MONTANA

THERMAL BREAK 120mm SLIDING SERIES

الخليج للسحب
Gulf Extrusions

06-2017-V.03

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.

MONTANA THERMAL BREAK 120mm SLIDING SERIES

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 20,000 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

OHSAS
- OHSAS 18001
- SASO
- ESMA

Health & Safety 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
- RoSPA's member

CHEMICAL COMPOSTIONS

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

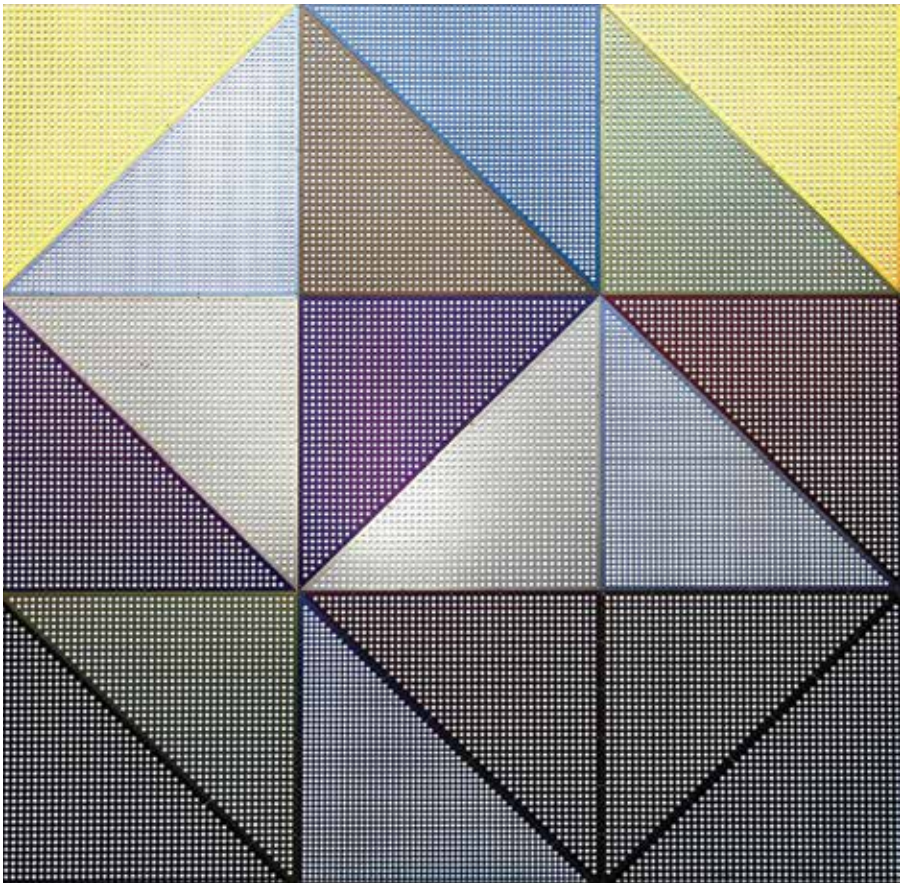
Element	Minimum	Maximum
Si	0.40	0.80
Fe	-	0.70
Cu	0.15	0.40
Mn	-	0.15
Mg	0.8	1.20
Cr	0.04	0.35
Zn	-	0.25
Ti	-	0.15
Other Each	-	0.05
Other Total	-	0.15
Aluminium	Remainder	

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. 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 01.07.2010).

Date of issue of the licence:	**10.03.2000**
Period of validity of the licence:	**until 31.12.2017**

Zurich, 15 November 2016

QUALANOD

José Arenas
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-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.

Date of issue of the licence:	**15.03.2000**
Period of validity of the licence:	**until 31.12.2017**

Zurich, 15 November 2016

QUALICOAT

M. C. Panam

Mohammed C. Panam
President

CERTIFICATION BODY

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

INTRODUCTION TO THE SYSTEM

The New Montana Thermal Break 120mm Sliding System is designed for heavy duty use (H-HC40) according to the American National Standard. The results have been impressive and apply to energy conservation, sound reduction and water & dust proofing.

The Montana Thermal Break with16mm fiberglass reinforced polyamide insulation has the sought after properties of high thermal resistance, rigidity, hardness and strength.

The importance of thermal conductivity in the aluminum frame becomes apparent when one considers that the frame accounts for an average of 25% of the total window surface.

- Normal Aluminium Profiles K=5.7W/M²k
- With 16mm Thermal Strip K=3.3W/M²k

The System consists of a single frame and sash profile that will be used on all four sides, with snap on track-clips.

The 16mm polyamide strips are introduced into the frame and sash profiles and then externally crimped using special tooling. The compressive test of the crimped profile is tested to ensure maximum strength.

The system covers two, three and four sashes including profiles for top and bottom fixed lights. Special lids have been designed to cover the frame tracks at the area where the sliding shutter is fixed.

In order to meet the needs of today's architects, window and door systems must be provided in a variety of colors. This system has the special advantage of permitting subsequent application of all presently known surfaces suitable for use with aluminium either after or before the thermal break strips have been assembled.

For better performance of the system, alignment cleats for the frame and shutter are used. Durable weather sealing mastic is a must at all joints. Specially designed EPDM gaskets are made available with the system to enhance the performance and create easy assembly. Other accessories such as roller & flush handles come as part of the system.

SYSTEM PERFORMANCE

Montana system has been tested at Bodycote:

- Air infiltration
- Static air pressure water penetration
- Wind resistance – serviceability
- Wind resistance - safety

AIR INFILTRATION (ASTM E283-04)

Test Pass/Fail Criteria

At 75 pascals, the average air flow through the fixed glazing shall not exceed 5.0m³/hour/m² based on the gross surface area of the wall measured from the exterior.
Calculation of permissible air infiltration through the sample
Permissible airflow rate through sample =5.0m³/hour/m² at 75Pa
Area of whole sample =2.16m²
Permissible airflow rate through sample =10.8m³/hour at 75Pa

STATIC AIR PRESSURE WATER PENETRATION (ASTM E331-00)

Test Pass/Fail Criteria

There shall be no water leakage. Water leakage is defined as penetration of water beyond a plane parallel to the glazing (the vertical plane) intersecting the innermost project of the test specimen, not including interior trim and hardware.

WIND RESISTANCE - SERVICEABILITY (ASTM E331-02)

Test Pass/Fail Criteria

At both positive and negative applications of the peak test pressure, no permanent damage shall have occurred and the maximum deflection shall not exceed the following:
Framing members generally - 1/175 of the span along the unit edge.

WIND RESISTANCE - SAFETY (ASTM E330-02)

Test Pass/Fail criteria

At both positive and negative applications of peak pressure, there shall be no permanent damage to framing member, panels or anchors.

Permanent deformation to wall framing members shall not exceed 1/500 of the span measured between points of attachment one hour after loading has been removed.

THERMAL TRANSMITTANCE

Calculated values hotbox measurement U-value window / doors (EN ISO 12567)
Type of Insulation: Insulating Strips made of PA 66 GF 25
Project Area: 1.9m²

Sample
Projection area of sample: 1.9026 m²
Thermal transmittance (rounded) (Ust) = 3.3 W/(m²*k)
Extended uncertenity (according GUM) = 0.099 W/m²*k

Al Futtaim الفطيم

Bodycote MATERIALS TESTING SERVICES

Certificate of Testing Compliance

CLADDING TECHNOLOGY DIVISION

Ref. AFBT Report No: DLR0335 **Date: March 2007**

AFBT Certificate No: WQ070 1555 / COT0335

System Supplier:
Gulf Extrusions Company LLC,
P. O. Box 5598,
Dubai,
U.A.E

Installer:
Gulf Extrusions Company LLC,
P. O. Box 5598,
Dubai,
U.A.E

System: System Development
HORIZONTAL SLIDING WINDOW
(MONTANA THERMAL BREAK 120MM SLIDING SERIES)

Al Futtaim Bodycote 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
- Wind Resistance ASTM E330-02 (Serviceability)
- Wind Resistance ASTM E330-02 (Safety)

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

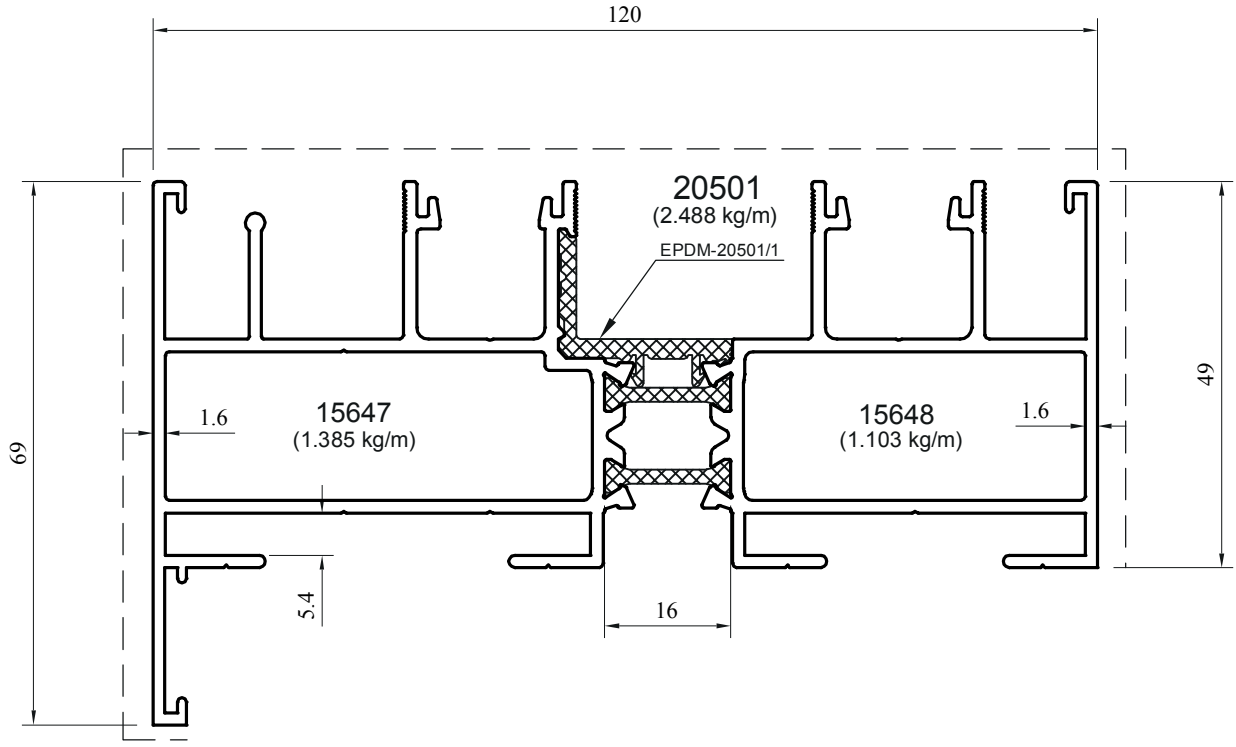
Tests marked ' * ' in this report are not included in our UKAS schedule of accreditation.

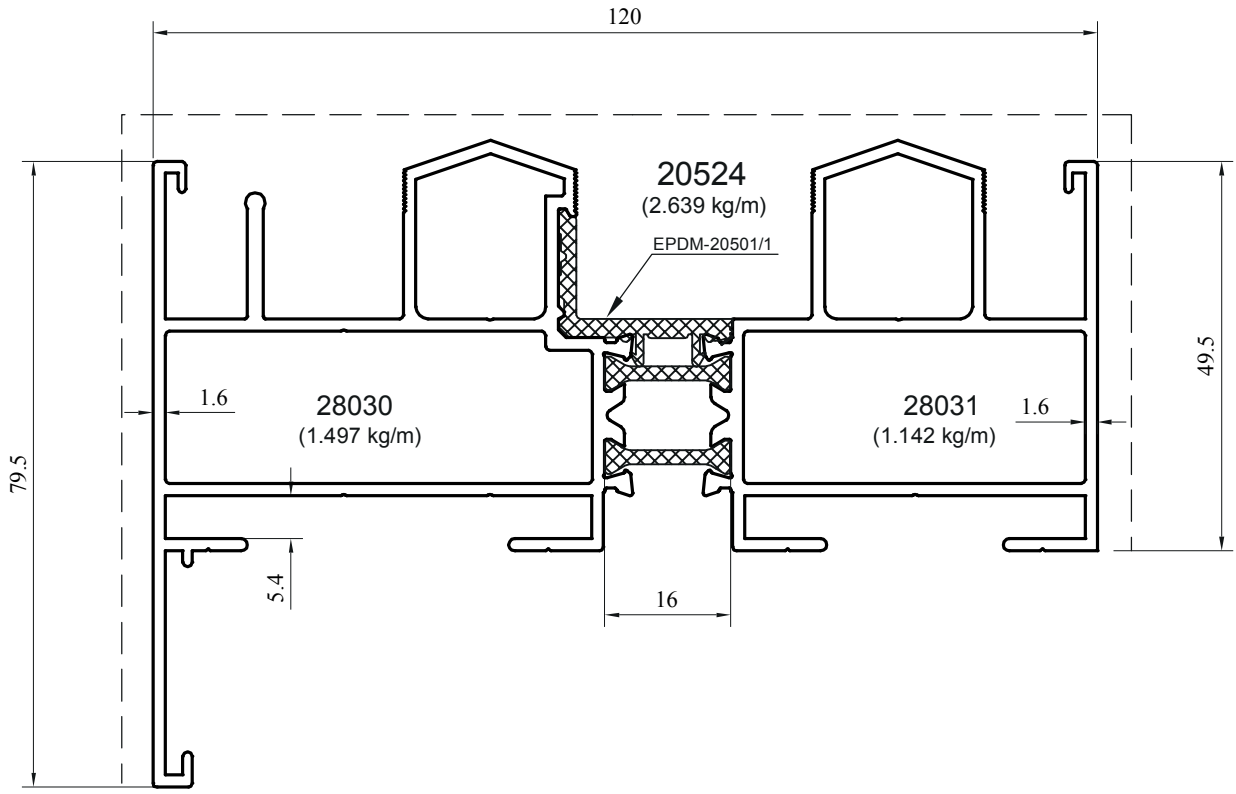
Signed: ..... Test Engineer

Signed: ..... Cladding Manager

PROFILES

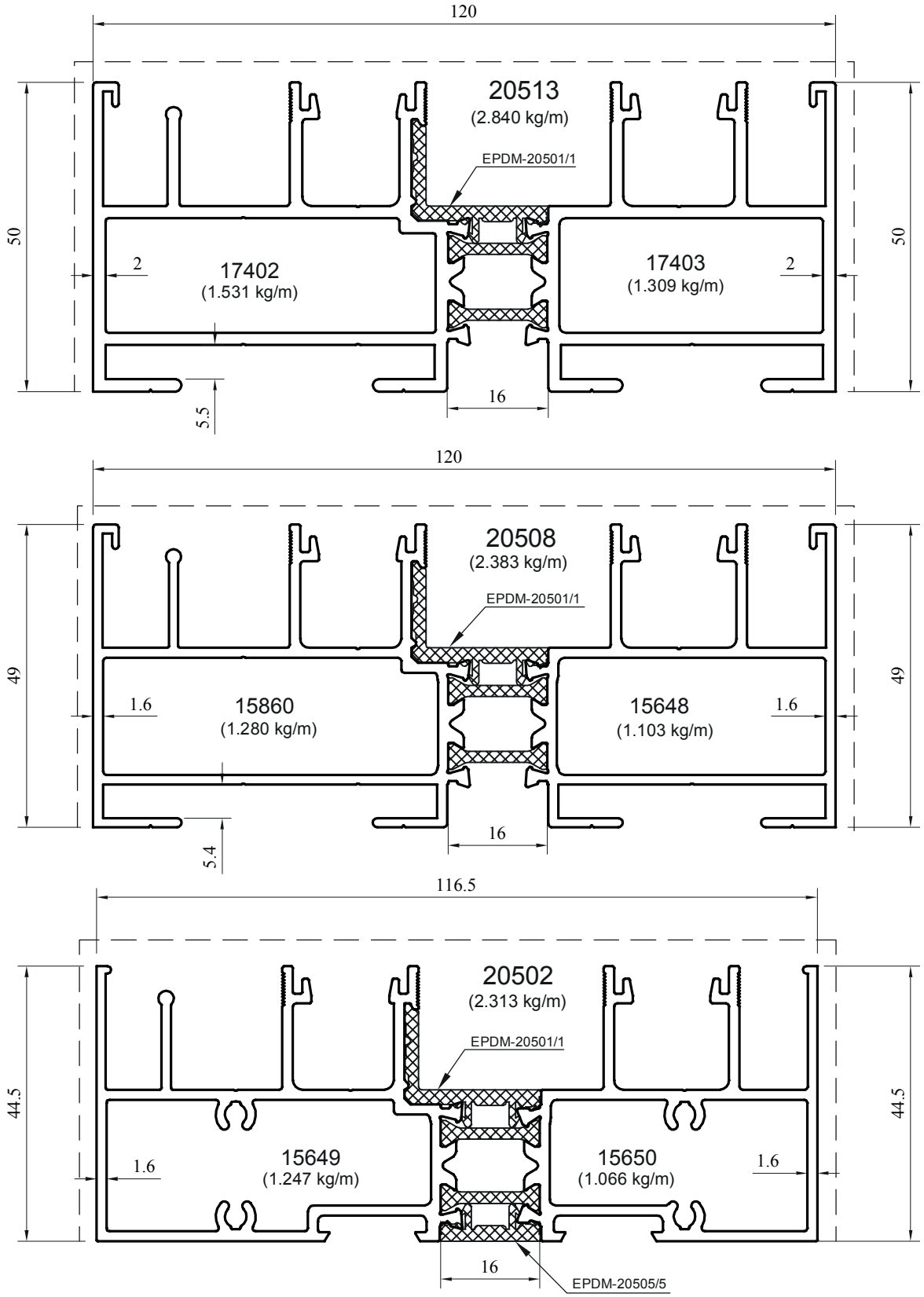
Frame Profiles
Flyscreen Inside





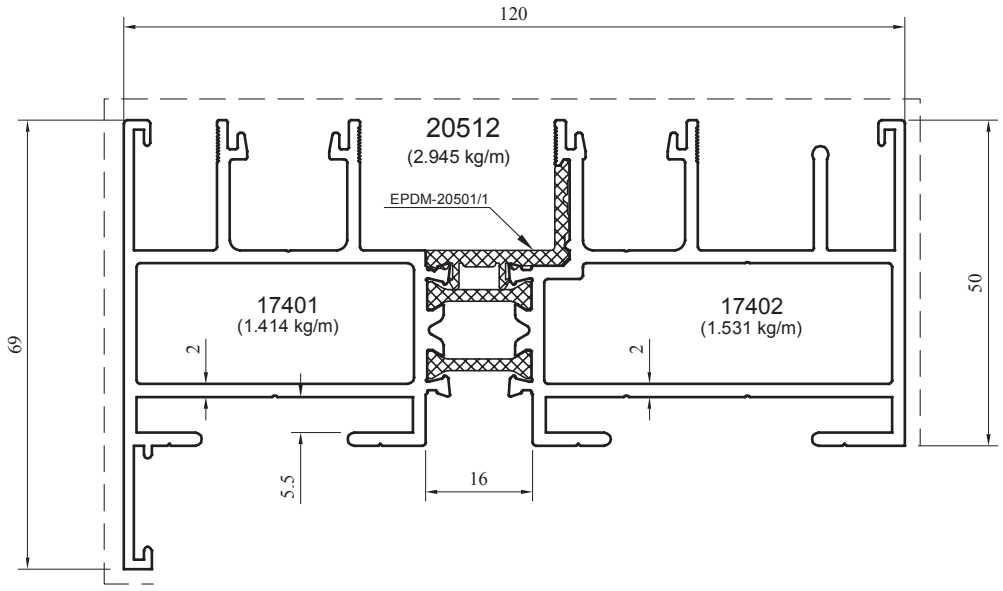
All dimensions in mm
Visible area_ _ _ _ _

