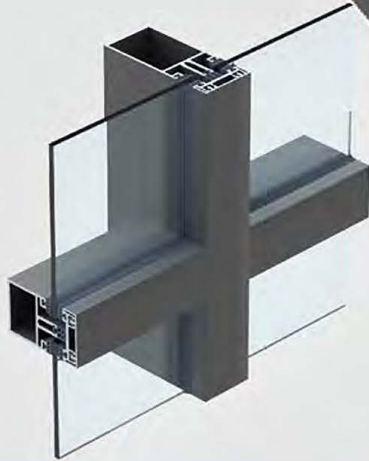


Machines & Aluminium Center
مركز ماكينات ومستلزمات الألومنيوم



PANORAMA 52

CURTAIN WALL SYSTEMS

2021

www.mac-alum.com

MACHINES & ALUMINIUM CENTER

Machines and Aluminum Center is an Egyptian based company established in the year 1981 and started its activity with aluminium applications in architectural and construction field.

They represent and cooperate with several leading European firms in field of aluminium business including aluminium fabrication machinery, accessories and hardware for architectural applications and different aluminium systems varying from windows and doors, up to facades and solar protection.

Our goal is to supply our clients with whatever is needed to apply our aluminium systems in the building construction. We are specialized in supplying all required machinery, equipments, dies, punches, hardware and fittings for our aluminium systems.

We offer a wide range of products to local market and neighbor countries. Our product range includes windows and doors, partition systems, different façade solutions and the related integrated accessories.

We partner with our customers with value added services which means that with the help of our specialized team of engineers, we provide our clients with technical support to assist them in improving their product's quality.

We are committed to innovative and creative product design to fulfill all architectural requirements. Our products can meet the most exacting engineering and technical standards while overcoming sophisticated design challenges.



Machines & Aluminium Center
مركز ماكينات ومستلزمات الألومنيوم

The profiles shown in this catalogue are patented.

The items shown are the exclusive property of **MACHINES & ALUMINIUM CENTER** and may not be even partially reproduced without **MACHINES & ALUMINIUM CENTER** authorization.

The manufacturer reserves the right to modify the items in this catalog without advanced notice.

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Technical Specifications

Materials

All aluminium profiles are from extruded aluminium alloy 6063 according to American standards ASTM B221 (B221M) - 02 - 2004 or European standards EN7551- and (Din 1748 Part 1).

Alloy Components:

■ Silicon	:	0.2 - 0.6 %
■ Iron	:	0.35 %
■ Manganese	:	0.10 %
■ Magnesium	:	0.45 – 0.9 %
■ Copper	:	0.1 %
■ Chromium	:	0.1 %
■ Zinc	:	0.1 %
■ Titanium	:	0.05 - 0.1 %
■ Aluminium	:	All the rest

Alloy Specifications:

- Tensile Strength: At least 1550 kg/cm²
 - Yield Strength: At least 1100 kg/cm²
 - Elongation: Up to 8.0 %
- All plastics parts are made from nylon reinforced with fiber glass which has high mechanical properties.
 - All gaskets are made from extruded E.P.D.M. – in hardness to suit its applications.
 - All fasteners within accessories are made from galvanized steel and stainless steel.



Finish

- All exposed surfaces of the aluminium profiles is treated either by anodizing treatment (according to DIN 17611) or by electrostatic powder coating to meet international standards BS EN 122061- and ASTM D1730 - 09.
- Anodizing treatment according to DIN 17611 with thickness from 16 to 20 micron according to next standards:
 - Abrasion A.S.T.M. D-968-72
 - Acid A.S.T.M. D-3260-73
 - Detergent A.S.T.M. D-2248-73
- Electrostatic powder coating according to RAL Specifications with thickness more than 70 micron.

Technical Features

- Panorama 52 system consists of mullions, transoms and auxiliary profiles in order that the width of the profiles should not be less than 52 mm with different depths according to the design of each profile and to its purpose.
- Profiles are characterized by diversity in sizes, weights, and steadiness, especially in mullions to suit different dimensions and loads according to international and Egyptian specifications.
- In designing the mullions, their resistance to the loads upon them is considered, as winds, storms, without any permanent distortion in accordance with the Egyptian code of loads and European Norm En13803, taking in consideration the location of the building, the height of the facade above the ground, and the location of the facade relative to the building. This is done through a graph that determines the maximum height and width according to the type of installation in the building.



- Panorama 52 system was designed to deal with the expansion joints through special connectors designed to avoid thermal loads on the facades. These joints are provided with gaskets that absorb the vibrations of the façade system, which may create noise that is produced when two metals hit each other, taking into consideration sealing against water leakage.
- The expansion interval is calculated by replacing it with 1.4 mm per linear meter gap (maximum 30 mm), this value allows vertical expansion without any load transfer up to the temperature difference of 43 ° C.
- Panorama 52 system design considered the different fixing joints forms of the facade to the building as an independent structure, whether the fixed joint is lateral, top or bottom fixing joint, taking into consideration different fixing joints types in the expansion factor between the building and the facade while ensuring the tightness of the joints, which increases the overall insulation efficiency of the facade.
- Mullions and transoms are assembled by mechanical joints that strengthen the connecting points to obtain the structural strength required for the connected part, with sufficient flexibility to absorb any lateral load as a result of the facade vibration and seismic load.
- Various joints considered to suit different design solutions for facades according to the design and the building's type.
- The method of installing accessories allows easy assembly and maintenance depending on the type of the building.
- The system allows the installation of various models of doors and windows within the facade while ensuring a good connection and load transfer in a proper way that maintaining the facade's safety.

Glazing

- Panorama 52 is designed for different types of glazing and provides a large range of infill types and measures, due to the availability of different profile types and a wide range of gaskets sizes.



- Glass panels may not be in direct contact with the aluminium structure profiles, Panorama 52 system is based on a series of glazing profiles that mitered to construct frame panels which are screwed in the screw channels of the supporting structure to obtain completely flush Glazing, by press the aluminium glass panel against the E.P.D.M. gaskets that fixed on the aluminium structure mesh.
- Panorama 52 is designed can hold different types of glass panels mechanically by pressure plate profile (conventional curtain wall) or by a given U-shape in the aluminium frame that called Semi structural glazing or by bonding the glass to the aluminium frame using structural silicone to construct a fully 4 sided structural glazing system.

Structural Silicon

- Structural silicon is used as a bonding material between the glass and the aluminium frame.
- Panorama 52 is designed to use an anodized bonding profile that enhances the compatibility with the structural silicon adhesive, this profile should be cleaned by a cleaner which acts as a degreaser and primer.
- Structural silicon should be supplied by an approved supplier (Dow Corning – Sika - Tremco), recommended structural silicon types (DC 993 by Dow Corning or SG500 by Sika or VEC99 Proglaze II by Tremco) or other silicones have been performed tests for the structural silicon indicated in EOTA guide.
- For double glazing, structural silicon is also preferably used for the bonding joint between both glass plates.

Gaskets:

- Gaskets used made of E.P.D.M., which has a high resistance to different weather conditions, high performance in a wide range of temperatures and it is free of any materials that can make it fragile with time, cause collapses



or cracks, which threatens to leak water. Moreover, it is characterized by its resistance to various weather factors such as sunlight and oxidizing agents with resistance to insects, vapors, and oxidized salts.

- In designing the sealing system, the thermal insulation was considered between the exterior parts of the facade and the profiles inside the building, which reduces the thermal transfer from outside to inside the building and vice versa to save energy and reduce the possibility of condensation.
- The gasket is being installed in order to be connected in special grooves inside the profile so that prevents cutting in any part. It consists of two layers: internal and external and another layer in the middle of the profile working on thermal insulation between inside and outside the building.
- The gaskets are applied in the appropriate grooves within the profiles; they should be cut slightly longer than is necessary to compensate for any shrinkage that may occur (about 10 mm per meter).
- The glazing gaskets can be cut straight or mitered according to the kind of profile connection.
- Gaskets are designed to avoid any thermal bridge between the external elements and supporting structure profiles for energy-saving and condensation resistance.
- Water tightness is complied with European standard EN12154, with no penetration up to 900 pascal (class RE900)
- Air permeability is complied with European standard EN12152 (class AE750) not greater than 1.5 cubic meters per hour per meter length of vent opening and not greater than 1.5 cubic meters per hour per meter length of fixed panels at pressure up to 750 pascal.



Powder Coating

ALWAN is one of the largest facilities in Egypt, in the field of electrostatic application of pure-polyester powder coatings as surface treatment, specifically designed to meet stringent requirements of the construction industry for architectural and industrial aluminum profiles.

We guarantee complete customer satisfaction on all our delivered products. Every production line has a fully equipped laboratory in order to meet all international quality specifications and standards as set by the QUALICOAT organization. The certifications of QUALICOAT , Quality Management ISO 9001 and Environmental Management ISO 14001, provide complete quality assurance. We ensure a full control over all the critical parameters concerning chemical pretreatment and the use of enhanced chemical pretreatment process, with high etching degree, in accordance to QUALICOAT specifications, as well as a full control on the painting processes and polymerization during the whole surface treatment procedure. Therefore, through a unique blending system, stringent quality assurance and compliance to measures, consistent quality during the production process is guaranteed.

The application of the above-mentioned steps will assist along the line with the overall excellent properties and the longevity of the color, providing an attractive finish to the projects and building components by ensuring gloss retention, color stability and corrosion protection.

Available Colors

In regards to the colors, they are available in RAL Gloss & RAL matt. The gloss affects how the eye perceives color so some slight variations in the finish may occur. In addition to that, the coating provides a wide range of custom-made colors that gives a variety of effects, including metallic effects.



Most of the colors are available in standard durable and some are available in super durable, which complies with advanced levels of weather resistance, gloss and color retention, and corrosion resistance, when compared to the standard durable specification.

Color customization to our standard products may be available on a request basis, with unlimited options of powder coating. In this respect, Non-standard designs and applications can be reviewed to determine the feasibility on a project-specific basis.

Warranty

The warranty is subject to terms and conditions based on the geographical location & when used on an architectural aluminum substrate.

Standard Durable Class 1: Up to 10 years

Super Durable Class 2: Up to 25 years

Notes:

- As the products are very often used under conditions beyond supplier's control, we cannot guarantee anything but the quality of the product itself.
- It is expected that any fading and/or chalking and/or change in gloss retention, either uniform or non-uniform that a color will experience in the field will result in the falling within acceptable range as specified in the Qualicoat specification standards.

*QUALICOAT is a quality label organization committed to maintaining and promoting the quality of lacquering, painting and coating on aluminum and its alloys, for architectural applications.



CERTIFICATE

for a COATING APPLICATOR



hereby authorises

MACHINES & ALUMINIUM CENTER (ALWAN)

213, SECOND INDUSTRIAL ZONE
6TH OF OCTOBER CITY
GIZA
Egypt

to use the quality label in conformity with the
QUALICOAT 2021 Specifications, applicable from 1 January 2021

Licence No.: 1609

Date of Granting: 06.05.2021

Valid until: 31.12.2021

Zurich, 6 May 2021

QUALICOAT

M. C. Panam

Mohammed C. Panam
President



Sue C. C. Paredi

Sue C. C. Paredi
Managing Director

QUALICOAT | Tödi strasse 48, 8002 Zurich, Switzerland | www.qualicoat.net





CERTIFICATE OF REGISTRATION

INTERCERT hereby certifies that Quality Management System of

Machines & Aluminium center



Office: Street No.75, Piece No. 32, 1st Industrial Zone, 6th of October City, Egypt.

مركز مكنيات ومعالجات الألمنيوم
(القاهرة)

Site: Piece No. 213, 2nd Industrial Zone, 6th of October city, Egypt.

Has been successfully assessed as per the requirements of

ISO 9001:2015

For the scope of

Trading, Treatment and Painting of Aluminum Profile

Initial Certification Date: 07-06-2021

Certificate Issue Date: 07-06-2021

Surveillance Validity Date: 06-06-2022

Recertification Date: 06-06-2024

Registration Number: IC-QM-2106051

Issued on behalf of InterCert
Head - Certifications



The validity of this certificate can be verified at www.intercert.com or through email at info@intercert.com. This certificate is the property of INTERCERT and must be returned on request. Accreditation details are available with IAS, (International Accreditation Services) Inc. USA at www.iasonline.org



CERTIFICATE OF REGISTRATION

INTERCERT hereby certifies that the Environmental Management System of

Machines & Aluminium center

Office: Street No.75, Piece No. 32, 1st Industrial Zone, 6th of October City, Egypt.

Site: Piece No. 213, 2nd Industrial Zone, 6th of October city, Egypt.



مركز ماكينات ومعالجات الألمنيوم
(القاهرة)

Has been successfully assessed as per the requirements of

ISO 14001:2015

For the scope of

Trading, Treatment and Painting of Aluminum Profile

Initial Certification Date:	07-06-2021
Certificate Issue Date:	07-06-2021
Surveillance Validity Date:	06-06-2022
Recertification Date:	06-06-2024

Registration Number: IC-EM-2106052

Signature of InterCert Head

Issued on behalf of InterCert
Head - Certifications



The validity of this certificate can be verified at www.intercert.com or through email at info@intercert.com. This certificate is the property of INTERCERT and must be returned on request. Accreditation details are available with IAS, (International Accreditation Services) Inc. USA at www.iasonline.org



AkzoNobel

Interpon D Approved Applicator

Series D1000

MACHINES AND ALUMINIUM CENTER
(Alwan)
213, 2nd industrial Zone, 6th of October City, Giza
Egypt

Has fulfilled AkzoNobel's tests and inspection regarding the pre-treatment, application, quality management standards and procedures, and complies with the requirements of the Architectural Range Approved Applicator schedule.

This certificate is effective from
31st May 2021 to 30th May 2022

Approved for Aluminium Alloys: AA5050

Approved for Pre-treatment Type: Chrome

Wael Mahmoud
Sales and Marketing Manager
North Africa & Levant

3/1/2021

AkzoNobel Industrial Paints



AkzoNobel

Interpon D Approved Applicator

Series D2000

MACHINES AND ALUMINIUM CENTER
(Alwan)
213, 2nd industrial Zone, 6th of October City, Giza
Egypt

Has fulfilled AkzoNobel's tests and inspection regarding the pre-treatment, application, quality management standards and procedures, and complies with the requirements of the Architectural Range Approved Applicator schedule.

This certificate is effective from
31st May 2021 to 30th May 2022

Approved for Aluminium Alloys: AA5050

Approved for Pre-treatment Type: Chrome

Wael Mahmoud
Sales and Marketing Manager
North Africa & Levant

3/1/2021

AkzoNobel Industrial Paints



To Whomever it may concern

Date: 18th April 2021

Subject: Powder coating facility of **Machines and Aluminium Center**, under the process of Jotun approved applicator certification to coat Jotun Architectural products.

Dear Sir/ Madam

This refers to above subject, here with we confirm you that for **Machines and Aluminium Center**, located in **Second Industrial Zone, Plot 213, 6th of October, EGYPT** is under the process of Jotun Approved applicator certification to coat Jotun Architectural products.

Preliminary audit has already been conducted, final audit will be conducted soon for certification. This letter is valid for six (6) months from the date above.

Please don't hesitate to contact me in case further clarifications

Godfrey L. Brazil

Technical Service Executive



Jotun Powder Coatings U.A.E. (LLC)
P.O. Box 31033, Dubai | Inter-Arab Emirates
Tel: +971 4 347 2535 | Fax: +971 4 347 2615 | www.jotun.com

Bankers
Tashkhan
Emirates NBD

Bank A/C: 01700000000000000000
R/C No: 42095
Paid Up Capital AED 3,000,000



Applicator approval certificate

Machines & Aluminium Center
(Alwan)

Is acknowledged by us to be an approved applicator to series 29 Powder coatings product line

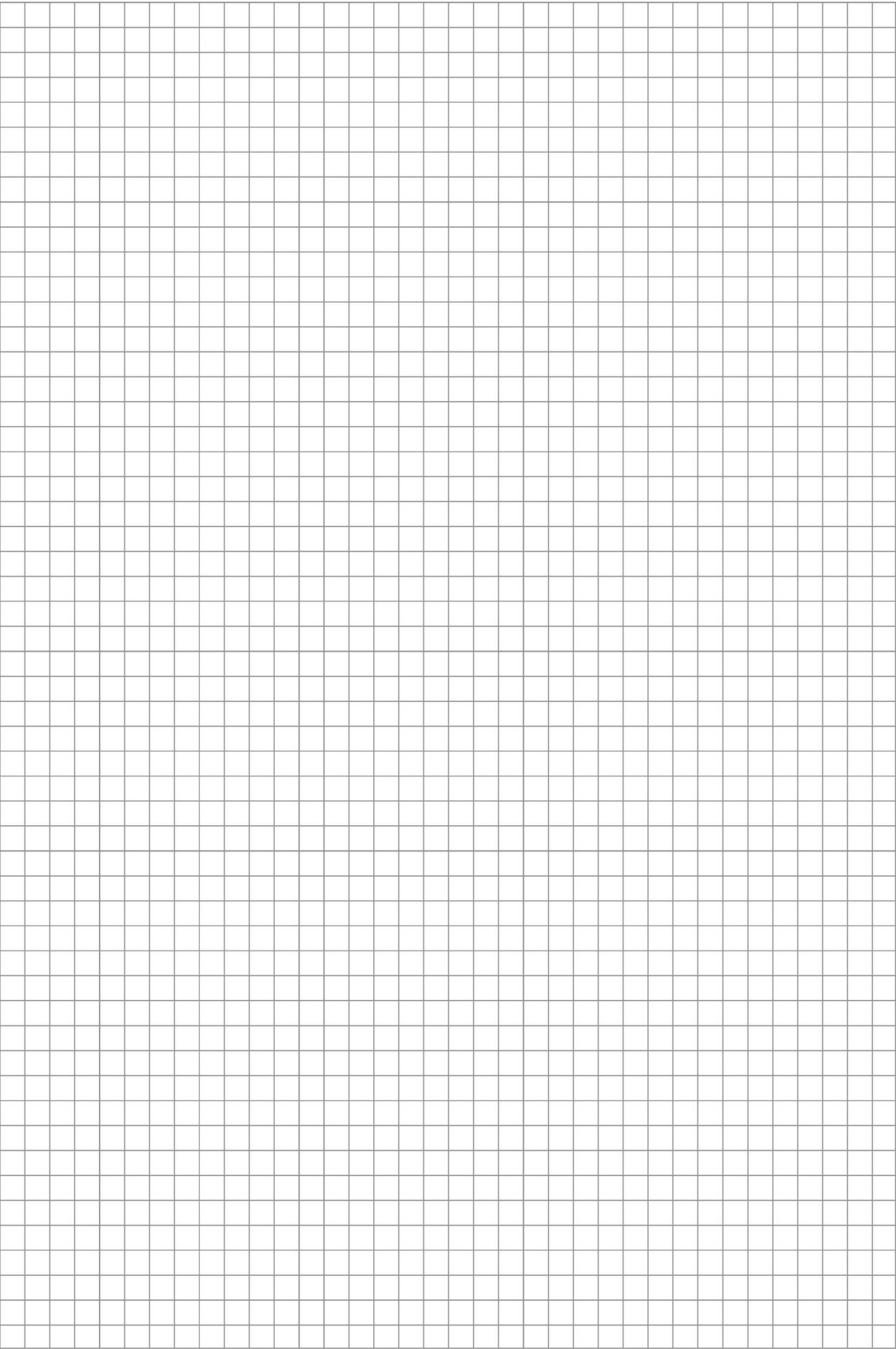
Date of certificate : 20/5/2021

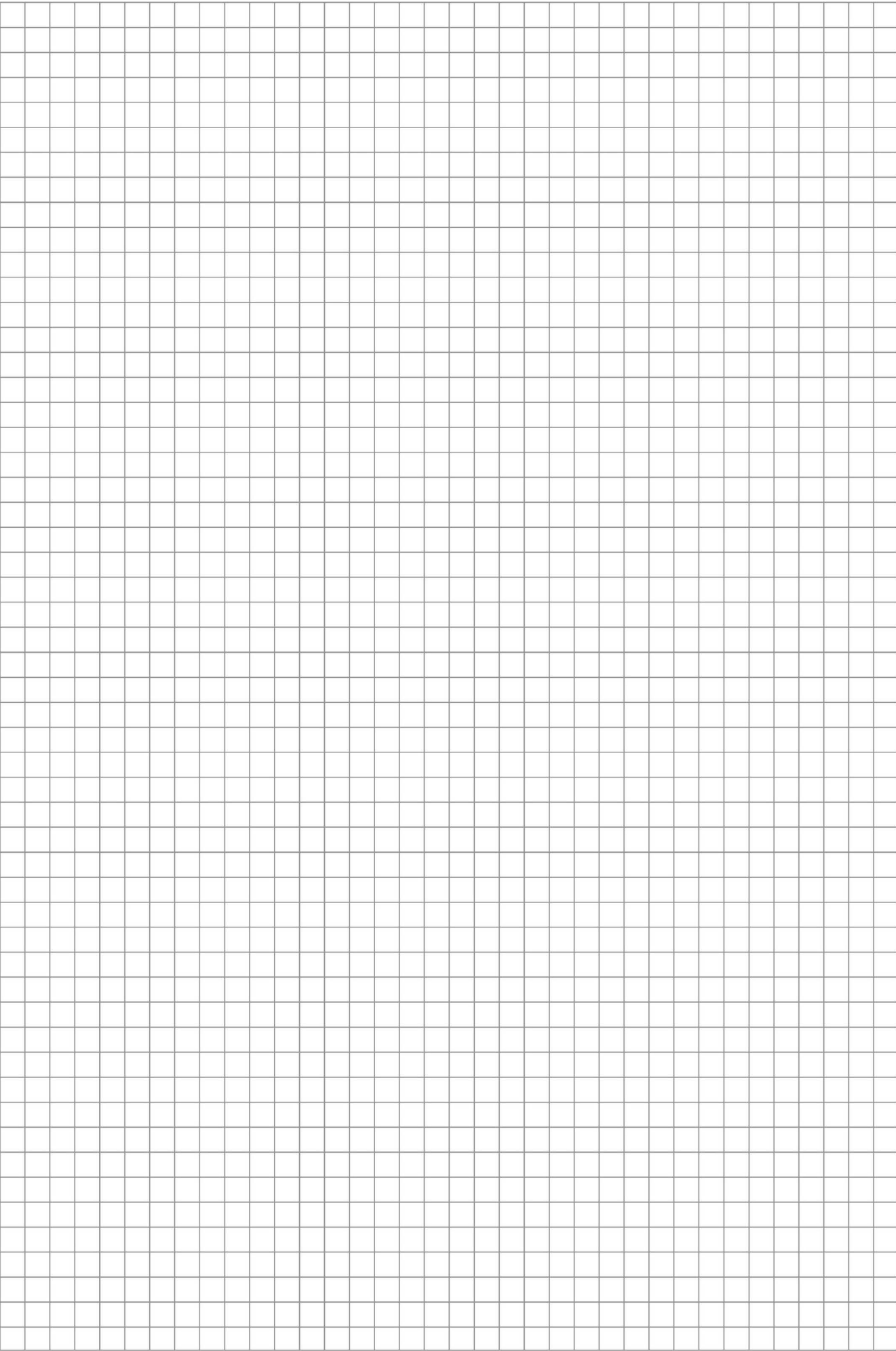
Date of expiration : 21/5/2022

This certificate is granted after a complete audit of pre-treatment used by the applicator, inspection of the oven, equipment, and knowledge of staff. We hereby acknowledge that Machines & Aluminium center fulfills our standards for an approved applicator.

Authorized signature
CEO

Authorized signature
Commercial director







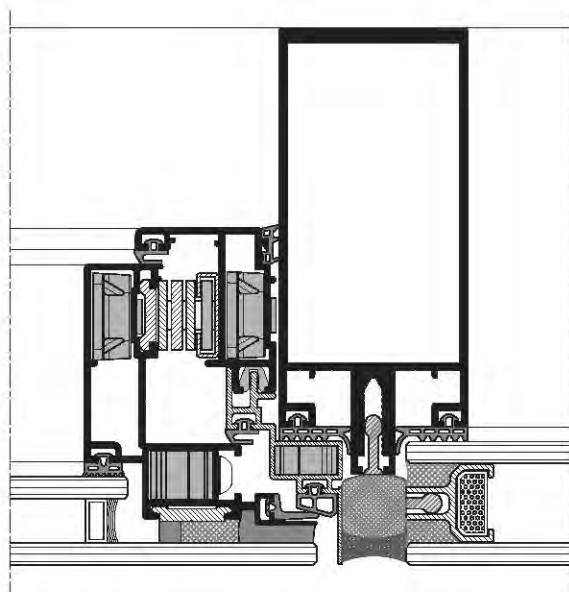
Technical Characteristics

Mullion	Depth	52 mm.
	Height	85 mm. to 245 mm.
Transoms	Depth	52 mm.
	Height	45 mm. to 135 mm.
Max Sash Weight (top hung)	130 kg.	

Complies with European norm EN 13830

Air Permability	(Class AE750)
Water Tightness	(Class RE900) up to 900 pa.
Resistance to wind load	up to 2000 pa.
Impact Resistance	(Class I5/E5)
UF values	1.8 to 3.3 W/m ² K DIN EN ISO 10077-2

- Available in 3 different glazing appearances, conventional curtain wall, full structural glazing and 2 way structural glazing.
- Integrated with different types of windows and entrance doors (inward – outward opening), including projection top hung/ parallel opening type.
- Allow same profile for mullion and transom (option).
- Controlled drainage system via a special transom gasket.
- Allow mullion and transom connections with or without notching of mullion or transom.





IRCCOS S.r.l.

Istituto di Ricerca e Certificazione per le Costruzioni Sostenibili

Notified Body No. 1994 in accordance with Regulation CPR (UE) No. 305/2011

CERTIFICATE

n. 0070/2019

The laboratory **IRCCOS S.r.l.**

declares that:

the product constituted by an Aluminium Curtain Wall
with gaskets between glasses, trade name

“PANORAMA 52 – STRUCTURAL GLAZING”

produced by:

MACHINES AND ALUMINIUM CENTER

122 Mohiy Al-Din Abu Al-Ezz St.

Dokki – Giza – Egypt

Successfully passed the following tests with the reported classes:

Air Permeability – positive pressure: class AE750

Air Permeability – negative pressure: class AE750

Watertightness under static pressure: class RE900

Resistance to wind loads – positive pressure: 2000 Pa

Resistance to wind loads – negative pressure: 2000 Pa

according to the following standards:

EN 13830:2015

EN 12153:2000 - EN 12152:2002

EN 12155:2000 - EN 12154:1999

EN 12179:2000 - EN 13116:2001

Technical Operator

Stefano Galli

IRCCOS S.r.l.

Istituto di Ricerca e Certificazione
per le Costruzioni Sostenibili
via Grandi n° 17, 21017 Samarate (VA)
C.F./P.IVA 05159630960

2nd August 2019

For complete results see the Test Report No. 0322/RP/19 issued on 2nd August 2019.

The results obtained refer exclusively to the samples tested.

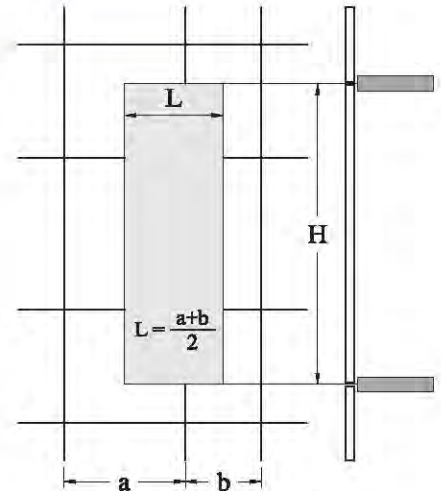
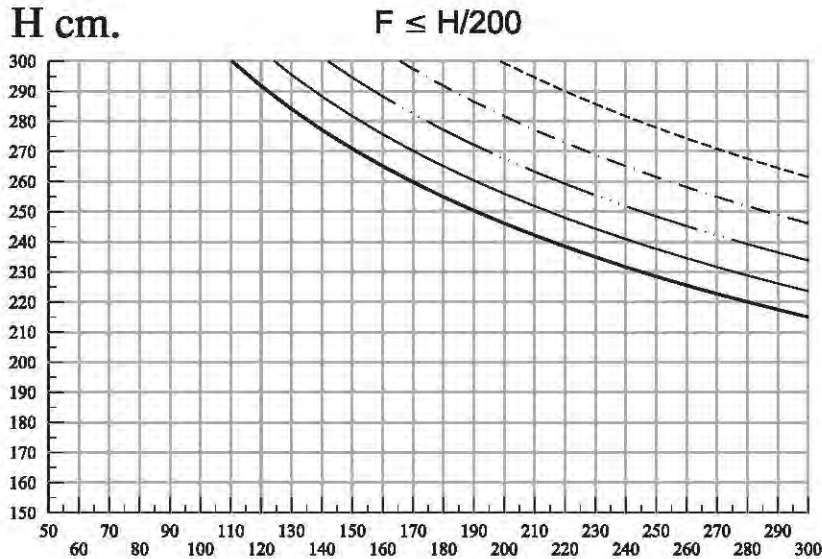
IRCCOS S.r.l. - Via Achille Grandi 17 – 21017 Samarate (VA) - Tel. 0331 594628

Unità operativa secondaria – Via dell’Industria, 6 – 72017 – Ostuni Z.I. (BR)

Cap. Soc. €89.220,80 I.V. - C.F. e P. Iva 05159630960 - R.E.A. VA-351993 - www.irccos.com

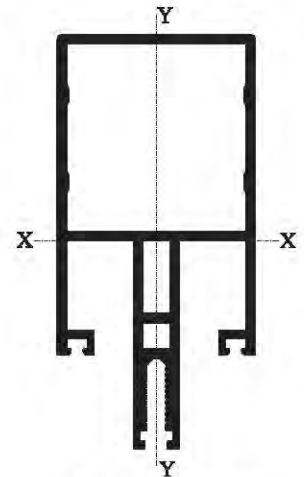
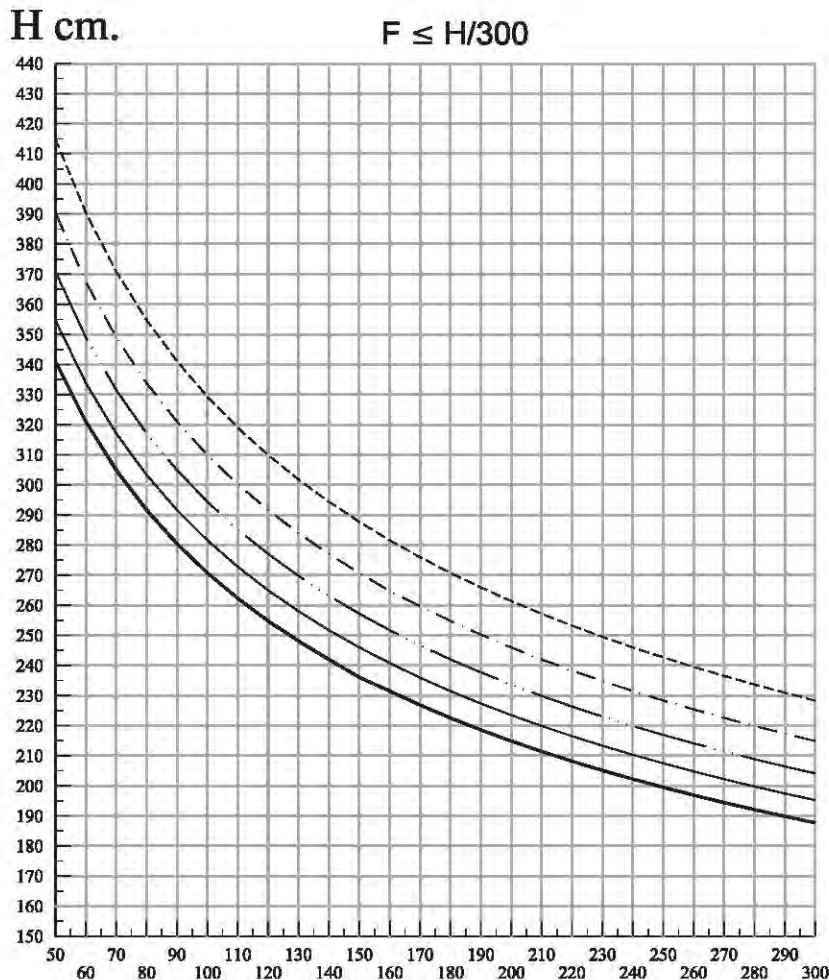


STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION



H = BEARING SPAN
L = LOAD WIDTH

RECTANGLE LOAD CHART FOR WIND LOAD
SIMPLY SUPPORTED ON TWO SUPPORTS



CW 5216

$I_x = 99.65 \text{ Cm}^4$

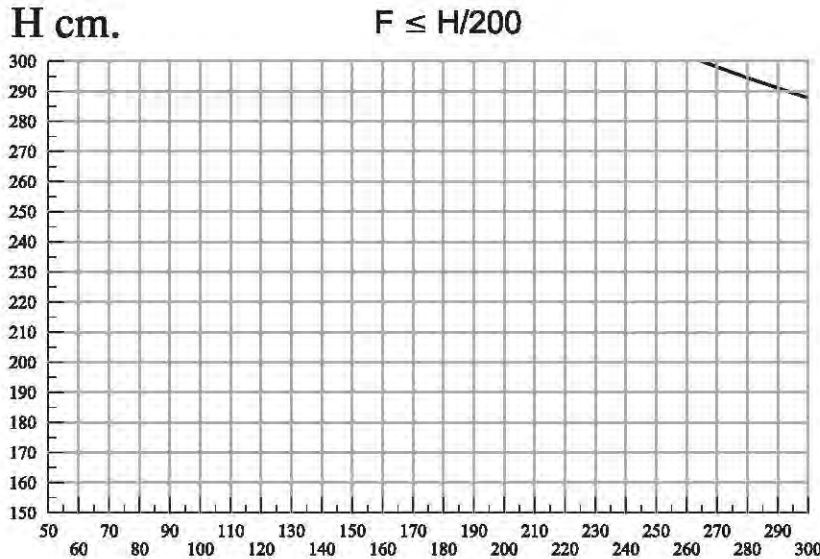
$W_x = 18.26 \text{ Cm}^3$

ALLOWABLE DEFLECTION (F)	
SINGLE GLASS 0 - 8 mm. UP TO 3 m. BEARING SPAN	H/200
SINGLE GLASS 0 - 8 mm. BEARING SPAN > 3 m	H/300
INSULATING DOUBLE GLASS	H/300

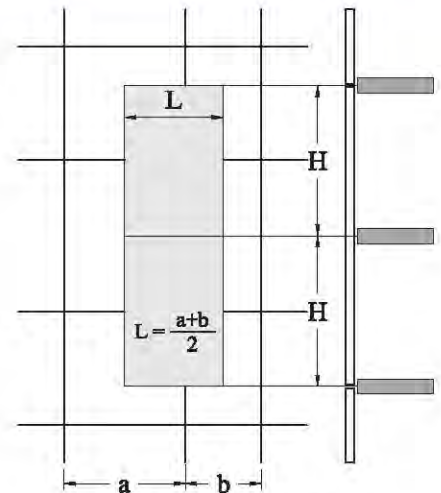
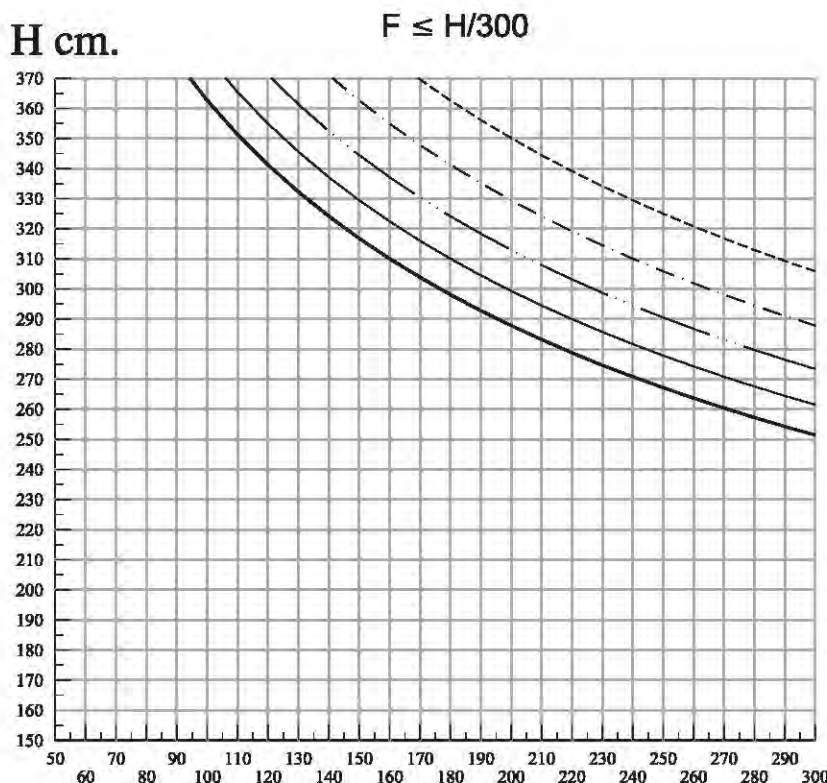
ZONE 1	-----	50kgf/m ²
ZONE 2	- - - - -	60kgf/m ²
ZONE 3		70kgf/m ²
ZONE 4	—————	80kgf/m ²
ZONE 5	—————	90kgf/m ²



STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION

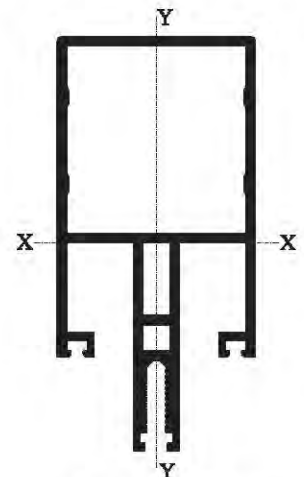


***Note:** Refereeing to the zone curves not presented in the above chart. Apply the allowable deflection up to H=300Cm. & L=300Cm.



