

Sliding TB 105mm

09-2018-V.1

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Sliding TB 105mm

105 - A	GULF EXTRUSIONS	03
105 - B	QUALITY AND CERTIFICATIONS	04 - 09
105 - C	INTRODUCTION TO THE SYSTEM	10
105 - D	PROFILES	11 - 13
105 - E	PROFILE LIST	15 - 17
105 - F	ACCESSORIES	19 - 21
105 - G	ASSEMBLY DRAWINGS	23 - 33
105 - H	3D SECTIONS	35 - 38

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



Health & Safety:

- OHSAS 18001 (Certification for occupational health & safety management)



Management:

- ISO 9001 (Quality Management System)
- ISO/TS 16949:2009 (Management System)



Environment:

- ISO 14001 (Environment Management System)



Membership in International Organization:

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



CHEMICAL COMPOSITIONS

ALLOY 6005A

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

ALLOY 6060

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

ALLOY 6063

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

ALLOY 6082

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

ALLOY 6061

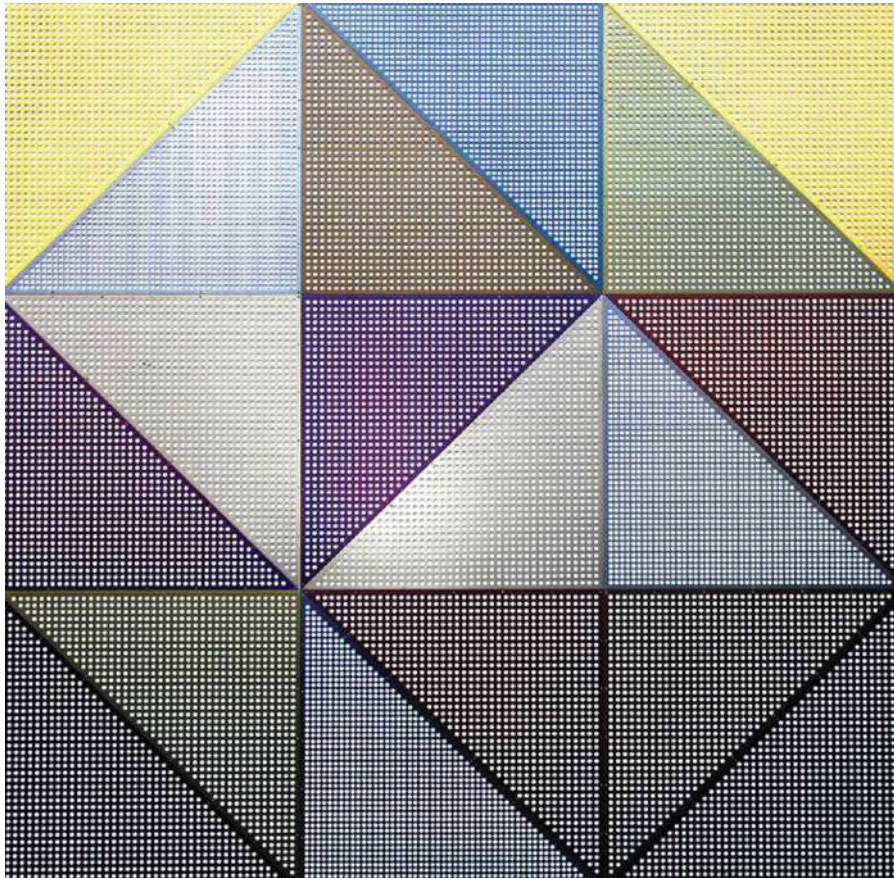
Element	Minimum	Maximum
Si	0.40	0.80
Fe	-	0.70
Cu	0.15	0.40
Mn	-	0.15
Mg	0.8	1.20
Cr	0.04	0.35
Zn	-	0.25
Ti	-	0.15
Other Each	-	0.05
Other Total	-	0.15
Aluminium	Remainder	

ANODIZING

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

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

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



Authorization to use the quality sign



This is to certify that

GULF EXTRUSIONS CO. 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



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Fax: +41 (0)43 305 09 98
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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-Vinylidene DiFluoride (PVDF) in terms of corrosion performance)
- Anti Bacterial (recommended to be used in Hospitals)
- Anti Static (recommended for laboratories, electronics assembly buildings) and Heat Resistant in nature.

This surface treatment process involves the following pre-treatment

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

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

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

GUARANTEE PERIOD:

10 years for PE-F Quality

25 years for PE-SDF

Authorization

to use the quality sign



This is to certify that

GULF EXTRUSIONS CO. 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 31.12.2018

Zurich, 31 October 2017

QUALICOAT

Mohammed C. Panam
President

CERTIFICATION BODY

Josef Schoppig
AC-Fiduciaire SA



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Internet: www.qualicoat.net

INTRODUCTION TO THE SYSTEM

Sliding TB105mm:

The Sliding Thermal Break 105mm is a special insulated system designed for heavy commercial use. The results have been impressive and apply to energy conservation, sound reduction and water & dust proofing.

The Sliding Thermal Break 105mm with 16mm fiberglass reinforced polyamide insulation and 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.

The System consists of a single frame and sash profile that will be used on all four sides. 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.

