Sliding 100mm



Sliding 100mm

		03
100 - B	QUALITY AND CERTIFICATIONS	04 - 09
100 - C	INTRODUCTION TO THE SYSTEM	10
100 - D	PROFILES	11 - 72
100 - E	PROFILE LIST	73 - 108
100 - F	ACCESSORIES	109 -111
100 - G	ASSEMBLY DRAWINGS	113 -152



GULF EXTRUSIONS

Gulf Extrusions Co. LLC, the flagship company of the Al Ghurair Group of Companies, was founded in 1976, 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 65,000 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 30,000 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



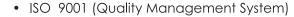
SASO



ESMA



Management:





ISO/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 COMPOSTIONS

ALLOY 6005A

Element	Minimum	Maximum
Si	0.50	0.90
Fe	-	0.35
Си	-	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
Си	-	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

	T	I
Element	Minimum	Maximum
Si	0.40	0.80
Fe	-	0.70
Си	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	

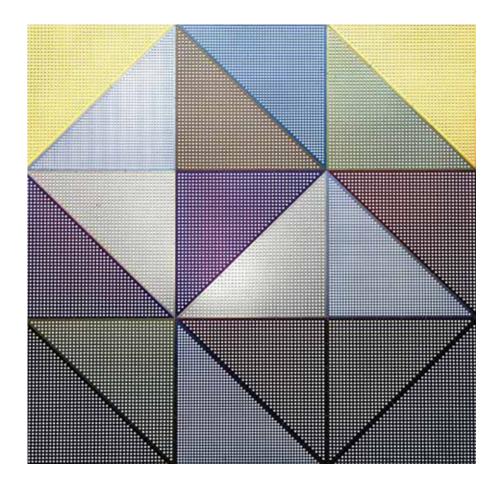


ANODIZING

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. LLC

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 the use of the quality label for ARCHITECTURAL ANODIZING as described in the current edition of the Specifications for the QUALANOD quality label for sulfuric acid-based anodizing of aluminium (Edition 01.01.2017). Architectural anodizing is one of the four types of anodizing covered by the Specifications.

Date of issue of the licence: 10.03.2000
Period of validity of the licence: until 31.12.2018

Zurich, 23 November 2017

QUALANOD

José Arenas President **CERTIFICATION BODY**



Josef Schoppig AC-Fiduciaire SA







Phone: +41 (0)43 305 09 70

E-Mail: j.schoppig@actreu.ch







Fax: +41 (0)43 305 09 98 Website: www.qualanod.net Mailing address: QUALANOD, P.O. Box 1507, CH-8027 Zurich

Domicile: QUALANOD c/o AC-Fiduciaire SA (certification body) Tödistrasse 42, CH-8002 Zurich



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-Vinyldine 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. LLC

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.

15.03.2000 Date of issue of the licence:

until 31,12,2018 Period of validity of the licence:

Zurich, 31 October 2017

QUALICOAT

CERTIFICATION BODY

Mohammed C. Panam

President

Josef Schoppig AC-Fiduciaire SA



Mailing address:

QUALICOAT, P.O. Box 1507, CH-8027 Zurich

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

QUALICOAT c/o AC-Fiduciaire SA, Tödistrasse 42, CH-8002 Zurich



INTRODUCTION TO THE SYSTEM

100mm 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. It is designed for heavy duty use according to the American National Standard. 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 aluminium on a wide range of presses starting with 800 tons to 4400 tons press. They are made of aluminium 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 100mm, a wide range of frames are available to suit most of the required applications in the building codes. 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:

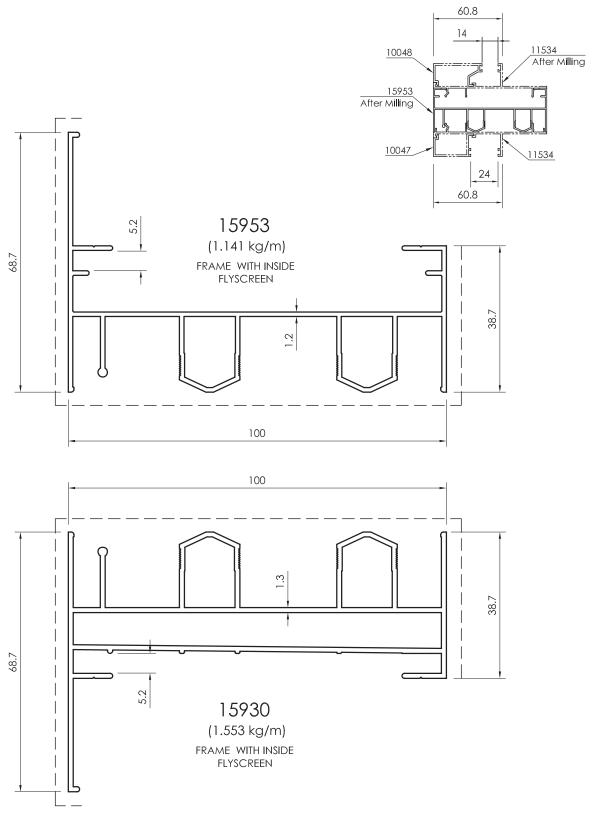
Assembly of the frames is done by 45° cut whereas the sashes are custom 90° & 45° cut.



PROFILES

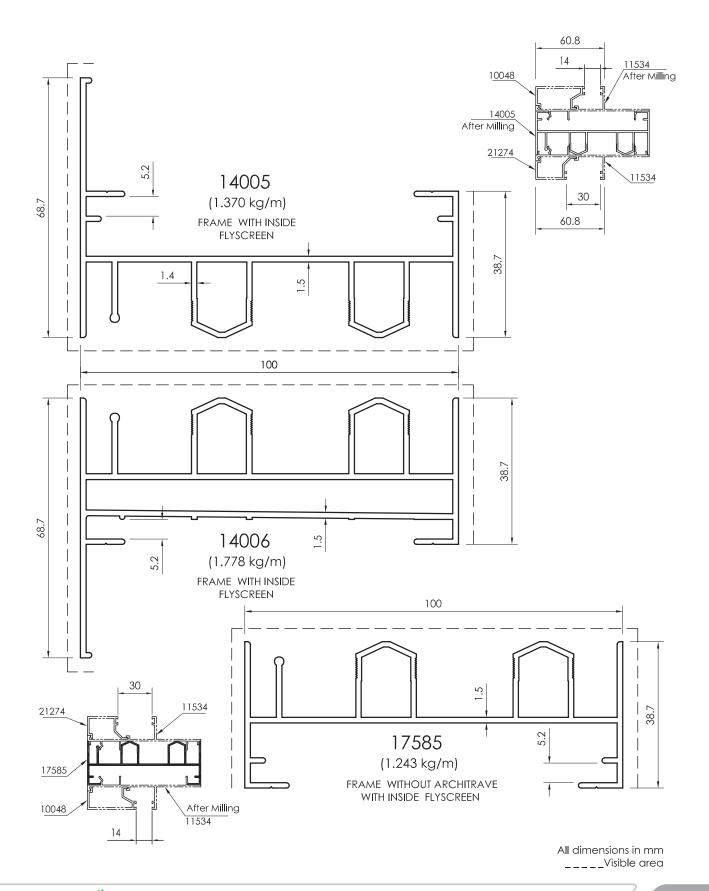


Frame Profiles



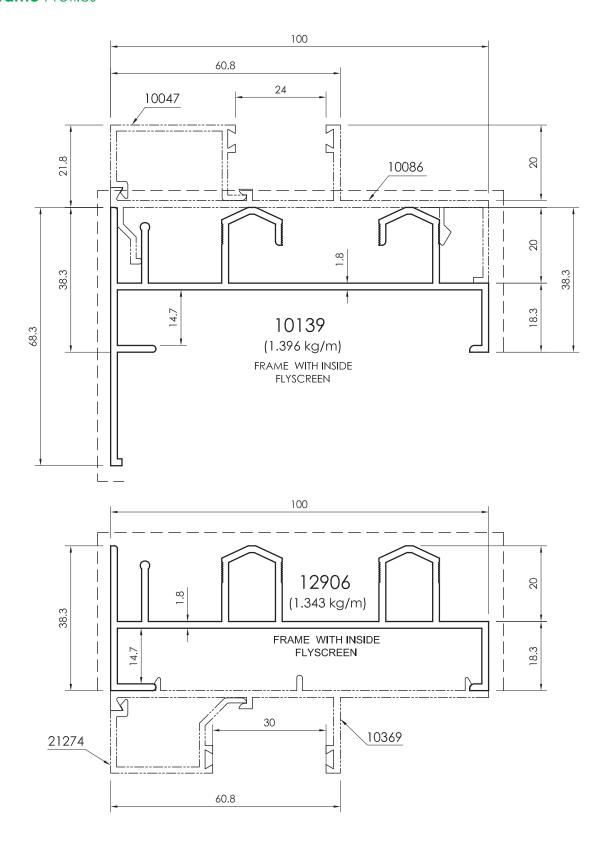


Frame Profiles



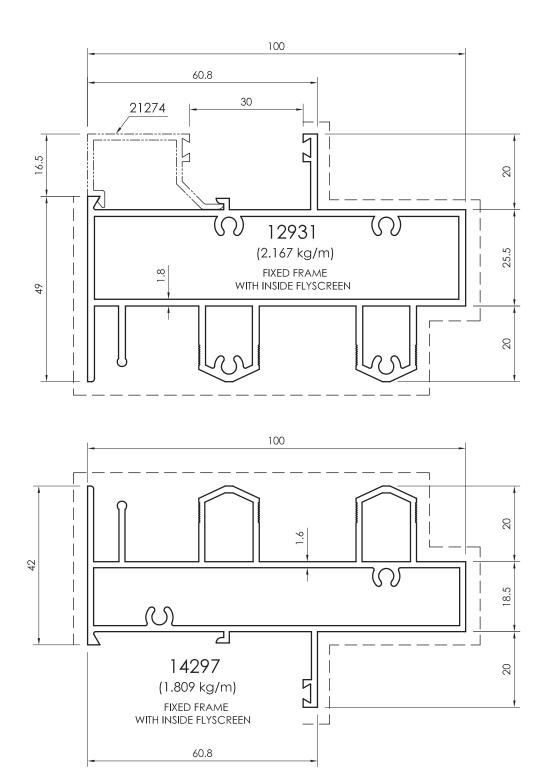


Frame Profiles





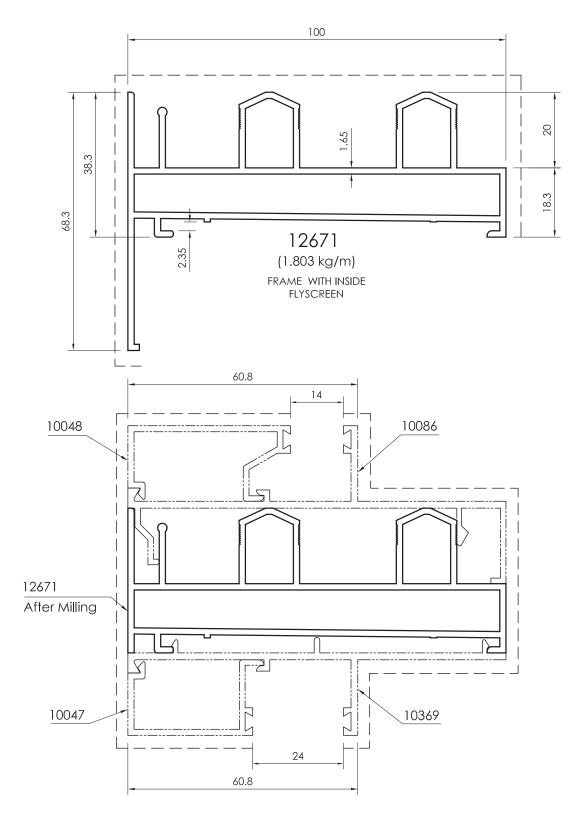
Frame Profiles



All dimensions in mm _____Visible area

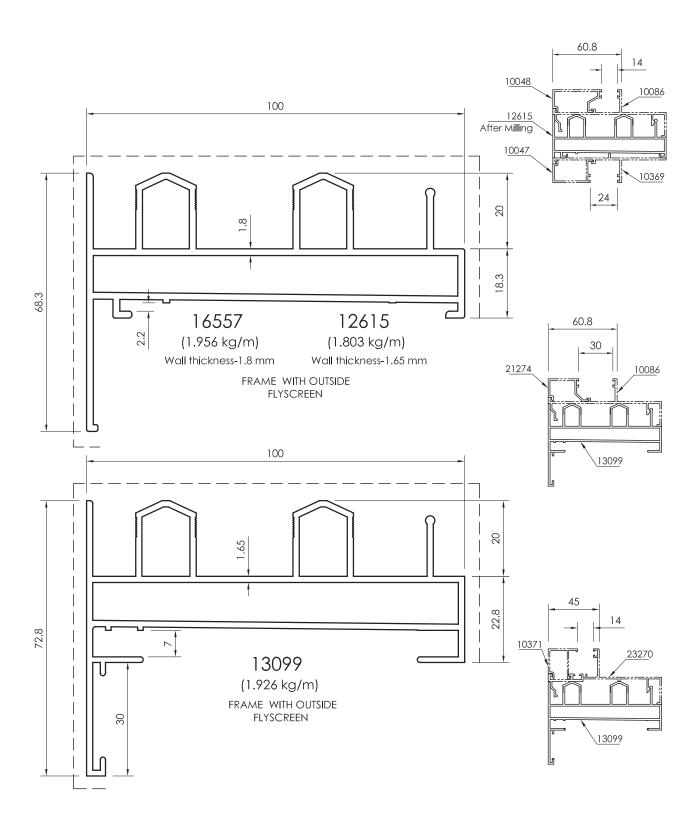


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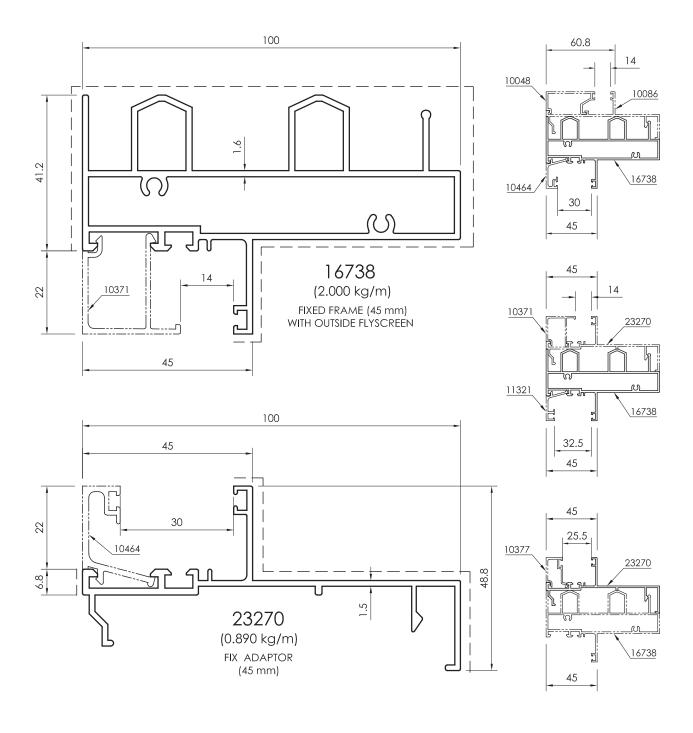
Frame Profiles



All dimensions in mm _ _ _ _ Visible area

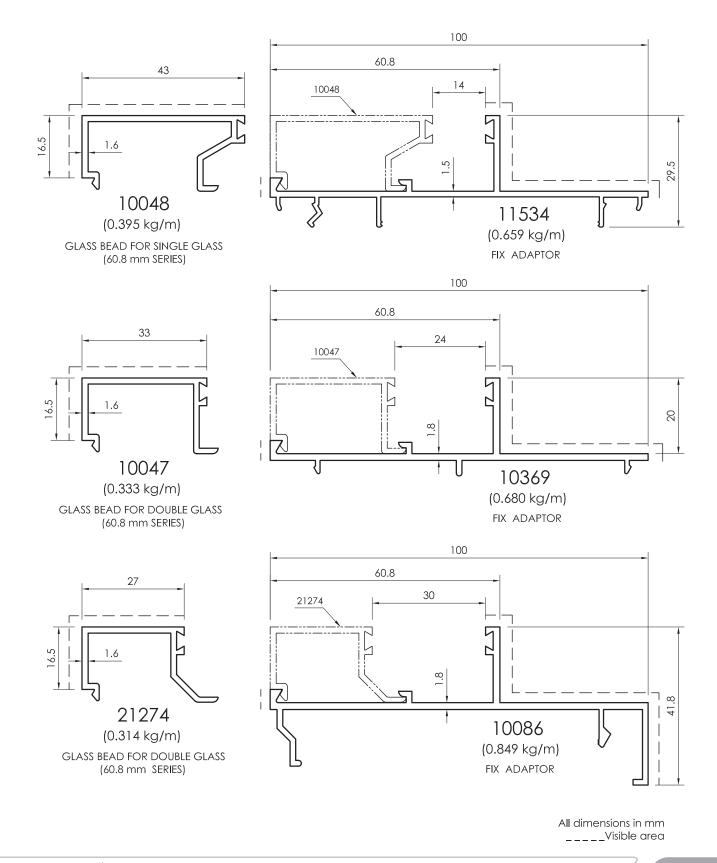


Frame / Adaptor Profiles





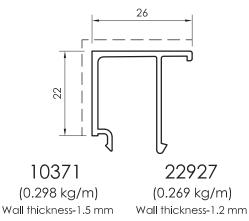
Adaptor / Glass Bead Profiles



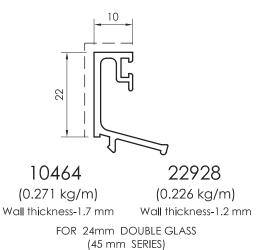


100-D PROFILES

Glass Bead Profiles



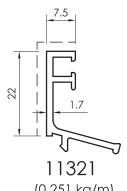
FOR 6-8 mm SINGLE GLASS (45 mm SERIES)



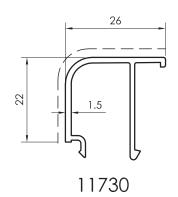
10377 23195
(0.282 kg/m) (0.258 kg/m)
Wall thickness-1.5 mm Wall thickness-1.2 mm

14.5

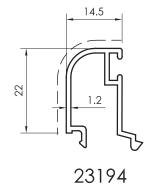
FOR 20 mm DOUBLE GLASS (45 mm SERIES)



(0.251 kg/m)
FOR 28 mm DOUBLE GLASS
(45 mm SERIES)

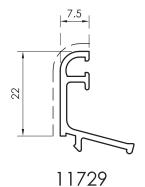


(0.286 kg/m)
FOR 6-8 mm SINGLE GLASS
(45 mm SERIES)



(0.249 kg/m)

FOR 20 mm DOUBLE GLASS (45 mm SERIES)

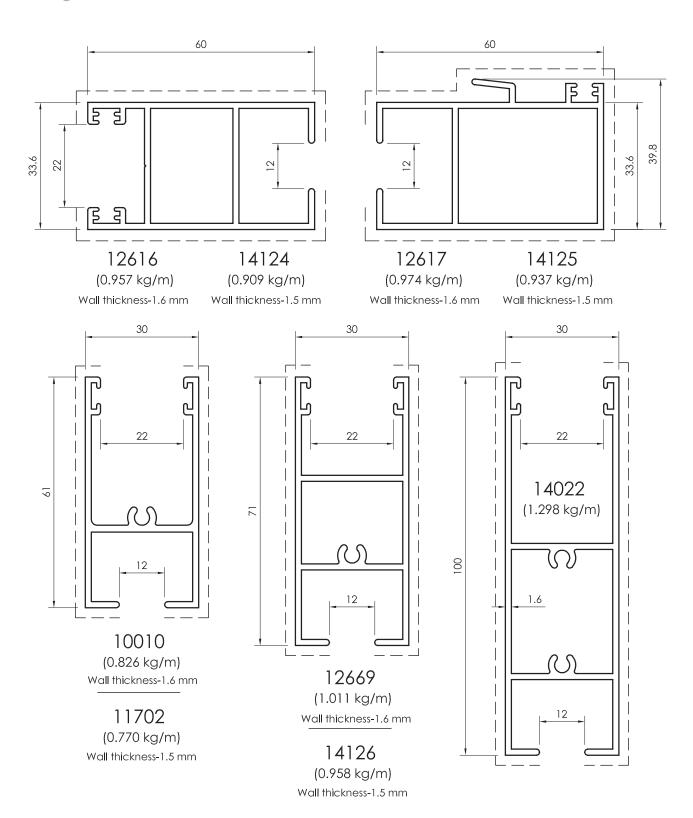


(0.242 kg/m)

FOR 28 mm DOUBLE GLASS (45 mm SERIES)