H = BEARING SPAN
L = LOAD WIDTH

RECTANGLE LOAD CHART FOR WIND LOAD CONTINUES SUPPORTED ON THREE SUPPORTS



CW 5216

$I_x = 99.65 \text{ Cm}^4$

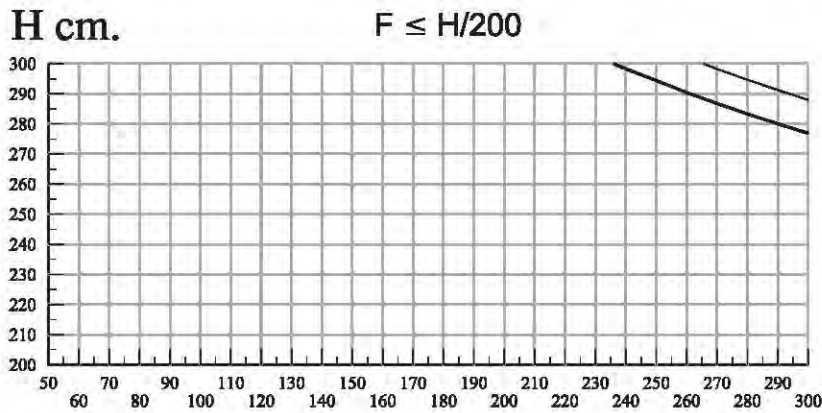
$W_x = 18.26 \text{ Cm}^3$

ALLOWABLE DEFLECTION (F)	
SINGLE GLASS 0 - 8 mm. UP TO 3 m. BEARING SPAN	H/200
SINGLE GLASS 0 - 8 mm. BEARING SPAN > 3 m	H/300
INSULATING DOUBLE GLASS	H/300

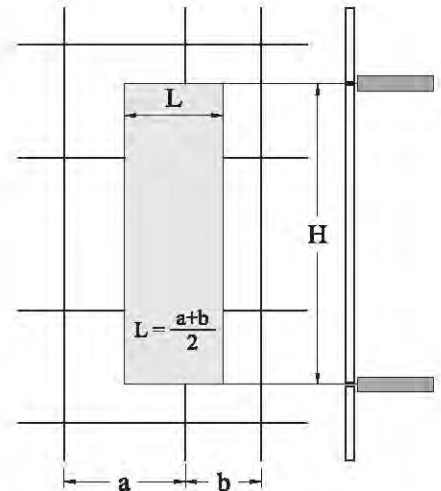
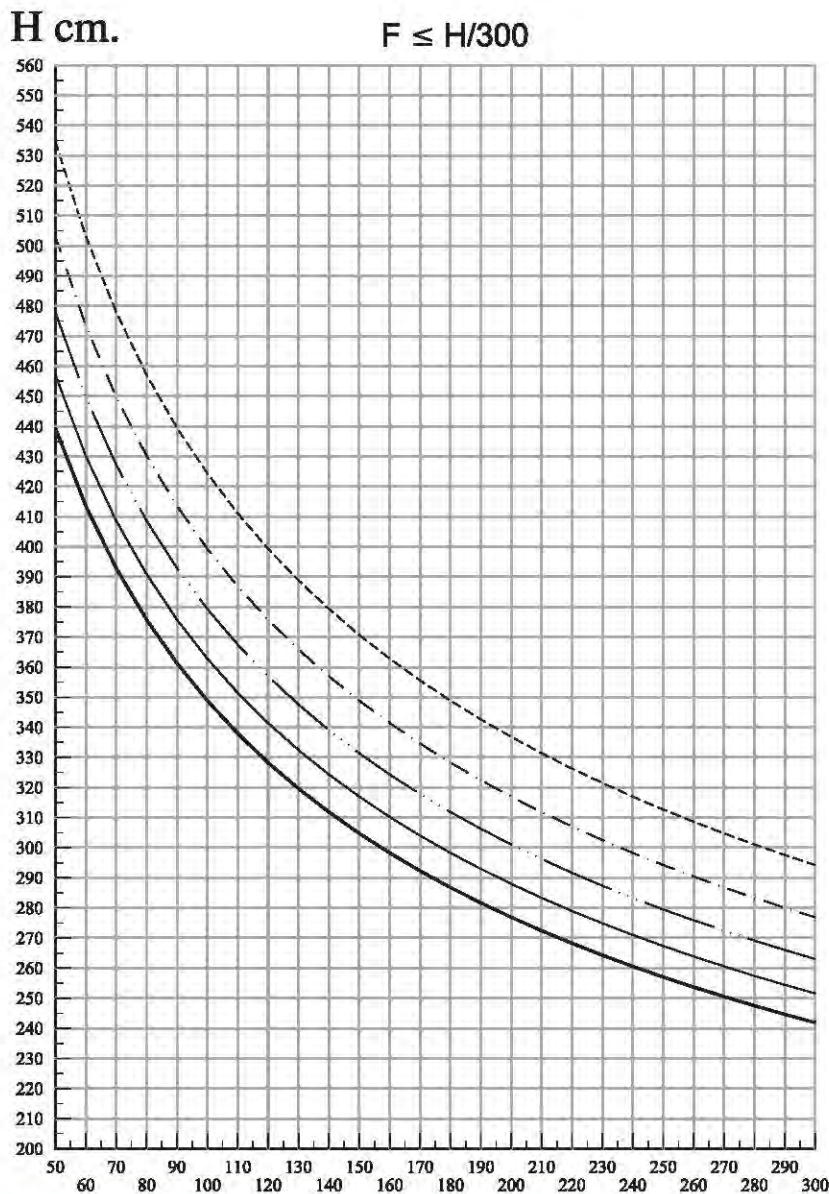
ZONE 1	-----	50kgf/m ²
ZONE 2	- - - - -	60kgf/m ²
ZONE 3	—————	70kgf/m ²
ZONE 4	—————	80kgf/m ²
ZONE 5	—————	90kgf/m ²



STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION



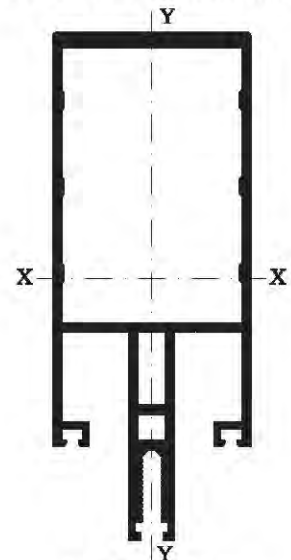
***Note:** Refereeing to the zone curves not presented in the above chart.
Apply the allowable deflection up to H=300Cm. & L=300Cm.



L cm.

H = BEARING SPAN
L = LOAD WIDTH

RECTANGLE LOAD CHART FOR WIND LOAD
SIMPLY SUPPORTED ON TWO SUPPORTS



CW 5217

$I_x = 212.85 \text{ Cm}^4$

$W_x = 32.49 \text{ Cm}^3$

ALLOWABLE DEFLECTION (F)	
SINGLE GLASS 0 - 8 mm. UP TO 3 m. BEARING SPAN	H/200
SINGLE GLASS 0 - 8 mm. BEARING SPAN > 3 m	H/300
INSULATING DOUBLE GLASS	H/300

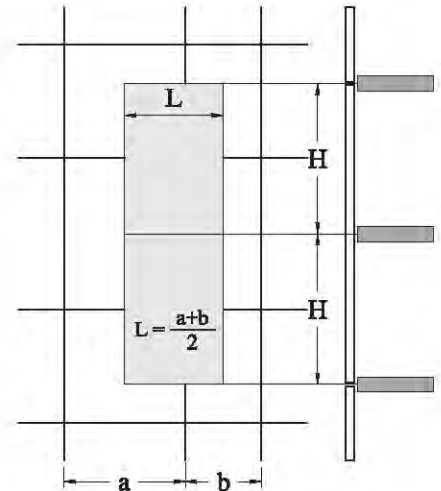
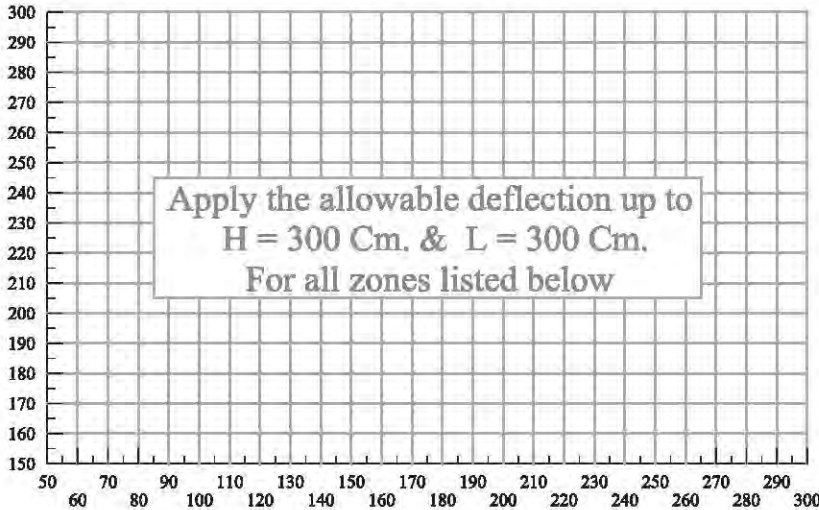
ZONE 1	-----	50kgf/m ²
ZONE 2	- - - - -	60kgf/m ²
ZONE 3	—————	70kgf/m ²
ZONE 4	—————	80kgf/m ²
ZONE 5	—————	90kgf/m ²



STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION

H cm.

$$F \leq H/200$$

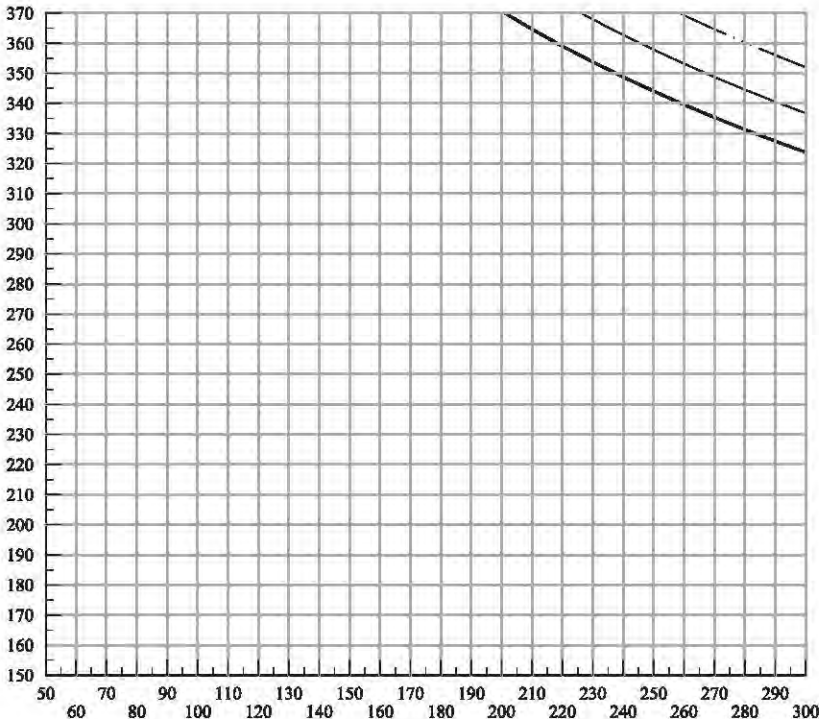


H = BEARING SPAN
L = LOAD WIDTH

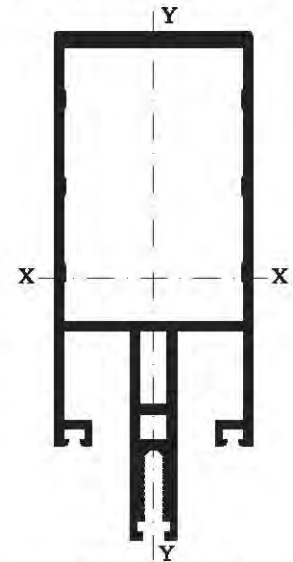
RECTANGLE LOAD CHART FOR WIND LOAD
CONTINUES SUPPORTED ON THREE SUPPORTS

H cm.

$$F \leq H/300$$



L cm.



CW 5217

$$I_x = 212.85 \text{ Cm}^4$$

$$W_x = 32.49 \text{ Cm}^3$$

ALLOWABLE DEFLECTION (F)	
SINGLE GLASS 0 - 8 mm. UP TO 3 m. BEARING SPAN	H/200
SINGLE GLASS 0 - 8 mm. BEARING SPAN > 3 m	H/300
INSULATING DOUBLE GLASS	H/300

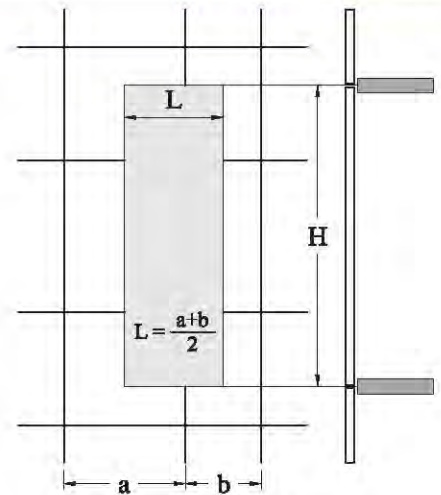
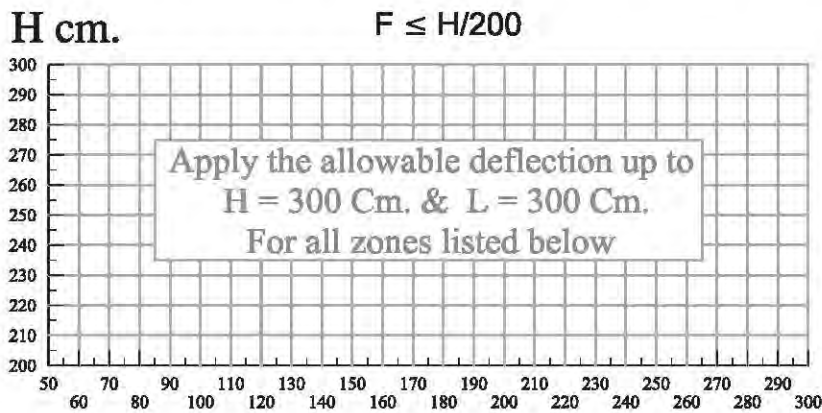
L cm.

Note: Refereeing to the zone curves not presented in the above chart.
Apply the allowable deflection up to H=370Cm. & L=300Cm.

ZONE 1	-----	50kgf/m ²
ZONE 2	- - - - -	60kgf/m ²
ZONE 3	—————	70kgf/m ²
ZONE 4	—————	80kgf/m ²
ZONE 5	—————	90kgf/m ²

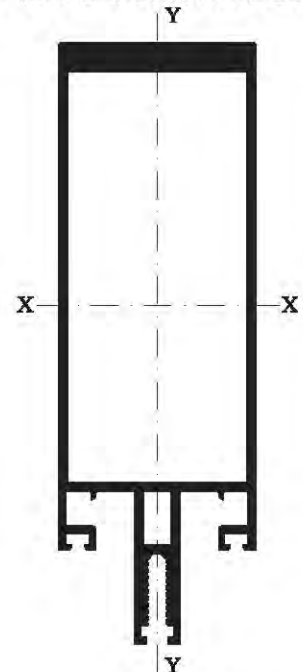
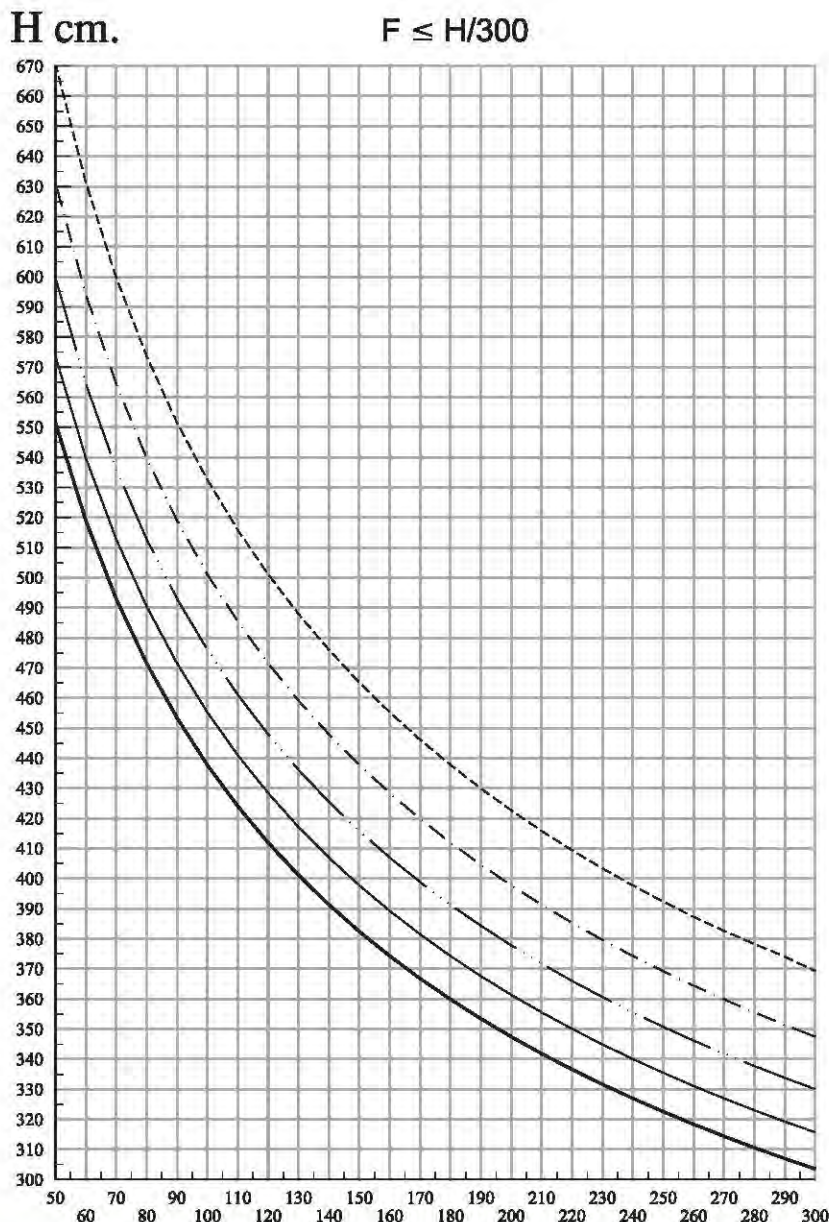


STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION



H = BEARING SPAN
L = LOAD WIDTH

RECTANGLE LOAD CHART FOR WIND LOAD
SIMPLY SUPPORTED ON TWO SUPPORTS



CW 5218

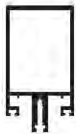
$I_x = 421.30 \text{ Cm}^4$

$W_x = 60.34 \text{ Cm}^3$

ALLOWABLE DEFLECTION (F)	
SINGLE GLASS 0 - 8 mm. UP TO 3 m. BEARING SPAN	H/200
SINGLE GLASS 0 - 8 mm. BEARING SPAN > 3 m	H/300
INSULATING DOUBLE GLASS	H/300

ZONE 1	-----	50kgf/m ²
ZONE 2	- - - - -	60kgf/m ²
ZONE 3		70kgf/m ²
ZONE 4	—————	80kgf/m ²
ZONE 5	—————	90kgf/m ²

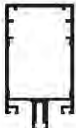


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 1108 (85 mm)	Mullion Profile	CW 5206	2.203 Kg/m.	491.37 mm.	81.13 cm ⁴	28.14 cm ⁴
	3 052 1111 (110 mm)	Mullion Profile	CW 5207	2.808 Kg/m.	541.40 mm.	182.52 cm ⁴	38.52 cm ⁴
	3 052 1113 (135 mm)	Mullion Profile	CW 5208	3.621 Kg/m.	590.57 mm.	372.49 cm ⁴	49.16 cm ⁴
	3 052 1116 (160 mm)	Mullion Profile	CW 5209	3.969 Kg/m.	560.57 mm.	564.74 cm ⁴	56.53 cm ⁴
	3 052 1121 (210 mm)	Mullion Profile	CW 5220.1	5.184 Kg/m.	740.57 mm.	1141.32 cm ⁴	75.65 cm ⁴
	3 088 1123 (220 mm)	Mullion Profile		7.277 Kg/m.	913.72 mm.	1961.55 cm ⁴	302.44 cm ⁴

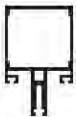
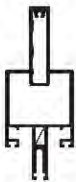


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 1208 (85 mm)	Mullion Profile	CW 5216.1	2.333 Kg/m.	511.20 mm.	99.68 cm ⁴	28.26 cm ⁴
	3 052 1211 (110 mm)	Mullion Profile	CW 5217.1	2.936 Kg/m.	561.40 mm.	213.07 cm ⁴	38.65 cm ⁴
	3 052 1213 (135 mm)	Mullion Profile	CW 5218	3.748 Kg/m.	610.62 mm.	926.93 cm ⁴	76.31 cm ⁴
	3 052 1216 (160 mm)	Mullion Profile	CW 5219	4.099 Kg/m.	660.62 mm.	627.79 cm ⁴	56.65 cm ⁴
	3 052 1218 (185 mm)	Mullion Profile	CW 5220	4.919 Kg/m.	710.62 mm.	926.93 cm ⁴	76.31 cm ⁴
	3 0521 258 (85 mm)	Mullion Profile	CW 5216	2.695 Kg/m.	562.00 mm.	99.65 cm ⁴	31.22 cm ⁴

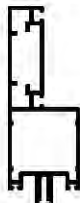


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 1261 (110 mm)	Mullion Profile	CW 5217	2.235 Kg/m.	612.00 mm.	212.85 cm ⁴	40.09 cm ⁴
	3 052 1401 (12 mm)	Transom Adeptor	CW 5230	0.896 Kg/m.	306.20 mm.	1.49 cm ⁴	6.59 cm ⁴
	3 052 1404 (45 mm)	Transom Profile	CW 5232	1.486 Kg/m.	373.79 mm.	16.32 cm ⁴	16.54 cm ⁴
	3 052 1406 (60 mm)	Transom Profile	CW 5233	1.620 Kg/m.	403.79 mm.	31.47 cm ⁴	19.59 cm ⁴
	3 052 1408 (85 mm)	Transom Profile	CW 5235	1.974 Kg/m.	451.10 mm.	76.12 cm ⁴	27.08 cm ⁴
	3 052 1411 (110mm)	Transom Profile		2.226 Kg/m.	501.10 mm.	138.74 cm ⁴	32.76 cm ⁴



PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 1413 (135 mm)	Transom Profile		2.469 Kg/m.	551.10 mm.	226.45 cm ²	38.43 cm ²
	3 052 1504 (45 mm)	Transom Profile	CW 5212	1.688 Kg/m.	399.40 mm.	24.58 cm ²	16.68 cm ²
	3 052 1506 (60 mm)	Transom Profile	CW 5213	1.817 Kg/m.	429.40 mm.	42.61 cm ²	19.73 cm ²
	3 052 1552 (25 mm)	Transom Profile	CW 5210	1.510 Kg/m.	331.00 mm.	10.17 cm ²	12.29 cm ²
	3 052 1606 (60 mm)	Transom Profile		1.350 Kg/m.	350.19 mm.	29.50 cm ²	16.60 cm ²
	3 052 2206 (110 mm)	Transom Profile	CW 5216.2	3.024 Kg/m.	562.24 mm.	163.83 cm ²	24.20 cm ²



PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 2208 (135 mm)	Transom Profile	CW 5217.2	3.335 Kg/m.	612.24 mm.	275.61 cm ²	31.31 cm ²
	3 052 2413 (135 mm)	Transom Profile		2.329 Kg/m.	570.53 mm.	178.75 cm ²	23.45 cm ²
	3 052 3004 (81 mm)	Mullion Adeptor		1.089 Kg/m.	381.35 mm.	21.65 cm ²	3.68 cm ²
	3 052 3013 (135 mm)	Mullion Adeptor		1.853 Kg/m.	506.89 mm.	120.76 cm ²	7.70 cm ²
	3 052 3113 (135 mm)	Mullion Adeptor		2.316 Kg/m.	606.60 mm.	188.43 cm ²	9.88 cm ²
	3 052 3604 (60 mm)	Mullion Profile		1.672 Kg/m.	451.17 mm.	33.01 cm ²	11.56 cm ²



PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	I _x	I _y
	3 052 3646 (60 mm)	Mullion Profile		1.728 Kg/m.	539.94 mm.	64.13 cm ⁴	23.52 cm ⁴
	3 052 3656 (61 mm)	Mullion Profile		2.581 Kg/m.	652.58 mm.	124.00 cm ⁴	28.32 cm ⁴
	3 052 3711 (81 mm)	Mullion Profile		2.262 Kg/m.	640.86 mm.	197.18 cm ⁴	13.53 cm ⁴
	3 052 3713 (135 mm)	Mullion Profile		1.853 Kg/m.	506.89 mm.	120.76 cm ⁴	7.70 cm ⁴
	3 052 3911 (110mm)	Transom Profile		2.127 Kg/m.	585.44 mm.	165.50 cm ⁴	22.10 cm ⁴
	3 052 3913 (135 mm)	Transom Profile		2.373 Kg/m.	635.44 mm.	27.89 cm ⁴	255.09 cm ⁴

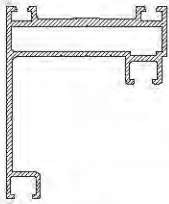


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 4008	Telescopic Joint	CW 5251	2.060 Kg/m.	276.21 mm.	34.79 cm ⁴	21.63 cm ⁴
	3 052 4011	Telescopic Joint	CW 5252	2.495 Kg/m.	323.53 mm.	85.34 cm ⁴	27.97 cm ⁴
	3 052 4013	Telescopic Joint	CW 5258	3.048 Kg/m.	362.52 mm.	150.15 cm ⁴	35.54 cm ⁴
	3 052 4016	Telescopic Joint	CW 5259	3.424 Kg/m.	411.92 mm.	250.18 cm ⁴	41.70 cm ⁴
	3 052 4058	Telescopic Joint	CW 5256	2.268 Kg/m.	245.24 mm.	24.00 cm ⁴	21.61 cm ⁴
	3 052 4061	Telescopic Joint	CW 5257	2.735 Kg/m.	290.52 mm.	65.21 cm ⁴	29.12 cm ⁴

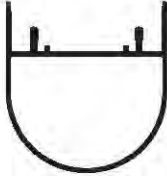
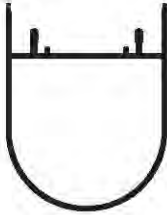
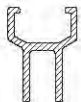
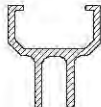


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 4211	Telescopic Joint		1.799 Kg/m.	294.40 mm.	69.95 cm ⁴	6.80 cm ⁴
	3 052 4213	Telescopic Joint		1.808 Kg/m.	311.56 mm.	83.36 cm ⁴	2.66 cm ⁴
	3 052 5011	Pressure Profile	CW 5221	0.605 Kg/m.	210.49 mm.		
	3 052 5020	Presser Profile	CW 5240	0.460 Kg/m.	112.43 mm.		
	3 052 5021	Sloped Presser Profile	CW 5241	0.477 Kg/m.	145.62 mm.		
	3 052 5111	Pressure Profile	CW 5222	1.150 Kg/m.	420.82 mm.		

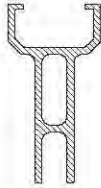
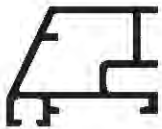
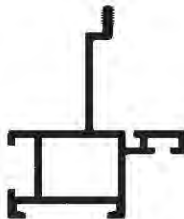


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 5061	Pressure Profile		1.111 Kg/m.	339.04 mm.		
	3 052 5251	Face Cap	CW 5225	0.394 Kg/m.	198.70 mm.		
	3 052 5261	Face Cap	CW 5226	0.435 Kg/m.	216.04 mm.		
	3 052 5352	Face Cap	CW 5227	0.696 Kg/m.	234.17 mm.		
	3 052 5353	Face Cap		0.777 Kg/m.	254.17 mm.		
	3 052 5363	Face Cap		0.718 Kg/m.	239.96 mm.		

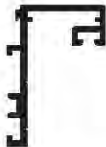
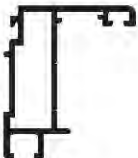
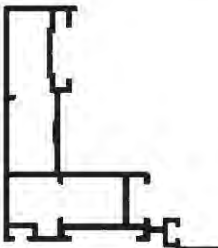
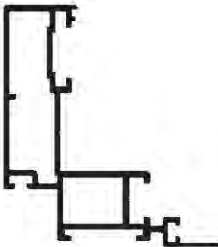
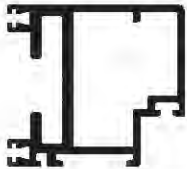


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 5365	Face Cap	CW 5228	0.900 Kg/m.	273.89 mm.		
	3 052 5366	Face Cap	CW 5229	0.900 Kg/m.	300.59 mm.		
	3 052 5510	Face Cap		1.446 Kg/m.	374.00 mm.		
	3 052 5914	Cover Adapetor		1.757 Kg/m.	587.96 mm.		
	3 052 6001	Spacer (16 mm)	CW 5291	0.251 Kg/m.	113.17 mm.		
	3 052 6002	Spacer (22 mm)	CW 5292	0.300 Kg/m.	132.19 mm.		

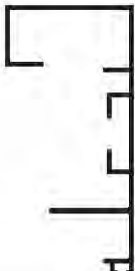
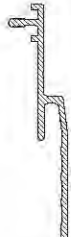
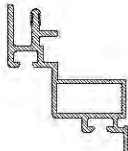


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 6004	Spacer (22 mm)		0.487 Kg/m.	168.19 mm.		
	3 052 6012	4 Way Single Glass Frame (22 mm)	CW 5296	0.377 Kg/m.	123.91 mm.		
	3 052 6013	4 Way Single Glass Frame (26 mm)	CW 5297	0.422 Kg/m.	132.28 mm.		
	3 052 6023	4 Way Single Glass Frame (28 mm)	CW 5295	0.563 Kg/m.	181.42 mm.		
	3 052 6042	Semi Structure Single Glass Frame (22 mm)	CW 5299	0.767 Kg/m.	236.00 mm.		
	3 052 6026	Spacer (20 mm)		0.665 Kg/m.	249.78 mm.		



PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 6101	Frame Profile	CW 6296	0.535 Kg/m.	227.94 mm.		
	3 052 6111	Frame Profile (22 mm)	CW 5283	0.656 Kg/m.	227.99 mm.		
	3 052 6255	Sash Profile	CW 5288	1.259 Kg/m.	374.00 mm.		
	3 052 6265	Sash Profile	CW 5289	1.184 Kg/m.	374.00 mm.		
	3 052 6295	Photo Cell Sash Profile		1.549 Kg/m.	348.67 mm.		
	3 052 9164	End Profile	CW 5279	0.545 Kg/m.	177.20 mm.		

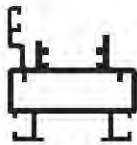
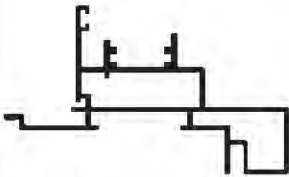
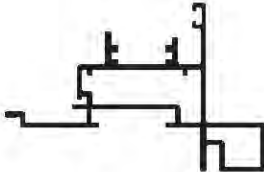
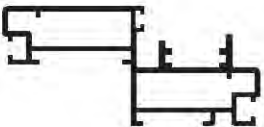
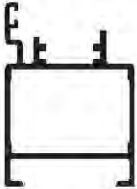
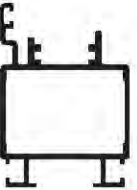


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 9161	End Profile		0.714 Kg/m.	317.38 mm.		
	3 052 9231	End Profile		1.303 Kg/m.	576.40 mm.		
	3 052 9232	Floor Filler Profile	CW 5276	1.361 Kg/m.	582.67 mm.		
	3 052 9330	Adpetor Profile		0.404 Kg/m.	191.24 mm.		
	3 052 9465	Frame Complementary	CW 5274	0.489 Kg/m.	209.66 mm.		
	3 052 9495	Seah Glass Extension Profile		0.205 Kg/m.	125.70 mm.		

