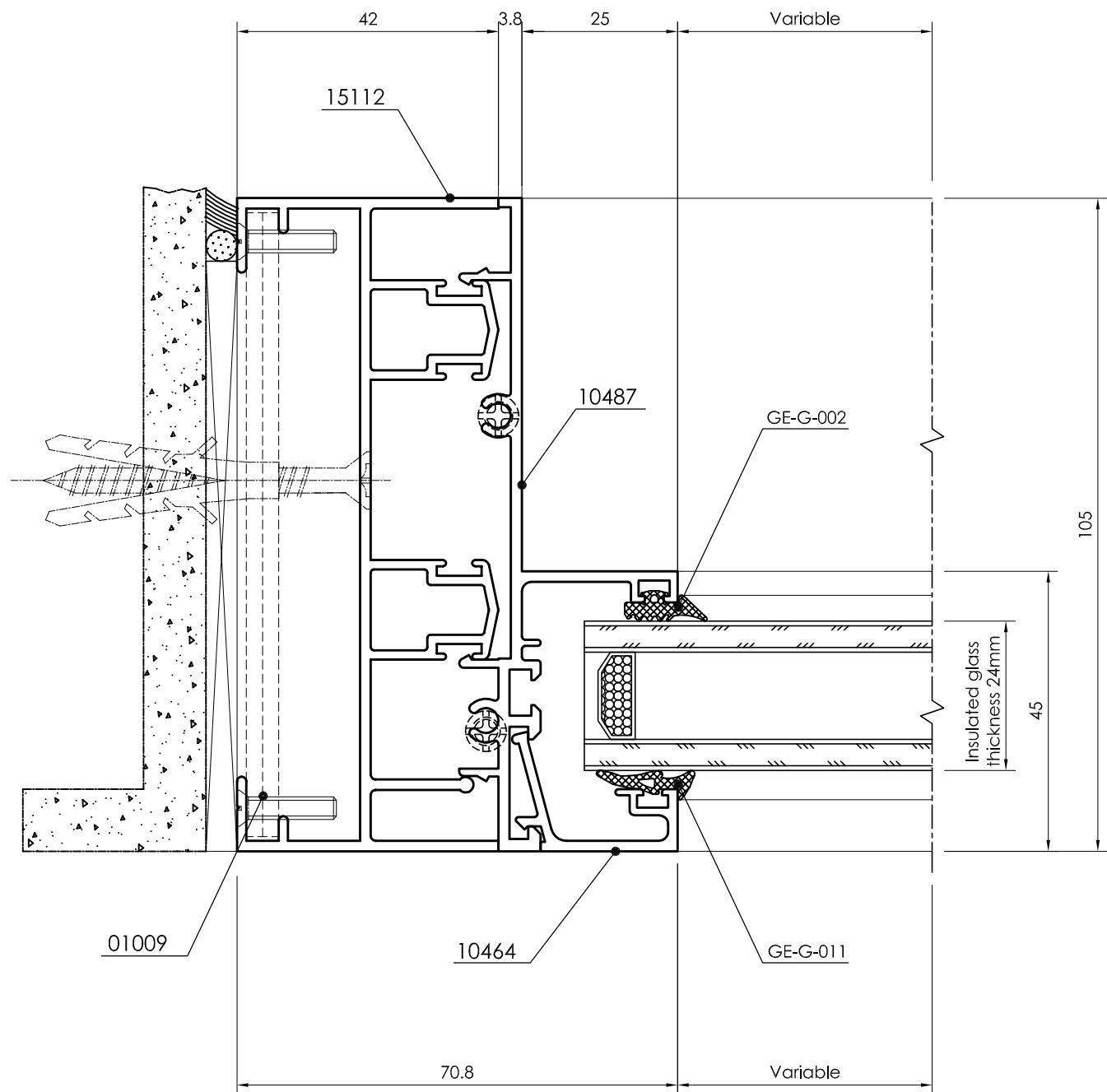
Detail - B2



**Left Fixed Section**

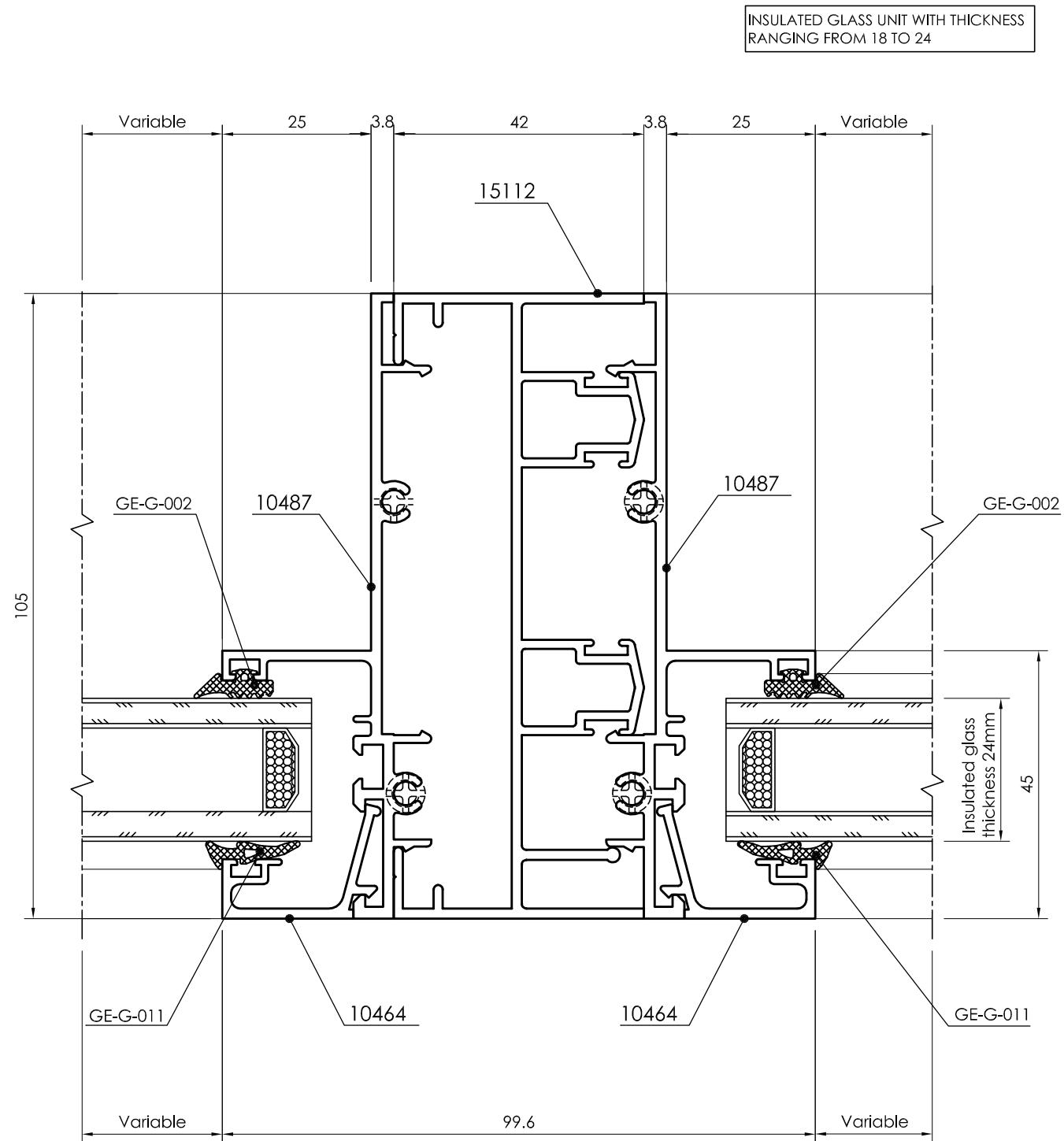
Detail - B3

INSULATED GLASS UNIT WITH THICKNESS  
RANGING FROM 18 TO 24



**Left Fixed Section**

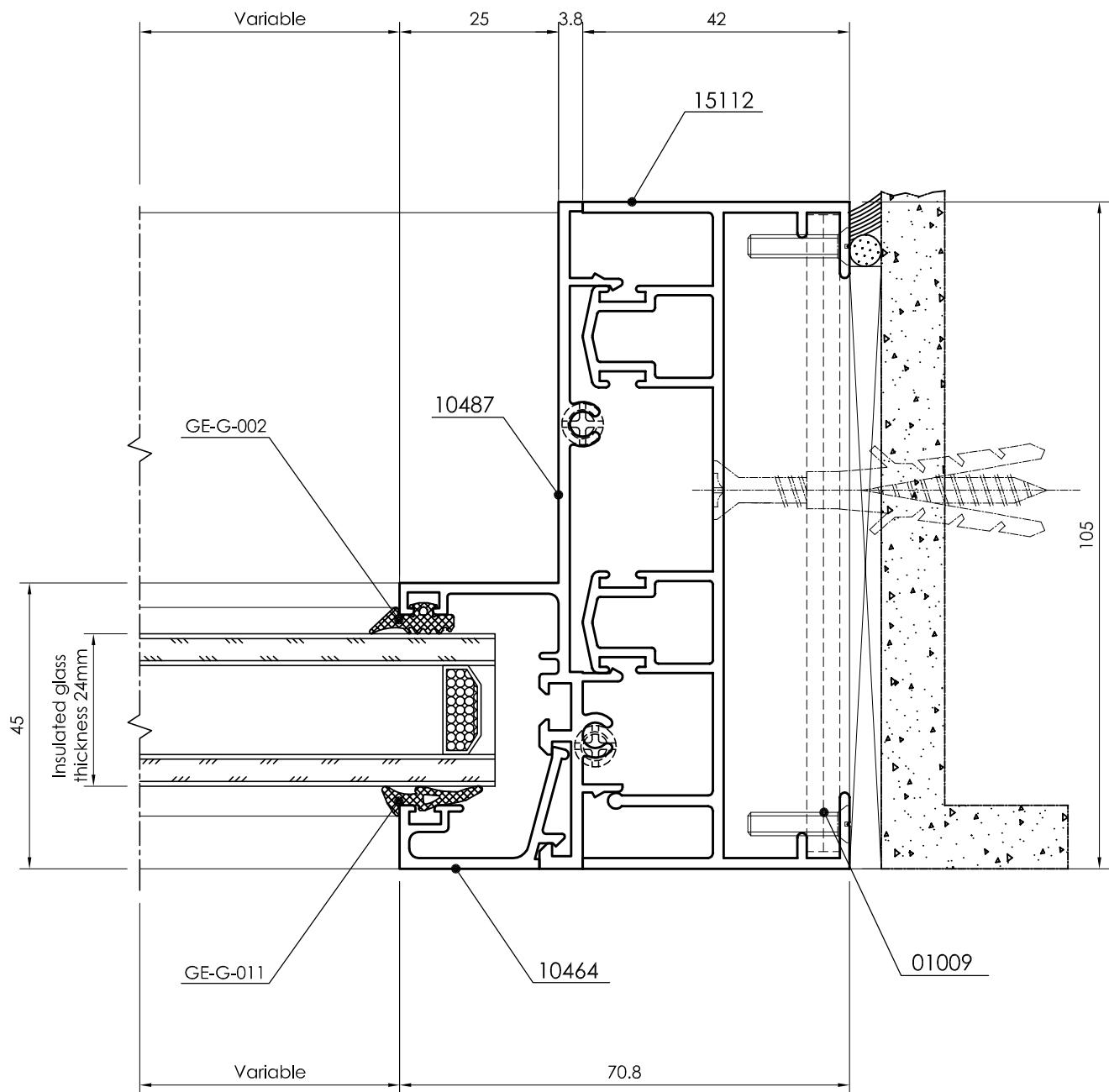
Detail - B4



**Left Fixed Section**

Detail - B5

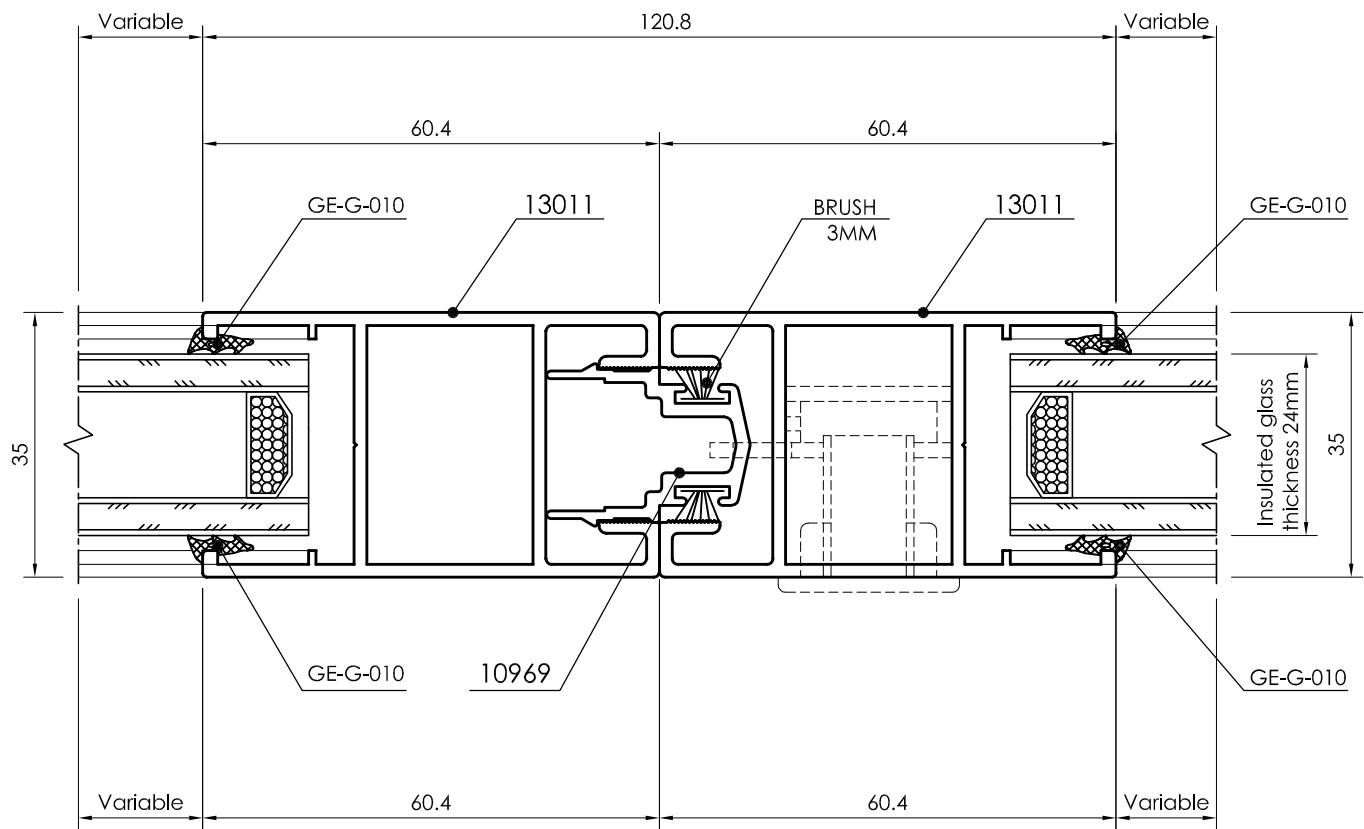
INSULATED GLASS UNIT WITH THICKNESS  
RANGING FROM 18 TO 24



**4 Vents Mid Section**

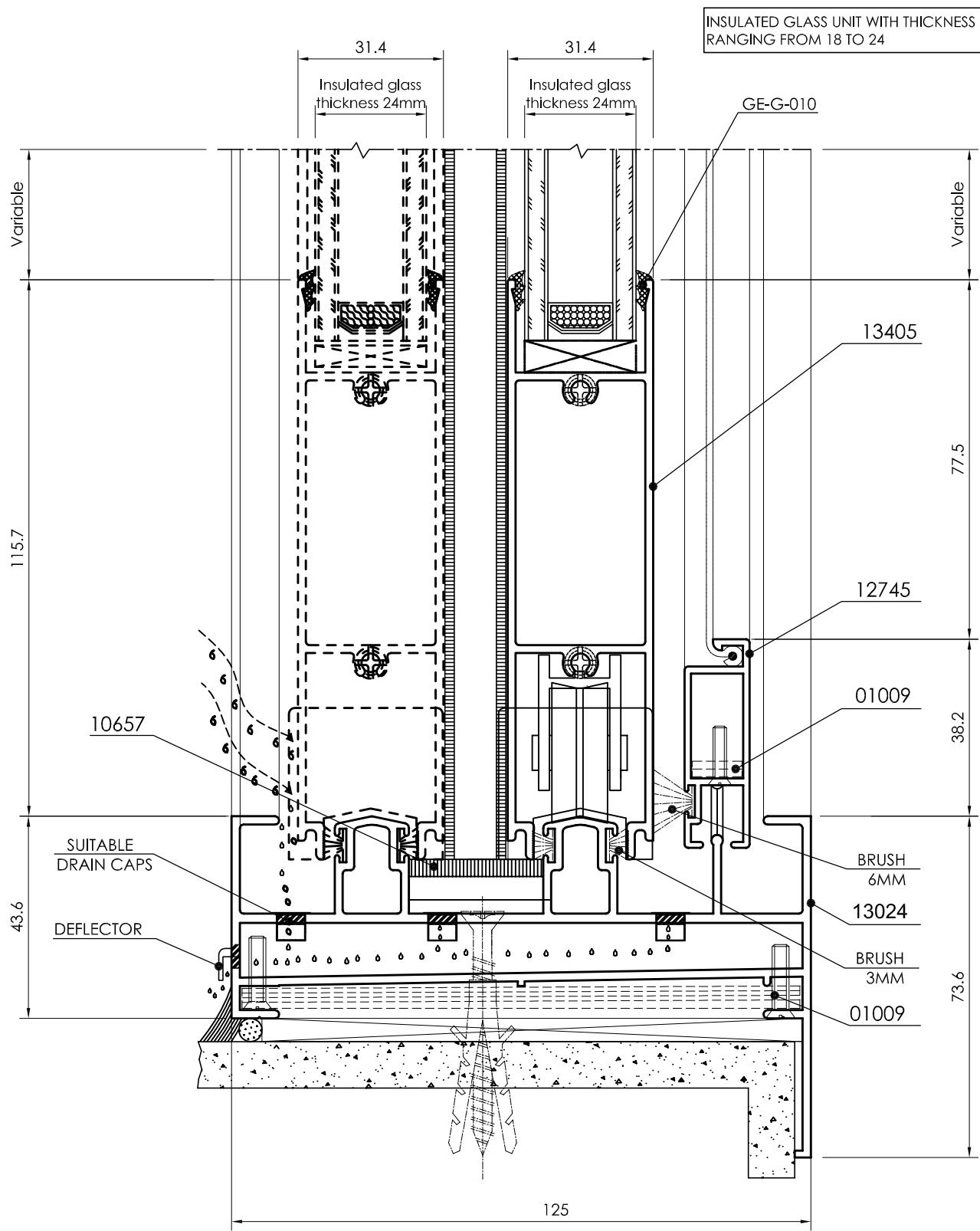
Detail - B6

INSULATED GLASS UNIT WITH THICKNESS  
RANGING FROM 18 TO 24



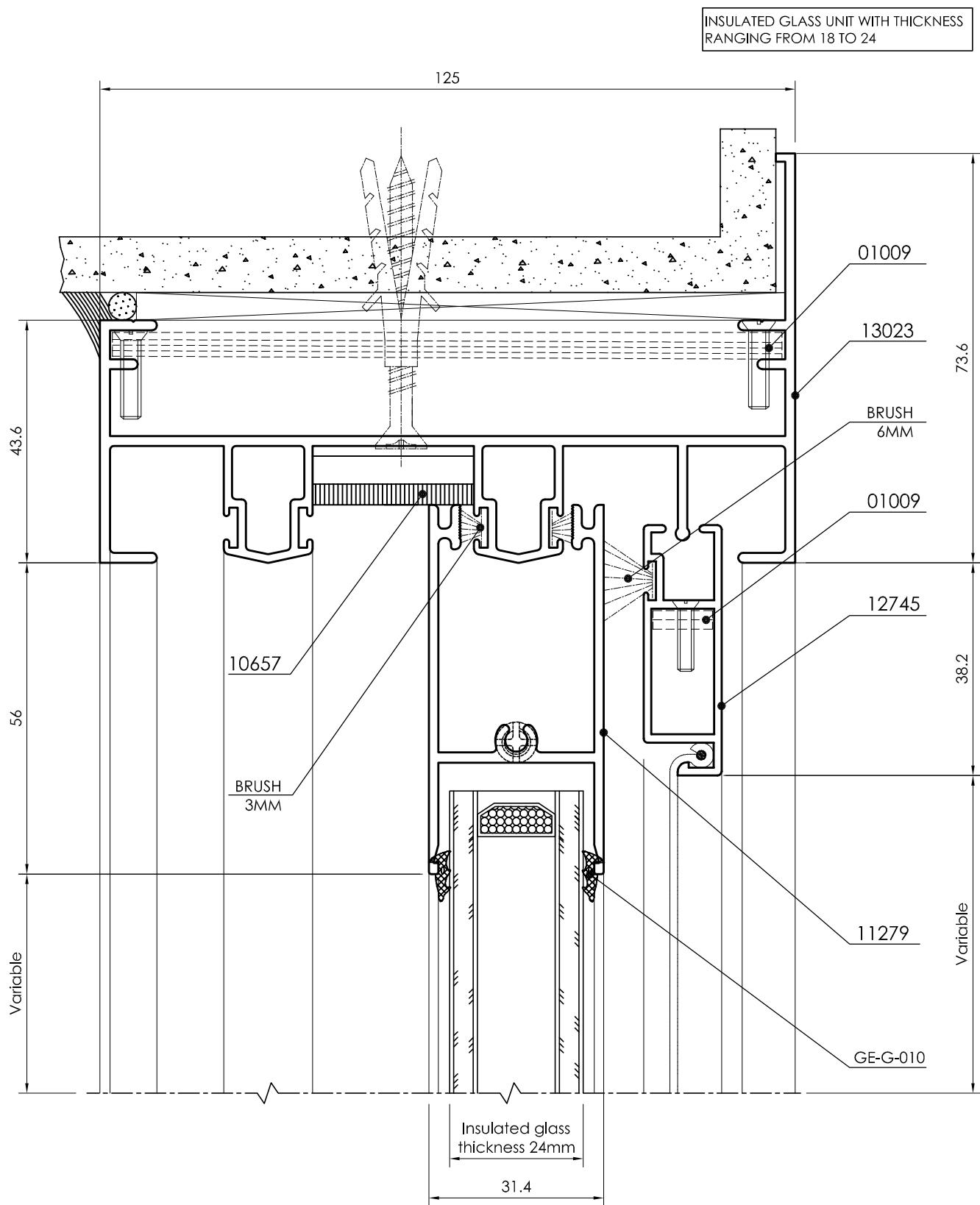
**Bottom Door Section**

Detail - D