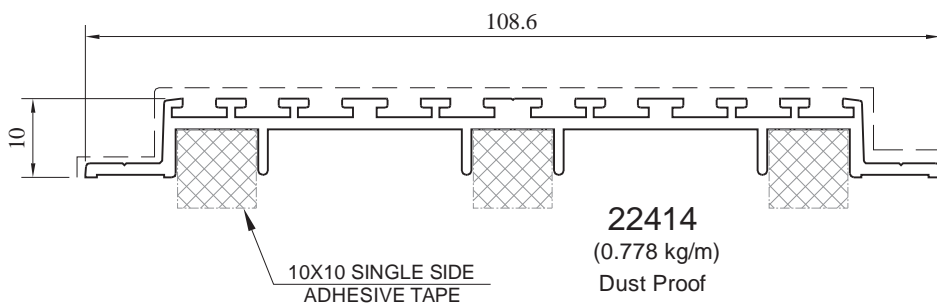
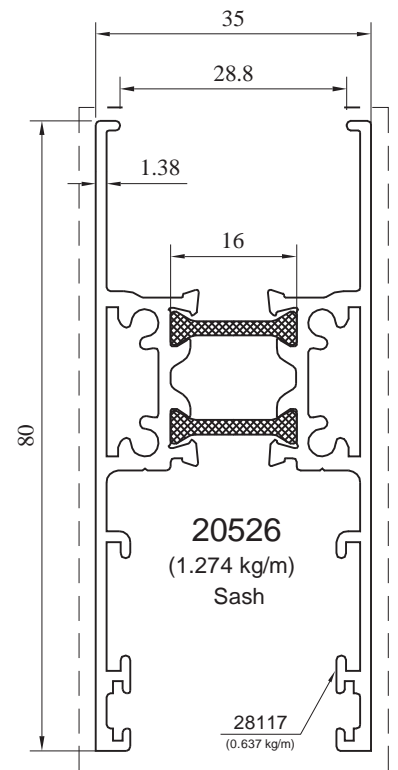
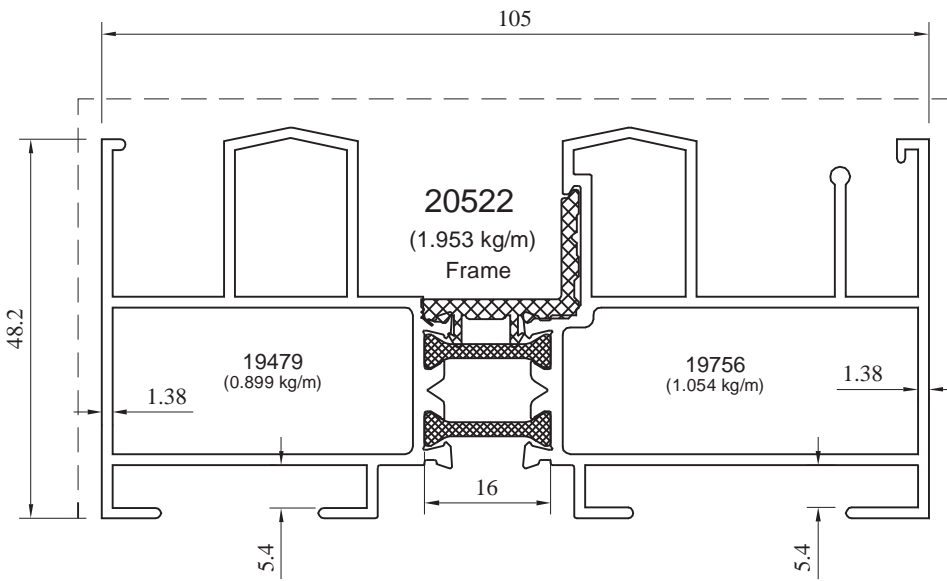
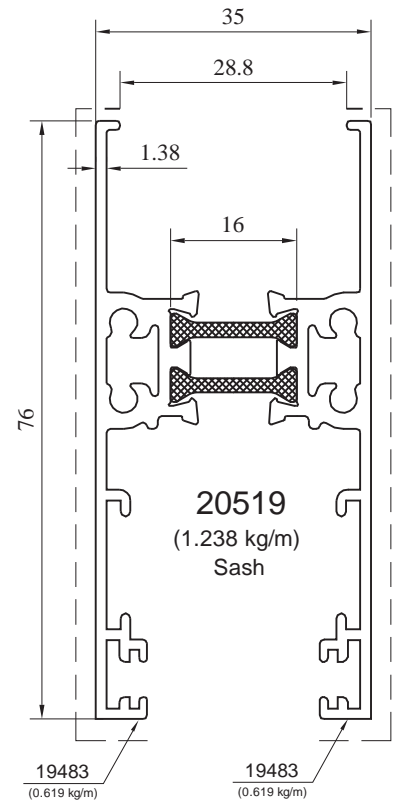
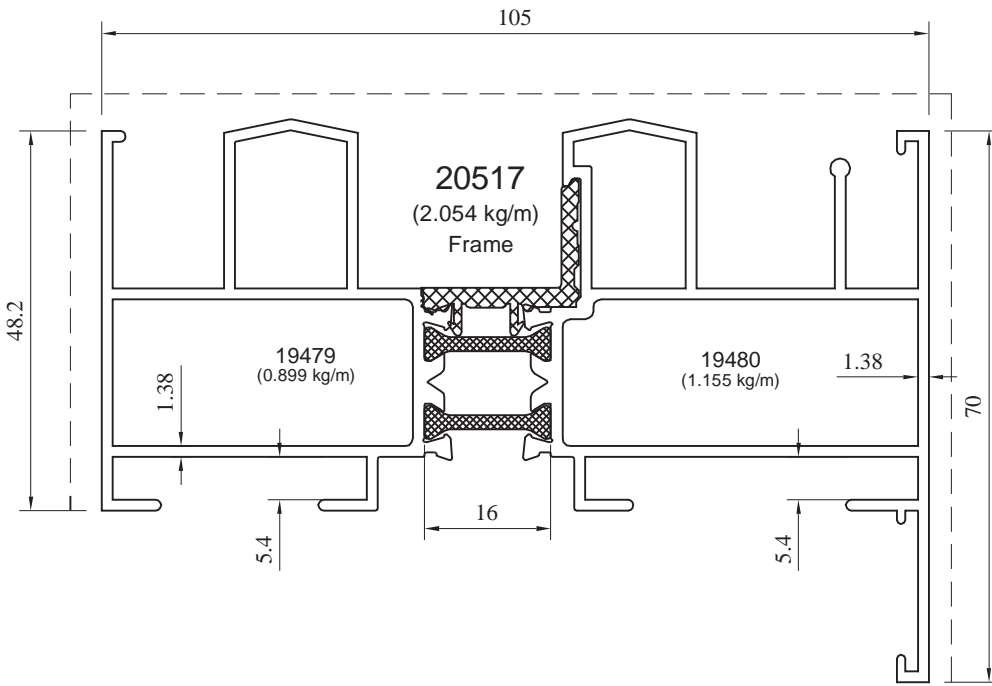
The system covers two sashes including profiles for top and bottom fixed lights. Special lids have been designed to cover the frame tracks at the area where the sliding shutter is fixed.

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.

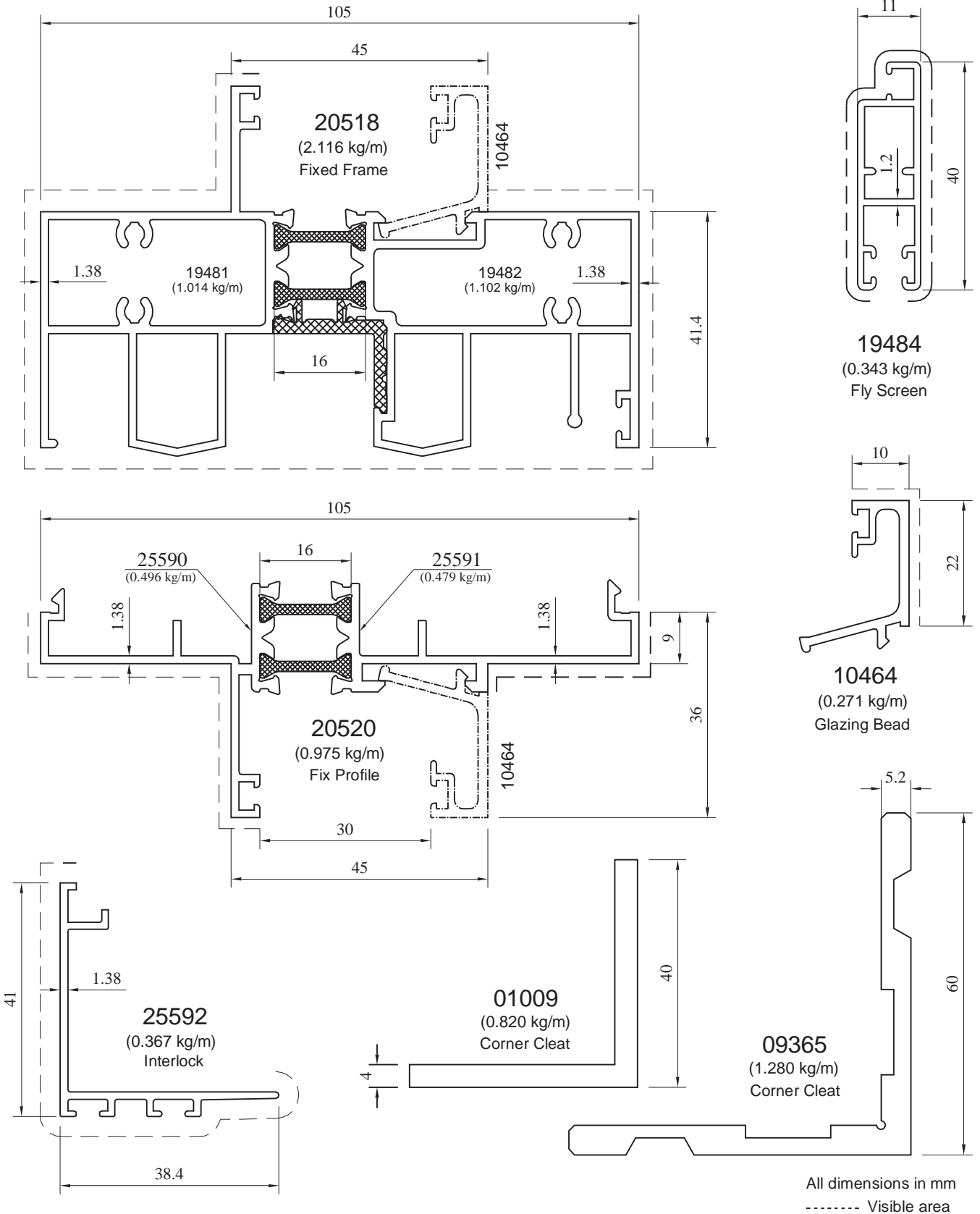
PROFILES

STB - 105

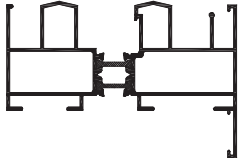
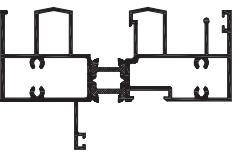

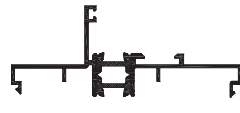

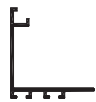






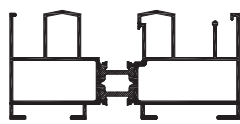
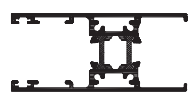
All dimensions in mm
 ----- Visible area

STB - 105





PROFILE LIST

Profile Reference	Child Profile	Profile Section	Page	Weight KG/M	IX cm ⁴	IY cm ⁴	WX cm ³	WY cm ³
20517	19479 + 19480		12	2.054	20.601	90.693	3.781	21.137
20518	19481 + 19482		13	2.116	17.413	84.236	4.601	15.953
20519	19483 + 19483		12	1.238	9.416	17.884	5.380	4.594
20520	25590 + 25591		13	0.975	2.780	28.505	0.988	5.117
19484	---		13	0.343	1.729	0.232	0.849	0.394
25592	---		13	0.367	2.403	1.657	0.869	0.578
10464	---		13	0.271	0.812	0.254	0.597	0.186