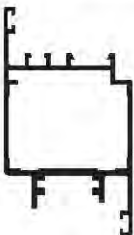
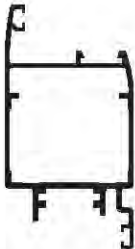
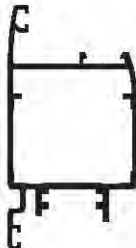
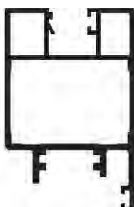
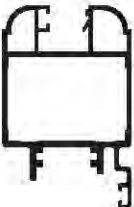
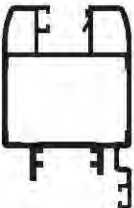


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	3 052 9711	Glass Extension Profile		0.340 Kg/m.	164.02 mm.		
	3 052 9496	Photo cell Sash Adaptor		0.596 Kg/m.	285.71 mm.		
	3 052 9611	Glass Spacer (12 mm.)	CW 5261	0.189 Kg/m.	85.38 mm.		
	3 052 9612	Glass Spacer (12 mm.)	CW 5263	0.208 Kg/m.	79.75 mm.		
	3 052 9623	120 ° Adeptor Spacer (12 mm.)	CW 5262	0.149 Kg/m.	74.84 mm.		
	3 062 9700	Rod	CW 6270	0.194 Kg/m.	51.36 mm.		

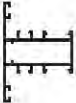
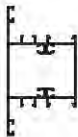


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	1 045 3620	Frame		1.301 Kg/m.	374.46 mm.	8.56	14.85
	1 045 3619	Frame		1.835 Kg/m.	524.91 mm.	16.94	63.12
	1 045 3692	Frame		1.789 Kg/m.	504.25 mm.	17.54 cm ⁴	44.88 cm ⁴
	1 045 3623	Frame		1.830 Kg/m.	481.60 mm.	13.56 cm ⁴	65.31 cm ⁴
	1 045 3700	Frame	SH 4517	1.420 Kg/m.	377.06 mm.	22.55 cm ⁴	20.04 cm ⁴
	1 045 3720	Frame	SH 4519	1.478 Kg/m.	414.46 mm.	24.76 cm ⁴	19.19 cm ⁴



PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	1 045 4751	Sash Profile		1.564 Kg/m.	431.52 mm.	32.55 cm ⁴	21.86 cm ⁴
	1 045 4754	Sash Profile	SH4538	1.638 Kg/m.	433.75 mm.	42.27 cm ⁴	23.87 cm ⁴
	1 045 4764	Sash Profile	SH 4534	1.639 Kg/m.	433.75 mm.	42.27 cm ⁴	23.00 cm ⁴
	1 045 4790	Sash Profile		1.778 Kg/m.	413.11 mm.	38.67 cm ⁴	23.42 cm ⁴
	1 045 4793	Sash Profile		1.747 Kg/m.	416.13 mm.	36.66 cm ⁴	22.13 cm ⁴
	1 045 4794	Sash Profile		1.758 Kg/m.	418.40 mm.	37.59 cm ⁴	22.47 cm ⁴



PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	1 045 5010	Transom	SH 4551	0.926 Kg/m.	353.50 mm.	8.90 cm ⁴	6.81 cm ⁴
	1 045 5120	Transom	SH 4552	1.242 Kg/m.	392.50 mm.	19.30 cm ⁴	12.04 cm ⁴
	1 045 5130	Transom	SH 4553	1.890 Kg/m.	511.70 mm.	123.62 cm ⁴	21.97 cm ⁴
	1 045 5140	Transom	SH 4554	2.163 Kg/m.	571.70 mm.	27.62 cm ⁴	222.27 cm ⁴
	1 045 5330	Skirt	SH 4558	1.987 Kg/m.	548.65 mm.	24.28 cm ⁴	143.19 cm ⁴
	1 045 5340	Skirt	SH 4559	2.260 Kg/m.	608.65 mm.	29.89 cm ⁴	250.72 cm ⁴

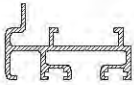
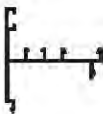
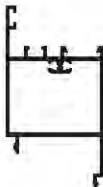
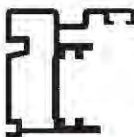


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	1 045 6110	Glass Beading	SH 4563	0.289 Kg/m.	172.50 mm.		
	1 045 6130	Glass Beading	SH 4560	0.270 Kg/m.	163.50 mm.		
	1 045 6140	Glass Beading	SH 4561	0.262 Kg/m.	158.50 mm.		
	1 045 6142	Glass Beading	SH 4562	0.246 Kg/m.	148.29 mm.		
	1 045 6145	Glass Beading	SH 4565	0.240 Kg/m.	145.24 mm.		
	1 045 6160	Glass Beading	SH 4568	0.251 Kg/m.	151.84 mm.		

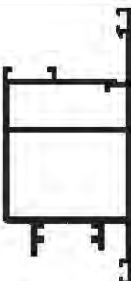
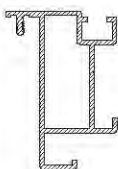
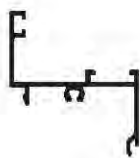


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	1 045 6180	Glass Beading	SH 4566	0.211 Kg/m.	137.51 mm.		
	1 045 6182	Glass Beading	SH 4567	0.206 Kg/m.	126.97 mm.		
	1 045 6290	Glass Beading	SH 4569	0.227 Kg/m.	117.69 mm.		
	1 045 6292	Glass Beading		0.187 Kg/m.	91.14 mm.		
	1 045 9140	Door Sill		0.541 Kg/m.	260.27 mm.		
	1 045 9120	Sill Reinforcing	SH 4577	0.356 Kg/m.	186.68 mm.		



PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	1 045 9440	Brush Holder		0.541 Kg/m.	260.27 mm.		
	1 045 9430	Skirting Board	SH 4568	0.540 Kg/m.	277.69 mm.		
	1 045 9510	Skirting Board		1.072 Kg/m.	349.42 mm.		
	1 045 9520	Skirting Board	SH 4573	1.242 Kg/m.	387.42 mm.		
	1 045 9540	Skirting Board		1.657 Kg/m.	467.42 mm.		
	1 045 9630	Central Nod	SH 4588	0.902 Kg/m.	267.81 mm.		

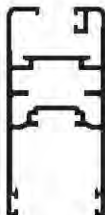
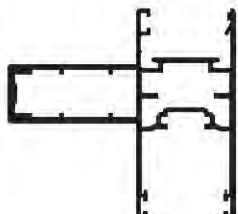


PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	1 045 9570	Brush Holder	SH 4581	0.359 Kg/m.	177.46 mm.		
	1 045 9910	Rod	SH 4571	0.146 Kg/m.	48.40 mm.		
	1061 4759	Sash Profile		2.266 Kg/m.	458.86 mm.	66.66 cm ²	32.72 cm ²
	1 061 4769	Sash Profile		2.257 Kg/m.	458.86 mm.	66.66 cm ²	31.60 cm ²
	1 061 9253	Frame Adpetor		0.749 Kg/m.	261.94 mm.		
	1 061 9510	Skirting Board		0.705 Kg/m.	322.86 mm.		

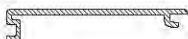
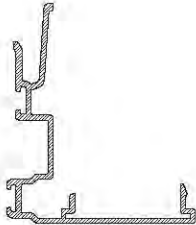


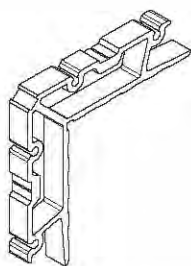
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	1 061 6140	Glass Beading	RC 6161	0.402 Kg/m.	234.83 mm.		
	1 061 6170	Glass Beading		0.338 Kg/m.	204.40 mm.		
	1 061 6180	Glass Beading	RC 6166	0.324 Kg/m.	197.40 mm.		
	1 061 6190	Glass Beading	RC 6167	0.311 Kg/m.	189.09 mm.		
	1 061 6192	Glass Beading	RC 6169	0.297 Kg/m.	181.09 mm.		
	1 061 6500	Glass Beading	RC 6169	0.142 Kg/m.	70.85 mm.		



PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	I _x	I _y
	2 122 3300	Mullion Adeptor		2.736 Kg/m.	756.81 mm.	220.78 cm ⁴	22.30 cm ⁴
	2 120 4110	Sash Profile	TN 1240	1.615 Kg/m.	519.22 mm.	33.07	15.48
	2 120 4120	Sash Profile	TN 1242	1.550 Kg/m.	479.51 mm.	28.75	15.34
	2 120 4130	Sash Profile		1.520 Kg/m.	474.60 mm.	28.25	15.31
	2 120 4330	Sash Profile		2.338 Kg/m.	577.39 mm.	31.88	76.80
	2 120 9210	Rail	TN 1291	0.196 Kg/m.	83.56 mm.		



PROFILE SHAPE	Prof. No.	DESCRIPTION	Old. No.	WEIGHT	PER.	lx	ly
	2 120 9220	Trac Cover	TN 1292	0.150 Kg/m.	79.38 mm.		
	2120 9510	Central Connection	TN 1250	0.560 Kg/m.	238.98 mm.		
	2 120 9520	Central Connection	TN 1251	0.240 Kg/m.	131.76 mm.		
	2120 9530	Central Connection		0.664 Kg/m.	336.67 mm.		



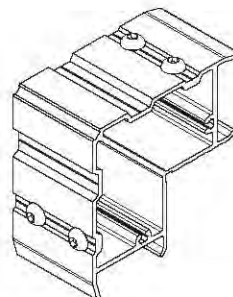
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Old No. 0304/08

Connecting Angle

Material: Aluminium

Finishes: Raw



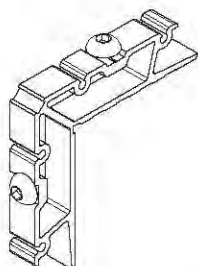
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Old No.

Connecting Angle

Material: Aluminium

Finishes: Raw



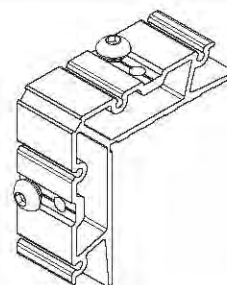
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Old No. 0304/11

Connecting Angle

Material: Aluminium

Finishes: Raw



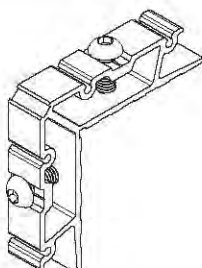
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Old No.

Connecting Angle

Material: Aluminium

Finishes: Raw



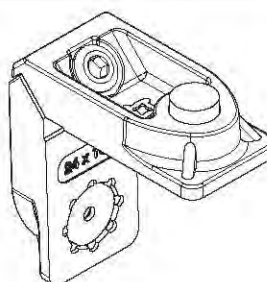
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Old No. 0304/14

Connecting Angle

Material: Aluminium

Finishes: Raw



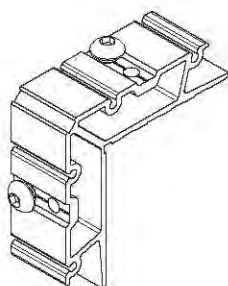
01 4240 0

Old No.

Corner Joint

Material: Aluminium

Finishes: Raw



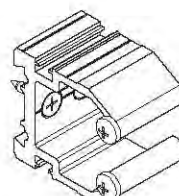
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Old No. 0305/23

Connecting Angle

Material: Aluminium

Finishes: Raw



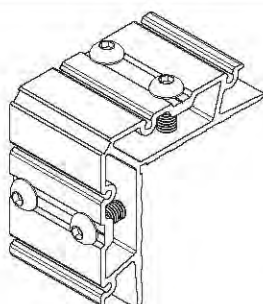
66 4531 0

Old No. 0453/30

Transom Joint

Material: Aluminium

Finishes: Raw



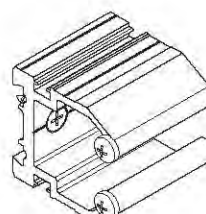
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Old No. 0305/38

Connecting Angle

Material: Aluminium

Finishes: Raw



66 4531 9

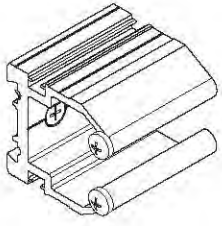
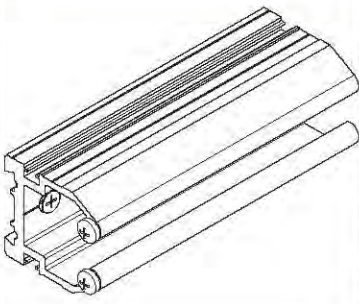
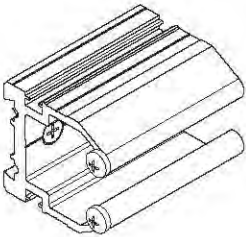
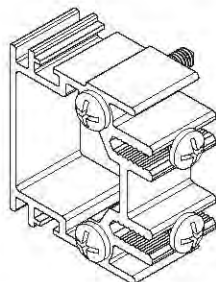
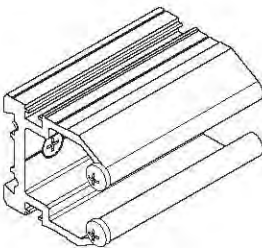
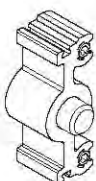
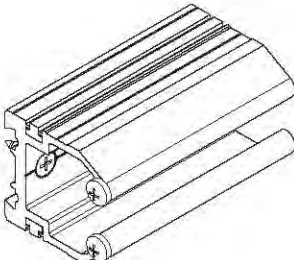
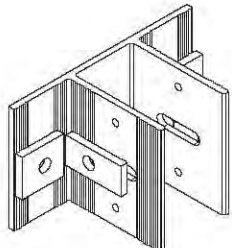
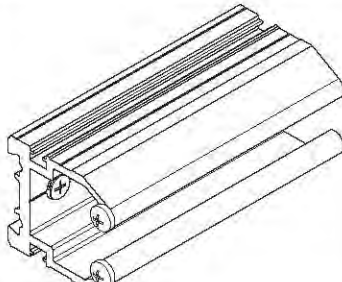
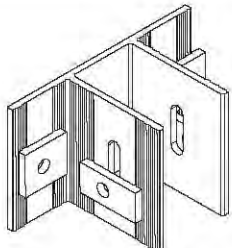
Old No. 0453/45

Transom Joint

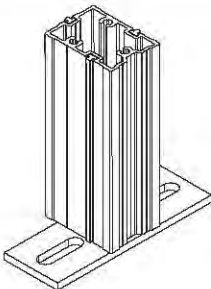
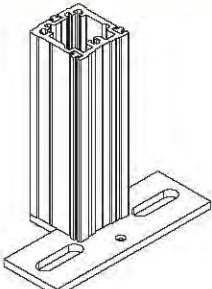
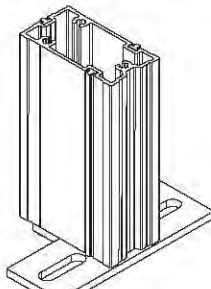
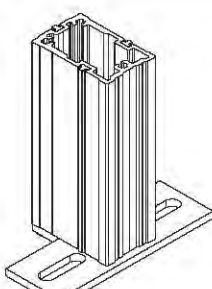
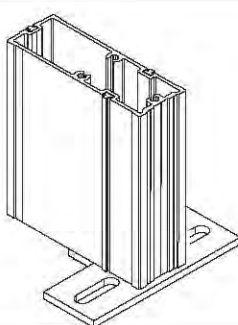
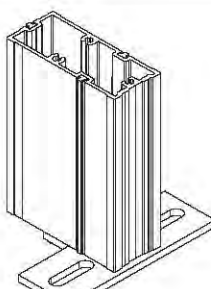
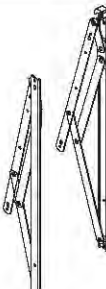
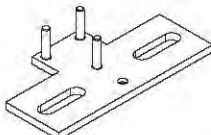
Material: Aluminium

Finishes: Raw

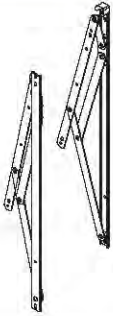
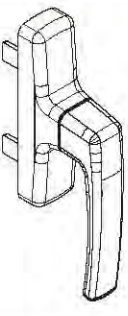
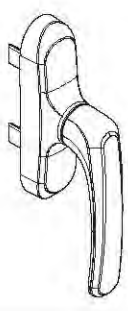
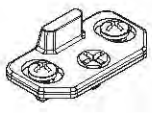
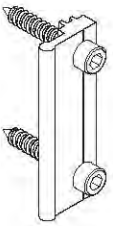
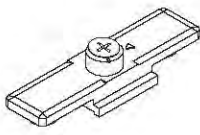
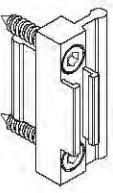


	66 4532 0 Old No. 0453/49 Transom Joint Material: Aluminium Finishes: Raw		66 4537 0 Old No. 0453/133 Transom Joint Material: Aluminium Finishes: Raw
	66 4533 0 Old No. 0453/63 Transom Joint Material: Aluminium Finishes: Raw		66 4511 0 Old No. Transom Joint Material: Aluminium Finishes: Raw
	66 4534 0 Old No. 0453/72 Transom Joint Material: Aluminium Finishes: Raw		66 5570 0 Old No. 0457 Transom Joint Material: Aluminium Finishes: Anodized
	66 4535 0 Old No. 0453/87 Transom Joint Material: Aluminium Finishes: Raw		66 0510 0 Old No. 4451 Fixing Bracket Material: Aluminium Finishes: Raw
	66 4536 0 Old No. 0453/108 Transom Joint Material: Aluminium Finishes: Raw		66 0520 0 Old No. 4452 Exption Bracket Material: Aluminium Finishes: Raw

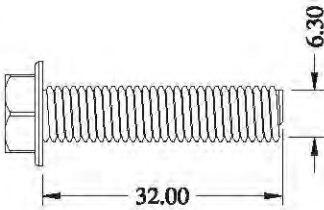


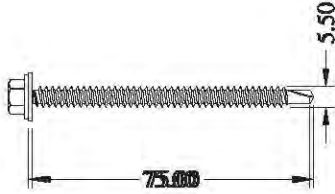
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	66 1540 0 Old No. 4454 Base Plate <i>Material: Steel& Alu.</i> <i>Finishes: Raw</i>		66 1590 0 Old No. 4459 Base Plate <i>Material: Steel& Alu.</i> <i>Finishes: Raw</i>
	66 1550 0 Old No. 4455 Base Plate <i>Material: Steel& Alu.</i> <i>Finishes: Raw</i>		MAC-23FHJ-18"T-16.5 Old No. Stay Arms <i>Material: Stainless Steel</i> <i>Finishes: Raw</i>
	66 1560 0 Old No. 4456 Base Plate <i>Material: Steel& Alu.</i> <i>Finishes: Raw</i>		MAC-23FHJ-22"T-16.5 Old No. Stay Arms <i>Material: Stainless Steel</i> <i>Finishes: Raw</i>
	66 1570 0 Old No. 4457 Steel Plate <i>Material: Steel</i> <i>Finishes: Galvanized</i>		MAC-23FHJ-26"T-16.5 Old No. Stay Arms <i>Material: Stainless Steel</i> <i>Finishes: Raw</i>

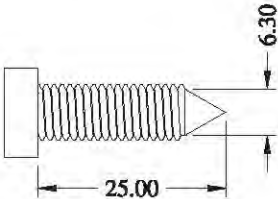


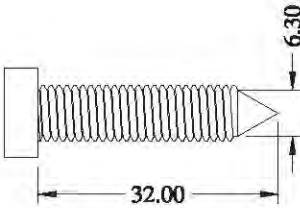
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	MAC-BCK300-14" Old No. Stay Arms Material: Stainless Steel Finishes: Raw		30 1200 1 Old No.0529 Omega Cremone Handle Material: Aluminium Finishes: Raw,Ral
	60 0500 0 Old No.0550 Nylon Clip Material: Plastic Finishes: Black		66 8529 0 Old No.0529 Locking Point Striker Material: Aluminium Finishes: Galvanized
	66 7610 0 Old No.0561 Glass Fixing Part Material: Aluminium Finishes: Anodized,Ral		50 1160 0 Old No.0516 Locking Point Striker Material: Aluminium Finishes: Galvanized
	66 7620 0 Old No.0562 Glass Fixing Part Material: Aluminium Finishes: Anodized,Ral		50 1180 0 Old No.0518 Locking Point Material: Aluminium Finishes: Galvanized

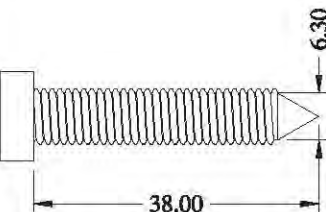


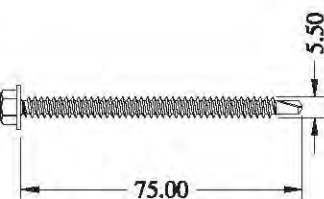
	201-631
	Old No.
	Fixing Screw
	Material: Steel
	Finishes: Galvanized

	204-551
	Old No.
	Fixing Screw
	Material: Steel
	Finishes: Galvanized

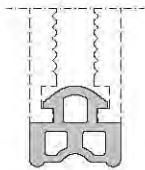
	202-630s
	Old No.
	Fixing Screw
	Material: Steel
	Finishes: Stainless Steel

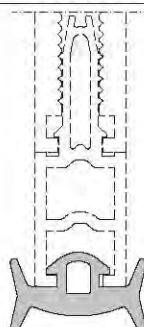
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	Old No.
	Fixing Screw
	Material: Steel
	Finishes: Stainless Steel

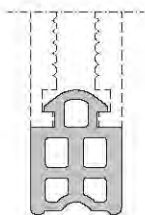
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	Finishes: Stainless Steel

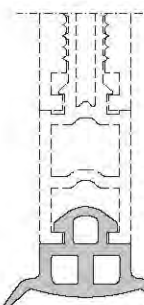
	203-551
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	Fixing Screw
	Material: Steel
	Finishes: Galvanized

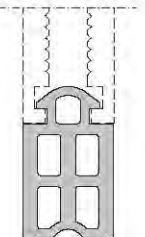


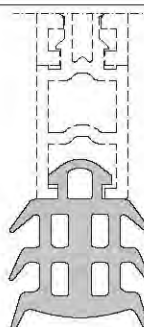
	GT 1250
	Old No.
	Isolator Filler Gasket
	Material: E.P.D.M. Finishes: Black

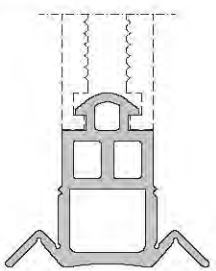
	GT 1255
	Old No.
	Isolator Filler Gasket
	Material: E.P.D.M. Finishes: Black

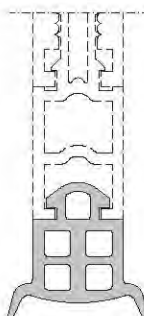
	GT 1251
	Old No.
	Isolator Filler Gasket
	Material: E.P.D.M. Finishes: Black

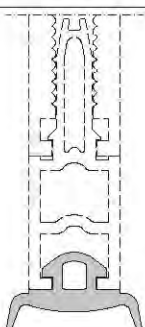
	GT 1256
	Old No.
	Isolator Filler Gasket
	Material: E.P.D.M. Finishes: Black

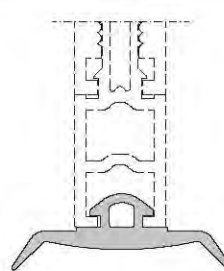
	GT 1252
	Old No.
	Isolator Filler Gasket
	Material: E.P.D.M. Finishes: Black

	GT 1257
	Old No.
	Isolator Filler Gasket
	Material: E.P.D.M. Finishes: Black

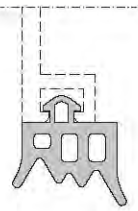
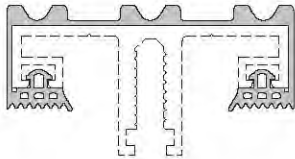
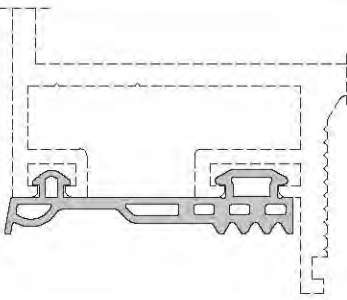
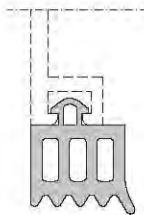
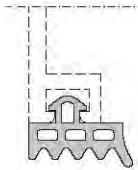
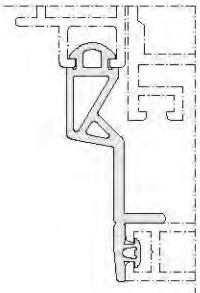
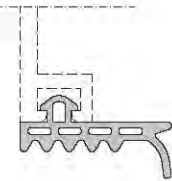
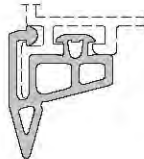
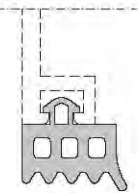
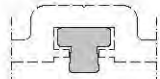
	GT 1254
	Old No.
	Isolator Filler Gasket
	Material: E.P.D.M. Finishes: Black

	GT 1258
	Old No.
	Isolator Filler Gasket
	Material: E.P.D.M. Finishes: Black

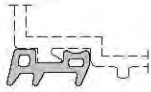
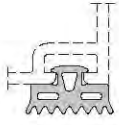
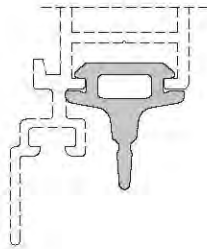
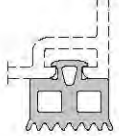
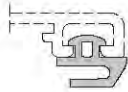
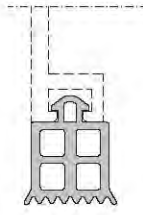
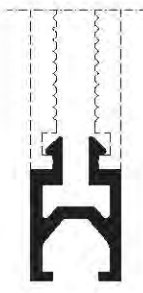
	GT 1253
	Old No.
	Isolator Filler Gasket
	Material: E.P.D.M. Finishes: Black

	GT 1259
	Old No.
	Isolator Filler Gasket
	Material: E.P.D.M. Finishes: Black

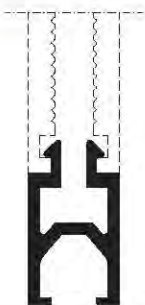


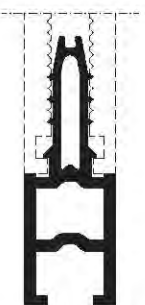
	GT 1267 Glazing Gasket 5:7mm. <i>Material:</i> E.P.D.M. <i>Finishes:</i> Black		GT 1224 Glazing Gasket 3:5mm. <i>Material:</i> E.P.D.M. <i>Finishes:</i> Black
	GT 1273 Glazing Gasket 3:5mm. <i>Material:</i> E.P.D.M. <i>Finishes:</i> Black		GT 1279 Glazing Gasket 9:11mm. <i>Material:</i> E.P.D.M. <i>Finishes:</i> Black
	GT 1274 Glazing Gasket 3:5mm. <i>Material:</i> E.P.D.M. <i>Finishes:</i> Black		GT 1284 Old No. Striker Gasket <i>Material:</i> E.P.D.M. <i>Finishes:</i> Black
	GT 1275 Glazing Gasket 3:5mm. <i>Material:</i> E.P.D.M. <i>Finishes:</i> Black		GT 1285 Old No. Striker Gasket <i>Material:</i> E.P.D.M. <i>Finishes:</i> Black
	GT 1277 Glazing Gasket 5:7mm. <i>Material:</i> E.P.D.M. <i>Finishes:</i> Black		GT 1286 Expansion Joint Gasket <i>Material:</i> E.P.D.M. <i>Finishes:</i> Black

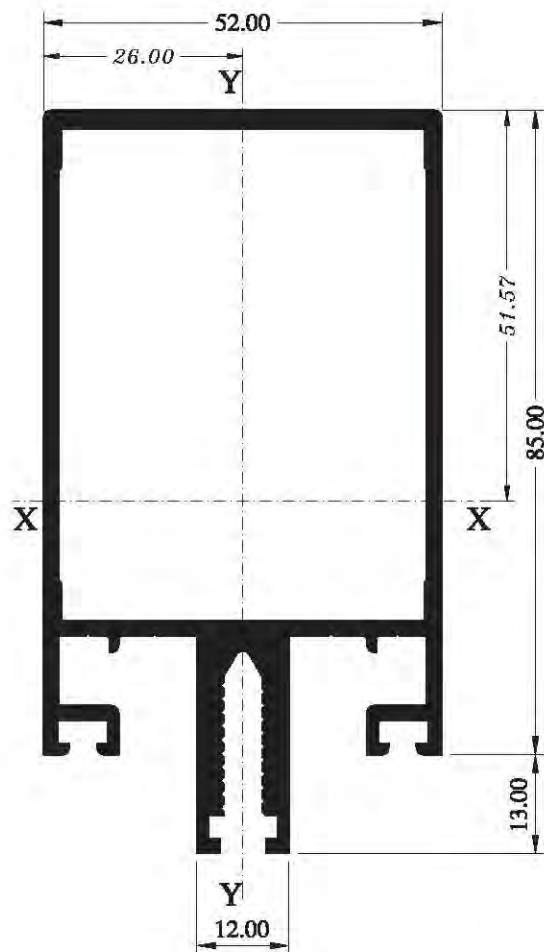


	GT 1334 Old No. Striker Gasket <i>Material: E.P.D.M.</i> <i>Finishes: Black</i>		GT 1343 Old No. Striker Gasket <i>Material: E.P.D.M.</i> <i>Finishes: Black</i>
	GT 1337 Old No. Striker Gasket <i>Material: E.P.D.M.</i> <i>Finishes: Black</i>		GT 1374 Glazing Gasket 3:5mm. <i>Material: E.P.D.M.</i> <i>Finishes: Black</i>
	GT 1336 Old No. Striker Gasket <i>Material: E.P.D.M.</i> <i>Finishes: Black</i>		GT 1377 Glazing Gasket 5:7mm. <i>Material: E.P.D.M.</i> <i>Finishes: Black</i>
	GT 1341 Old No. Striker Gasket <i>Material: E.P.D.M.</i> <i>Finishes: Black</i>		GT 1379 Glazing Gasket 9:11mm. <i>Material: E.P.D.M.</i> <i>Finishes: Black</i>
	RG 1293 Old No. Isolator Filler Gasket 15mm. <i>Material: P.V.C</i> <i>Finishes: Black</i>		



	RG 1294
	Old No.
	Isolator Filler Gasket 18mm.
	<i>Material: P.V.C</i> <i>Finishes: Black</i>

	RG 1295
	Old No.
	Isolator Filler Gasket 18mm.
	<i>Material: P.V.C</i> <i>Finishes: Black</i>

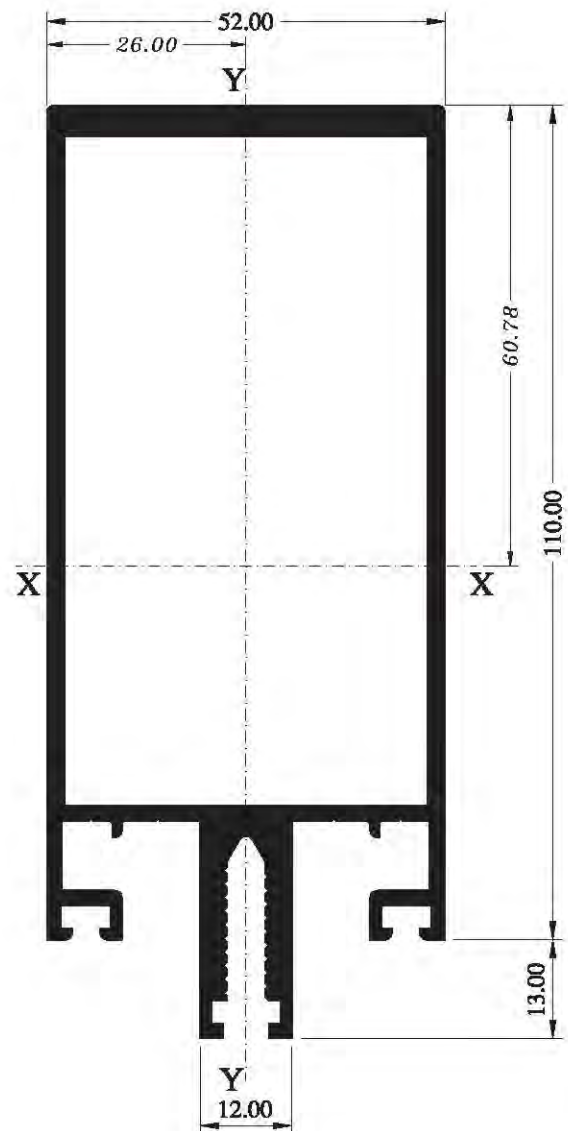


3 052 1108

2.203 Kg./ml.

$I_x = 81.13 \text{ Cm}^4$

$I_y = 28.14 \text{ Cm}^4$



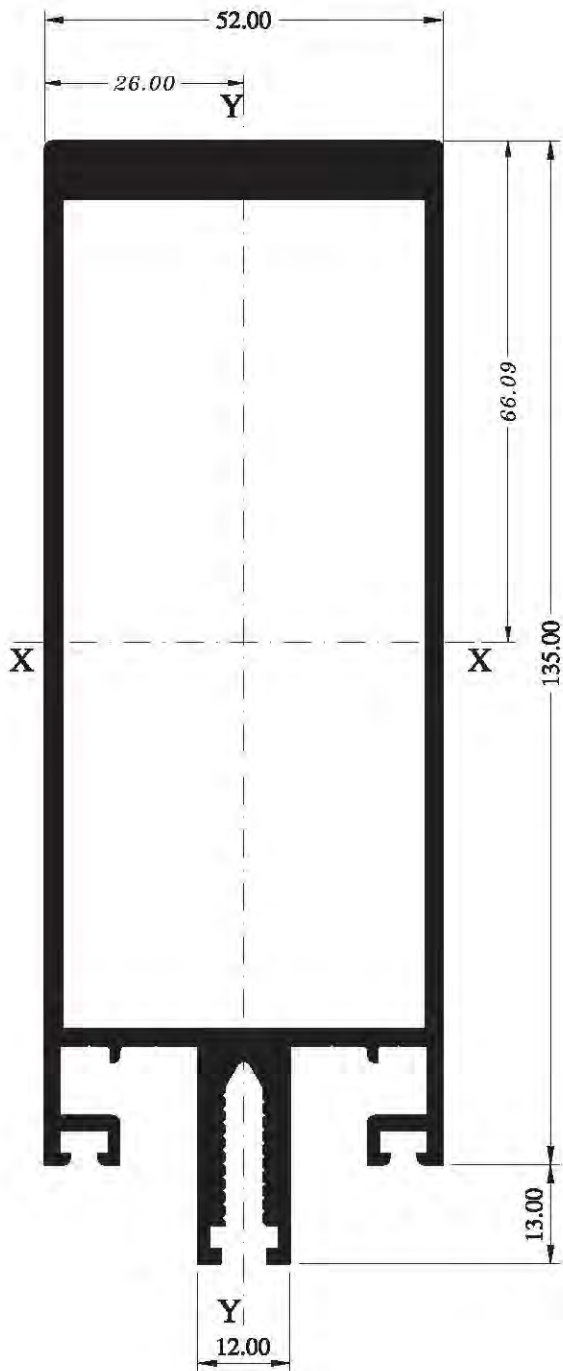
3 052 1111

2.808 Kg./ml.

$I_x = 182.52 \text{ Cm}^4$

$I_y = 38.52 \text{ Cm}^4$

Profile No.	<i>3 052 1108</i>	<i>3 052 1111</i>
Profile Old No.	<i>CW 5206</i>	<i>CW 5207</i>