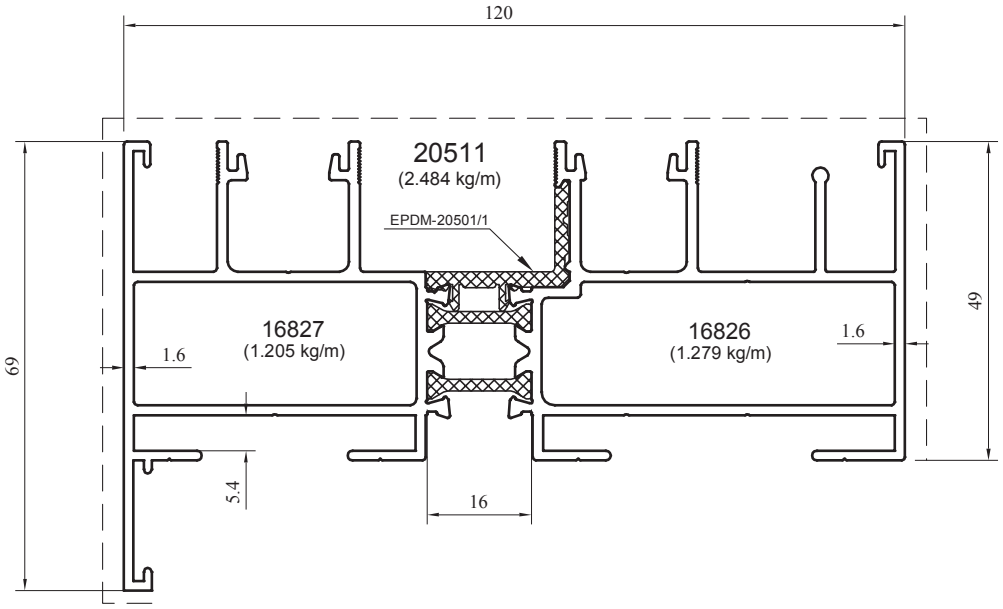
Frame Profiles



All dimensions in mm
_ _ _ _ _Visible area

Frame Profiles
Flyscreen Outside



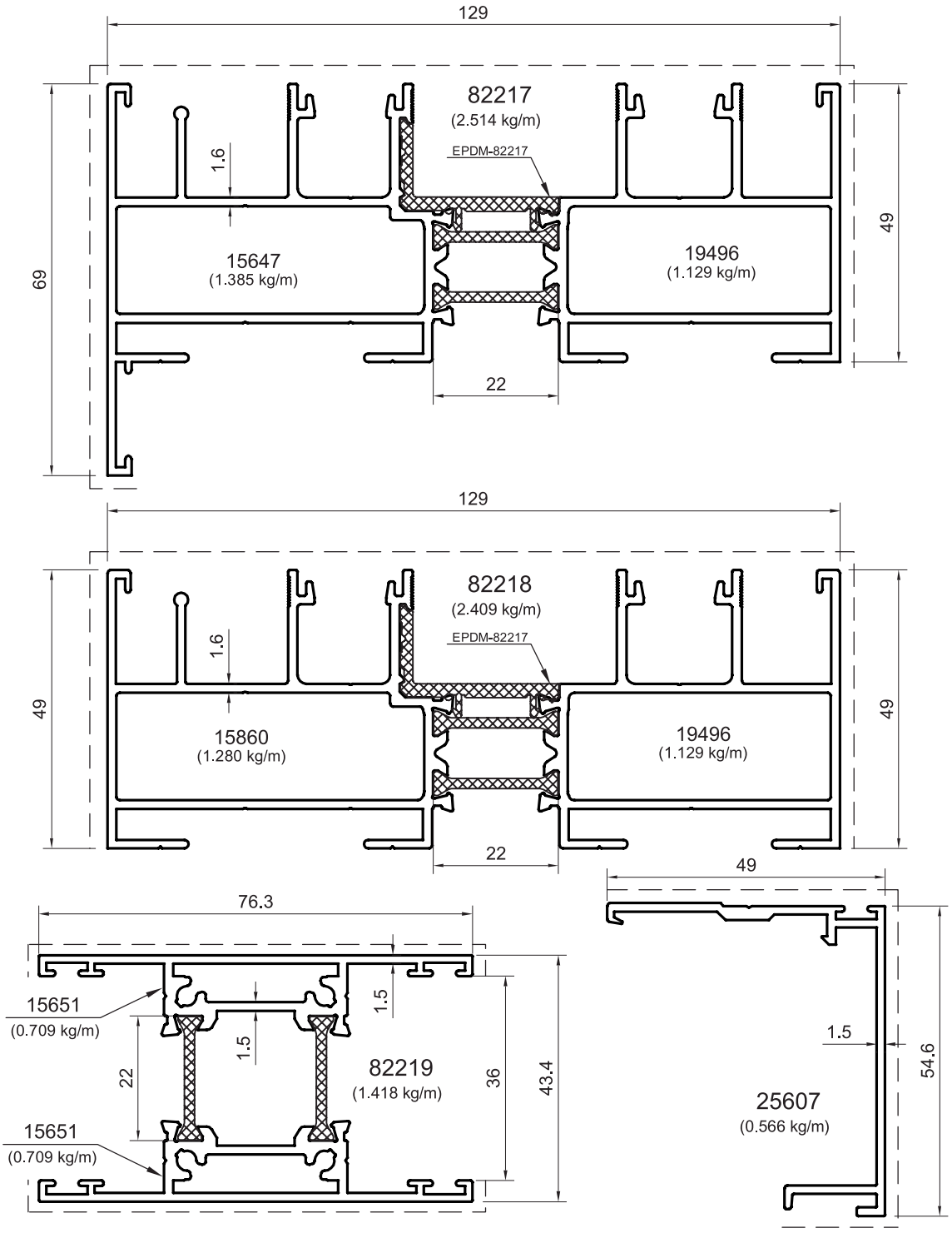


All dimensions in mm
-------- Visible area

All dimensions in mm
Visible area_ _ _ _ _

Frame Fixed Profiles

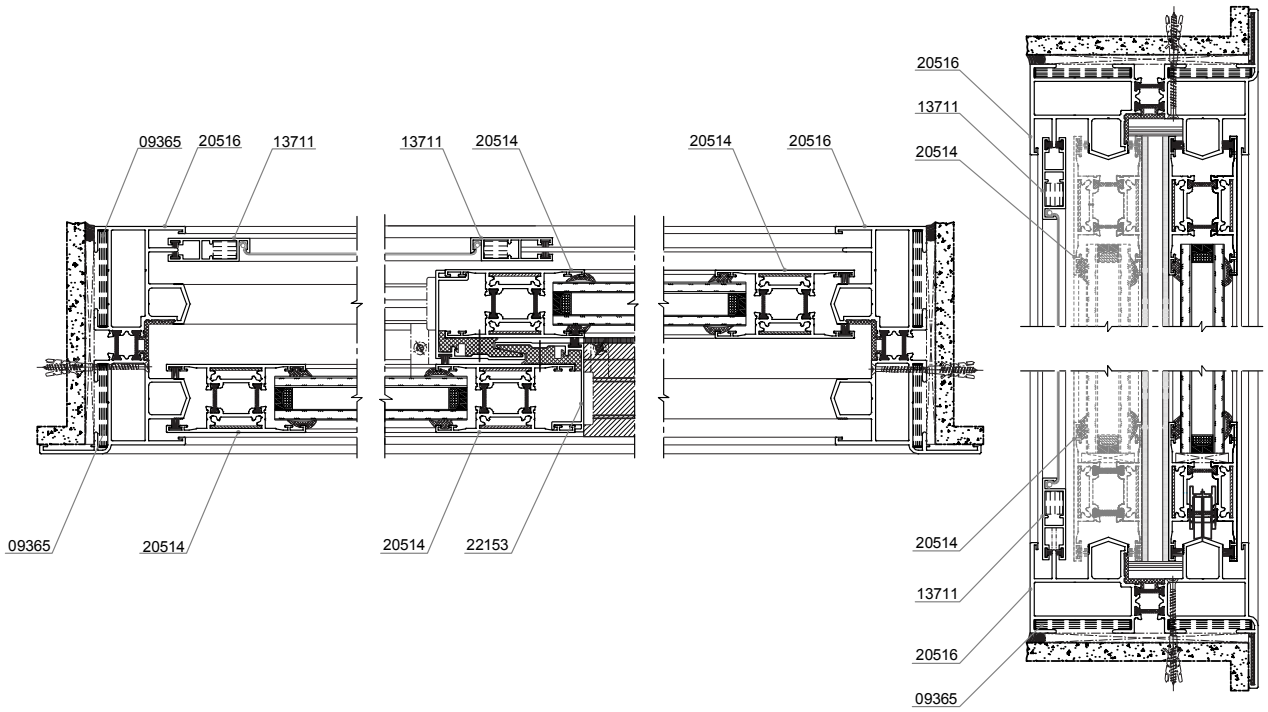
Frame and Sash Profiles 129mm

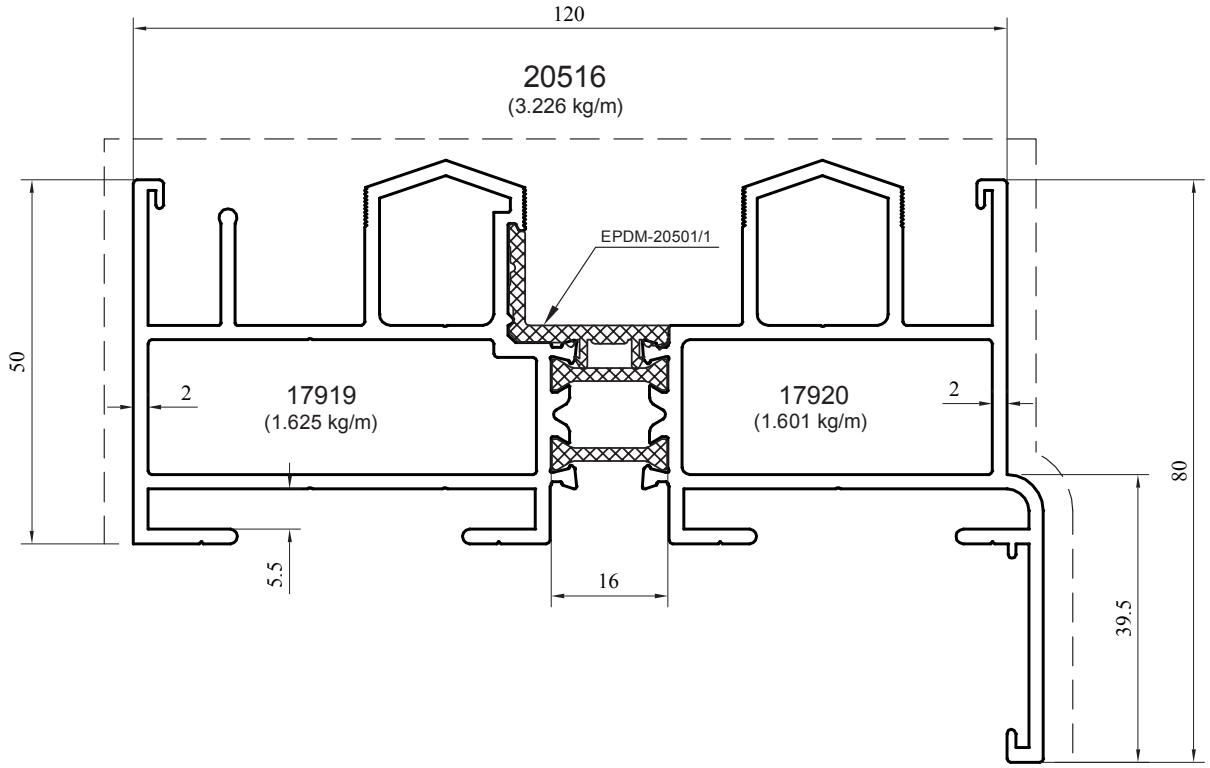


All dimensions in mm

_ _ _ _ _Visible area

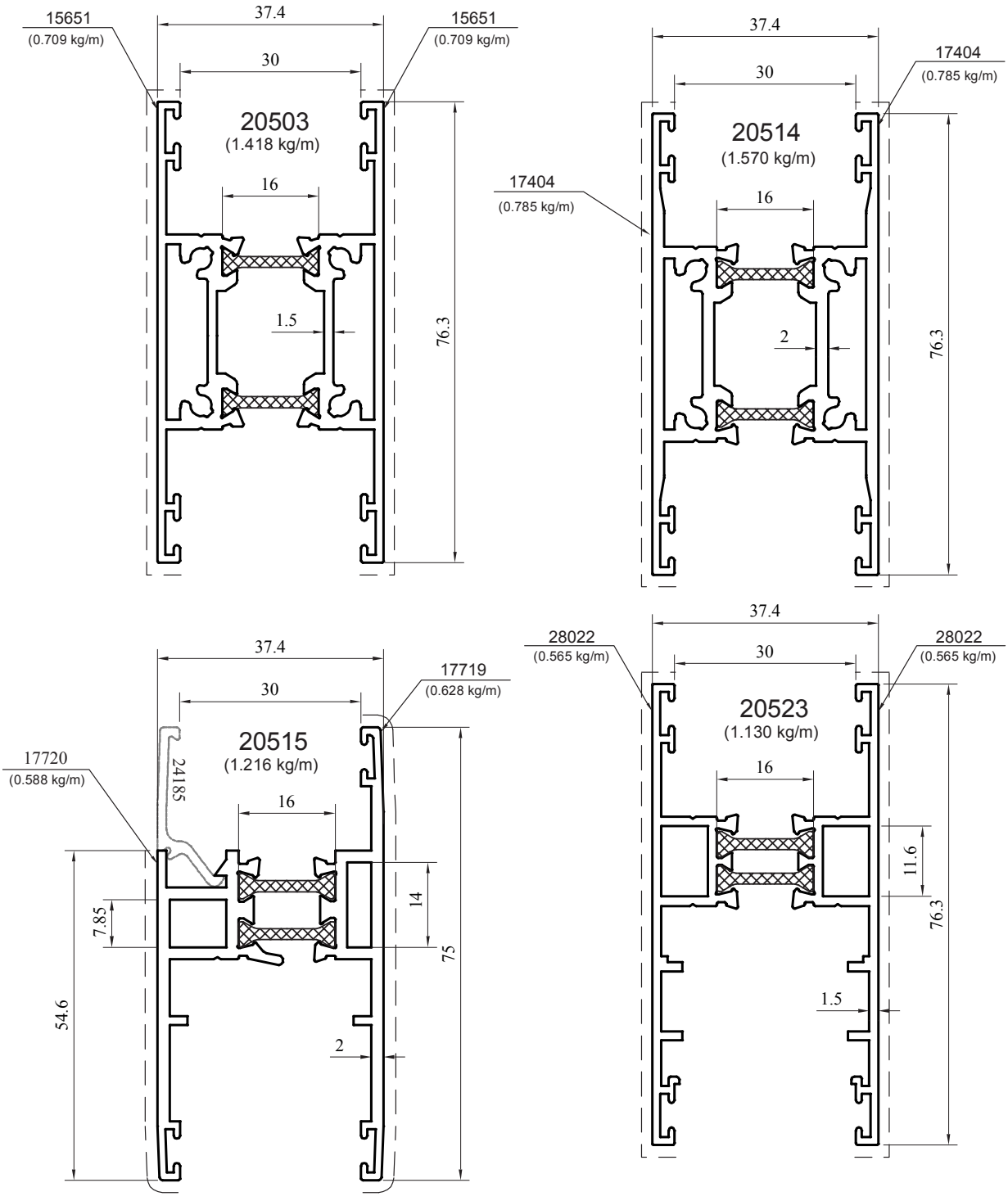
Frame Profiles
Flyscreen Outside





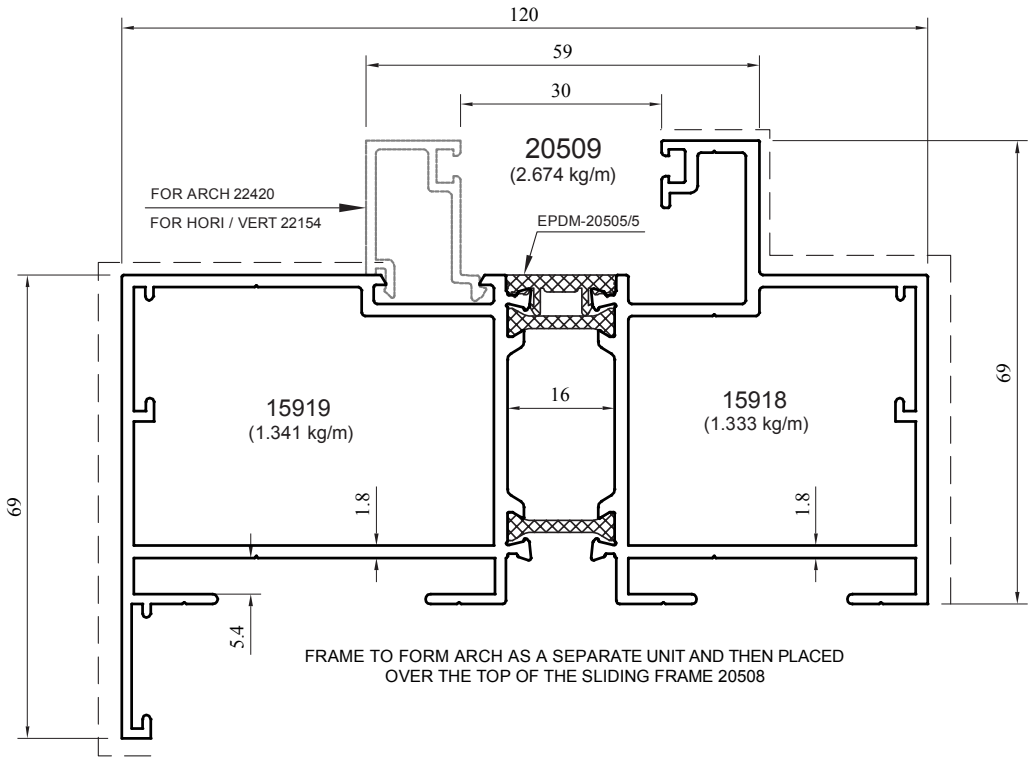
All dimensions in mm
Visible area_ _ _ _ _

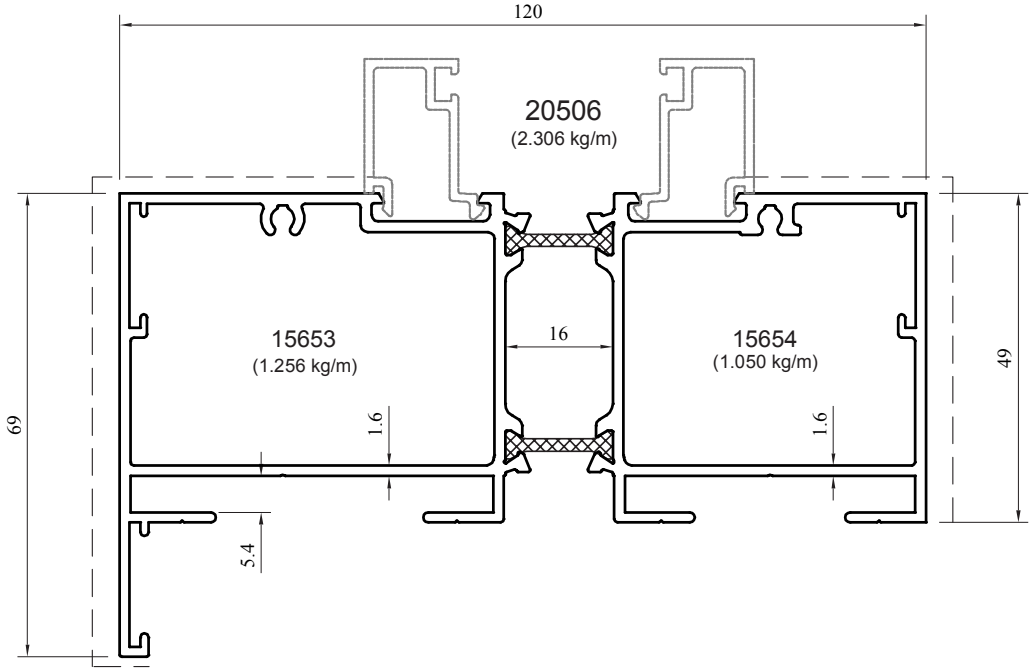
Sash Profiles



All dimensions in mm
_ _ _ _ _Visible area

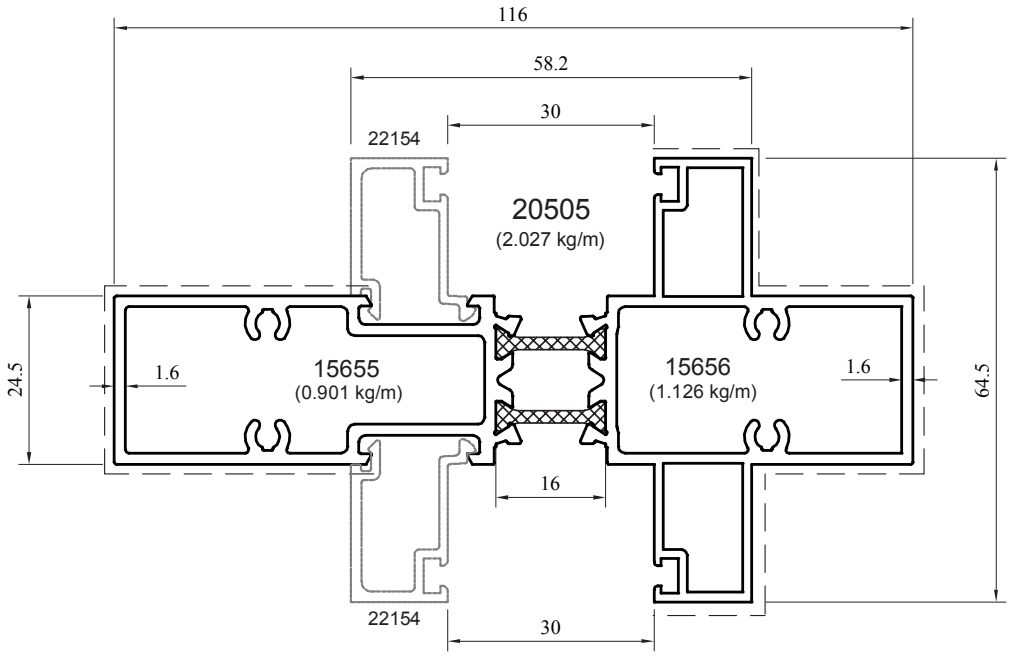
Transom Profiles

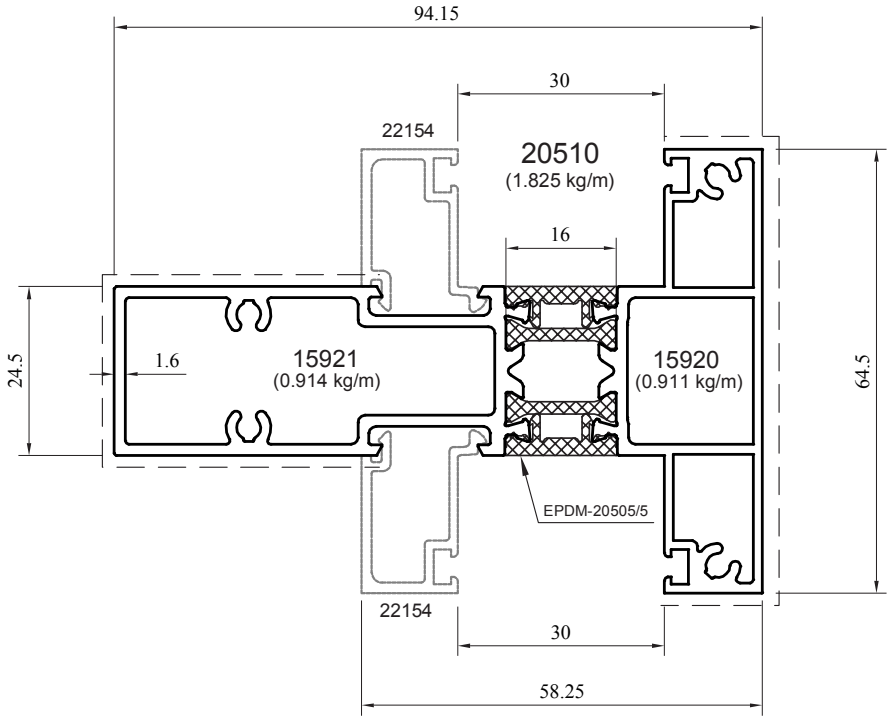




All dimensions in mm
Visible area_ _ _ _ _

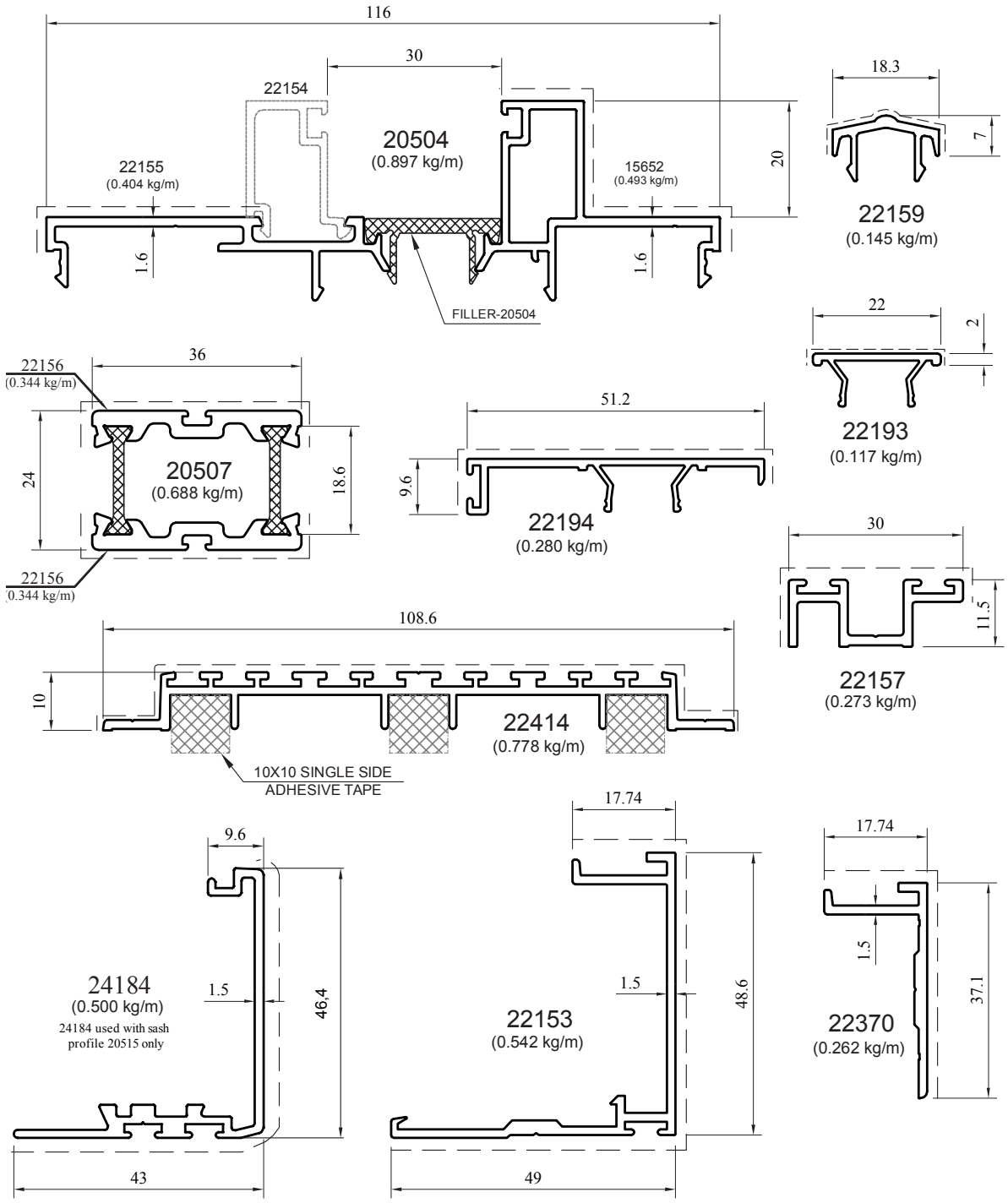
Interlock / Fix / Flyscreen Profiles





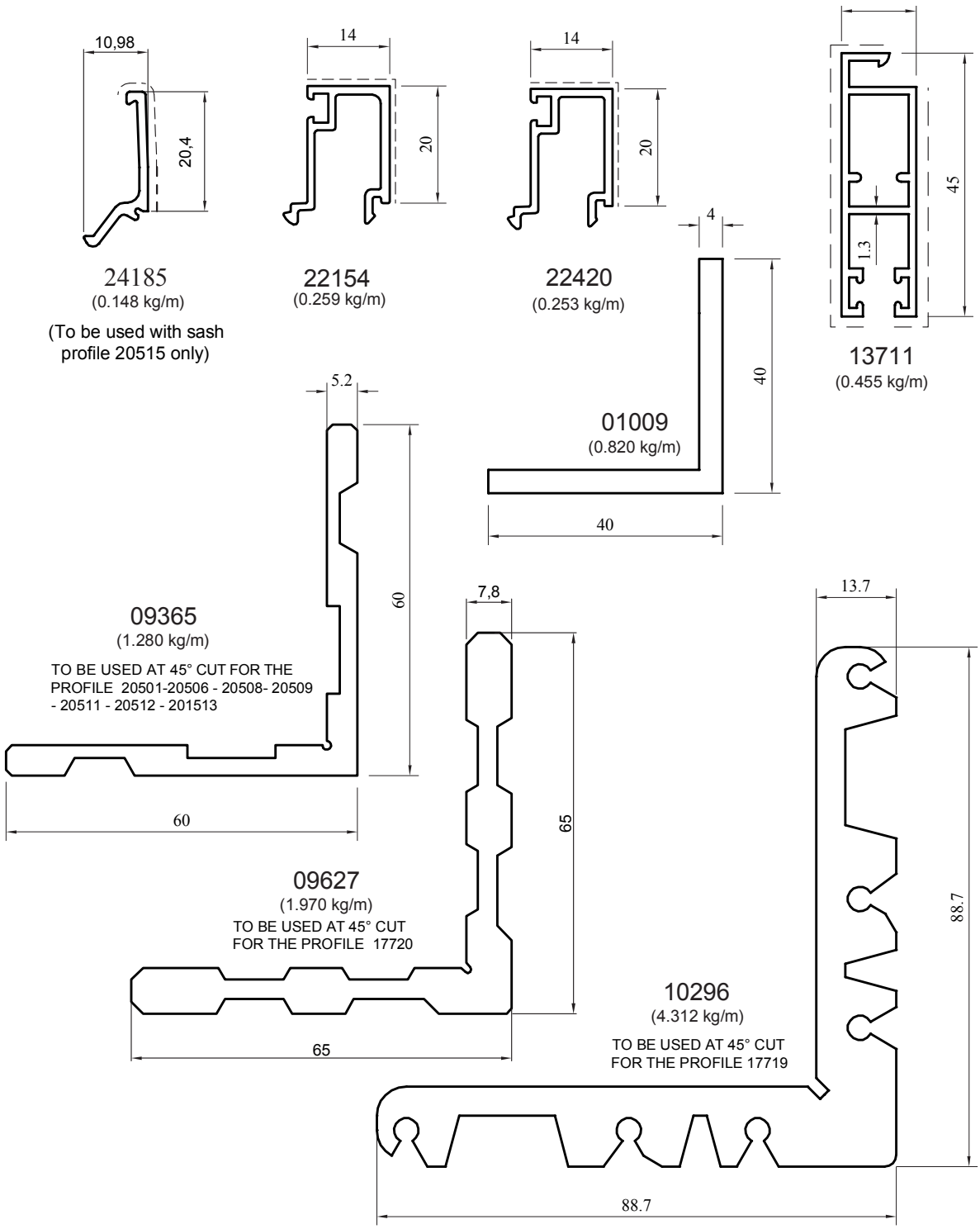
All dimensions in mm
_ _ _ _ _Visible area

Complementary Profiles



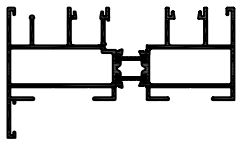
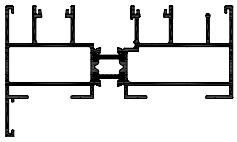
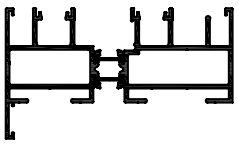
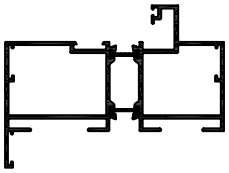
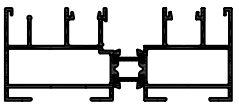
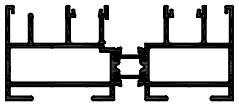
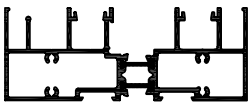
All dimensions in mm
Visible area_ _ _ _ _

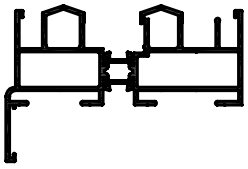
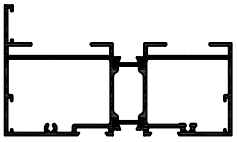
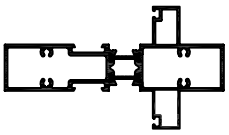
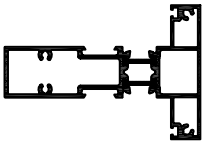
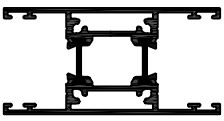
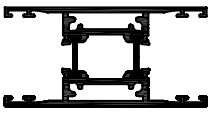
Complementary Profiles

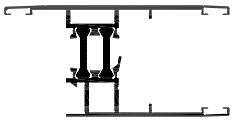
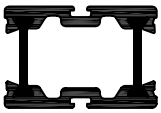
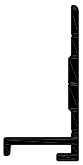
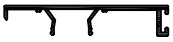


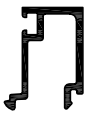
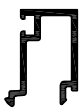
All dimensions in mm
_ _ _ _ _Visible area

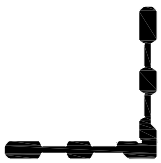
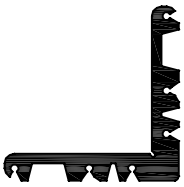
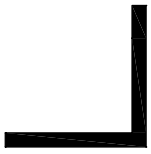
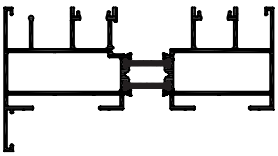
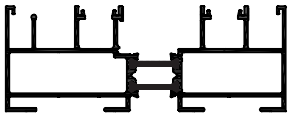
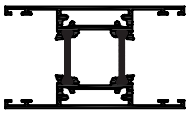
PROFILE LIST