## Top Door Section

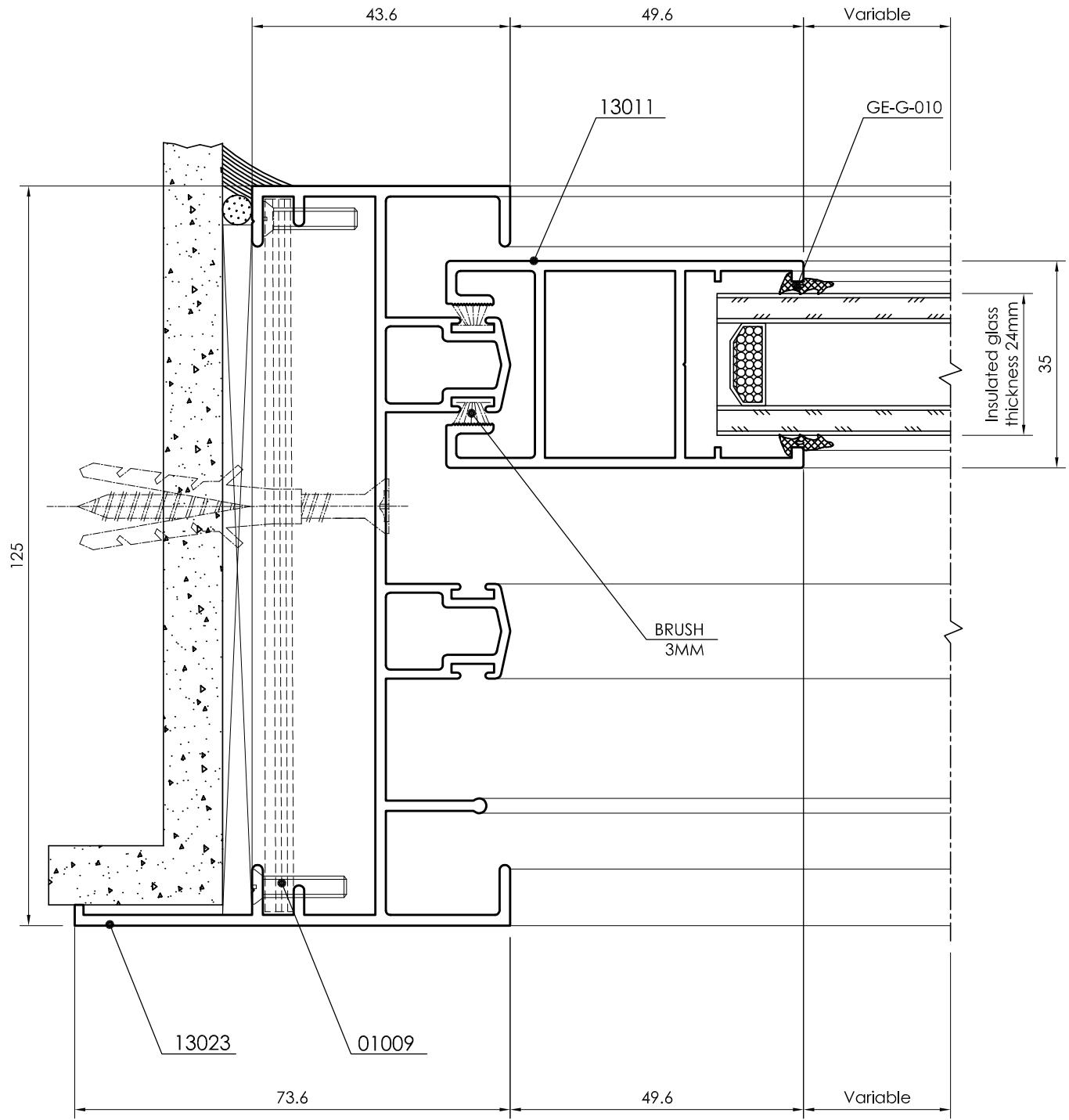
Detail - D1



**Left Door Section**

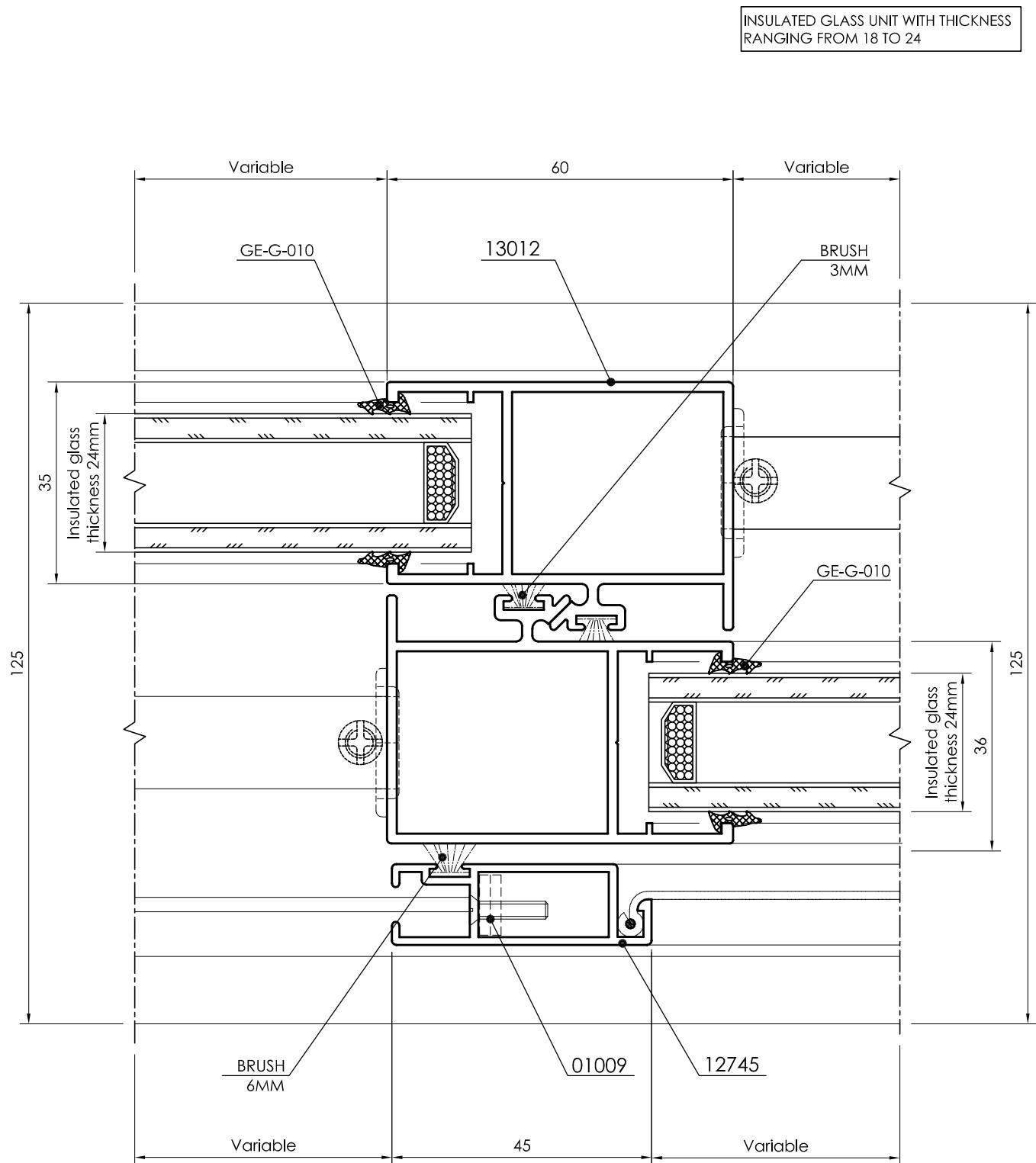
Detail - D2

INSULATED GLASS UNIT WITH THICKNESS  
RANGING FROM 18 TO 24



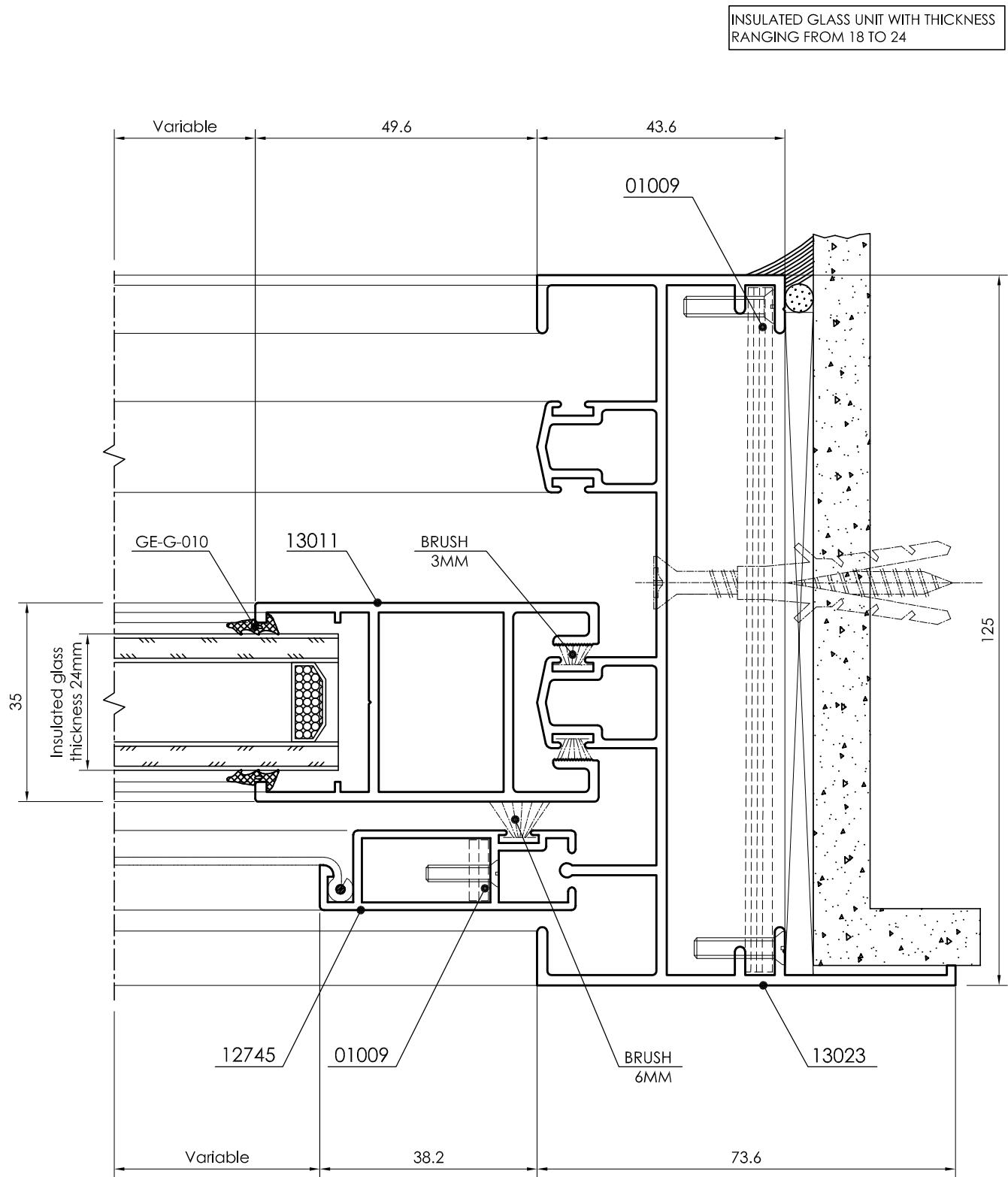
**Interlock Section**

Detail - D3



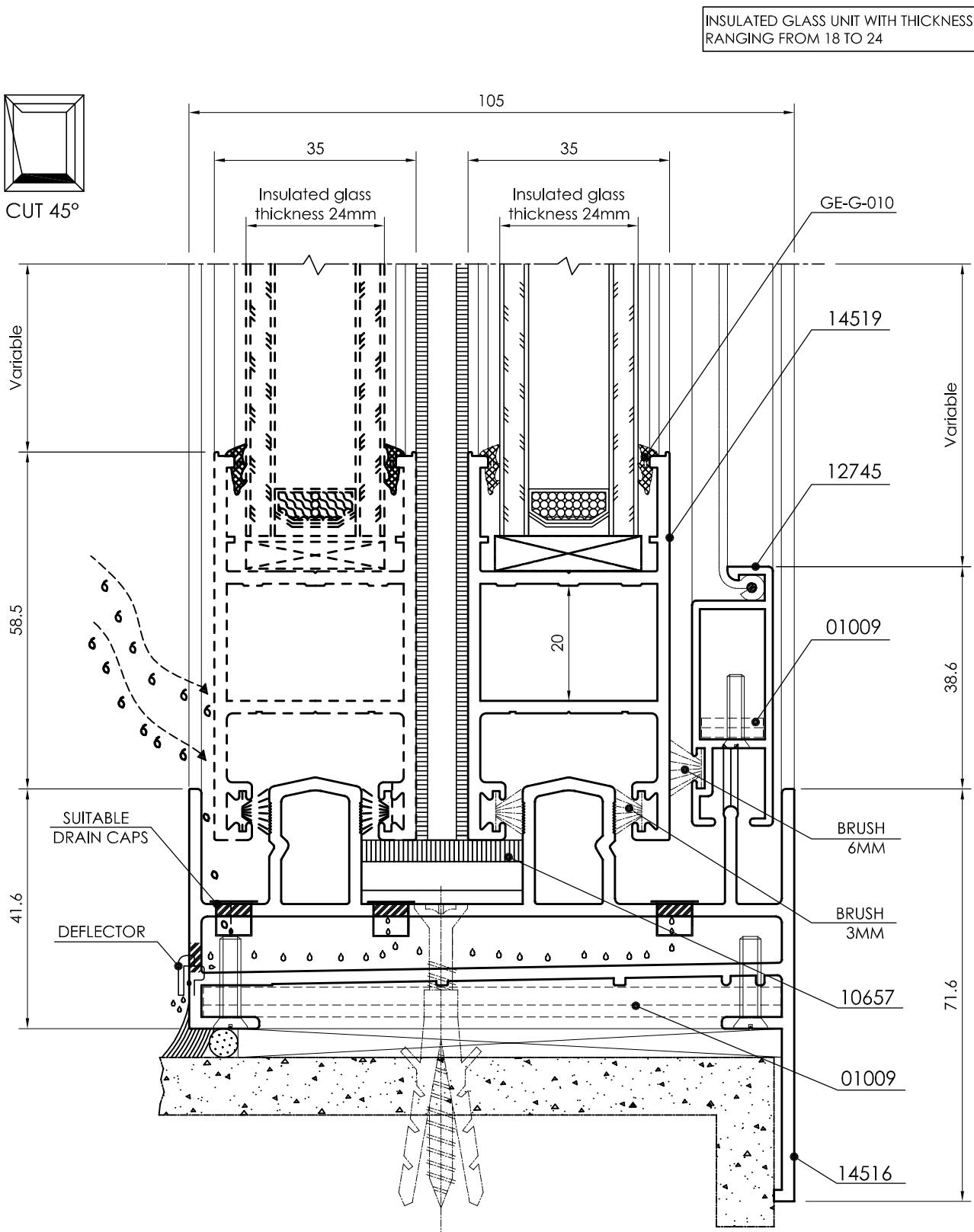
## Right Door Section

Detail - D4



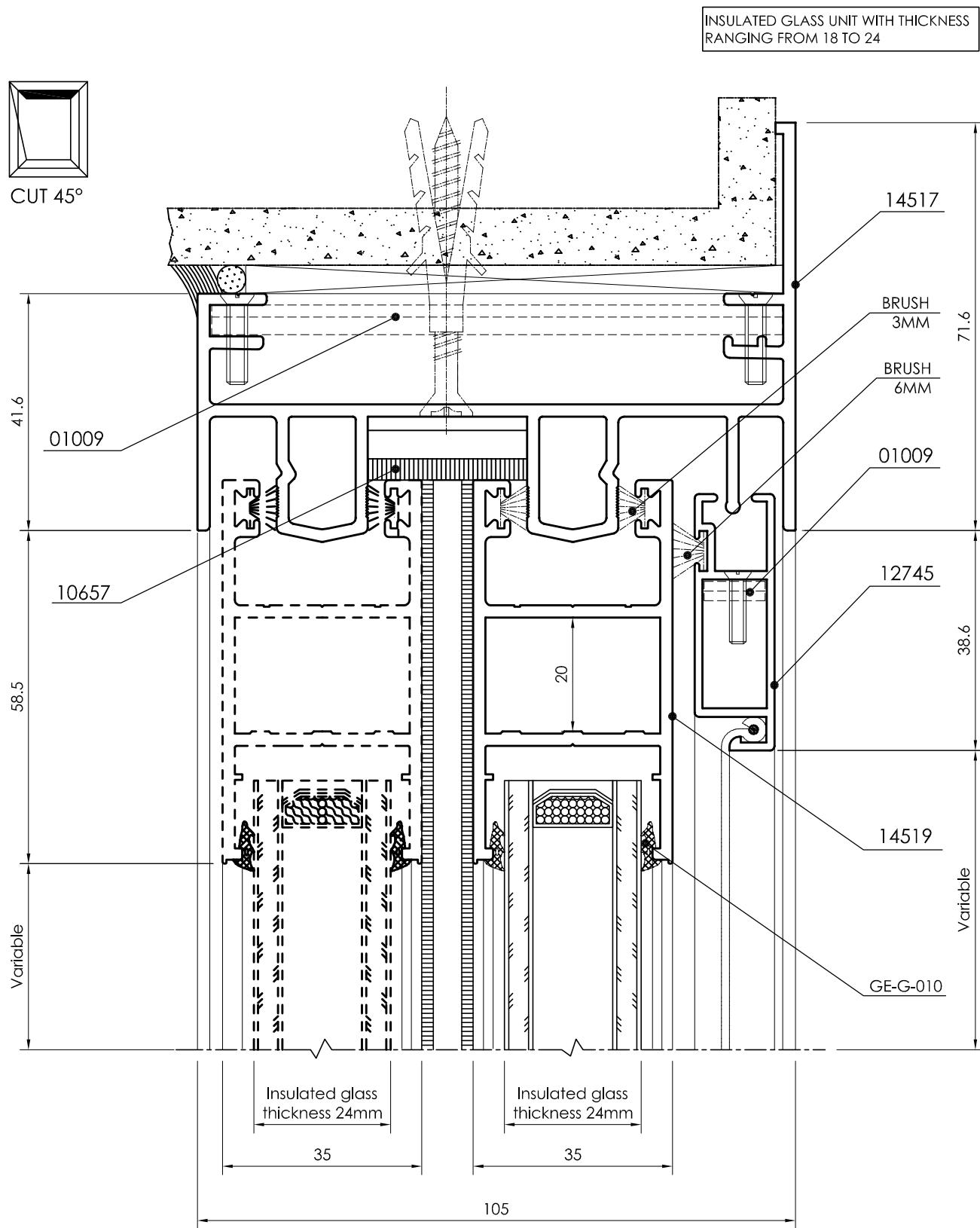
**Bottom Door / Window Section**

Detail - R



## Top Door / Window Section

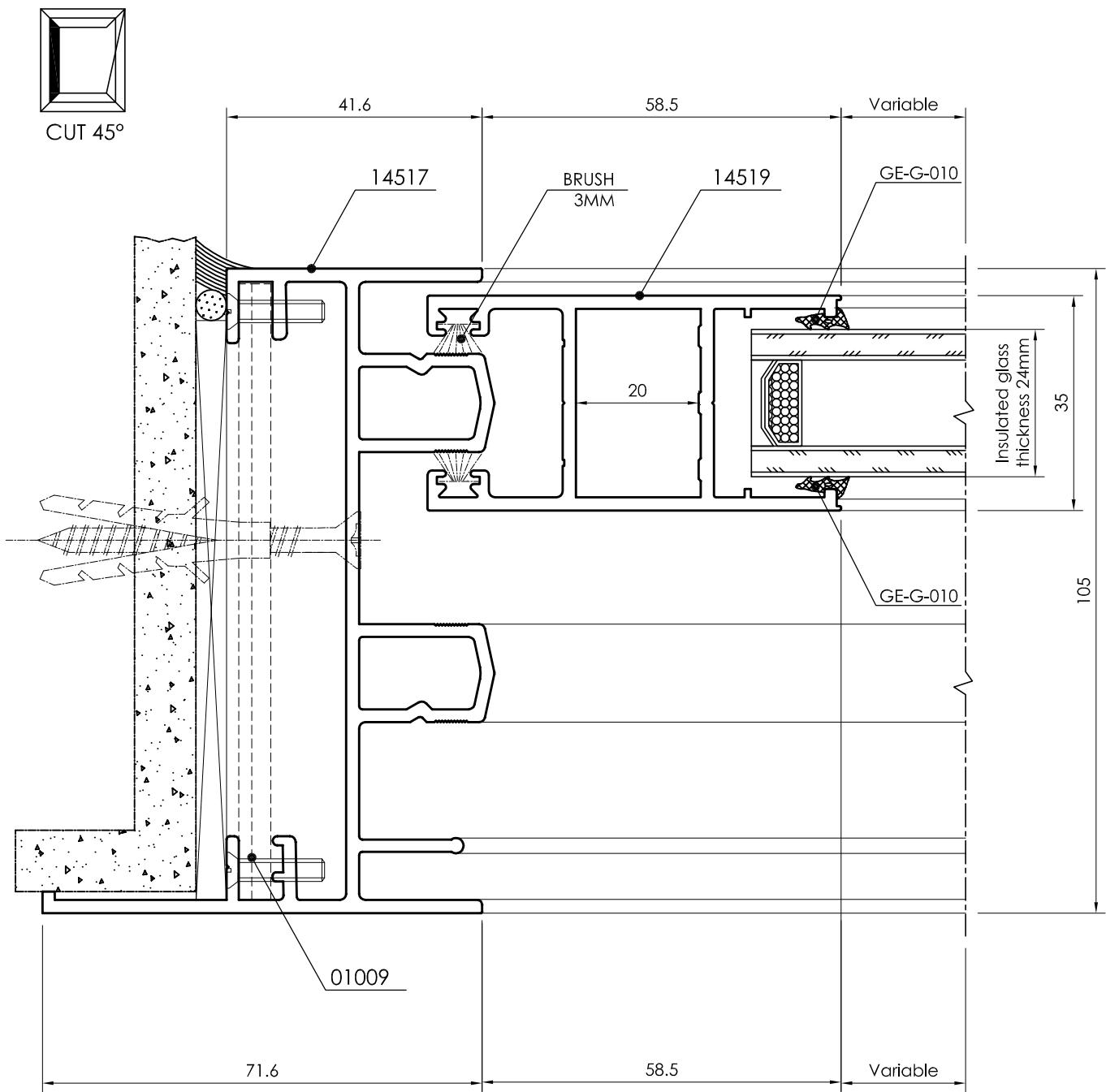
Detail - R1



**Left Door / Window Section**

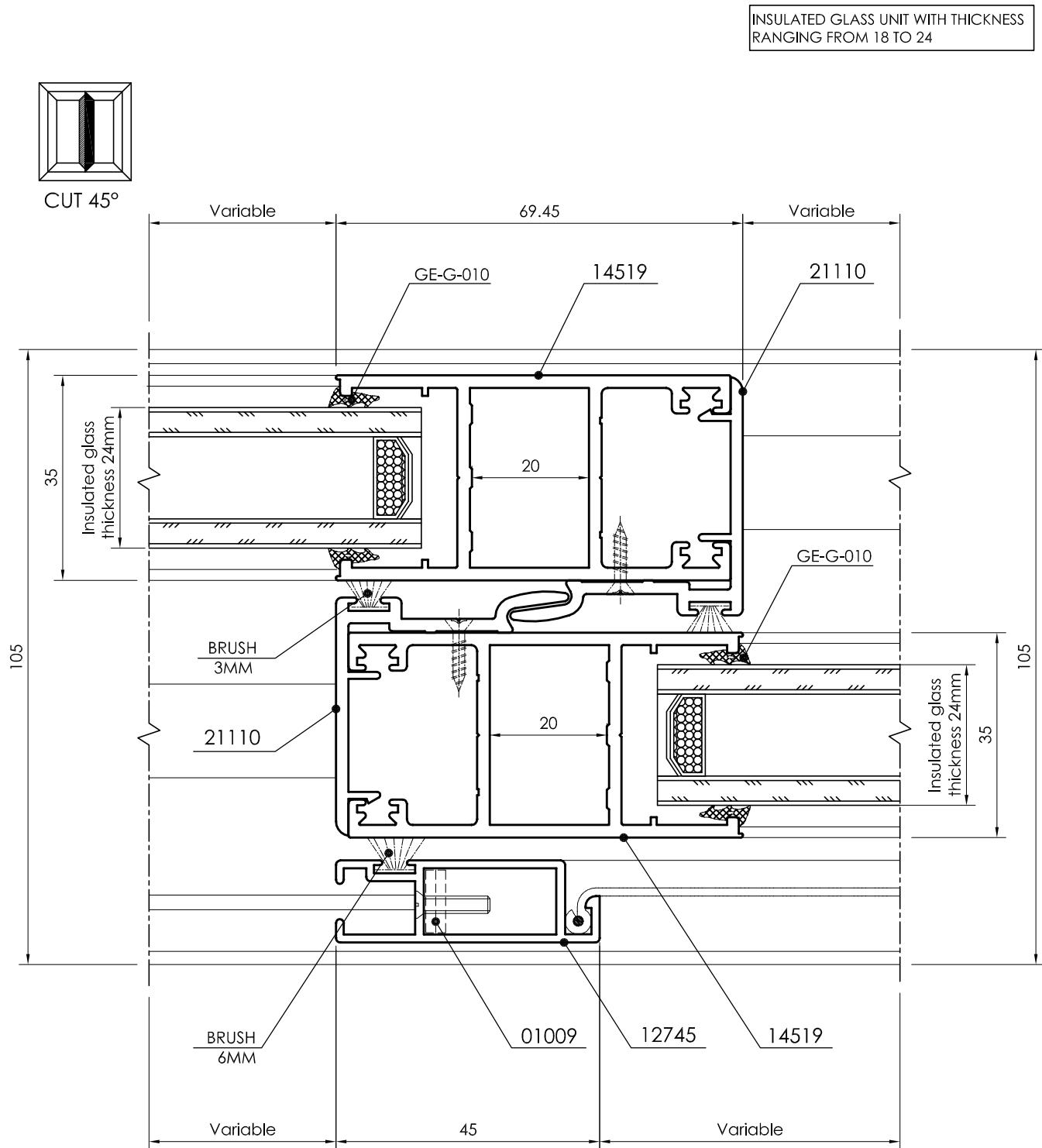
Detail - R2

INSULATED GLASS UNIT WITH THICKNESS  