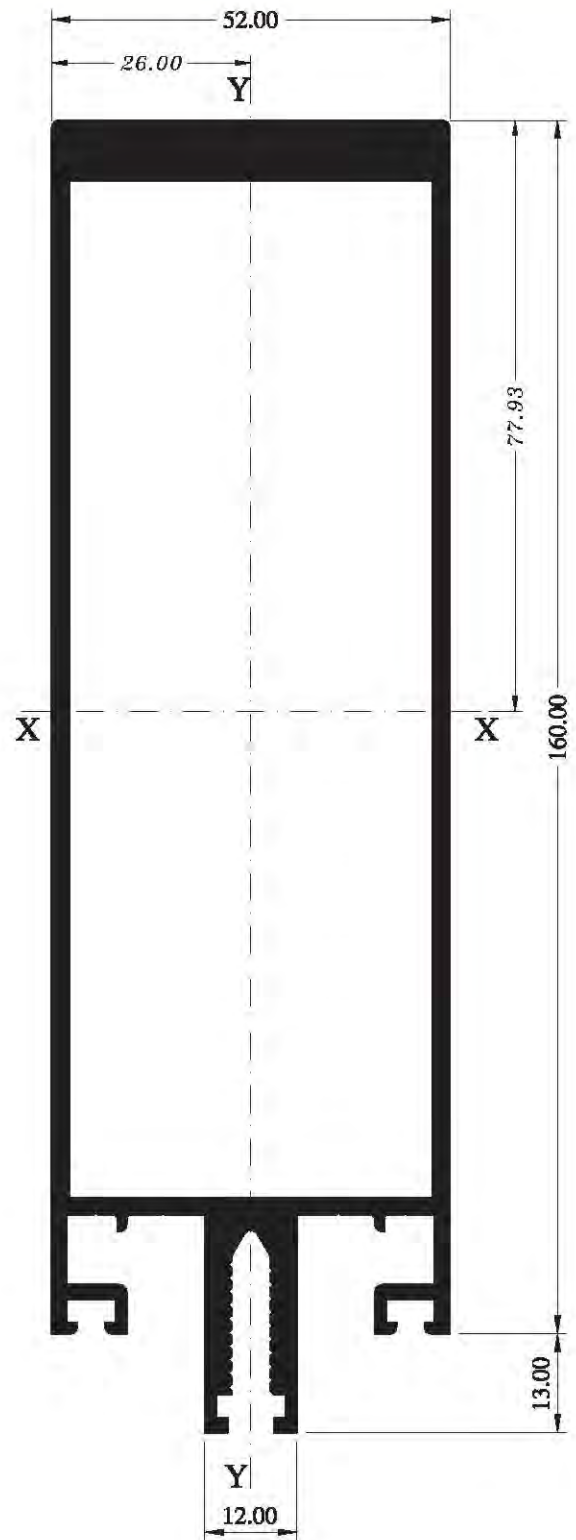


3 052 1113

3.621 Kg./ml.

$I_x = 372.49 \text{ Cm}^4$

$I_y = 49.16 \text{ Cm}^4$



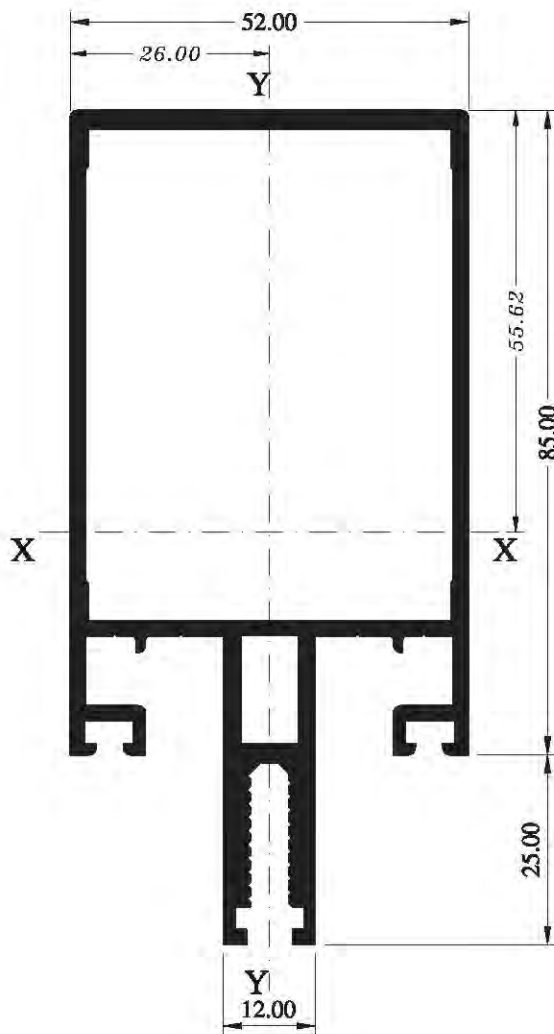
3 052 1116

3.969 Kg./ml.

$I_x = 564.74 \text{ Cm}^4$

$I_y = 56.53 \text{ Cm}^4$

Profile No.	3 052 1113	3 052 1116
Profile Old No.	CW 5208	CW 5209

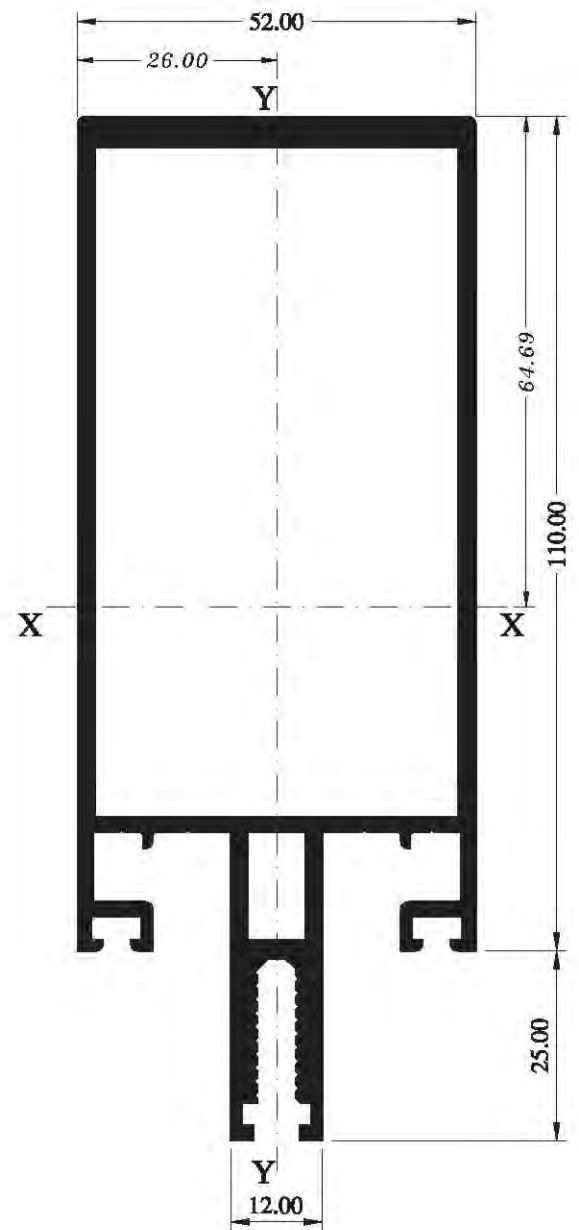


3 052 1208

2.333 Kg./ml.

$I_x = 99.68 \text{ Cm}^4$

$I_y = 28.26 \text{ Cm}^4$



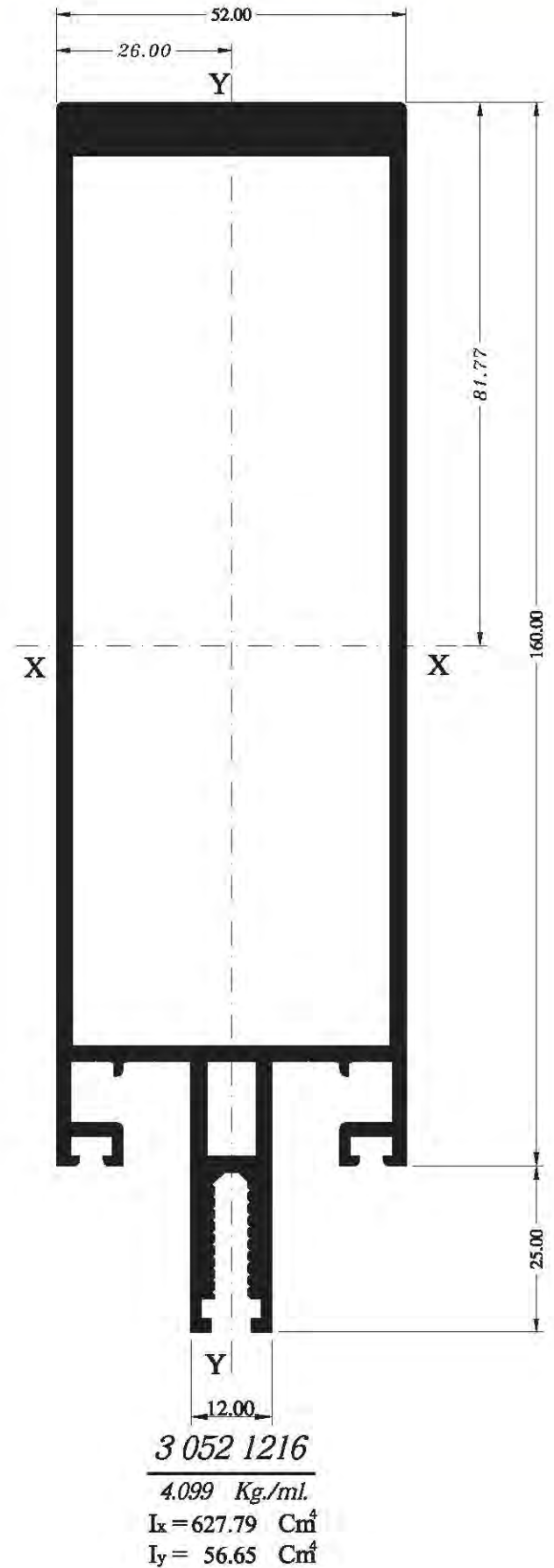
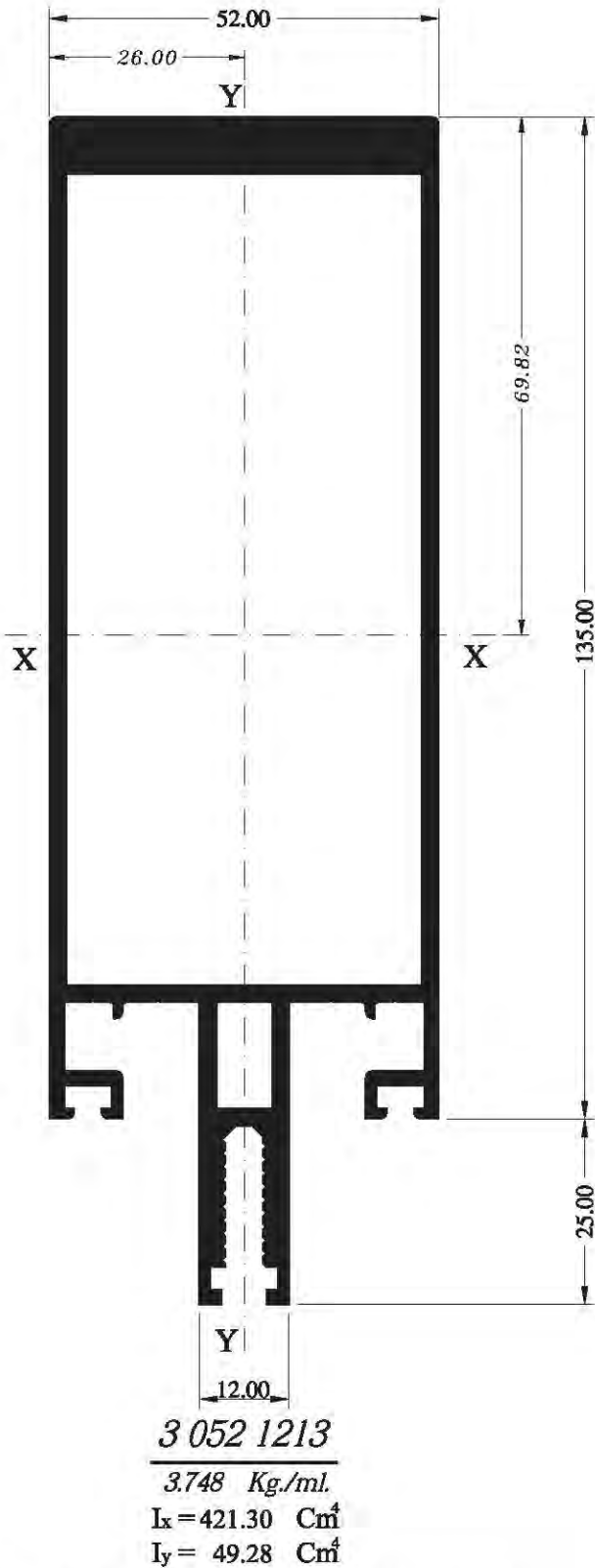
3 052 1211

2.936 Kg./ml.

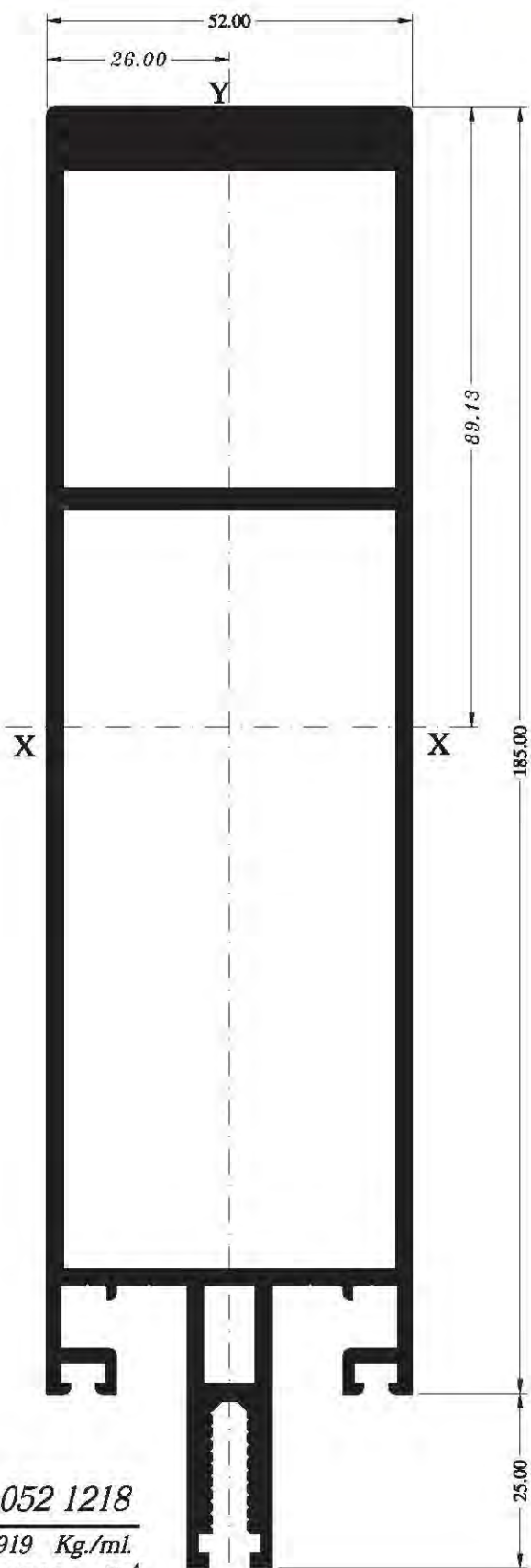
$I_x = 213.07 \text{ Cm}^4$

$I_y = 38.65 \text{ Cm}^4$

Profile No.	3 052 1208	3 052 1211
Profile Old No.	CW 5216.1	CW 5217.1



Profile No.	3 052 1213	3 052 1216
Profile Old No.	CW 5218	CW 5219



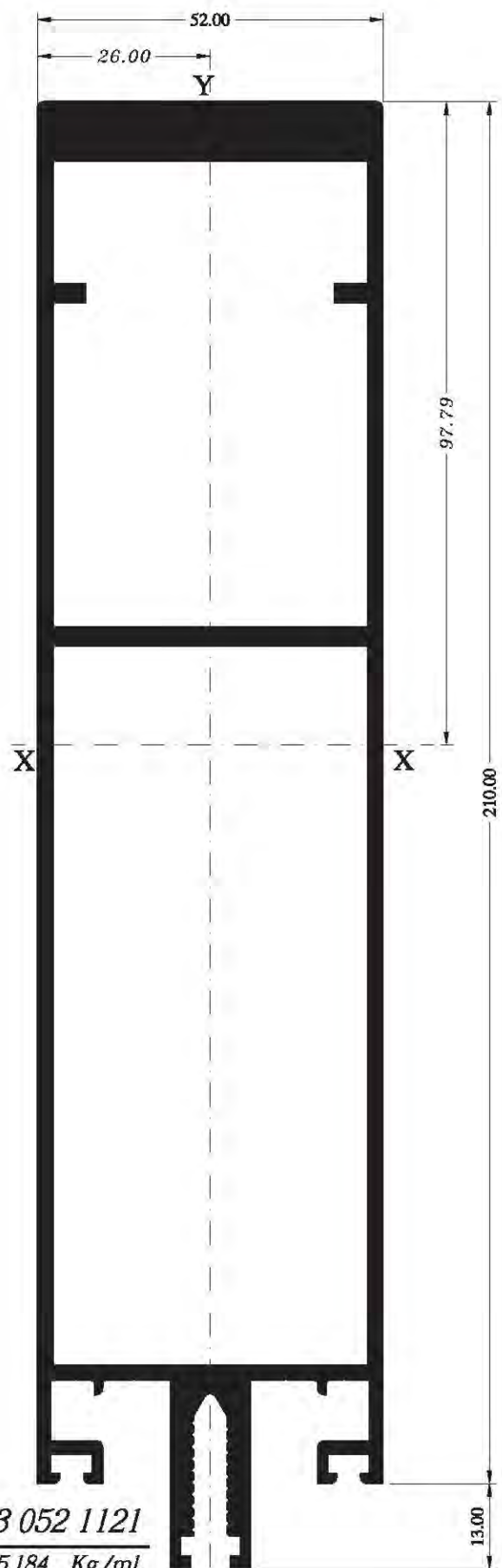
3 052 1218

4.919 Kg./ml.

$I_x = 926.93 \text{ Cm}^4$

$I_y = 76.31 \text{ Cm}^4$

Profile No.	3 052 1218	3 052 1121
Profile Old No.	CW 5220	CW 5220.1

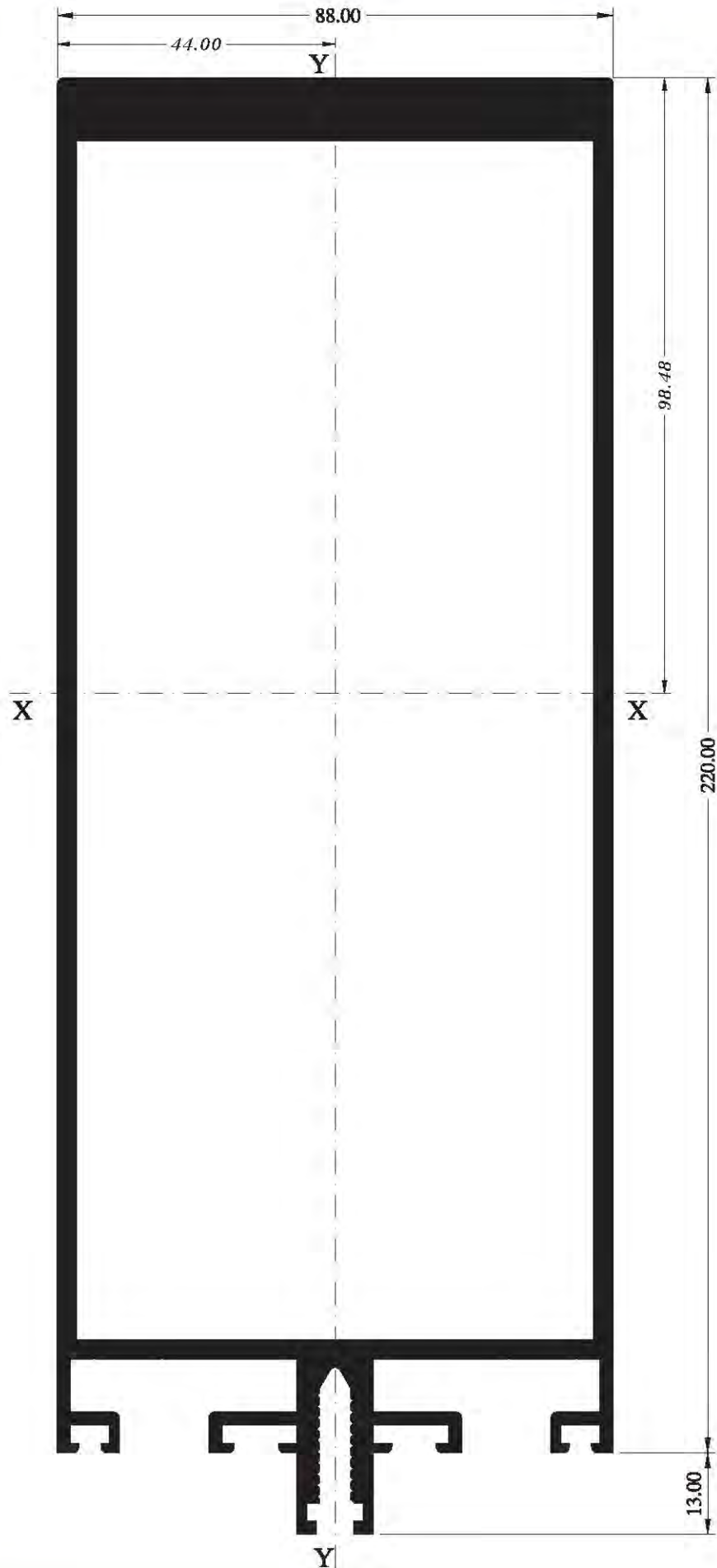


3 052 1121

5.184 Kg./ml.

$I_x = 1141.32 \text{ Cm}^4$

$I_y = 75.65 \text{ Cm}^4$

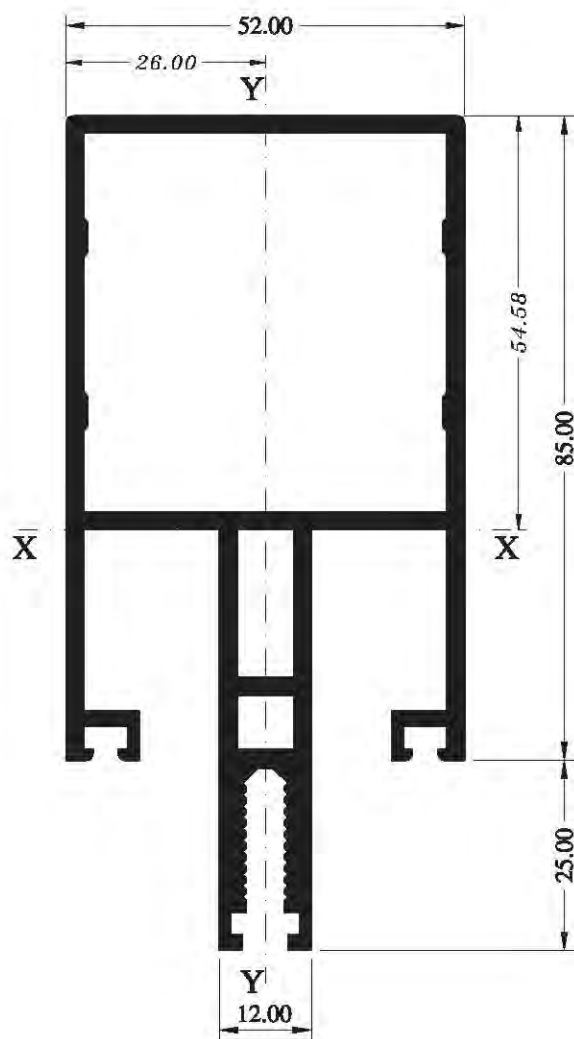


3 088 1123

7.277 Kg./ml.

$I_x = 1961.55 \text{ Cm}^4$

$I_y = 302.44 \text{ Cm}^4$

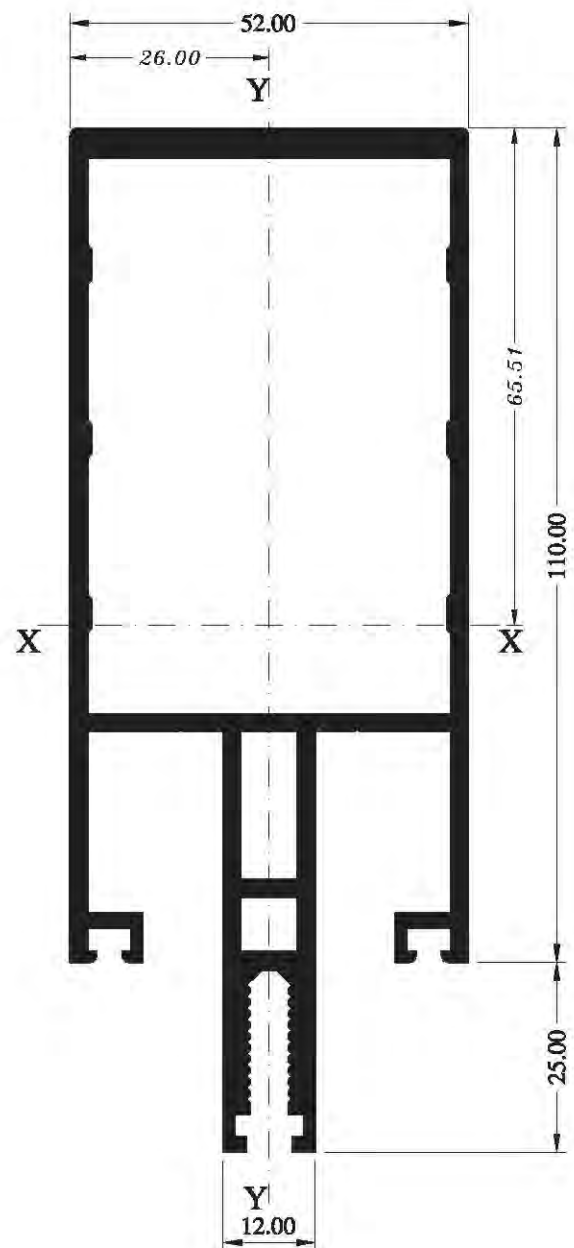


3 052 1258

2.695 Kg./ml.

$I_x = 99.65 \text{ Cm}^4$

$I_y = 31.22 \text{ Cm}^4$



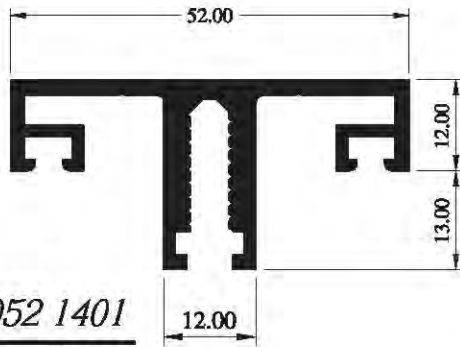
3 052 1261

3.235 Kg./ml.

$I_x = 212.85 \text{ Cm}^4$

$I_y = 40.09 \text{ Cm}^4$

Profile No.	3 052 1258	3 052 1261
Profile Old No.	CW 5216	CW 5217

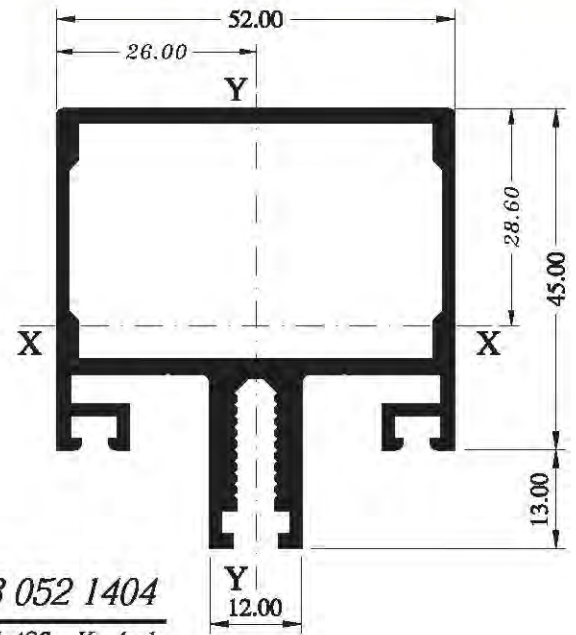


3 052 1401

0.896 Kg./ml.

$I_x = 1.49 \text{ Cm}^4$

$I_y = 6.59 \text{ Cm}^4$

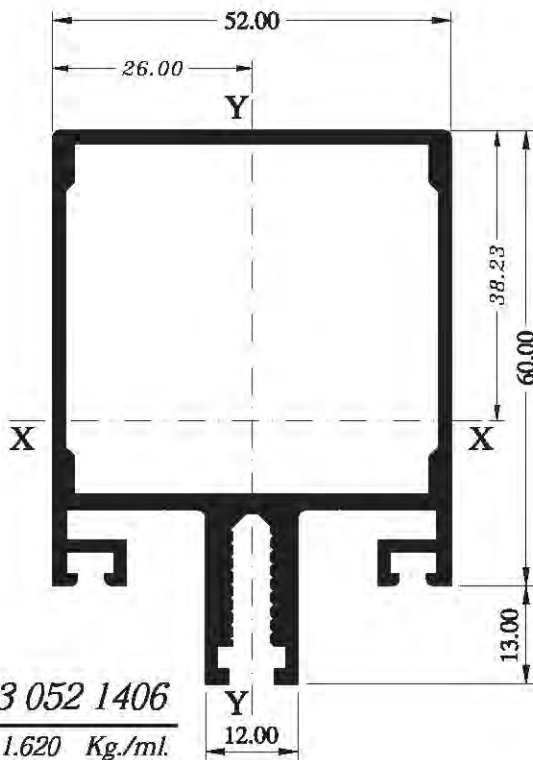


3 052 1404

1.486 Kg./ml.

$I_x = 16.32 \text{ Cm}^4$

$I_y = 16.54 \text{ Cm}^4$

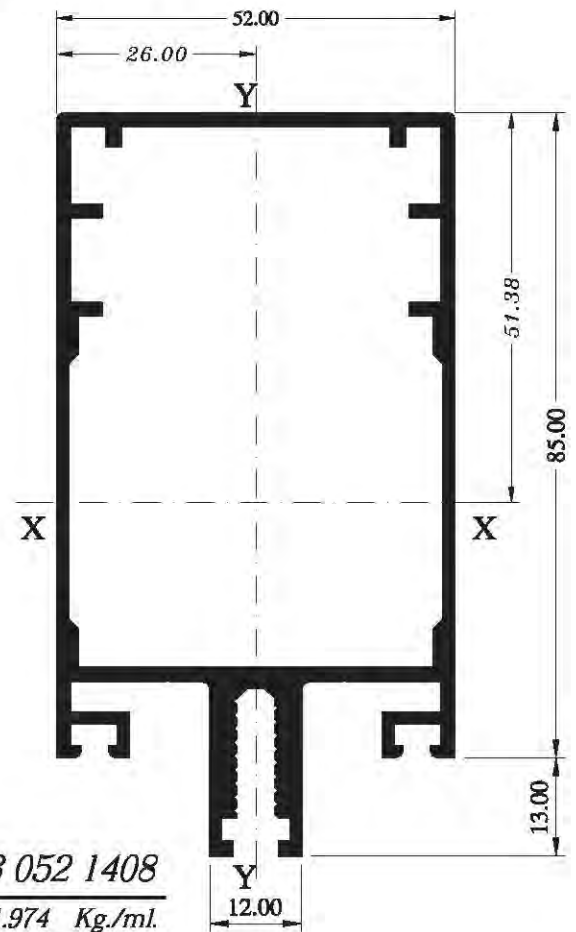


3 052 1406

1.620 Kg./ml.

$I_x = 31.47 \text{ Cm}^4$

$I_y = 19.59 \text{ Cm}^4$



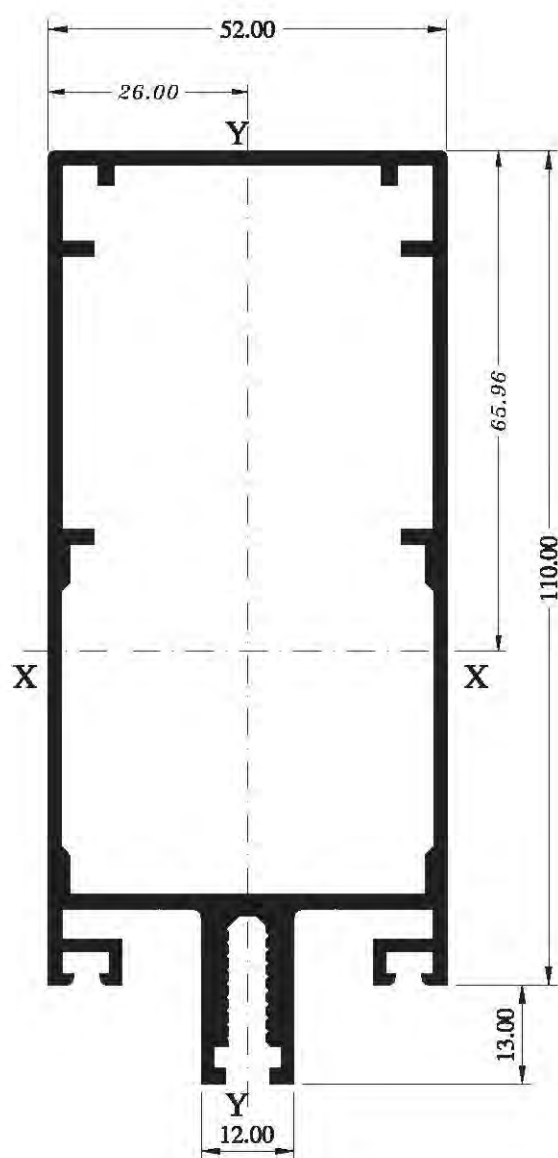
3 052 1408

1.974 Kg./ml.

$I_x = 76.12 \text{ Cm}^4$

$I_y = 27.08 \text{ Cm}^4$

Profile No.	3 052 1401	3 052 1404	3 052 1406	3 052 1408
Profile Old No.	CW 5230	CW 5232	CW 5233	CW 5235