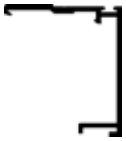
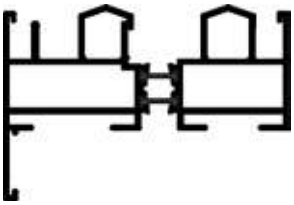
Profile Reference	Child Profile	Profile Section	Page	Weight KG/M	IX cm^4	IY cm^4	WX cm^3	WY cm^3
20501	15647+15648		14	2.488	22.00	144.60	4.58	13.25
20511	16826+16827		16	2.484	22.89	143.60	5.58	22.72
20512	17401+17402		16	2.945	26.68	170.03	6.663	27.11
20509	15919+15918		20	2.674	43.00	148.00	9.25	24.21
20508	15860+15648		15	2.383	18.60	131.0	8.30	21.57
20513	17402+17403		15	2.840	22.57	157.41	8.01	25.89
20502	15649+15650		15	2.313	15.20	111.40	5.92	19.35

Profile Reference	Child Profile	Profile Section	Page	Weight KG/M	IX cm^4	IY cm^4	WX cm^3	WY cm^3
20516	17919+17920		18	3.226	38.612	196.012	7.524	30.167
20506	15653+15654		20	2.306	31.13	131.91	12.34	22.54
20504	22155+15652		22	0.897	2.06	38.86	1.02	6.09
20505	15655+15656		21	2.027	14.78	83.83	4.58	13.25
20510	15921+15920		21	1.825	16.00	62.00	5.00	10.75
20503	15651+15651		19	1.418	11.06	18.42	5.91	4.83
20514	17404+17404		19	1.570	20.16	12.60	5.285	6.738

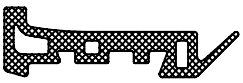
Profile Reference	Child Profile	Profile Section	Page	Weight KG/M	IX cm^4	IY cm^4	WX cm^3	WY cm^3
20515	17720+17719		19	1.216	13.420	10.094	3.494	4.870
20507	22156+22156		22	0.688	2.473	3.060	2.061	1.70
22157	--		22	0.273	0.133	0.842	0.218	0.506
22153	--		22	0.542	6.734	4.166	2.199	1.159
24184	--		22	0.500	4.734	2.716	1.457	0.873
22370	--		22	0.262	1.109	0.253	0.469	0.182
22194	--		22	0.280	0.073	2.630	0.098	0.929

Profile Reference	Child Profile	Profile Section	Page	Weight KG/M	IX cm^4	IY cm^4	WX cm^3	WY cm^3
22414	--		22	0.778	0.213	26.056	0.342	4.799
22159	--		22	0.145	0.042	0.175	0.058	0.191
22193	--		22	0.117	0.028	0.188	0.040	0.171
24185	--		23	0.148	0.350	0.045	0.245	0.056
22154	--		23	0.259	0.553	0.315	0.407	0.288
22420	--		23	0.253	0.537	0.308	0.394	0.294
13711	--		23	0.455	3.111	0.418	1.350	0.625

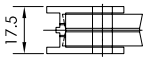
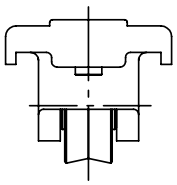
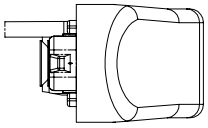
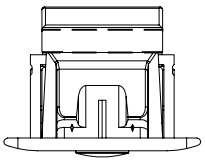
Profile Reference	Child Profile	Profile Section	Page	Weight KG/M	IX cm^4	IY cm^4	WX cm^3	WY cm^3
09365	--		23	1.280	--	--	--	--
09627	--		23	1.970	--	--	--	--
10296	--		23	4.312	--	--	--	--
01009	--		23	0.820	--	--	--	--
82217	15647 + 19496		17	2.514	172.415	23.442	25.920	5.776
82218	15860 + 19496		17	2.409	157.372	19.289	24.542	7.095
82219	15651 + 15651		17	1.418	19.799	16.391	5.190	7.553

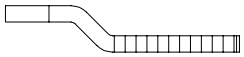
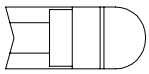
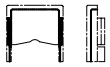
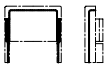
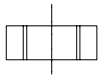
Profile Reference	Child Profile	Profile Section	Page	Weight KG/M	IX cm^4	IY cm^4	WX cm^3	WY cm^3
25607	---		17	0.566	---	---	---	---
20523	28022 +28022		19	1.130	17.059	10.395	4.158	5.559
20524	28030 +28031		14	2.639	31.792	155.937	6.220	25.027

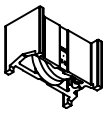
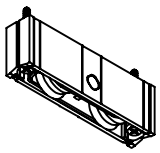
ACCESSORIES

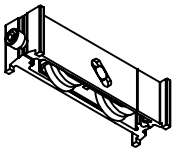
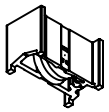
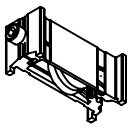
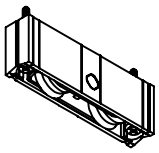
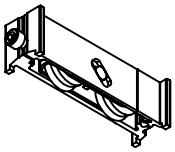
Gasket Reference	Section	Description	Unit
EPDM-20501-1		EPDM FILLER RUBBER FOR 20501/20502 & 20508	Linear Meter
EPDM-20503-1		EPDM RUBBER FOR INTERLOCK PROFILES 20503 & 22153	Linear Meter
EPDM-20515		EPDM RUBBER FOR INTERLOCK PROFILES 20515 & 24184	Linear Meter
EPDM-20503-2		EPDM RUBBER FOR 3 VENTS TO BE USED WITH 20503 & 22153	Linear Meter
EPDM-20503-3		EPDM SEALING RUBBER TO BE USED WITH SASH 20503 - OUTWARD SIDE TO HOLD 24MM (DOUBLE GLAZED UNIT)	Linear Meter
EPDM-20503-4		EPDM SEALING RUBBER TO BE USED WITH SASH 20503 -INWARD SIDE TO HOLD 24MM (DOUBLE GLAZED UNIT)	Linear Meter
EPDM-20503-5		EPDM SEALING U-TYPE RUBBER TO BE USED WITH 20503 TO HOLD 24MM (DOUBLE GLAZED UNIT)	Linear Meter

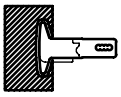
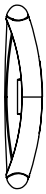
Gasket Reference	Section	Description	Unit
EPDM-20504		HARD EPDM, POLYMIDE OR EPDM FILLER FOR 20504 (22155+15652)	Linear Meter
EPDM-20505-5		EPDM FILLER RUBBER FOR 20502 / 20505 / 20506	Linear Meter
EPDM-20507		EPDM SEALING RUBBER TO BE USED WITH 20503 & 20507	Linear Meter
600.13.001		EPDM SEALING RUBBER FOR TOP / BOTTOM FIXED LIGHT (OUTWARD SIDE)	Linear Meter
600.13.007		EPDM SEALING RUBBER FOR TOP / BOTTOM FIXED LIGHT (INWARD SIDE)	Linear Meter
BRUSH 10MM HIGH (6.5-6.8 WIDE)		10MM FIN TYPE BRUSH FOR SASH PROFILE	Linear Meter
BRUSH 8.0MM HIGH (6.5-6.8 WIDE)		8.0MM NORMAL BRUSH FOR INTERLOCK PROFILE 22153 & 22157 AND FOR PROFILE 22414	Linear Meter

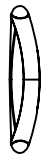
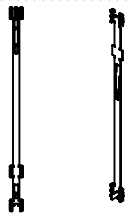
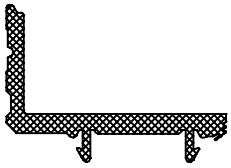
Gasket Reference	Section	Description	Unit
CA-20501		1.5MM THICK CLEAT FOR PROPER ALIGNMENT OF FRAME PROFILE 20501/ 20506	Piece
CA-20503		2.0MM THICK CLEAT FOR PROPER ALIGNMENT OF SASH PROFILE 20503	Piece
NED-503		NEEDLE BEARING ROLLER HOUSED IN AN ALUMINUM CHANNEL TO BE USED AT THE BOTTOM OF THE SASH PROFILE 20503	Piece
NED-515		NEEDLE BEARING ROLLER HOUSED IN AN ALUMINUM CHANNEL TO BE USED AT THE BOTTOM OF THE SASH PROFILE 20515	Piece
SUI-03-15		SUITABLE FLUSH TYPE HANDLE WITH LOCKING ARRANGEMENT (COUNTERPLATE + NIB)	Piece
HO-515		OUTSIDE HANDLE FOR SASH PROFILE 20515	Piece
HI-515		INSIDE EMBEDDED HANDLE FOR SASH PROFILE 20515	Piece

Gasket Reference	Section	Description	Unit
NIB-515		NIB FOR SASH PROFILE 20515	Piece
COU-515		COUNTER PLATE FOR SASH PROFILE 20515	Piece
END CAP BEC-22153 (BOTTOM END CAP)		PLASTIC END CAP TO COVER MILLED PART AT THE BOTTOM OF THE INTERLOCK PROFILE 22153	Piece
END CAP BEC-22153 (TOP END CAP)		PLASTIC END CAP TO COVER MILLED PART AT THE TOP OF THE INTERLOCK PROFILE 22153	Piece
SUC-120		DRAINAGE VALVE	Piece
SUP-120		DEFLECTOR	Piece
HOS-503		3.0 MM THICK HOLDING STRIP FOR FASTENING ROLLER ON SASH 20503 USING 2 M5X20 SCREWS	Piece

Gasket 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-32		B 4.2 X 32 - DIN 7981 - A2 FOR SASH CORNER ASSEMBLY	Piece
SCR-19		B 4.2 X 19 - DIN 7981 - A2 FOR LABYRINTH FASTENING	Piece
SCR-20		B 5 X 20 - DIN 965 - A2 FOR ROLLER FASTENING	Piece
GUXSSF0100		Single Roller to be used with 20503	Piece
GUXSDF0100		Double Roller to be used with 20503	Piece

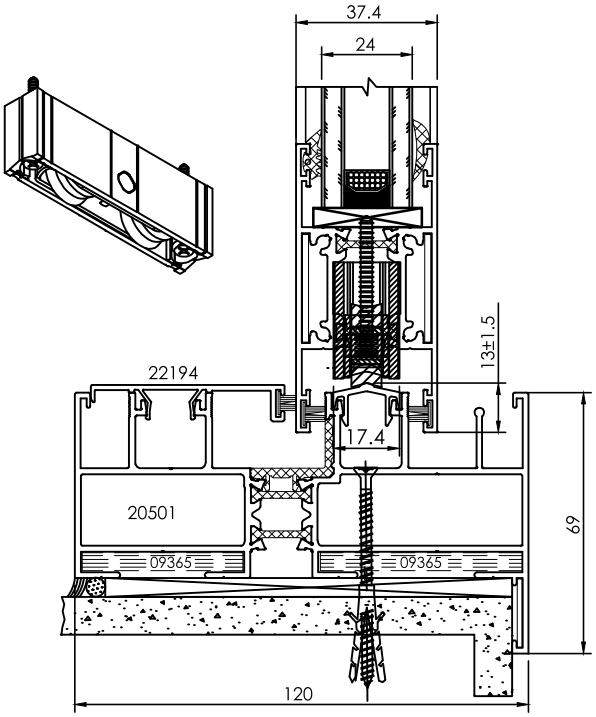
Gasket Reference	Section	Description	Unit
GUXSDR0100		Double Adjustable Roller to be used with 20503	Piece
GUXSSF0200		Single Roller to be used with 20515	Piece
GUXSSR0200		Single Adjustable Roller to be used with 20515	Piece
GUXSDF0200		Double Roller to be used with 20515	Piece
GUXSDR0200		Double Adjustable Roller to be used with 20515	Piece
GUXBSM0100		BSM Manual Lock to be used with 20503 & 20515	Piece
GUXBSA0100		BSA Automatic Lock to be used with 20503 & 20515	Piece

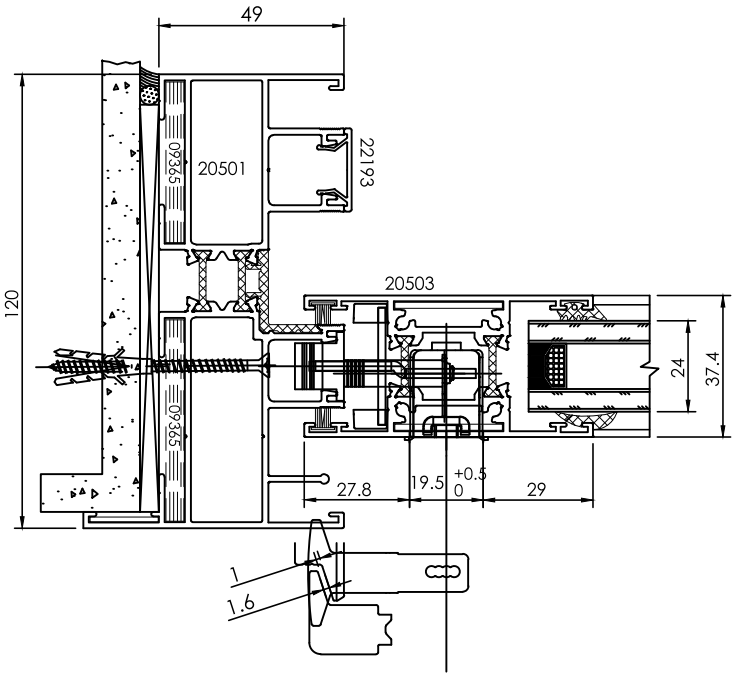
Gasket Reference	Section	Description	Unit
GUXDUO		DUO Hook with Template anti Device System to be used with 20503 & 20515	Piece
GUXFAI0100		FAI Flat Inside Handle to be used with 20503 & 20515	Piece
GUXPOM0100		POM Open Operating Handle (Right & Left) to be used with 20503 & 20515	Piece
GUXPCM0100		PCM Standard Operating Handle to be used with 20503 & 20515	Piece
GUXFAH0100		FAH Flat Inside Handle to be used with 20503 & 20515	Piece
GUXPCF0100		PCF Standard Outside Handle to be used with 20503 & 20515	Piece
GUXFAE0100		FAE Flat Outside Handle to be used with 20503 & 20515	Piece

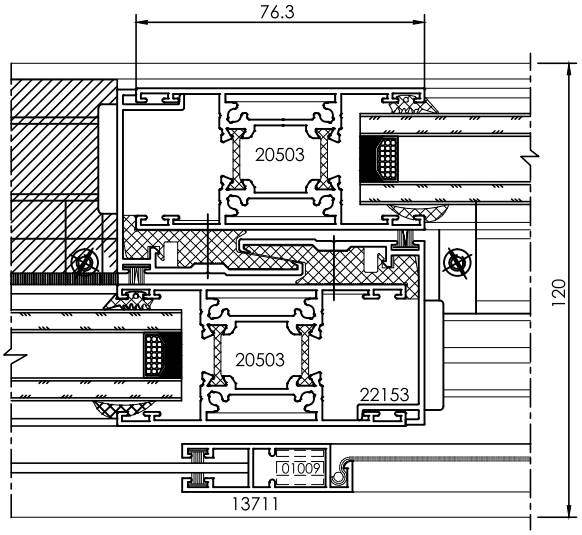
Gasket /Accessories Reference	Section	Description	Unit
GUXPOF0100		POF Open Outside Handle to be used 20503 & 20515	Piece
GUXPEC0100		PEC Open Outside Handle to be used with 20503 & 20515	Piece
GUXS3G		S3G Sliding Three point Lock Kit	Piece
GUXBUT		Stopper	Piece
GUXGAV0100		Aluminium Locking Plate	Piece
EPDM-82217		EPDM Filler Rubber for Frame 82217 and 82218	Linear Meter

Sotralu Accessories

Profiles		
Description	Shape	Section No.
Frame		20501
SASH		20503
Fly Screen Frame		13711
Bottom rail clip		22159
Upper & Side cover clip		22193
Cover for fixed position		22194
Interlock		22153
Corner Cleat		09365
Corner Cleat		01009
Dust proof		22414
1.5mmCleat for proper Alignment of Frame		CA-20501
2.0mmCleat for proper Alignment of Sash		CA-20503
Double Fix Roller		GUXSDF0100
BSA Automatic lock		GUXBSA0100
Standard Operating Handle		GUXPCM0100
Aluminium Locking Plate		GUXGAV0100
DUO Hook with Template anti Device System		GUXDUO

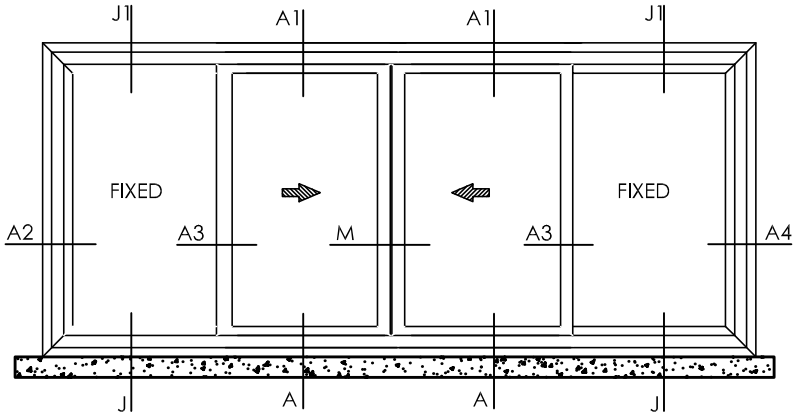




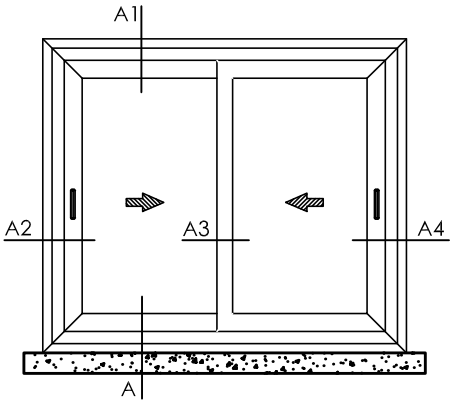


ASSEMBLY DRAWINGS

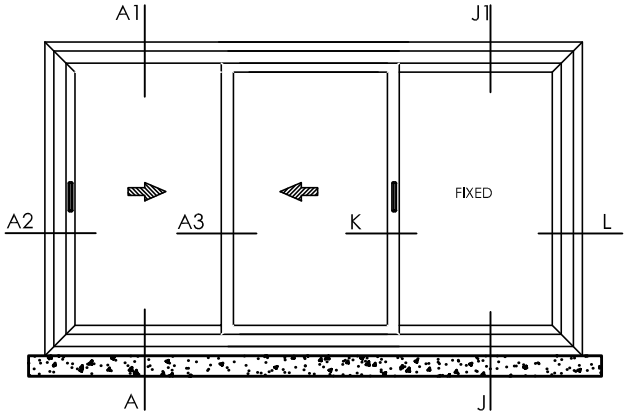
Sections



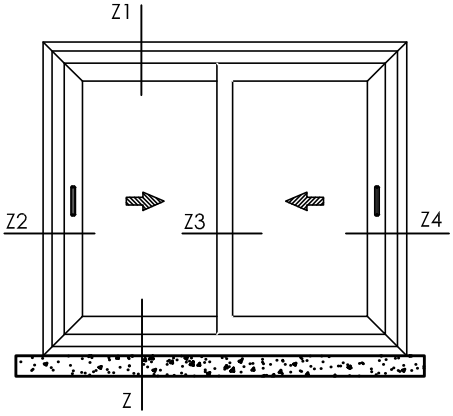
4 -VENT SLIDING WINDOW (120MM)



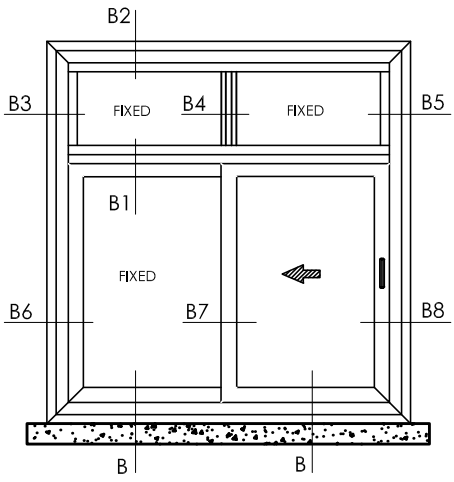
SLIDING WINDOW (120MM)



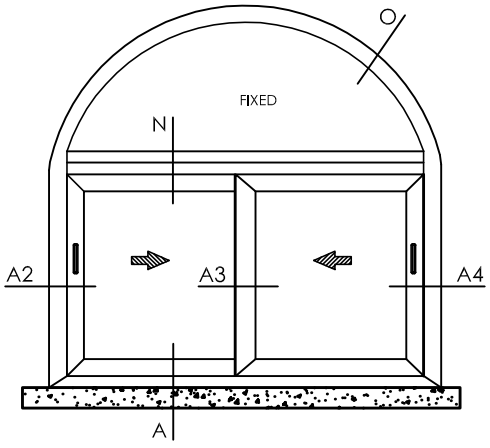
3 -VENT SLIDING WINDOW (120MM)