Profile Reference	Child Profile	Profile Section	Page	Weight KG/M	IX cm ⁴	IY cm ⁴	WX cm ³	WY cm ³
09365	---		13	1.280	---	---	---	---
01009	---		13	0.820	---	---	---	---
22414	---		12	0.778	---	---	---	---
20522	19479 + 19756		12	1.953	16.147	81.172	5.971	15.364
20526	28117 + 28117		12	1.274	19.070	9.535	4.581	5.448

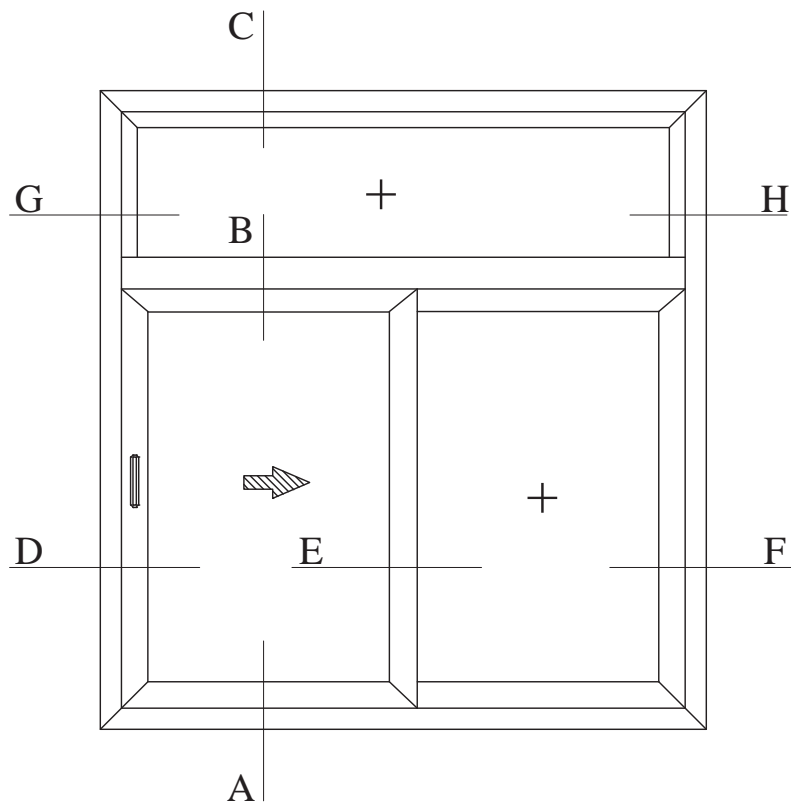
ACCESSORIES

Gasket/Accessories Reference	Section	Description	Unit
EPDM-20517		EPDM FILLER RUBBER FOR 20517 & 20518	Linear Meter
EPDM-INTERLOCK 20519		EPDM RUBBER FOR INTERLOCK	Linear Meter
EPDM-20519		EPDM SEALING U-TYPE RUBBER TO BE USED WITH SASH 20519 TO HOLD 24MM (DOUBLE GLAZED UNIT)	Linear Meter
EPDM-600.13.007		EPDM SEALING RUBBER TO BE USED WITH GLAZING BEAD -INWARD SIDE TO HOLD 24MM (DOUBLE GLAZED UNIT)	Linear Meter
EPDM-20503-3		EPDM SEALING RUBBER TO BE USED WITH FIXED FRAME -OUTWARD SIDE TO HOLD 24MM (DOUBLE GLAZED UNIT)	Linear Meter
BRUSH-3mm		3.0mm NORMAL BRUSH FOR SASH & INTERLOCK	Linear Meter
Handle 20519		INSIDE HANDLE + COUPLING KIT + NIB & COUNTER PLATE	Piece
Roller 20517		ONE WHEEL FIXED CARRIAGE	Piece
Roller 20517-1		TWO WHEEL ADJUSTABLE CARRIAGE	Piece

Gasket/Accessories Reference	Section	Description	Unit
CA-20517		1.5mm THICK CLEAT FOR PROPER ALIGNMENT OF FRAME PROFILES 20517	Piece
CA-20519		1.75mm THICK CLEAT FOR PROPER ALIGNMENT OF SASH PROFILES 20519	Piece