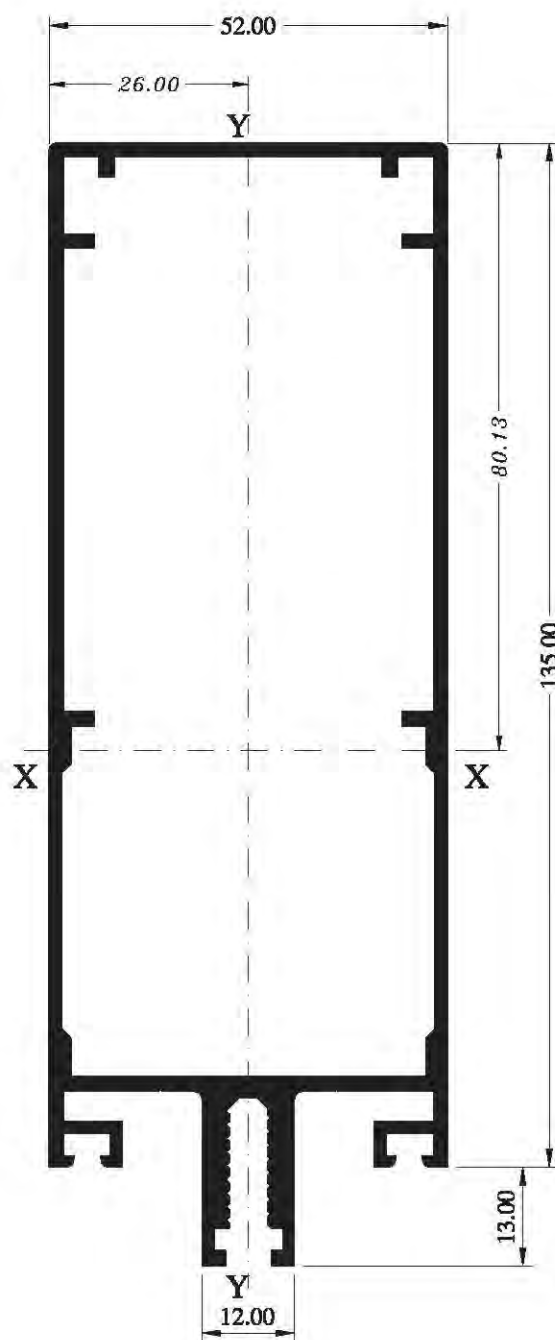


3 052 1411

2.226 Kg./ml.

$I_x = 138.74 \text{ Cm}^4$

$I_y = 32.76 \text{ Cm}^4$

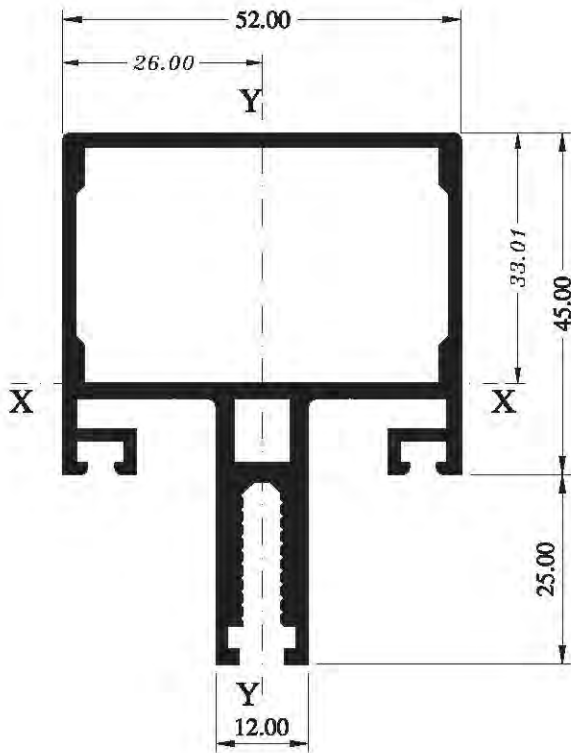


3 052 1413

2.469 Kg./ml.

$I_x = 226.45 \text{ Cm}^4$

$I_y = 38.43 \text{ Cm}^4$

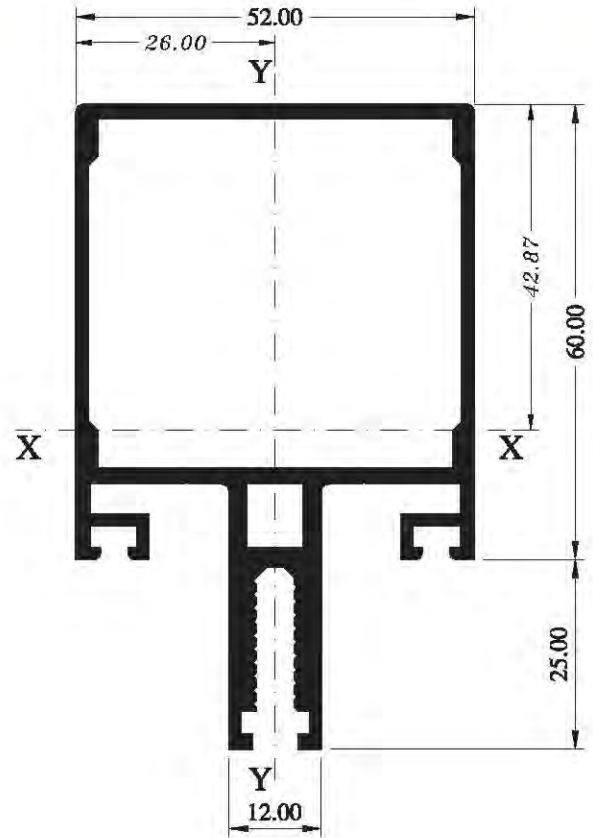


3 052 1504

1.688 Kg./ml.

$I_x = 24.58 \text{ Cm}^4$

$I_y = 16.68 \text{ Cm}^4$

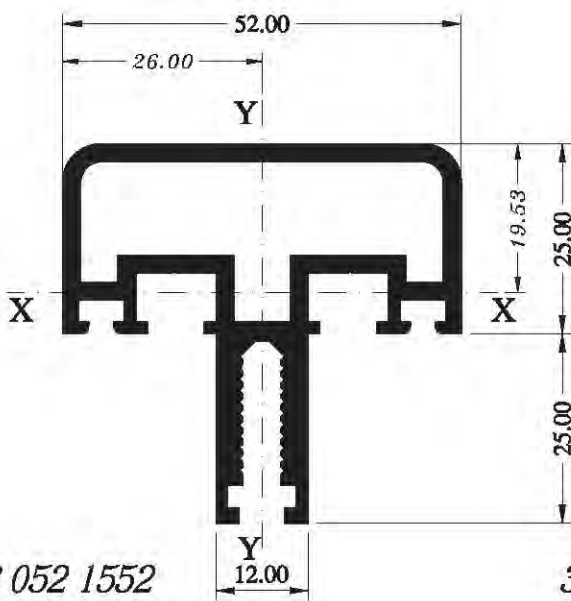


3 052 1506

1.817 Kg./ml.

$I_x = 42.61 \text{ Cm}^4$

$I_y = 19.73 \text{ Cm}^4$

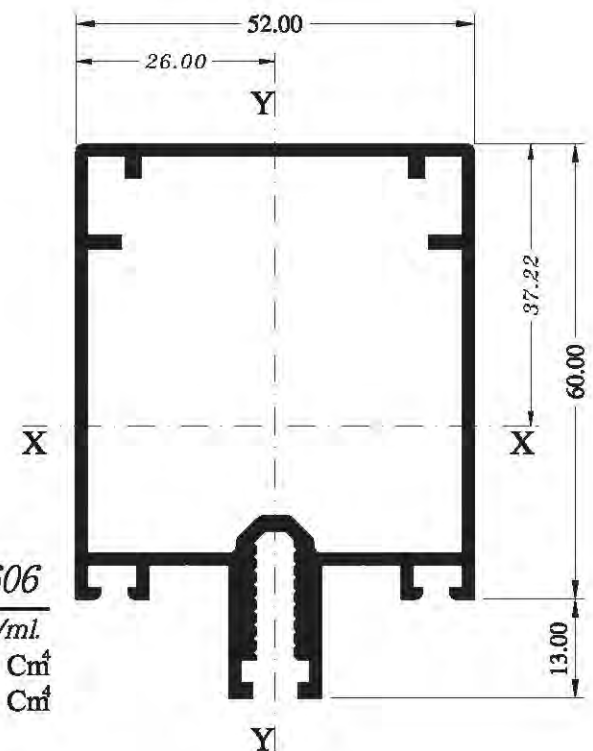


3 052 1552

1.510 Kg./ml.

$I_x = 10.17 \text{ Cm}^4$

$I_y = 12.29 \text{ Cm}^4$



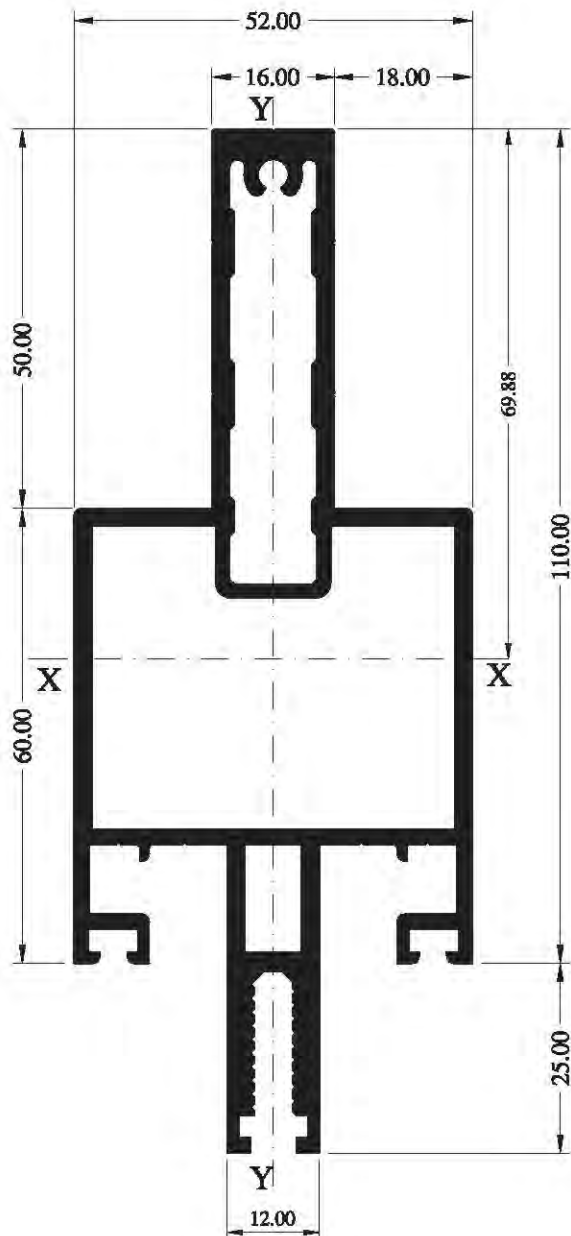
3 052 1606

1.350 Kg./ml.

$I_x = 29.50 \text{ Cm}^4$

$I_y = 16.60 \text{ Cm}^4$

Profile No.	3 052 1504	3 052 1506	3 052 1552
Profile Old No.	CW 5212	CW 5213	CW 5210

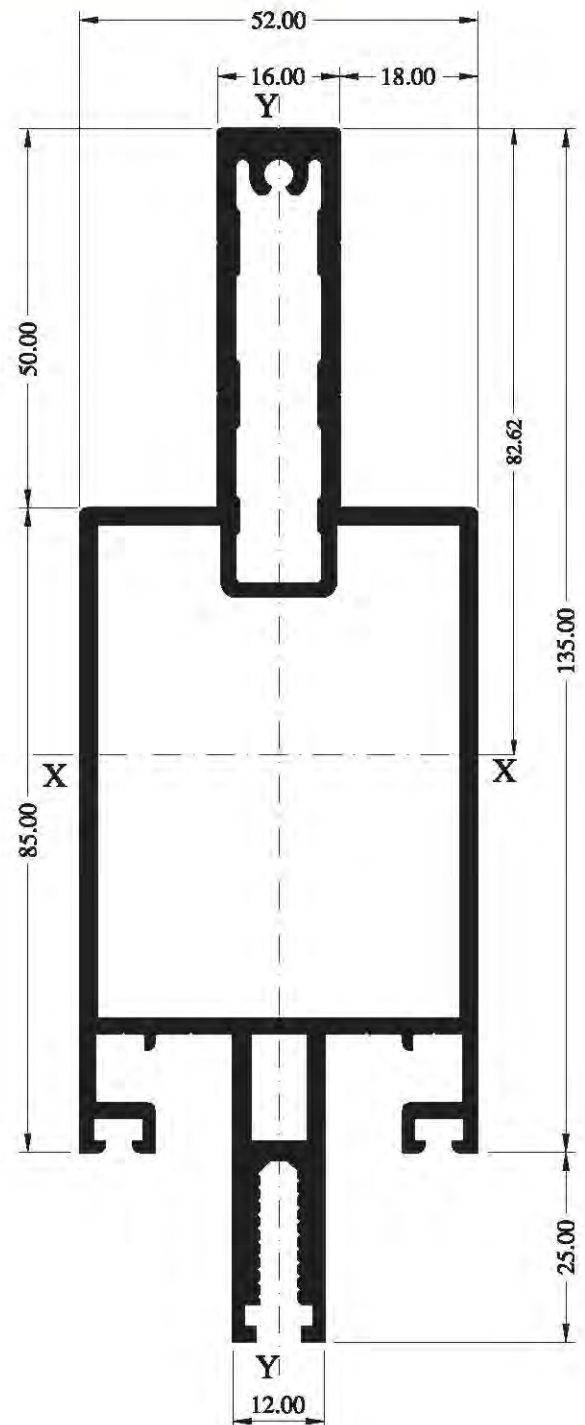


3 052 2206

3.024 Kg./ml.

$I_x = 163.83 \text{ Cm}^4$

$I_y = 24.20 \text{ Cm}^4$



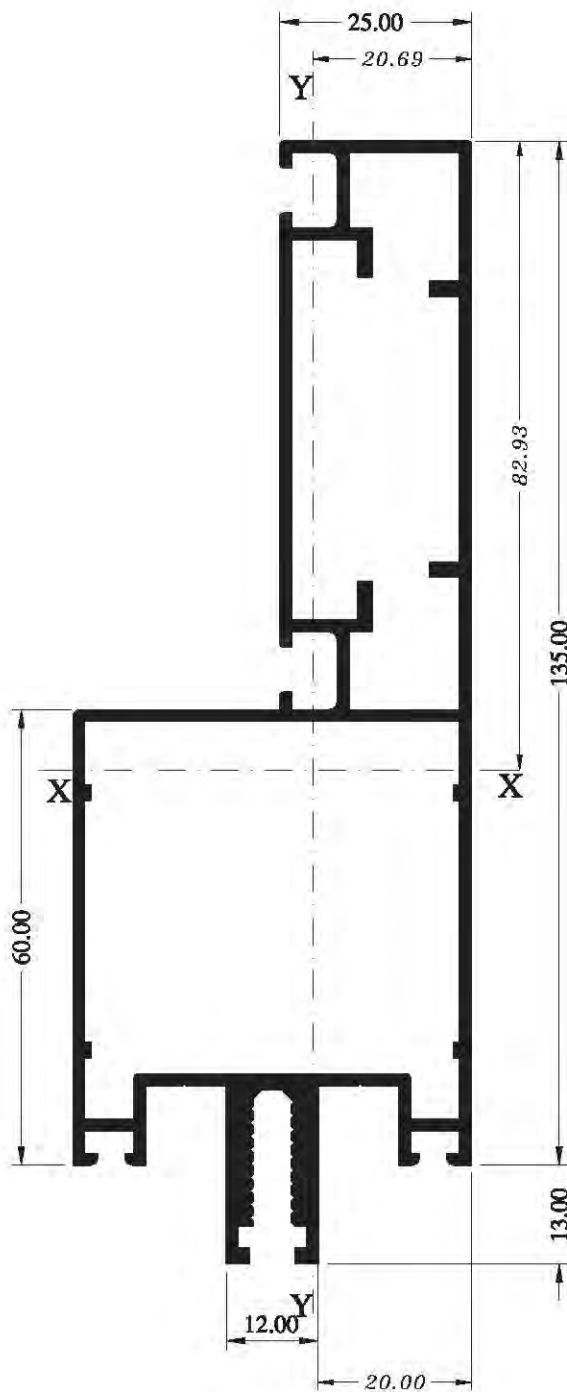
3 052 2208

3.335 Kg./ml.

$I_x = 275.61 \text{ Cm}^4$

$I_y = 31.31 \text{ Cm}^4$

Profile No.	3 052 2206	3 052 2208
Profile Old No.	CW 5216.2	CW 5217.2

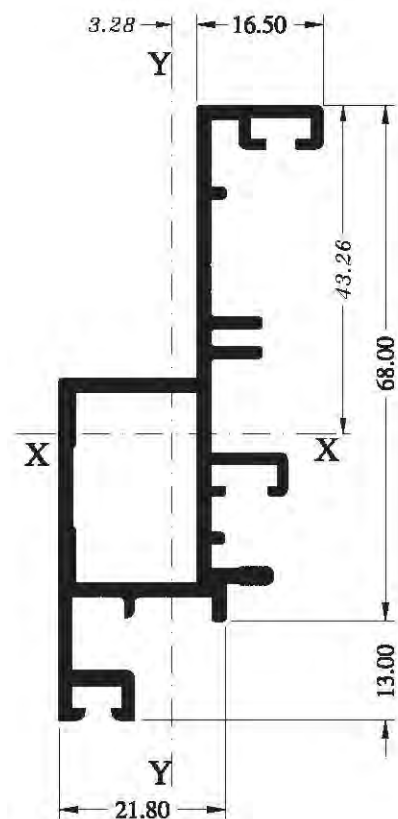


3 052 2413

2.329 Kg./ml.

$I_x = 178.75 \text{ Cm}^4$

$I_y = 23.45 \text{ Cm}^4$

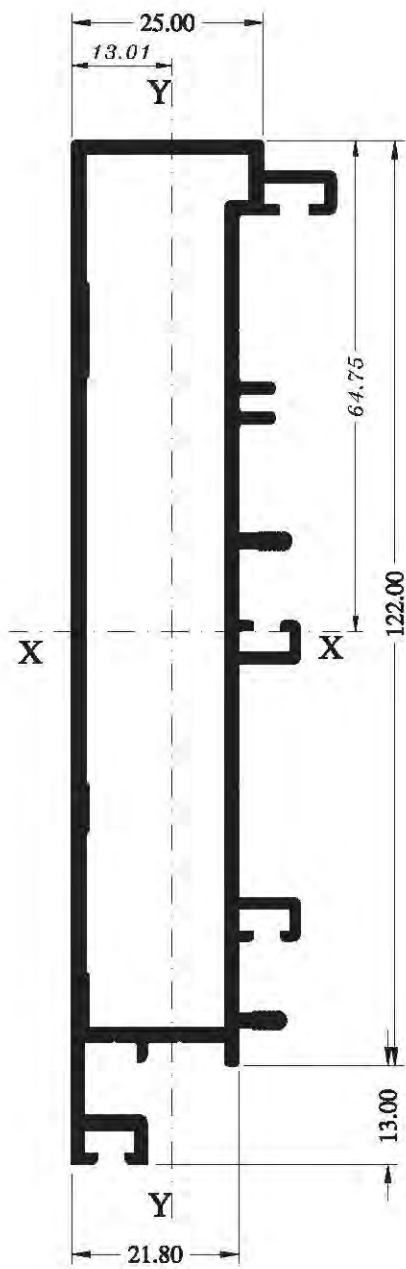


3 052 3004

1.089 Kg./ml.

$I_x = 21.65 \text{ Cm}^4$

$I_y = 3.68 \text{ Cm}^4$

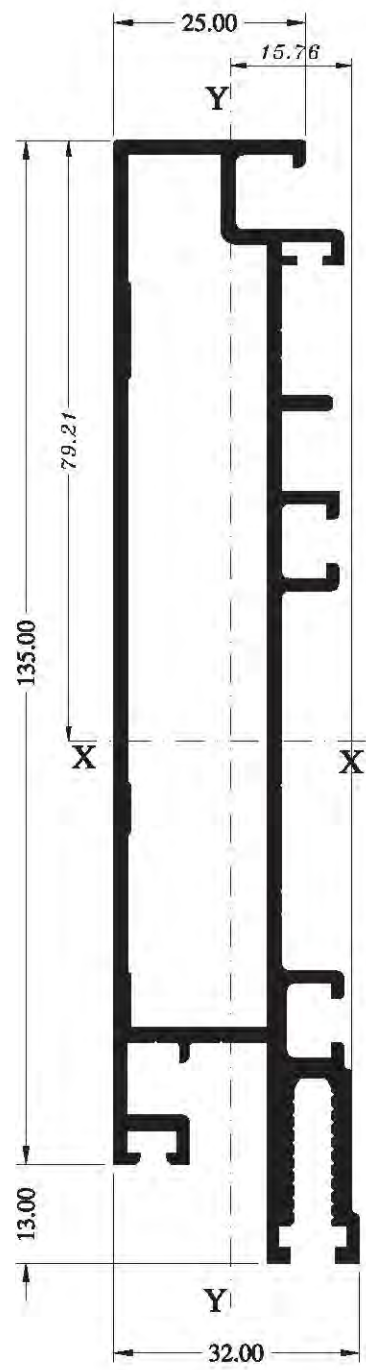


3 052 3013

1.853 Kg./ml.

$I_x = 120.76 \text{ Cm}^4$

$I_y = 7.70 \text{ Cm}^4$

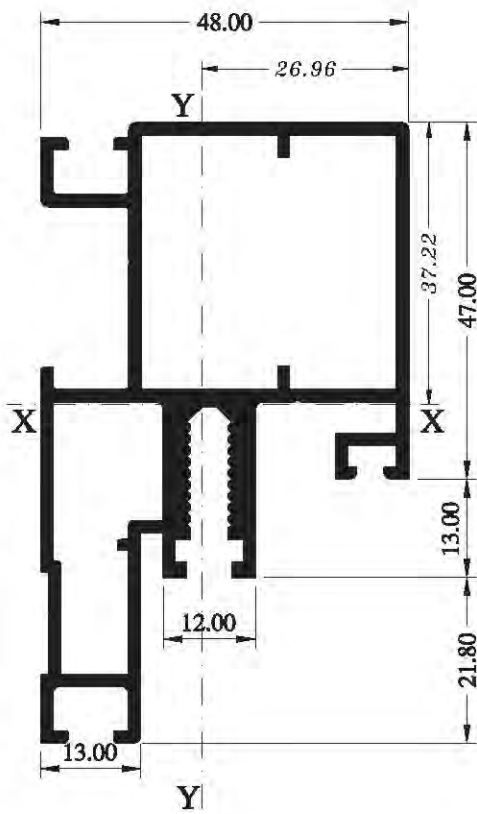


3 052 3113

2.316 Kg./ml.

$I_x = 188.43 \text{ Cm}^4$

$I_y = 9.88 \text{ Cm}^4$

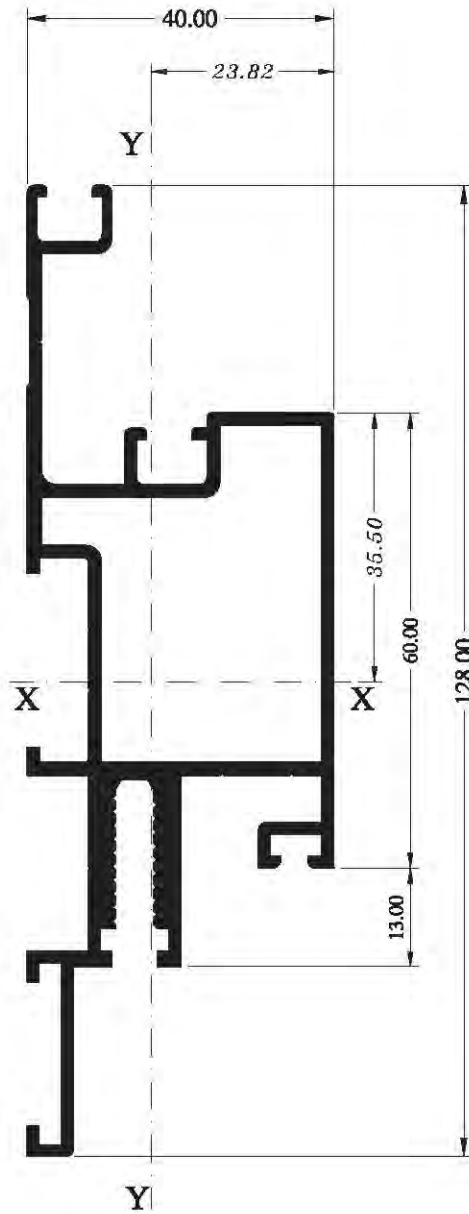


3 052 3604

1.672 Kg./ml.

$I_x = 33.01 \text{ Cm}^4$

$I_y = 11.56 \text{ Cm}^4$

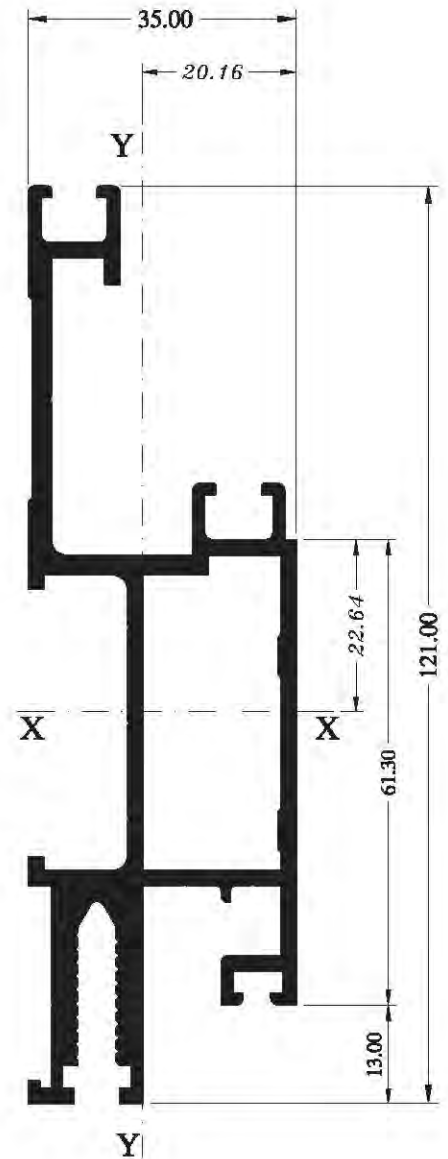


3 052 3606

1.804 Kg./ml.

$I_x = 62.89 \text{ Cm}^4$

$I_y = 11.51 \text{ Cm}^4$

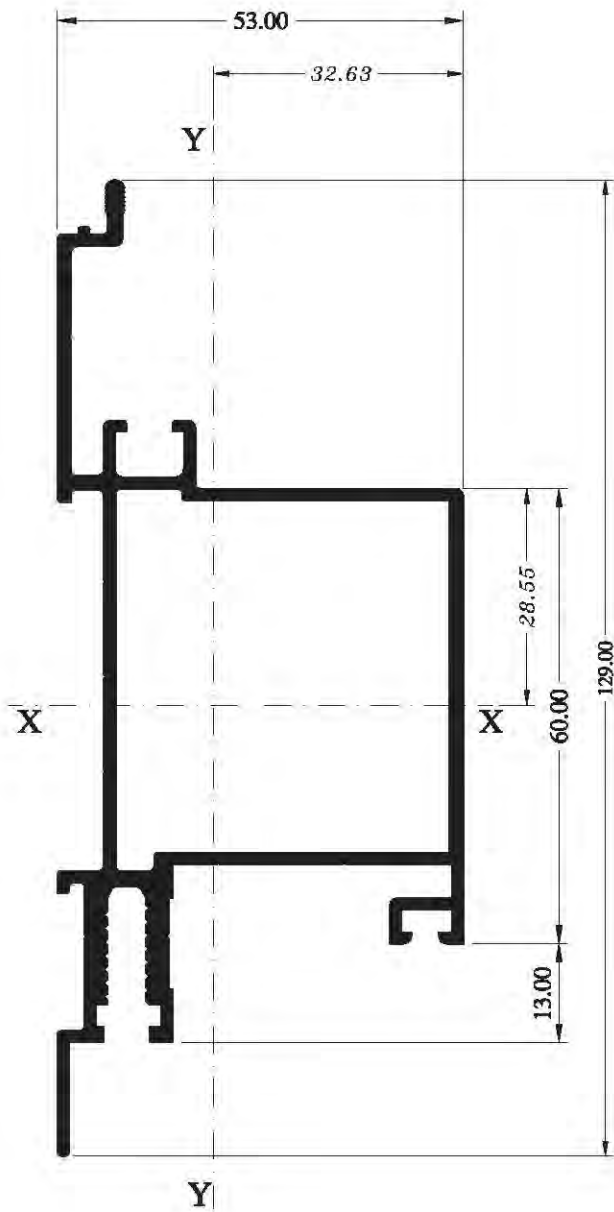


3 052 3616

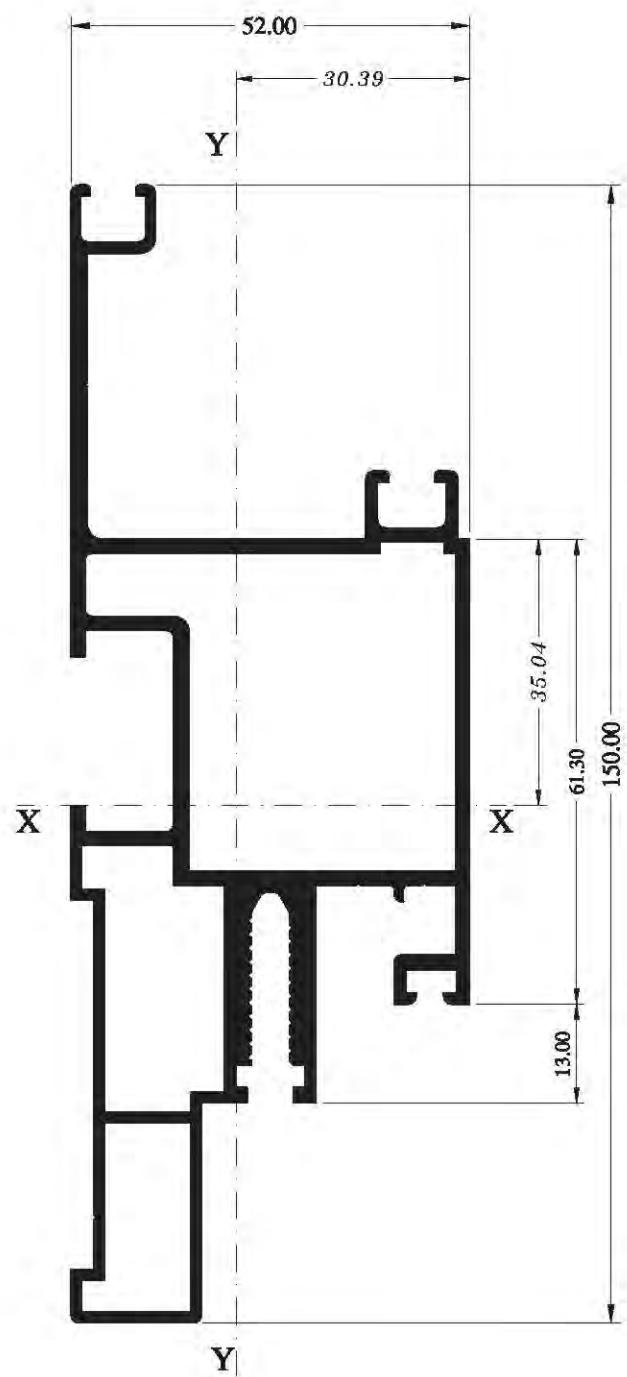
2.130 Kg./ml.