SLIDING WINDOW (120MM)
FLY SCREEN OUT SIDE

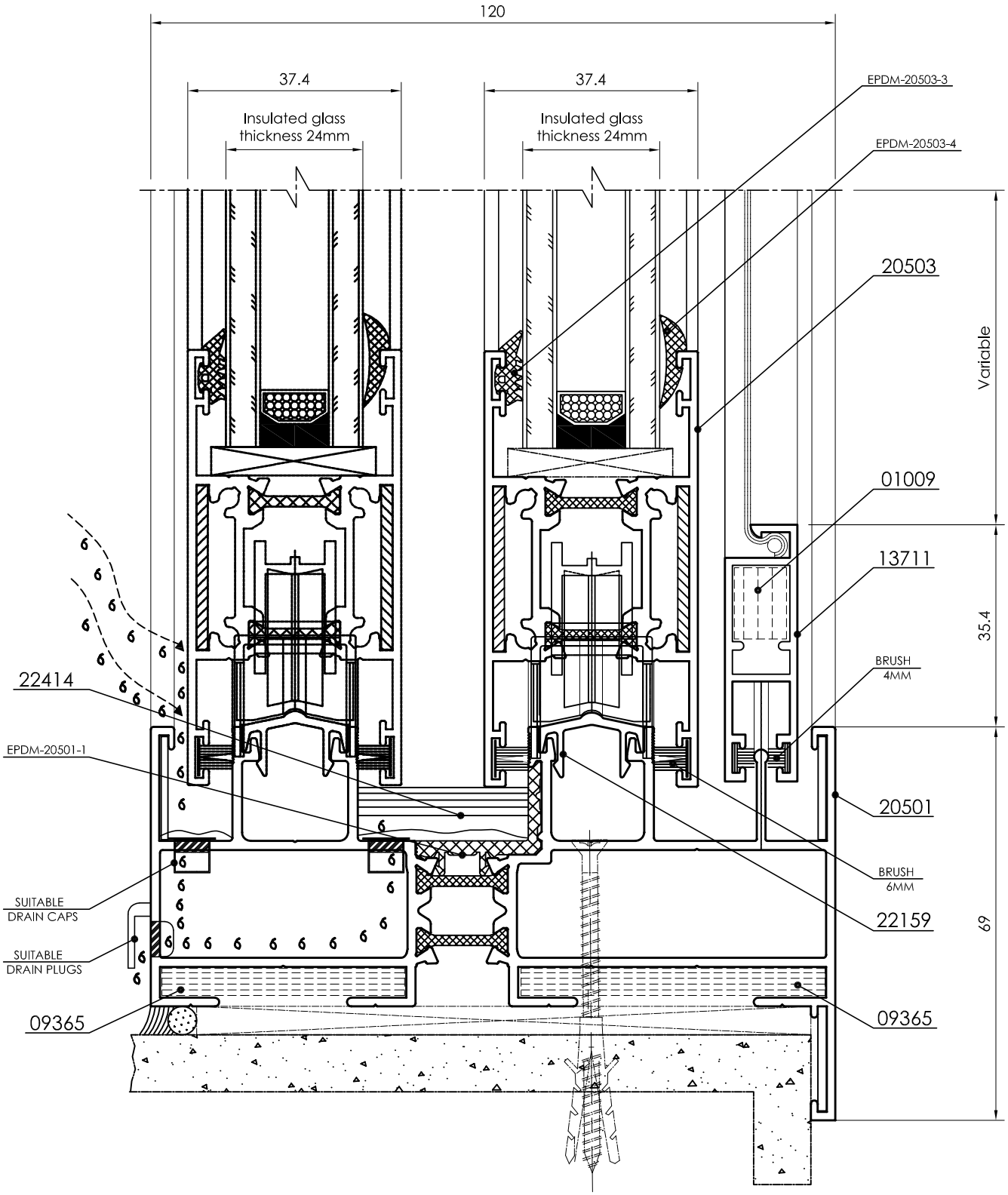


SLIDING WINDOW (120MM)
WITH FIXED PANEL

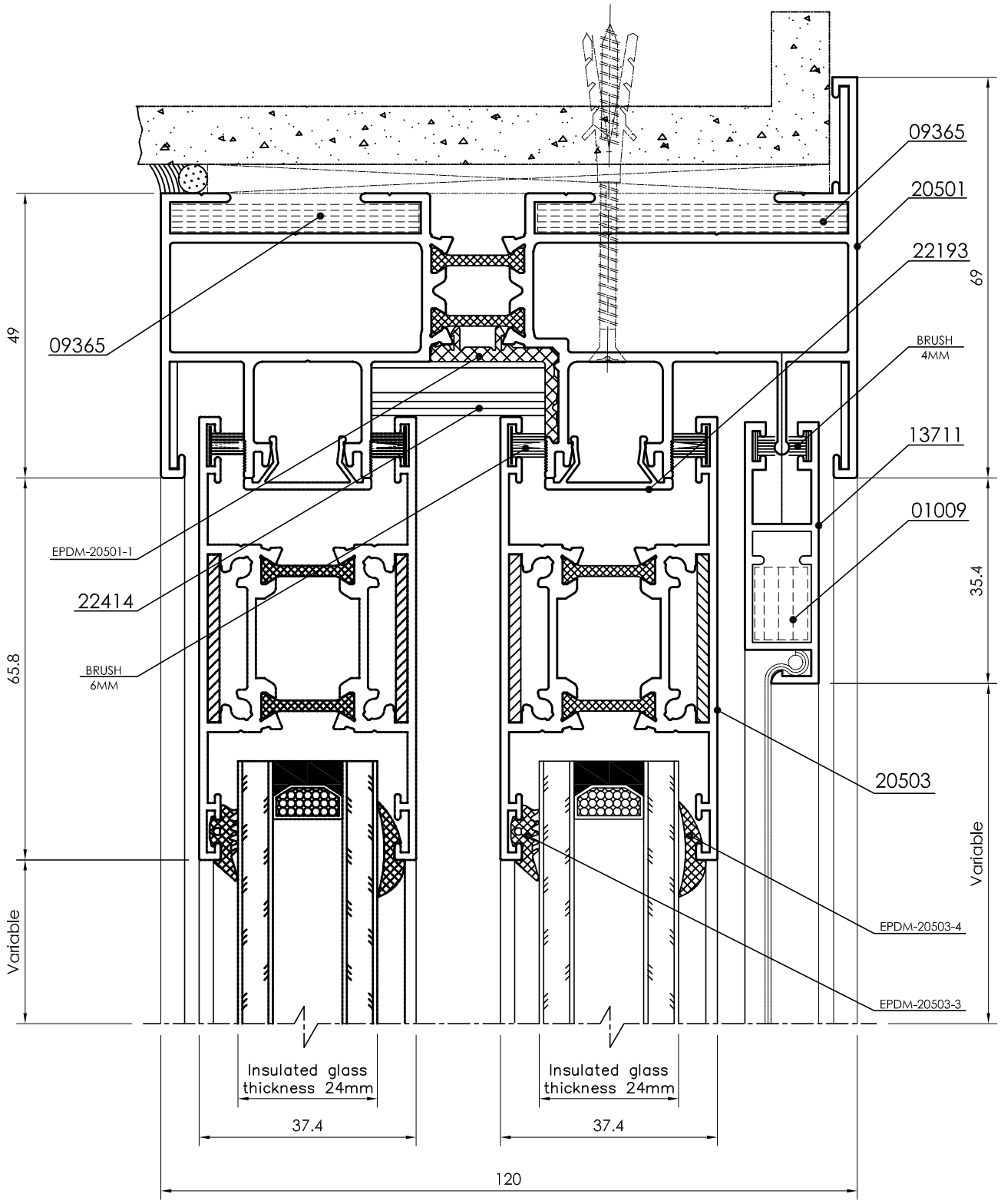


SLIDING WINDOW (120MM)
WITH FIXED ARCH PANEL

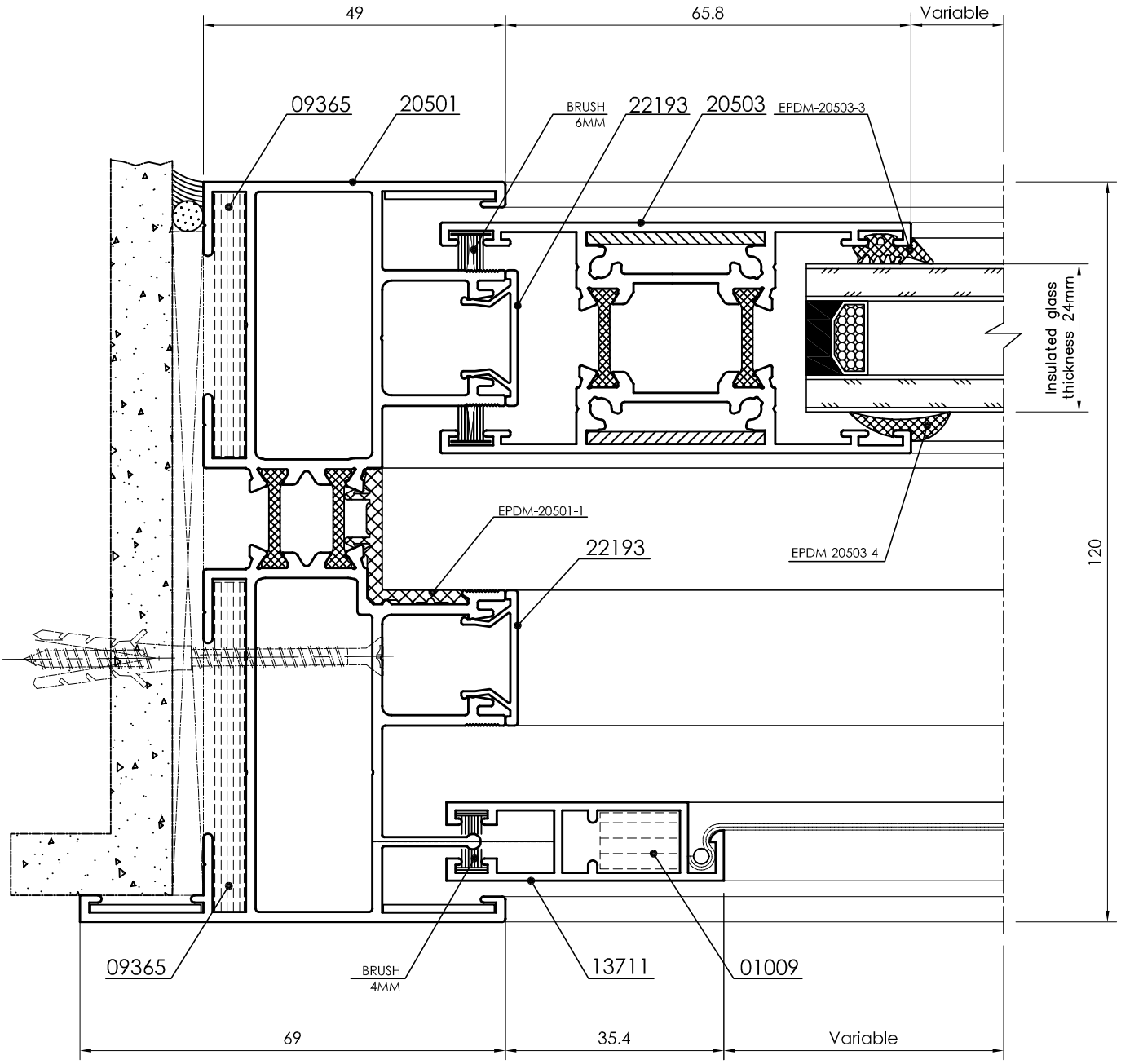
Bottom Section
Detail - A



Top Section
Detail - A1

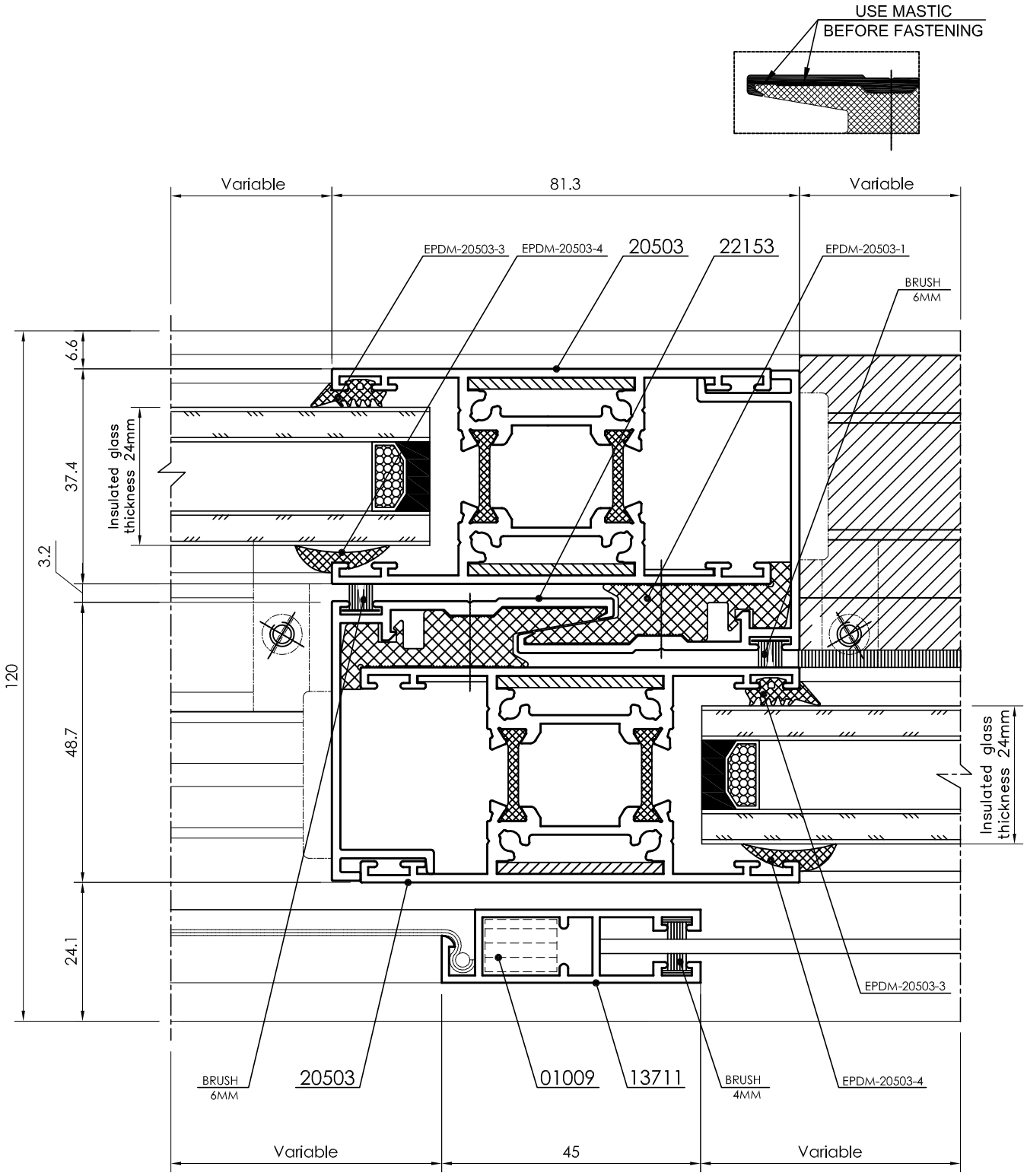


Left Section
Detail - A2

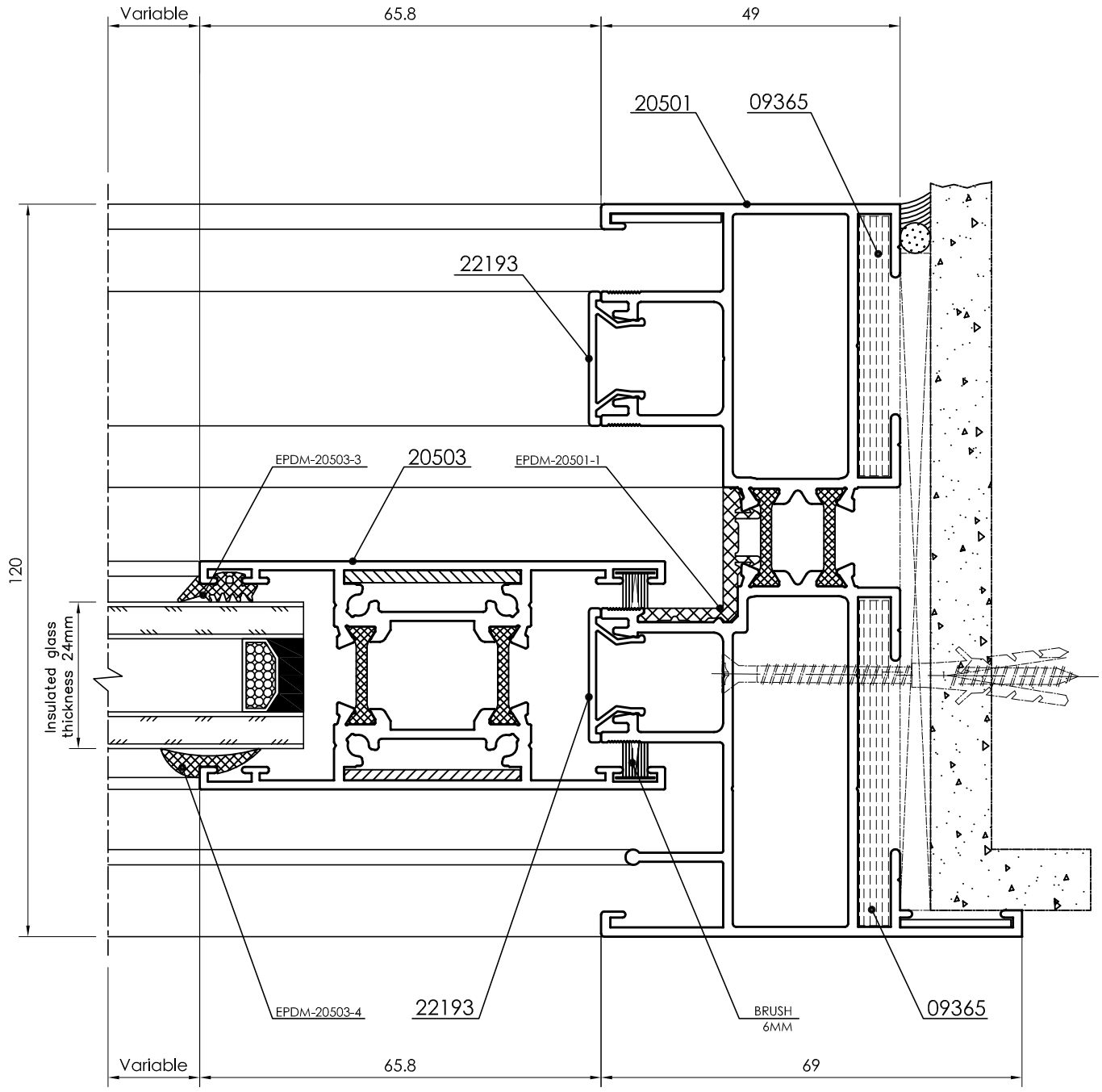


Interlock Section

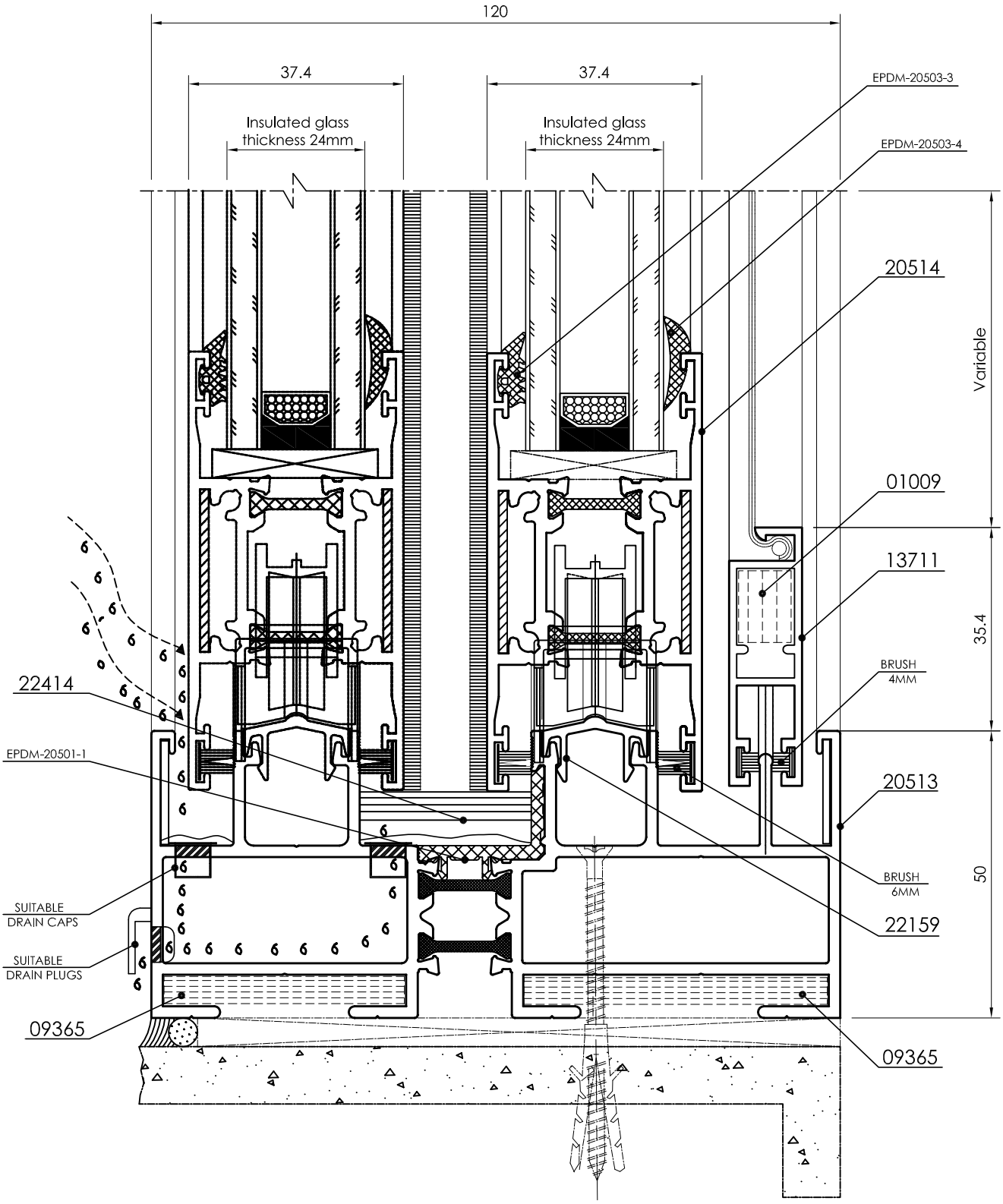
Detail - A3



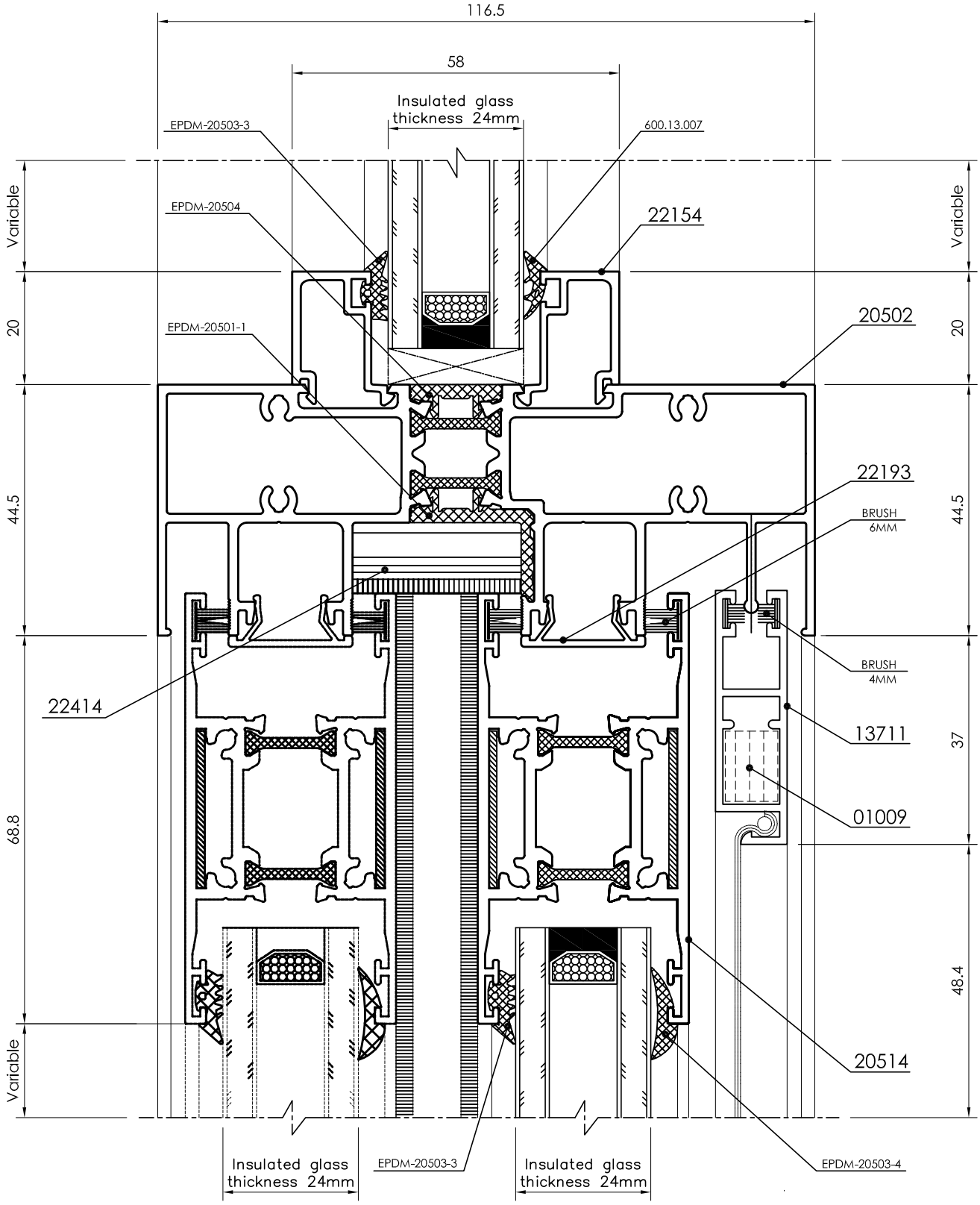
Right Section
Detail - A4



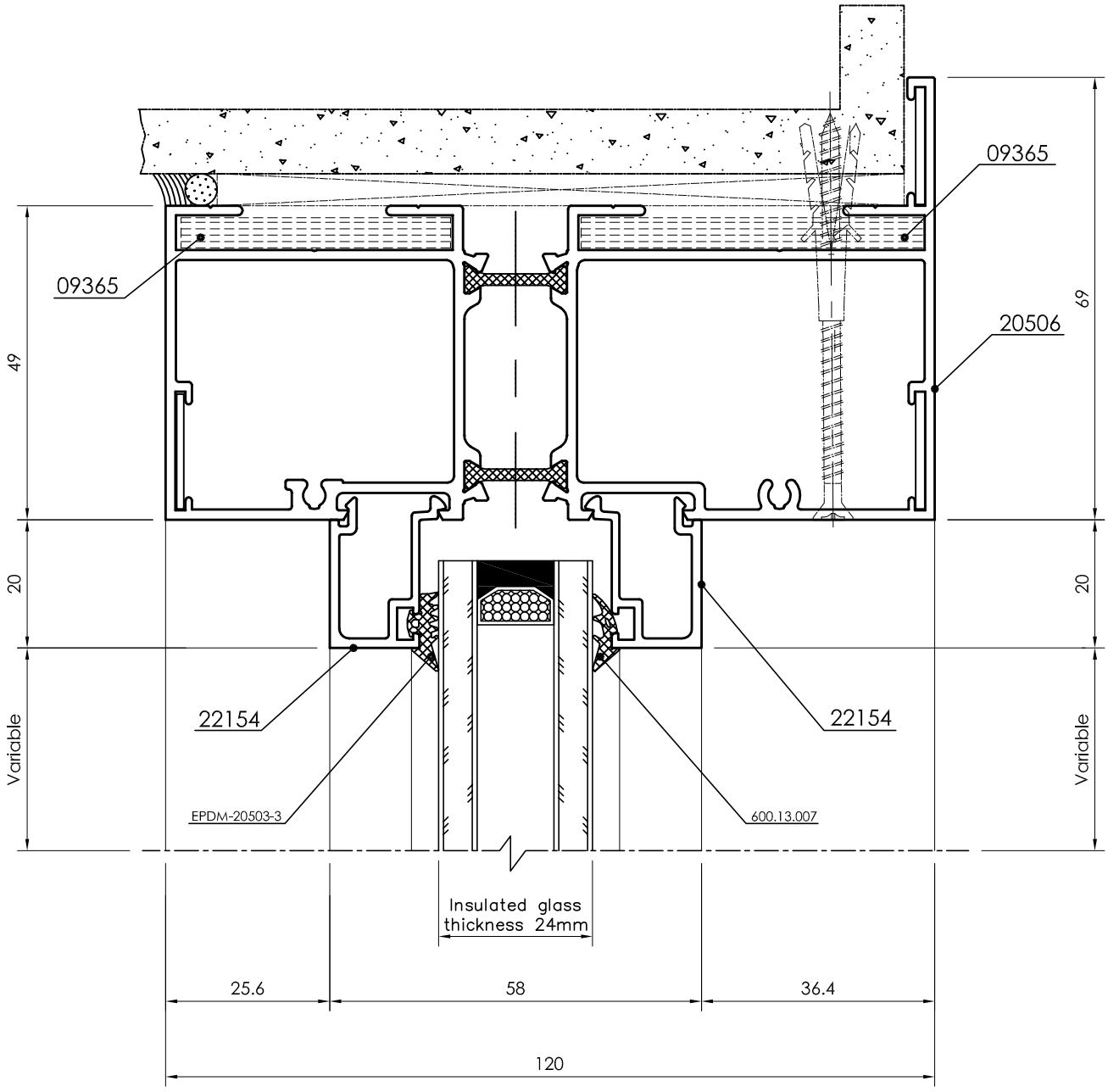
Bottom Section
Detail - B



Middle Section
Detail - B1

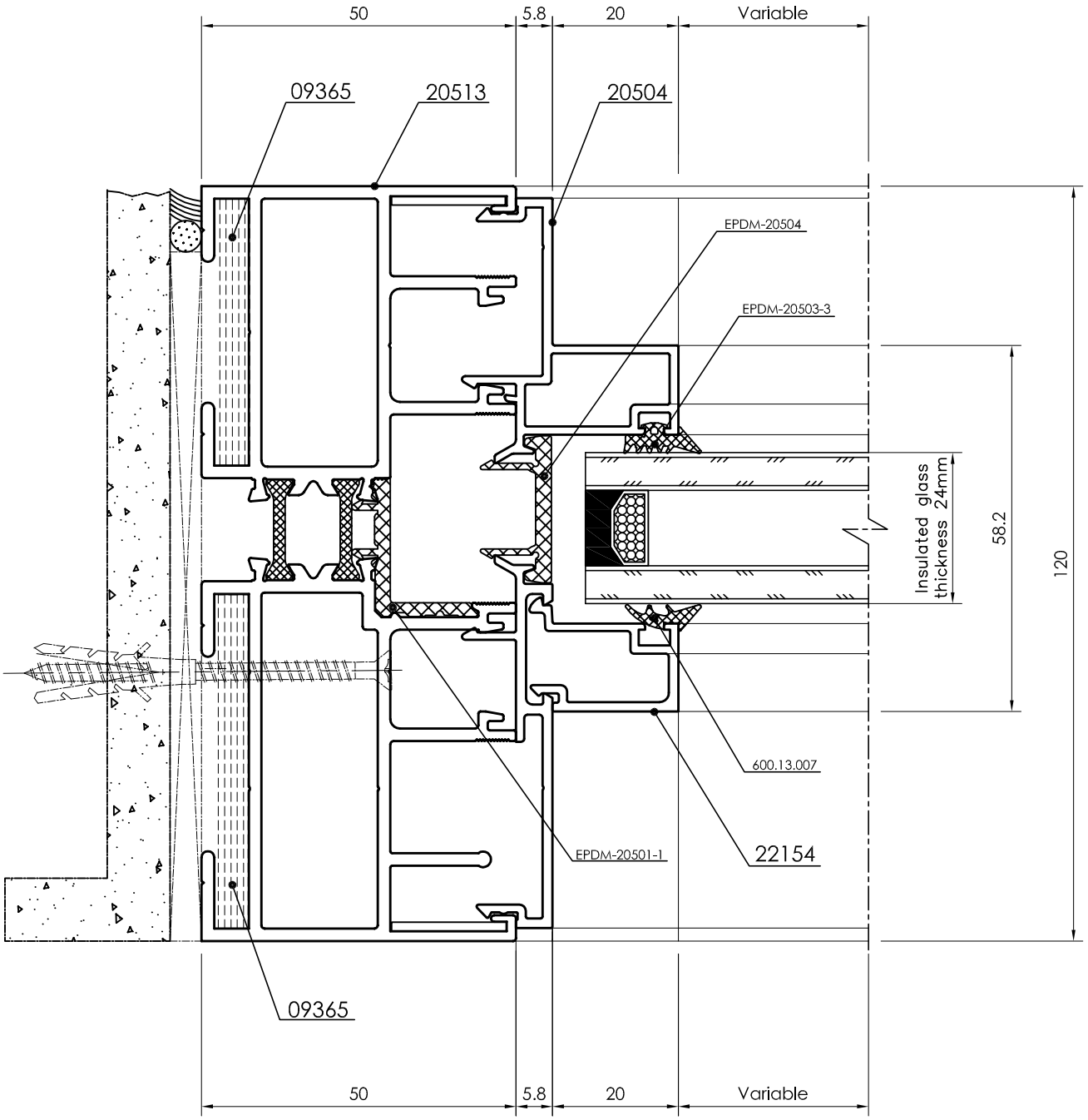


Top Section
Detail - B2



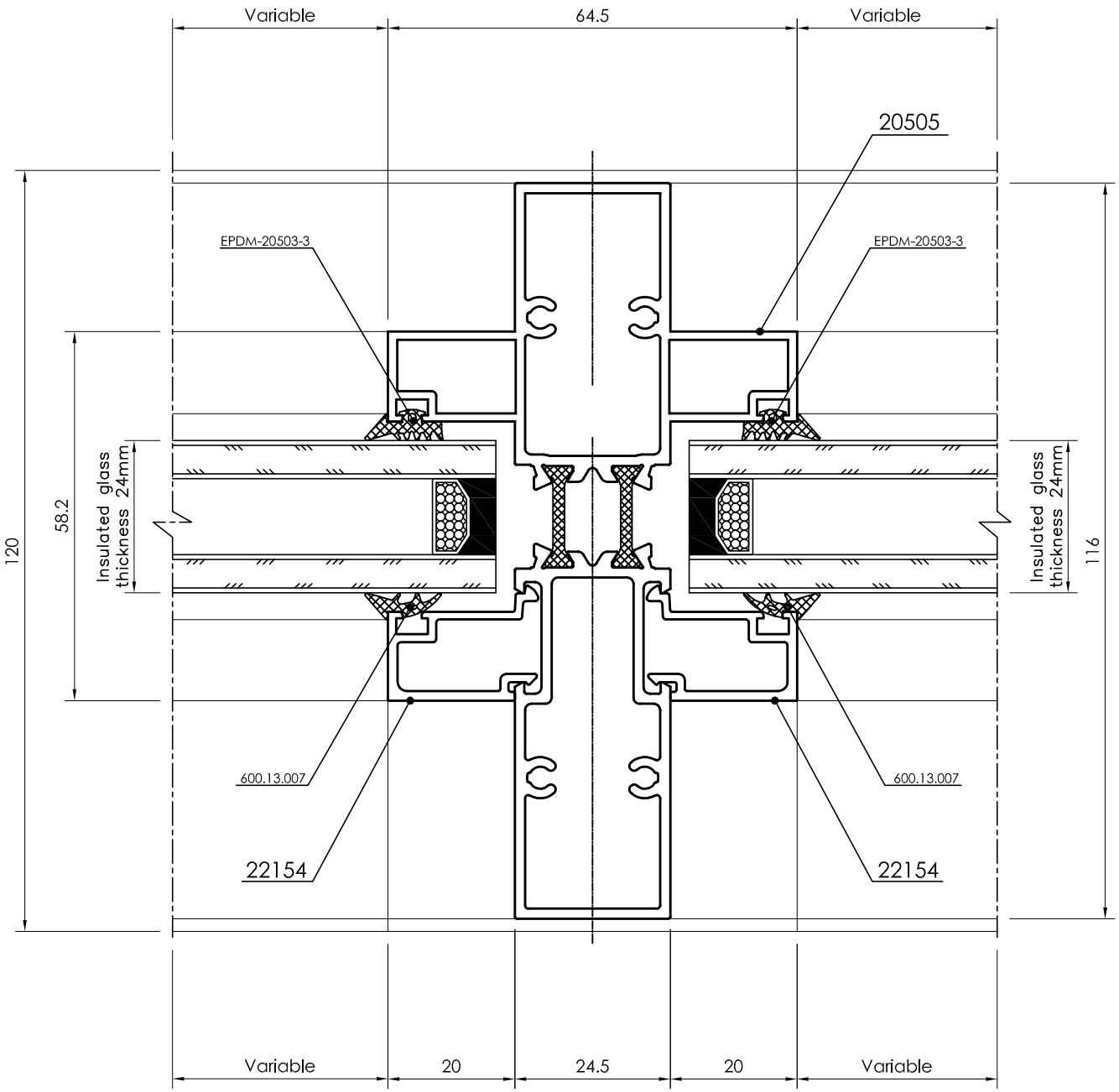
Left Fixed Section

Detail - B3



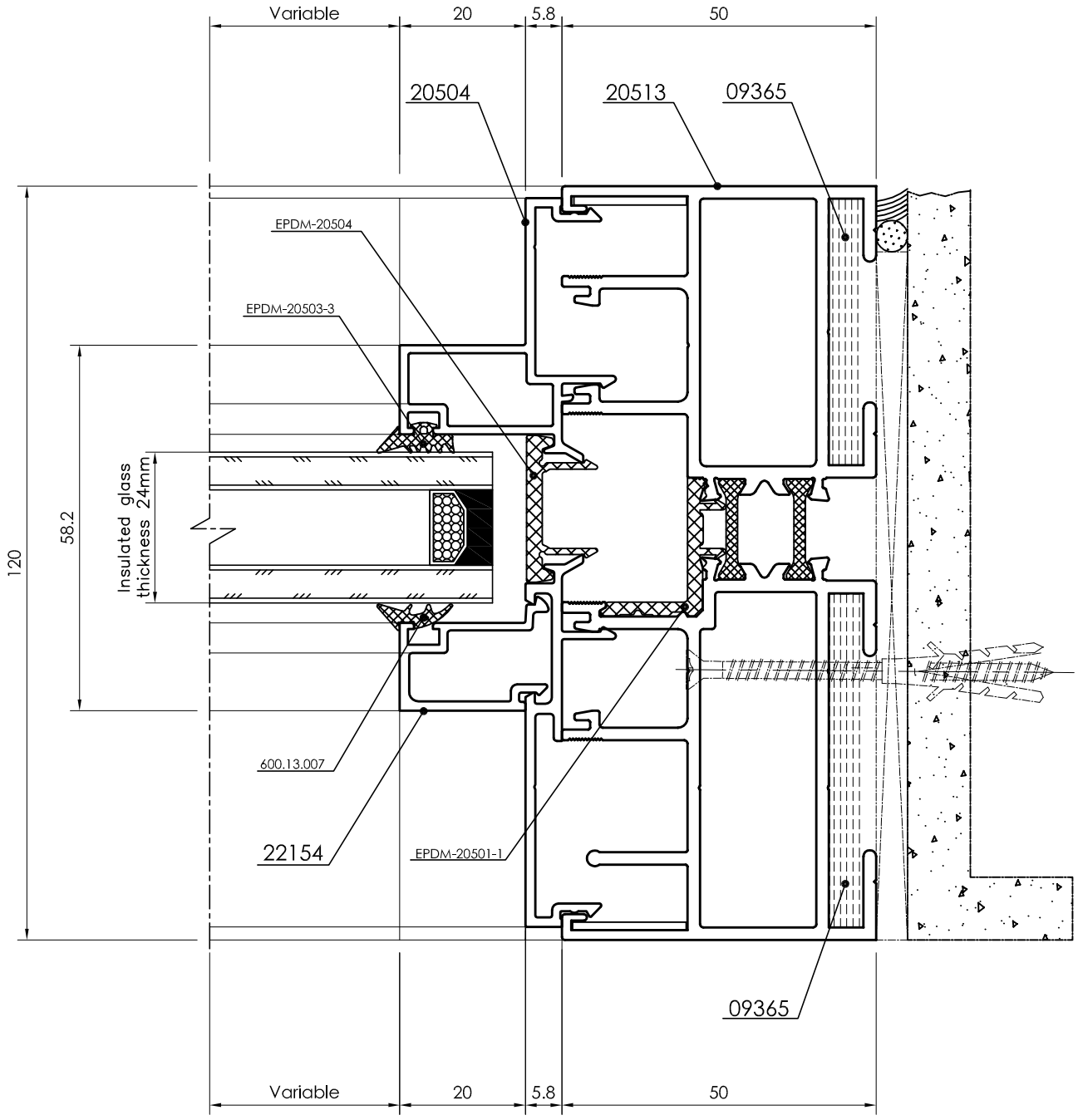
Mullion Section for fixed top

Detail - B4



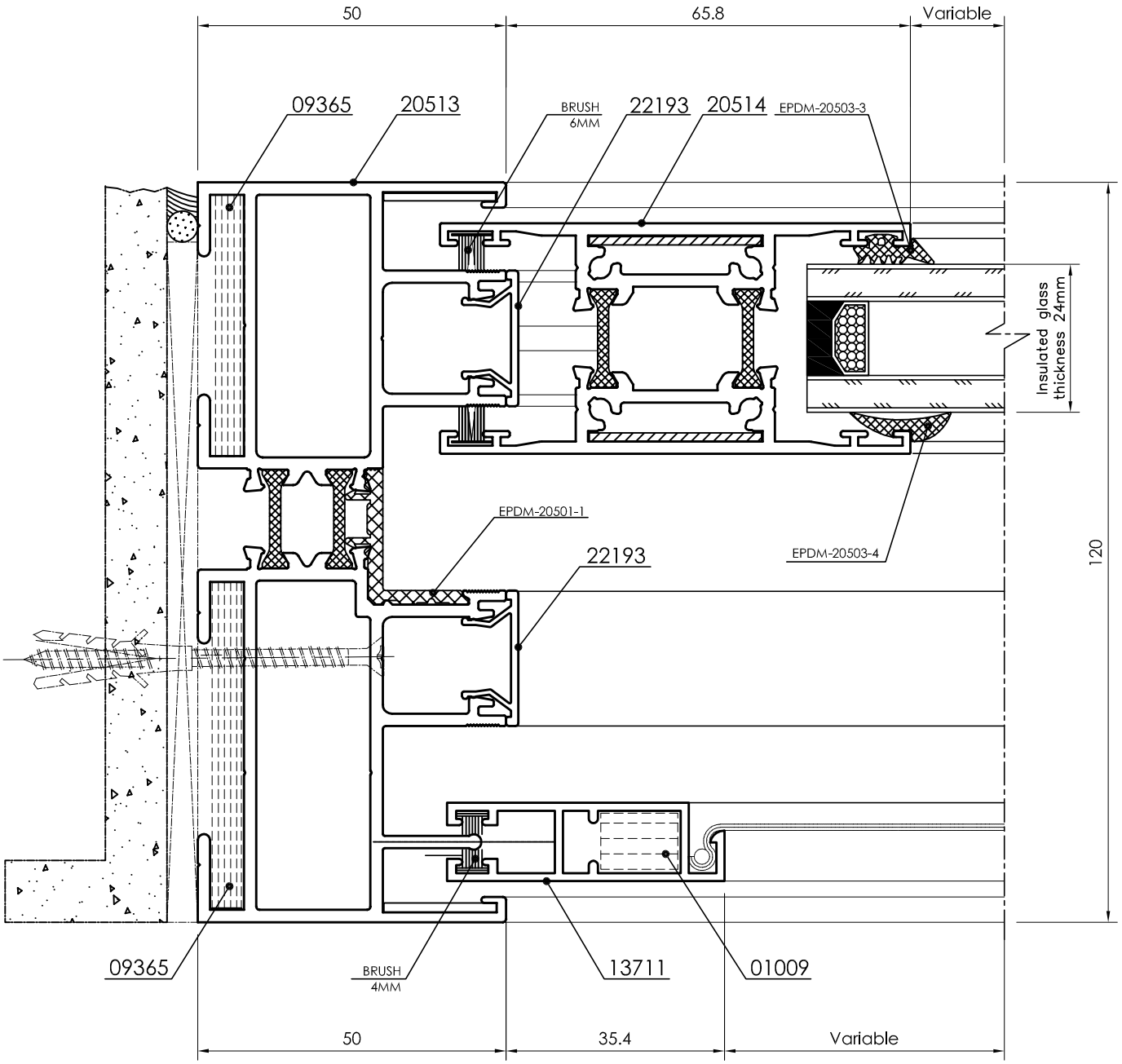
Right Fixed Section