RANGING FROM 18 TO 24



**Interlock Section**

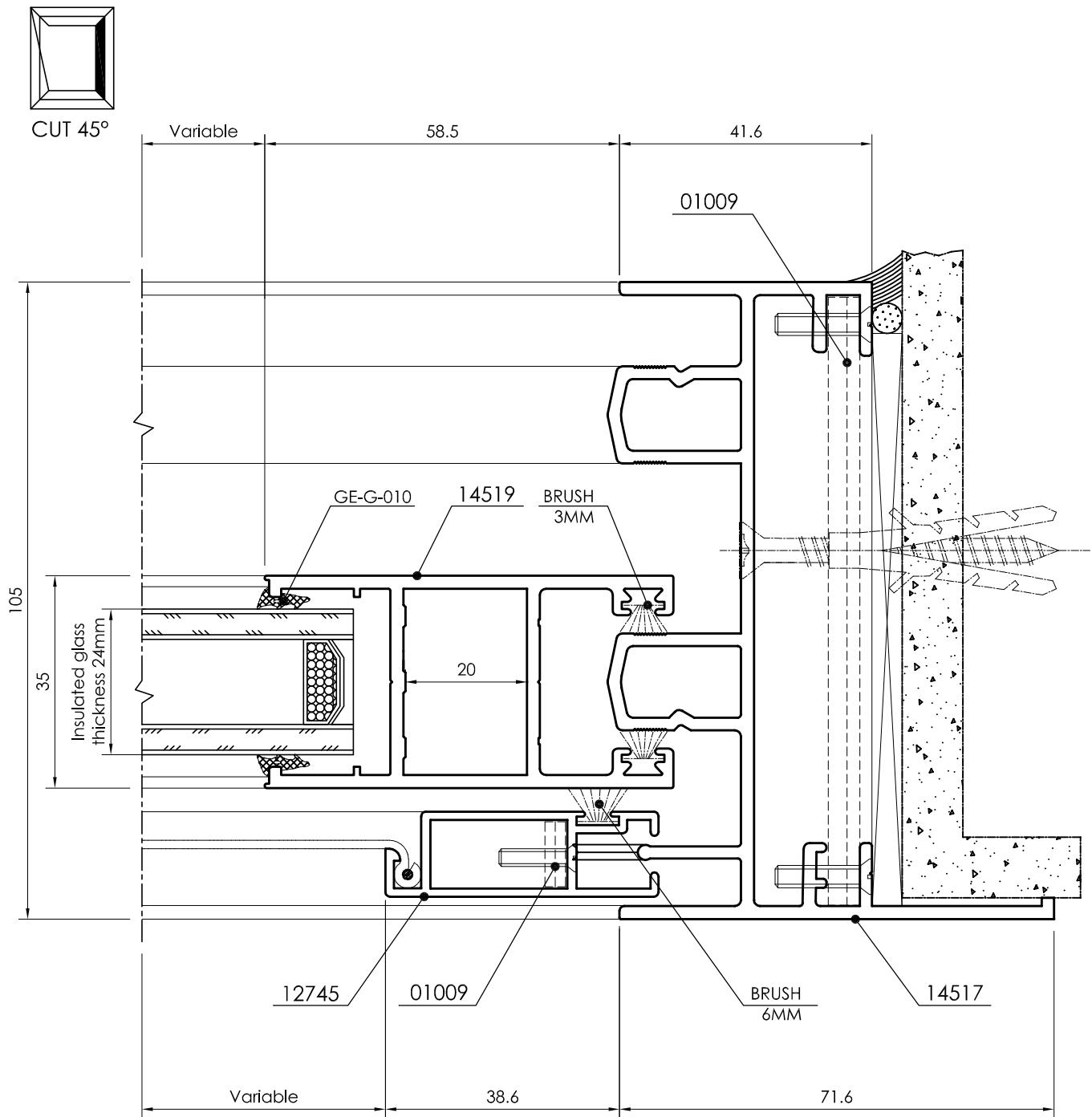
Detail - R3



## Right Door / Window Section

Detail - R4

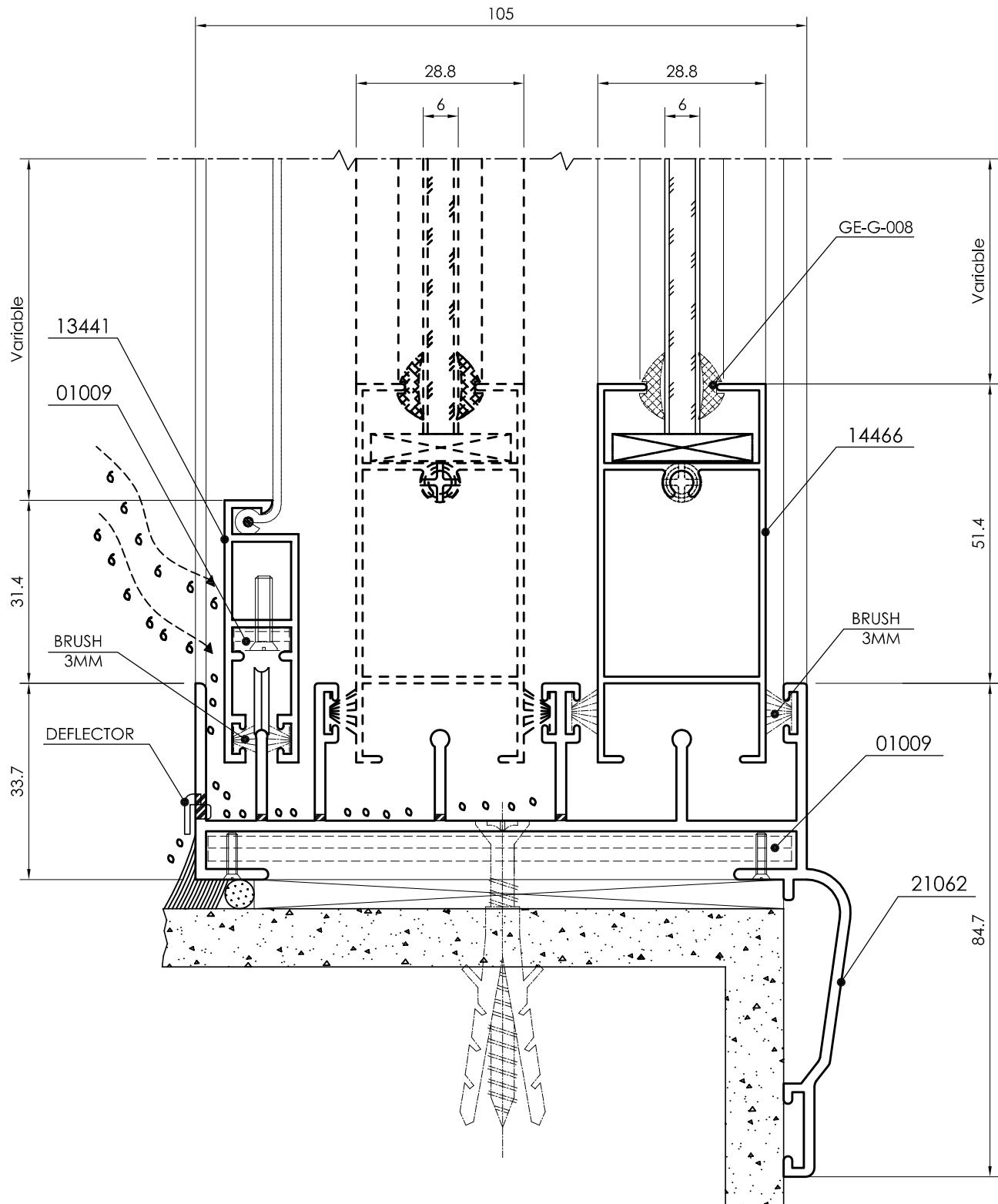
INSULATED GLASS UNIT WITH THICKNESS  
RANGING FROM 18 TO 24



**Bottom** Section

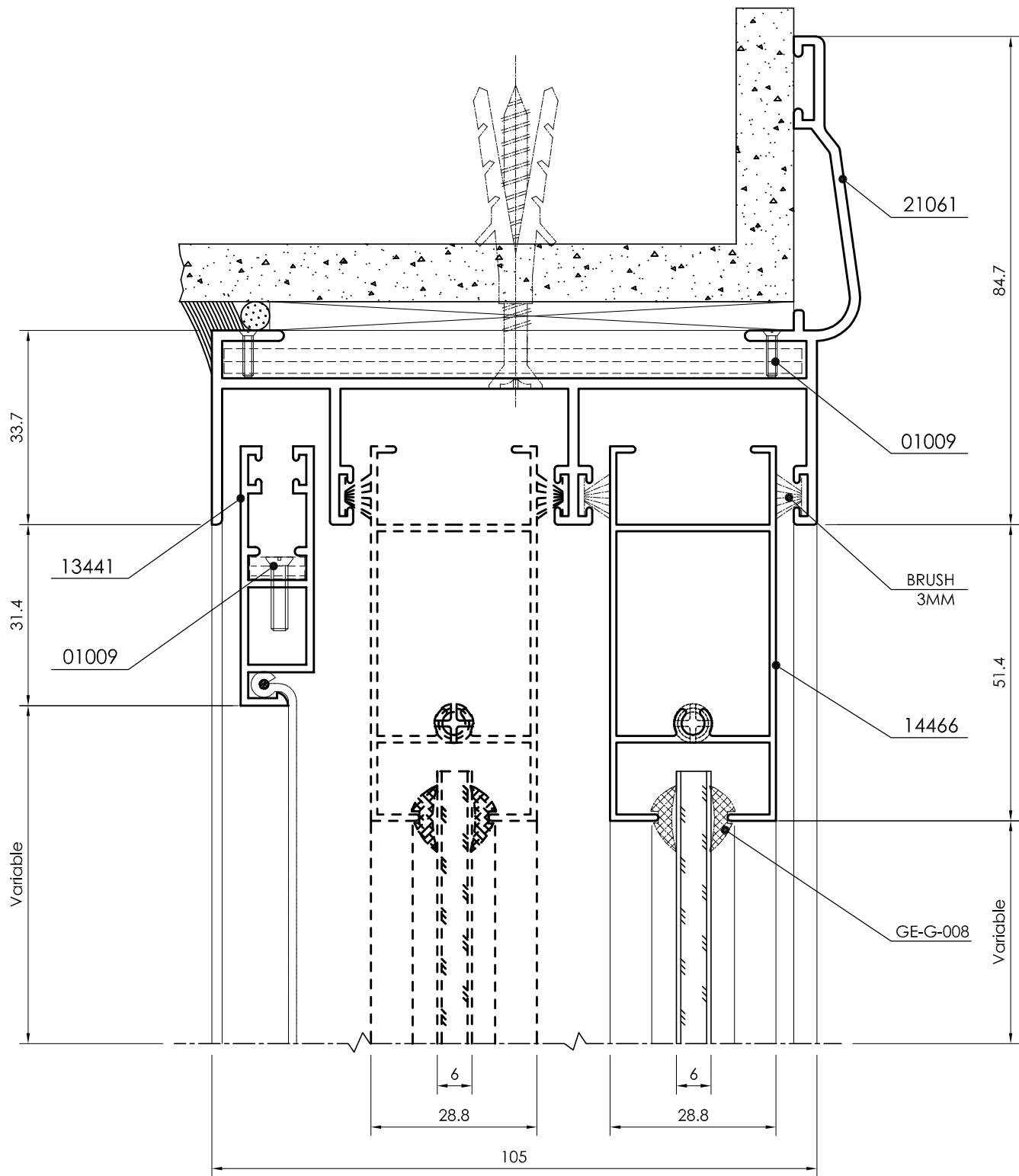
Detail - C

SINGLE GLASS UNIT WITH THICKNESS  
RANGING FROM 4 TO 8



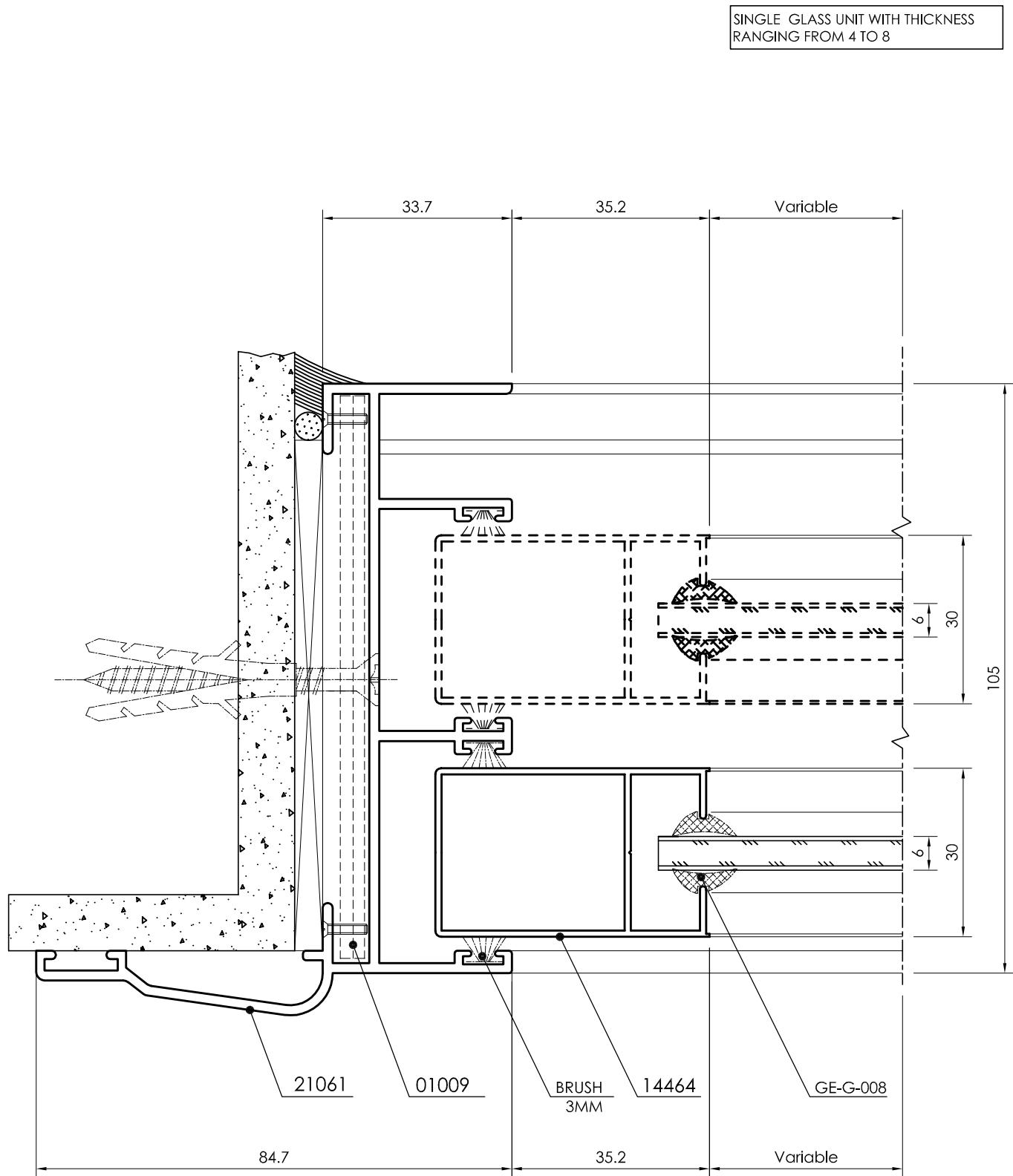
**Top Section**  
Detail - C1

SINGLE GLASS UNIT WITH THICKNESS  
RANGING FROM 4 TO 8



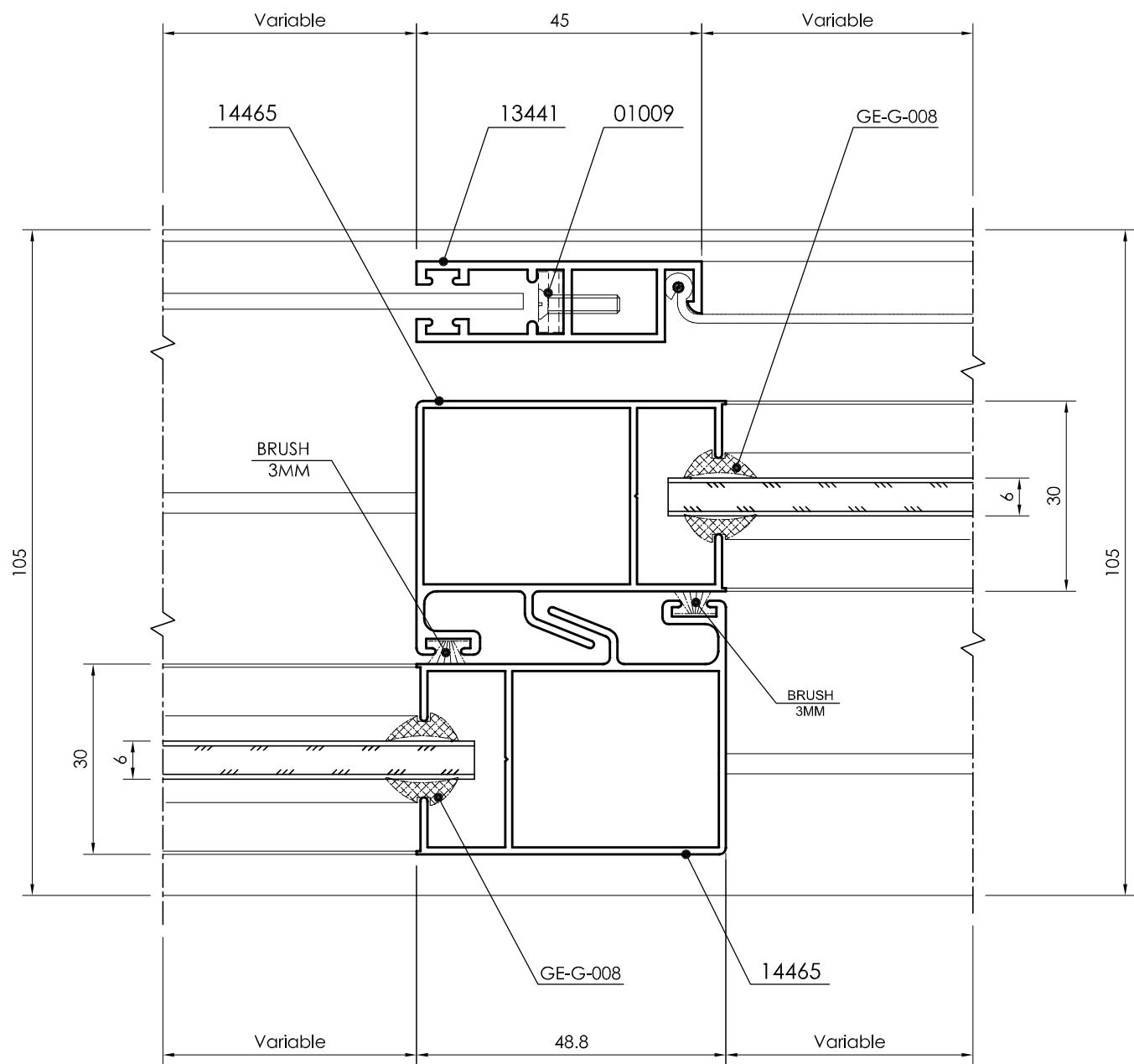
**Left Section**

Detail - C2



**Interlock Section**

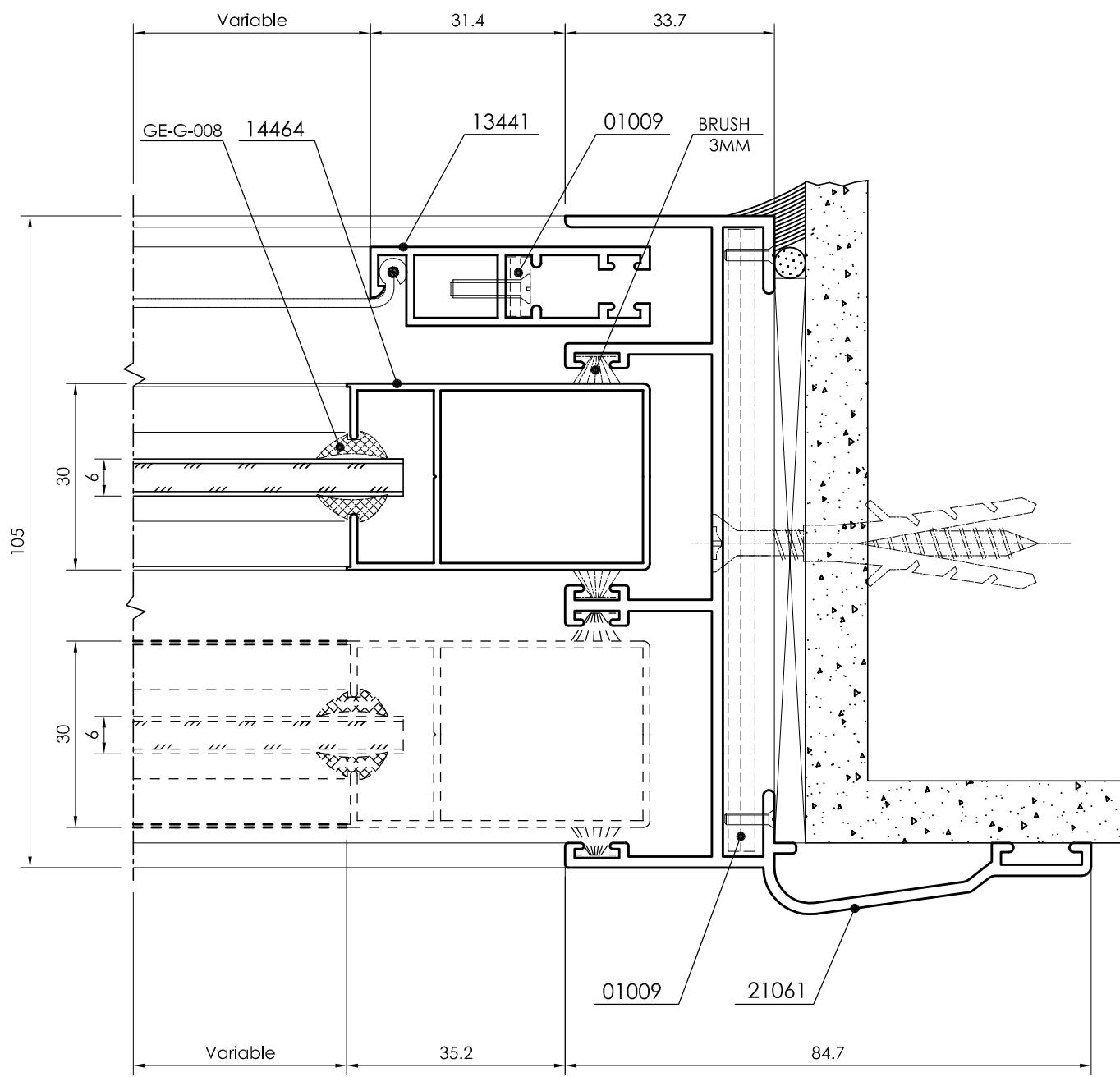