$I_x = 88.17 \text{ Cm}^4$

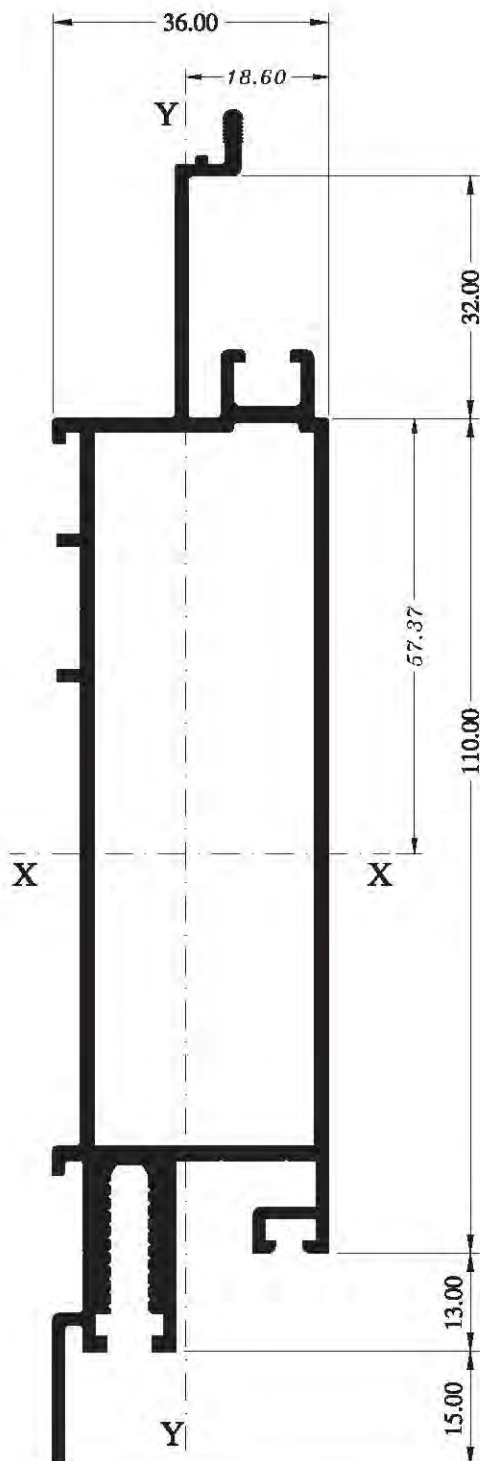
$I_y = 10.63 \text{ Cm}^4$



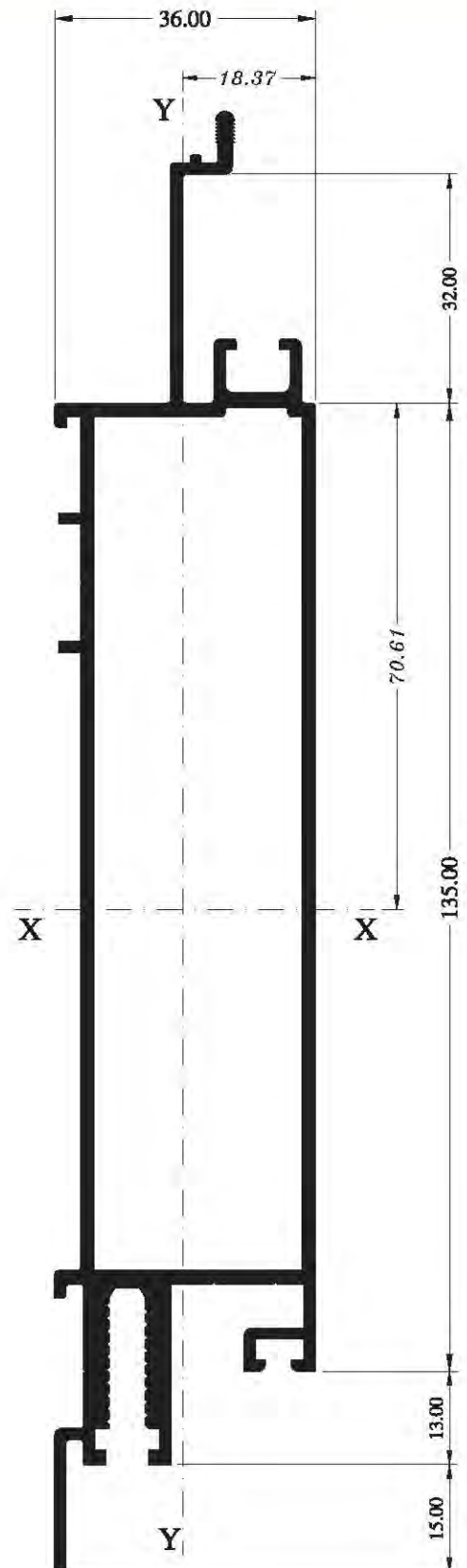
3 052 3646
1.728 Kg./ml.
 $I_x = 64.13 \text{ Cm}^4$
 $I_y = 23.52 \text{ Cm}^4$



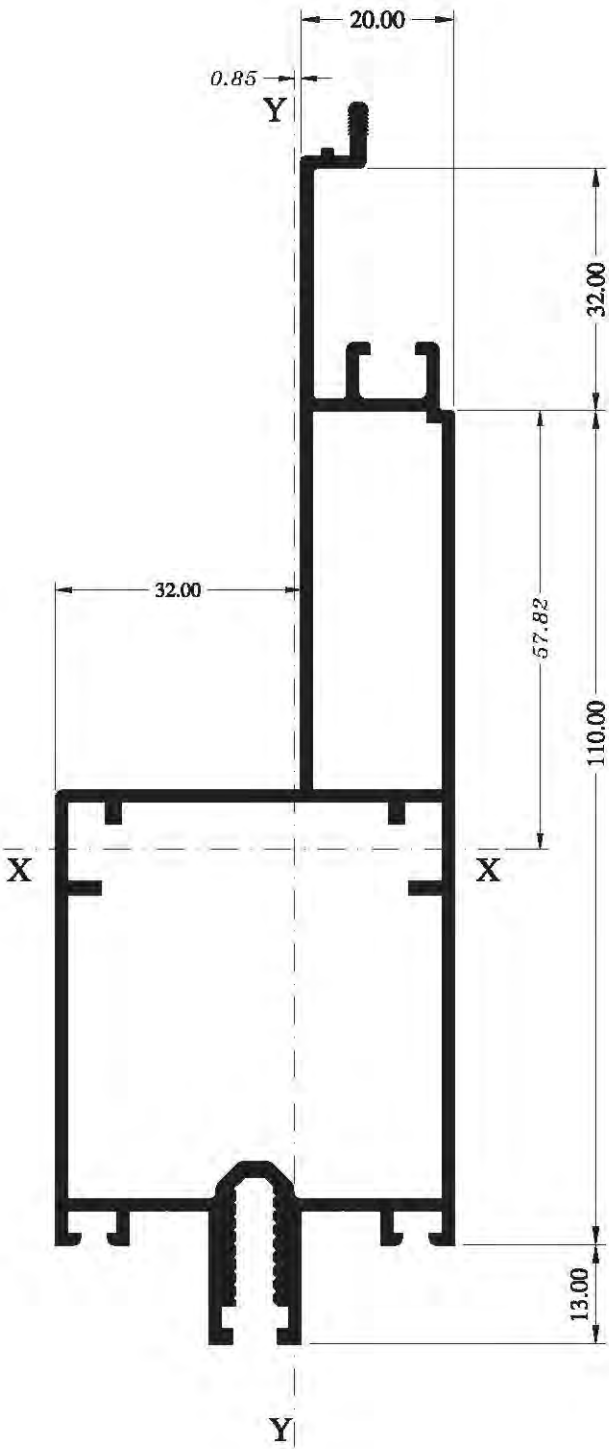
3 052 3656
2.581 Kg./ml.
 $I_x = 124.00 \text{ Cm}^4$
 $I_y = 28.32 \text{ Cm}^4$



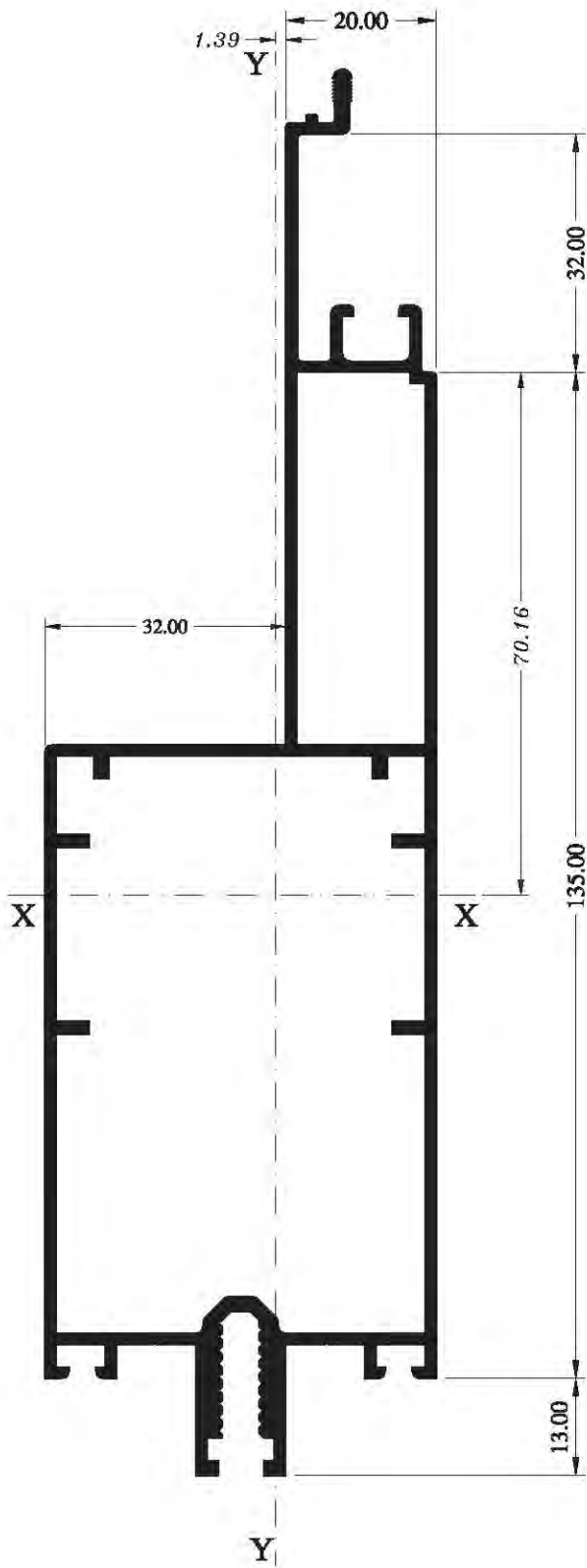
3 052 3711
2.262 Kg./ml.
 $I_x = 197.18 \text{ Cm}^4$
 $I_y = 13.53 \text{ Cm}^4$



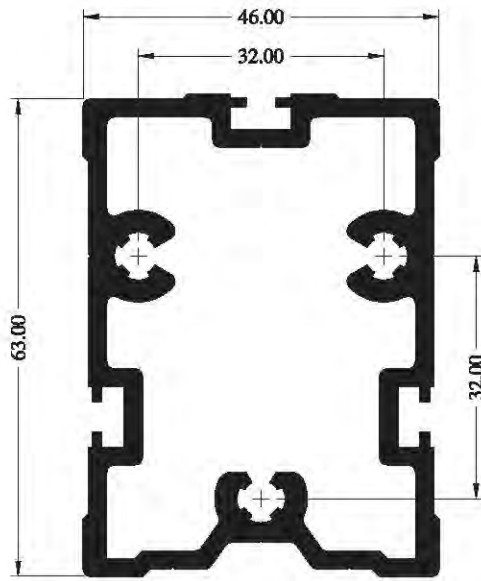
3 052 3713
2.506 Kg./ml.
 $I_x = 301.47 \text{ Cm}^4$
 $I_y = 15.69 \text{ Cm}^4$



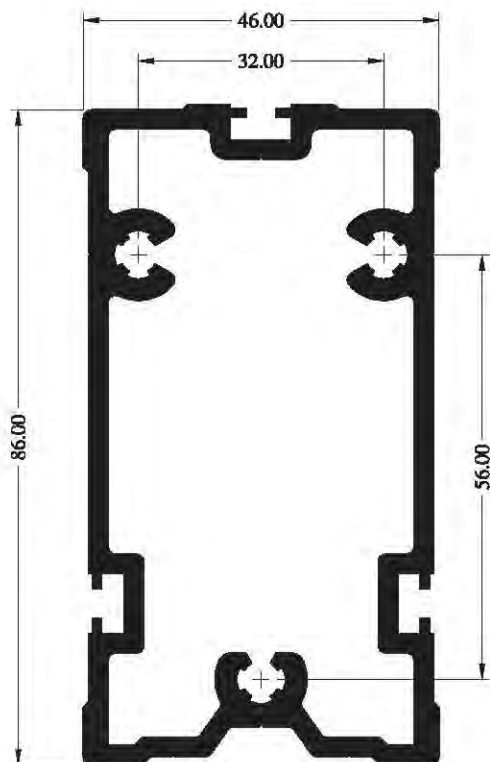
3 052 3911
2.127 Kg./ml.
 $I_x = 165.50 \text{ Cm}^4$
 $I_y = 22.10 \text{ Cm}^4$



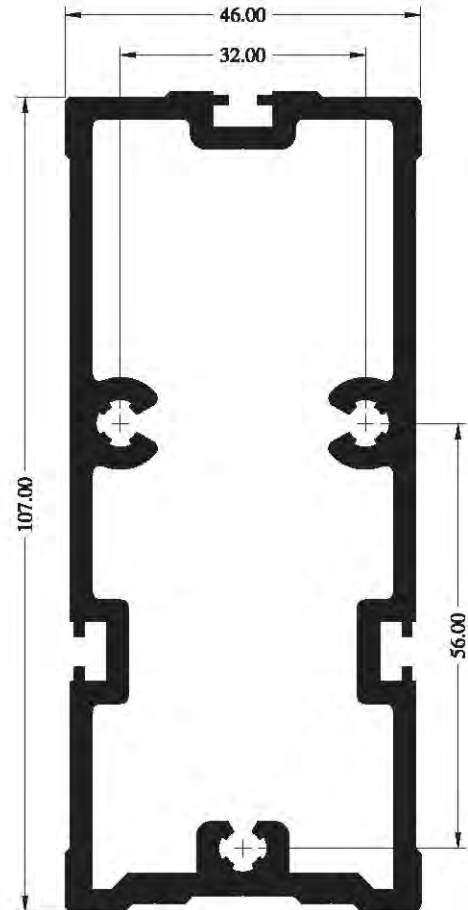
3 052 3913
2.373 Kg./ml.
 $I_x = 255.09 \text{ Cm}^4$
 $I_y = 27.89 \text{ Cm}^4$



3 052 4008
2.060 Kg./ml.

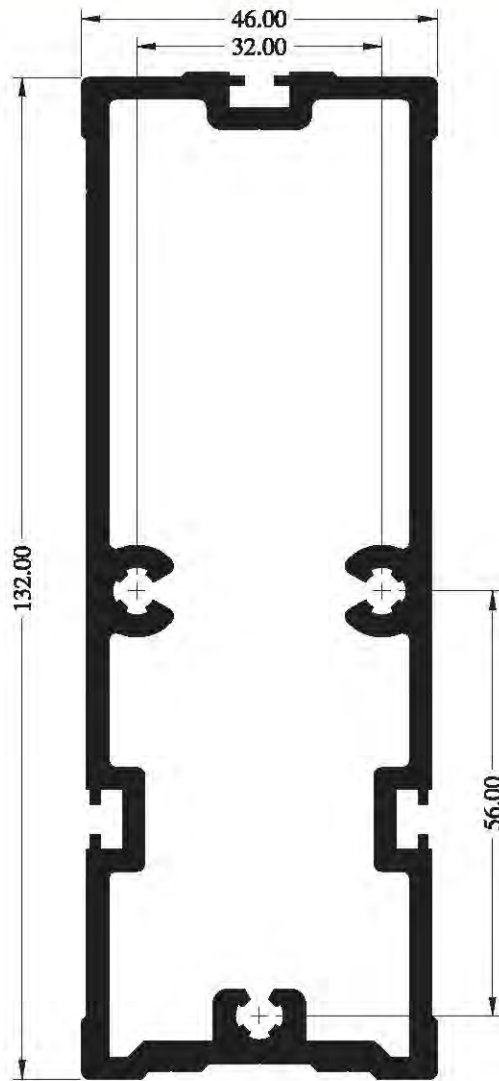


3 052 4011
2.495 Kg./ml.

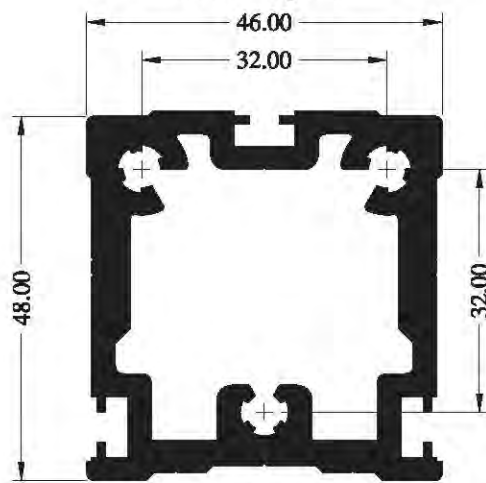


3 052 4013
3.048 Kg./ml.

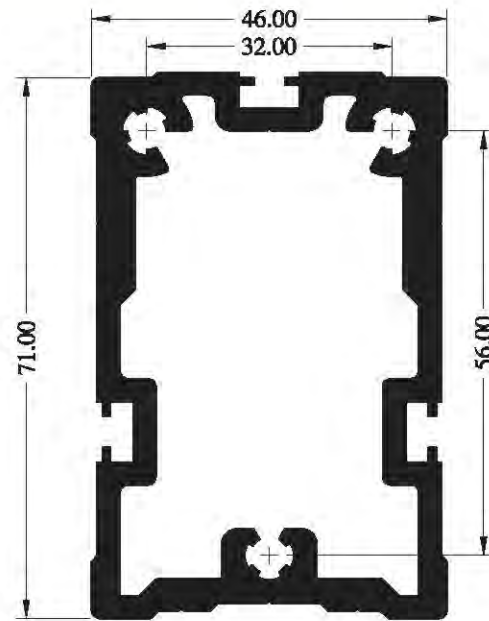
Profile No.	3 052 4008	3 052 4011	3 052 4013
Profile Old No.	CW 5251	CW 5252	CW 5258



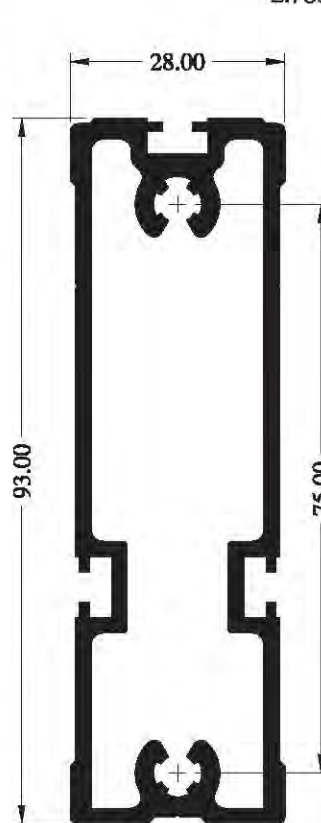
3 052 4016
3.424 Kg./ml.



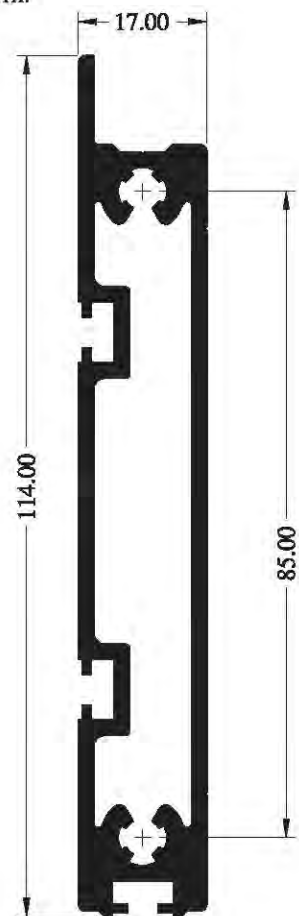
3 052 4058
2.268 Kg./ml.



3 052 4061
2.735 Kg./ml.

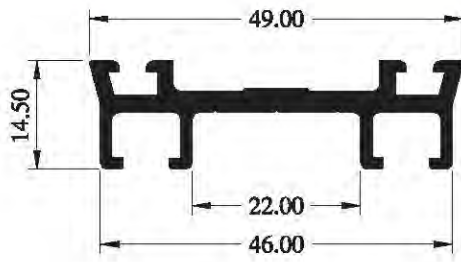


3 052 4211
1.799 Kg./ml.

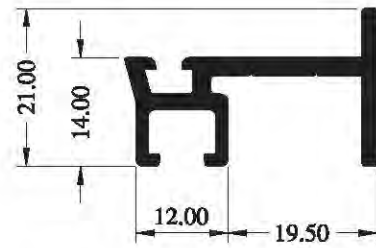


3 052 4213
1.808 Kg./ml.

Profile No.	3 052 4016	3 052 4058	3 052 4061
Profile Old No.	CW 5259	CW 5256	CW 5257



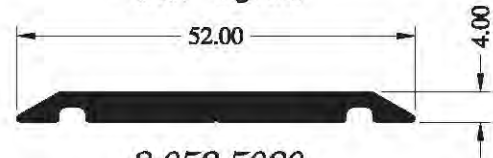
3 052 5011
0.605 Kg./ml.



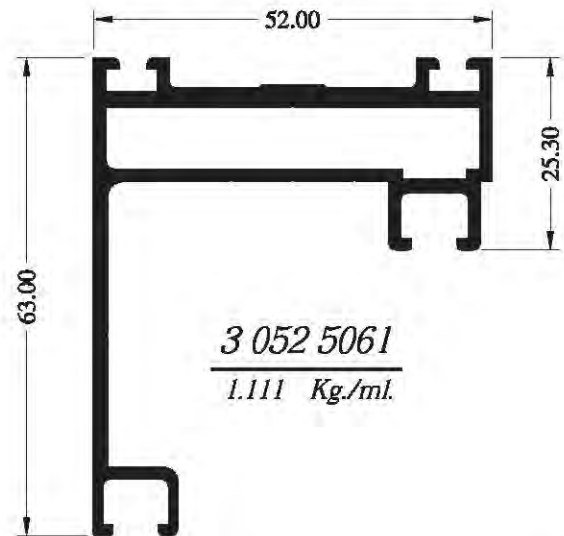
3 052 5511
0.439 Kg./ml.



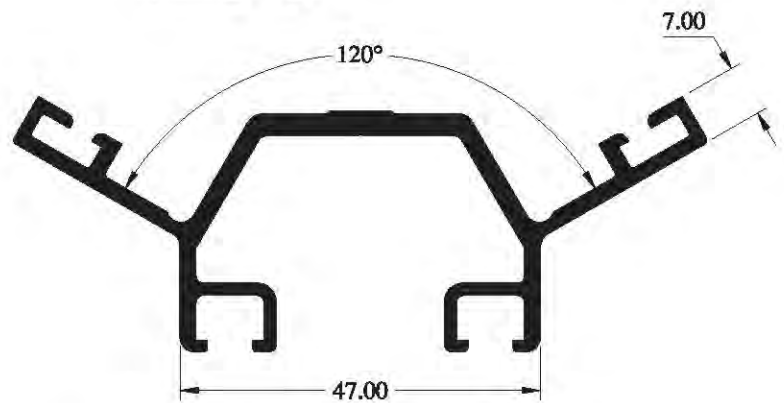
3 052 5021
0.477 Kg./ml.



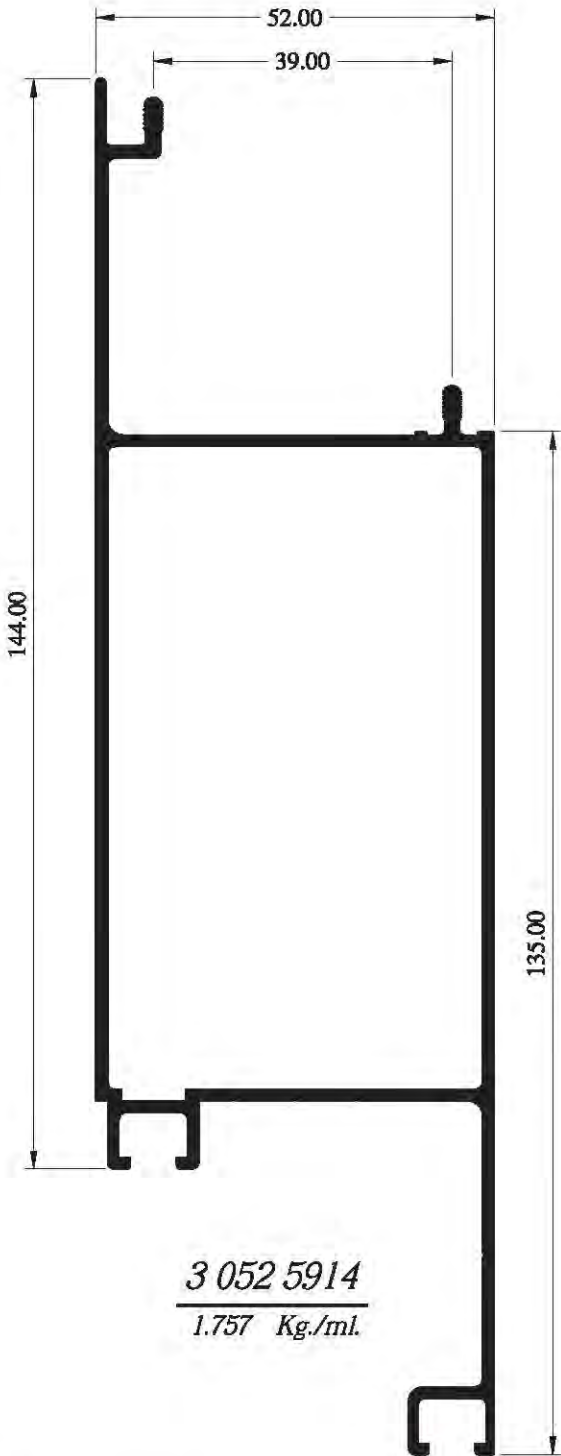
3 052 5020
0.460 Kg./ml.



3 052 5061
1.111 Kg./ml.

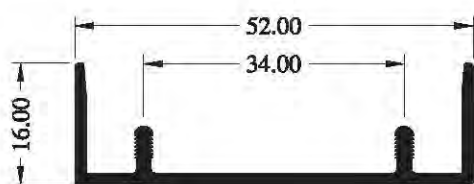


3 052 5111
1.150 Kg./ml.



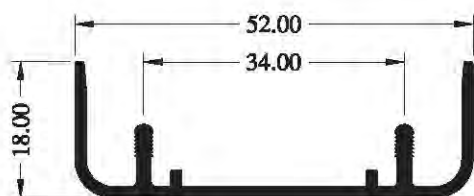
3 052 5914
1.757 Kg./ml.

Profile No.	3 052 5011	3 052 5020	3 052 5021	3 052 5111
Profile Old No.	CW 5221	CW 5240	CW 5241	CW 5222



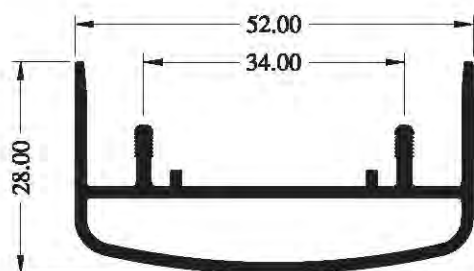
3 052 5251

0.394 Kg./ml.



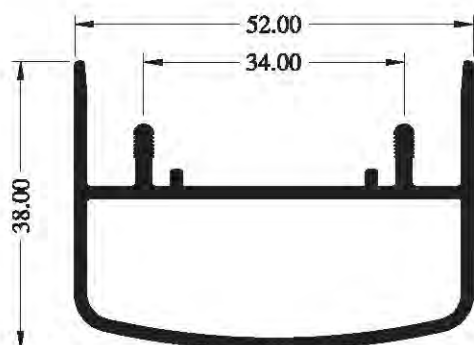
3 052 5261

0.435 Kg./ml.



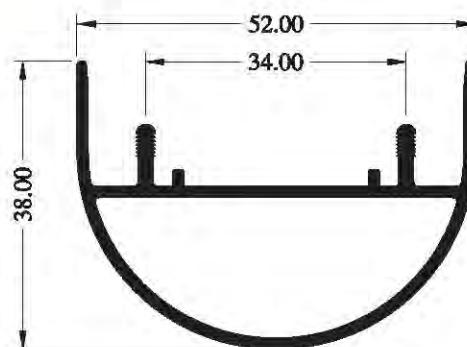
3 052 5352

0.696 Kg./ml.



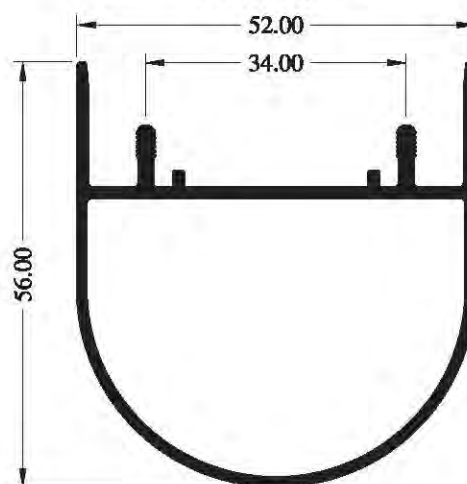
3 052 5353

0.777 Kg./ml.



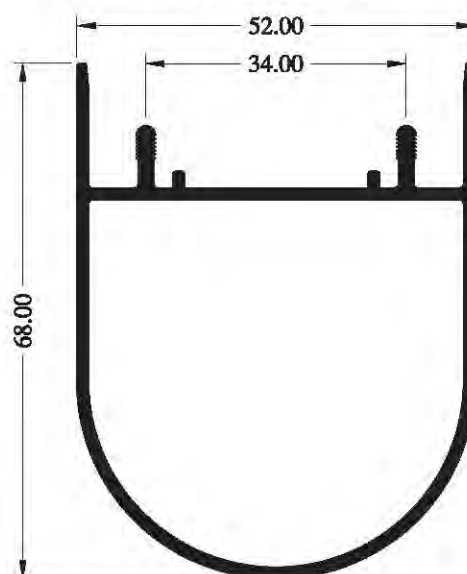
3 052 5363

0.718 Kg./ml.



3 052 5365

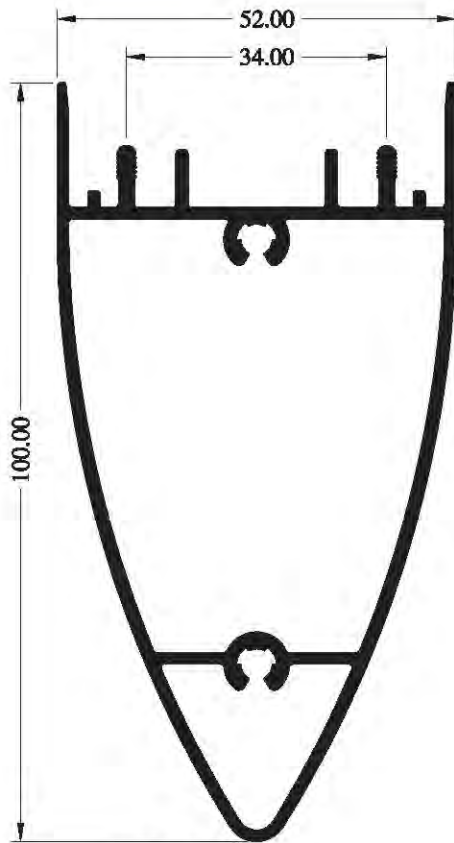
0.815 Kg./ml.



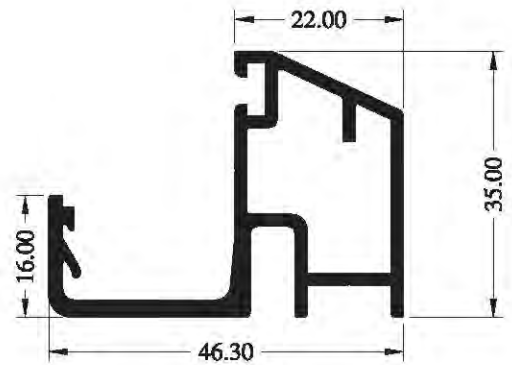
3 052 5366

0.900 Kg./ml.

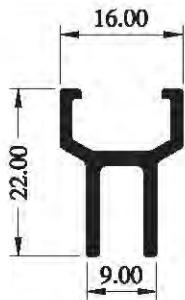
Profile No.	3 052 5251	3 052 5261	3 052 5352	3 052 5365	3 052 5366
Profile Old No.	CW 5225	CW 5226	CW 5227	CW 5228	CW 5229



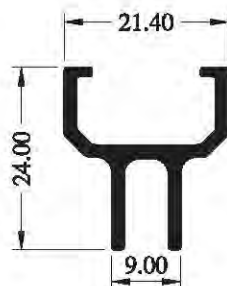
3 052 5510
1.446 Kg./ml.



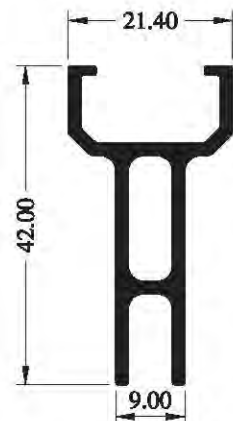
3 052 6042
0.767 Kg./ml.



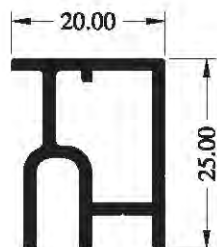
3 052 6001
0.251 Kg./ml.



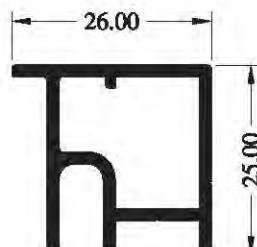
3 052 6002
0.300 Kg./ml.



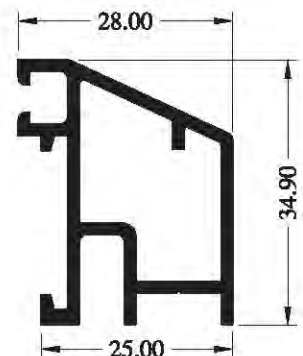
3 052 6004
0.487 Kg./ml.



3 052 6012
0.377 Kg./ml.

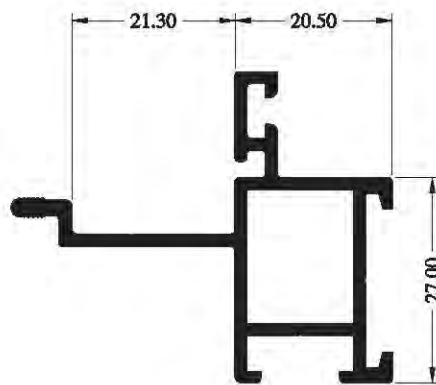


3 052 6013
0.421 Kg./ml.

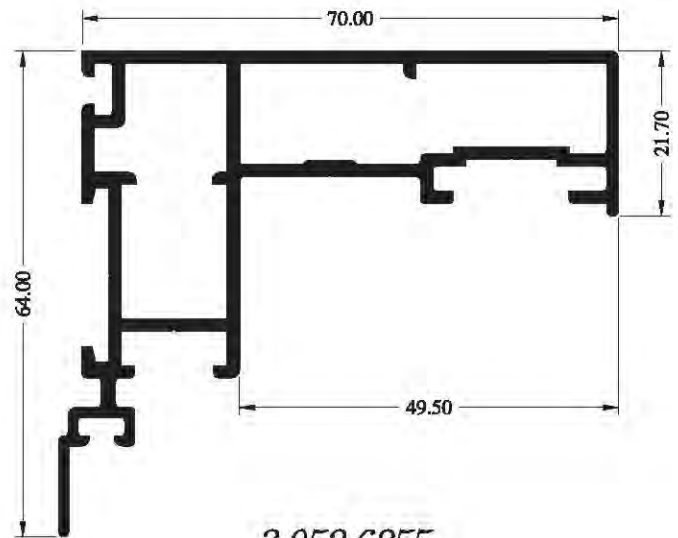


3 052 6023
0.563 Kg./ml.

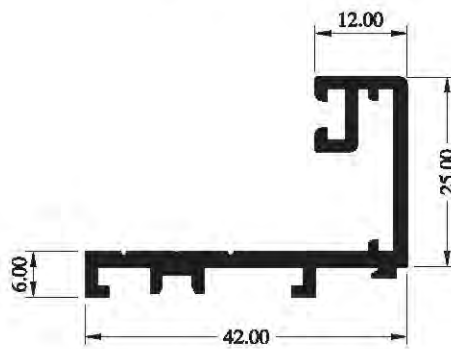
Profile No.	3 052 6001	3 052 6002	3 052 6012	3 052 6013	3 052 6023	3 052 6042
Profile Old No.	CW 5291	CW 5292	CW 5296	CW 5297	CW 5295	CW 5299



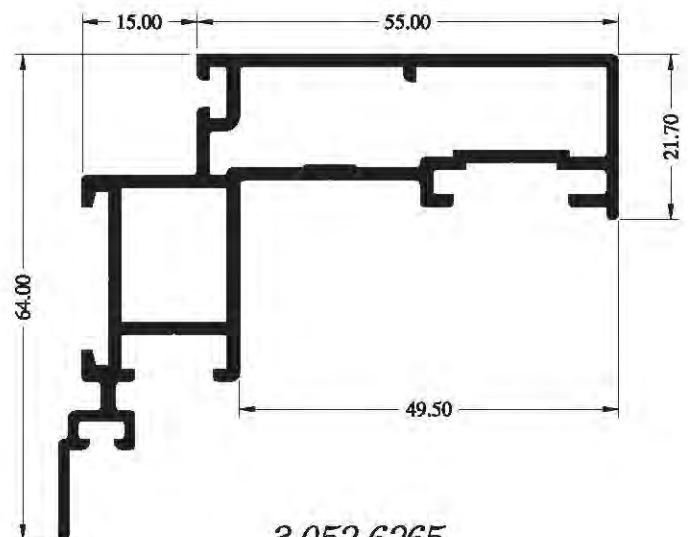
3 052 6026
0.665 Kg./ml.