Detail - B5



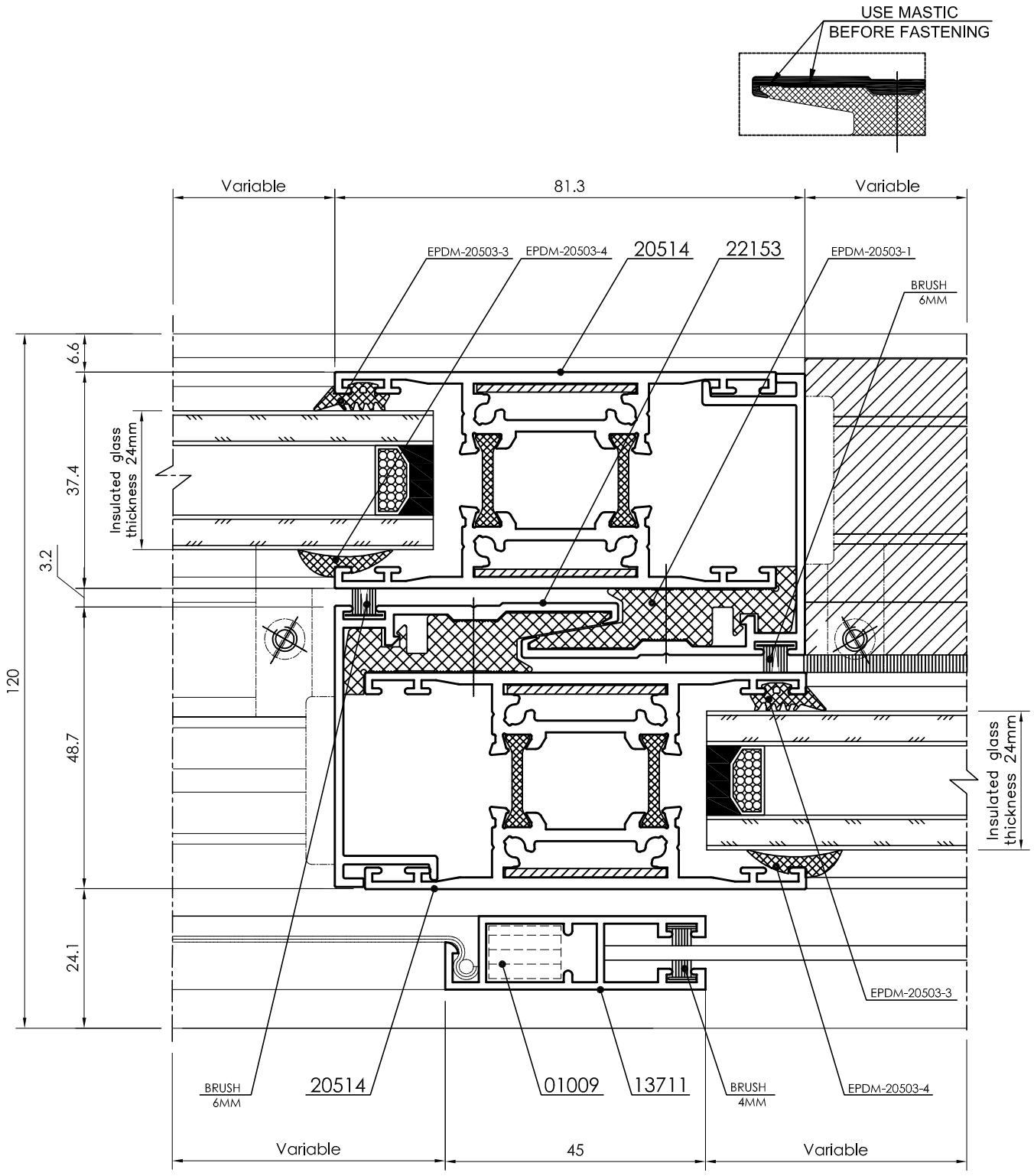
Interlock Section

Detail - B6

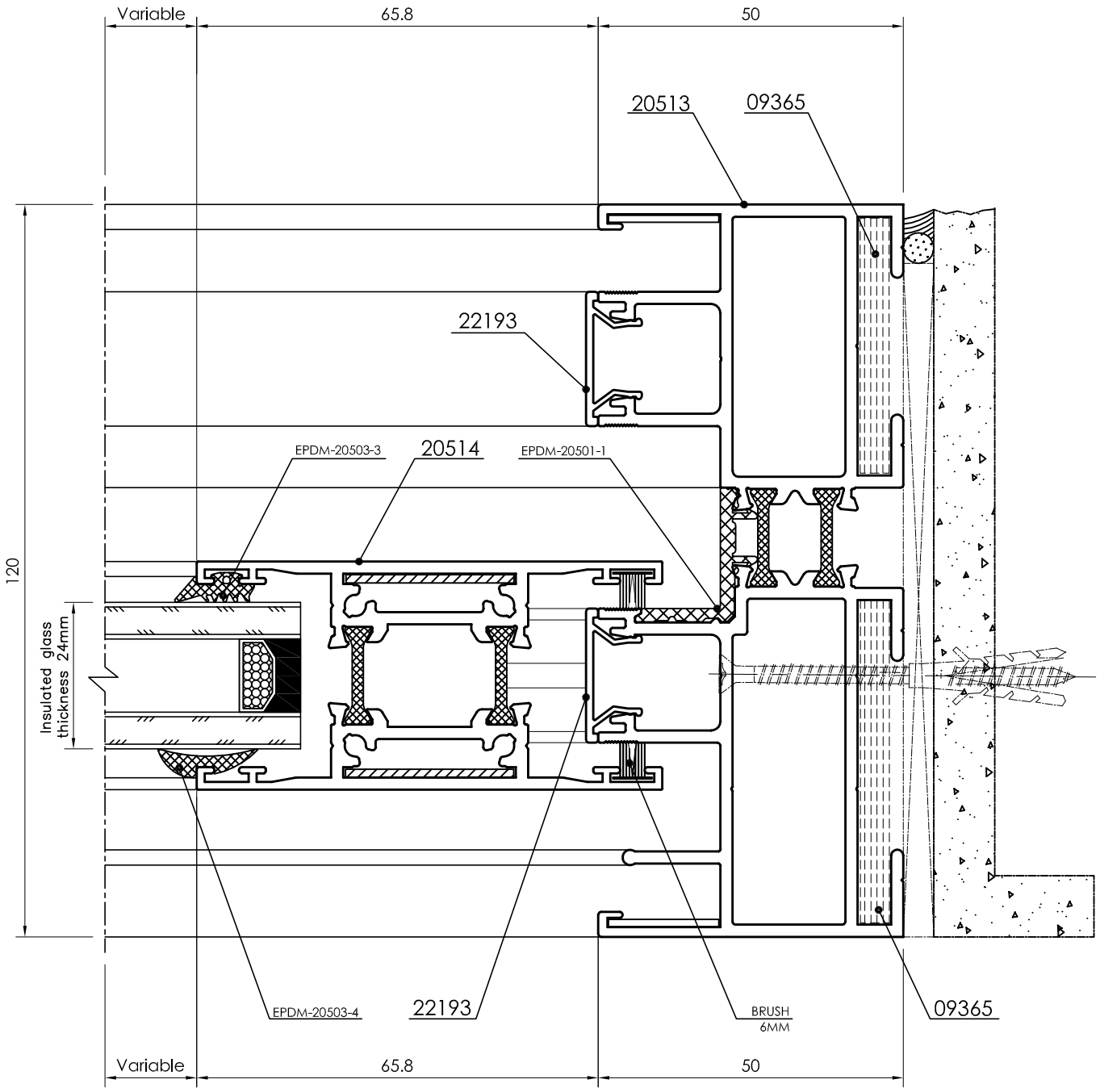


Interlock Section

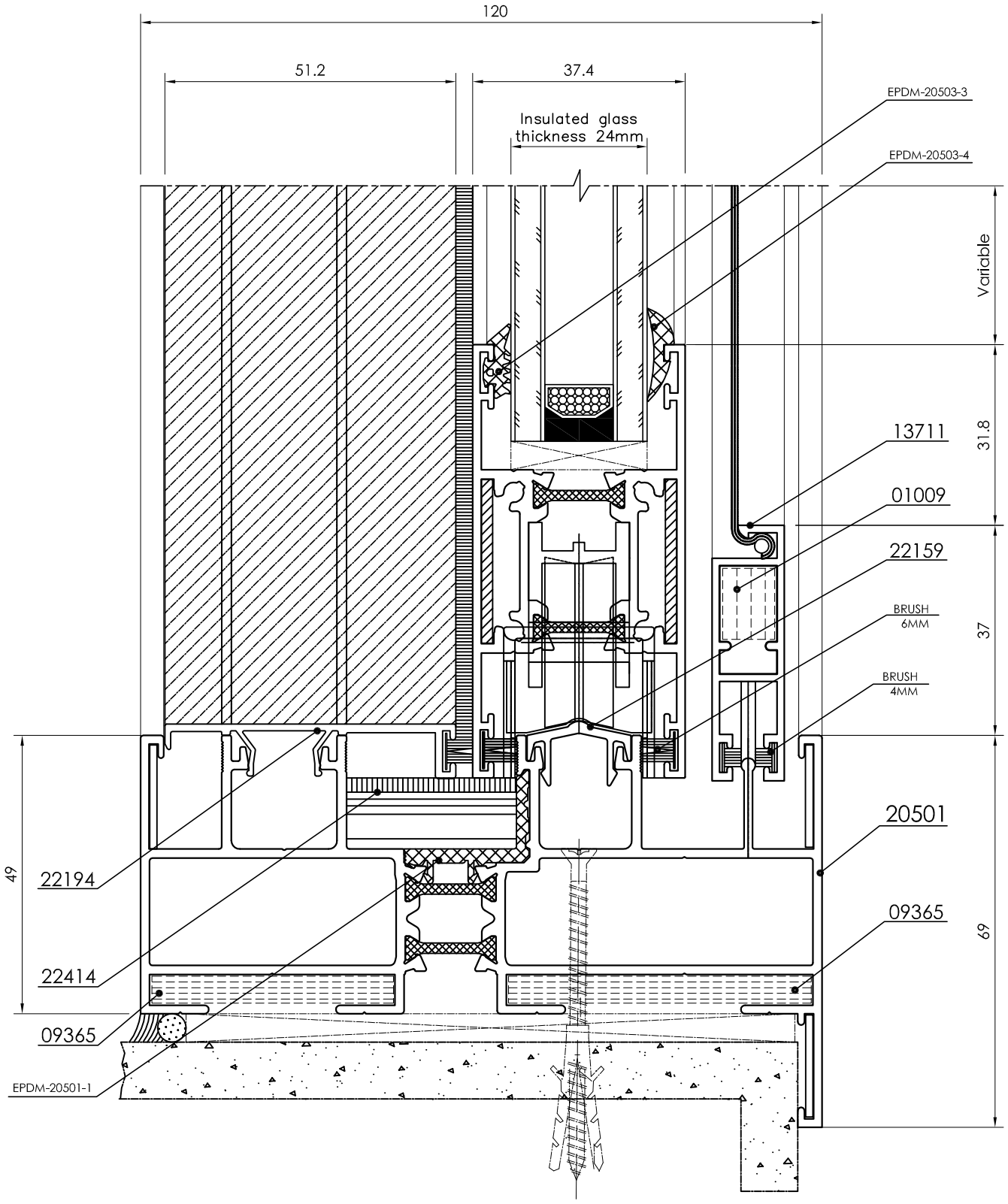
Detail - B7



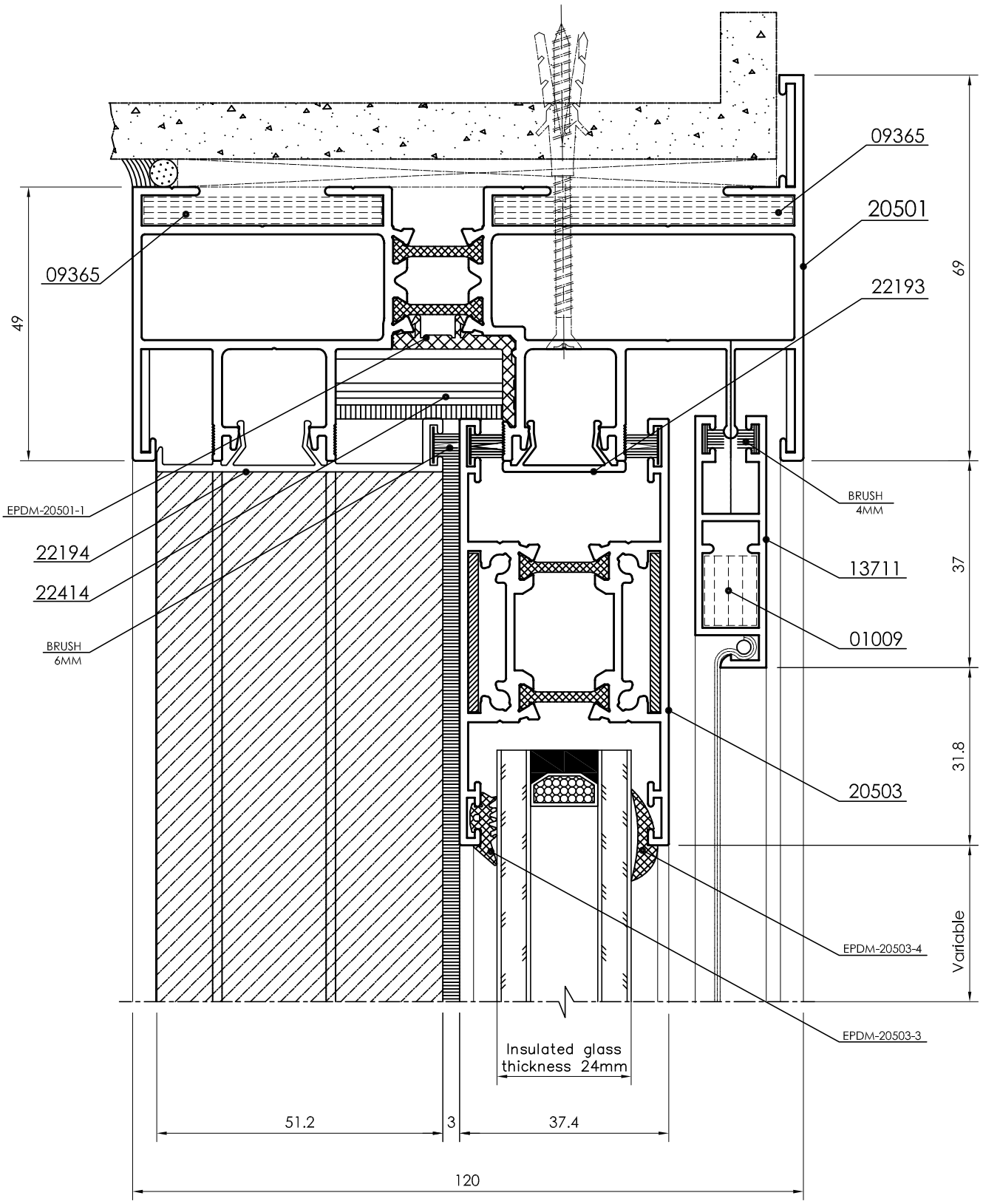
Right Section
Detail - B8



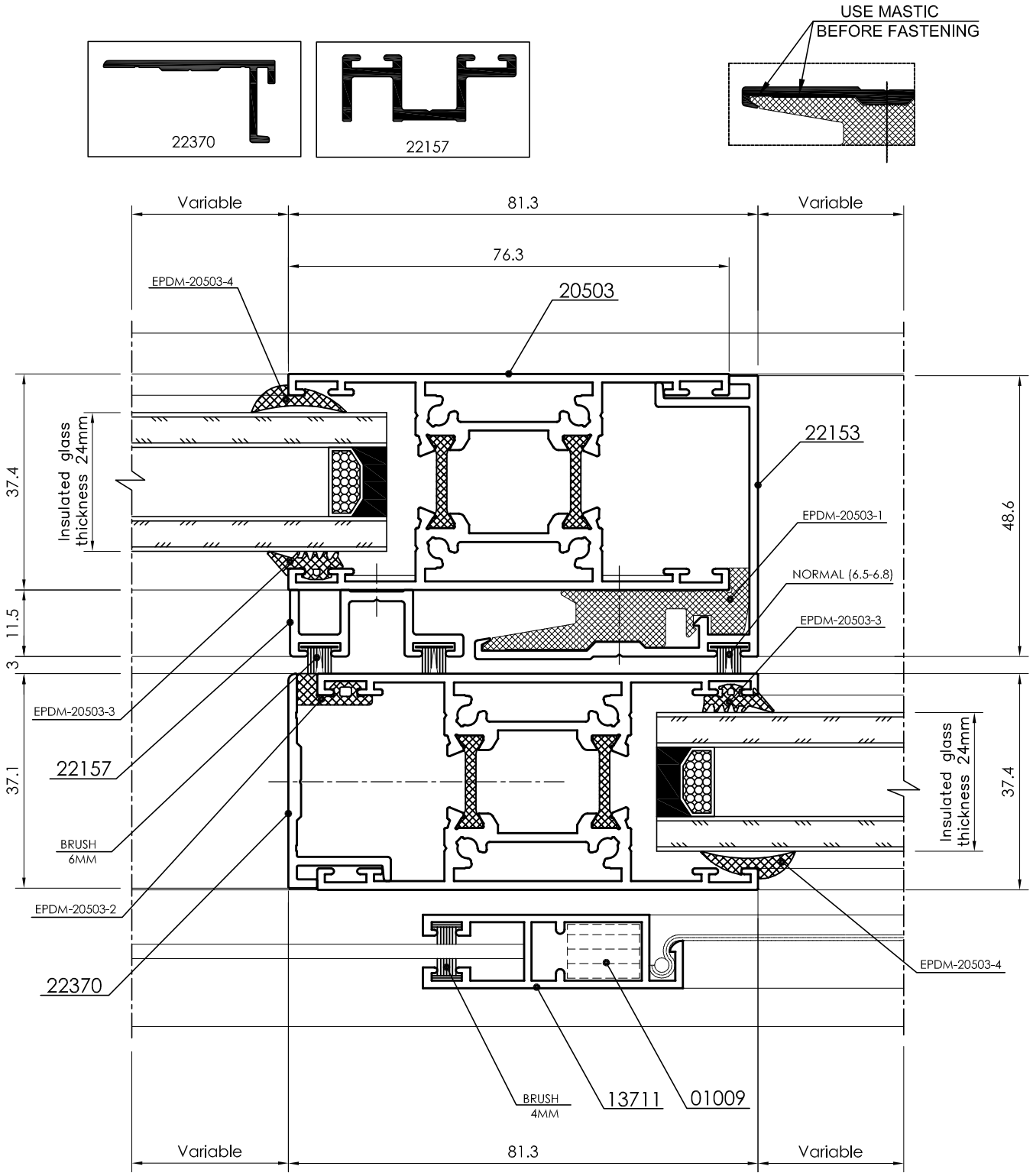
Bottom Section
Detail - J



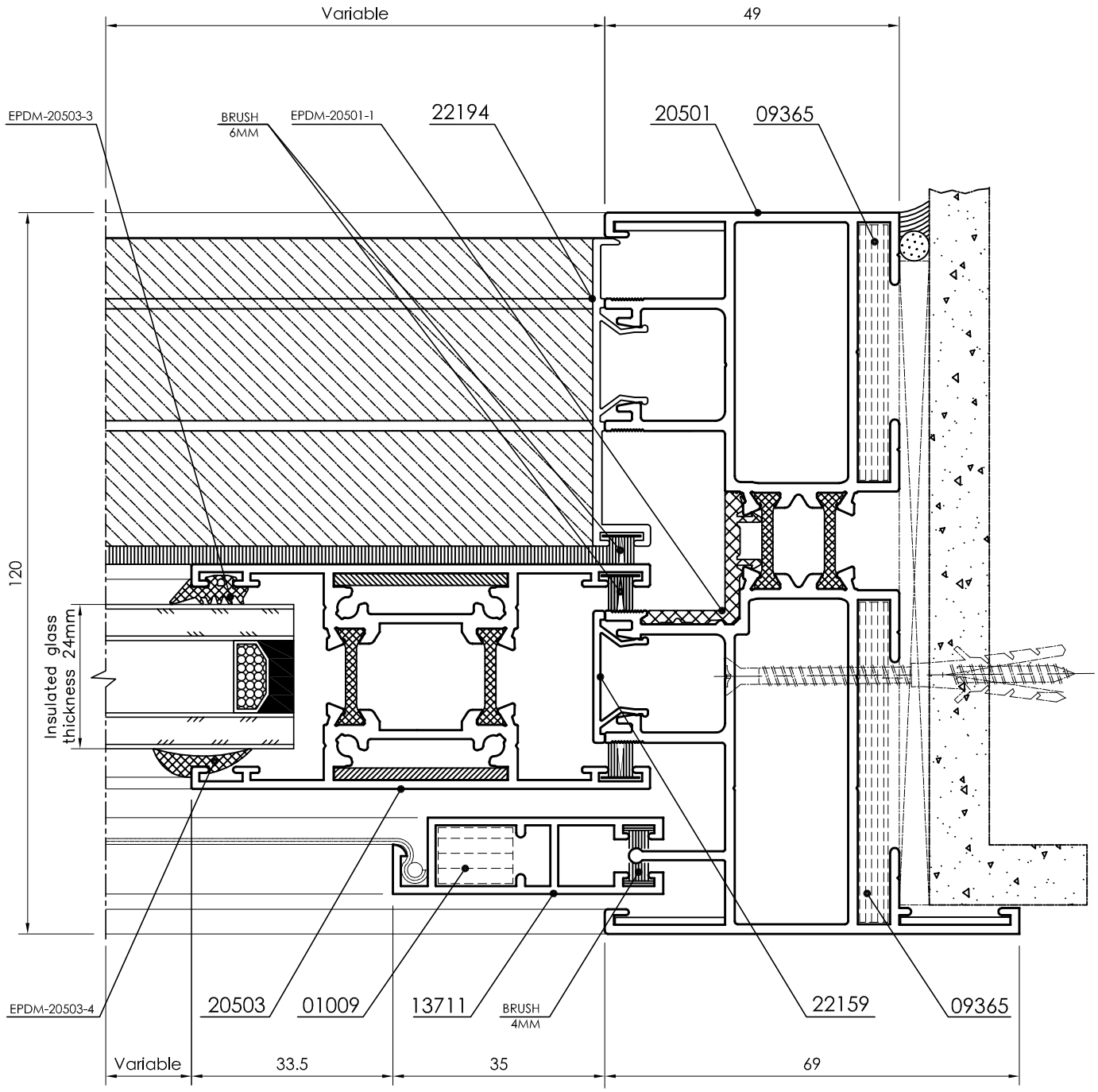
Top Section
Detail - J1



Interlock Section
Detail - K

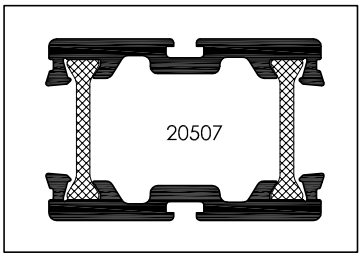


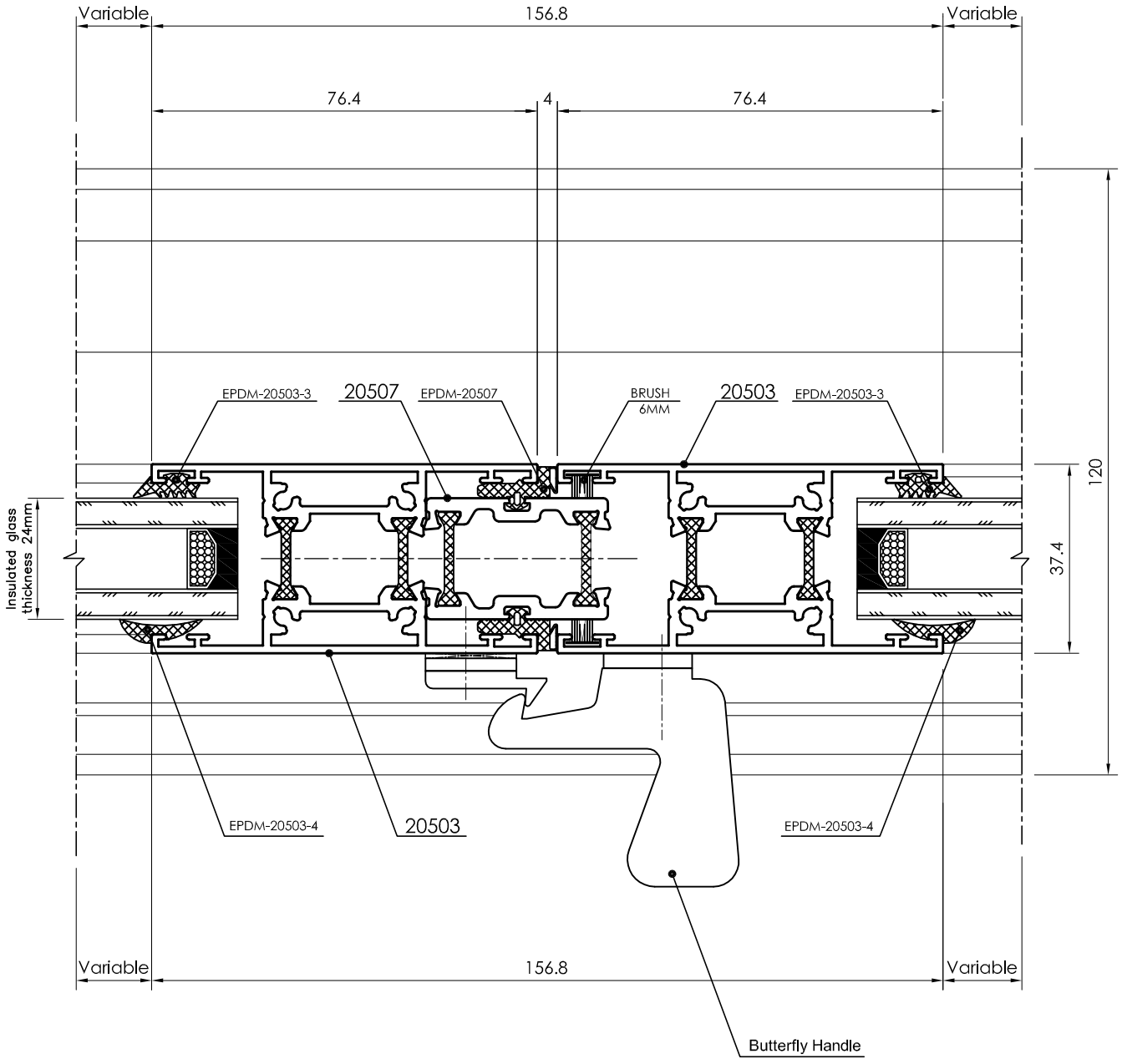
Right Section
Detail - L



4 Vents Mid Section

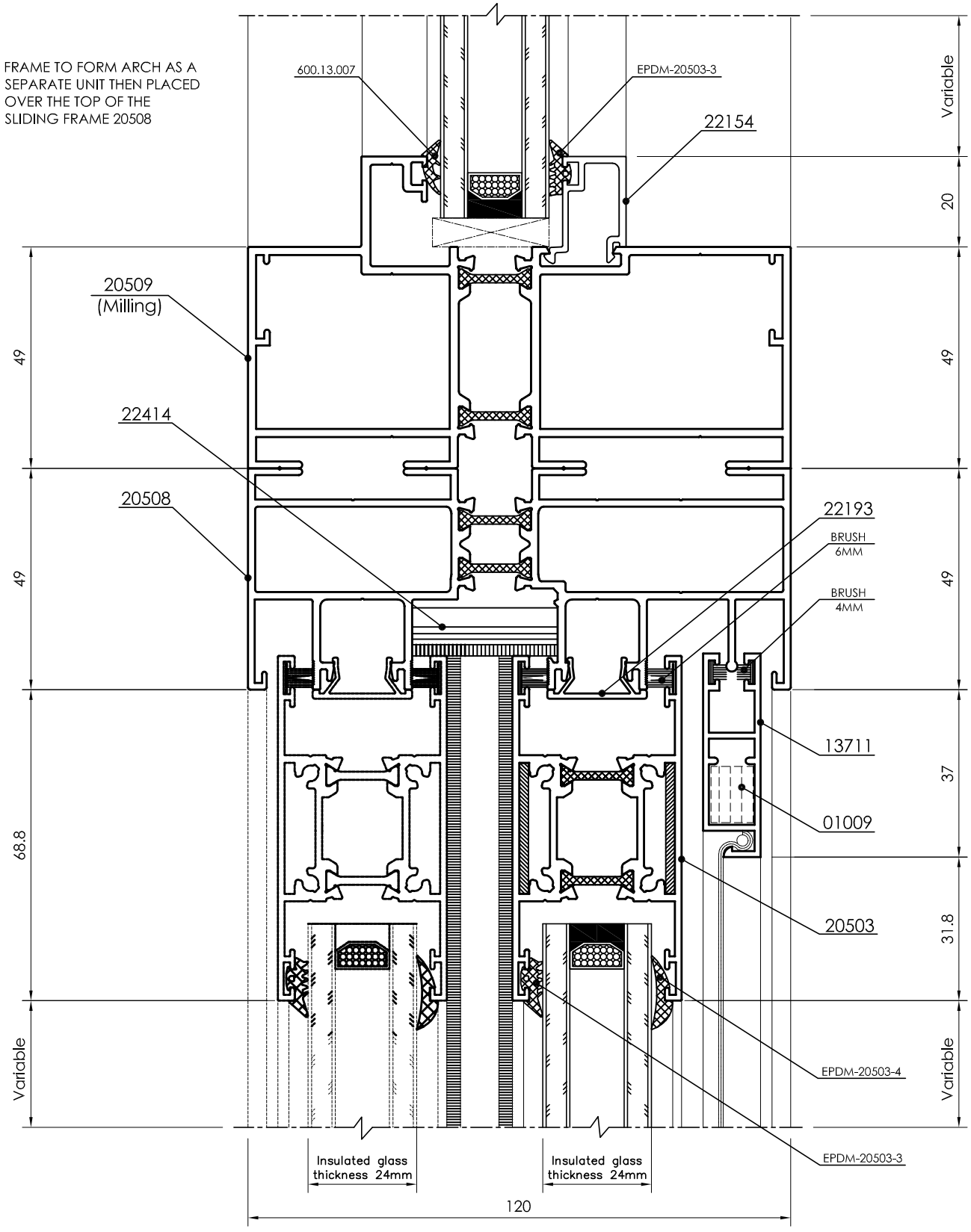
Detail - M





Arch Section

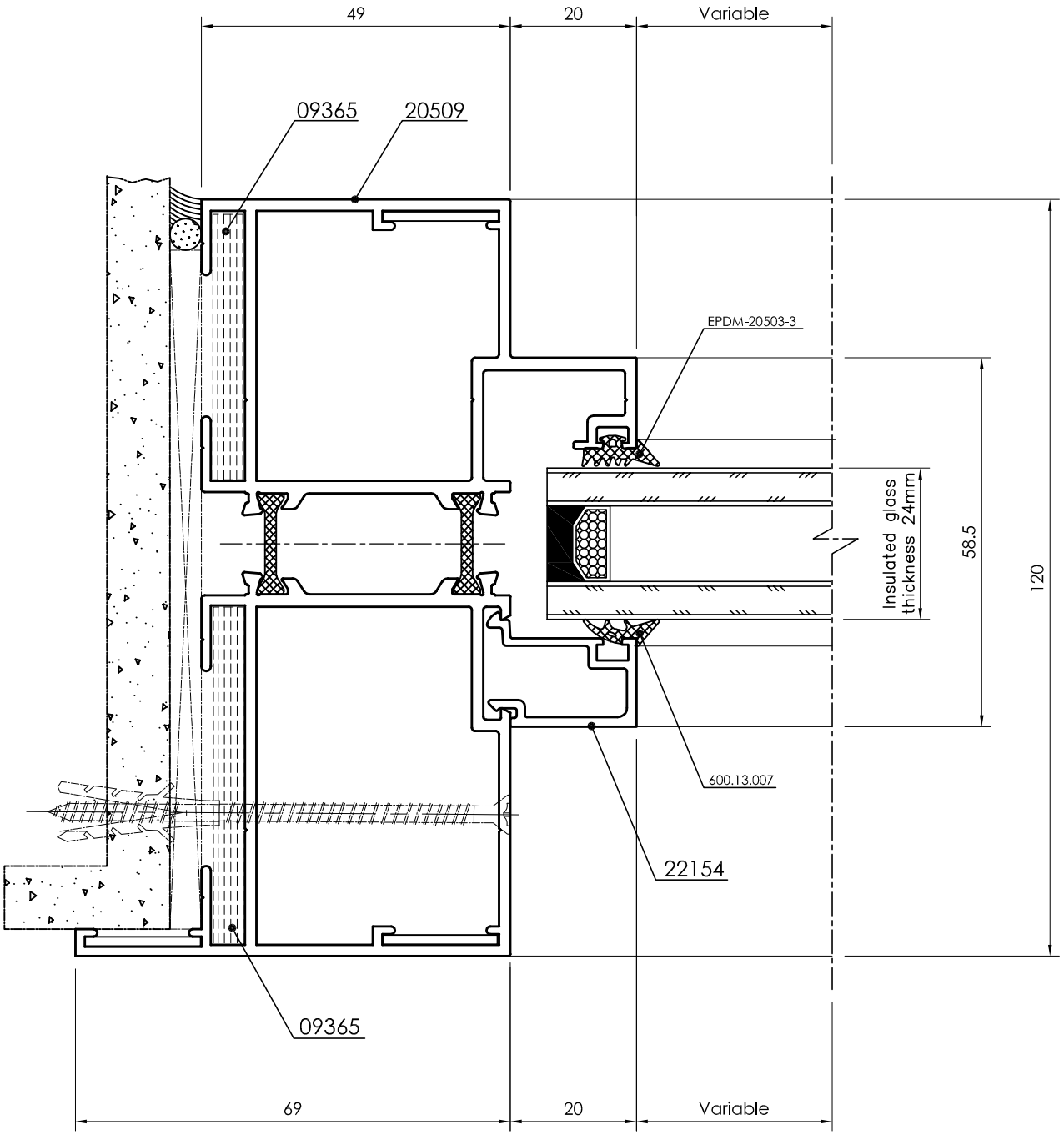
Detail - N



Arch Section

Option - 1

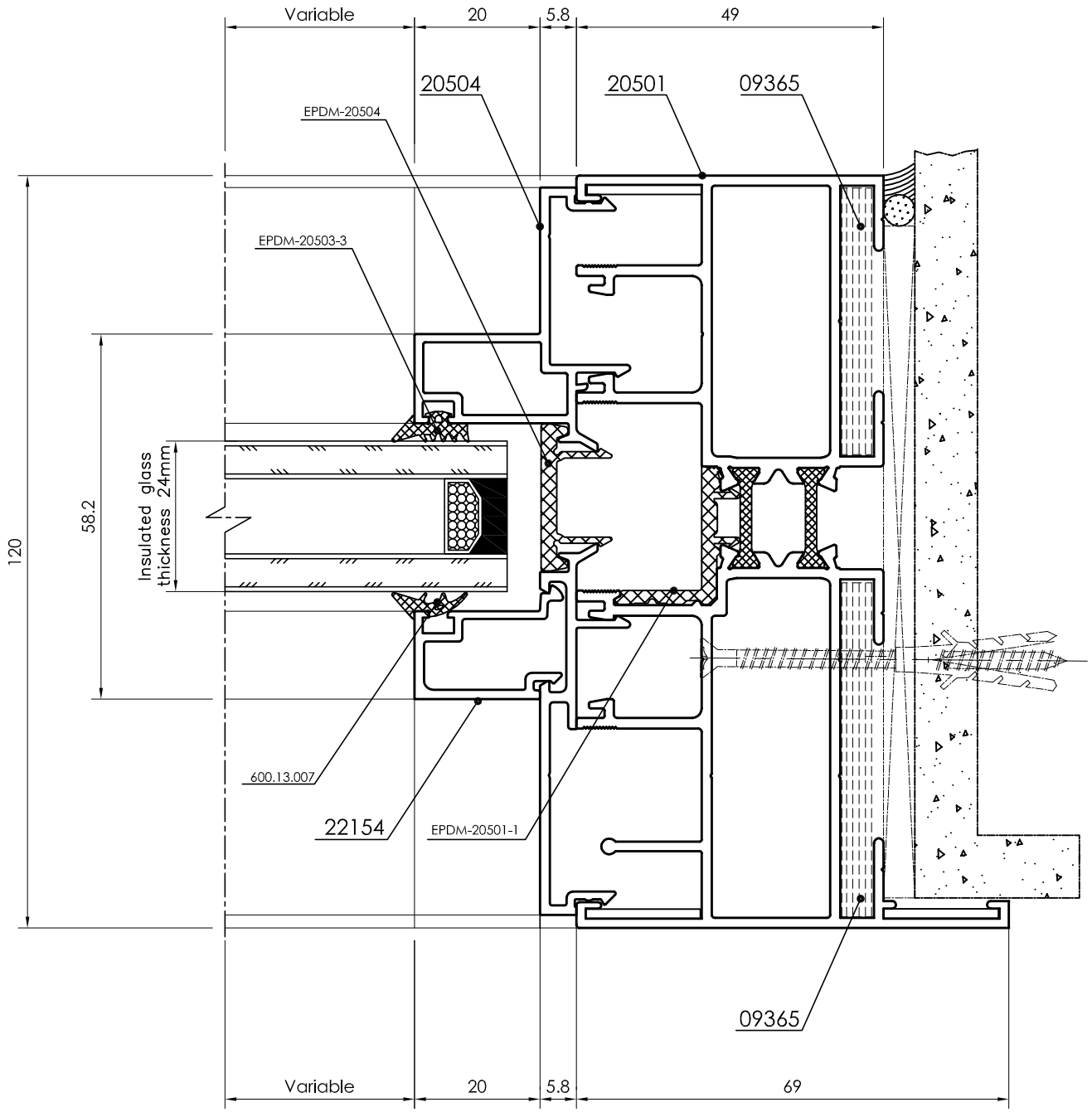
Detail - O



Right Section

Option - 2

Detail - O

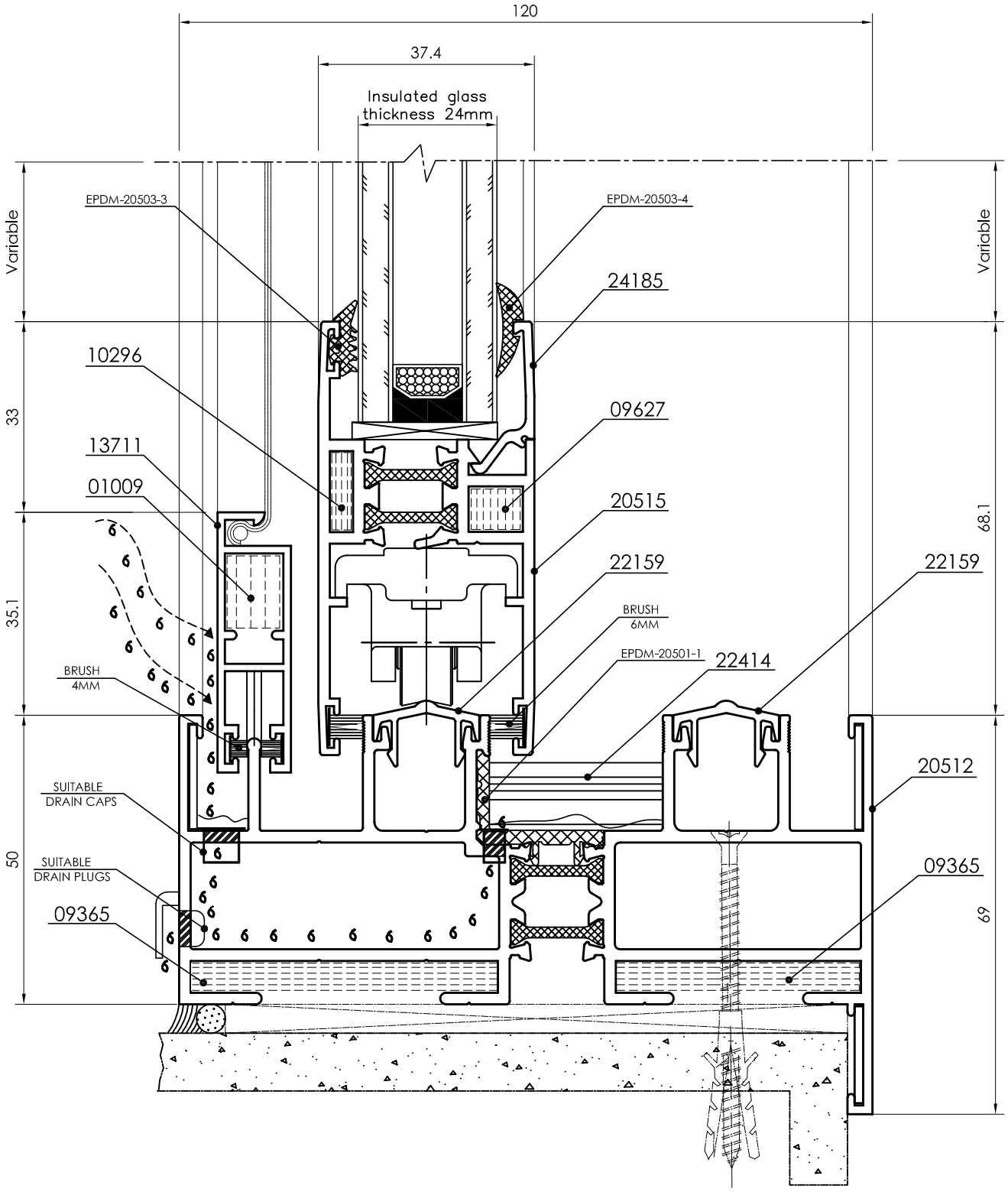


Botttom Section

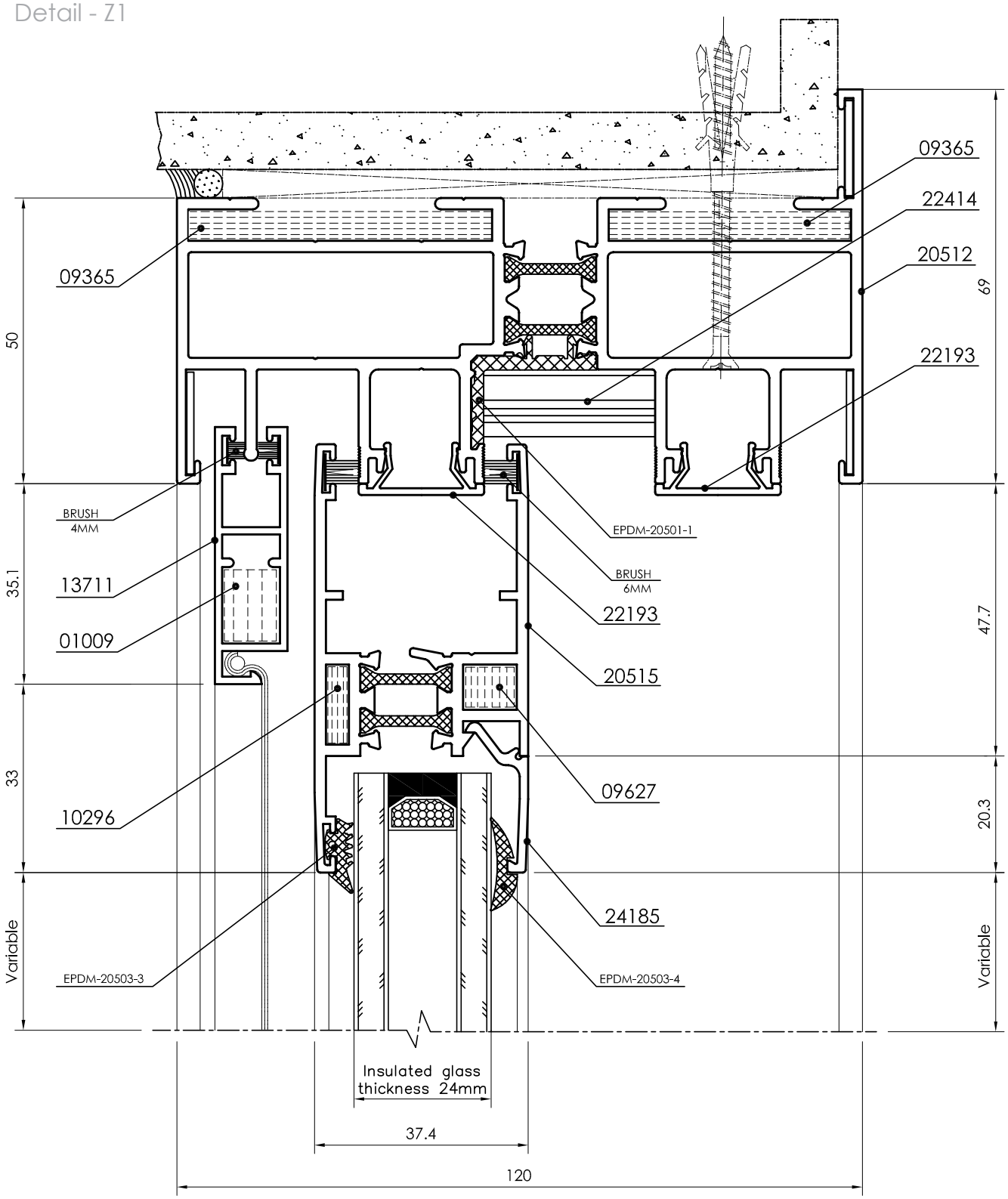
Flyscreen Outside

Detail - Z