Detail - C3

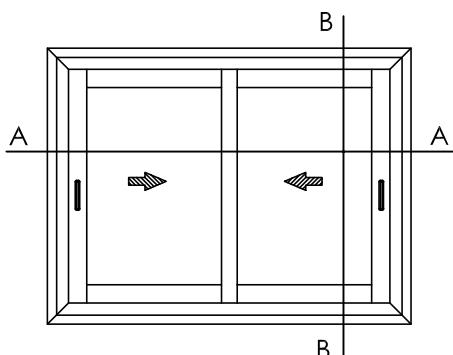
SINGLE GLASS UNIT WITH THICKNESS  
RANGING FROM 4 TO 8

**Left Section**

Detail - C4

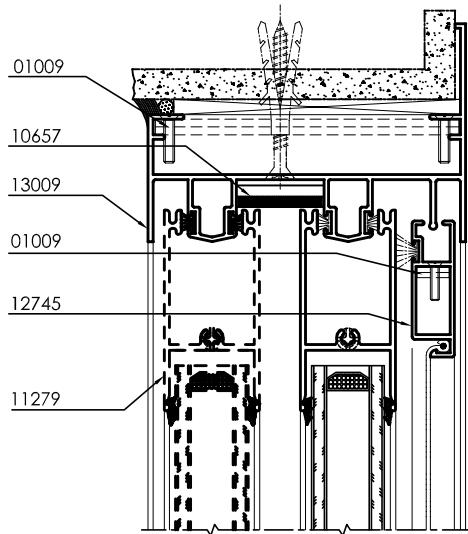
SINGLE GLASS UNIT WITH THICKNESS  
RANGING FROM 4 TO 8



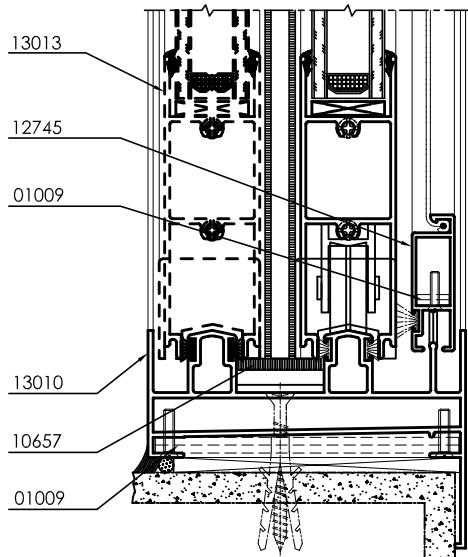


2 - SLIDING WINDOW (105MM)

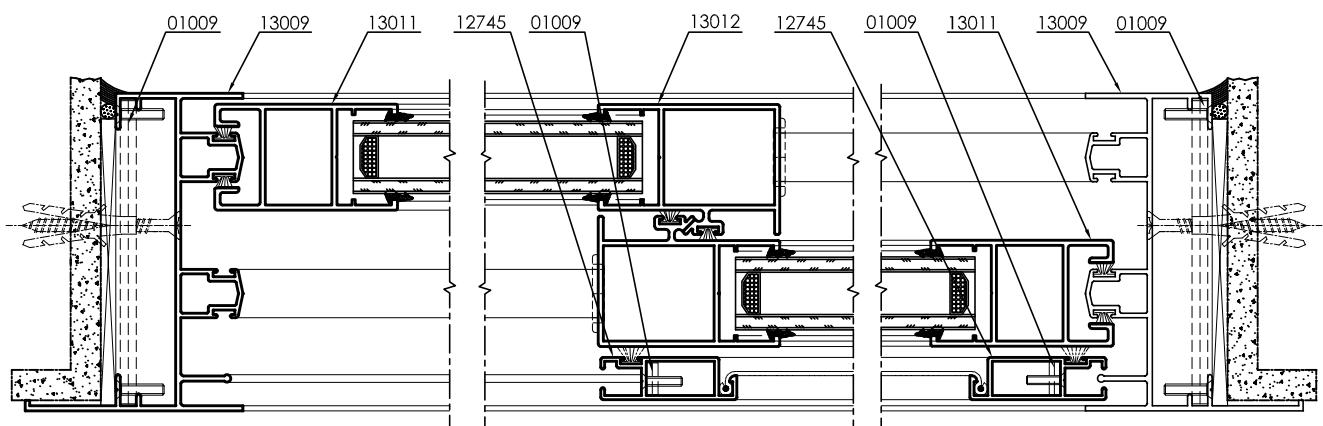
DETAIL : B-B

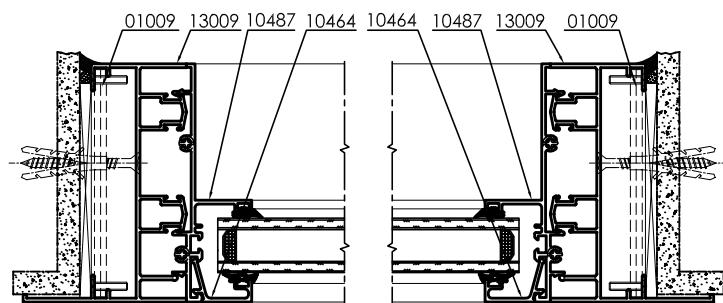
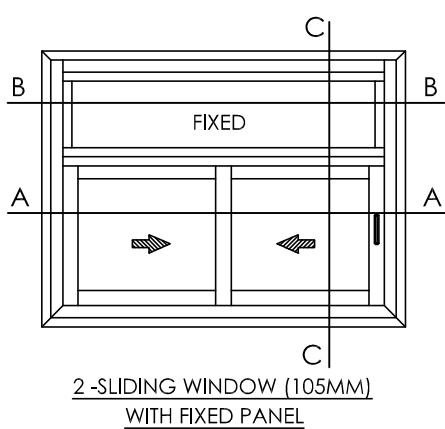


PROFILES		
Description	Shape	Section No.
Bottom Frame		13010
Top /Side Frame		13009
Bottom Sash		13013
Top Sash		11279
Side Sash		13011
Interlock		13012
Fly screen		12745