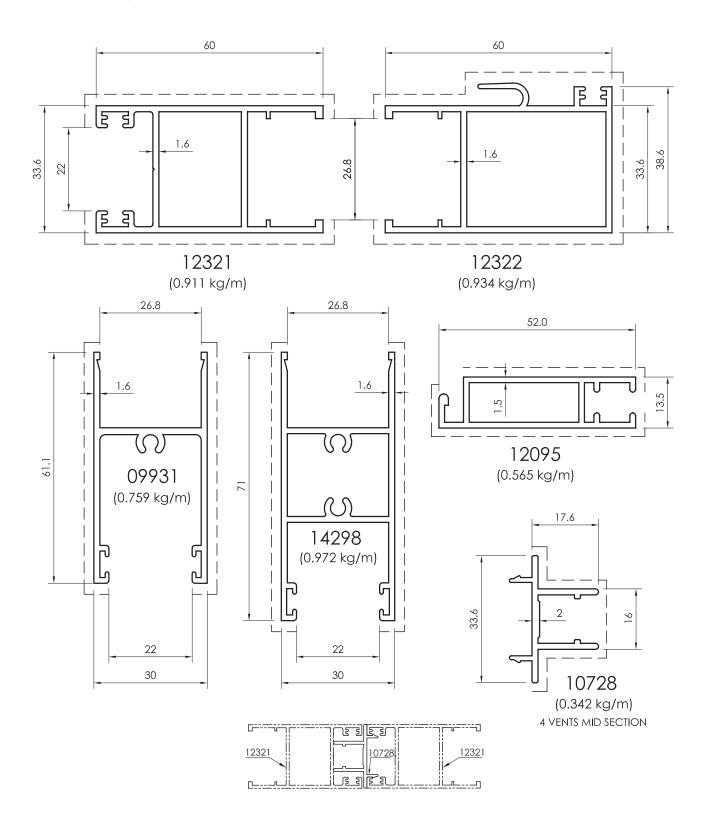
For Single Glass



All dimensions in mm _____Visible area

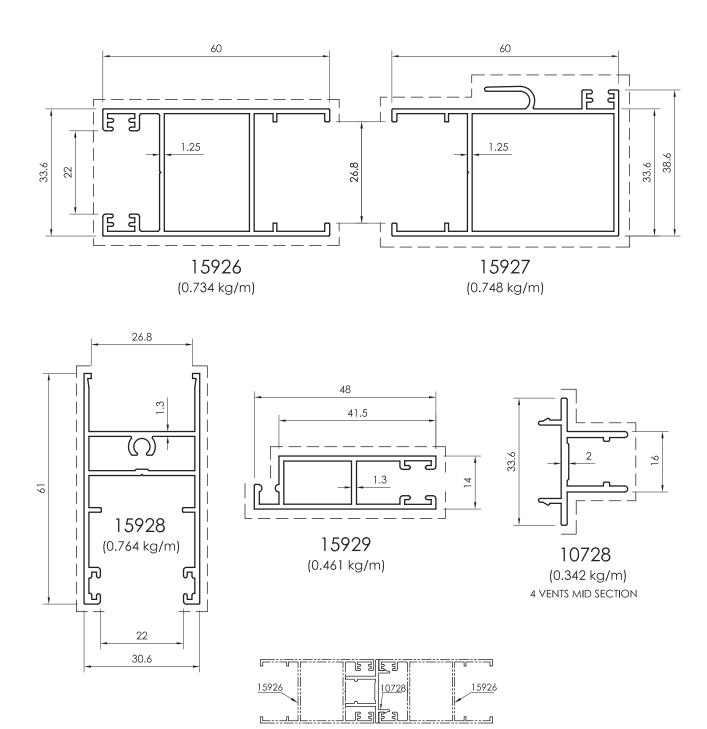


For Double Glass





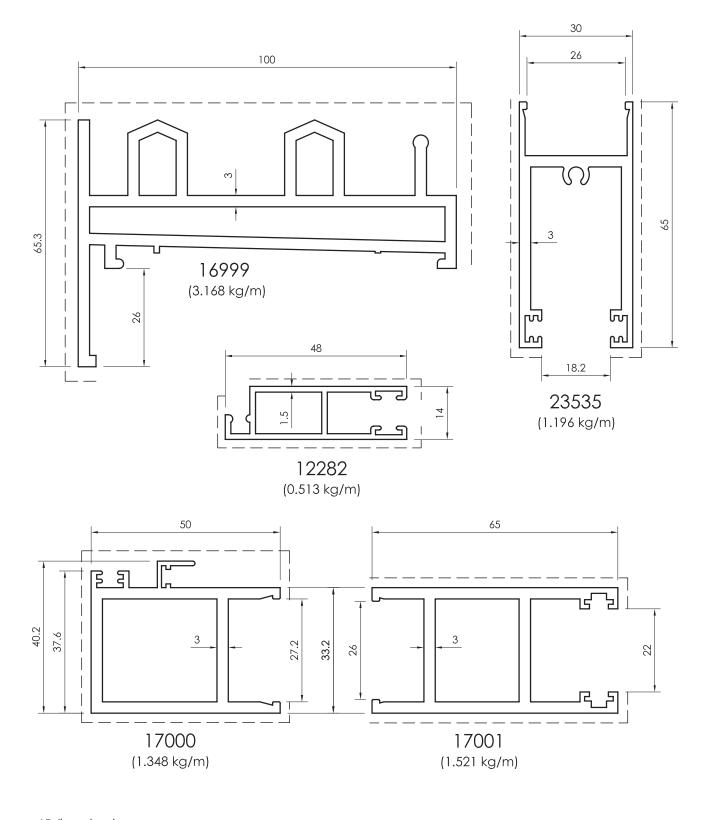
For Double Glass



All dimensions in mm ____Visible area

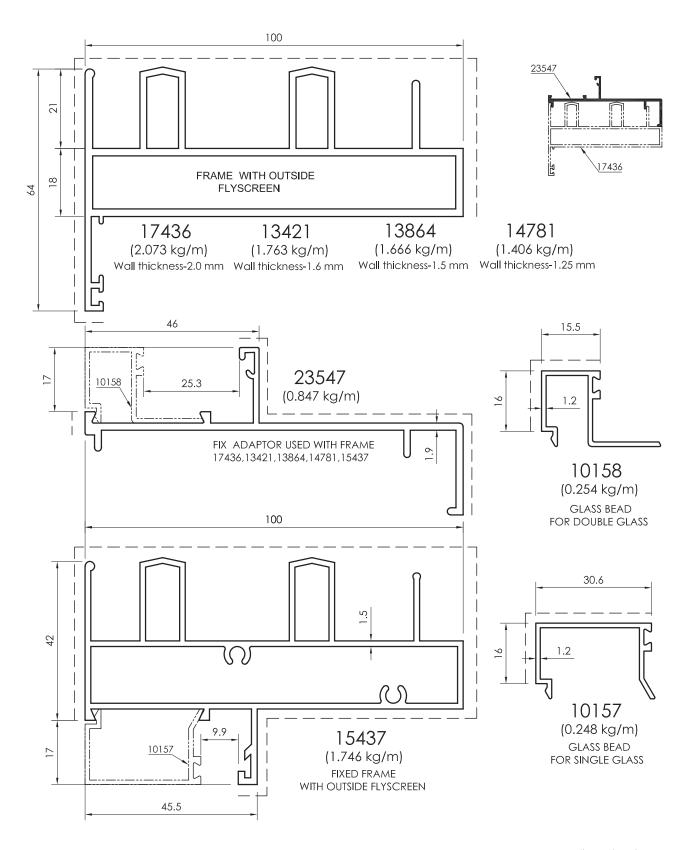


Frame With Outside Flyscreen & Sash Profiles - 3mm





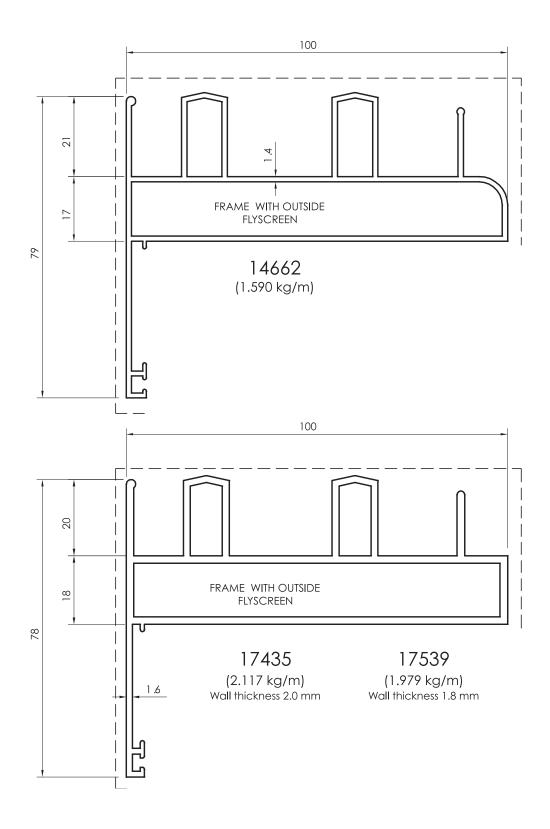
Frame / Adaptor Profiles



All dimensions in mm

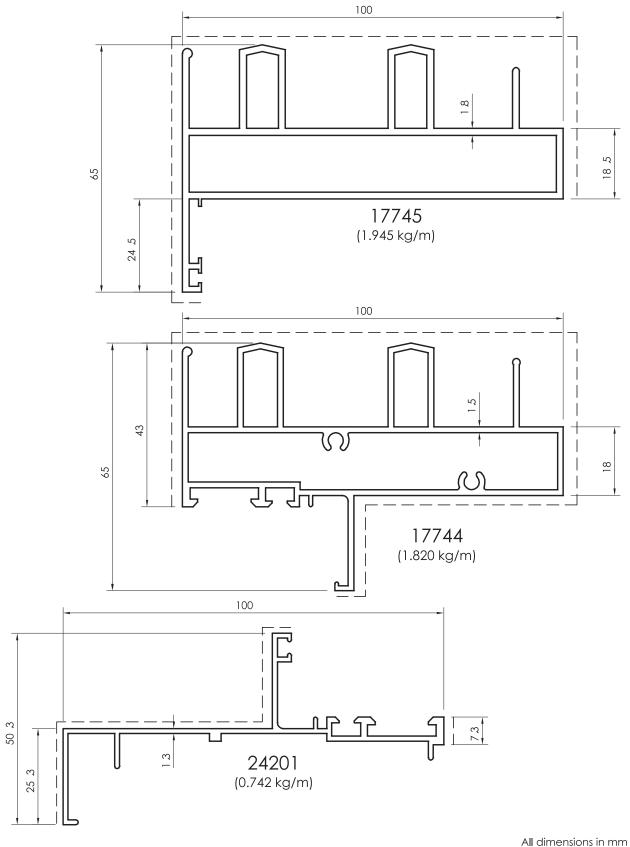


Frame Profiles





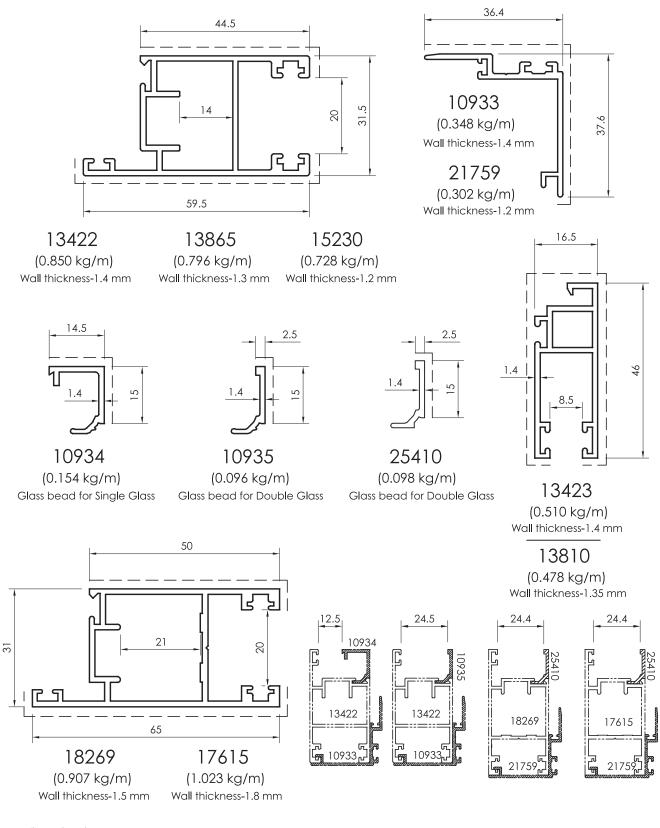
Frame / Adaptor Profiles



All dimensions in mm
_ _ _ _ Visible area

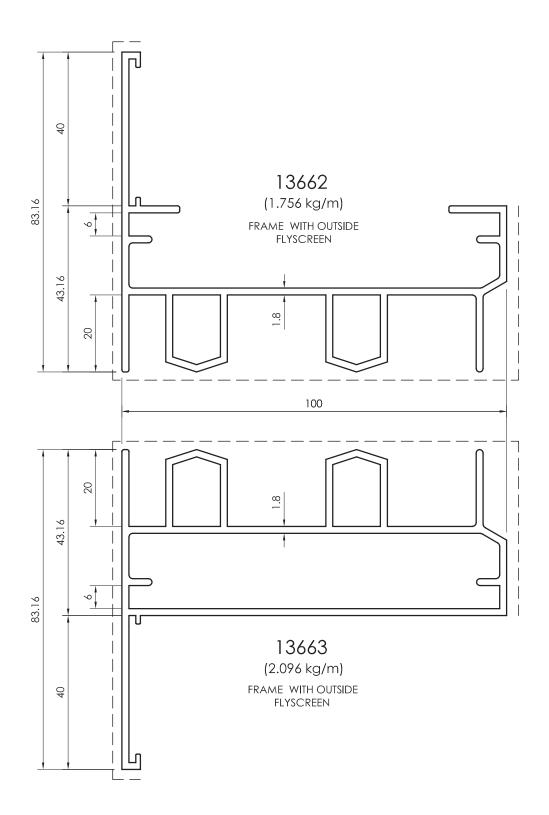


Sash Profiles





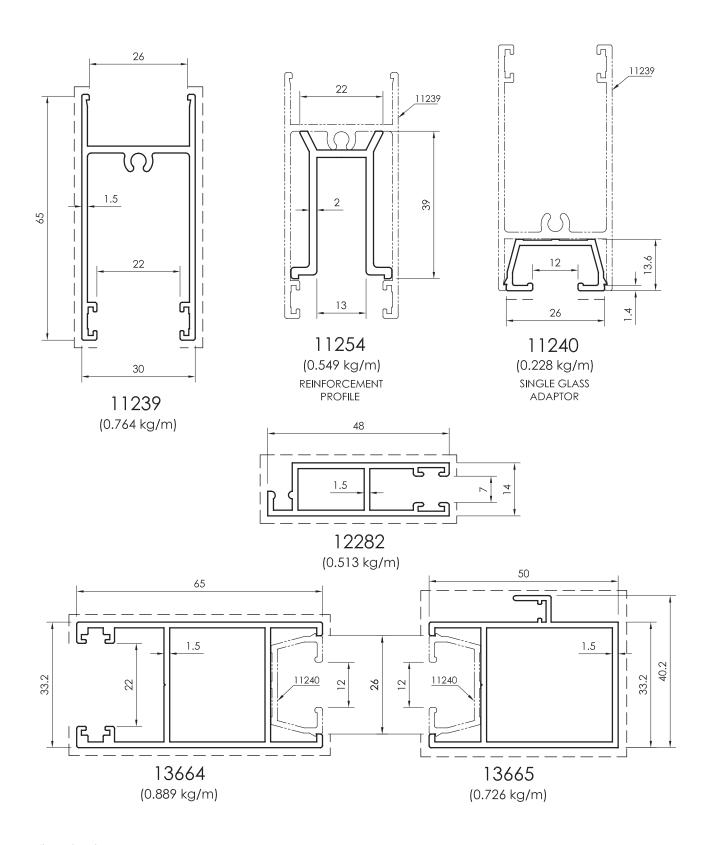
Frame Profiles



All dimensions in mm _ _ _ _ Visible area

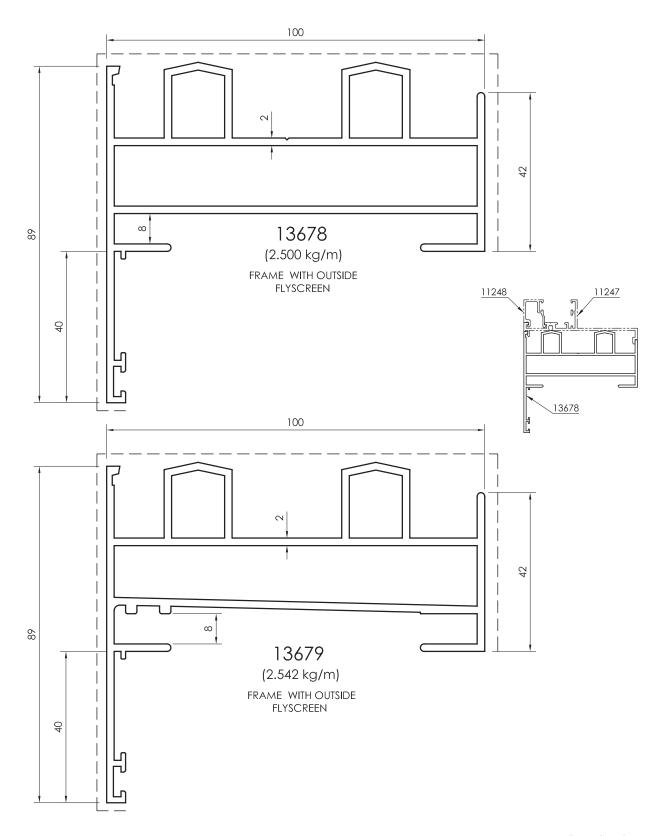


Sash Profiles





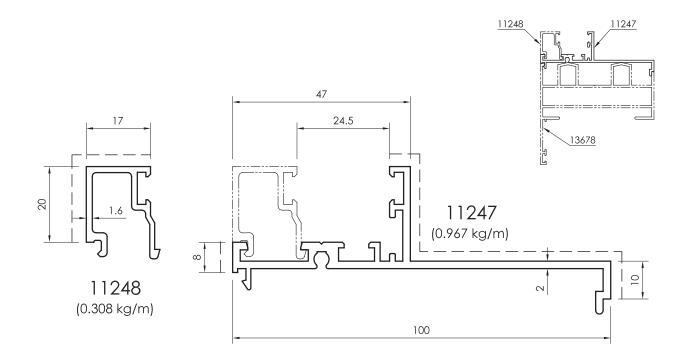
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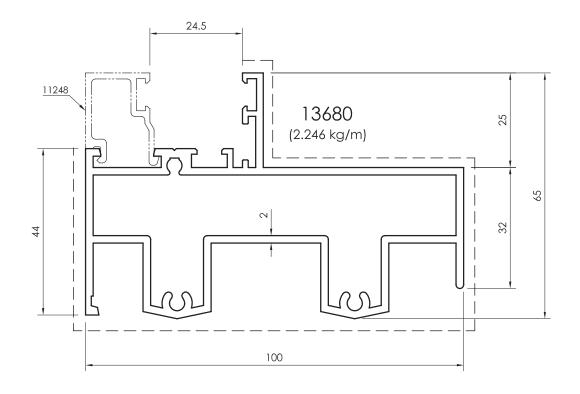