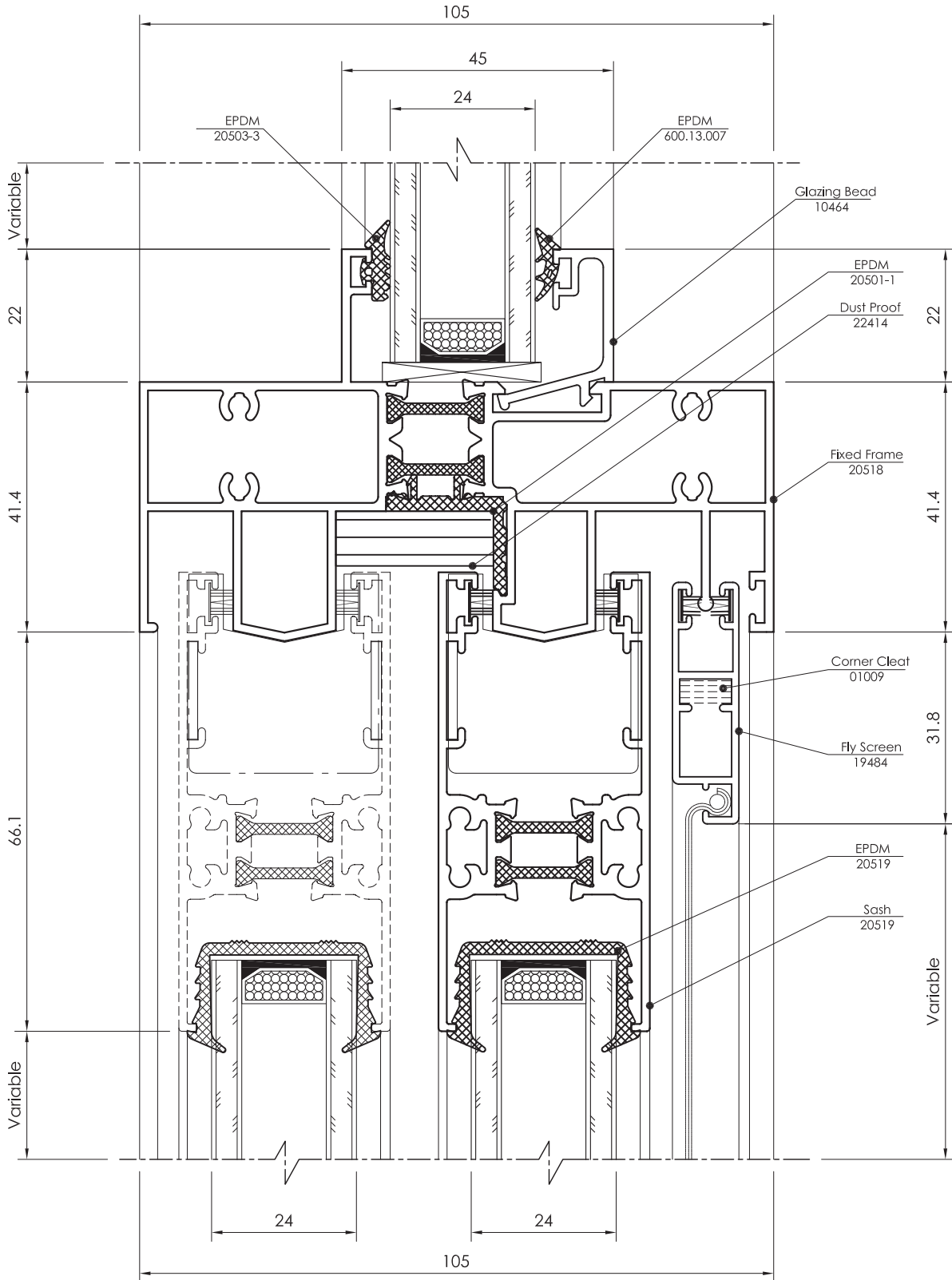
ASSEMBLY DRAWINGS

Sliding Window (105mm) with Fixed Panel



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

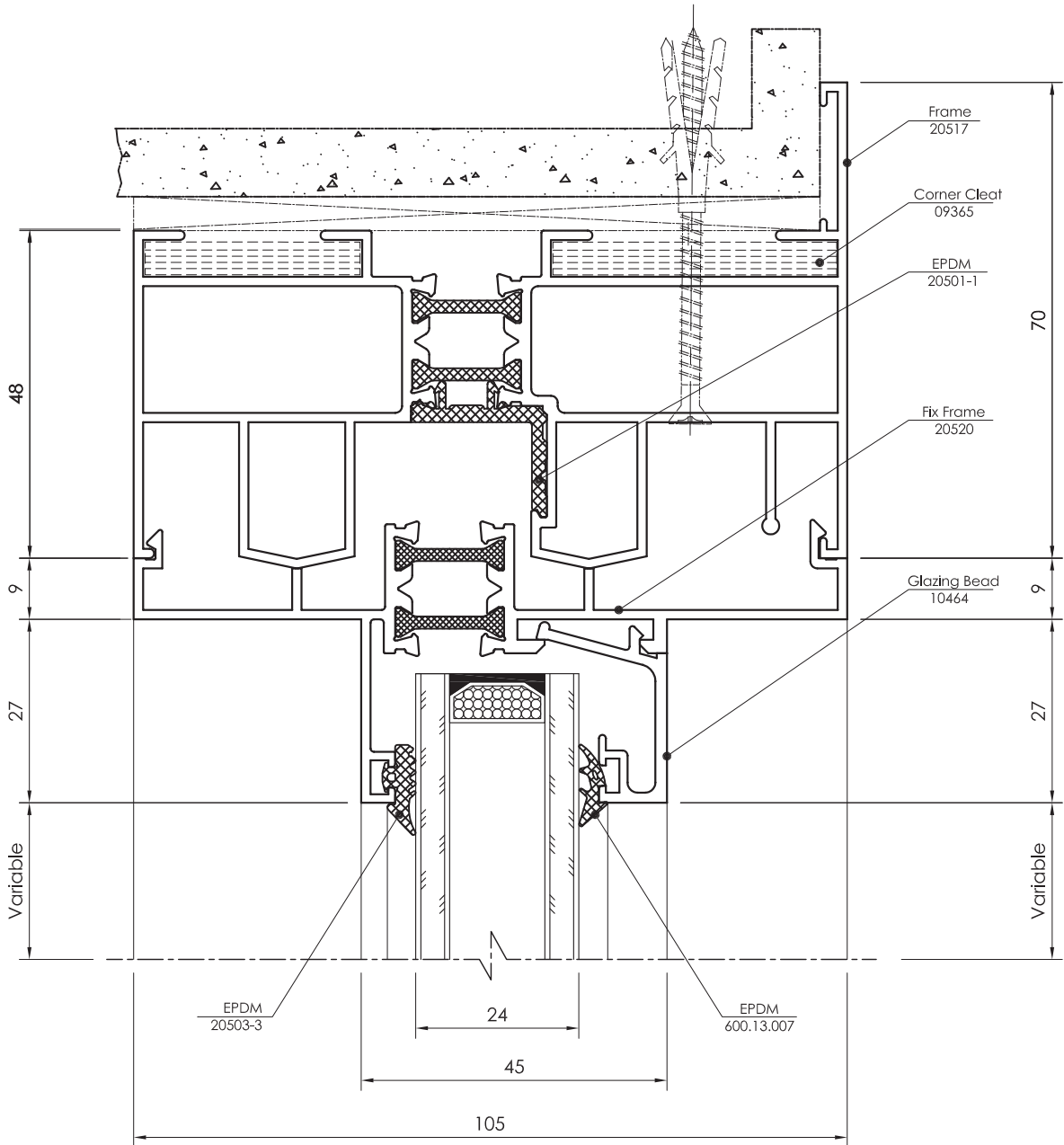
STB - 105
Detail - B



All dimensions in mm
Visible area_____

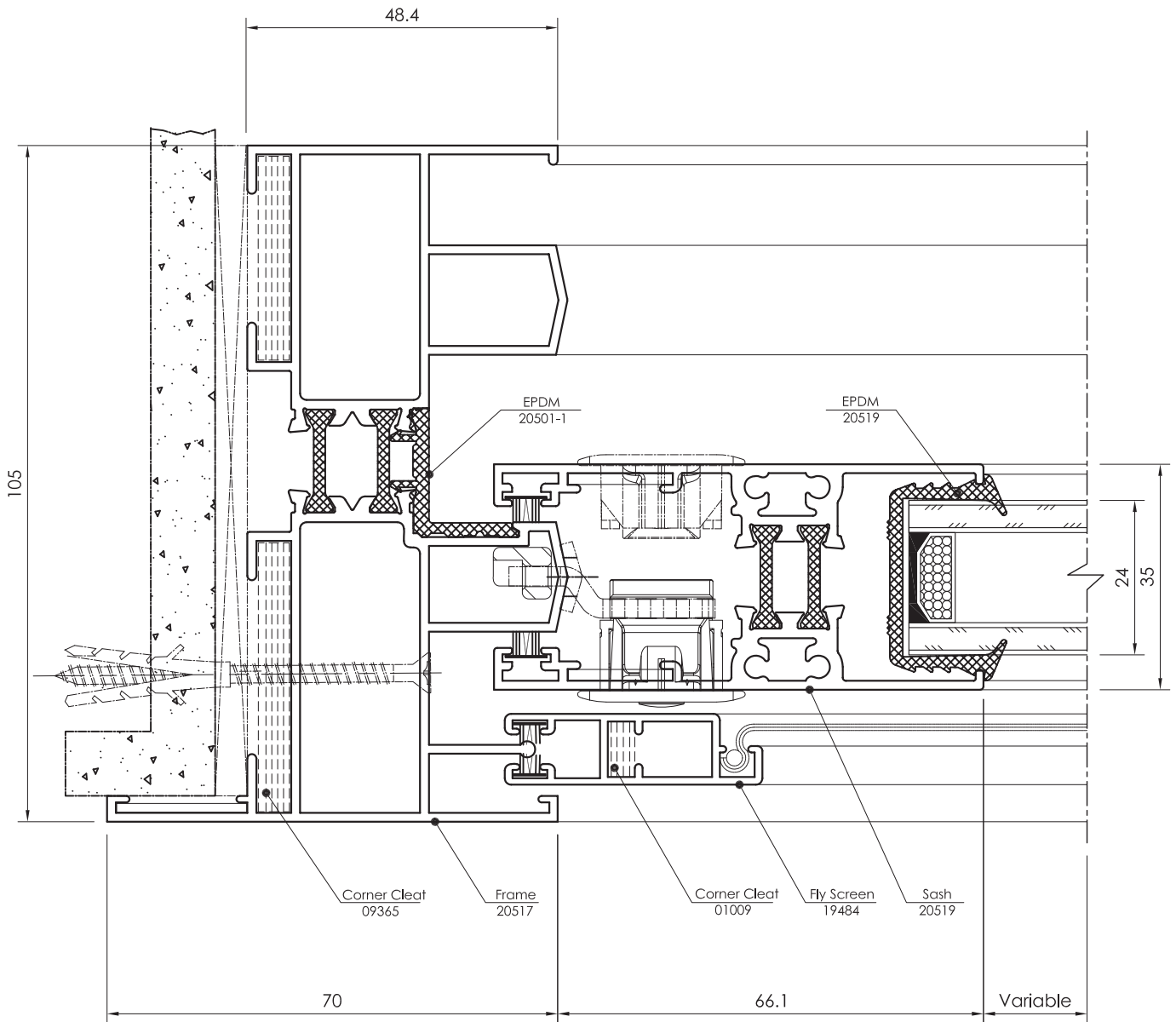
STB - 105

Detail - C



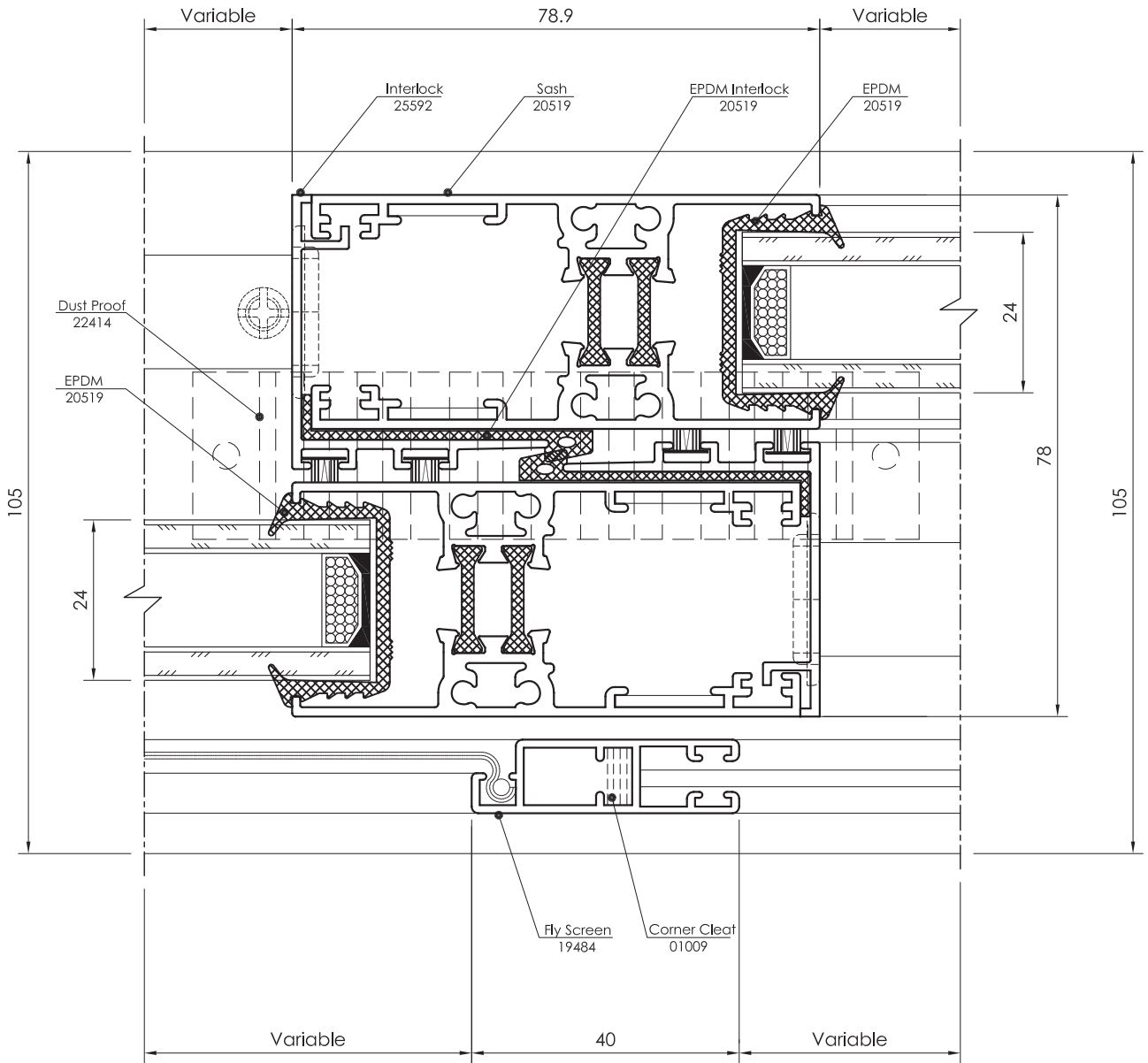
All dimensions in mm
----- Visible area

STB - 105
Detail - D