IN THIS OPTION MILLING THE THERMAL STRIP TO ADD THE ROLLER, IS NOT REQUIRED



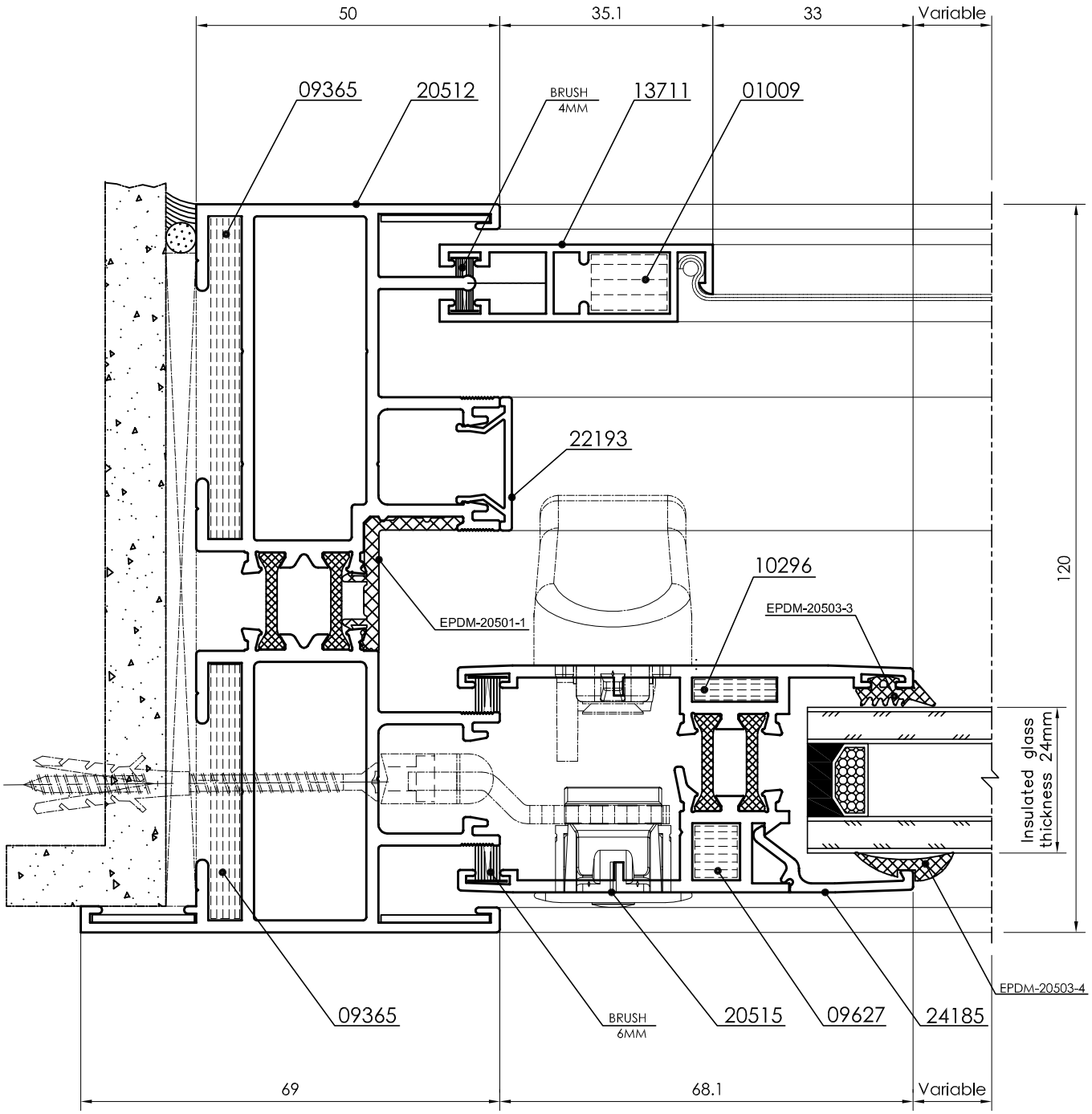
Top Section
Flyscreen Outside
Detail - Z1



left Side Section

Flysreen Outsdide

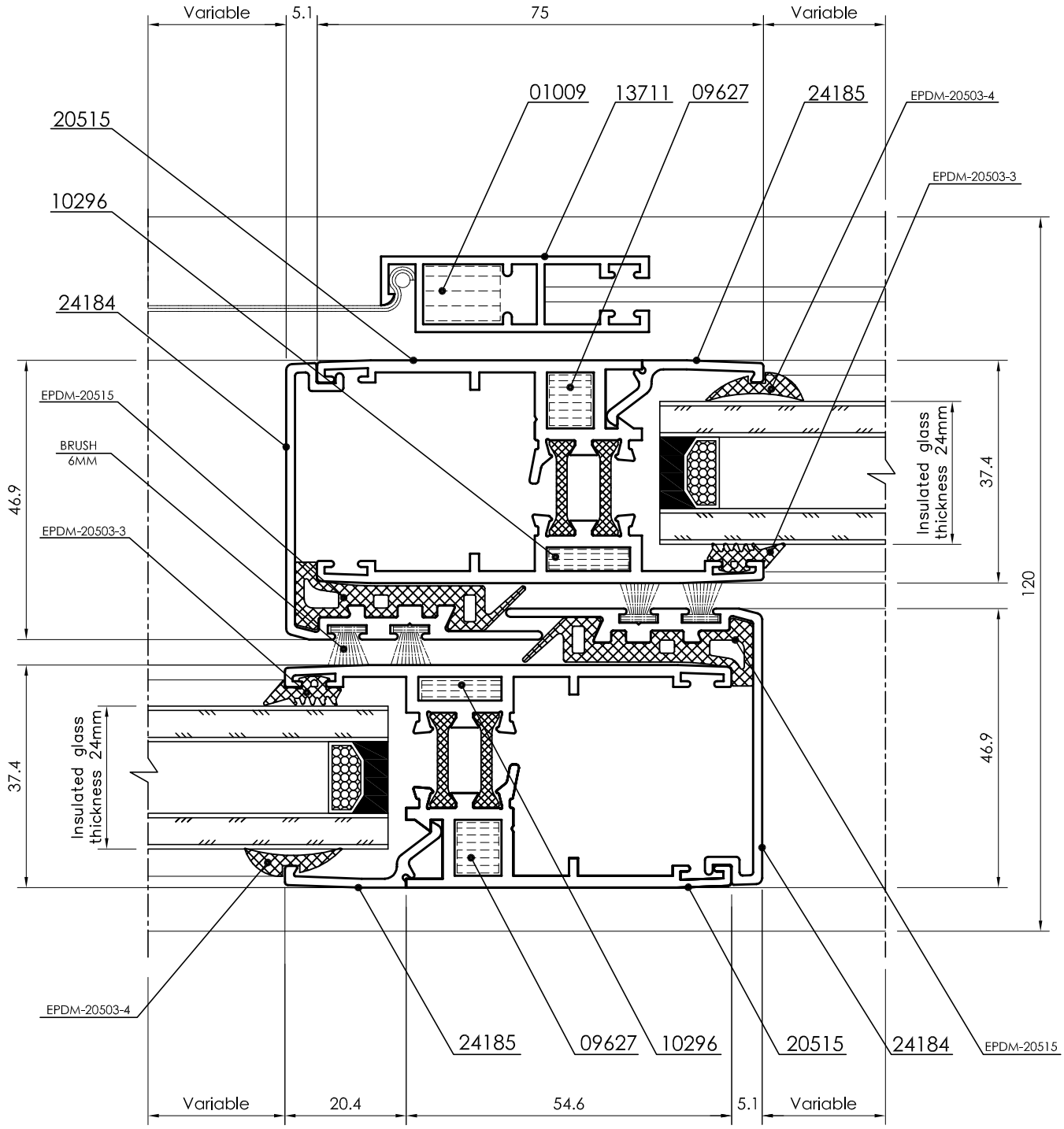
Detail - Z2



Interlock Section

Flyscreen Outside

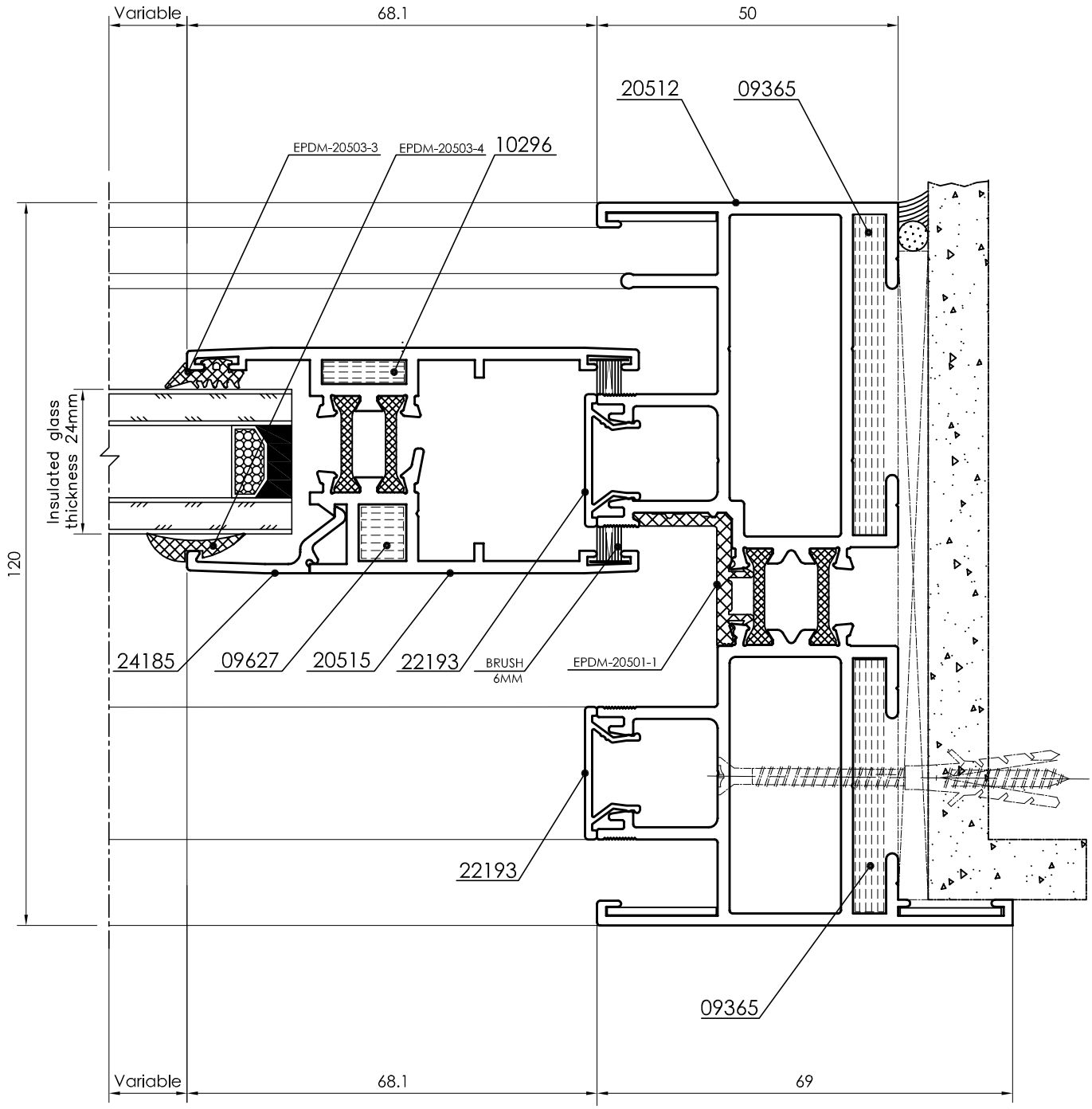
Detail - Z3

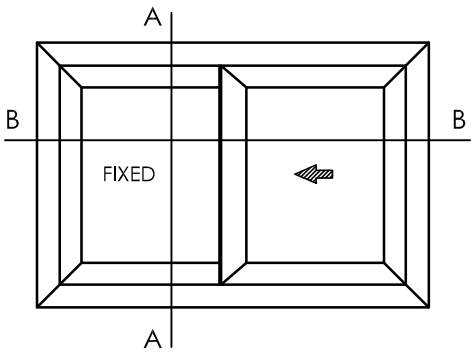


Right Side Section

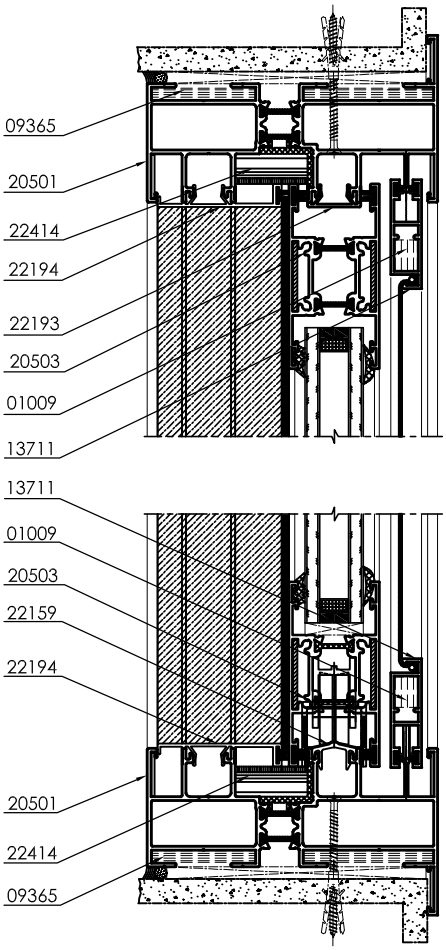
Flyscreen Outside

Detail - Z4



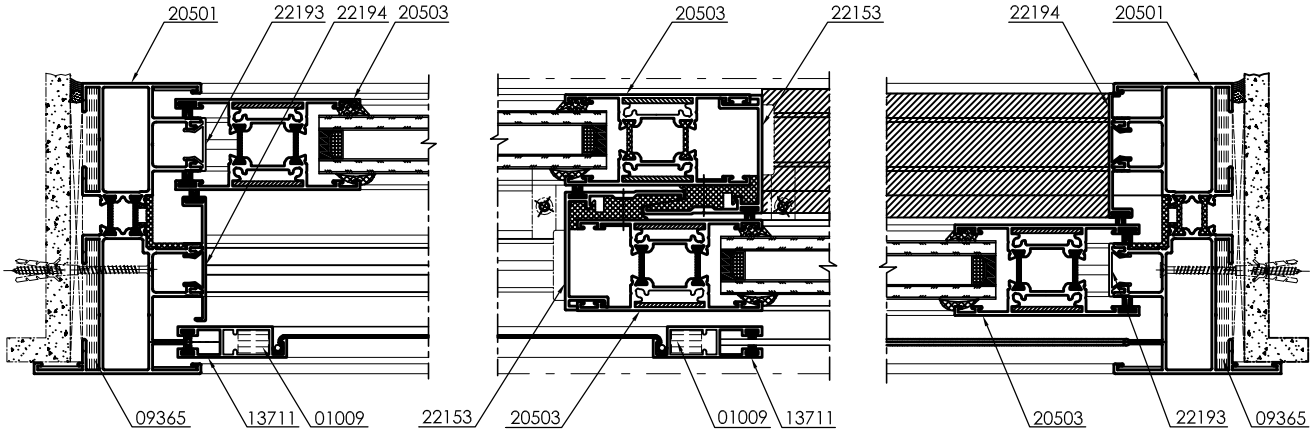


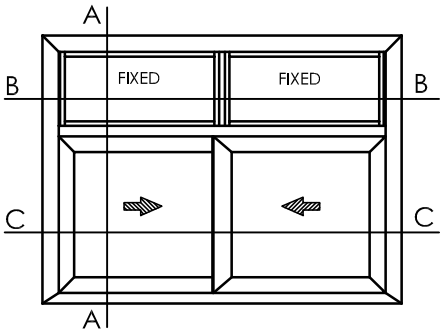
DETAIL : A-A



Profiles		
Description	Shape	Section No.
Frame		20501
SASH		20503
Fly Screen Frame		13711
Bottom rail clip		22159
Upper & Side cover clip		22193
Cover for fixed position		22194
Interlock		22153
Corner Cleat		09365
Corner Cleat		01009
Dust proof		22414

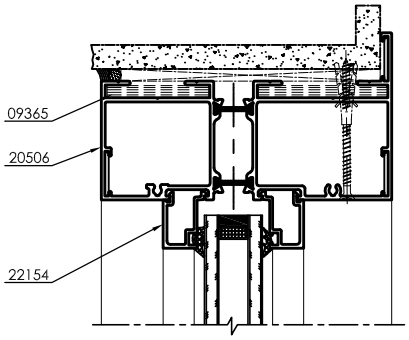
DETAIL : B-B

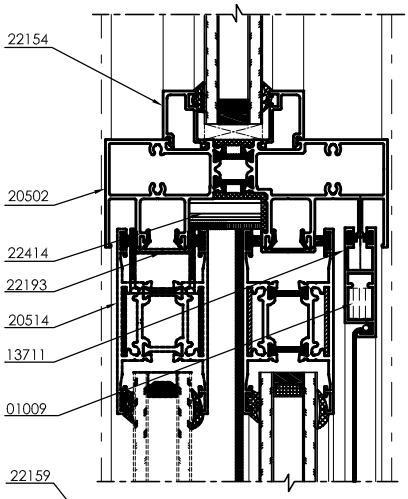




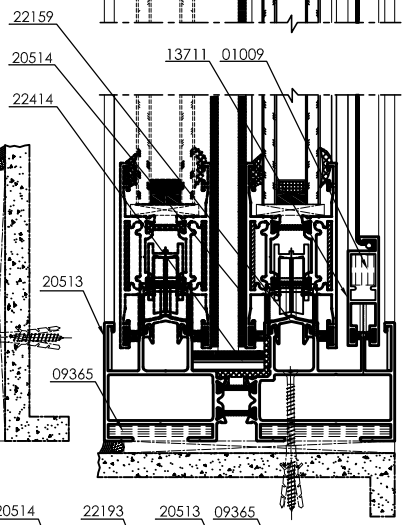
Profiles		