All dimensions in mm _ _ _ _ Visible area

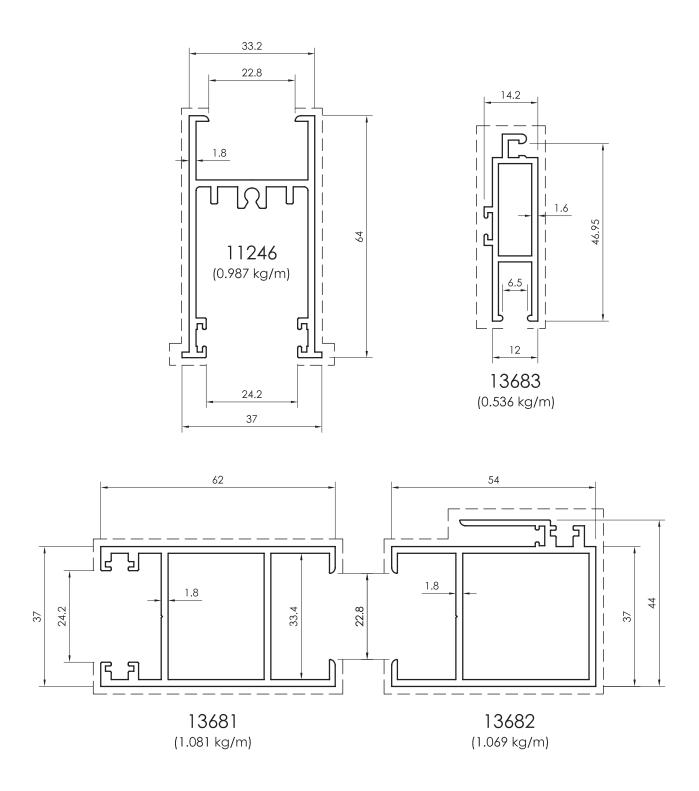


Frame / Adaptor Profiles





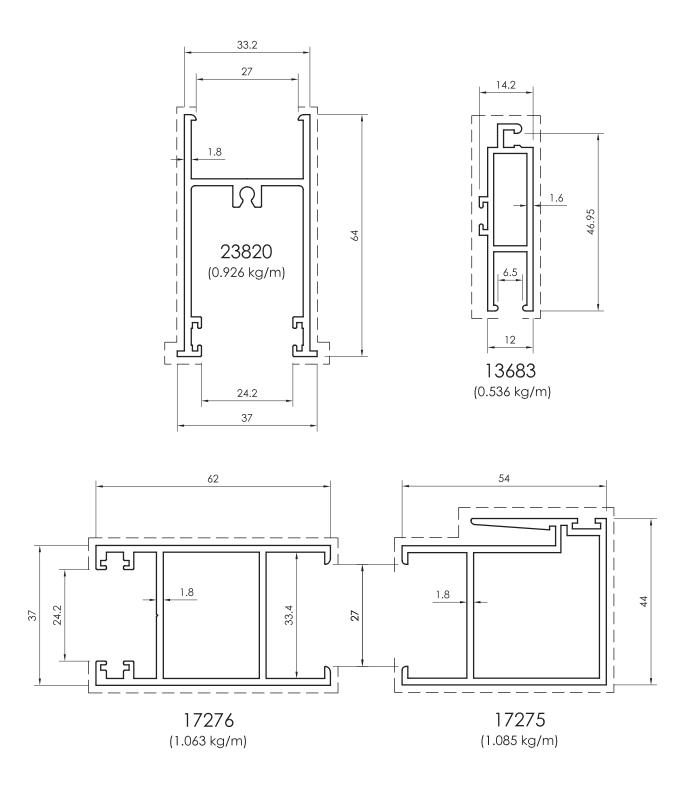




All dimensions in mm

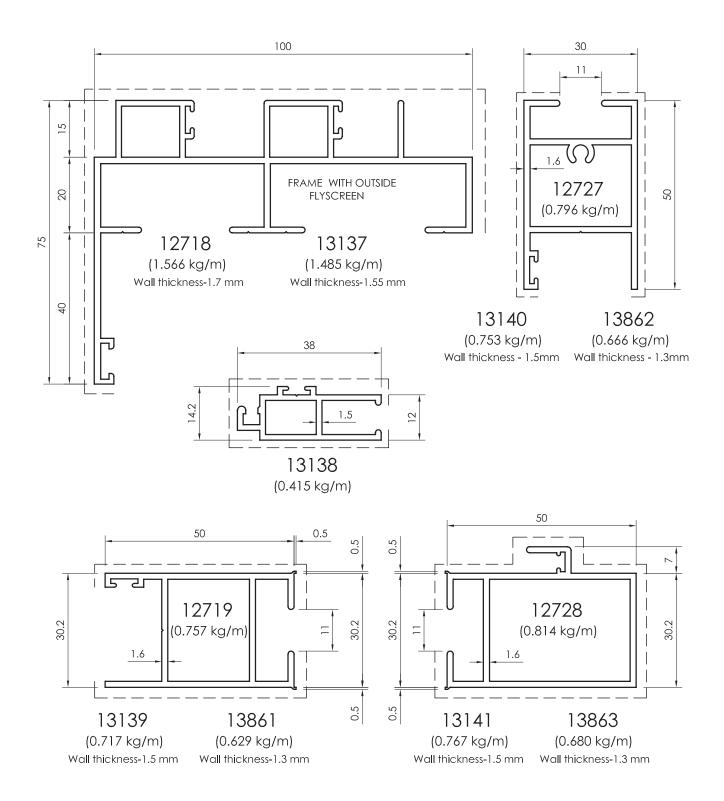


Sash Profiles





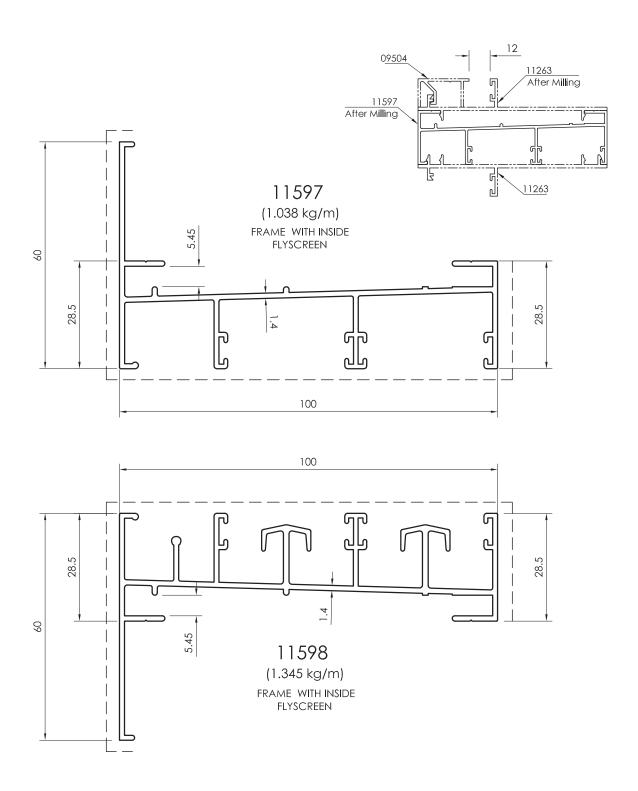
Frame / Sash Profiles



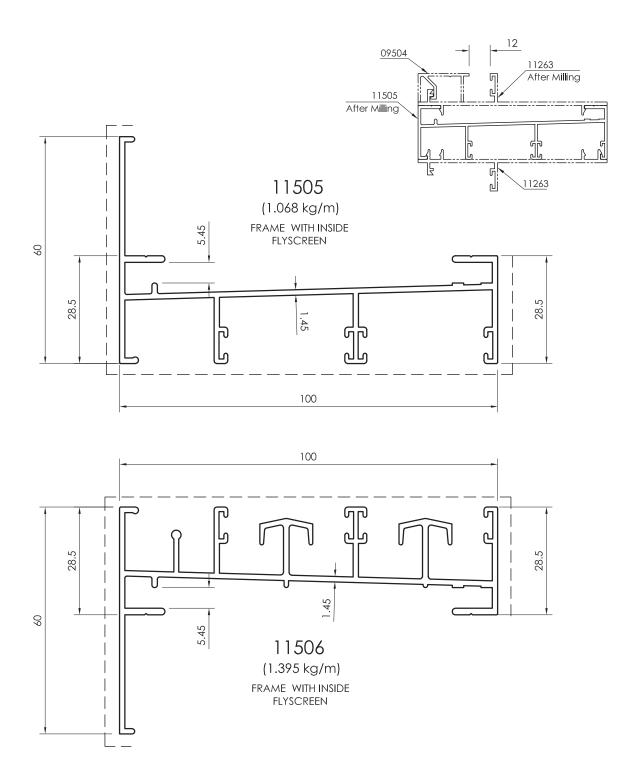
All dimensions in mm _____Visible area



Frame Profiles



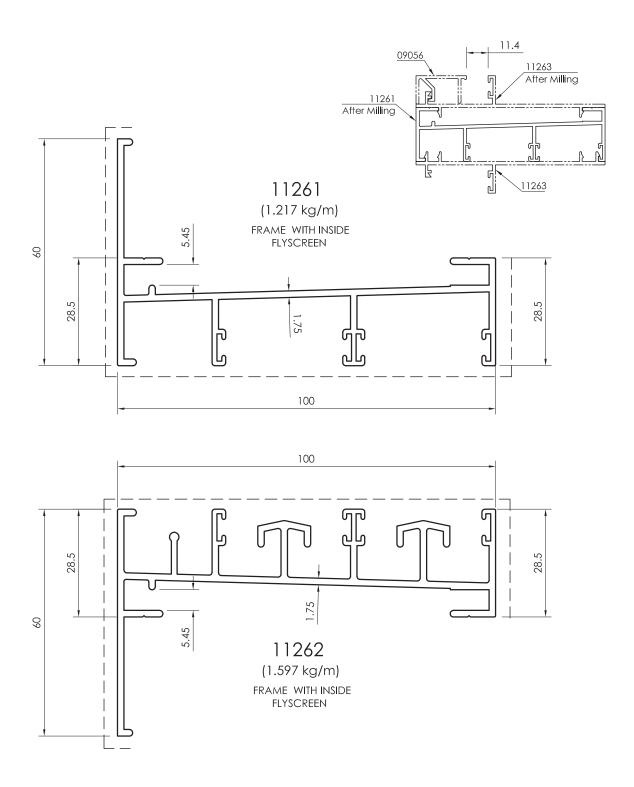




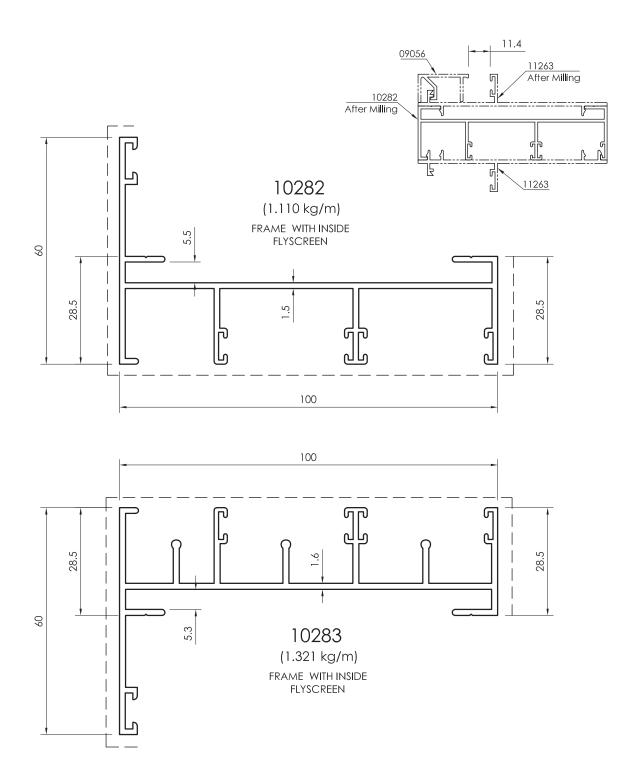
All dimensions in mm _ _ _ _ Visible area



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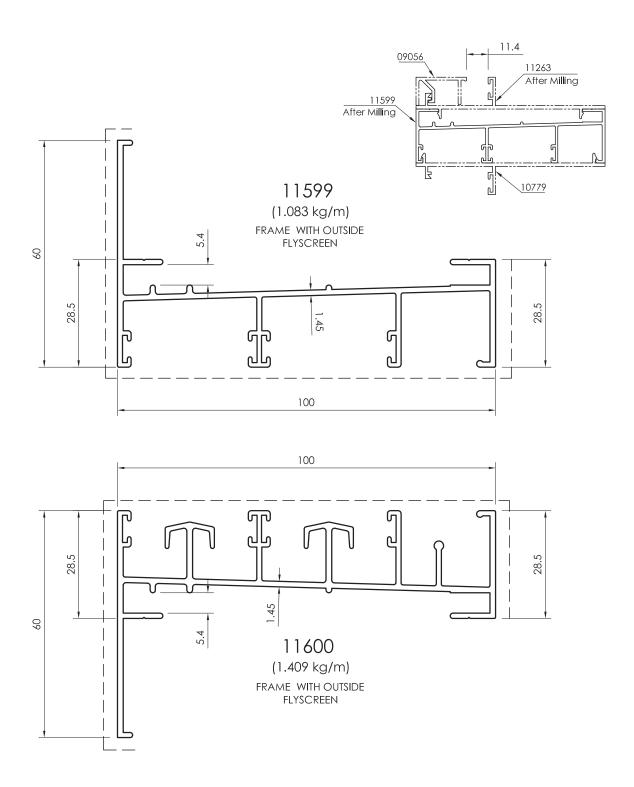




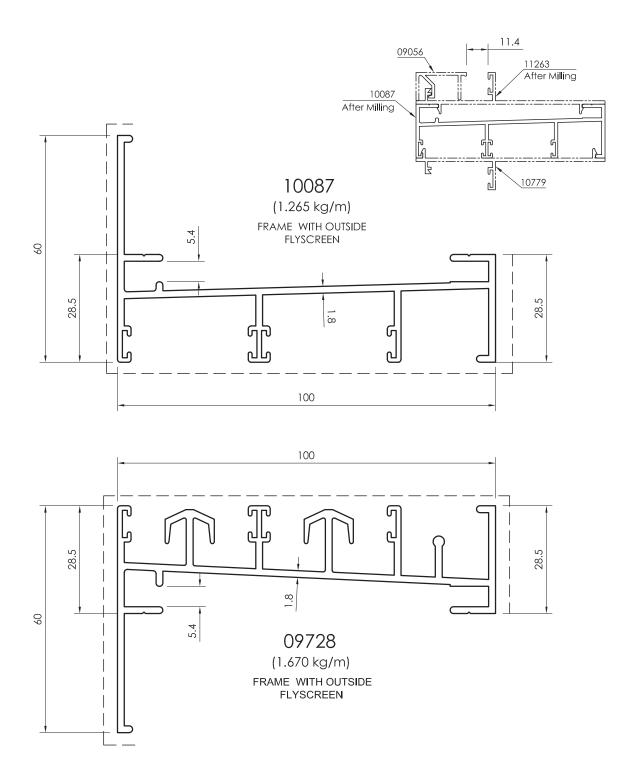
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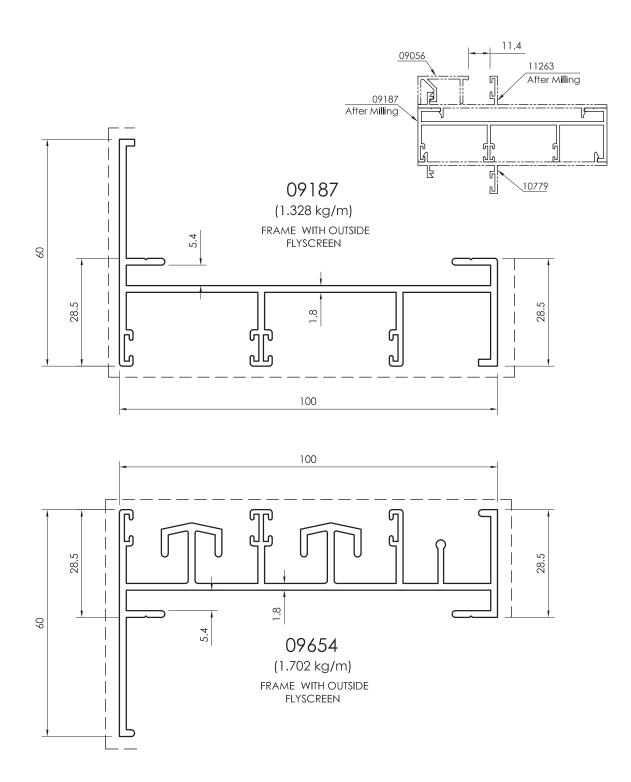




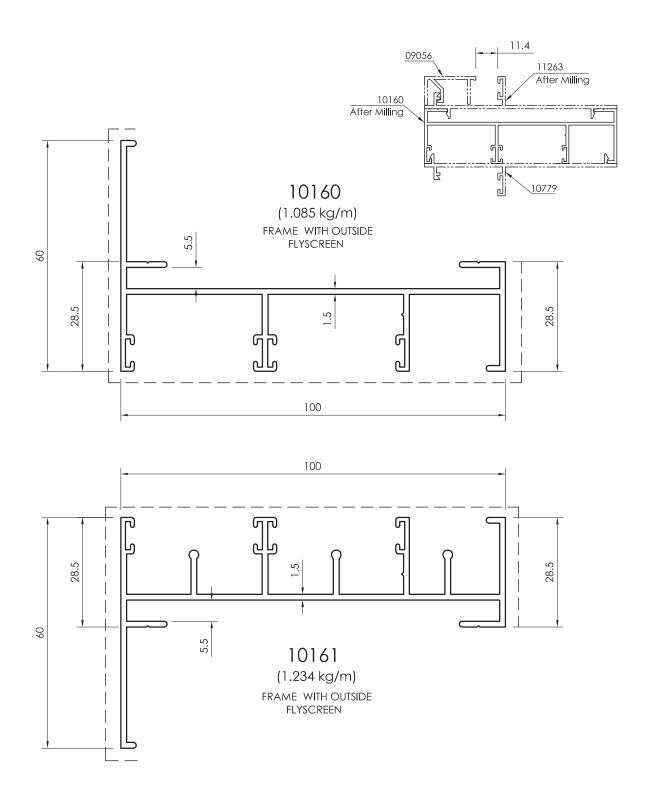
All dimensions in mm _ _ _ _ Visible area



Frame Profiles



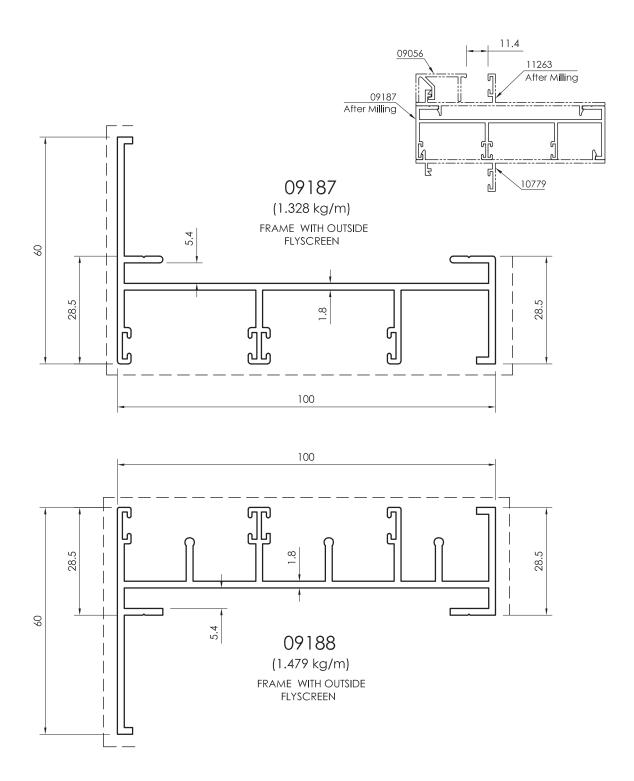




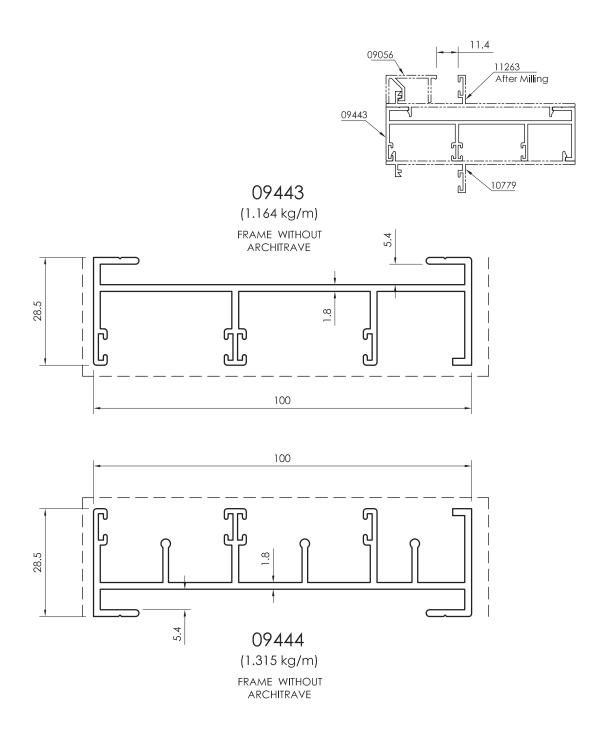
All dimensions in mm _ _ _ _ Visible area