Dust Proof		10657
Corner Cleat - 40*4		01009

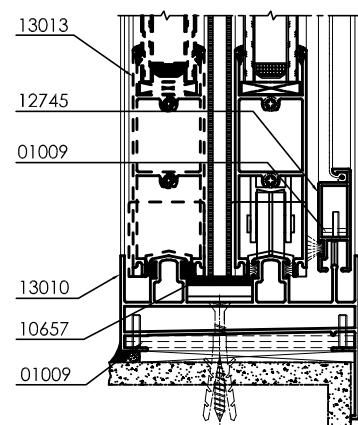
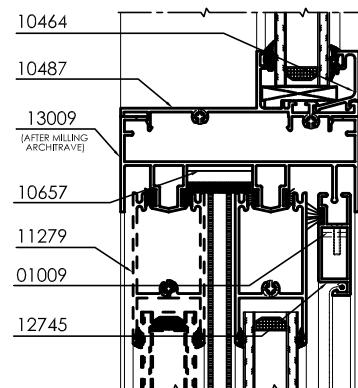
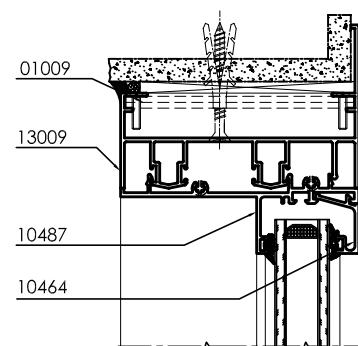
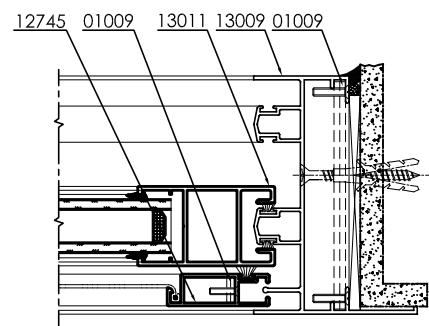
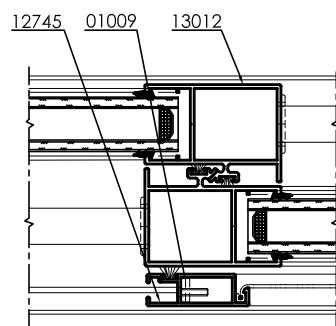
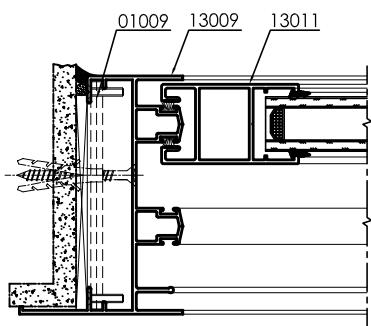


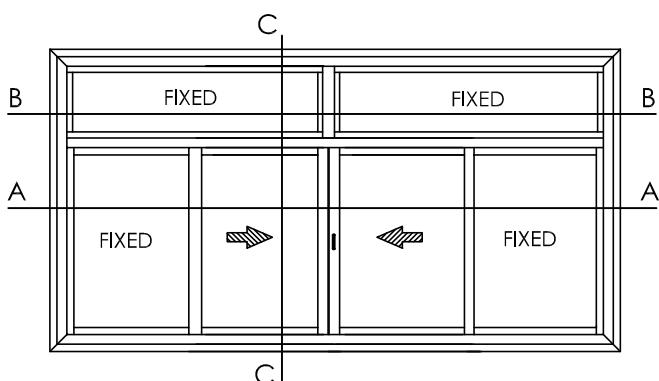
DETAIL : A-A





PROFILES		
Description	Shape	Section No.
Bottom Frame		13010
Top /Side Frame		13009
Bottom Sash		13013
Top Sash		11279
Side Sash		13011
Interlock		13012
Fly screen		12745
Glazing bead		10464
Adaptor		10487
Dust Proof		10657
Corner Cleat - 40*4		01009

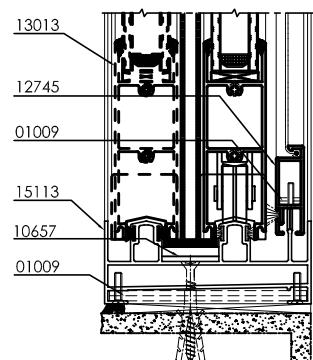