Description	Shape	Section No.
Frame		20513
Sash		20514
Fly screen		13711
Bottom rail clip		22159
Upper & Side cover clip		22193
Top frame		20506
Interlock		22153
Corner Cleat		09365
Corner Cleat		01009
Dust proof		22414
Mullion for Top & Bottom		20505
Glazing bead		22154
Fixed light		20504
Frame Fixed Top & Bottom		20502

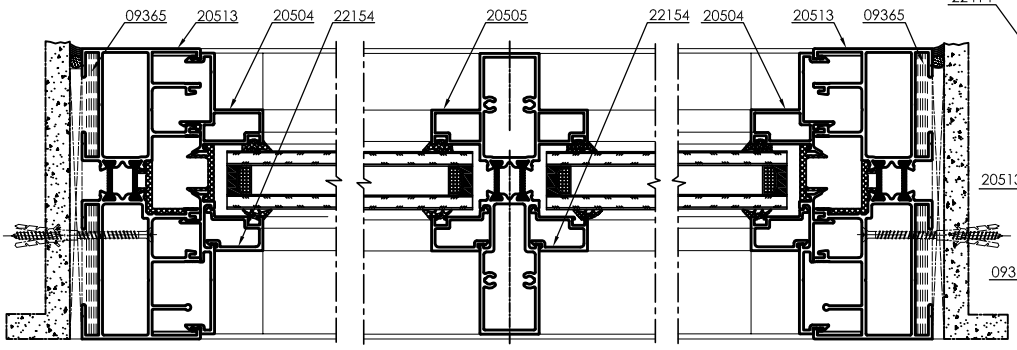
DETAIL : A-A



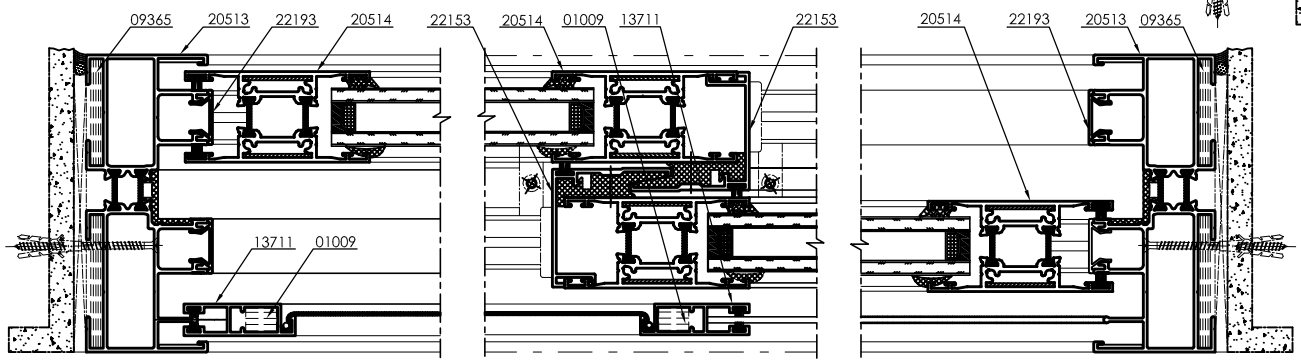


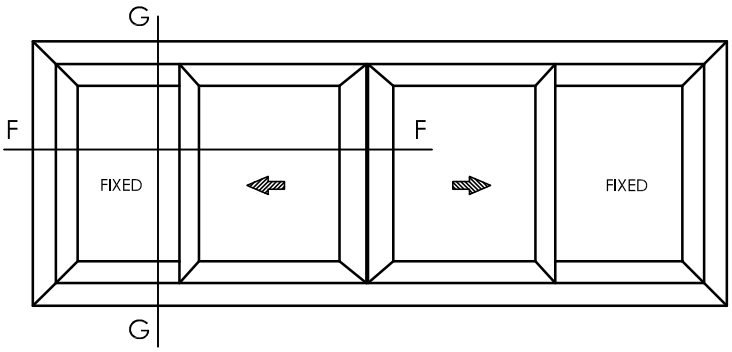
DETAIL : B-B



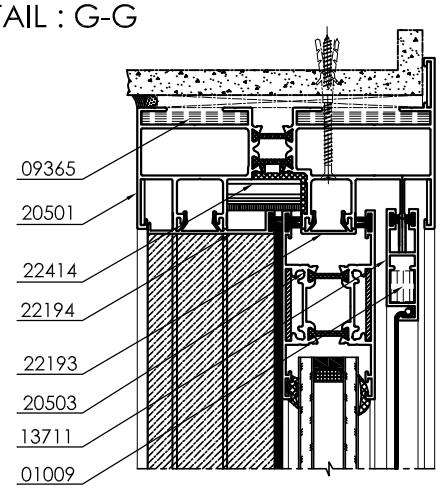


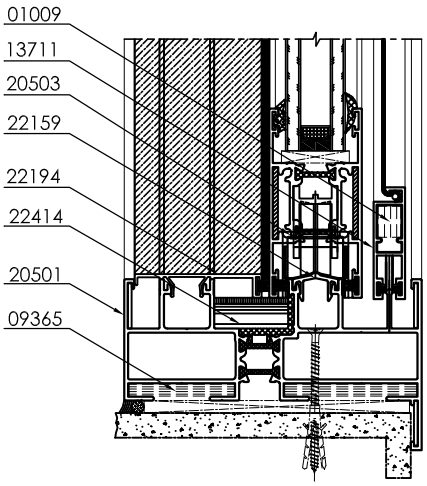
DETAIL : C-C





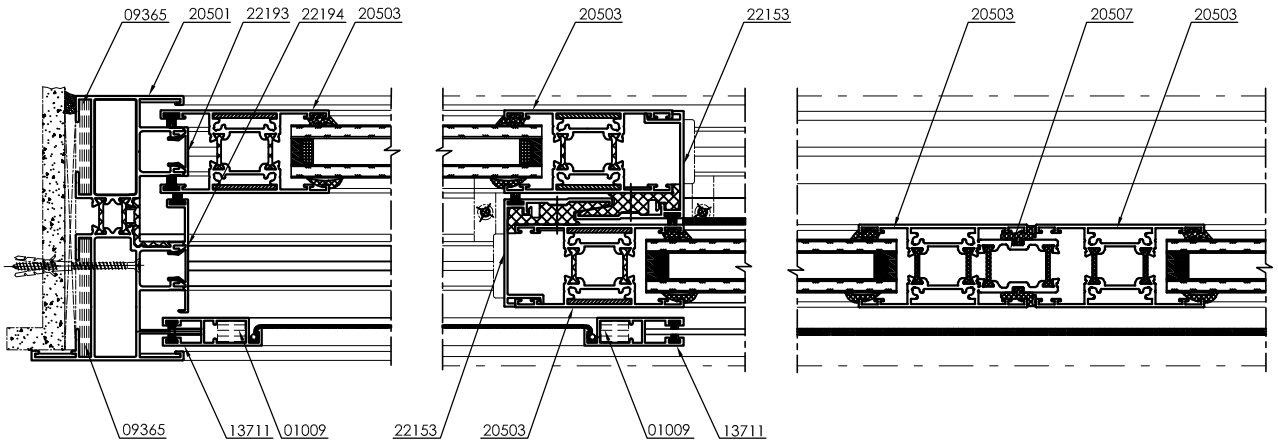
DETAIL : G-G

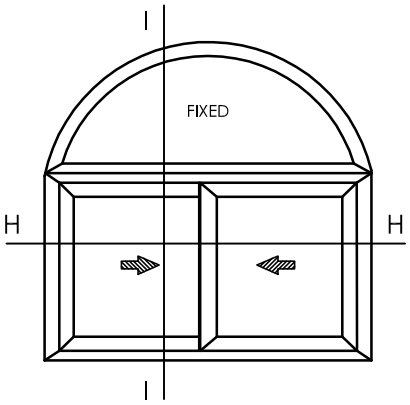




Profiles		
Description	Shape	Section No.
Frame		20501
Sash		20503
Fly screen frame		13711
Bottom rail clip		22159
Upper & Side cover clip		22193
Vertical sash connector		20507
Interlock		22153
Cover for fix position		22194
Corner Cleat		09365
Corner Cleat		01009
Dust proof		22414