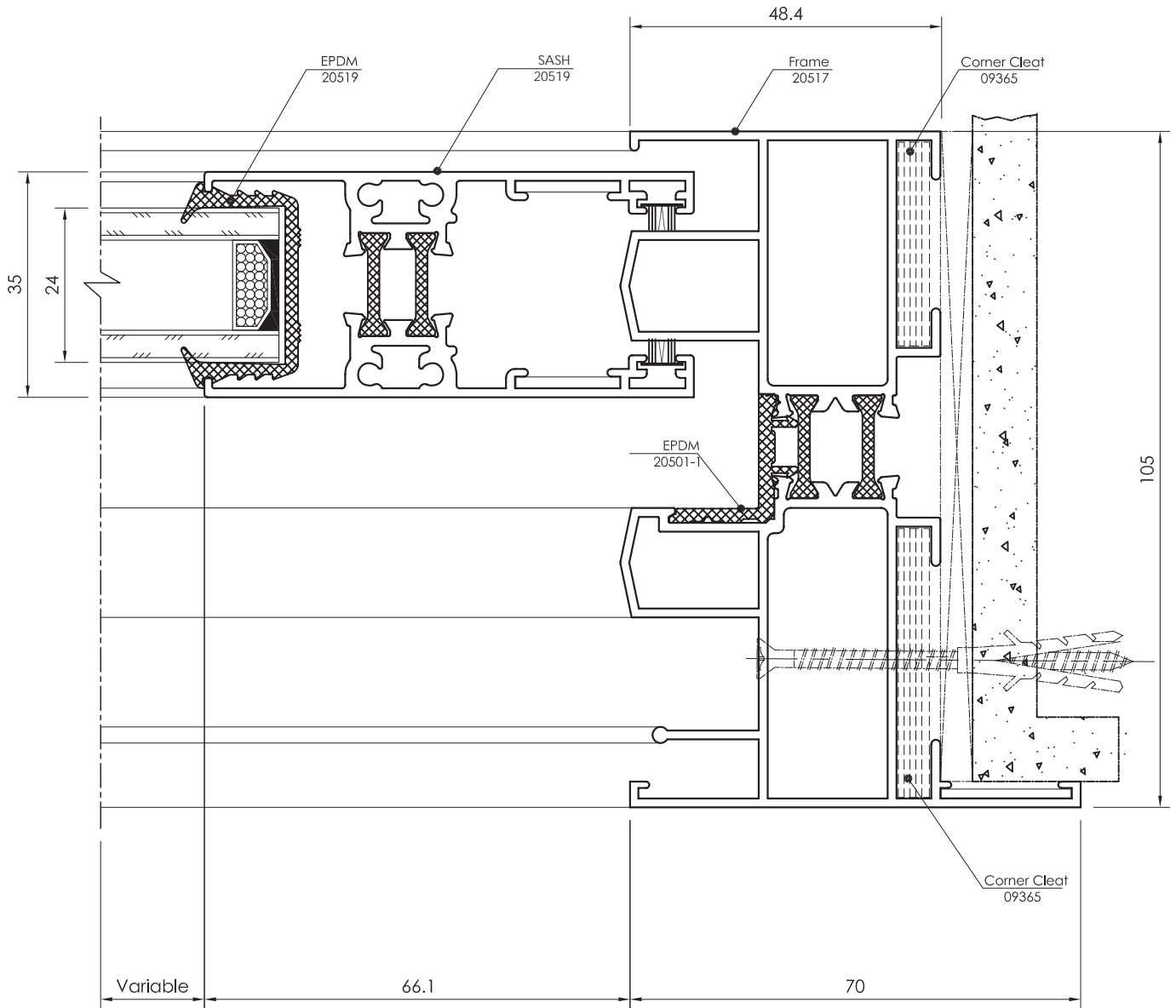
All dimensions in mm
Visible area_____

STB - 105
Detail - E



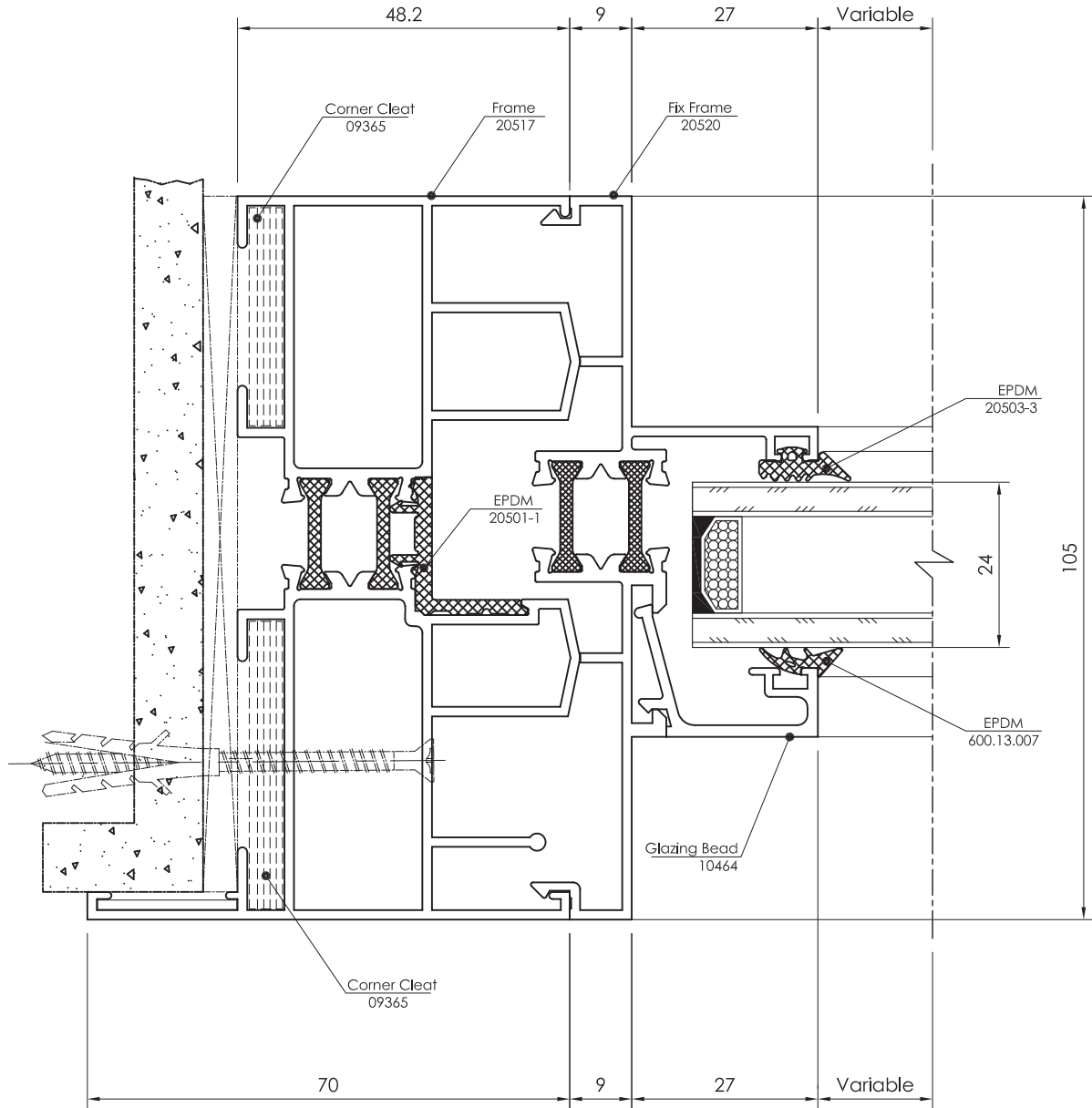
All dimensions in mm
----- Visible area

STB - 105
Detail - F



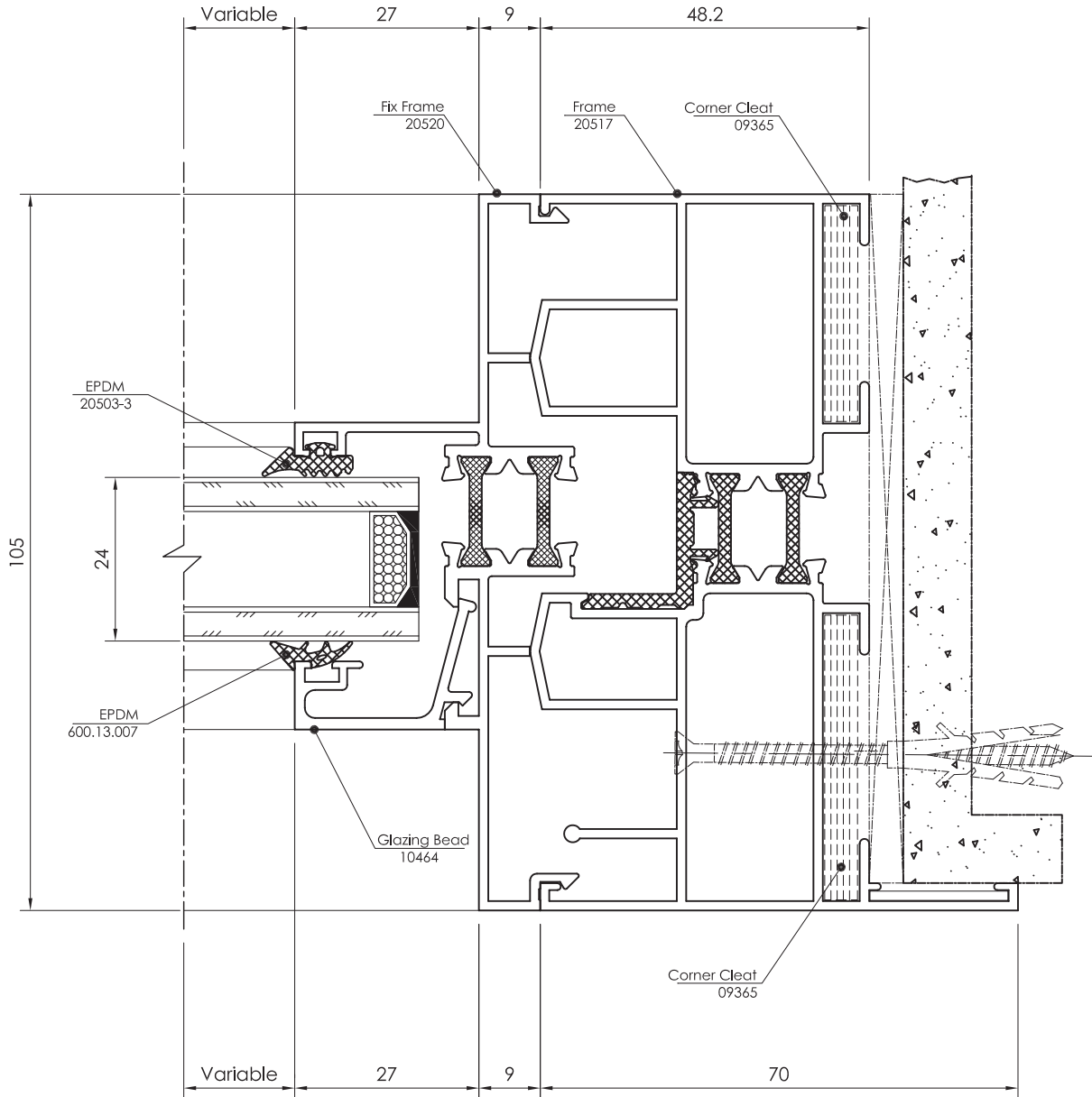
All dimensions in mm
Visible area_____

STB - 105
Detail - G

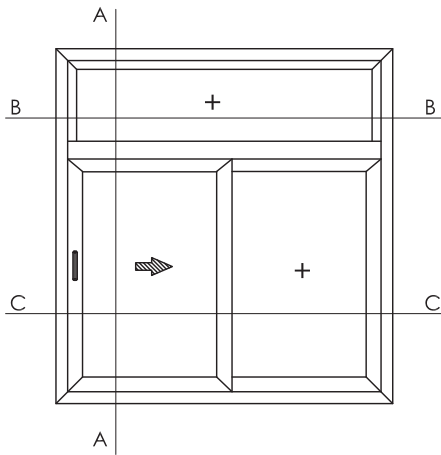


All dimensions in mm
----- Visible area

STB - 105
Detail - H



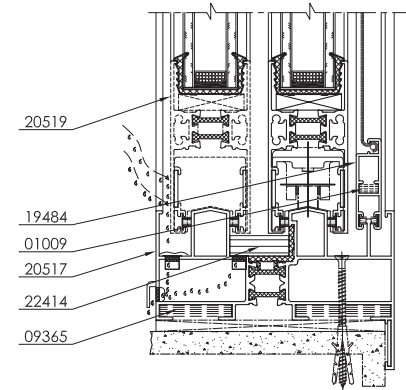