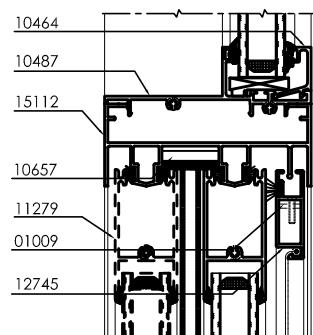
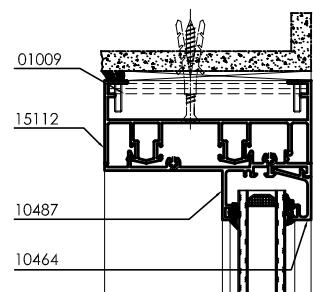
**DETAIL : C-C****DETAIL : A-A**



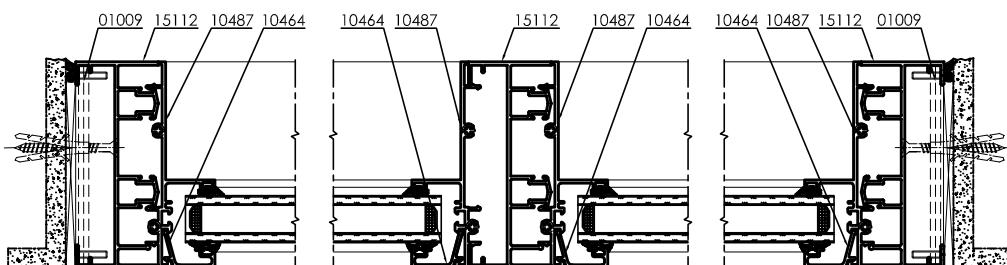
4 - VENT WINDOW WITH TOP FIXED PANEL

PROFILES		
Description	Shape	Section No.
Bottom Frame		15113
Top /Side Frame		15112
Bottom Sash		13013
Top Sash		11279
Side Sash		13011
Interlock		13012
Fly screen		12745
Glazing bead		10464
Adaptor		10487
Dust Proof		10657
Corner Cleat - 40*4		01009

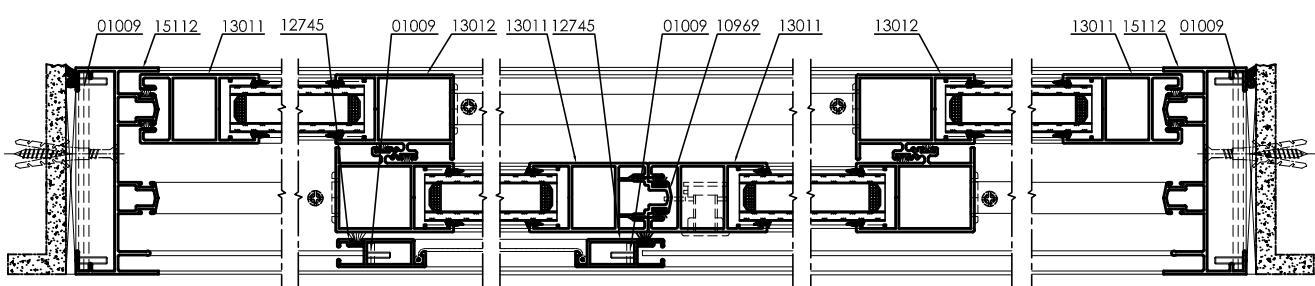
DETAIL : C-C

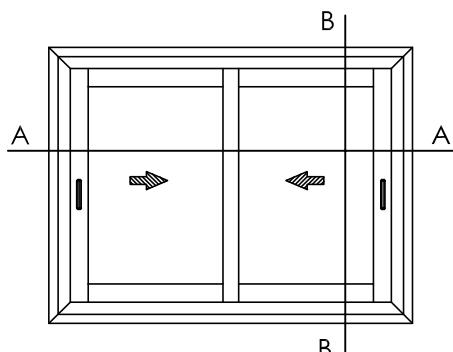


DETAIL : B-B



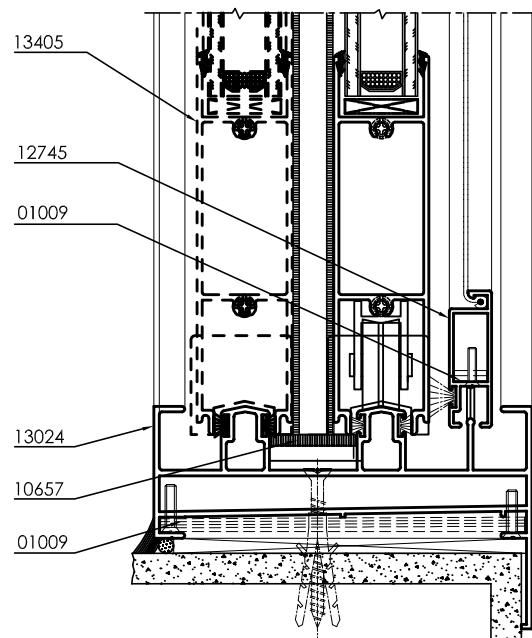
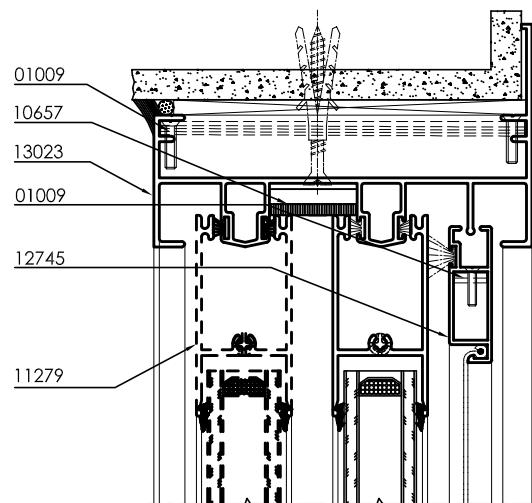
DETAIL : A-A