Frame Profiles



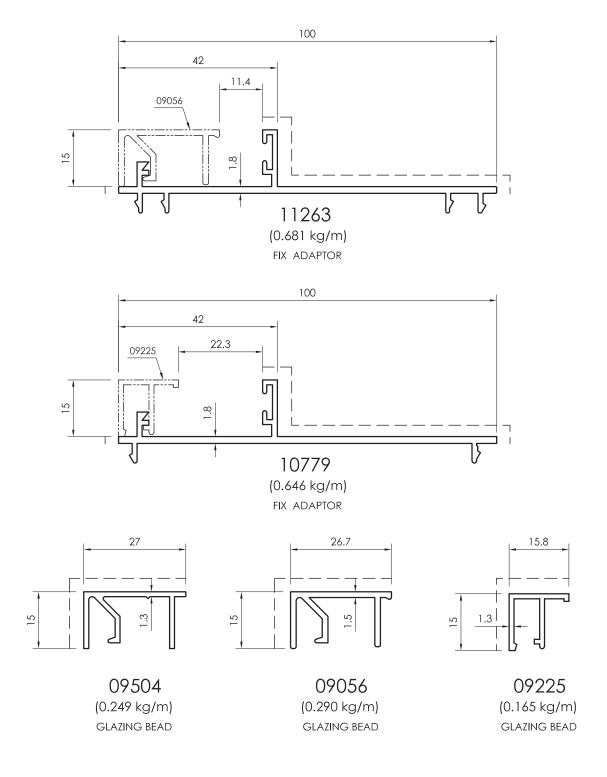




All dimensions in mm
____Visible area



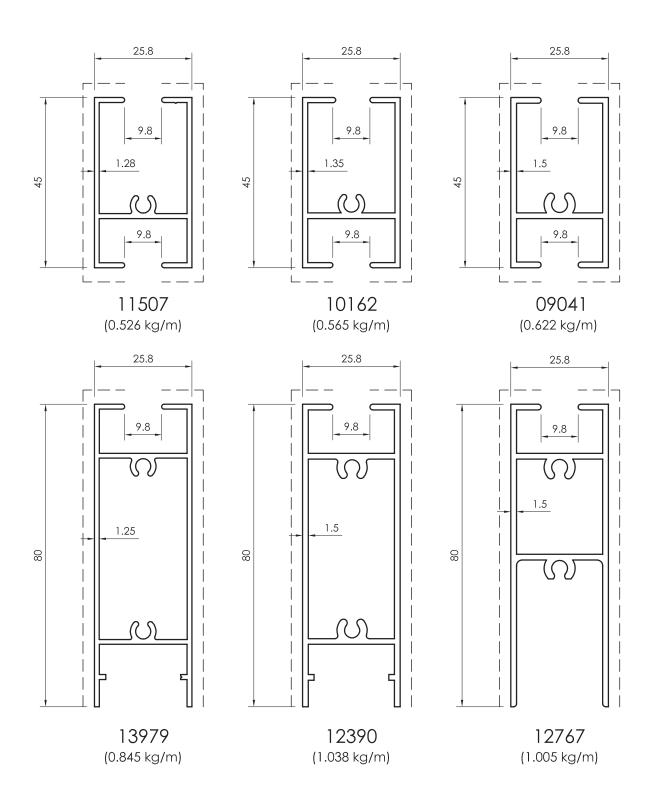
Fixed Adaptor Profiles





Sash Profile

For Single Glass

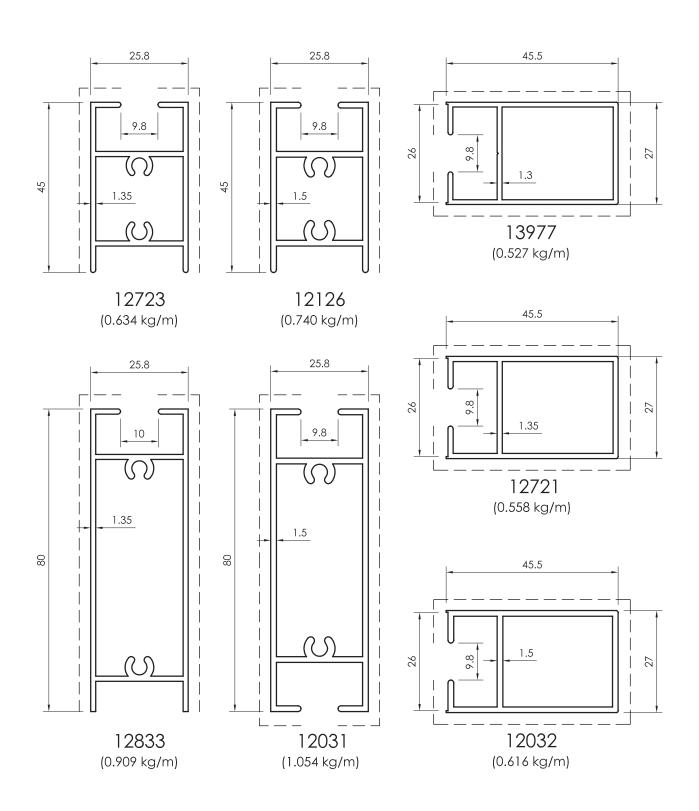


All dimensions in mm _____Visible area



Sash Profile

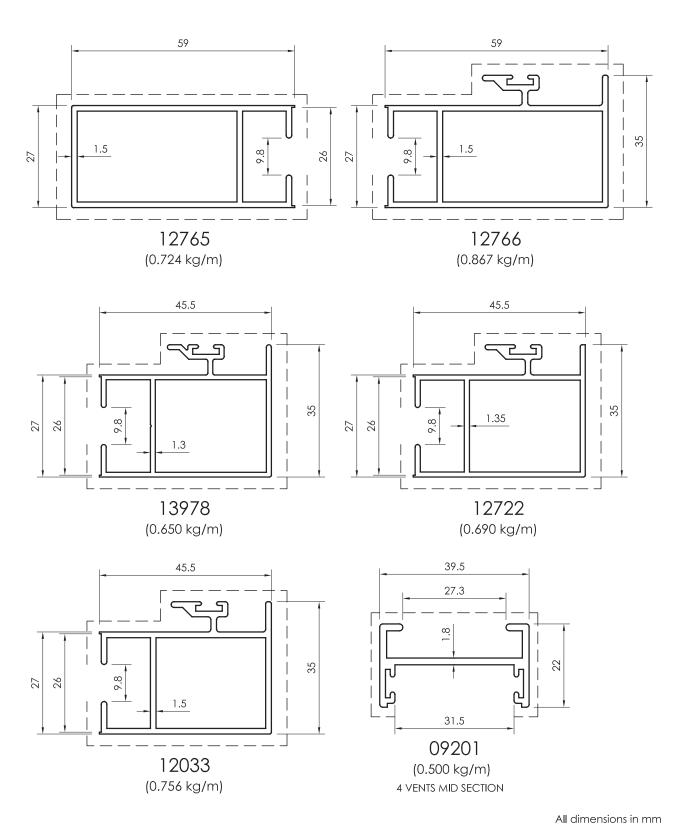
For Single Glass





Sash Profile

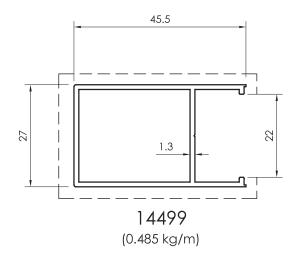
For Single Glass

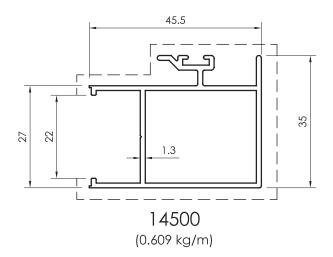


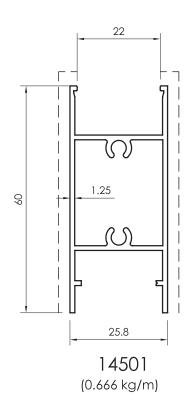


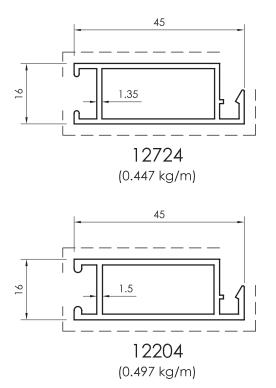
Sash Profile

For Double Glass

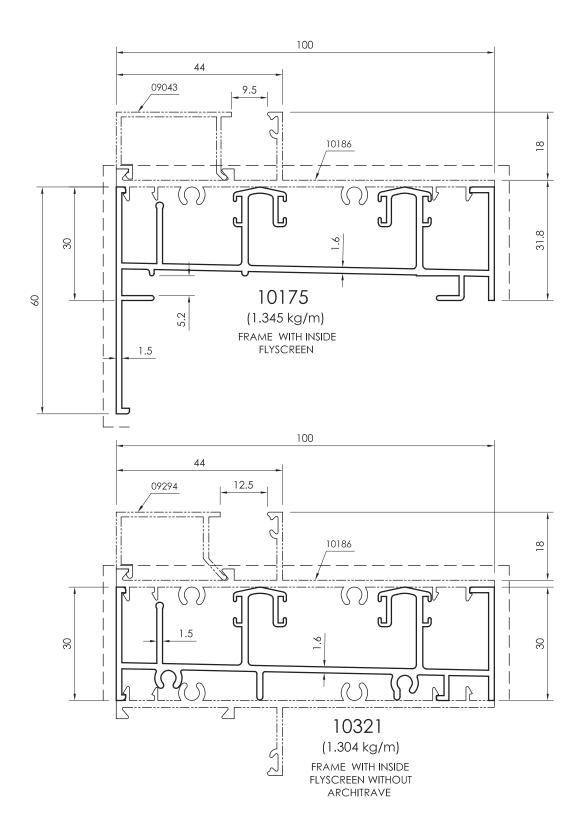








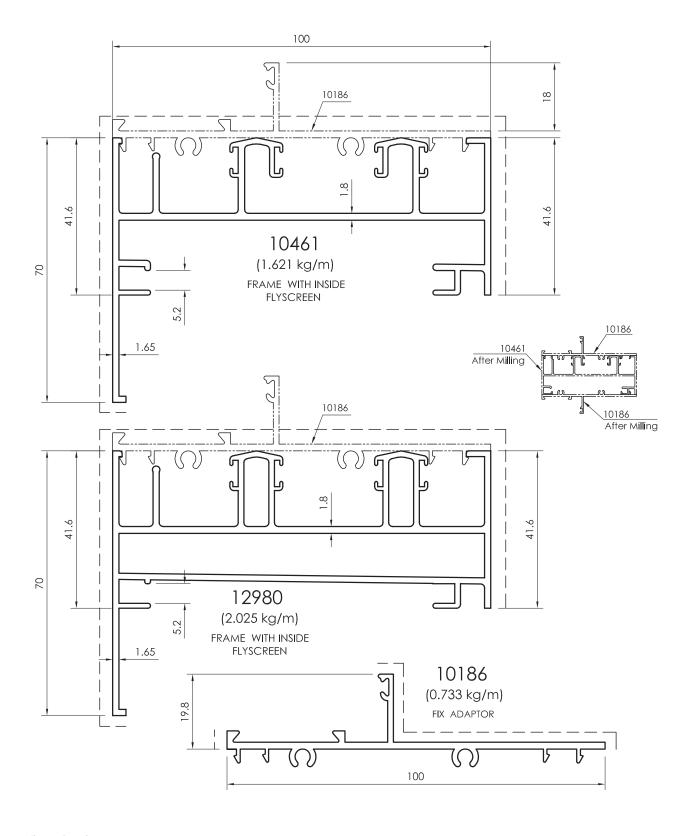




All dimensions in mm _____Visible area

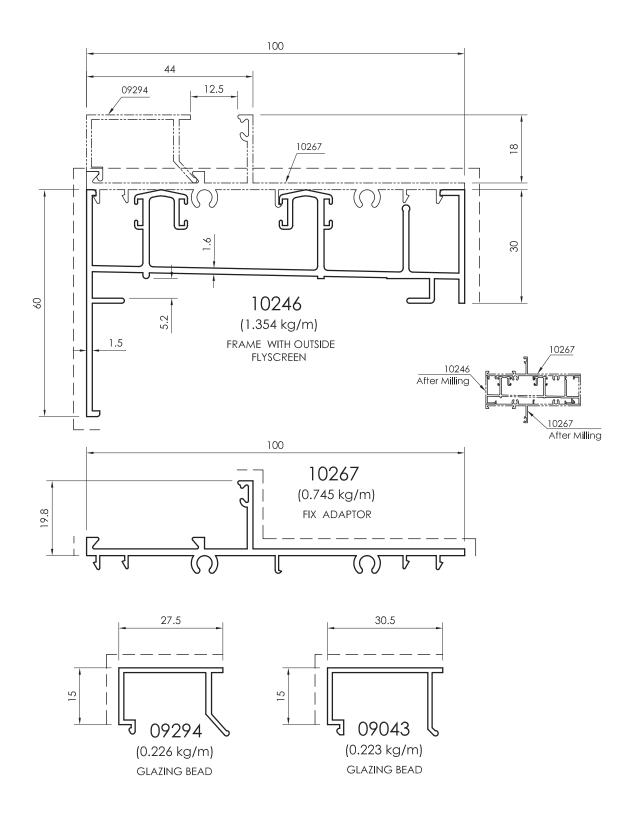


Frame / Adaptor Profiles





Frame / Adaptor Profiles

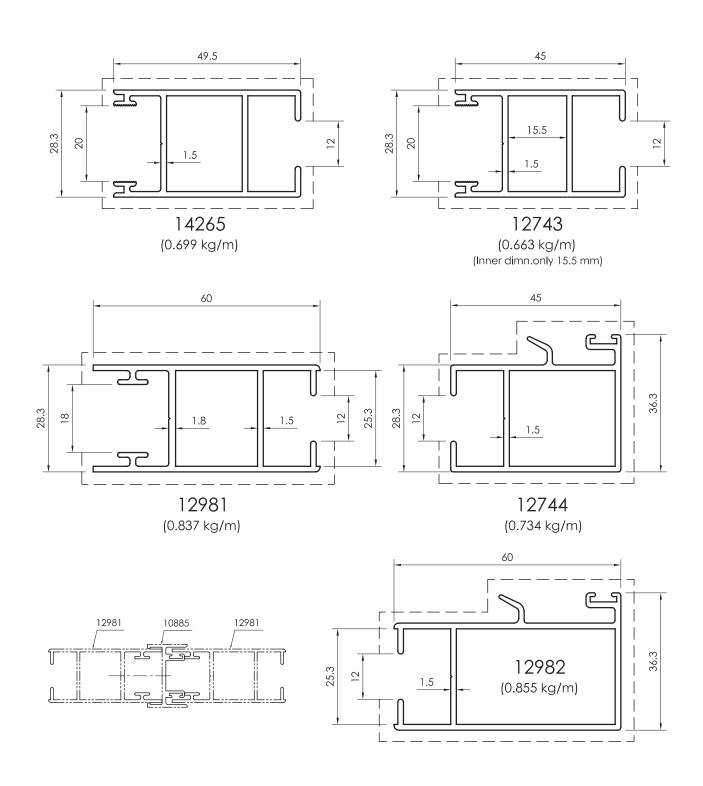


All dimensions in mm _____Visible area



Sash Profile

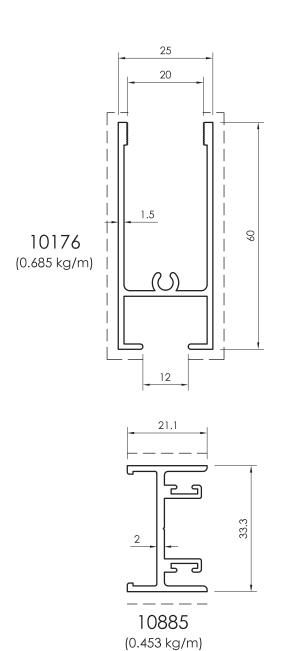
For Single Glass

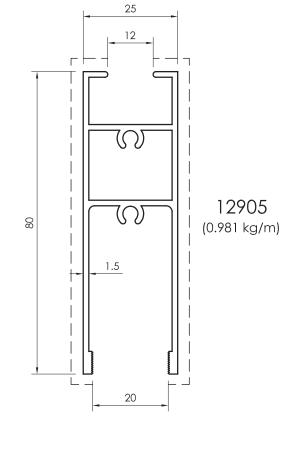


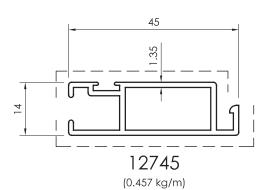


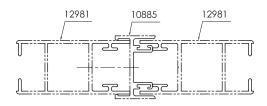
Sash Profiles

For Single Glass







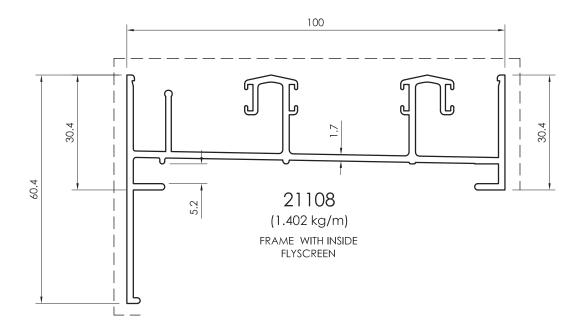


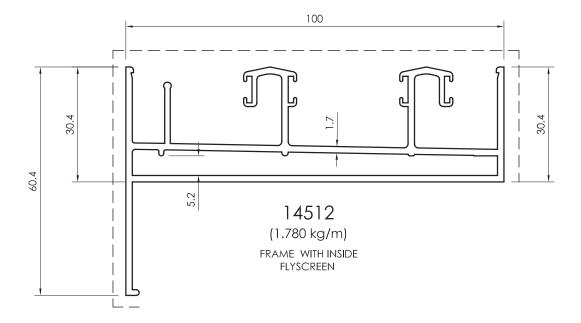
4 VENTS MID SECTION

All dimensions in mm



Frame Profiles

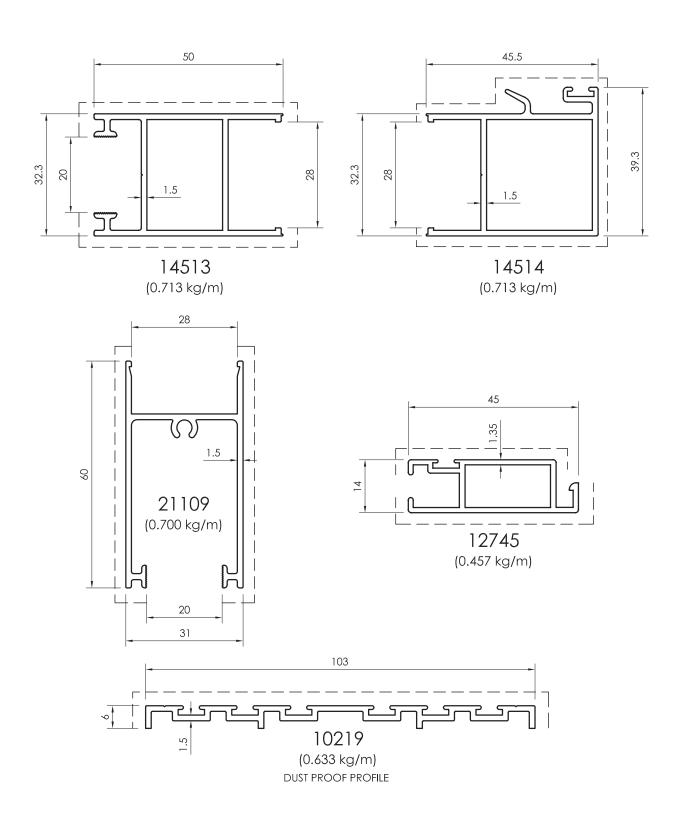






Sash Profiles

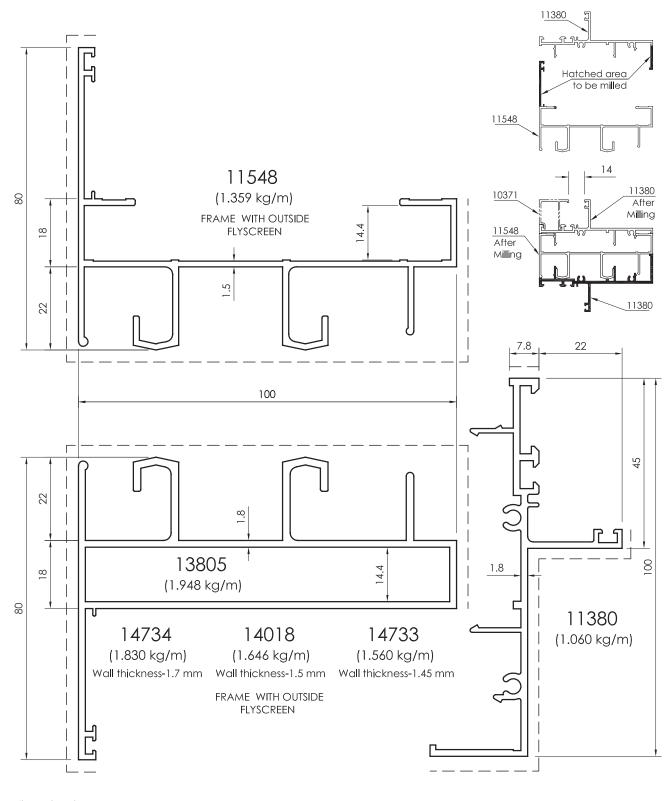
For Double Glass



All dimensions in mm _____Visible area



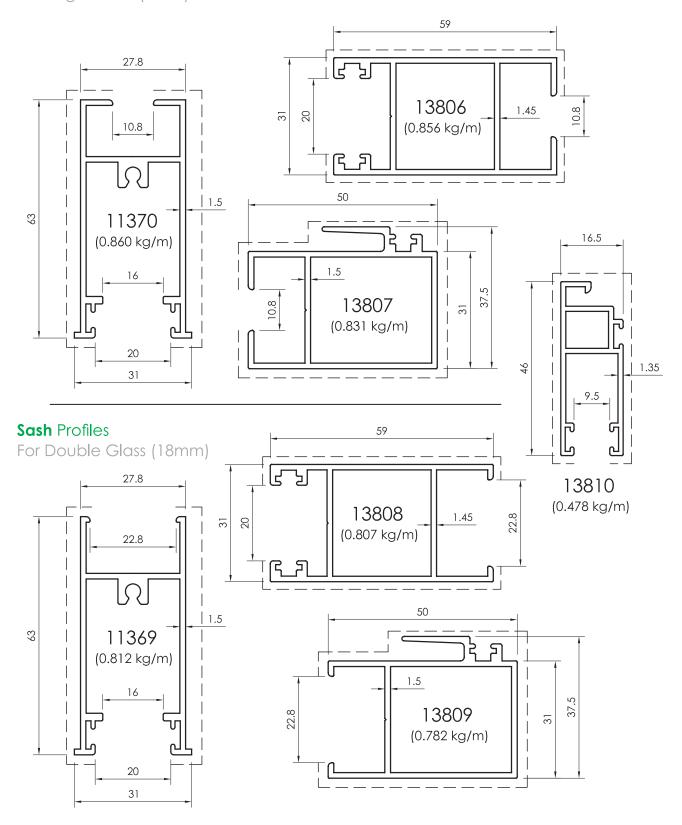
Frame / Adaptor Profiles





Sash Profiles

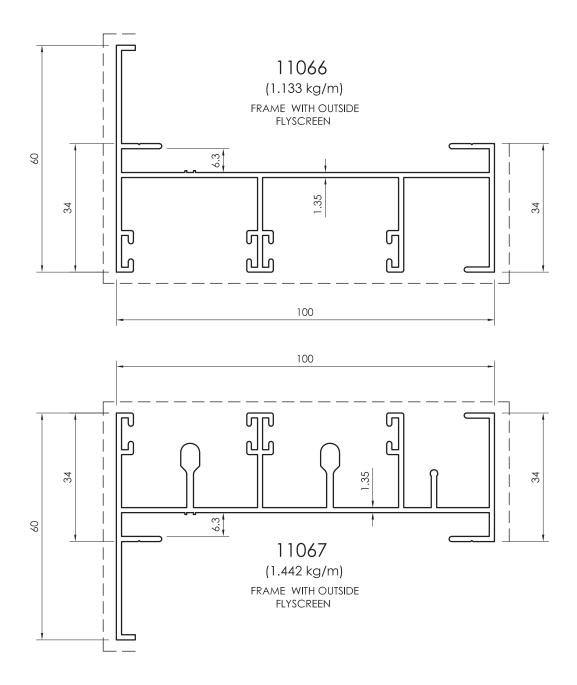
For Single Glass (6mm)



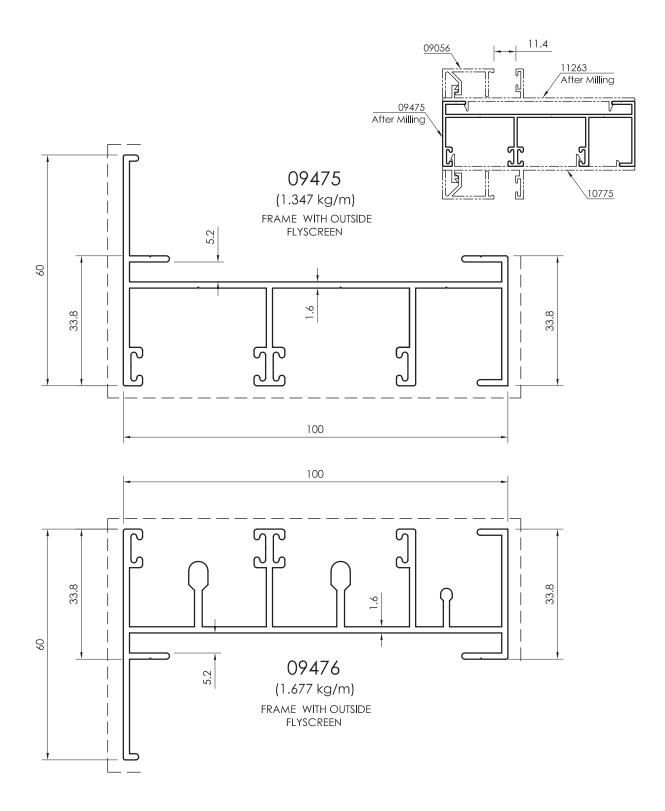
All dimensions in mm _____Visible area



Frame Profiles





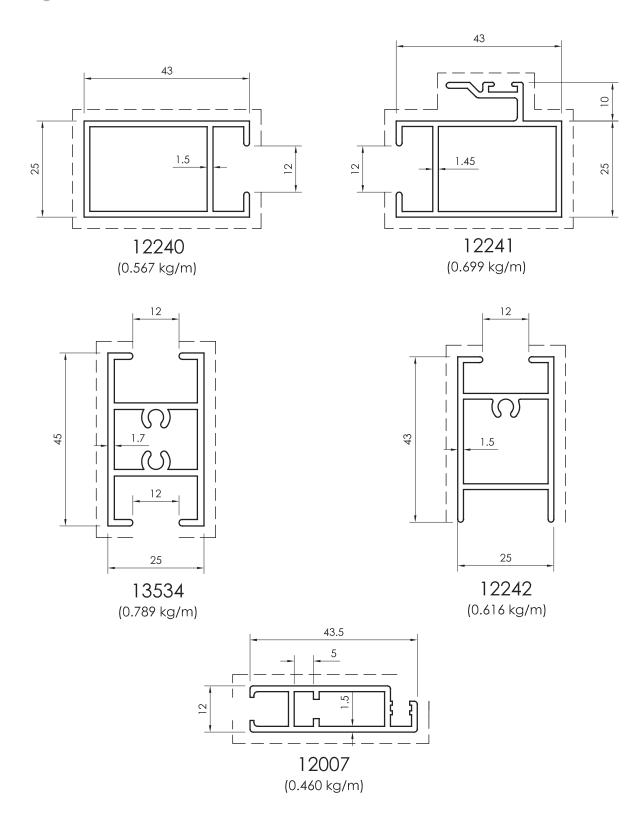


All dimensions in mm

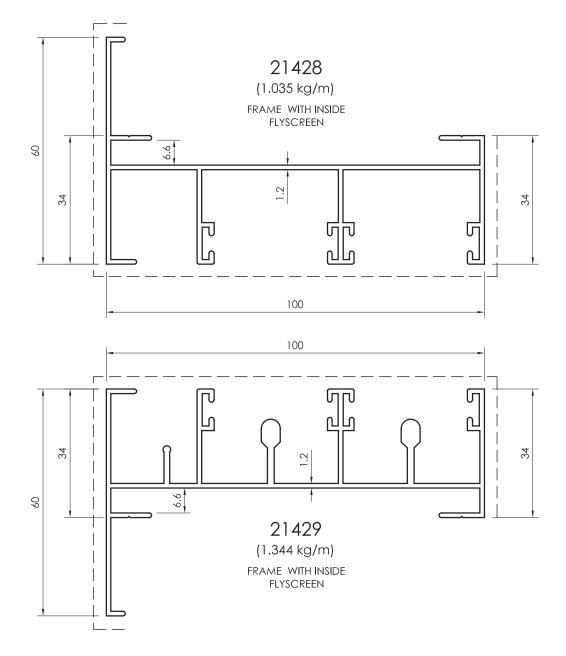


Sash Profiles

For Single Glass



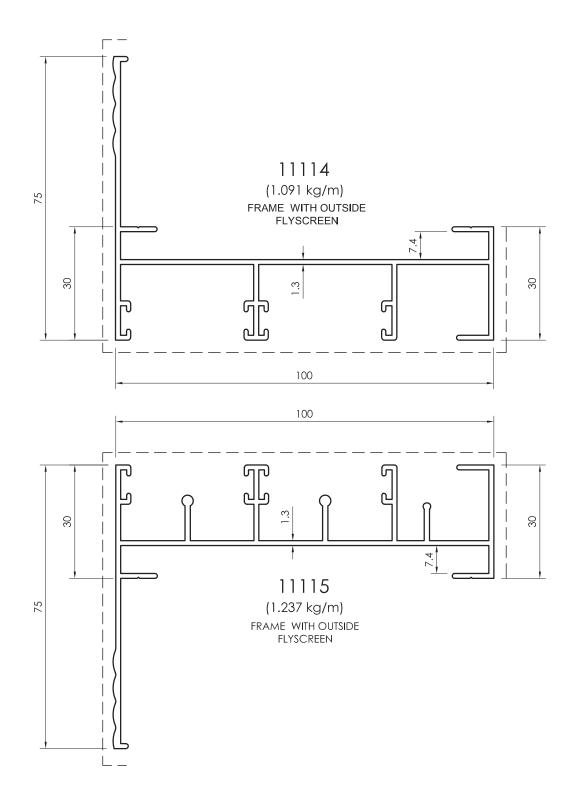




All dimensions in mm _ _ _ _ Visible area



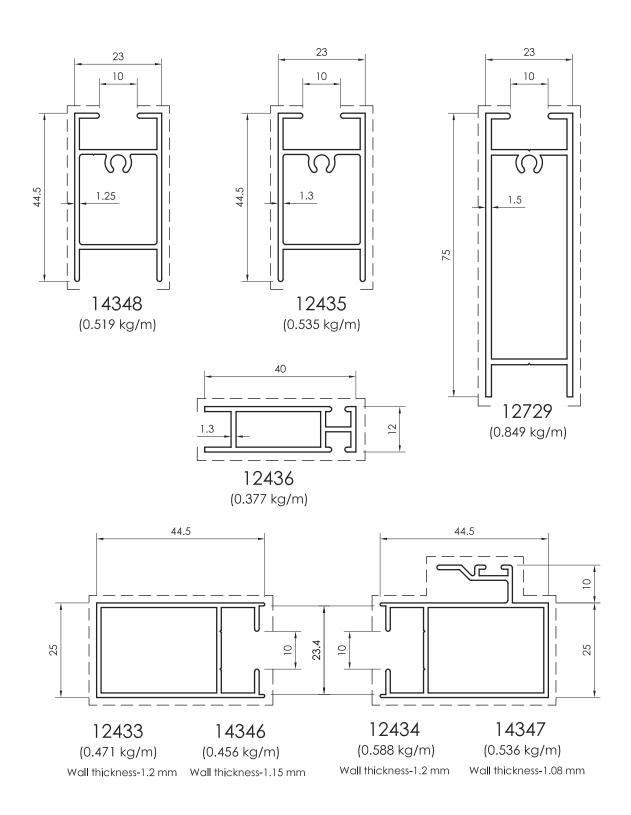
Frame Profiles





Sash Profiles

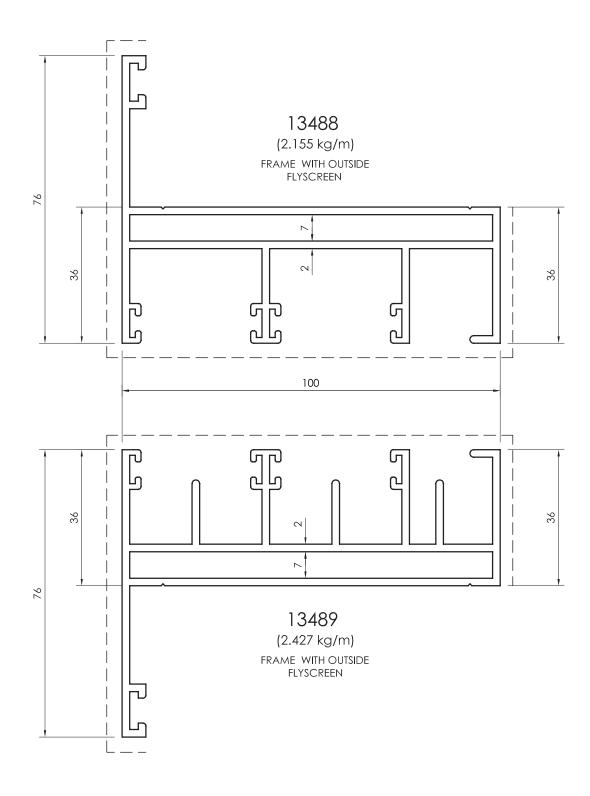
For Single Glass



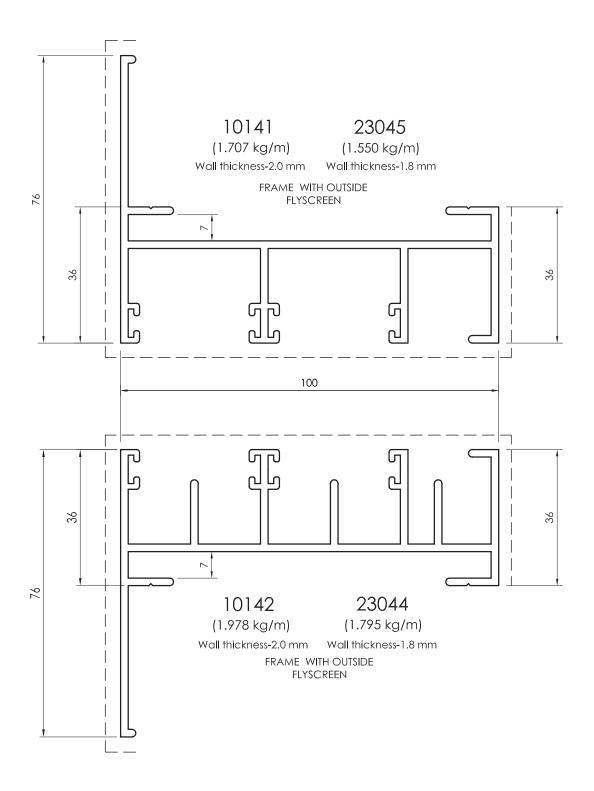
All dimensions in mm
____Visible area



Frame Profiles



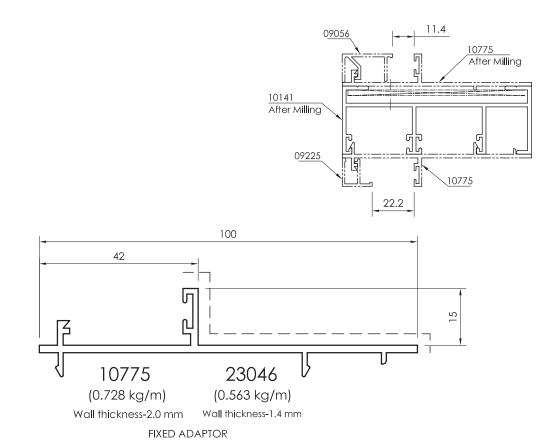




All dimensions in mm
____Visible area



Frame / Adaptor Profiles



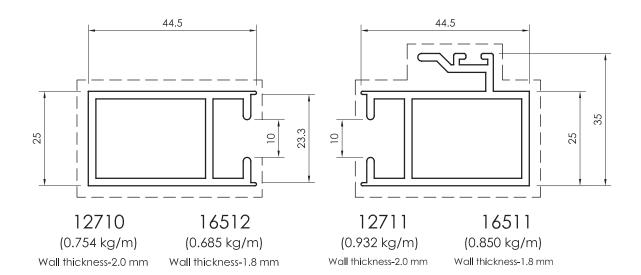
13249
(2.491 kg/m)
FIXED FRAME WITH
OUTSIDE FLYSCREEN