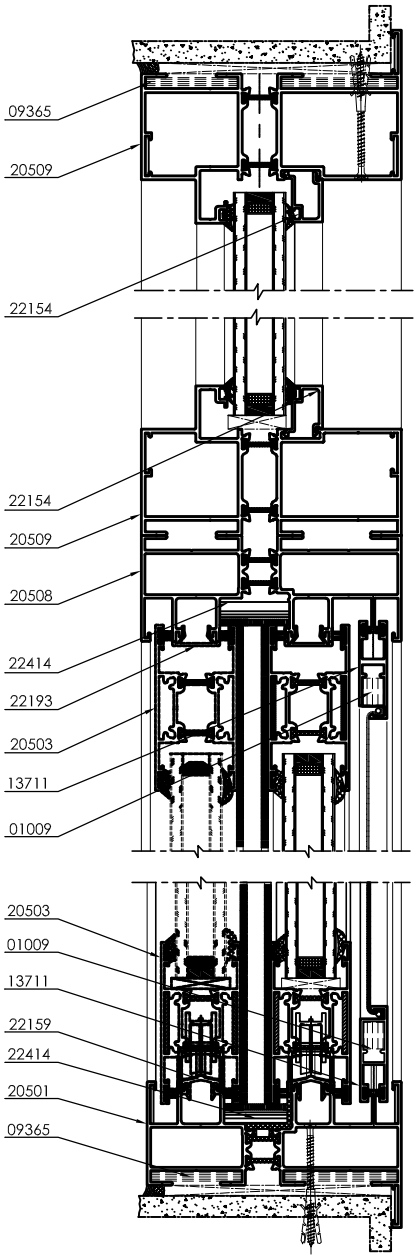
DETAIL : F-F



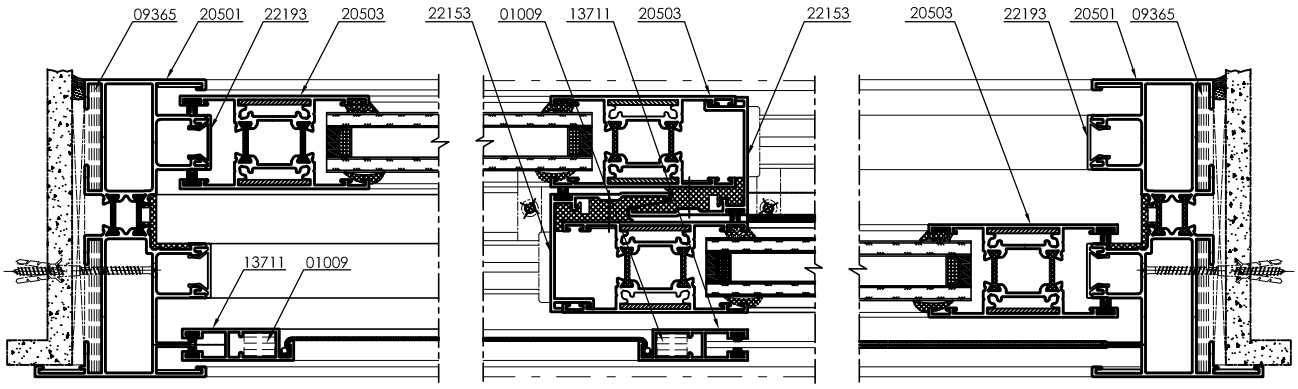


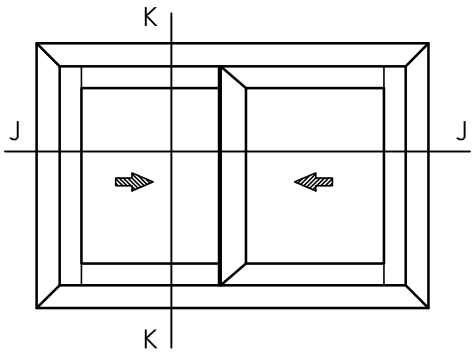
Profiles		
Description	Shape	Section No.
Frame		20501
Sash		20503
Fly screen		13711
Bottom rail clip		22159
Upper & Side cover clip		22193
Fitted profile		20507
Arch frame		20509
Fixed light		20504
Door frame		20508
Glazing bead		22154
Interlock		22153
Corner Cleat		09365
Corner Cleat		01009
Dust proof		22414

DETAIL : I-I



DETAIL : H-H

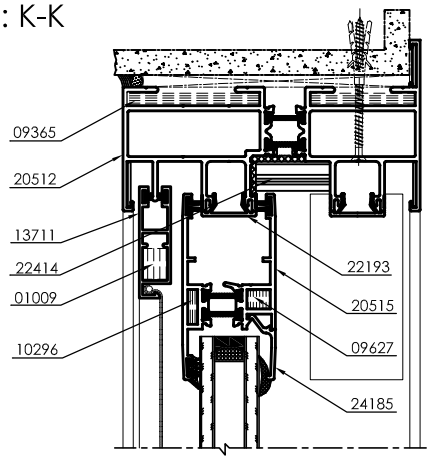


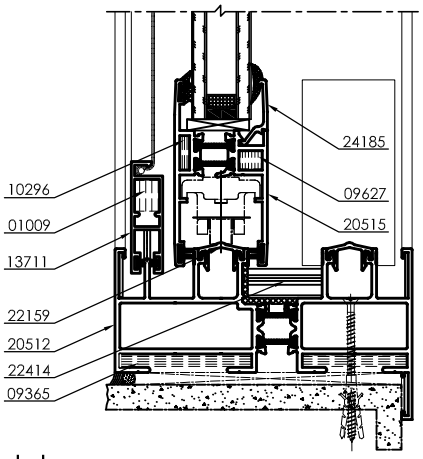


(FLY SCREEN OUT SIDE)

IN THIS OPTION MILLING THE THERMAL STRIP TO ADD THE ROLLER, IS NOT REQUIRED

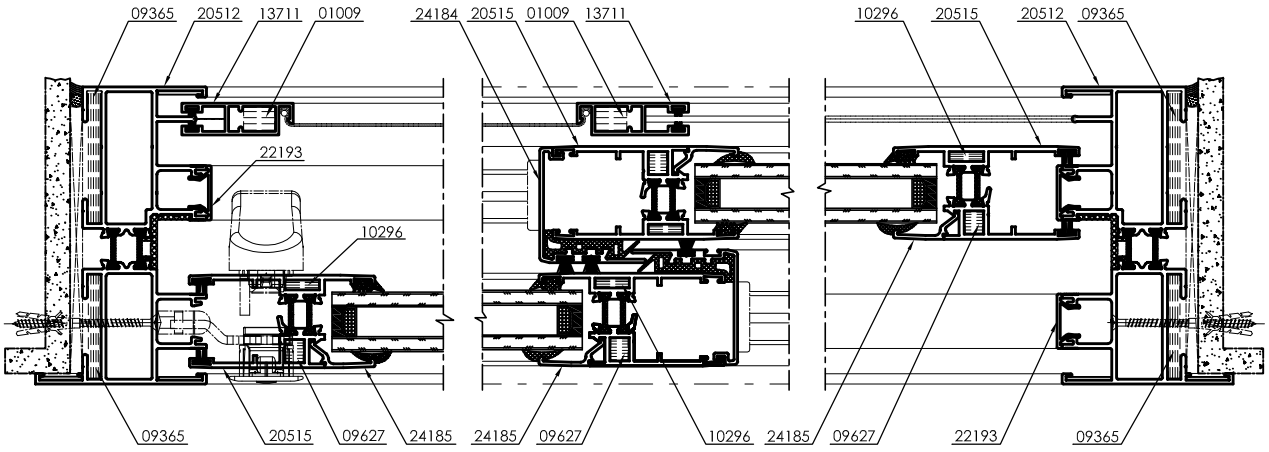
DETAIL : K-K





Profiles		
Description	Shape	Section No.
Frame		20512
Sash		20515
Fly screen		13711
Bottom rail clip		22159
Upper & Side cover clip		22193
Interlock		24184
Corner Cleat		10296
Corner Cleat		09627
Corner Cleat		09365
Corner Cleat		01009
Dust proof		22414
Glazing bead		24185

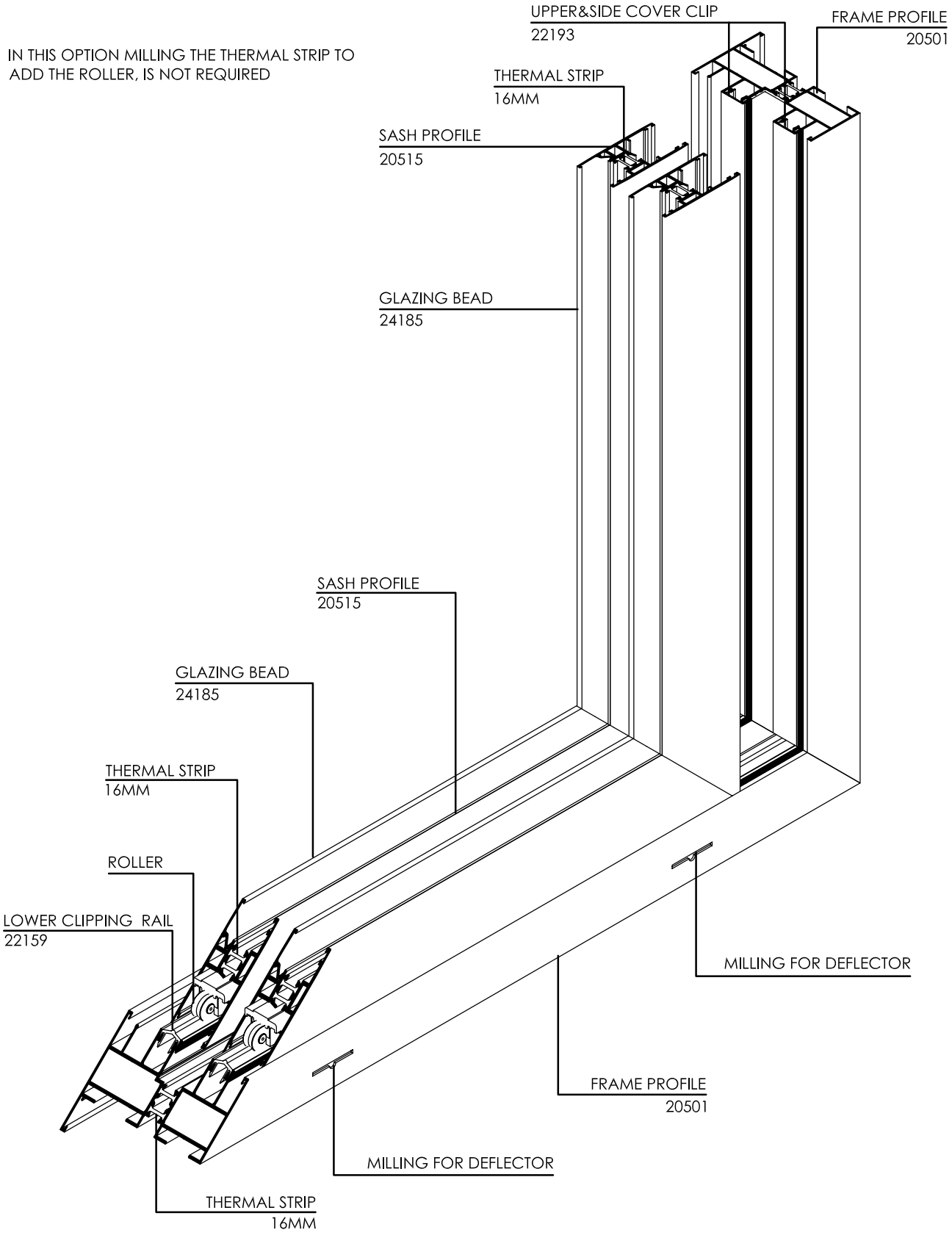
DETAIL : J-J



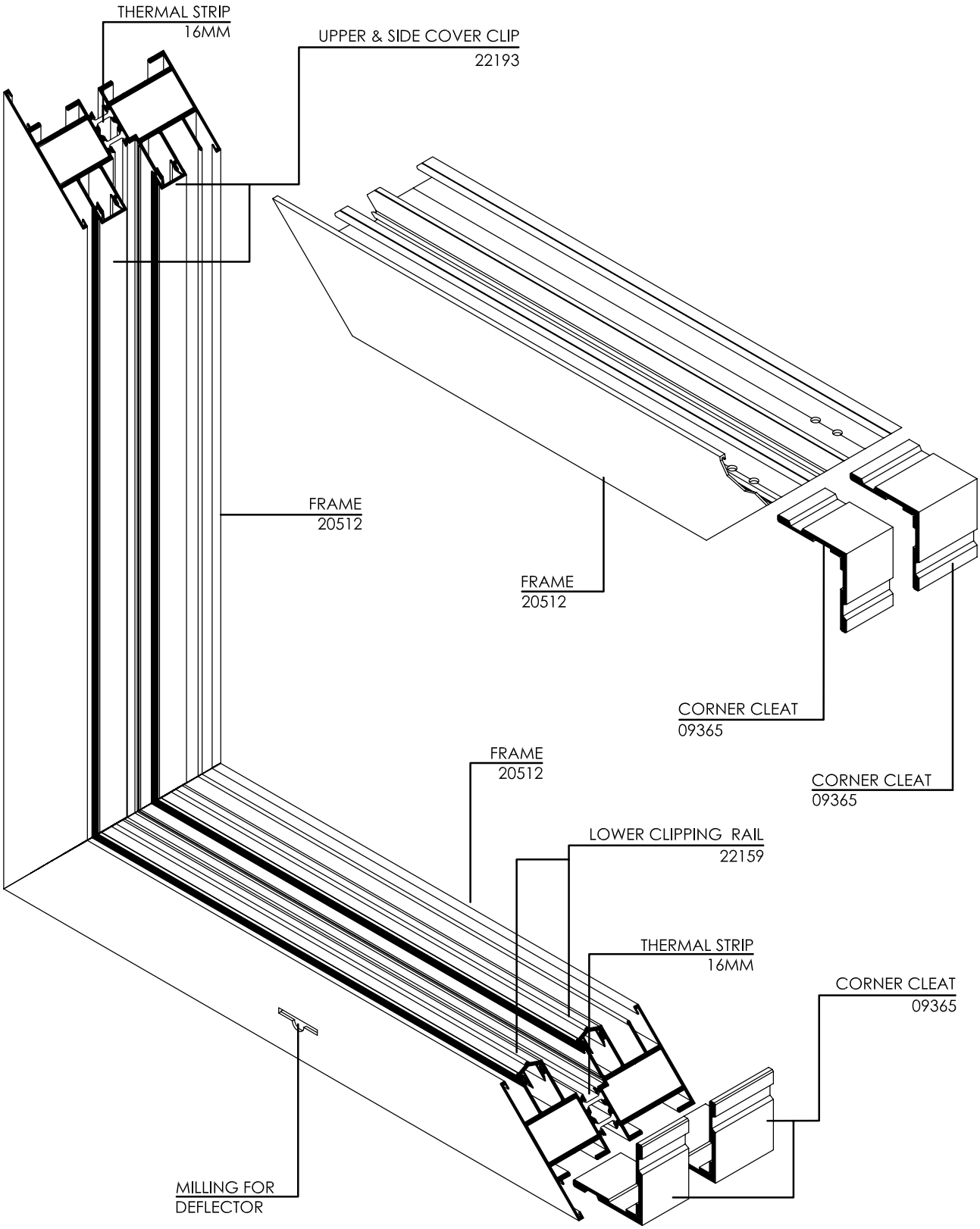
الخليج للسحب
Gulf Extrusions

3D SECTIONS

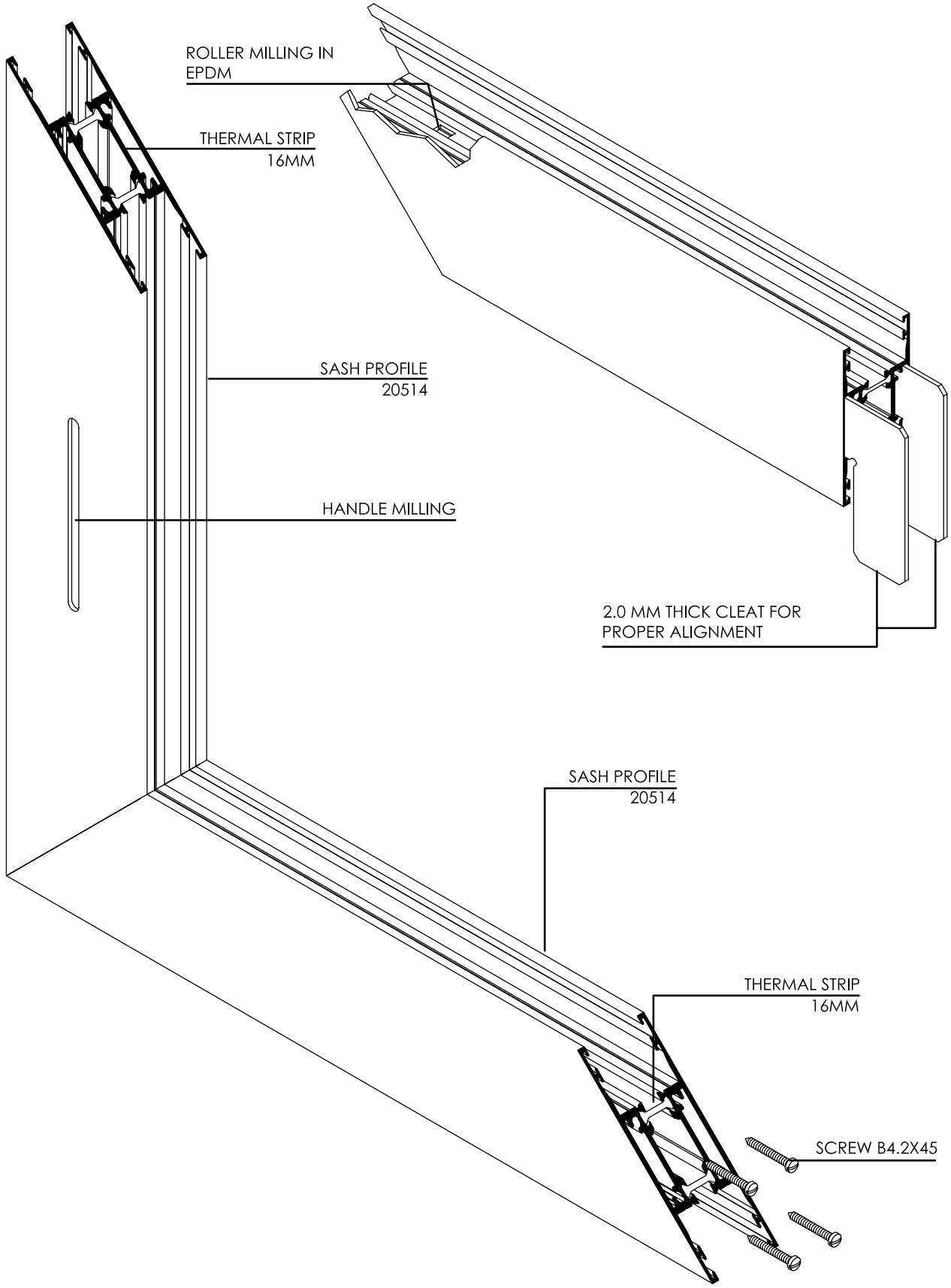
Frame and Sash



Frame

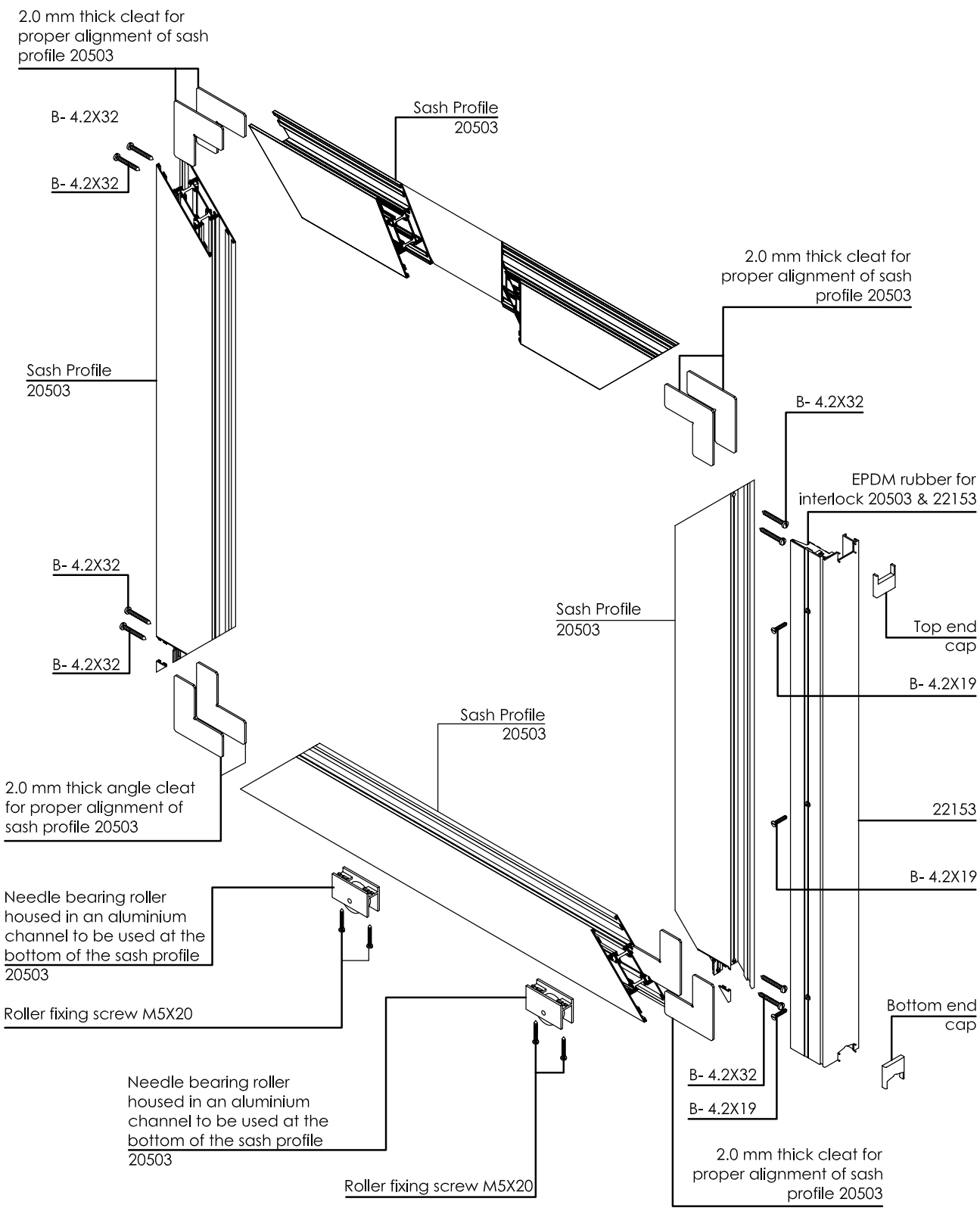

THERMAL STRIP
16MM
UPPER & SIDE COVER CLIP
22193
FRAME
20512
FRAME
20512
CORNER CLEAT
09365
FRAME
20512
CORNER CLEAT
09365
LOWER CLIPPING RAIL
22159
THERMAL STRIP
16MM
CORNER CLEAT
09365
MILLING FOR
DEFLECTOR

Sash


ROLLER MILLING IN EPDM
THERMAL STRIP 16MM
SASH PROFILE 20514
HANDLE MILLING
2.0 MM THICK CLEAT FOR PROPER ALIGNMENT
SASH PROFILE 20514
THERMAL STRIP 16MM
SCREW B4.2X45

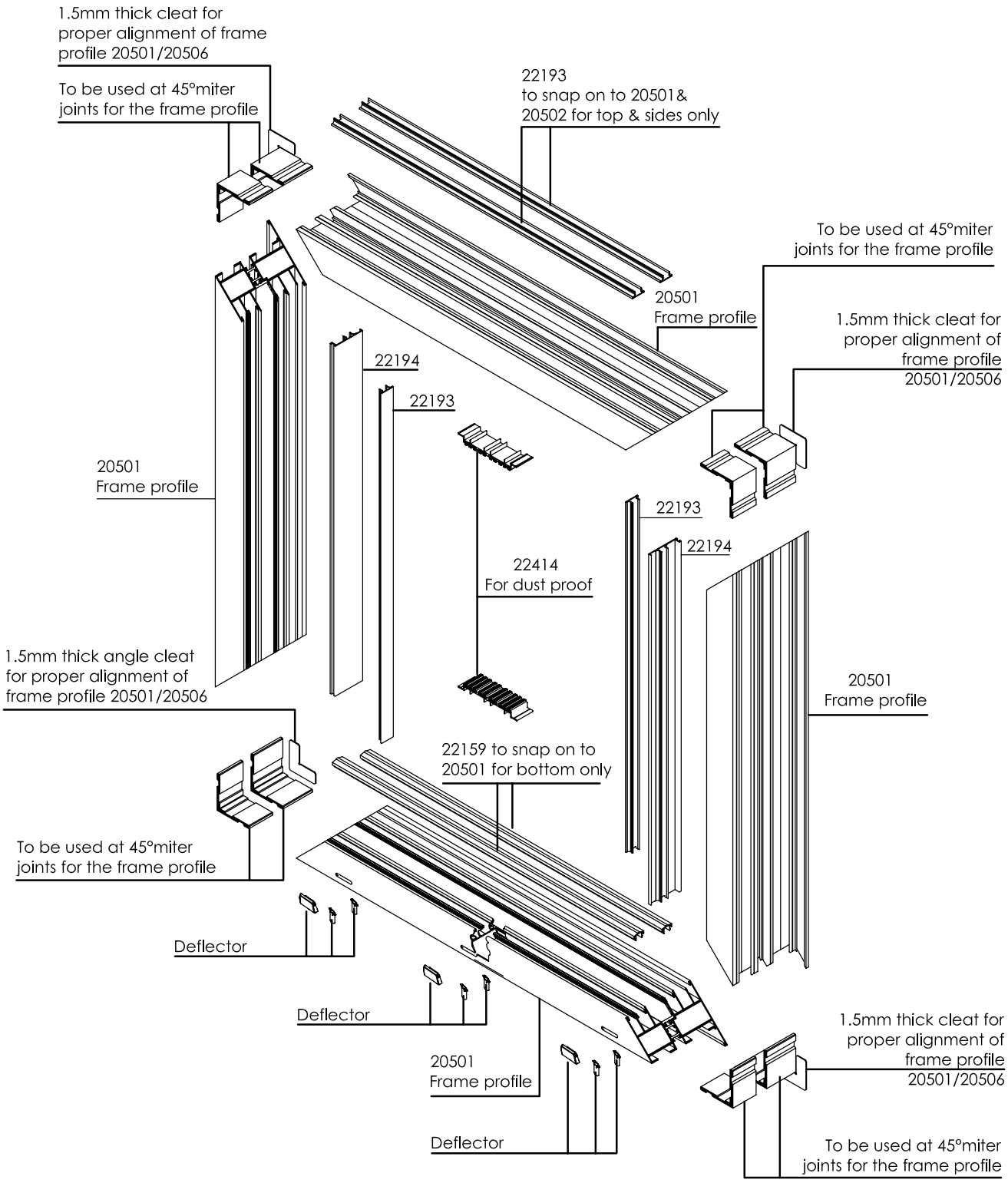
Sash Fabrication Instructions

SASH 3D ASSEMBLY DRAWINGS



Frame Fabrication Instructions

FRAME 3D ASSEMBLY DRAWINGS



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.

الخليج للسحب
Gulf Extrusions

P.O.Box-5598, Dubai, United Arab Emirates • Tel: +971 4 884 6146 • Fax: +971 4 884 6830
Email: mail@gulfex.com • Visit us at www.gulfex.com