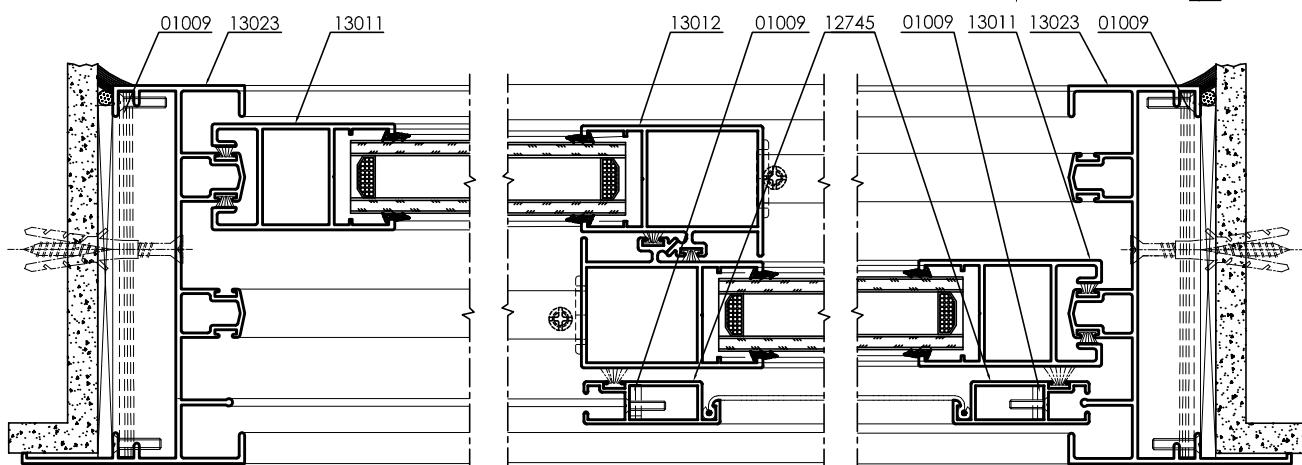


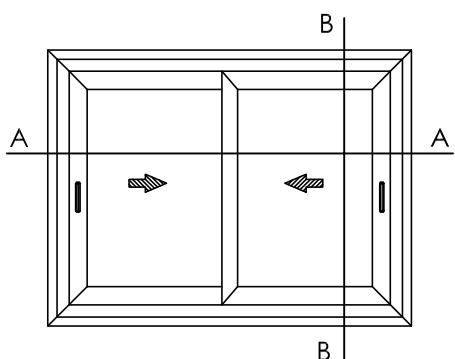
2 - SLIDING DOOR (125MM)

DETAIL : B-B



DETAIL : A-A

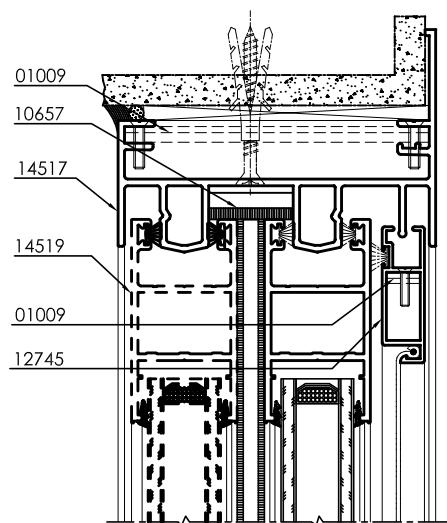




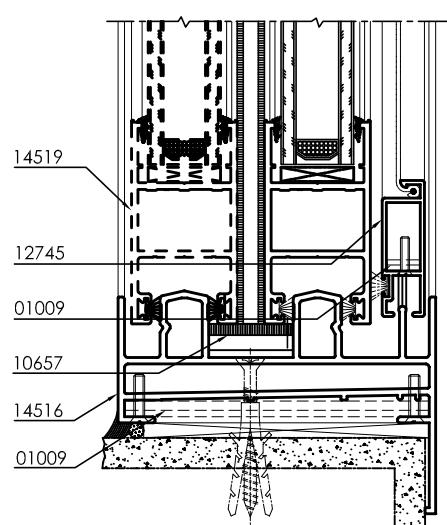
2 - SLIDING WINDOW (105MM)

Cut 45°

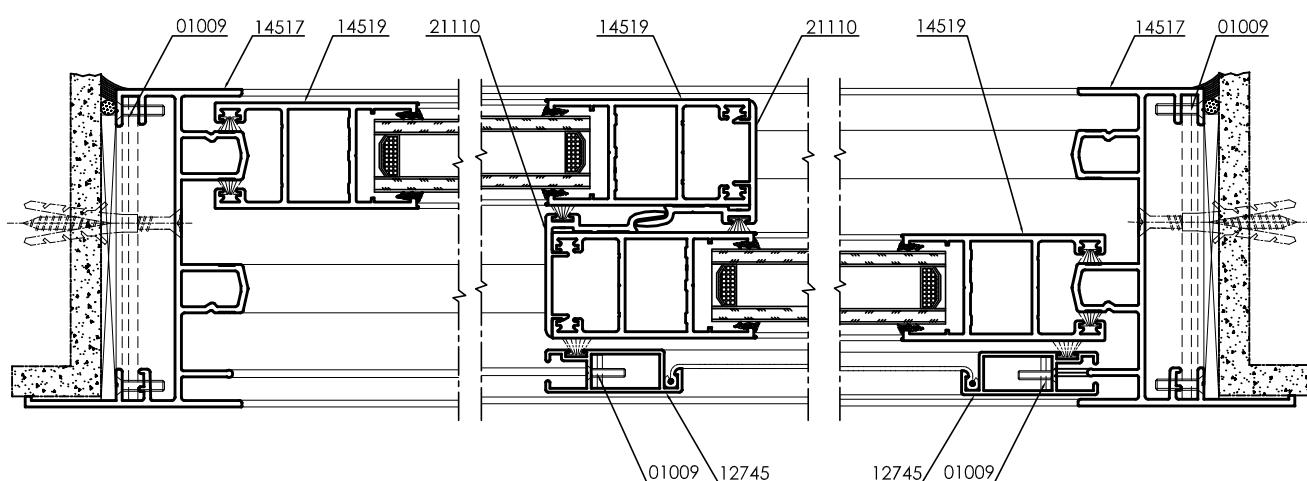
DETAIL : B-B

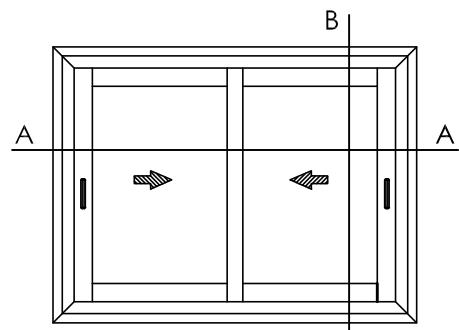


PROFILES		
Description	Shape	Section No.
Bottom Frame		14516
Top /Side Frame		14517
Bottom/Top/Side Sash		14519
Interlock		21110
Fly screen		12745
Dust Proof		10657
Corner Cleat - 40*4		01009



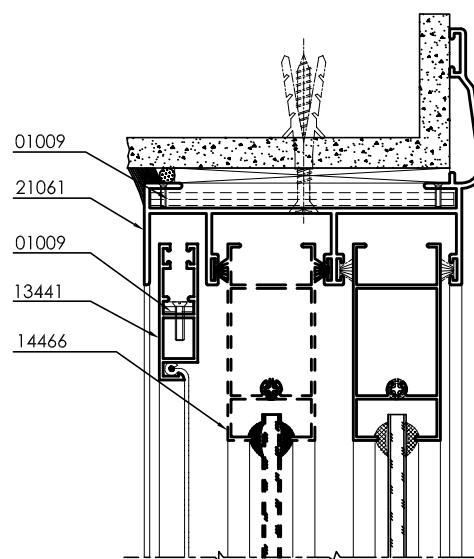
DETAIL : A-A



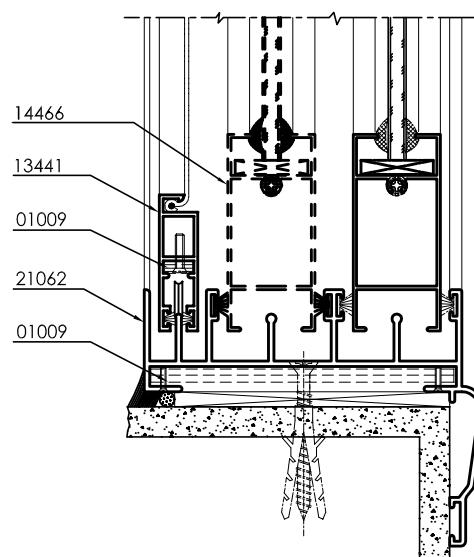


2 - SLIDING WINDOW (105MM)

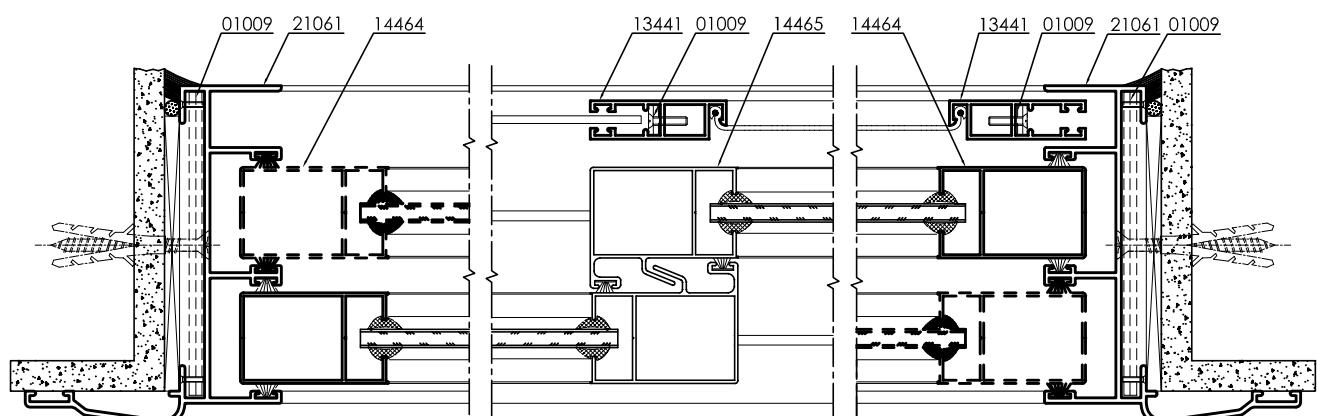
DETAIL : B-B



PROFILES		
Description	Shape	Section No.
Bottom Frame		21062
Top /Side Frame		21061
Bottom / Top Sash		14466
Side Sash		14464
Interlock		14465
Fly screen		13441
Corner Cleat - 40*4		01009