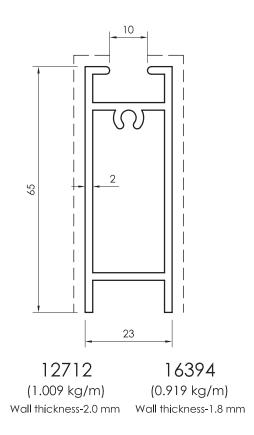
All dimensions in mm Visible area____ 42

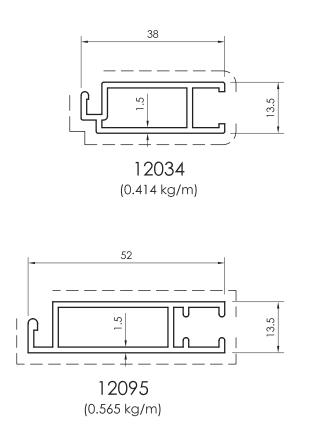


Sash Profiles

For Single Glass



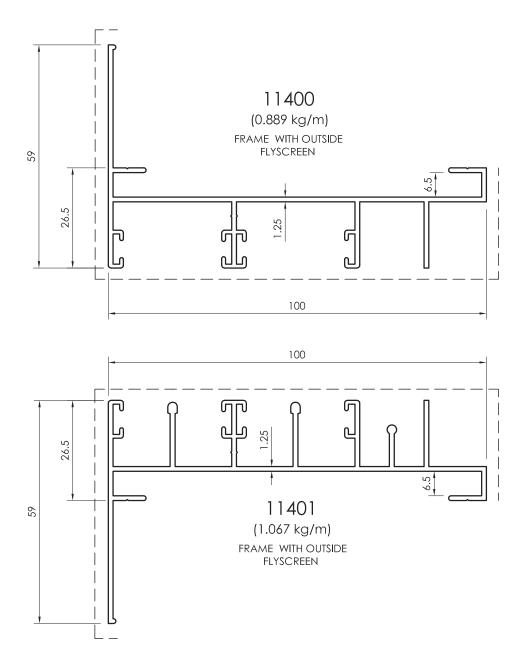




All dimensions in mm _____Visible area

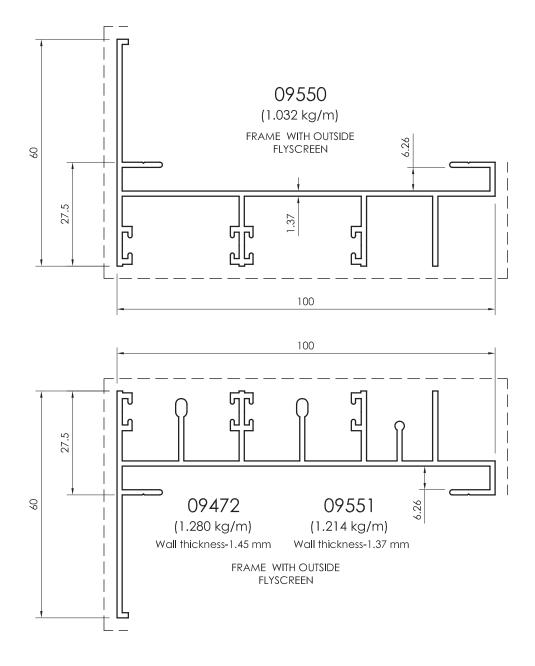


Frame Profiles





Frame Profiles

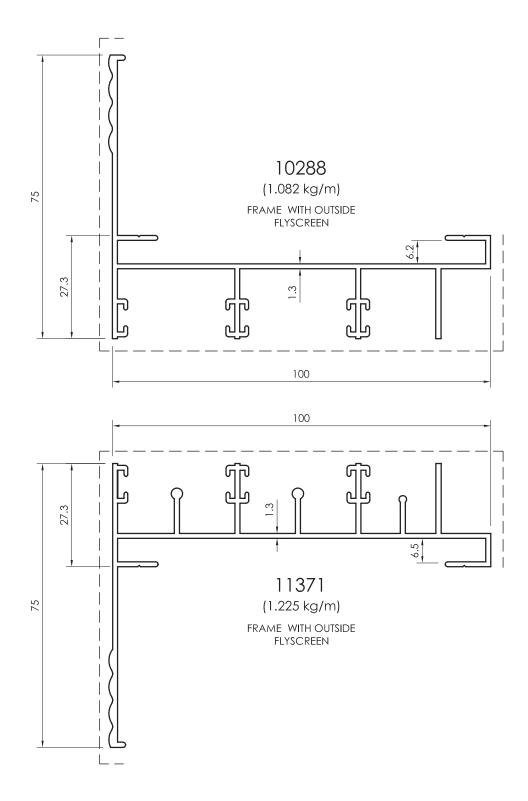


All dimensions in mm _ _ _ _ Visible area



100-D

Frame Profiles

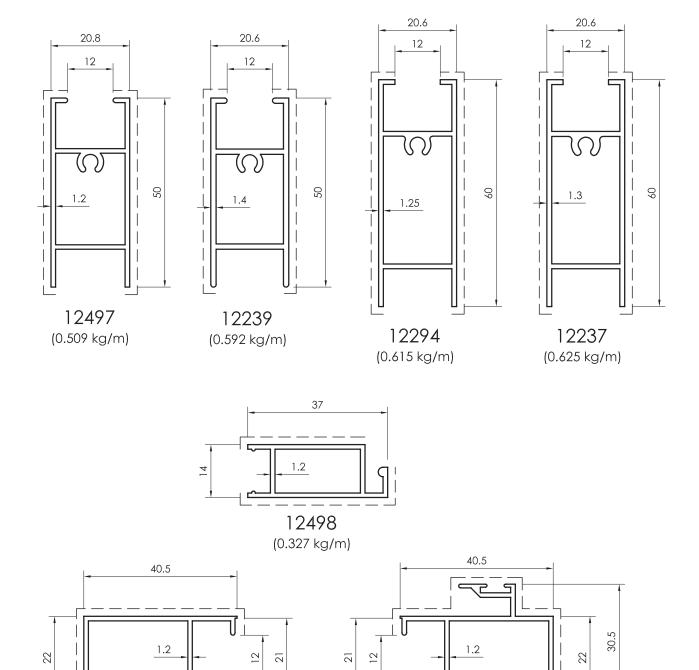


All dimensions in mm Visible area____



Sash Profiles

For Single Glass



All dimensions in mm _____Visible area

12496

(0.498 kg/m)



12495

(0.412 kg/m)

100-Е

PROFILE LIST



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
15953		12	1.141	9.142	57.497	1.91	10.6
15930		12	1.553	10.755	69.95	2.35	13.107
14005		13	1.370	10.805	59.087	2.267	12.7
14006		13	1.778	12.004	79.549	2.627	14.905
17585	FU J	13	1.243	4.724	58.72	2.245	11.707
10139		14	1.396	11.587	64.040	2.474	10.680
12906		14	1.343	4.589	55.709	2.188	10.274



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
12931		15	2.167	21.890	77.642	5.647	15.126
14297		15	1.809	64.170	12.122	12.267	3.560
12671		16	1.803	12.564	73.631	2.823	13.034
16557		17	1.956	13.498	79.148	3.033	13.892
12615		17	1.803	12.564	73.199	2.823	12.848
13099		17	1.926	16.932	82.380	3.594	14.419
16738		18	2.000	13.690	64.734	3.6	11.856



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
16999		24	3.168	19.927	124.61	4.803	21.95
17436		25	2.073	15.551	80.576	3.978	14.20
13421		25	1.763	14.245	69.461	3.634	12.165
13864		25	1.666	13.625	66.038	3.475	11.575
14781		25	1.406	11.740	55.85	3.014	9.659
15437		25	1.746	12.849	58.247	3.762	10.827
17435		26	2.117	21.753	83.745	3.752	14.448



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
14662		26	1.590	18.768	62.16	3.581	10.411
13662		28	1.756	23.828	84.228	4.120	14.160
13663		28	2.096	26.86	90.35	4.876	15.592
13678		30	2.500	37.059	114.525	6.191	20.312
13679		30	2.542	36.828	116.495	6.143	20.543
13680		31	2.246	21.221	79.51	5.377	14.793
12718		34	1.566	18.297	61.032	3.446	10.203



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
13137		34	1.485	17.776	57.269	3.336	9.570
11597		35	1.038	5.945	50.449	1.469	8.922
11598		35	1.345	7.075	58.096	1.643	10.881
11505	[36	1.068	6.155	53.614	1.518	9.507
11506		36	1.395	7.472	51.954	1.735	11.595
11261		37	1.217	6.961	60.334	1.732	10.558
11262		37	1.597	8.576	70.323	2.0	13.054



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
10282	[38	1.110	7.319	54.590	1.875	9.432
10283		38	1.321	7.748	61.466	1.945	10.726
11599		39	1.083	6.306	54.144	1.566	9.671
11600		39	1.409	7.586	60.854	1.778	10.907
10087		40	1.265	7.200	63.407	1.796	11.407
09728		40	1.670	9.179	72.284	2.121	13.006
09187		41	1.328	7.280	62.943	1.837	11.357



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
09654	[mɨmɨŋ]	41	1.702	8.976	71.878	2.111	12.861
10160		42	1.085	6.344	53.837	1.594	9.705
10161		42	1.234	6.598	58.272	1.627	10.711
09188		43	1.479	7.597	68.145	1.880	12.541
09443	<u>[</u>	44	1.164	2.422	49.722	1.455	9.735
09444	<u>[.f.l.]</u>	44	1.315	2.536	53.789	1.559	10.476
10175		50	1.345	7.834	62.463	73.687	11.614



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
10321		50	1.304	3.615	62.463	2.261	10.216
10461		51	1.621	13.930	52.096	2.886	15.571
10246		52	1.354	7.834	82.373	1.883	11.297
12980		51	2.025	15.616	62.221	3.358	16.92
21108		55	1.402	8.287	88.84	1.997	11.929
14512	L T T	55	1.780	9.541	65.397	2.432	13.751
11548		57	1.359	17.69	61.61	3.262	10.158



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
13805		57	1.948	22.471	78.258	4.310	13.374
14734		57	1.830	31.391	74.53	4.114	12.755
14018		57	1.646	19.217	66.932	3.701	11.381
14733		57	1.560	18.373	63.61	3.557	10.827
11066		59	1.133	7.575	55.497	1.960	10.242
11067		59	1.442	8.154	61.667	1.236	3.398
09475		60	1.347	8.655	64.429	2.237	11.937



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
09476		60	1.677	9.205	71.392	2.316	13.186
21428		62	1.035	6.995	50.226	1.790	9.161
21429		62	1.344	7.526	57.45	1.865	10.972
11114	[63	1.091	12.756	55.886	2.444	9.594
11115		63	1.237	13.214	59.62	2.481	10.393
13488		65	2.155	22.122	95.860	4.563	17.232
13489		65	2.427	23.423	103.616	4.712	18.963



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
10141		66	1.707	17.377	85.889	3.375	15.433
10142		66	1.978	18.157	98.627	3.454	17.205
23045		66	1.550	15.828	77.52	3.069	13.838
23044		66	1.795	16.527	84.55	3.14	15.442
13249		67	2.491	19.888	96.122	5.989	19.213
11400	F F 1 1	69	0.889	4.762	38.34	1.166	6.494
11401		69	1.067	5.38	41.81	1.270	7.130



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
09550		70	1.032	5.804	43.828	1.413	7.412
09472		70	1.280	6.762	49.877	1.593	8.472
09551		70	1.214	6.484	47.464	1.524	8.053
10288		71	1.082	13.225	48.411	2.542	7.812
11371		71	1.225	13.877	51.592	2.6	8.429
23270		18	0.890	2.572	35.093	0.975	6.838
11534	, , , , , , , , , , , , , , , , , , , 	19	0.659	0.743	20.303	0.384	3.934



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
10369		19	0.680	0.368	18.853	0.359	3.758
10086	\ 	19	0.849	1.706	33.098	0.793	6.221
23547	• • • • • • • • • • • • • • • • • • • 	25	0.847	1.817	32.555	0.797	5.972
11247	, , ,]	31	0.967	1.750	30.437	0.750	5.762
10779	<u>F</u> 1	45	0.646	0.338	20.465	0.230	3.821
11263	<u> </u>	45	0.681	0.365	22.225	0.244	4.167
10186	, ,] , , ,	51	0.733	0.507	21.022	0.282	3.911



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
10267	 	52	0.745	0.516	21.040	0.286	4.011
11380	- 1.4. 1.4. 1.4. 1.4. 1.4. 1.4. 1.4. 1.4	57	1.060	2.817	35.993	1.060	6.969
10775	<u> </u>	67	0.728	0.387	21.883	0.260	4.092
23046	<u> </u>	67	0.563	0.362	17.098	0.250	3.136
10048		19	0.395	0.596	3.309	0.432	1.526
10047		19	0.333	0.561	2.016	0.429	1.060
21274	Ţ	19	0.314	0.536	1.499	0.437	0.709



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
10371	Ţ	20	0.298	0.840	0.746	0.495	0.471
22927	Ţ	20	0.269	0.787	0.677	0.473	0.441
10377	Ţ	20	0.282	0.742	0.385	0.488	0.327
23195	ŢŢ	20	0.258	0.699	0.356	0.468	0.313
10464	Ţ	20	0.271	0.812	0.254	0.598	0.186
22928	Ţ	20	0.226	0.698	0.220	0.503	0.164
11321	J	20	0.251	0.696	0.241	0.497	0.170



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
11730	Ţ	20	0.286	0.796	0.697	0.487	0.453
11729	À	20	0.242	0.632	0.233	0.436	0.167
23194	Ţ	20	0.249	0.644	0.333	0.453	0.292
10158	ΓĿ	25	0.254	0.511	0.653	0.487	0.317
10157	Ţţ	25	0.248	0.381	1.317	0.282	0.824
10934	フ	27	0.154	0.222	0.120	0.201	0.126
10935	ڸ	27	0.096	0.118	0.017	0.118	0.024



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
11248	Γ	31	0.308	0.684	0.497	0.663	0.45
09225	Ţ	45	0.165	0.139	0.124	0.147	0.125
09056	IZT	45	0.290	0.217	0.797	0.219	0.523
09504	ŊŢ	45	0.249	0.202	0.732	0.732	0.473
09294	Ţ	52	0.226	0.285	0.900	0.900	0.568
09043	ŢŢ	52	0.223	0.292	1.059	1.059	0.640
12616	E S S S S S S S S S S S S S S S S S S S	21	0.957	6.626	11.887	3.944	3.855



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
14124	63	21	0.909	6.326	11.449	3.765	3.702
12617		21	0.974	7.590	14.009	3.688	4.389
14125		21	0.937	7.359	13.413	3.594	4.196
10010		21	0.826	4.773	9.275	3.182	2.942
11702		21	0.770	4.516	9.243	3.011	2.806
12669		21	1.011	5.577	15.279	3.718	4.064
14126		21	0.958	5.326	14.724	3.551	3.937



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
14022		21	1.298	39.982	7.458	7.428	4.972
12321	E S	22	0.911	6.509	9.923	3.874	3.042
15926	E 3	23	0.734	5.354	8.187	3.187	2.481
12322		22	0.934	7.492	11.905	3.710	3.529
15927		23	0.748	6.165	9.612	3.102	2.842
09931	<u></u>	22	0.759	7.741	4.503	2.525	3.002
14298		22	0.972	12.387	5.292	3.427	3.528



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
15928		23	0.764	4.414	7.723	2.885	2.466
17000	F A C	24	1.348	9.322	11.960	4.236	4.131
17001		24	1.521	10.015	17.477	6.033	5.205
23535	C .	24	1.196	6.789	13.886	4.526	4.230
13422		27	0.850	4.843	8.478	2.815	2.616
13865		27	0.796	4.589	8.093	2.668	2.467
15230		27	0.728	4.174	7.345	2.412	2.281



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
10933	7	27	0.348	1.705	1.412	0.658	0.534
21759	7.	27	0.302	1.507	1.214	0.583	0.460
11239	F	29	0.764	4.565	10.207	3.043	2.923
13664		29	0.889	6.376	12.138	3.840	3.595
13665		29	0.726	5.525	6.587	2.530	2.432
11246		32	0.987	7.027	12.499	3.799	3.689
13681		32	1.081	9.235	13.516	4.991	4.128



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
13682		32	1.069	10.424	11.197	4.659	3.695
23820		33	0.926	6.763	11.788	3.655	3.581
17276		33	1.063	9.132	12.861	4.936	3.867
17275		33	1.085	11.144	10.847	4.782	3.512
12727		34	0.796	4.109	6.304	2.678	2.270
13140		34	0.753	3.912	6.029	2.538	2.179
13862		34	0.666	3.475	5.382	2.247	1.942



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
12719		34	0.757	4.185	6.257	2.621	2.284
13139		34	0.717	3.987	5.984	2.486	2.192
13861		34	0.629	3.543	5.324	2.2	1.953
12728		34	0.814	5.124	8.382	2.540	3.305
13141		34	0.767	4.862	7.926	2.413	3.124
13863		34	0.680	4.402	7.0	2.213	2.759
09041		46	0.622	2.431	4.339	1.885	1.782



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
10162		46	0.565	2.237	4.029	1.731	1.657
11507		46	0.526	2.128	3.811	1.649	1.566
12767	33	46	1.005	18.122	4.022	3.977	3.1138
12390		46	1.038	22.258	4.064	5.284	3.145
13979		46	0.845	22.258	4.064	5.284	3.145
12126	F =	47	0.740	4.358	2.455	1.989	1.903
12723	 	47	0.634	4.538	2.455	1.989	1.903



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
12032		47	0.616	2.709	5.265	2.007	2.289
12721		47	0.558	2.480	4.805	1.72	2.091
13977		47	0.527	2.34	4.584	1.733	1.997
12031		47	1.054	25.762	4.149	6.441	3.216
12833	E 3	47	0.909	22.386	3.662	5.406	2.839
12765		48	0.724	3.361	10.418	2.489	3.510
12766		48	0.867	4.898	11.504	2.654	3.706



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
12033		48	0.756	4.204	5.918	2.333	2.406
12722		48	0.690	3.872	5.4	2.157	2.196
13978		48	0.650	3.63	5.133	2.017	2.1
14499		49	0.485	2.235	3.781	1.656	1.522
14500		49	0.609	3.505	4.231	1.975	1.624
14501		49	0.666	6.649	2.643	2.193	2.048
14265		53	0.699	3.427	5.720	2.422	2.284



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
12743		53	0.663	3.185	4.301	2.250	1.888
12981	<u>-</u>	53	0.837	4.140	9.107	2.926	2.999
12744		53	0.734	4.252	6.066	2.206	2.432
12982		53	0.855	5.084	12.663	2.584	3.894
10176	3	54	0.685	8.094	2.861	2.435	2.289
12905	3 3	54	0.981	18. <i>7</i> 81	3.840	4.236	3.072
14513		56	0.713	4.556	5.258	2.821	1.922



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
14514		56	0.713	5.216	5.238	2.581	1.934
21109		56	0.700	8.125	4.483	2.643	2.892
11370		58	0.860	4.097	11.762	2.643	3.467
13806		58	0.856	5.109	10.96	3.296	3.632
13807		58	0.831	5.674	8.063	3.020	3.028
11369		58	0.812	3.96	10.23	2.554	3.175
13808		58	0.807	4.971	9.307	3.207	2.912



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
13809		58	0.782	5.517	6.782	2.917	2.402
12240		61	0.567	2.159	4.453	1.727	2.065
12241		61	0.699	3.688	4.598	1.984	2.060
12242	TT	61	0.616	3.545	2.163	1.519	1.730
13534	F 3	61	0.789	2.620	4.719	2.096	2.097
12435	F	64	0.535	1.637	3.406	1.423	1.399
14348		64	0.519	1.588	3.311	1.381	1.356



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
12729	Ţ <u> </u>	64	0.849	2.9	17.7	2.521	4.409
12433		64	0.471	1.831	3.85	1.464	1.710
14346		64	0.456	1.782	3.758	1.425	1.683
12434		64	0.588	3.184	4.099	1.710	1.740
14347		64	0.536	2.938	3.772	1.583	1.607
12710		68	0.754	2.759	5.887	2.208	2.586
16512		68	0.685	2.546	5.412	2.036	2.384



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
12711		68	0.932	4.767	6.229	2.532	2.636
16511		68	0.850	4.418	5.737	2.356	2.429
12712		68	1.009	15.222	3.215	4.365	2.795
16394	5	68	0.919	2.963	1.983	2.576	3.982
12239	3	72	0.592	1.473	4.221	1.43	1.617
12497	 \$	72	0.509	1.332	3.478	1.280	1.426
12237	4	72	0.625	1.64	7.072	1.592	2.227



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
12294		72	0.615	1.583	6.79	1.537	2.146
12495		72	0.412	1.253	2.668	0.594	1.266
12496		72	0.498	2.014	2.776	1.213	1.276
15929		23	0.461	0.538	3.517	0.721	1.448
12282		24	0.513	0.583	3.749	0.781	1.551
13423	<u>. </u>	27	0.510	0.781	3.690	0.881	1.553
13810		58	0.478	0.734	3.256	0.822	1.338

Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
13683		32	0.536	0.455	4.006	0.586	1.595
13138	<u> </u>	34	0.415	0.347	1.766	0.441	0.892
12724		49	0.447	0.747	3.731	0.871	1.622
12204		49	0.497	0.747	3.731	0.871	1.622
12007		61	0.460	0.365	2.766	0.570	1.267
12436	TH:	64	0.377	0.298	2.133	0.496	0.993
12034		68	0.414	0.405	2.018	0.588	1.039