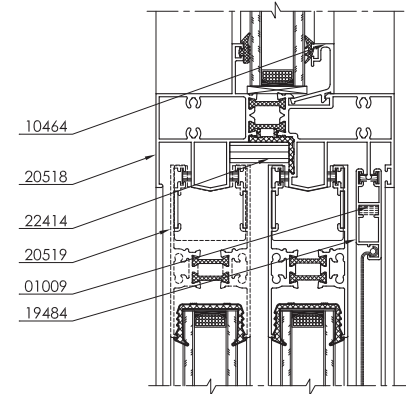
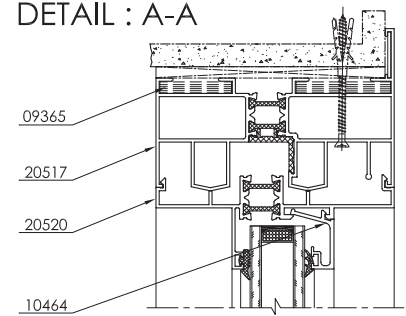
All dimensions in mm
Visible area_____



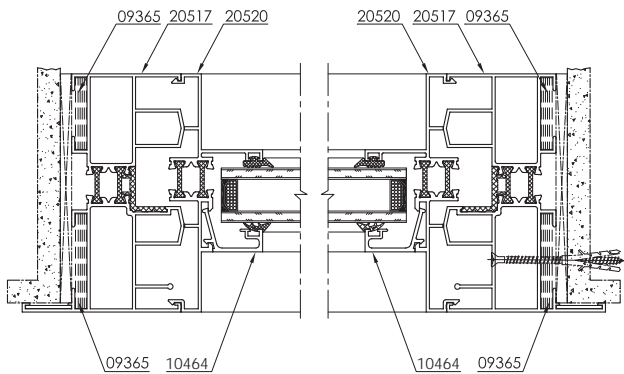
SLIDING WINDOW (105mm)
WITH FIXED PANEL

Profiles		
Description	Shape	Section No.
Frame		20517
Sash		20519
Interlock		25592
Fix Frame		20518
Fix Profile		20520
Fly Screen		19484
Glazing Bead		10464
Dust proof		22414
Corner Cleat		09365
Corner Cleat		01009