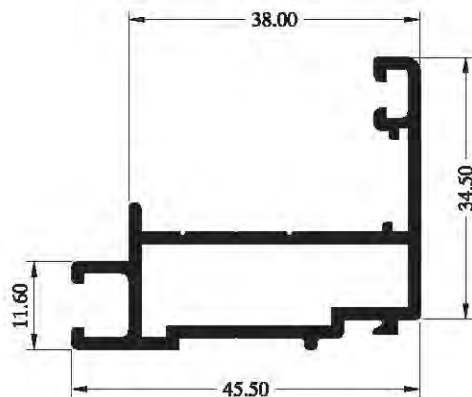
3 052 6255
1.259 Kg./ml.



3 052 6101
0.535 Kg./ml.

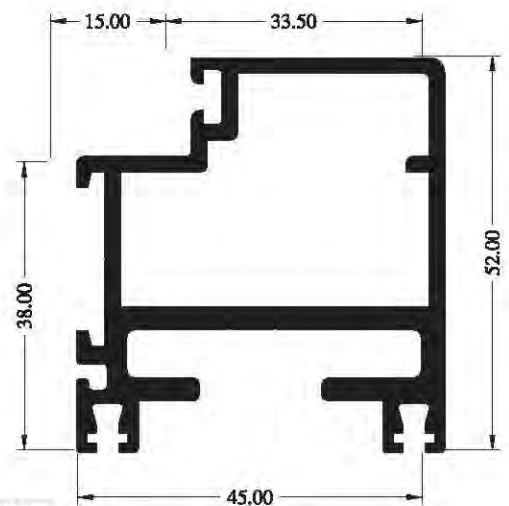


3 052 6265
1.184 Kg./ml.

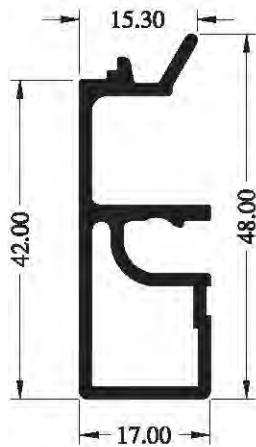


3 052 6111
0.656 Kg./ml.

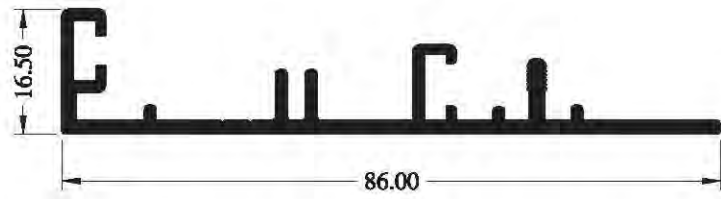
3 052 6295
1.549 Kg./ml.



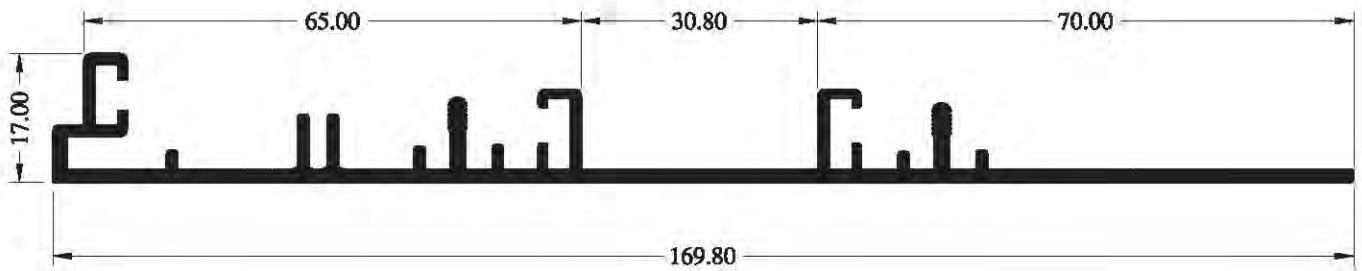
Profile No.	3 052 6101	3 052 6111	3 052 6255	3 052 6265
Profile Old No.	CW 6296	CW 5283	CW 5288	CW 5289



3 052 9164
0.545 Kg./ml.

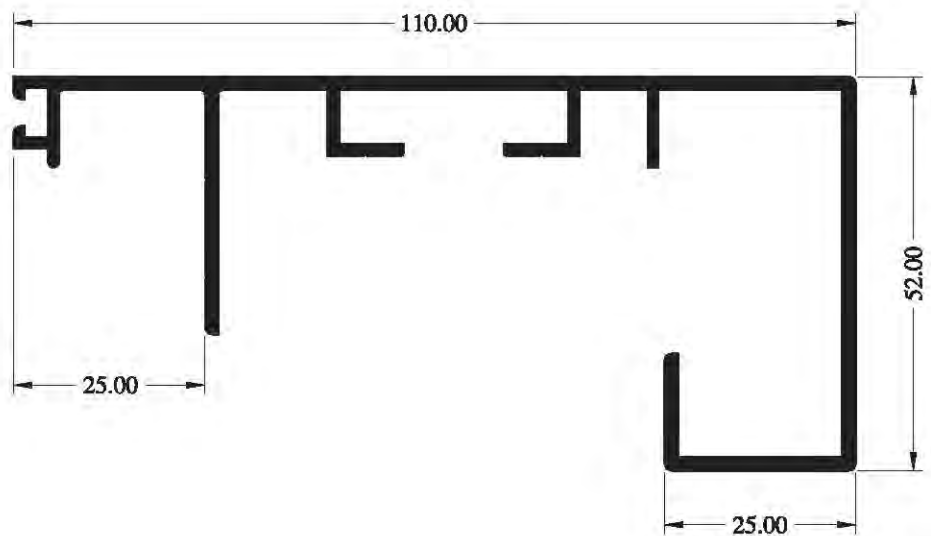


3 052 9161
0.714 Kg./ml.

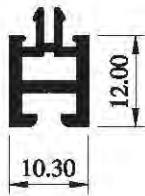


3 052 9231
1.303 Kg./ml.

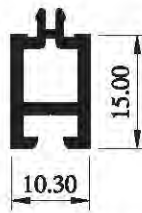
3 052 9232
1.361 Kg./ml.



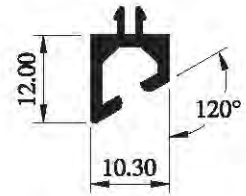
Profile No.	3 052 9164	3 052 9232
Profile Old No.	CW 5279	CW 5276



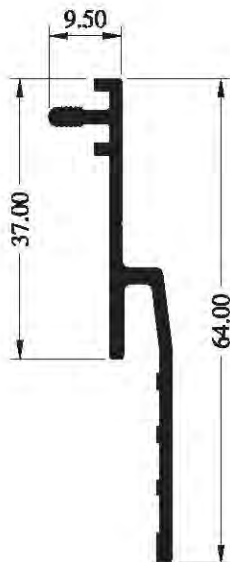
3 052 9611
0.189 Kg./ml.



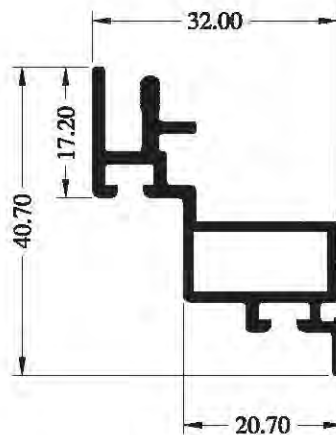
3 052 9612
0.208 Kg./ml.



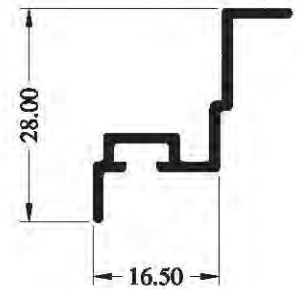
3 052 9623
0.149 Kg./ml.



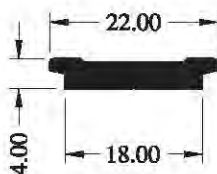
3 052 9330
0.404 Kg./ml.



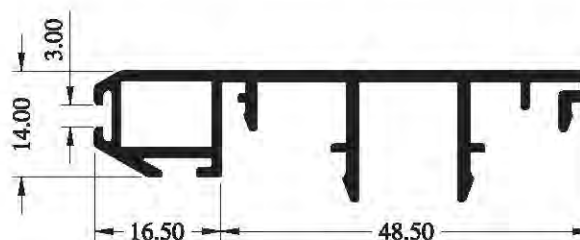
3 052 9465
0.489 Kg./ml.



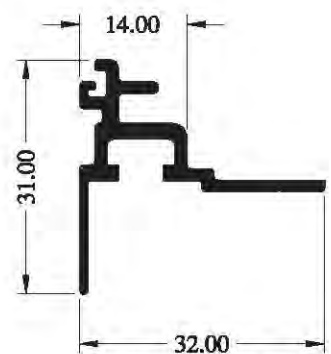
3 052 9495
0.205 Kg./ml.



3 062 9700
0.194 Kg./ml.



3 052 9496
0.507 Kg./ml.

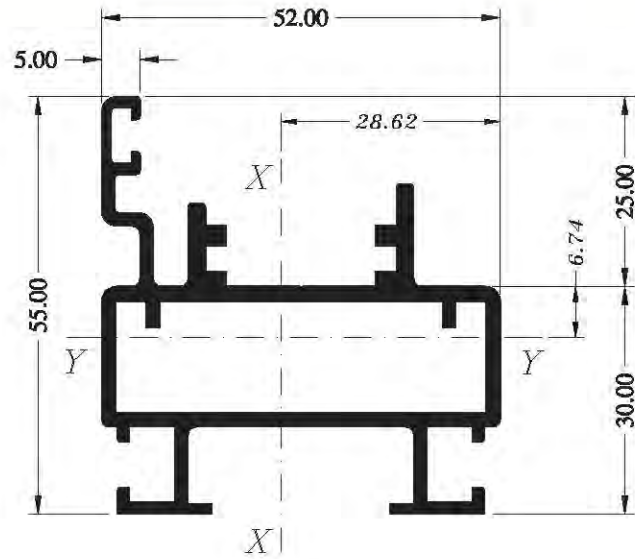


3 052 9711
0.340 Kg./ml.

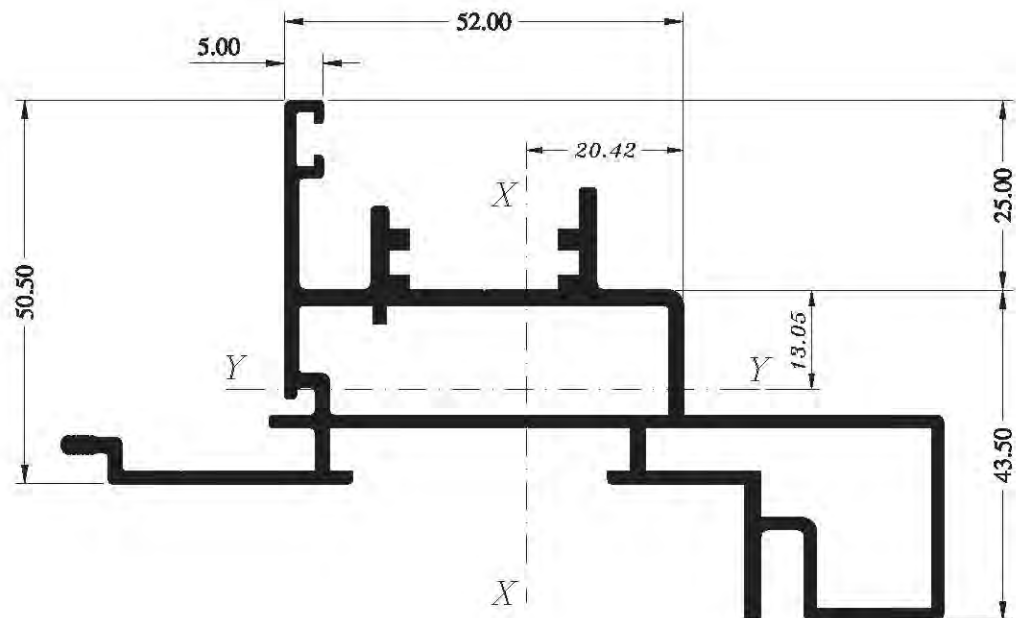
Profile No.	3 052 9465	3 052 9611	3 052 9612	3 052 9623	3 062 9700
Profile Old No.	CW 5274	CW 5261	CW 5263	CW 5262	CW 6270



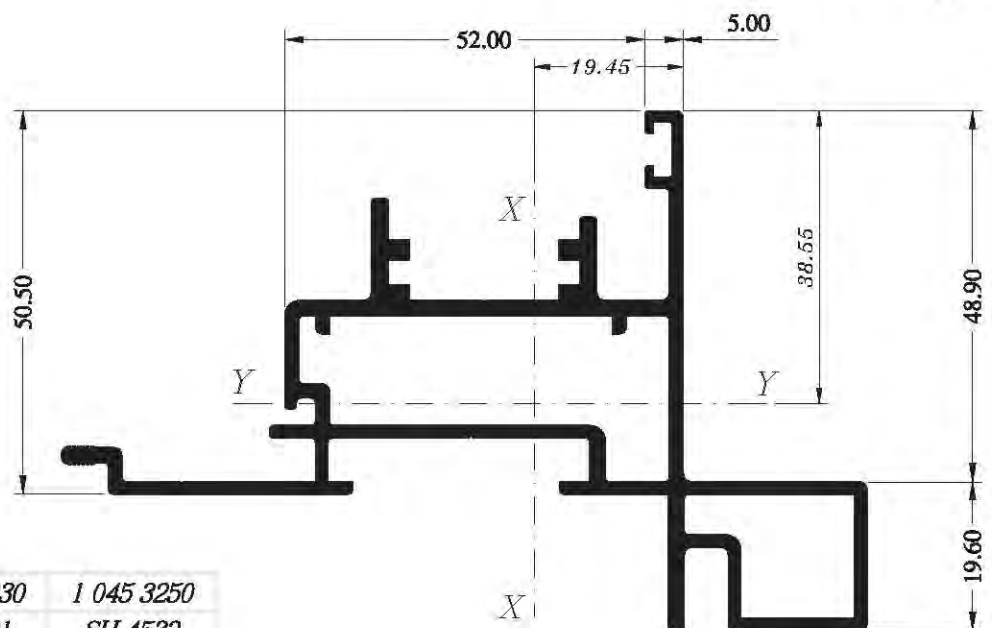
1 045 3620
1.301 Kg./ml.



1 045 3619
1.835 Kg./ml.



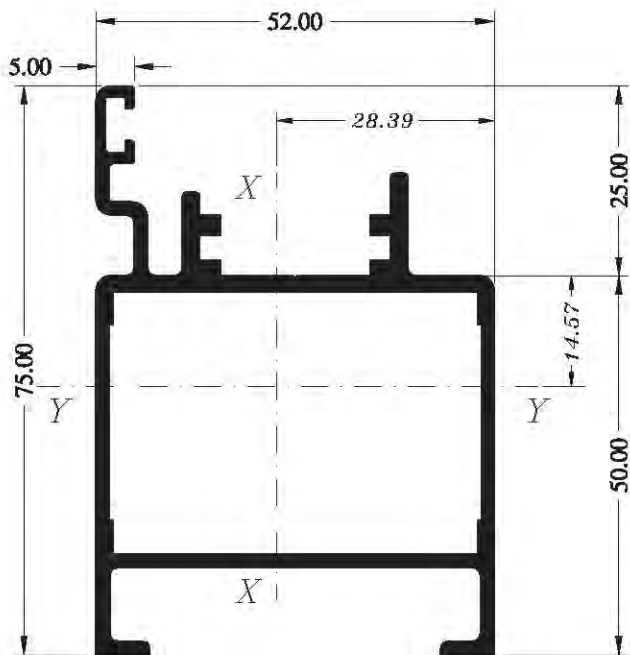
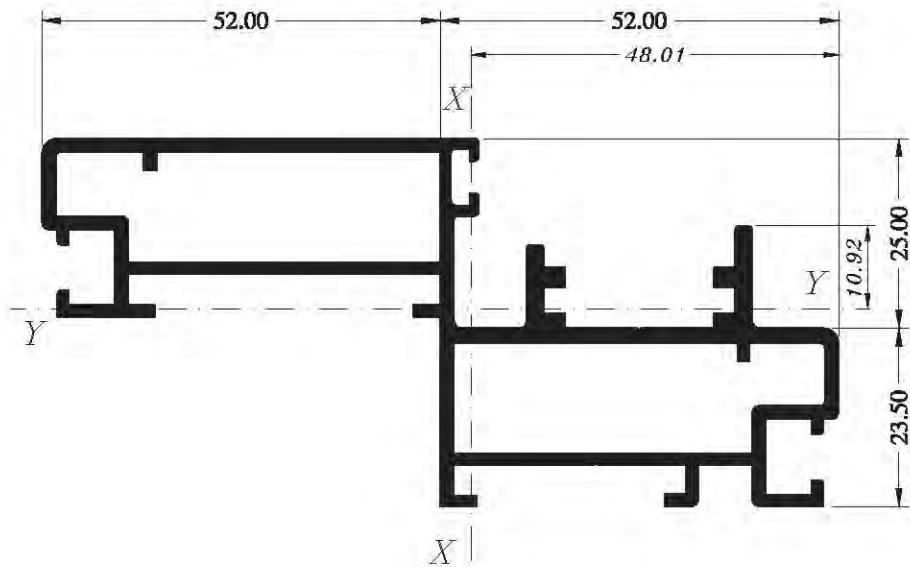
1 045 3692
1.798 Kg./ml.



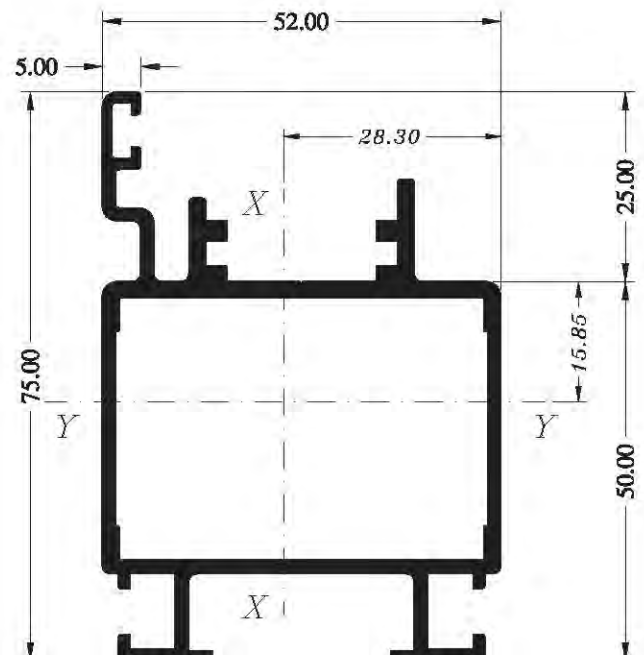
Profile No.	1 045 3230	1 045 3250
Profile Old No.	SH 4531	SH 4532



1 045 3623
1.830 Kg./ml.

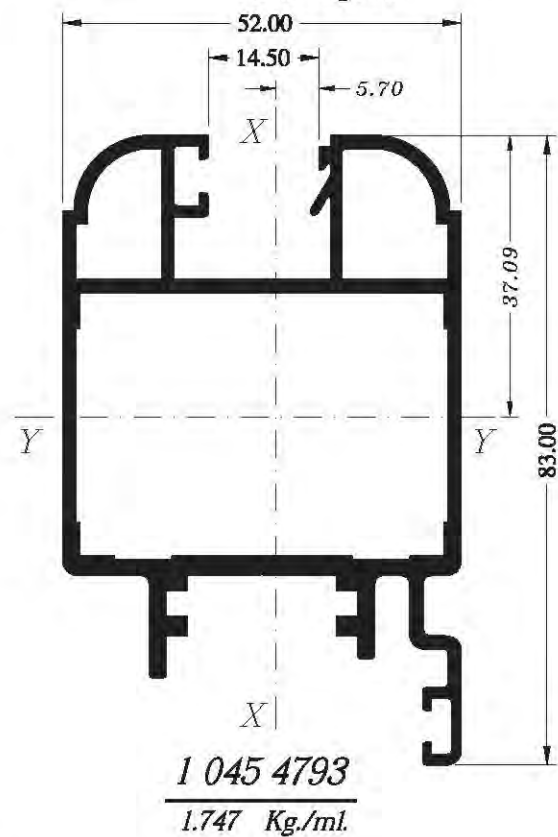
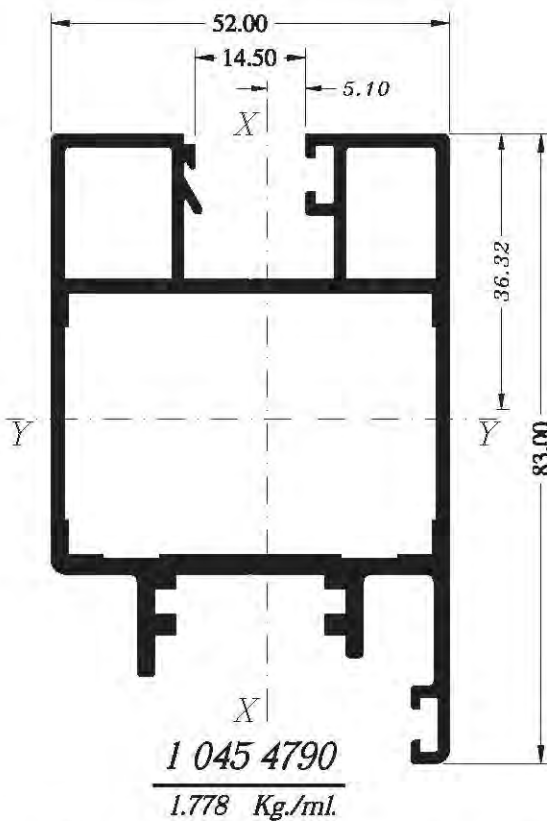
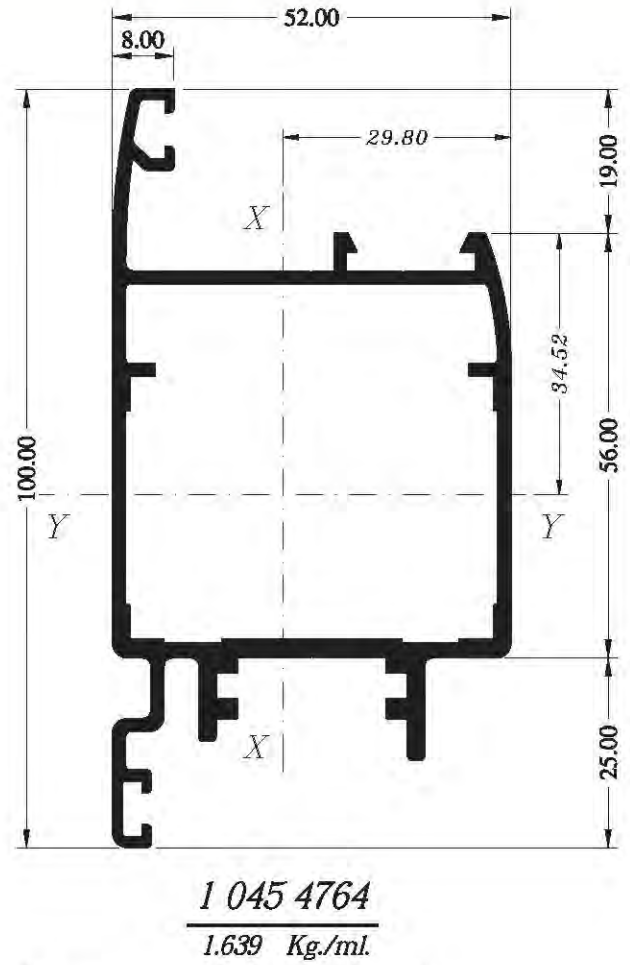
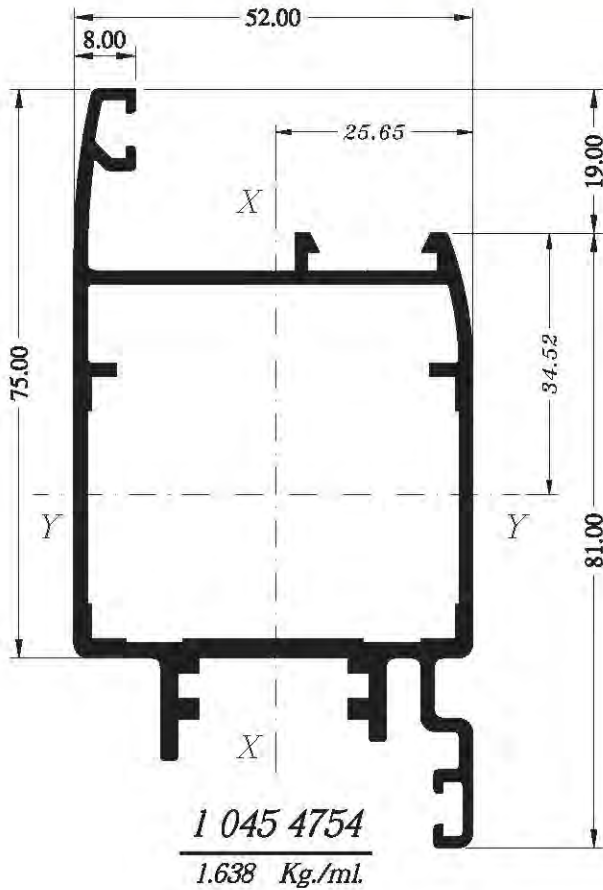


1 045 3700
1.420 Kg./ml.

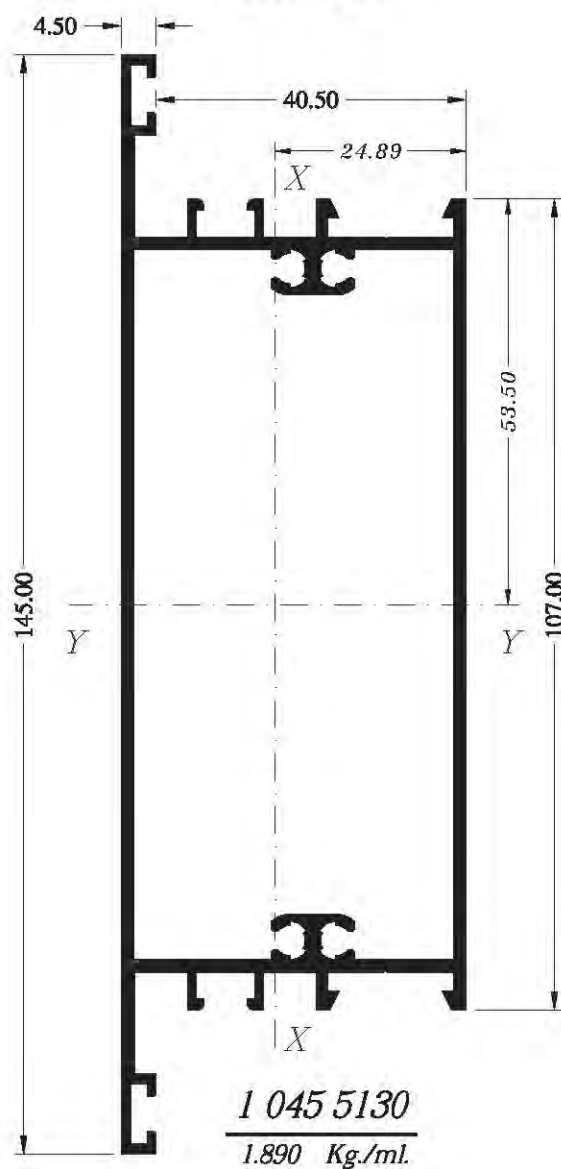
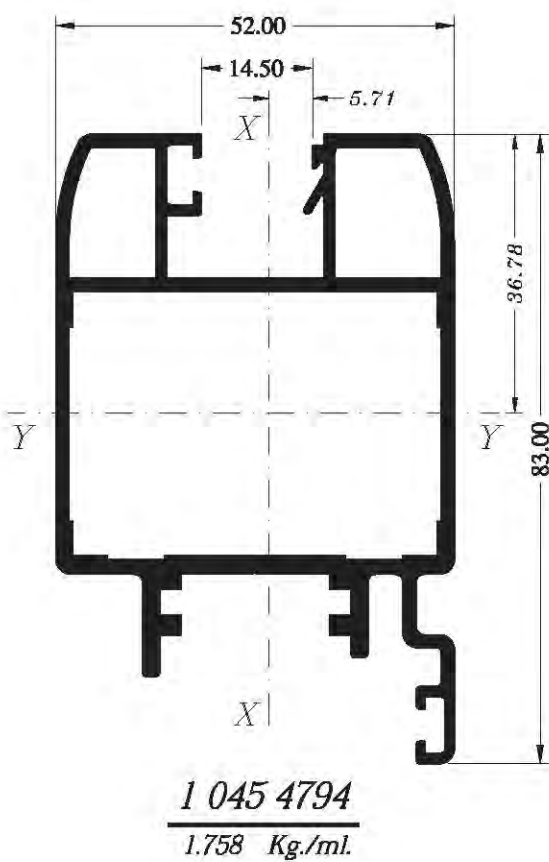
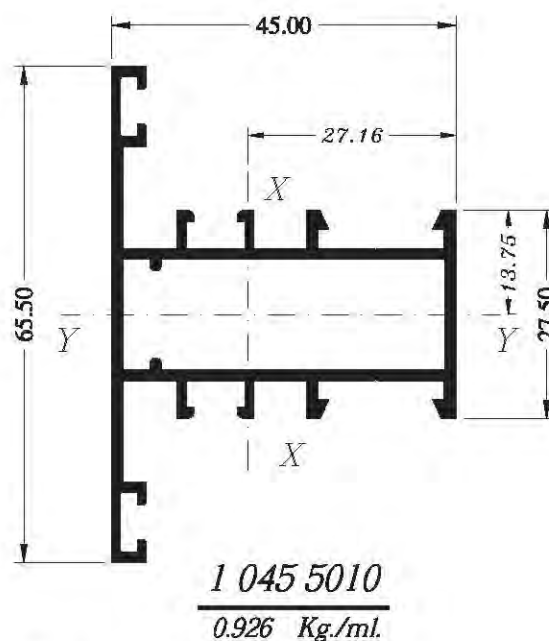
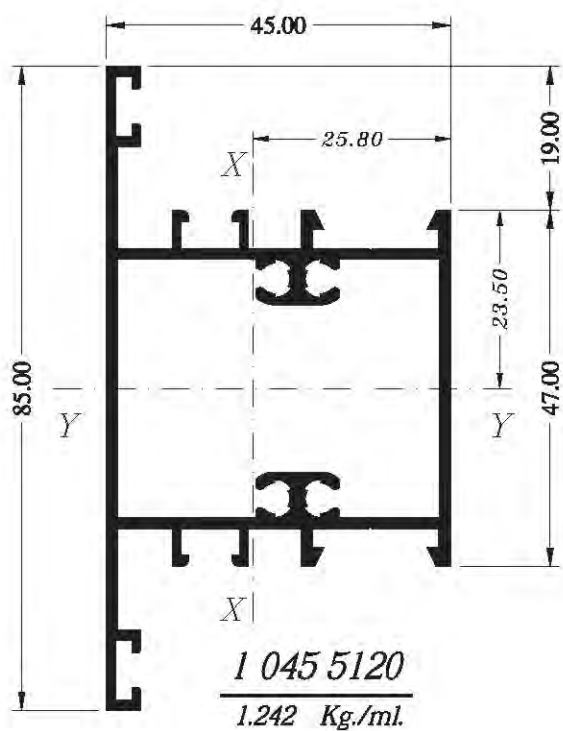


1 045 3720
1.478 Kg./ml.