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
12095		68	0.565	0.587	5.252	0.826	1.998
12498	<u> </u>	72	0.327	0.373	1.586	0.494	0.833
12745	ىكك	56	0.457	0.503	3.191	0.679	1.414
10728	11	22	0.342	0.944	0.414	0.562	0.308
11254	Ï	29	0.549	1.249	3.096	0.935	1.563
11240		29	0.228	0.215	0.740	0.291	0.543
09201		48	0.500	4.281	0.532	2.168	0.451



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
10885		54	0.453	2.490	0.377	1.496	0.352
10219	Lecteration	56	0.633	0.047	22.115	0.120	4.294
17745		27	1.945	15.713	74.870	4.023	13.031
17539		26	1.979	21.944	78.514	4.252	13.318
17744		27	1.820	13.556	59.419	3.503	10.832
24201		27	0.742	2.207	27.738	0.869	5.472
17615		28	1.023	12.330	5.776	3.499	3.420



Profile Reference	Profile Section	Page	Weight KG/M	IX cm⁴	IY cm⁴	WX cm³	WY cm³
18269		28	0.907	11.308	5.158	3.172	3.058
25410	J	28	0.098				

ACCESSORIES



Gasket/Accessories Reference	Section	Description	Unit
GE-G-009		FIX ADAPTOR GASKET	Linear Meter
GE-G-010		GLAZING BEAD GASKET	Linear Meter
GE-G-034		FIX ADAPTOR GASKET	Linear Meter
BRUSH - 4.5mm		4.5MM HIGH REGULAR BRUSH FOR FRAME/SASH PROFILE	Linear Meter
BRUSH - 6.5mm		6.5MM HIGH REGULAR BRUSH FOR FRAME/SASH PROFILE	Linear Meter
ROLLER		ROLLER USED AT THE BOTTOM OF THE BOTTOM SASH PROFILE	Pieces
ROLLER		ROLLER USED AT THE BOTTOM OF THE FLYSCREEN PROFILE	Pieces
FLUSH HANDLE	(+ +)	SUITABLE FLUSH TYPE HANDLE WITH LOCKING ARRANGEMENT (COUNTERPLATE + NIB)	Pieces
BOTTOM END CAP		PLASTIC END CAP TO COVER MILLED PART AT THE BOTTOM OF THE INTERLOCK PROFILES	Pieces
TOP END CAP		PLASTIC END CAP TO COVER MILLED PART AT THE TOP OF THE INTERLOCK PROFILES	Pieces

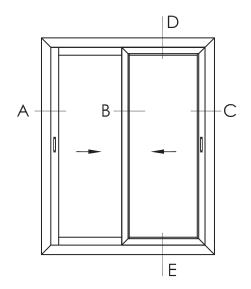
Gasket/Accessories Reference	Section	Description	Unit
SUC-120	T	DRAINAGE VALVE	Pieces
SUP-120		DEFLECTOR	Pieces
SCR-19	}	B 4.2 X 19 - DIN 7982 - A2 FOR FRAME CORNER	Pieces
SCR-20		M 5 X 20 - DIN 965 - A2 FOR ROLLER FASTENING	Pieces
SCR-32	(Sminiminin)	B 4.2 X 32 - DIN 7981 - A2 FOR SASH CORNER	Pieces
SCR-45	 	B 4.2 X 45 - DIN 7981 - A2 FOR SASH CORNER	Pieces

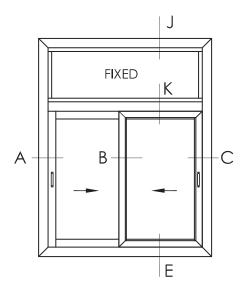


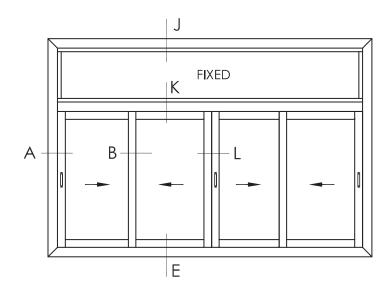
ASSEMBLY DRAWINGS



Inside Flyscreen with Architrave





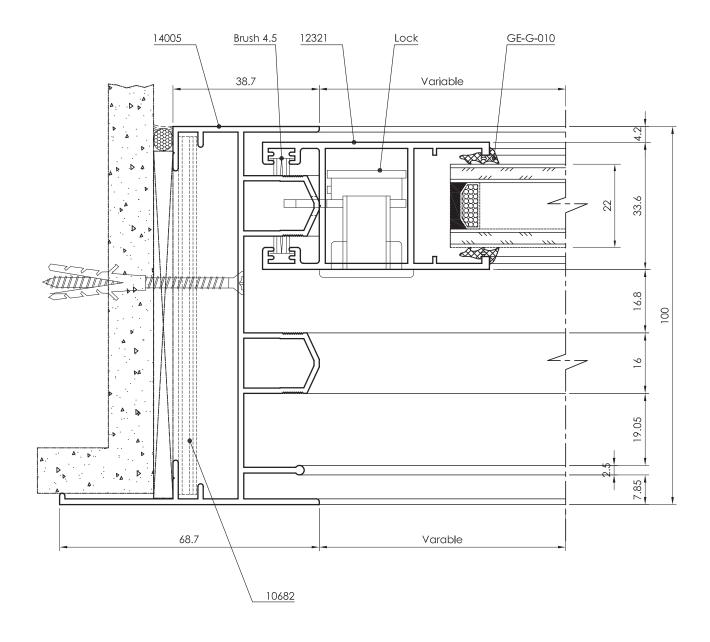


All dimensions in cross sections are shown in mm Profile are not necessarily shown to scale



Detail - A

Insulated Glass unit with Thickness 22mm

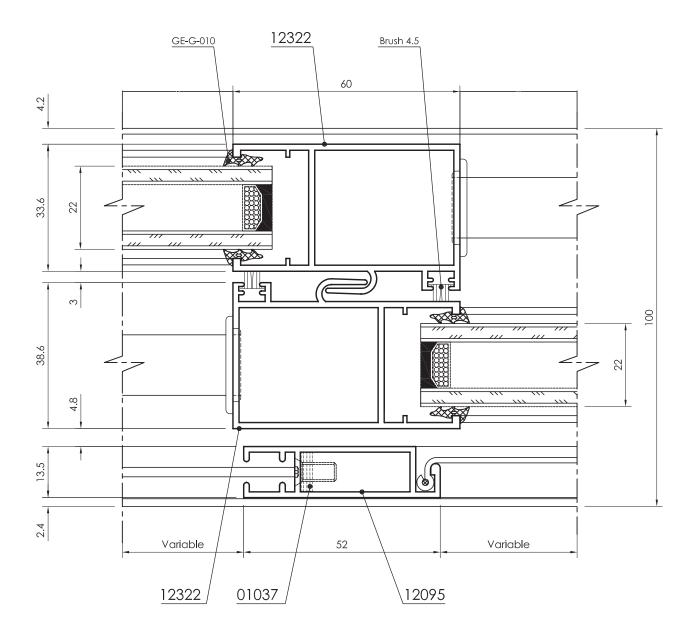


All dimensions in mm _____Visible area



Detail - B

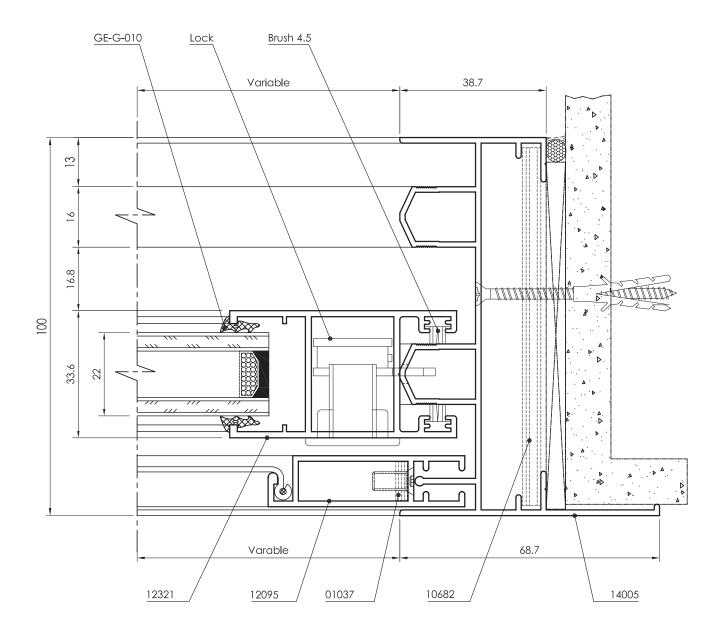
Insulated Glass unit with Thickness 22mm





Detail - C

Insulated Glass unit with Thickness 22mm

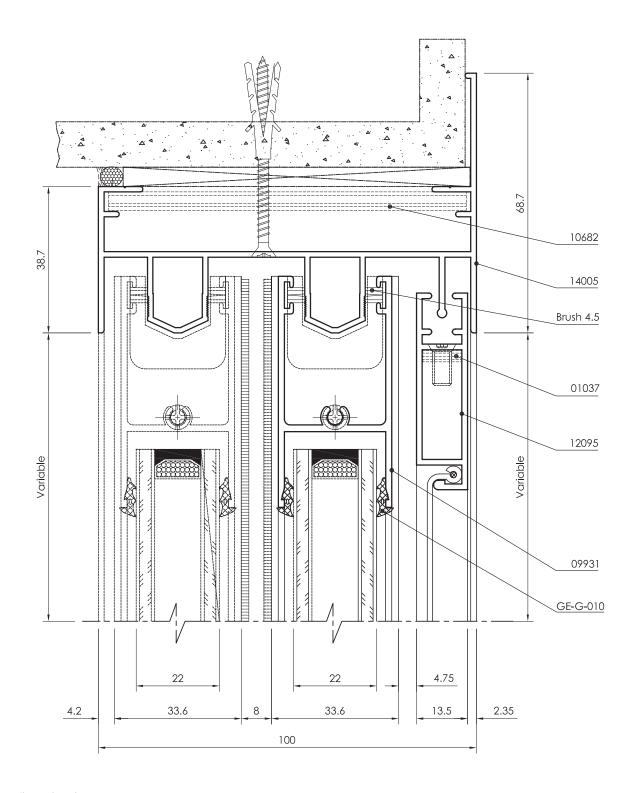


All dimensions in mm _ _ _ _ Visible area



Detail - D

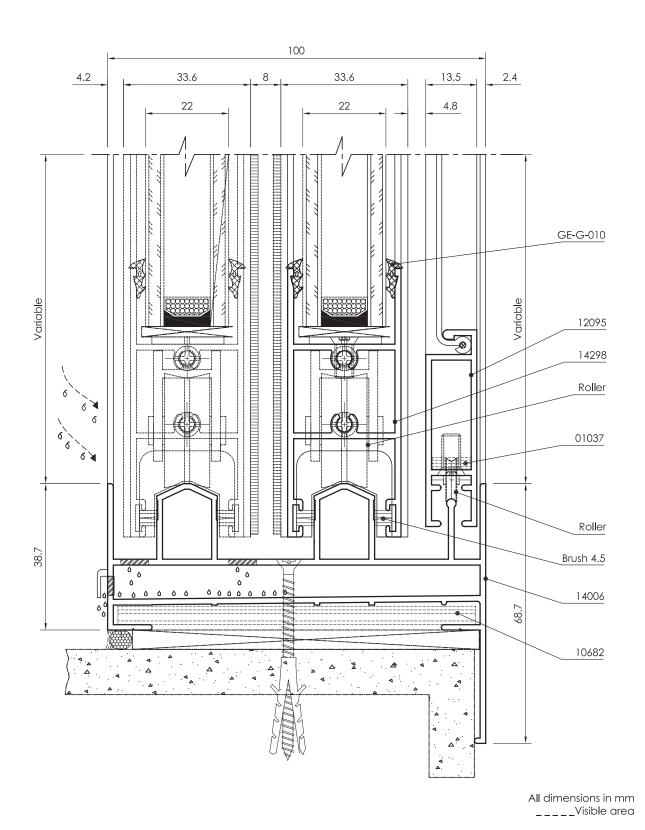
Insulated Glass unit with Thickness 22mm





Detail - E

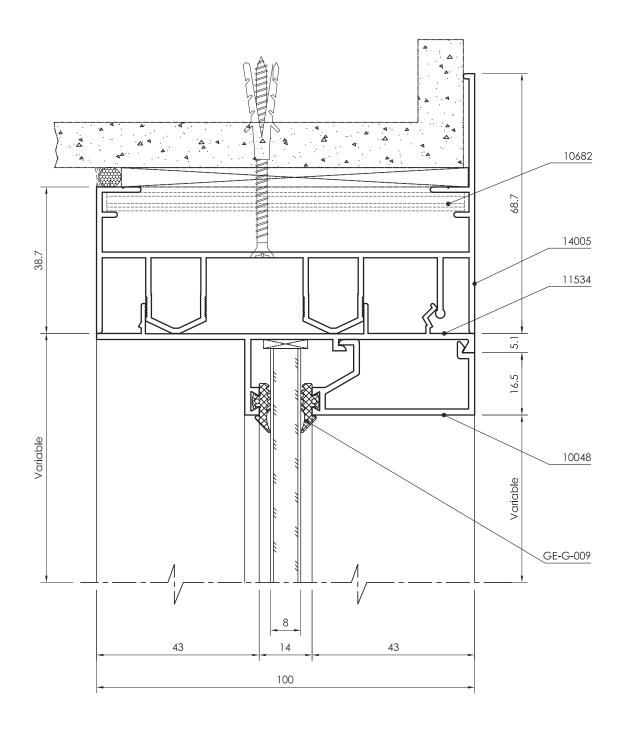
Insulated Glass unit with Thickness 22mm





Detail - J

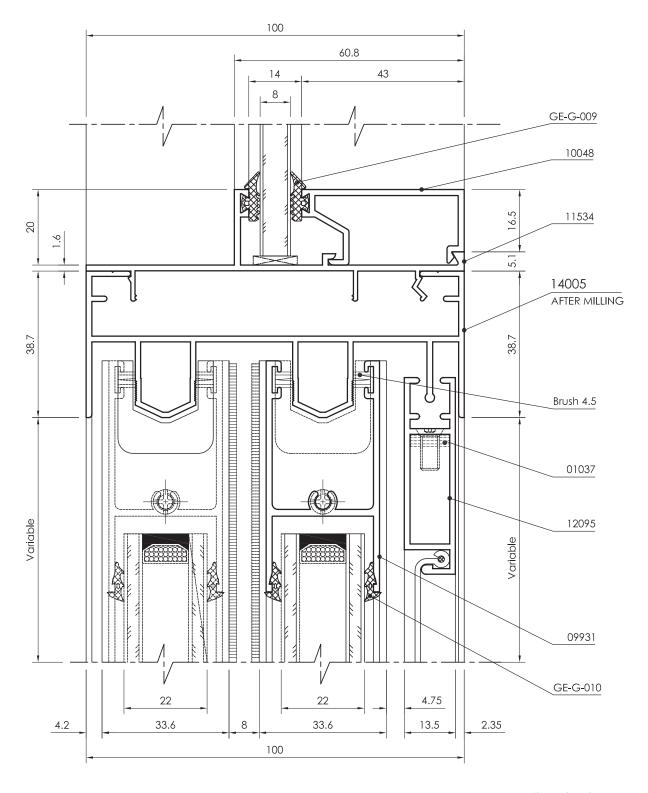
Single Glazed unit with Thickness 6 to 8mm





Detail - K

Insulated Glass unit with Thickness 22mm

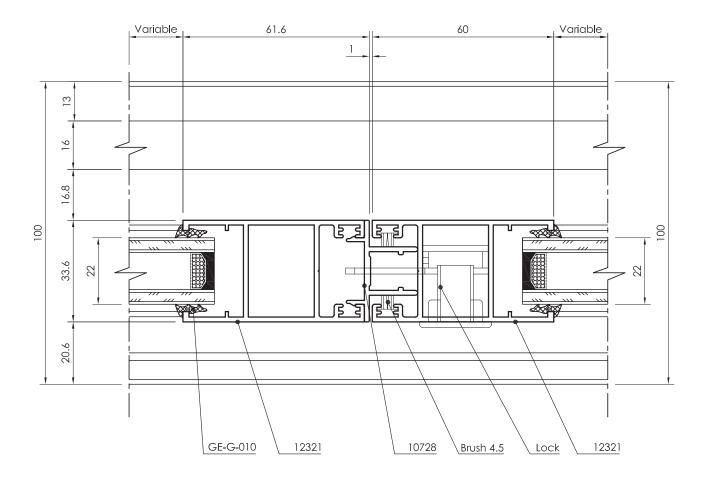


All dimensions in mm
____Visible area



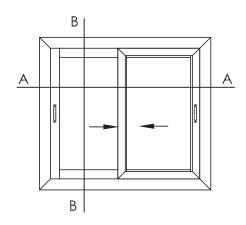
Detail - L

Insulated Glass unit with Thickness 22mm



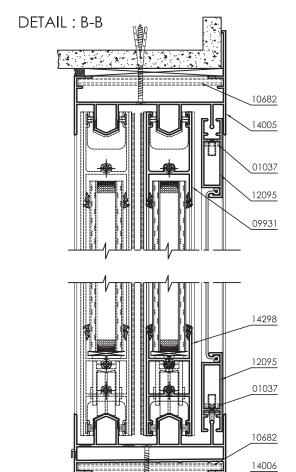


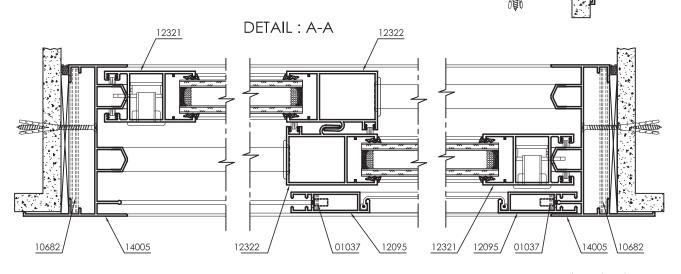
Insulated Glass unit with Thickness 22mm



2 - SASH WINDOW

PROFILES (Double Glazed)			
Description	Shape	Section No.	
Bottom Frame	Land	14006	
Top /Side Frame	[uui	14005	
Top Sash	1	09931	
Bottom Sash	II	14298	
Side Sash	III	12321	
Interlock		12322	
Fly screen	===1	12095	
Corner Cleat - 35 x 3		01037	
Corner Cleat		10682	

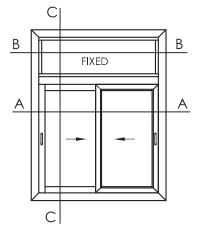




All dimensions in mm _____Visible area

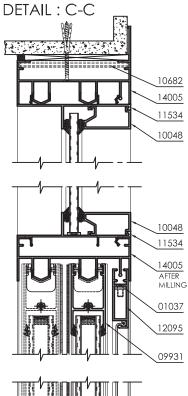


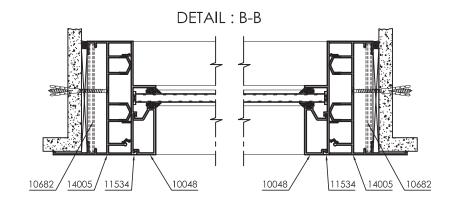
Insulated Glass unit with Thickness 22mm

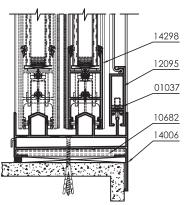


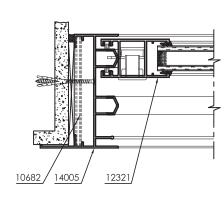
2 - SASH WINDOW WITH FIXED

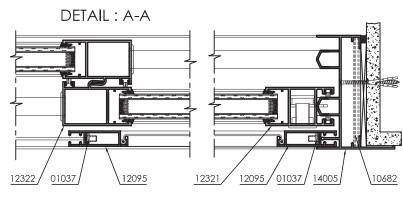
PROFILES (Double Glazed)				
Description	Shape	Section No		
Bottom Frame	1004	14006		
Top /Side Frame	fo o d	14005		
Top Sash	=	09931		
Bottom Sash	II	14298		
Side Sash	III	12321		
Interlock	Ĕ	12322		
Fly screen	===	12095		
Fix Adaptor	+ + + + + + + + + + + + + + + + + + + +	11534		
Glazing Bead (for single glass)	7	10048		
Corner Cleat - 35 x 3	Ĺ	01037		
Corner Cleat		10682		



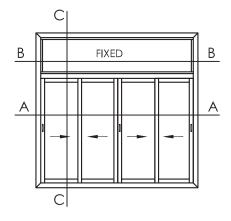






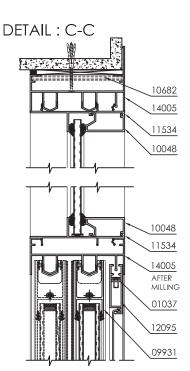


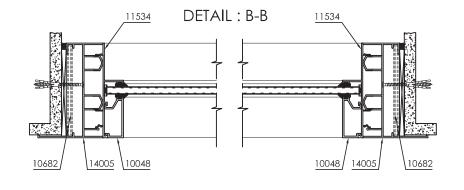
Insulated Glass unit with Thickness 22mm

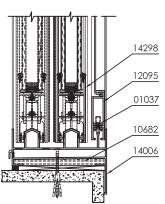


4 - SASH WINDOW WITH FIXED

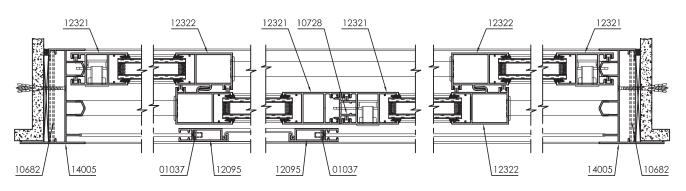
PROFILES (Double Glazed)				
Description	Shape	Section No		
Bottom Frame	604	14006		
Top /Side Frame	[uui	14005		
Top Sash	<u> </u>	09931		
Bottom Sash	H	14298		
Side Sash	III	12321		
Interlock	Ħ.	12322		
Fly screen	Ē	12095		
4-Vents mid adaptor	#	10728		
Fix Adaptor	, 	11534		
Glazing Bead (for Single glass)	2)	10048		
Corner Cleat - 35 x 3	٦	01037		
Corner Cleat		10682		



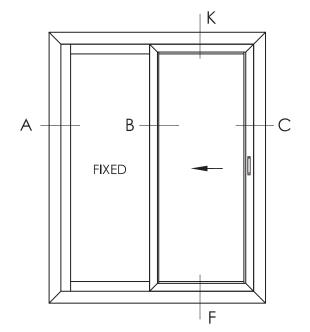


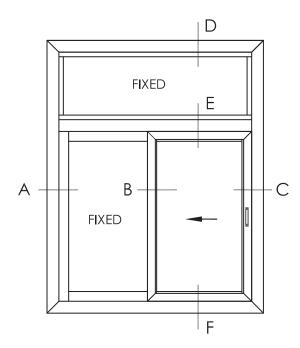


DETAIL: A-A



Inside Flyscreen With Architrave



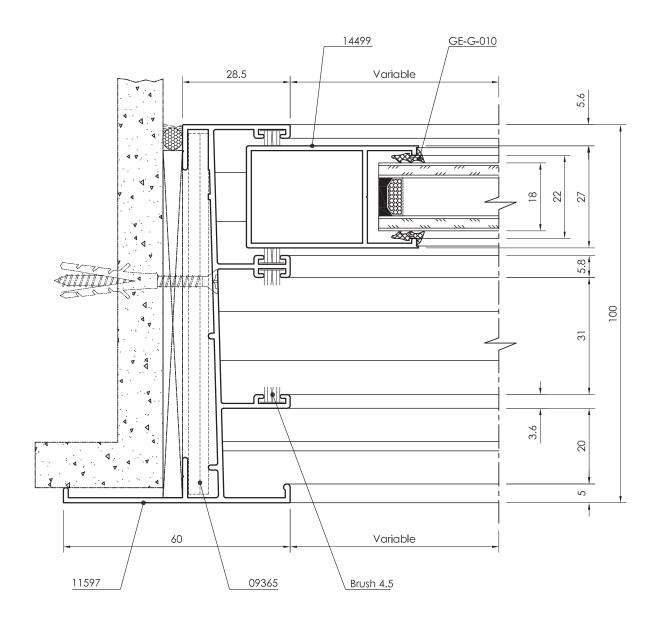


All dimensions in cross sections are shown in mm Profile are not necessarily shown to scale