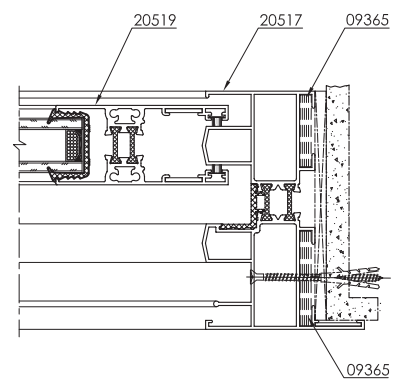
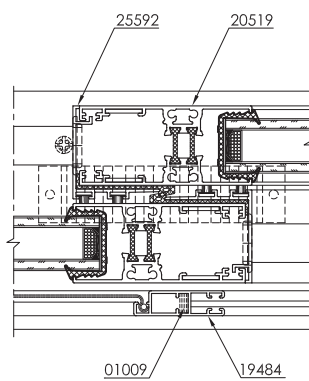
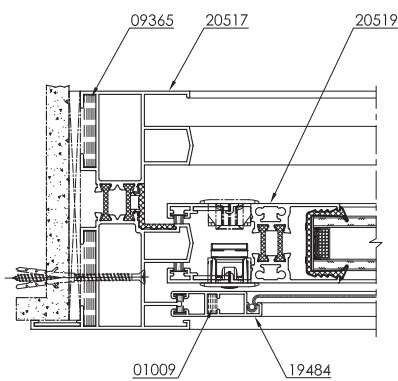
DETAIL : A-A



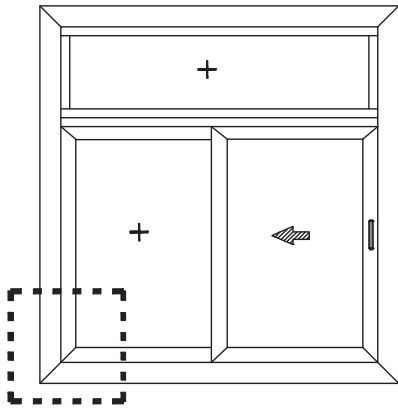
DETAIL : B-B



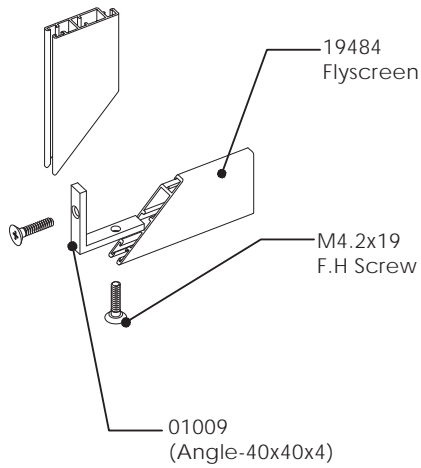
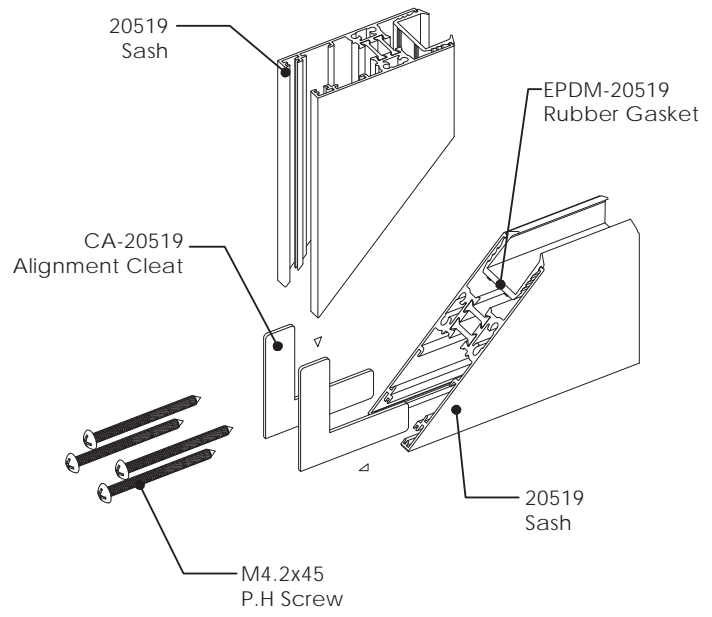
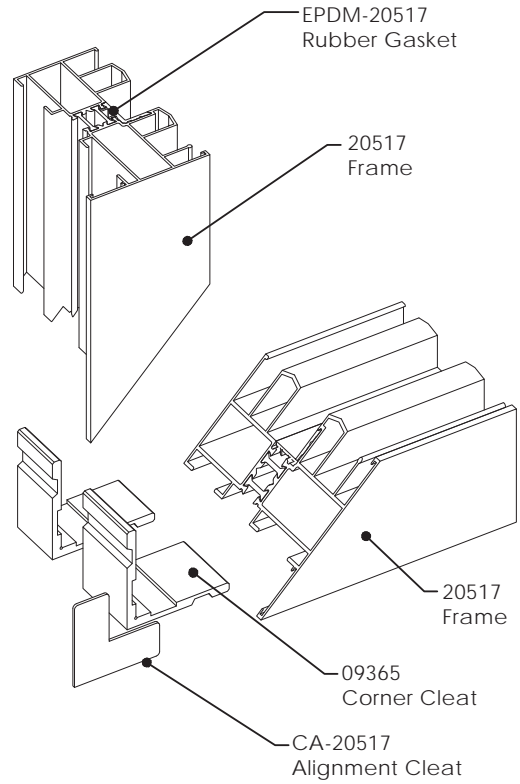
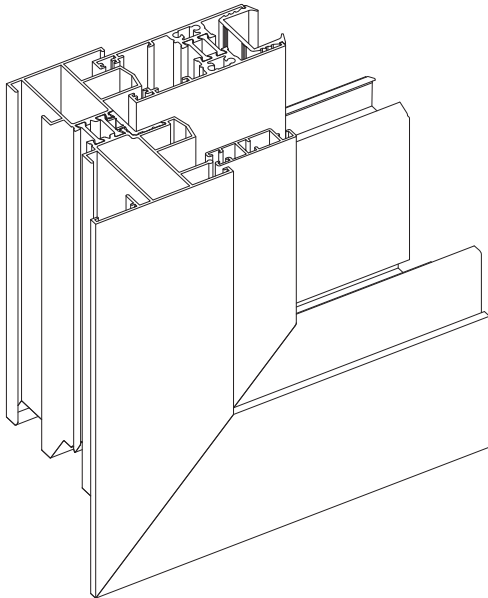
DETAIL : C-C