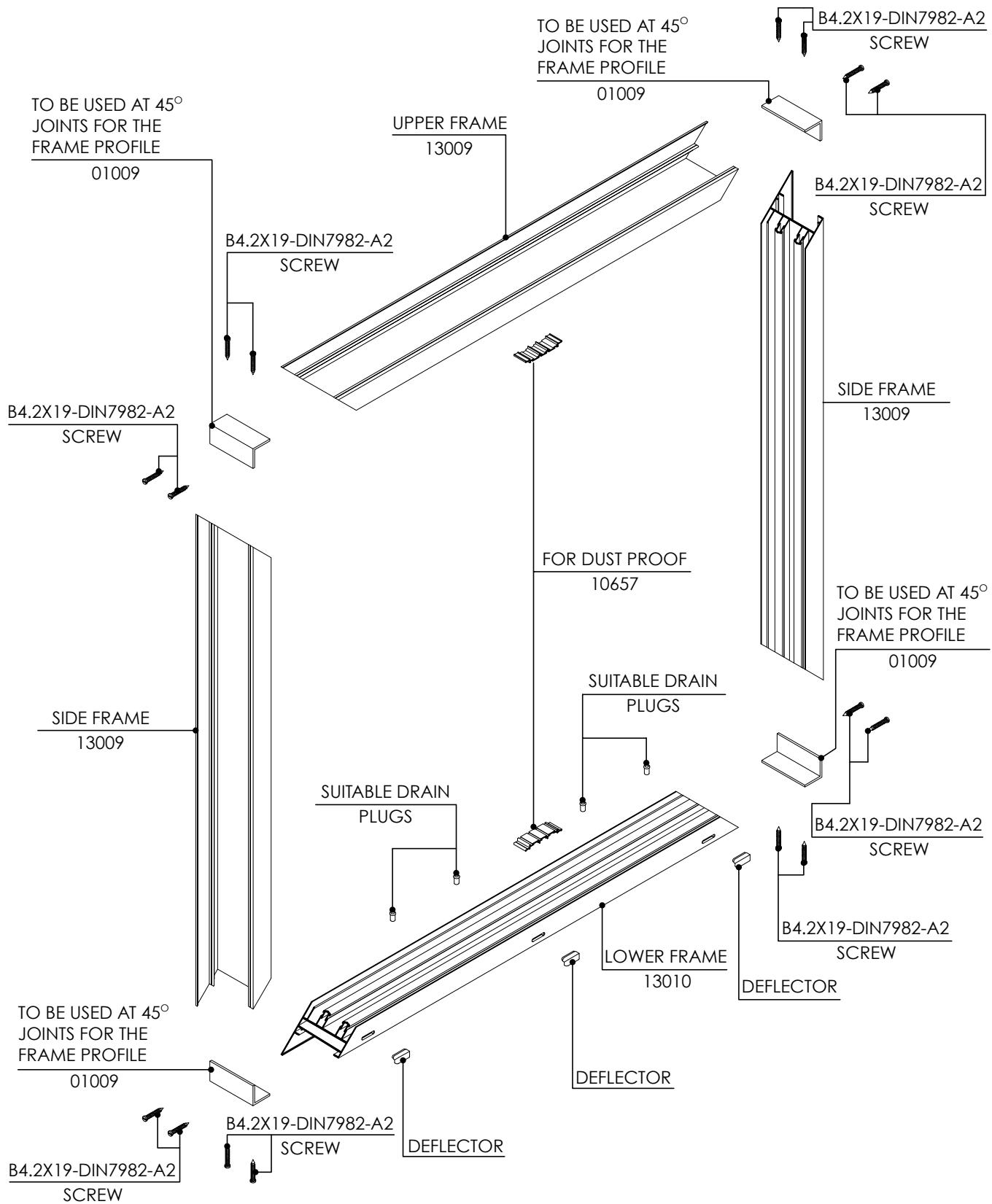
DETAIL : A-A

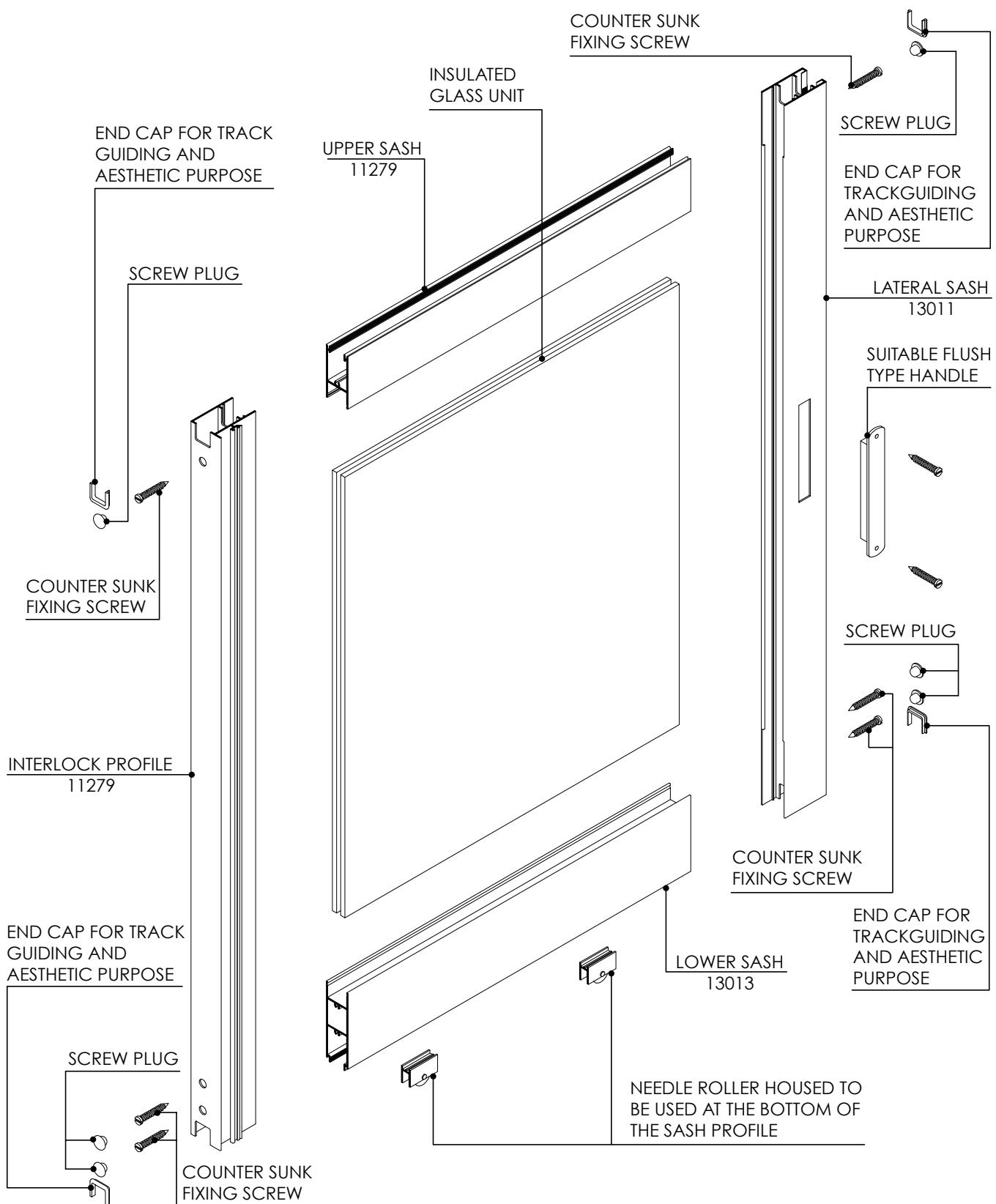


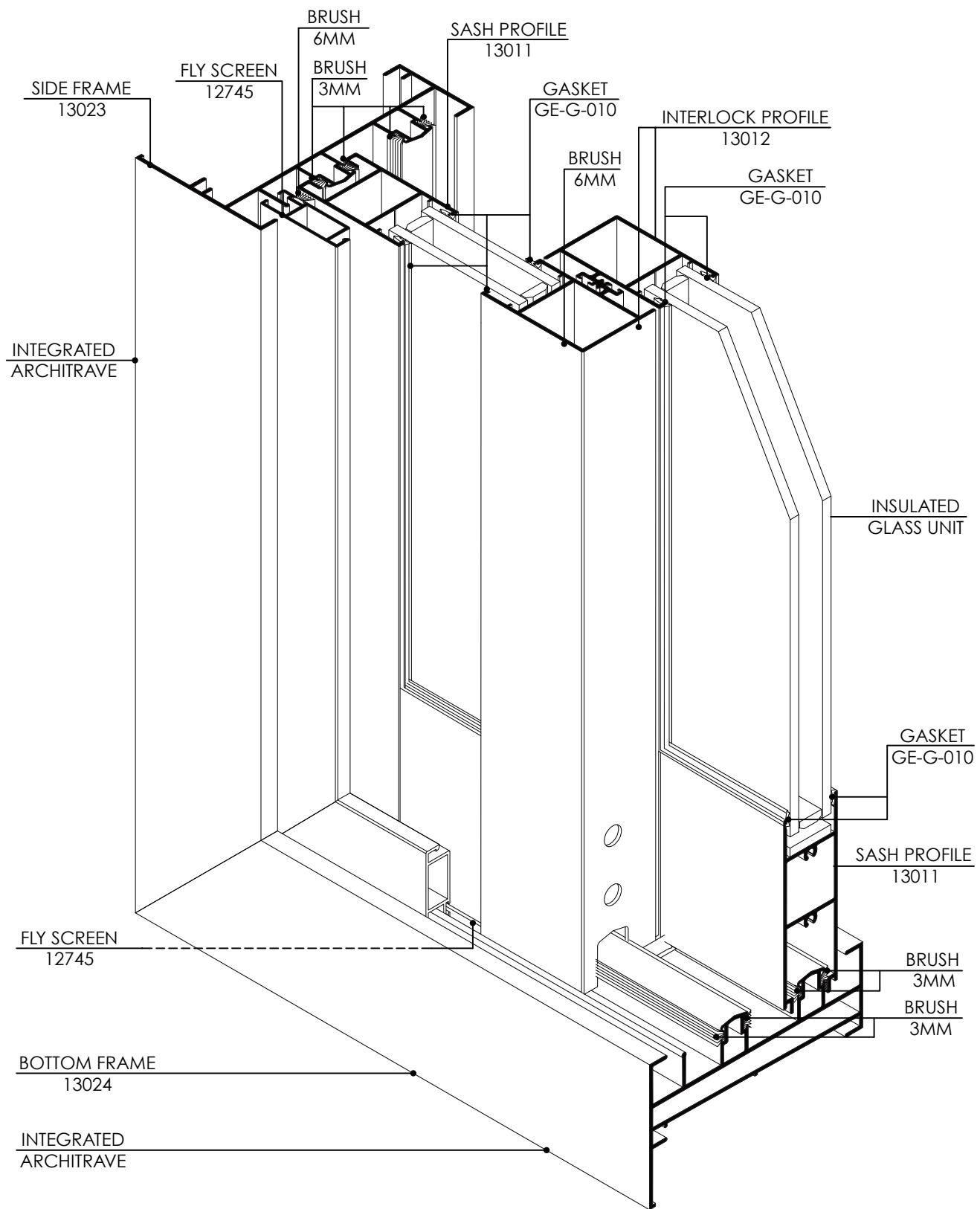


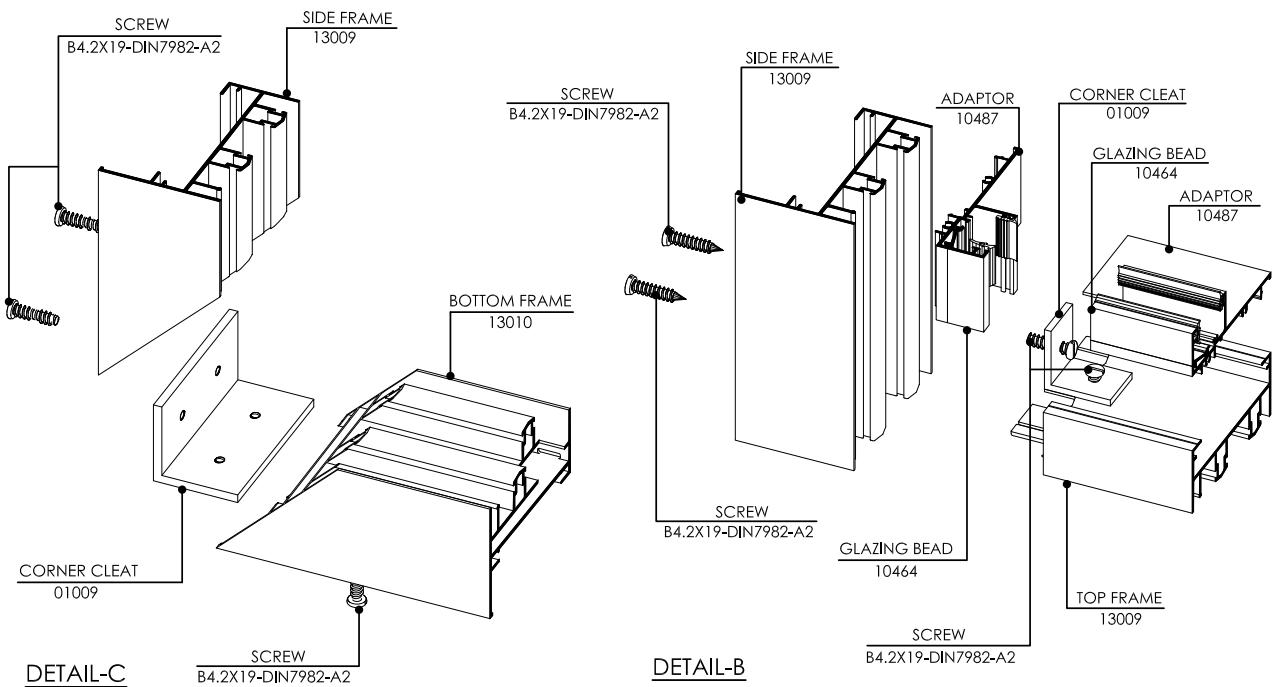
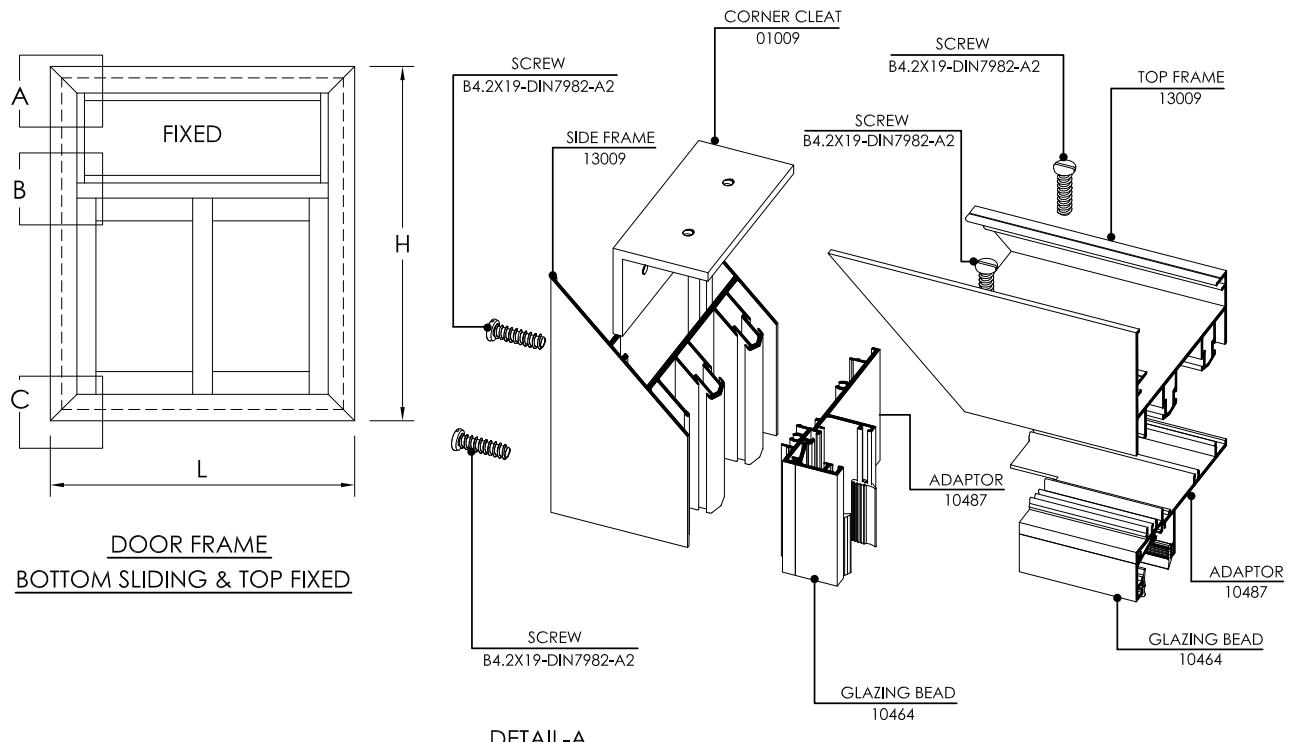
## 3D SECTIONS

## Frame and Sash



**Sash Section**

**Sliding Frame**

**Sliding Door 125mm**



**All rights reserved.**

No part of this publication maybe reproduced, stored in a retrieval system or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without prior permission of Gulf Extrusions.