Detail - A

Insulated Glass unit with Thickness 18mm

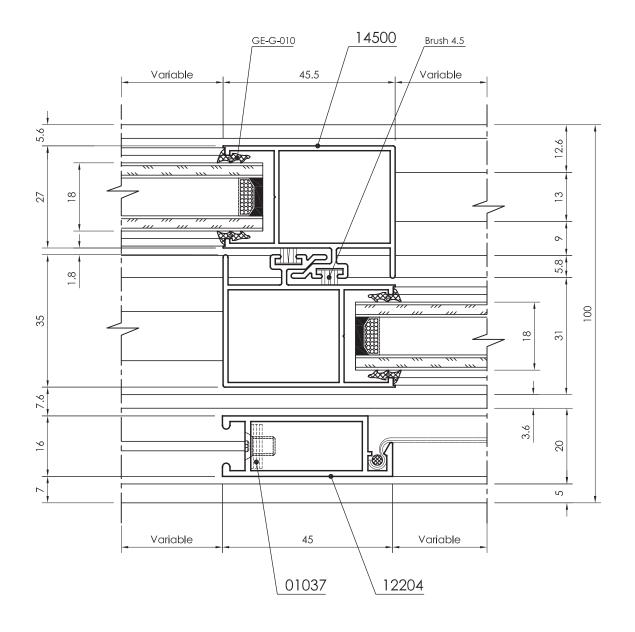


All dimensions in mm _____Visible area



Detail - B

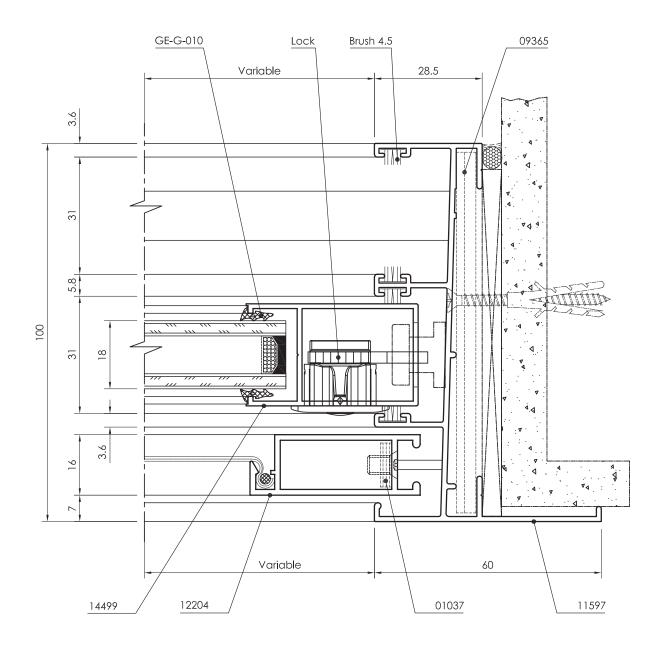
Insulated Glass unit with Thickness 18mm





Detail - C

Insulated Glass unit with Thickness 18mm

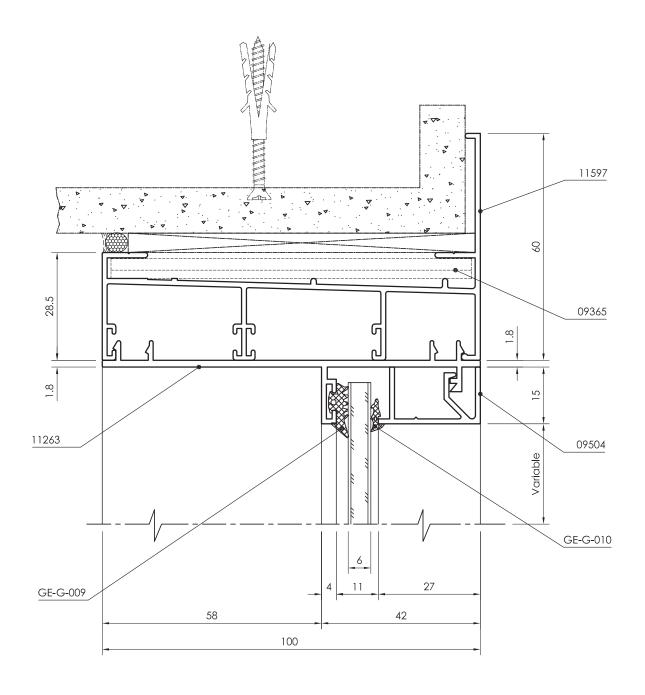


All dimensions in mm ____Visible area



Detail - D

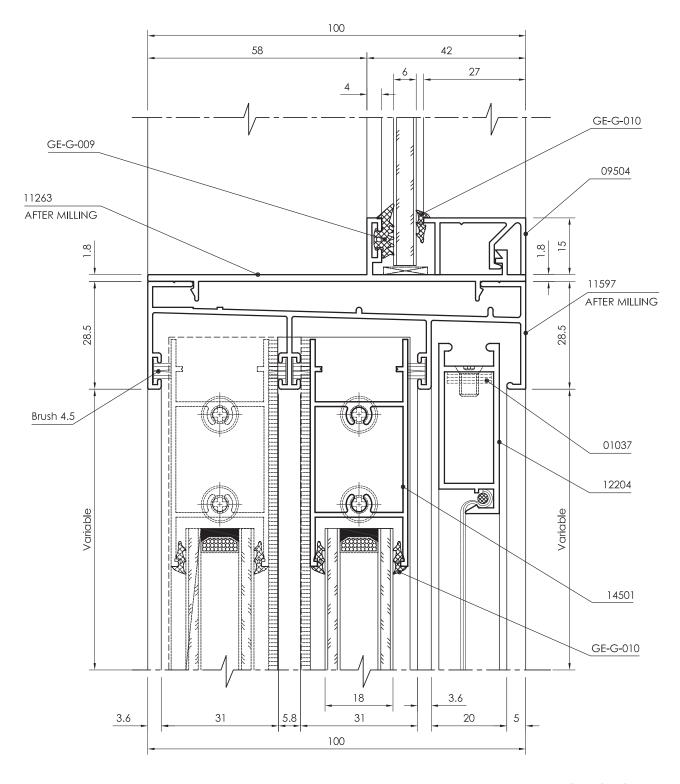
Single Glass unit with Thickness 6 to 8mm





Detail - E

Insulated Glass unit with Thickness 18mm & Fixed 6 to 8mm

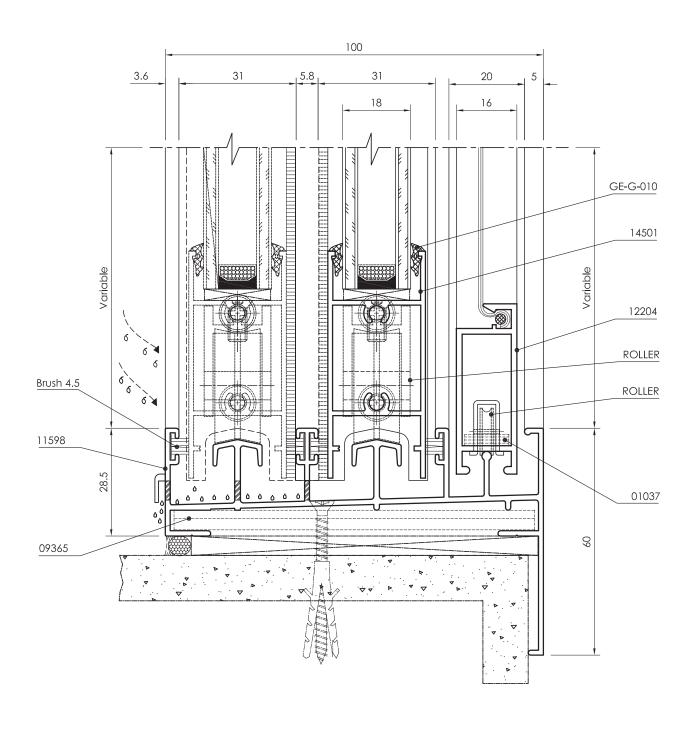


All dimensions in mm _ _ _ _ Visible area



Detail - F

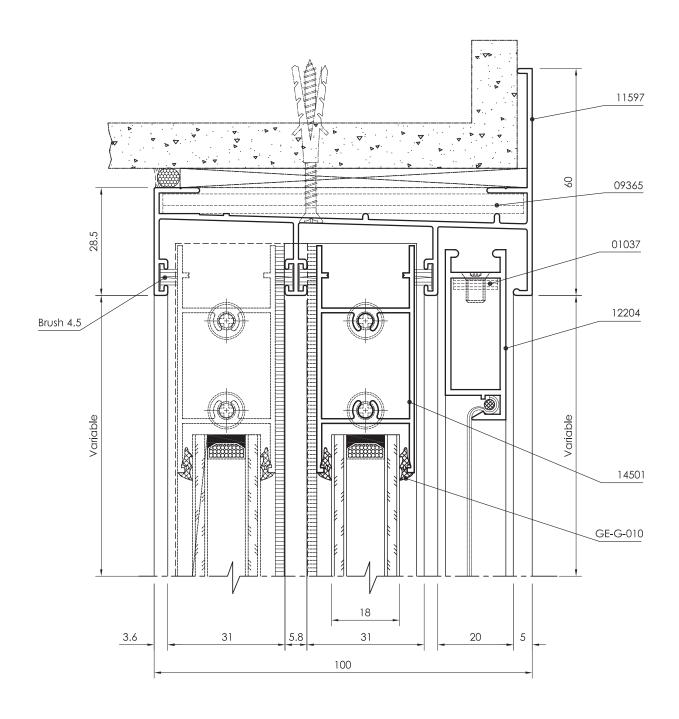
Insulated Glass unit with Thickness 18mm





Detail - K

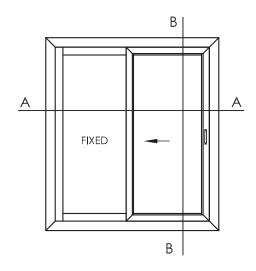
Insulated Glass unit with Thickness 18mm



All dimensions in mm

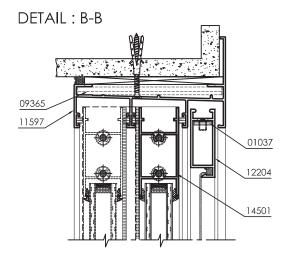


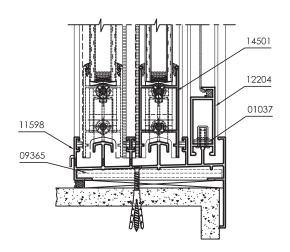
Insulated Glass unit with Thickness 18mm

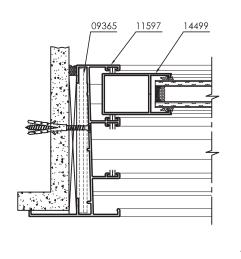


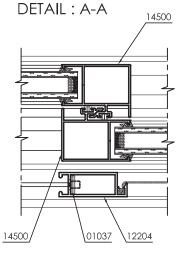
2 - SASH WINDOW

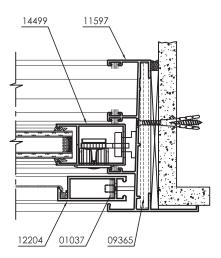
PROFILES (Double Glazed)				
Description	Shape	Section No.		
Bottom Frame	[דוֹדוֹנַ]	11598		
Top /Side Frame	<u> </u>	11597		
Top / Bottom Sash	Ħ	14501		
Side Sash	□	14499		
Interlock	Ť	14500		
Fly screen	4	12204		
Corner Cleat - 35 x 3		01037		
Corner Cleat		09365		





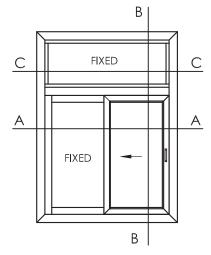






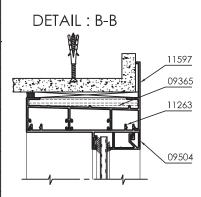


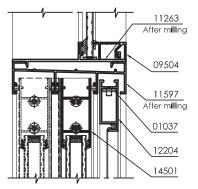
Insulated Glass unit with Thickness 18mm & Fixed 6 to 8mm

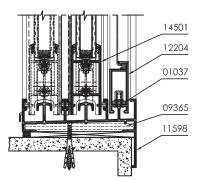


2 - SASH WINDOW WITH FIXED

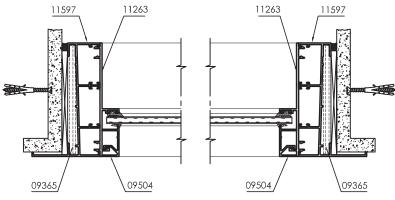
PROFILES (Double Glazed)			
Description	Shape	Section No	
Bottom Frame	[7:71]	11598	
Top /Side Frame	[-1-1-]	11597	
Top / Bottom Sash	II	14501	
Side Sash	□	14499	
Interlock	Ĭ	14500	
Fly screen	皿	12204	
Fix Adaptor	, 	11263	
Glazing Bead (for Single glass)	га	09504	
Corner Cleat - 35 x 3		01037	
Corner Cleat		09365	

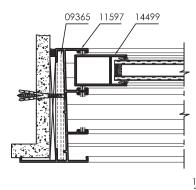


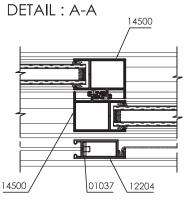


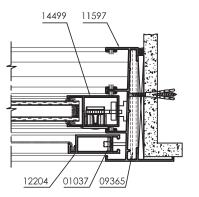








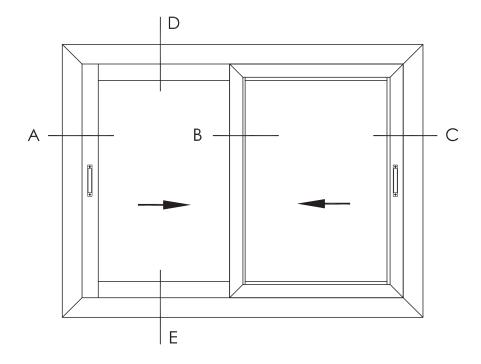




All dimensions in mm _ _ _ _ Visible area



Inside Flyscreen With Architrave

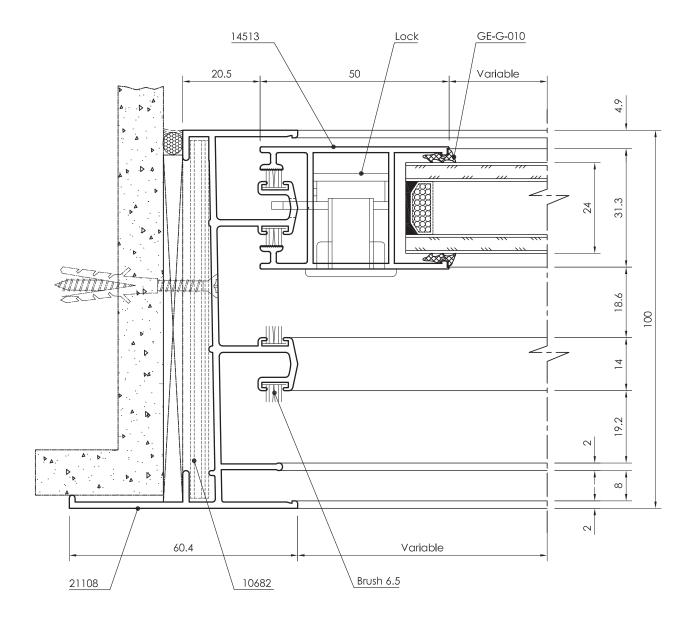


All dimensions in cross sections are shown in mm Profile are not necessarily shown to scale



Detail - A

Insulated Glass unit with Thickness 24mm

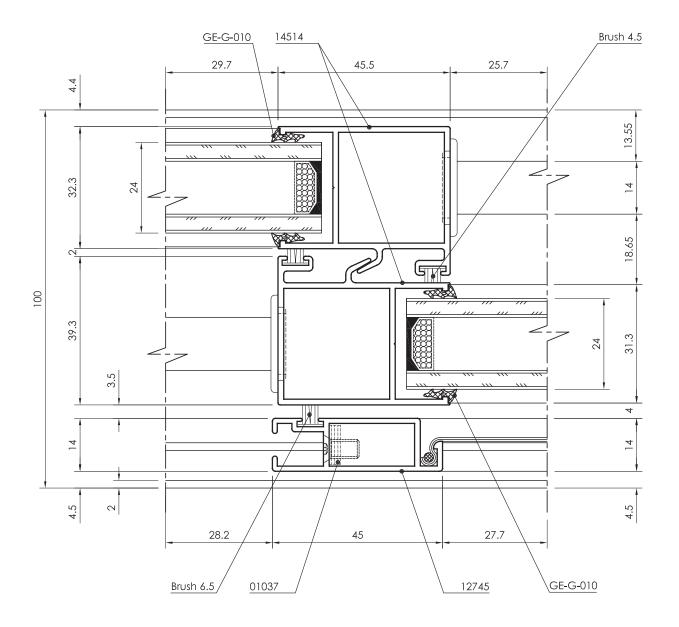


All dimensions in mm _____Visible area



Detail - B

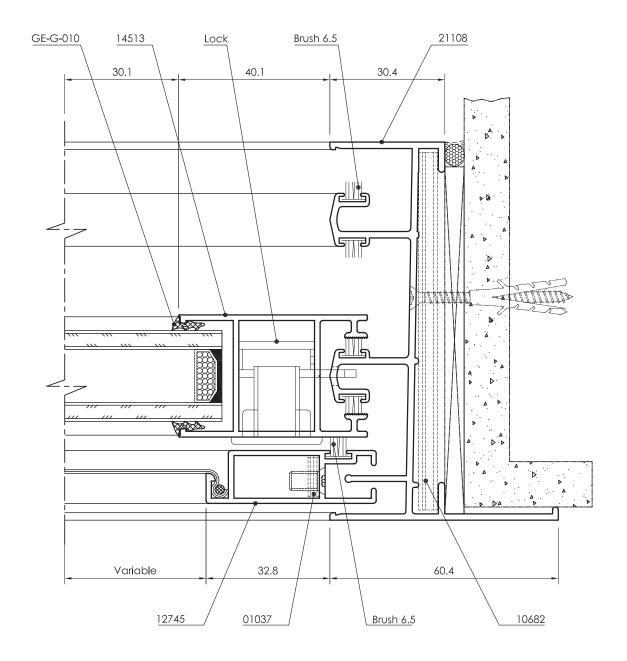
Insulated Glass unit with Thickness 24mm





Detail - C

Insulated Glass unit with Thickness 24mm

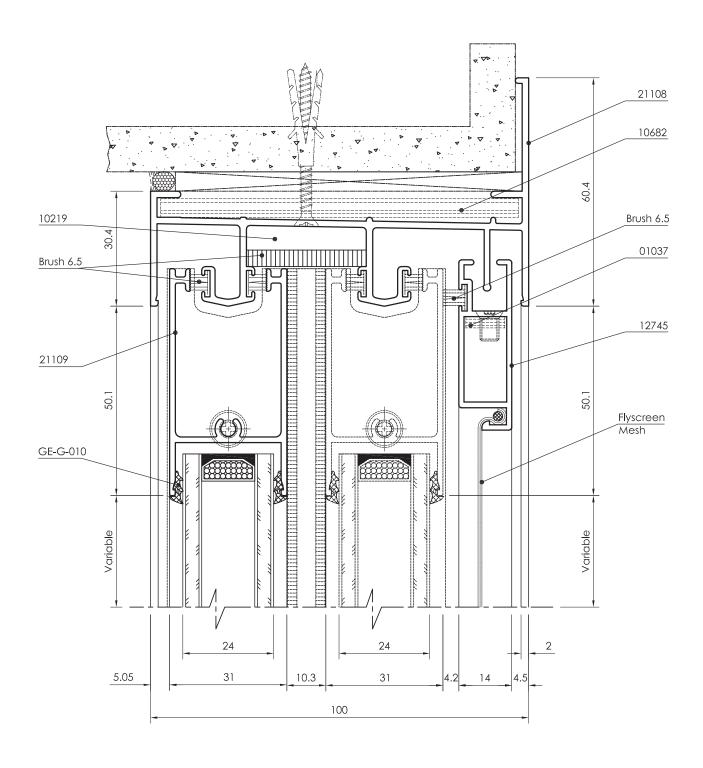


All dimensions in mm _____Visible area



Detail - D

Insulated Glass unit with Thickness 24mm

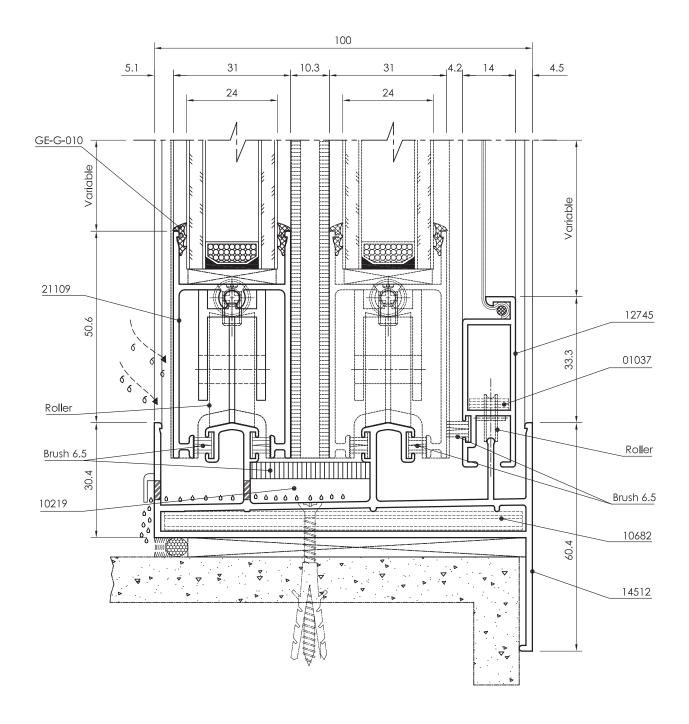




Sliding Window / Door Series 100

Detail - E

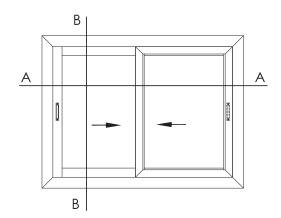
Insulated Glass unit with Thickness 24mm



All dimensions in mm

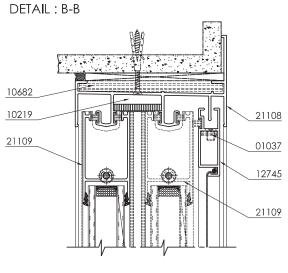


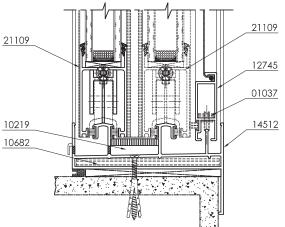
Insulated Glass unit with Thickness 24mm

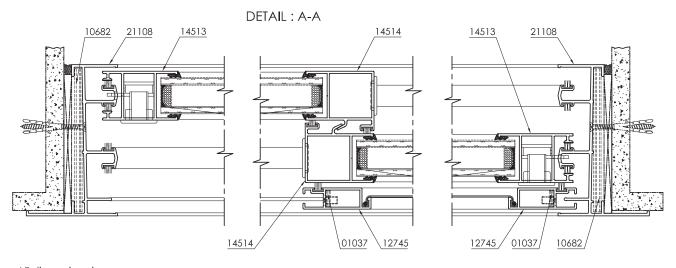


2 - SASH WINDOW

PROFILES (Double Glazed)					
Description	Shape	Section No.			
Bottom Frame	<u> </u>	14512			
Top /Side Frame	Tu ti	21108			
Top / Bottom Sash	<u> </u>	21109			
Side Sash	□:	14513			
Interlock	Ĭ	14514			
Fly screen	Ħ	12745			
Dust Proof Profile	Ladambad	10219			
Corner Cleat - 35 x 3		01037			
Corner Cleat		10682			