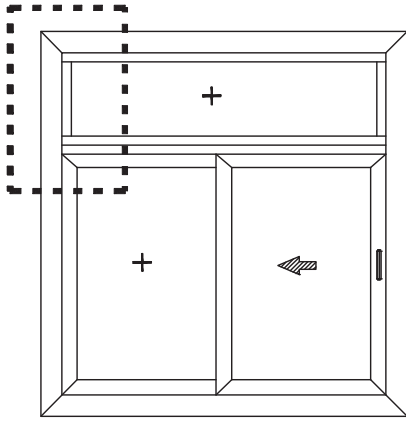


3D SECTIONS

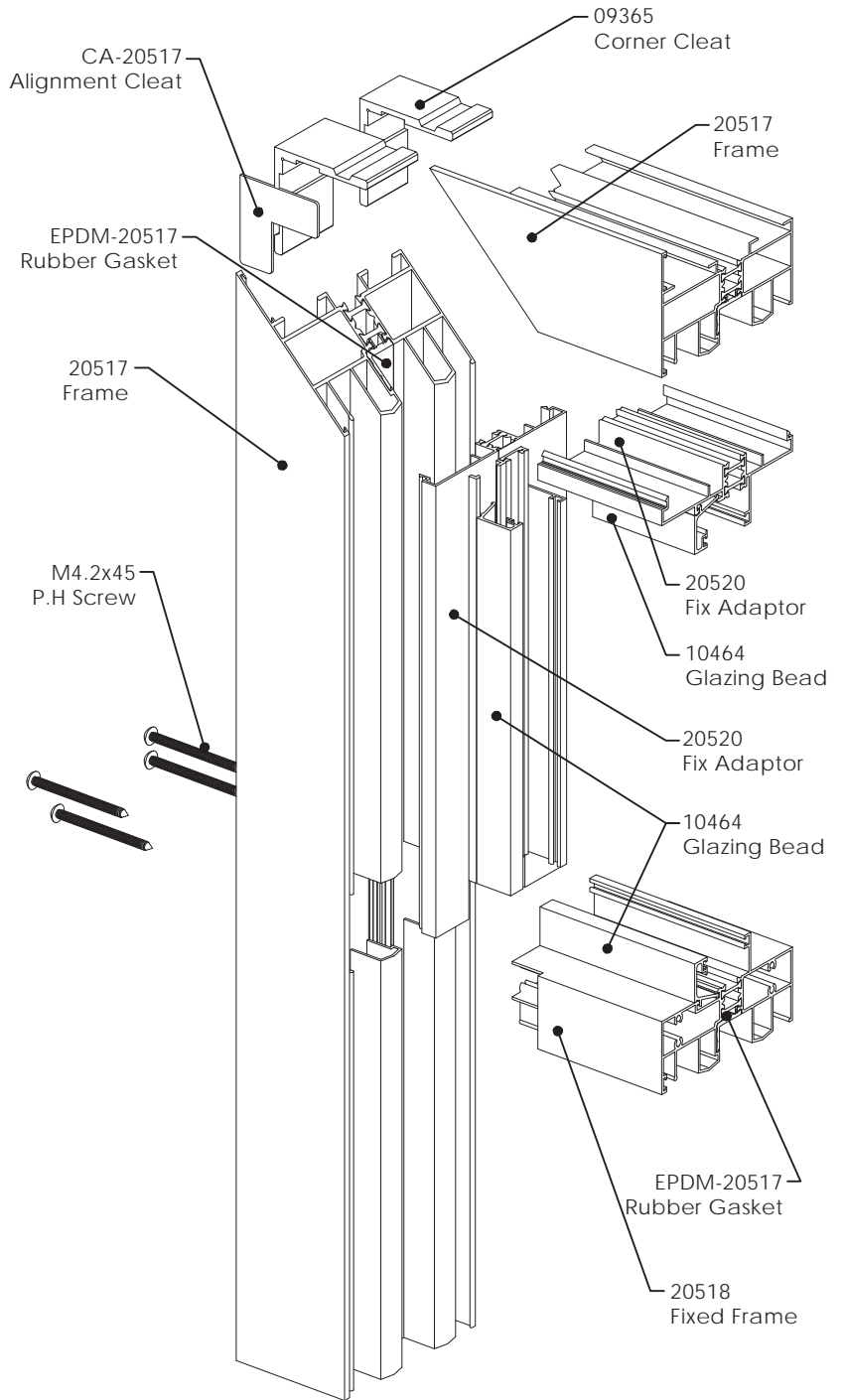
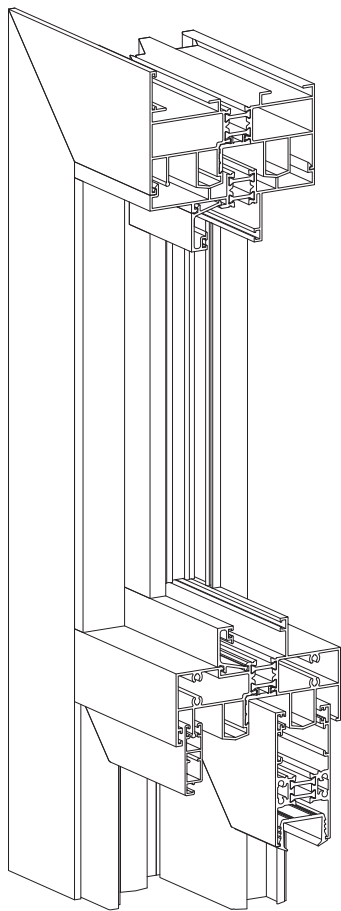


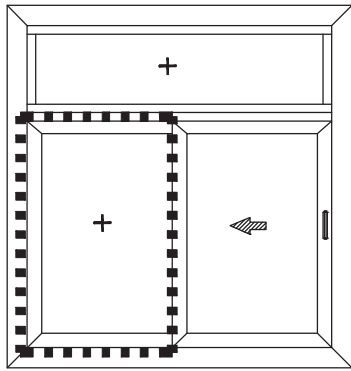
Frame & Sash Corner Assembly



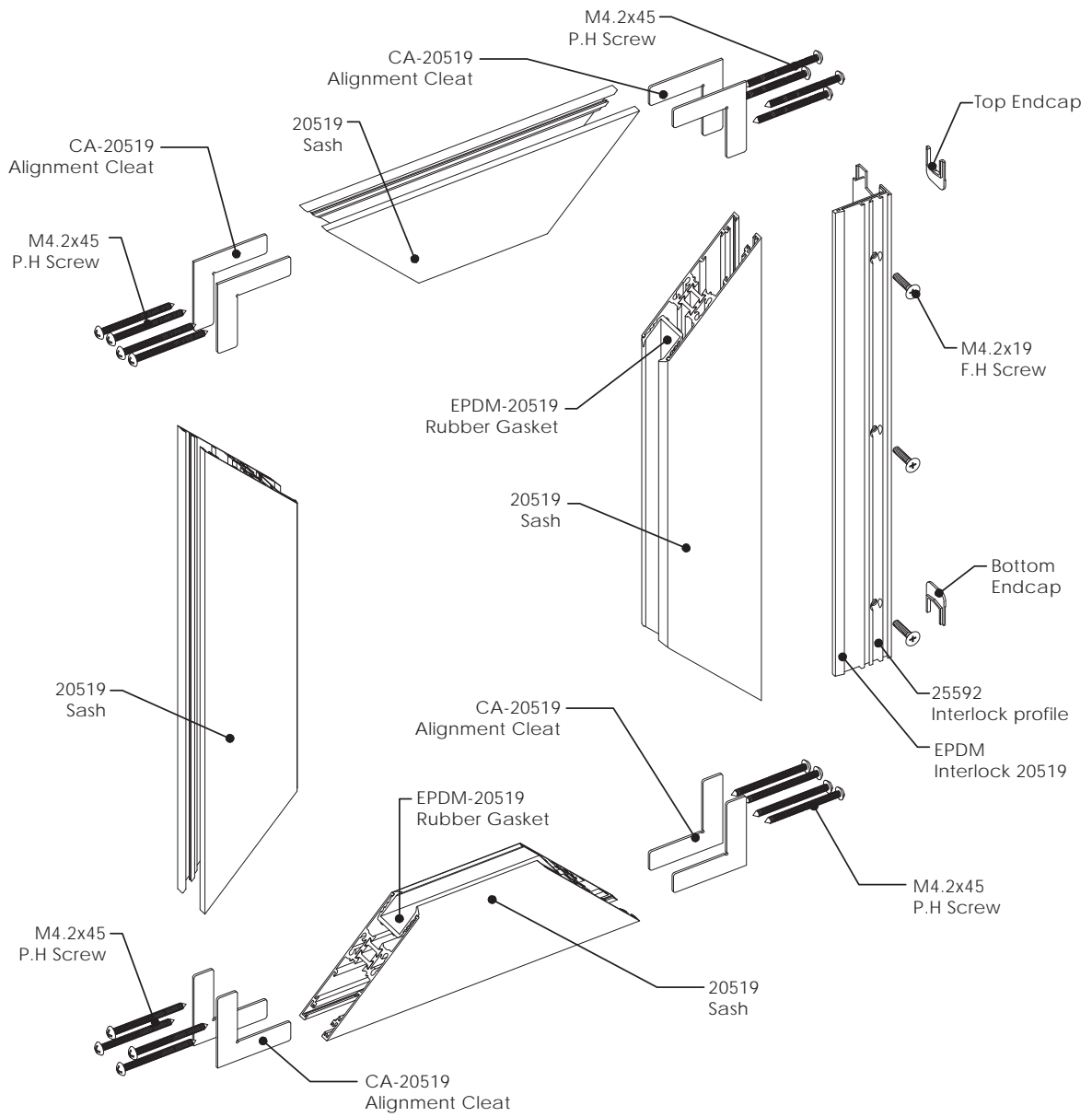
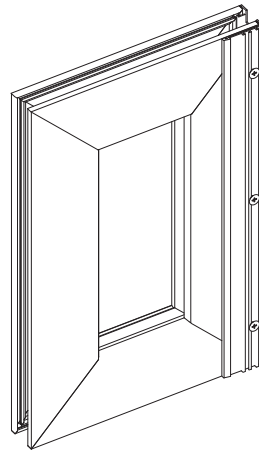


Fixed Frame Corner Assembly





Sash with interlock



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