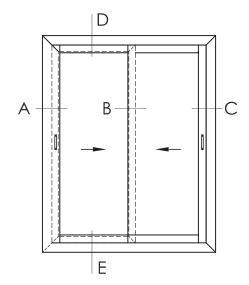


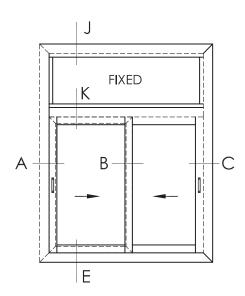




Sliding Window / Door Series 100

Outside Flyscreen With Architrave



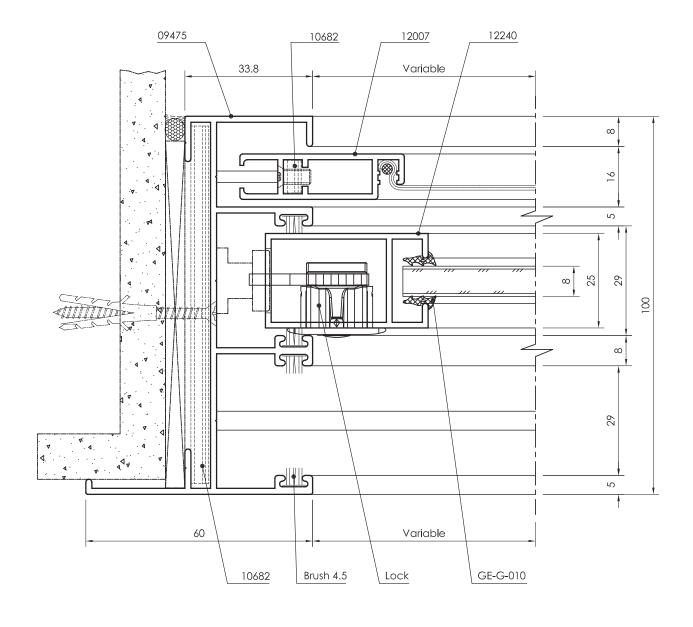


All dimensions in cross sections are shown in mm Profile are not necessarily shown to scale



Detail - A

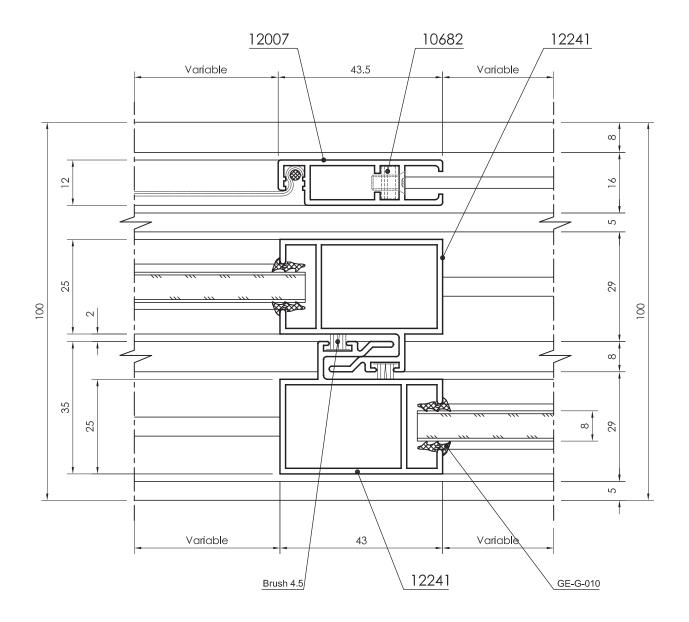
Single Glass unit with Thickness 6 - 8mm





Detail - B

Single Glass unit with Thickness 6 - 8mm

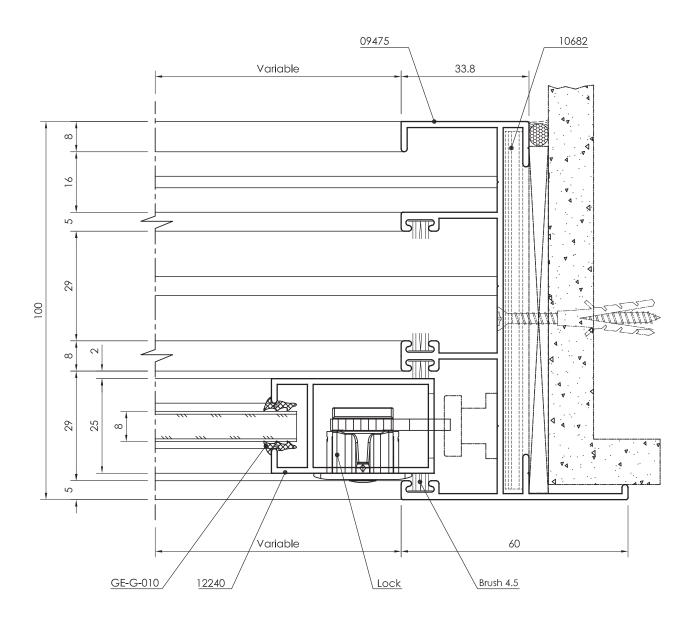


All dimensions in mm
____Visible area



Detail - C

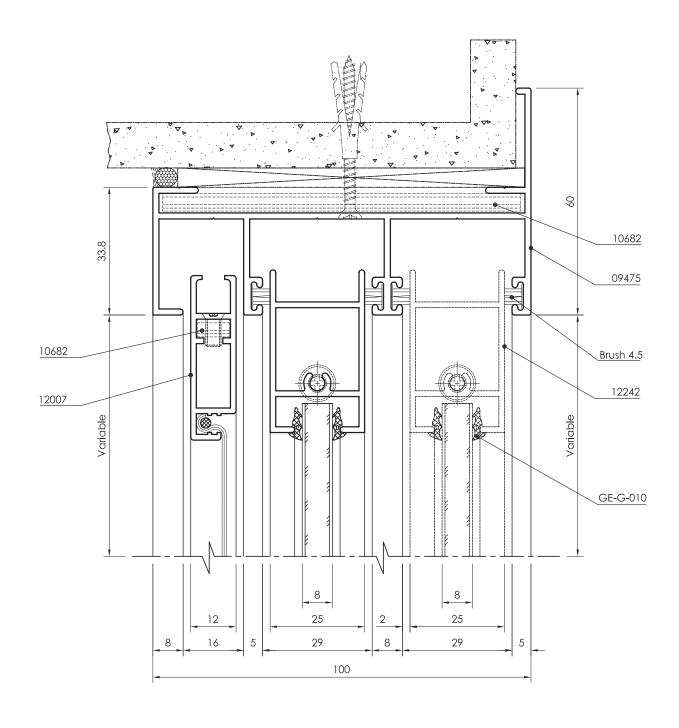
Single Glass unit with Thickness 6 - 8mm





Detail - D

Single Glass unit with Thickness 6 - 8mm

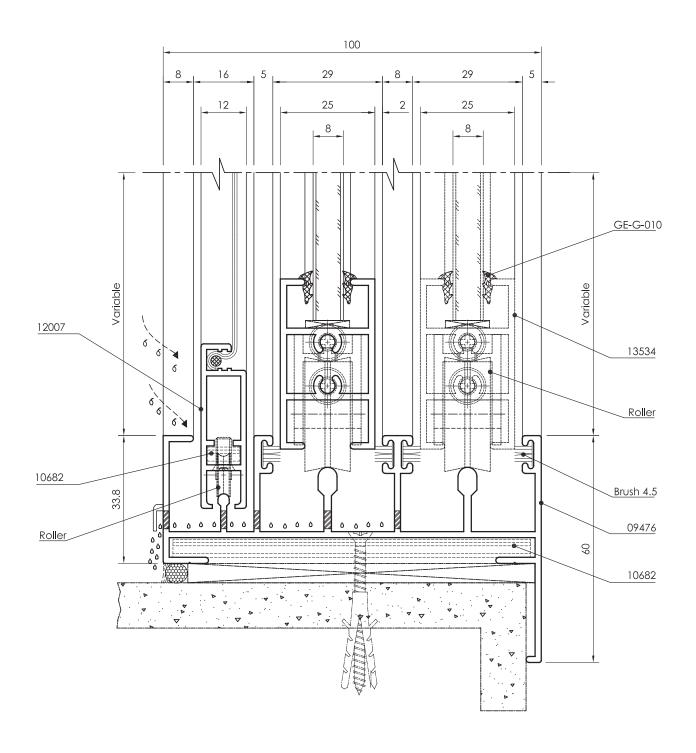


All dimensions in mm



Detail - E

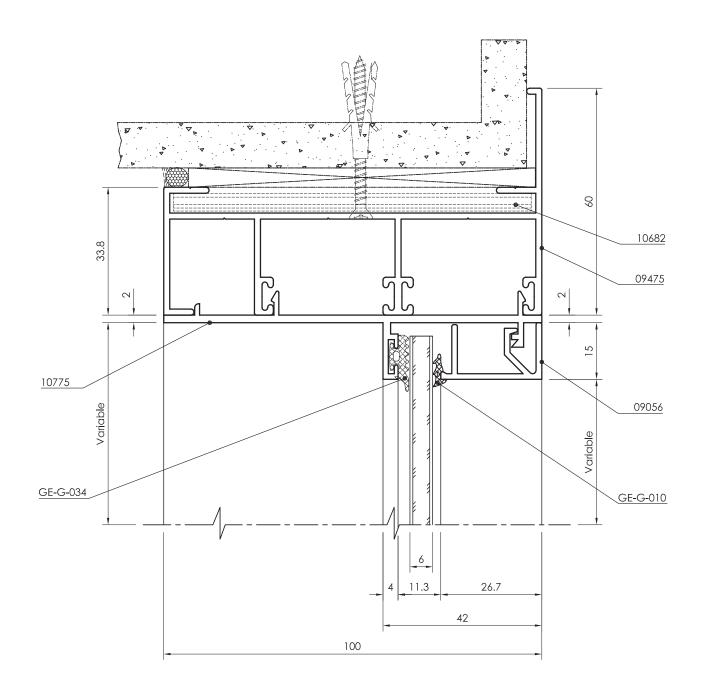
Single Glass unit with Thickness 6 - 8mm





Detail - J

Single Glass unit with Thickness 6 - 8mm



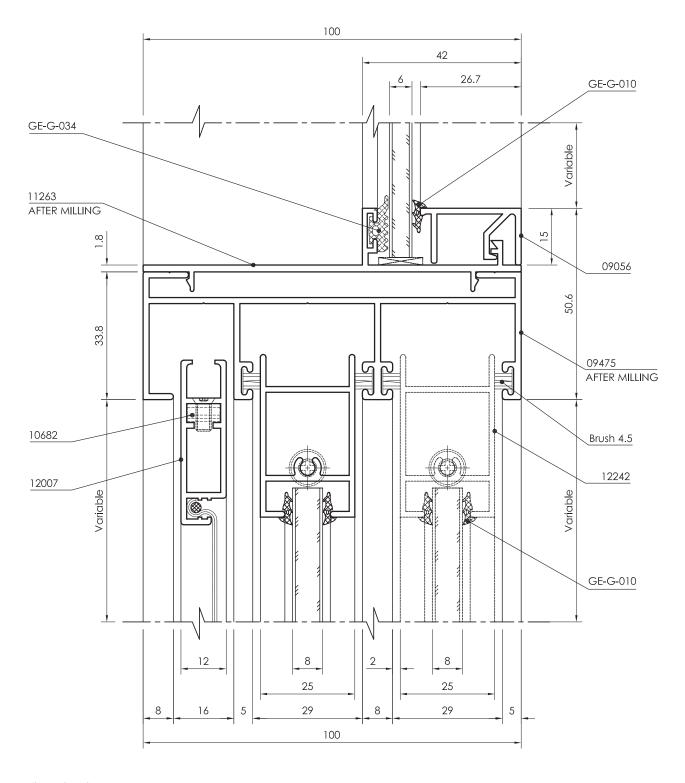
All dimensions in mm _____Visible area



Sliding Window / Door Series 100

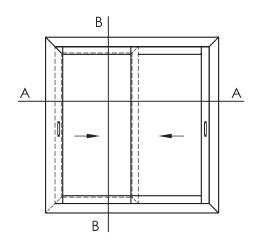
Detail - K

Single Glass unit with Thickness 6 - 8mm



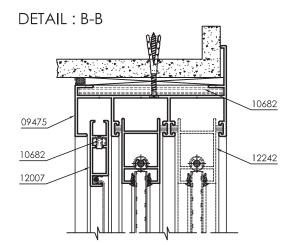


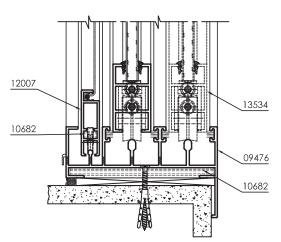
Single Glass unit with Thickness 6 - 8mm

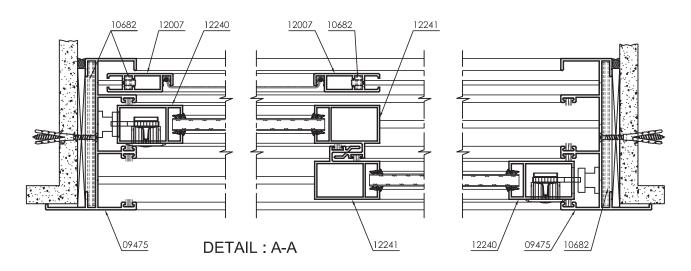


2 - SASH WINDOW

PROFILES (Single Glazed)					
Description	Shape	Section No.			
Bottom Frame	[بانایا	09476			
Top /Side Frame	لننا	09475			
Top Sash	正	12242			
Bottom Sash	Æ	13534			
Side Sash		12240			
Interlock		12241			
Fly screen	==	12007			
Corner Cleat		10682			



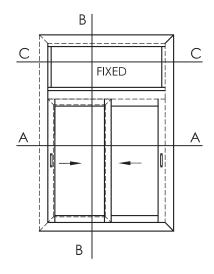




All dimensions in mm _____Visible area

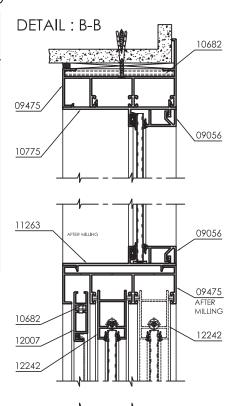


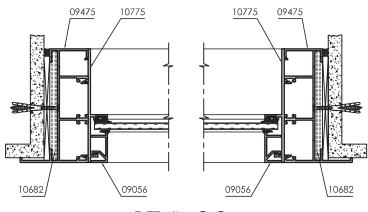
Single Glass unit with Thickness 6 - 8mm

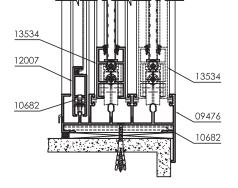


2 - SASH WINDOW WITH FIXED

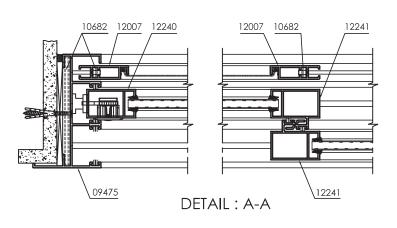
PROFILES (Single Glazed)					
Description	Shape	Section No			
Bottom Frame		09476			
Top /Side Frame		09475			
Top Sash	正	12242			
Bottom Sash	Œ	13534			
Side Sash	□	12240			
Interlock	Ĕ	12241			
Fly screen		12007			
Corner Cleat		10682			
Fix Adaptor	+	10775			
Fix Adaptor	. 1	11263			

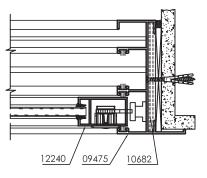






DETAIL: C-C





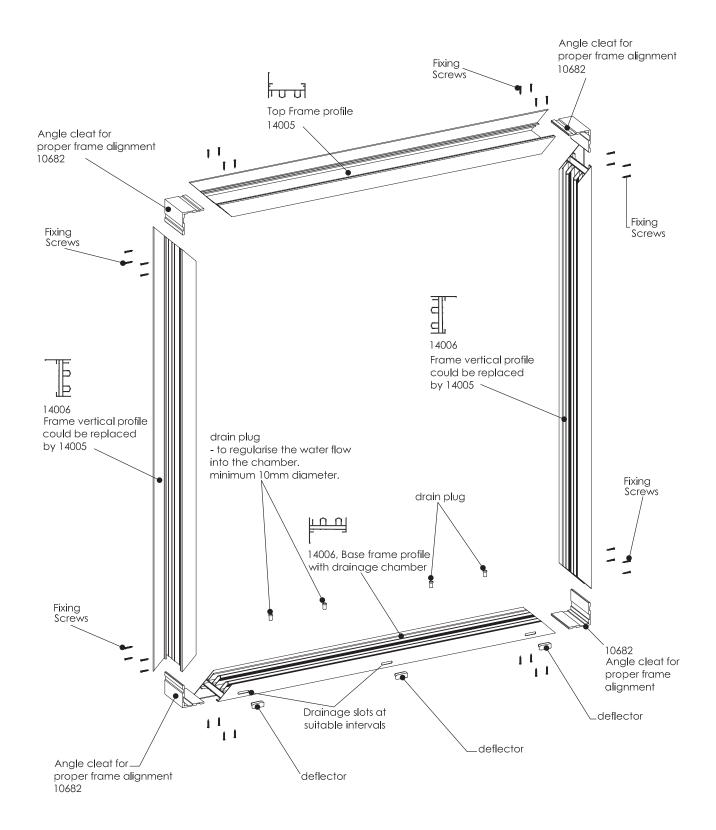
All dimensions in mm Visible area_ _ _ _



3D SECTIONS

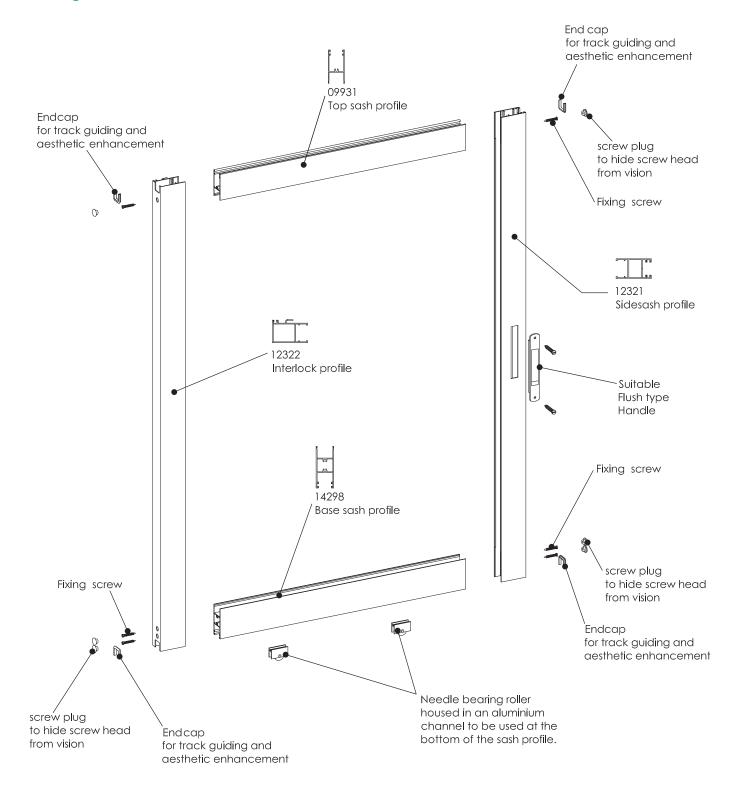


Sliding Frame



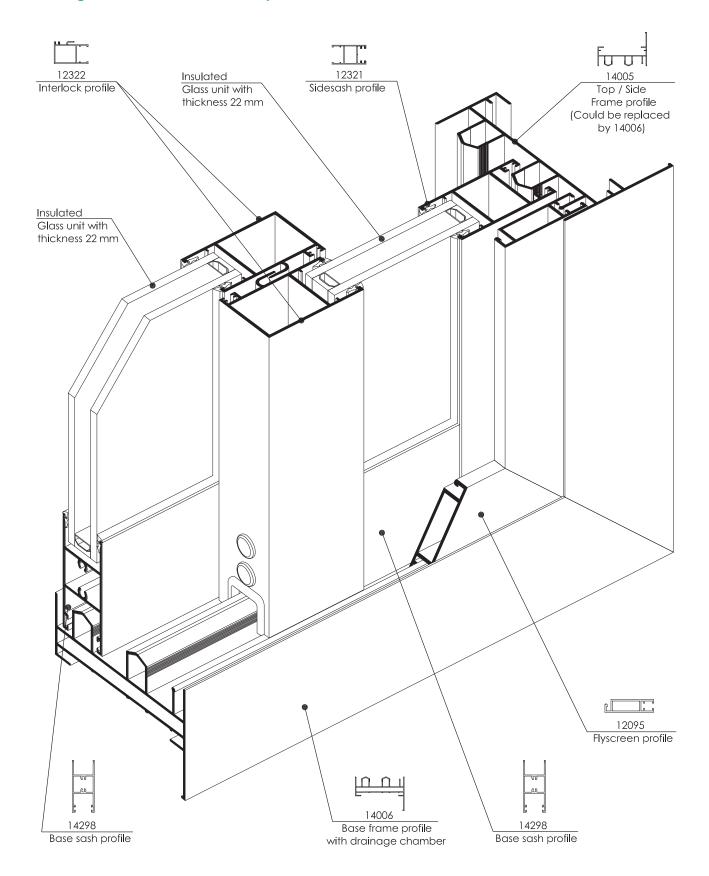


Sliding Slash

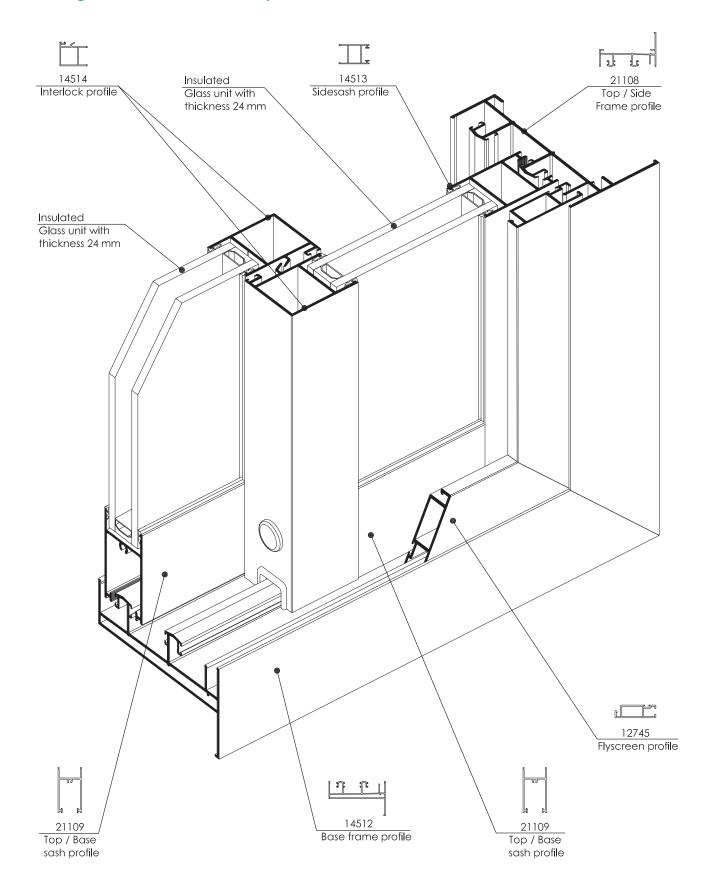




100-H









100-H