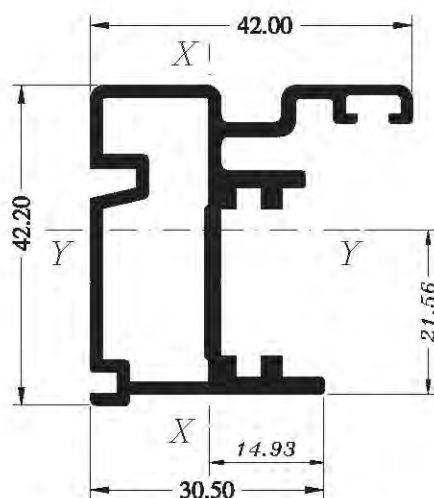
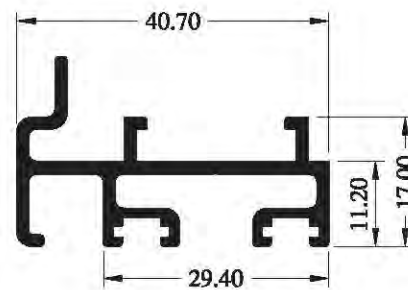
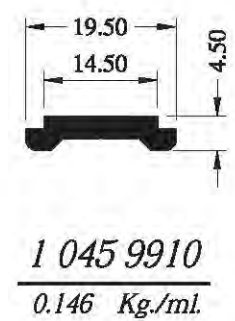
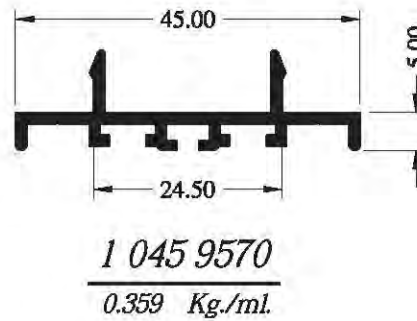
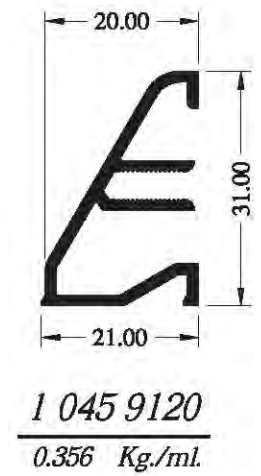
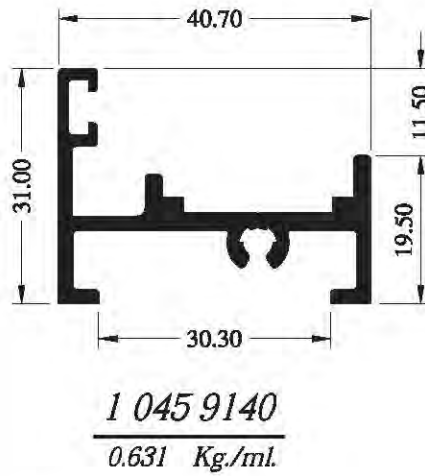
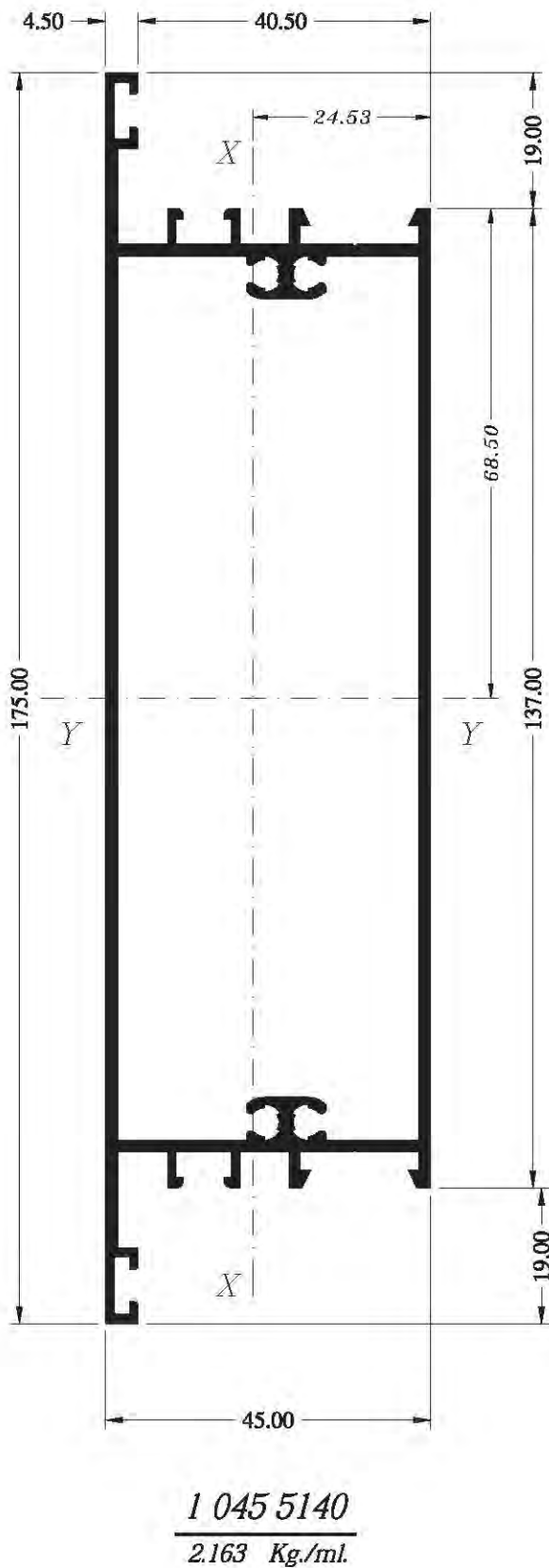
Profile No.	1 045 3700	1 045 3720
Profile Old No.	SH 4517	SH 4519



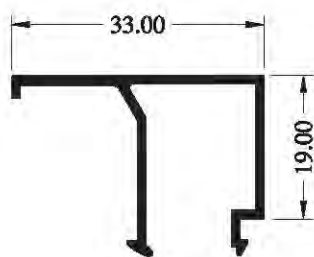
Profile No.	1 045 4652	1 045 4754	1 045 4764
Profile Old No.	SH 4537	SH 4538	SH 4534



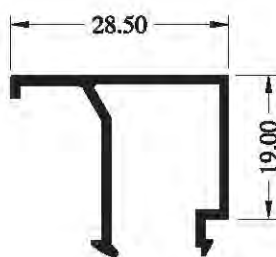
Profile No.	1 045 5010	1 045 5120	1 045 5130
Profile Old No.	SH 4551	SH 4552	SH 4553



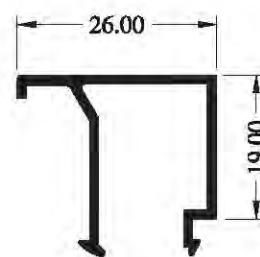
Profile No.	1 045 5140	1 045 9120	1 045 9570	1 045 9630	1 045 9910
Profile Old No.	SH 4554	SH 4577	SH 4581	SH 4588	SH 4571



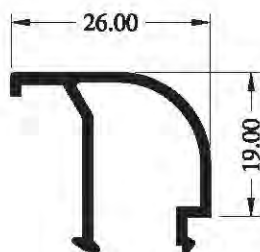
1 045 6110
0.289 Kg./ml.



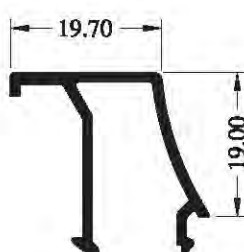
1 045 6130
0.270 Kg./ml.



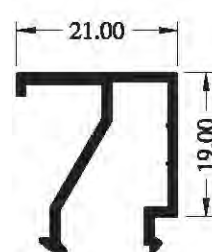
1 045 6140
0.262 Kg./ml.



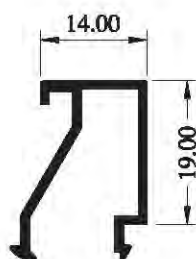
1 045 6142
0.246 Kg./ml.



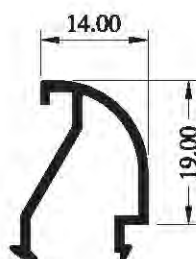
1 045 6145
0.240 Kg./ml.



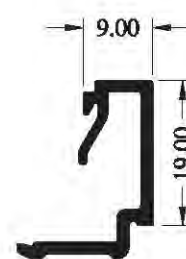
1 045 6160
0.251 Kg./ml.



1 045 6180
0.211 Kg./ml.



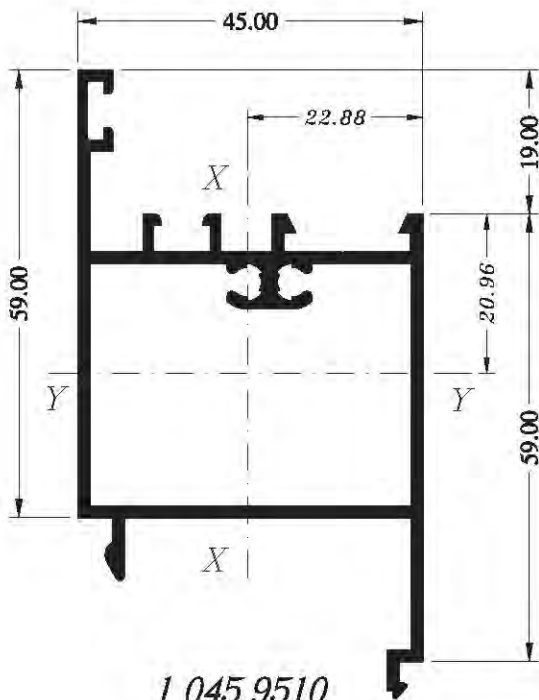
1 045 6182
0.206 Kg./ml.



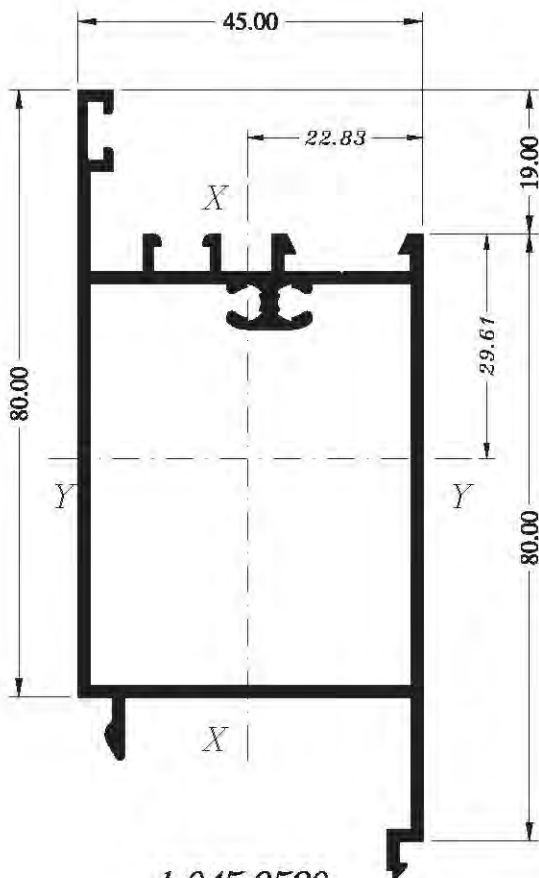
1 045 6290
0.227 Kg./ml.

Profile No.	1 045 6110	1 045 6130	1 045 6140	1 045 6142	1 045 6145	1 045 6160
Profile Old No.	SH 4563	SH 4560	SH 4561	SH 4562	SH 4565	SH 4568

Profile No.	1 045 6180	1 045 6182	1 045 6290
Profile Old No.	SH 4566	SH 4567	SH 4569

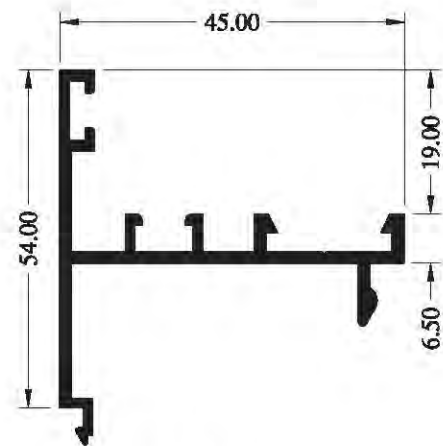


1 045 9510
1.072 Kg./ml.

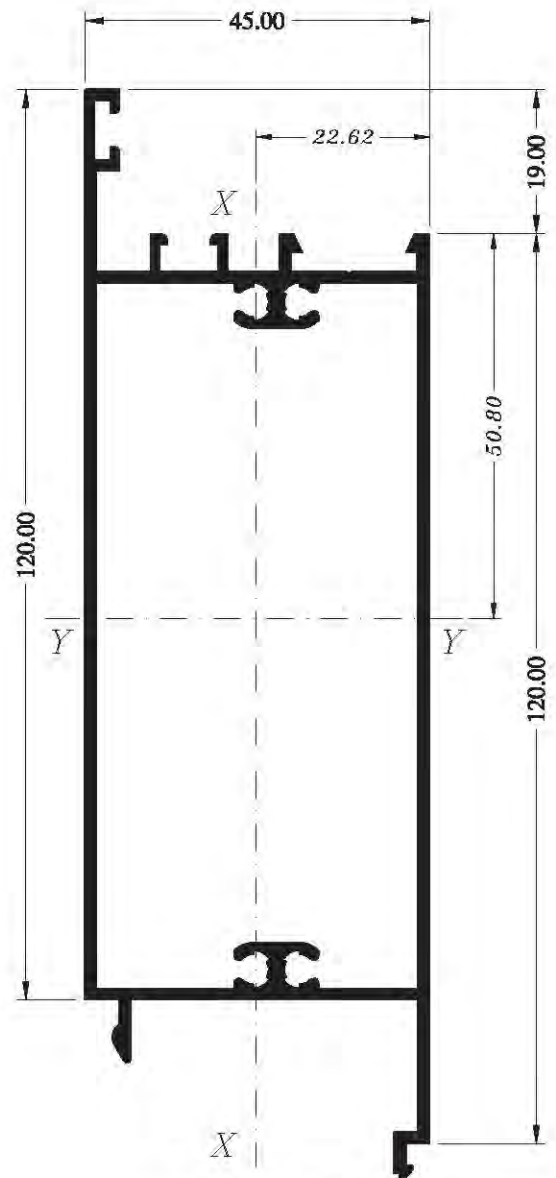


1 045 9520
1.242 Kg./ml.

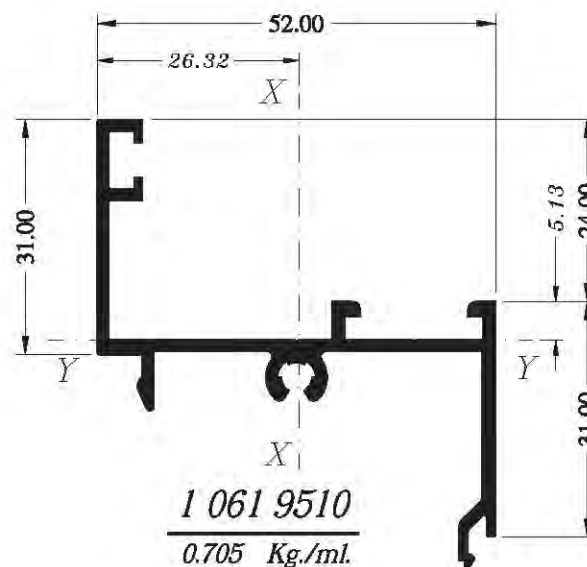
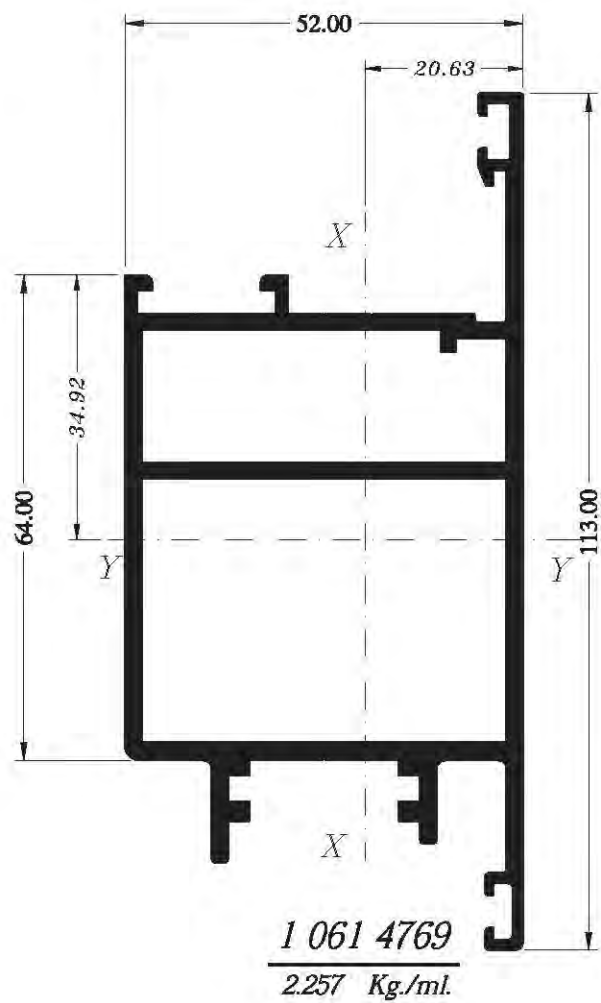
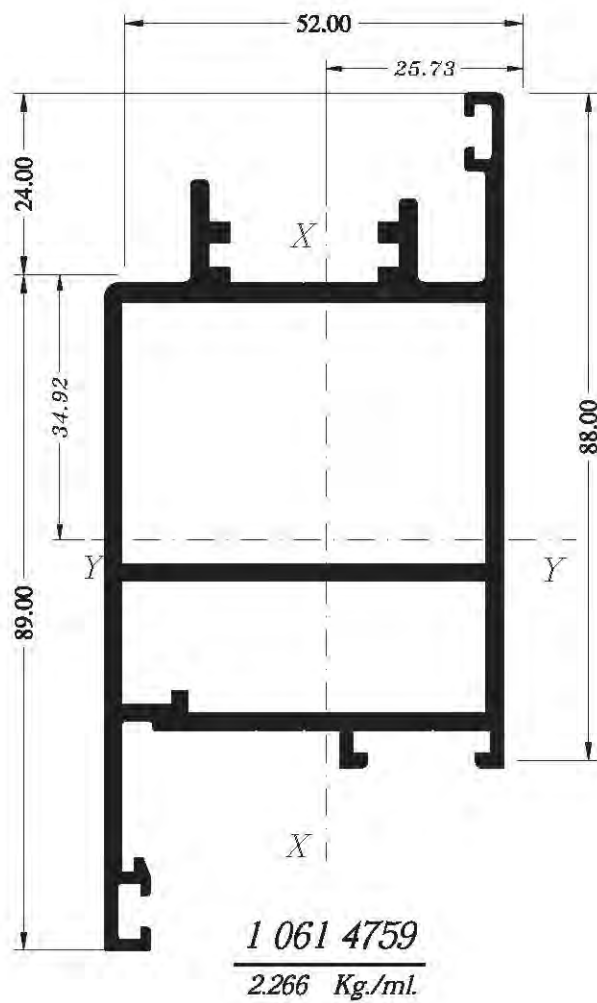
Profile No.	1 045 9520
Profile Old No.	SH 4573



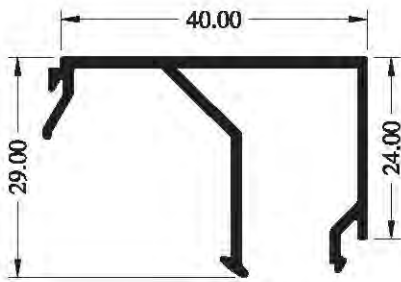
1 045 9430
0.540 Kg./ml.



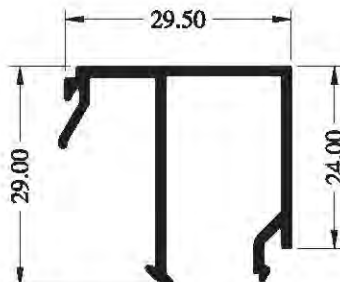
1 045 9540
1.657 Kg./ml.



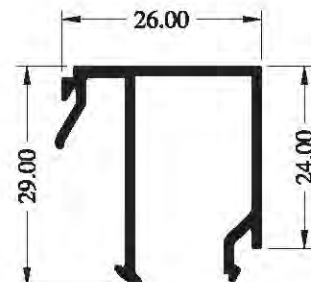
Profile No.	1 061 4527
Profile Old No.	RC 6123



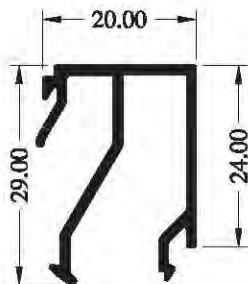
1 061 6140
0.402 Kg./ml.



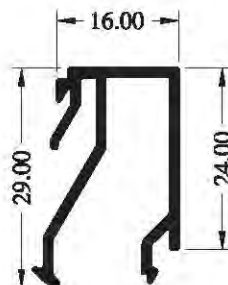
1 061 6170
0.338 Kg./ml.



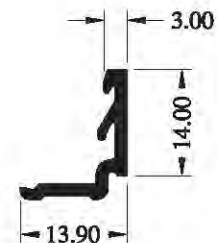
1 061 6180
0.324 Kg./ml.



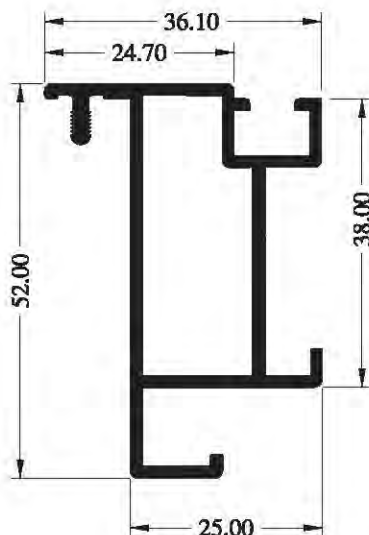
1 061 6190
0.311 Kg./ml.



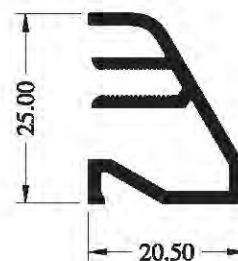
1 061 6192
0.297 Kg./ml.



1 061 6500
0.142 Kg./ml.

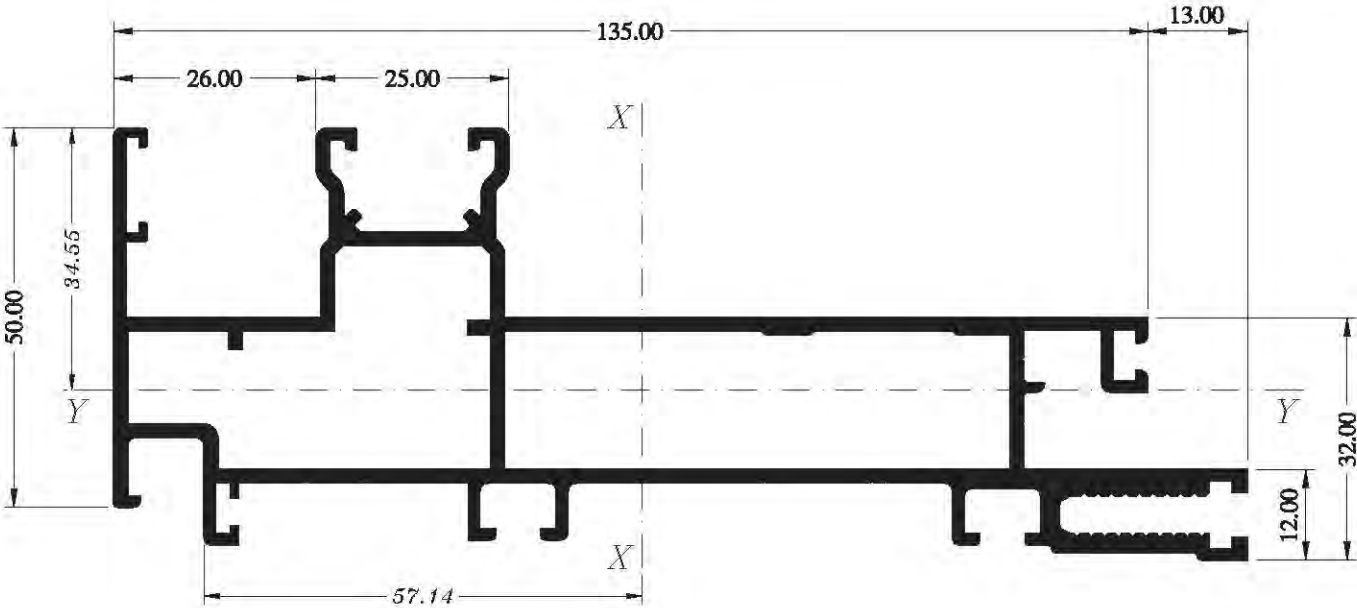


1 061 9253
0.749 Kg./ml.

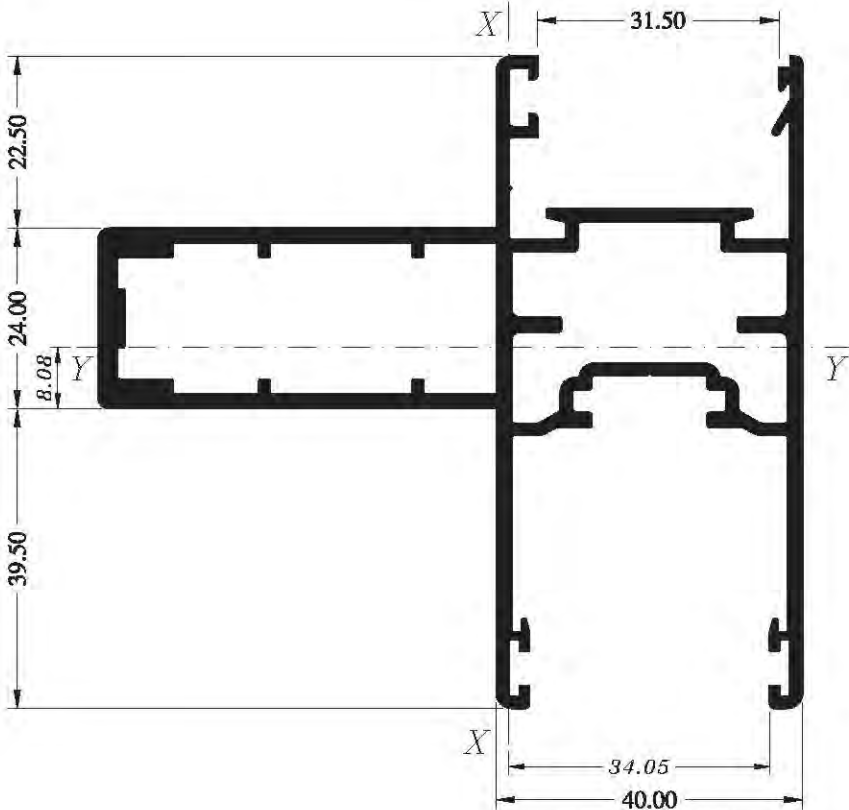


1 061 9120
0.328 Kg./ml.

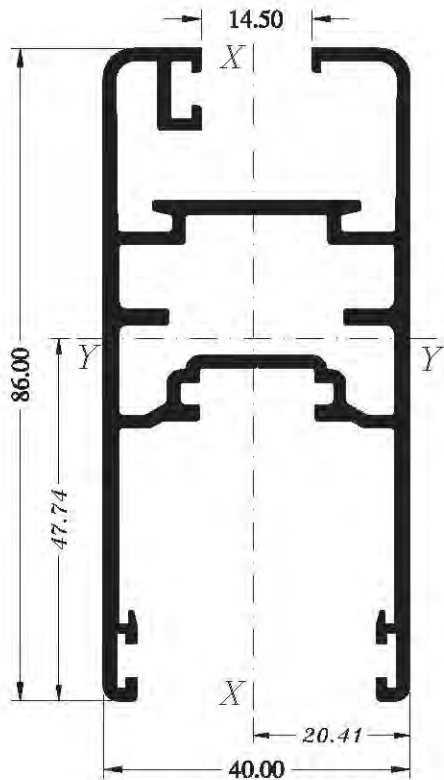
Profile No.	1 061 6140	1 061 6180	1 061 6190	1 061 6500
Profile Old No.	RC 6161	RC 6166	RC 6167	RC 6169



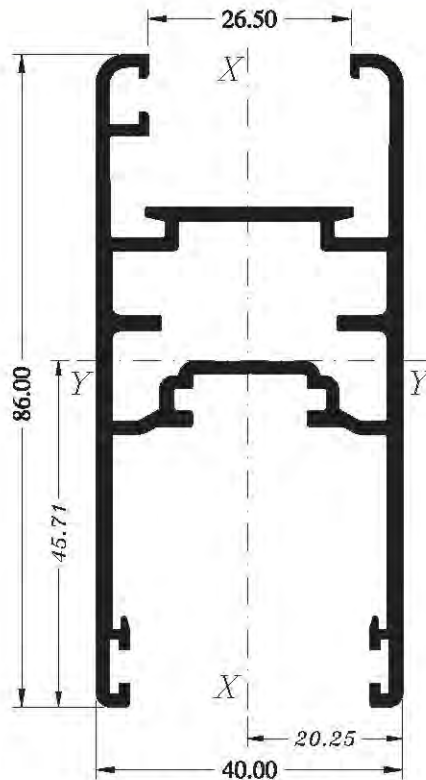
2 120 3300
2736 Kg./ml.



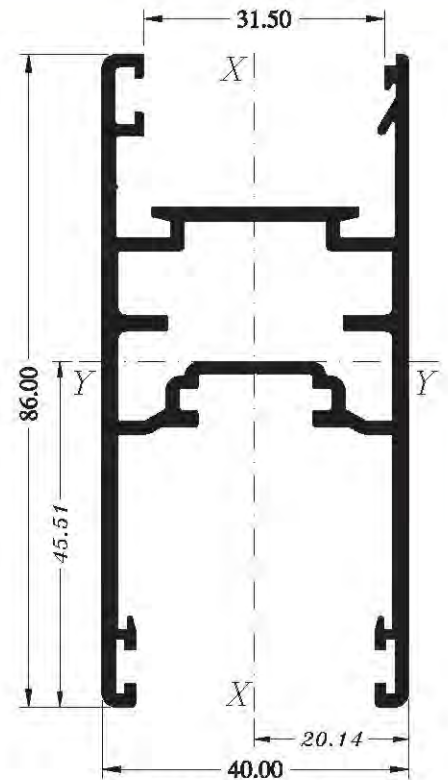
2 120 4330
2.338 Kg./ml.



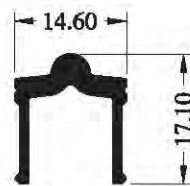
2 120 4110
1.615 Kg./ml.



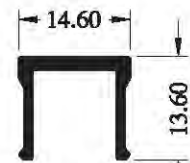
2 120 4120
1.550 Kg./ml.



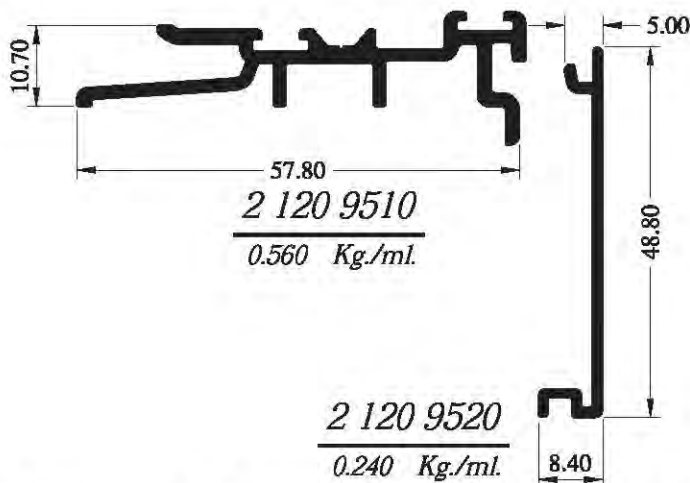
2 120 4130
1.520 Kg./ml.



2 120 9210
0.196 Kg./ml.

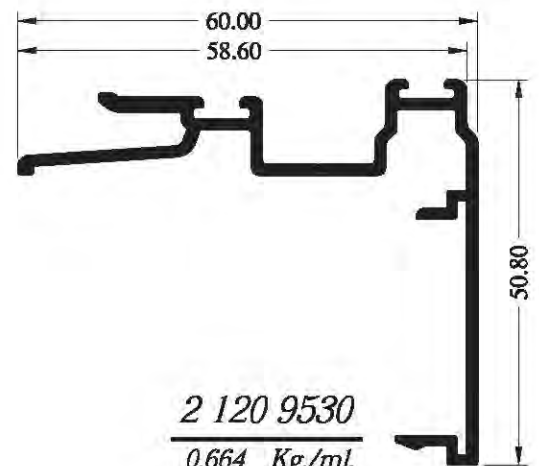


2 120 9220
0.150 Kg./ml.



2 120 9510
0.560 Kg./ml.

2 120 9520
0.240 Kg./ml.

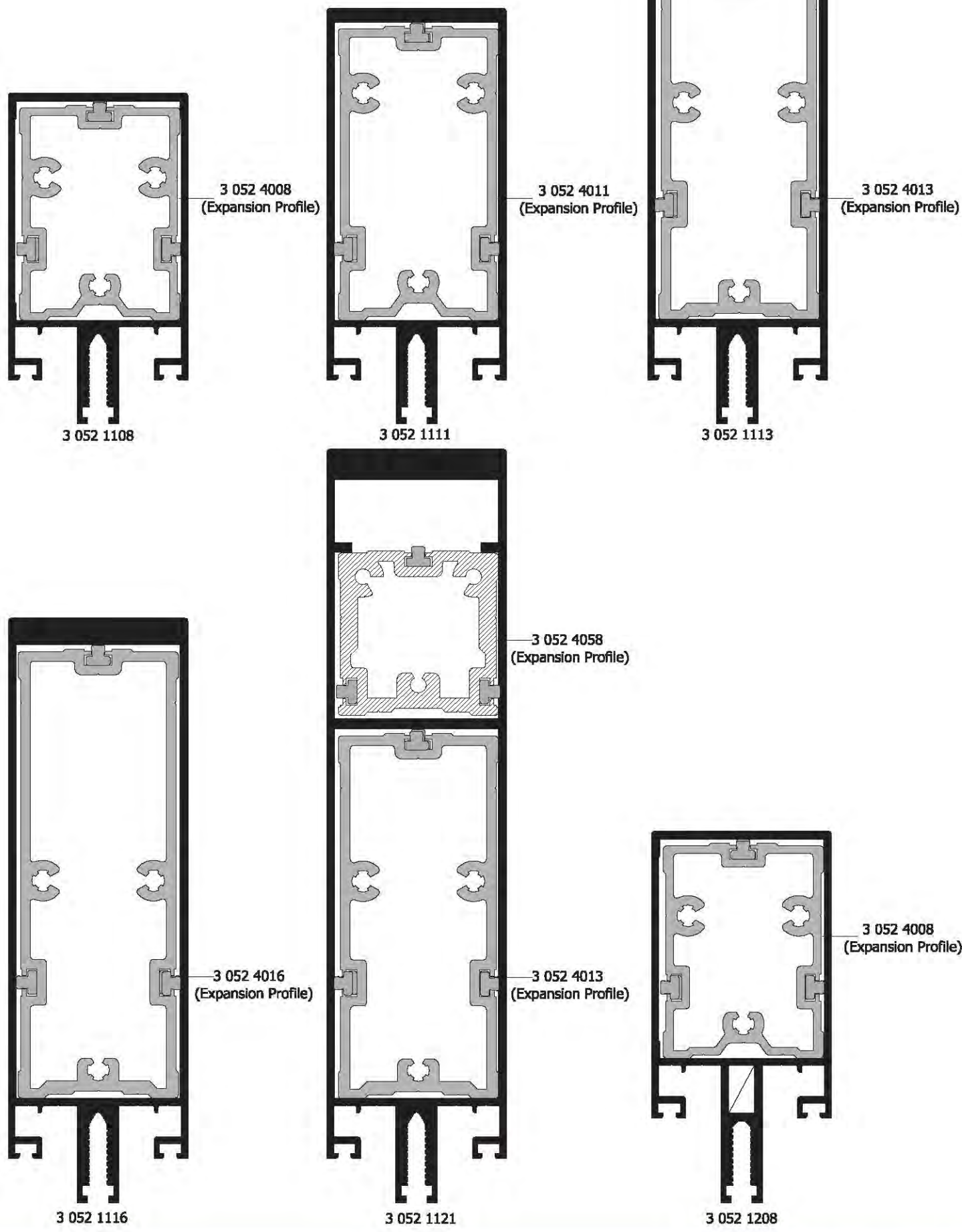


2 120 9530
0.664 Kg./ml.

Profile No.	2 120 4110	2 120 4120	2 120 9210	2 120 9510	2 120 9520	2 120 9530
Profile Old No.	TN 1240	TN 1242	TN 1291	TN 1250	TN 1251	TN 1252

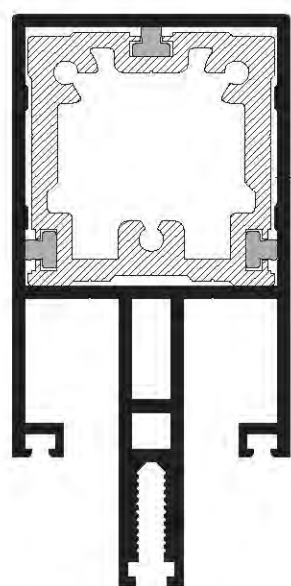


Expansion Profile For Mullion



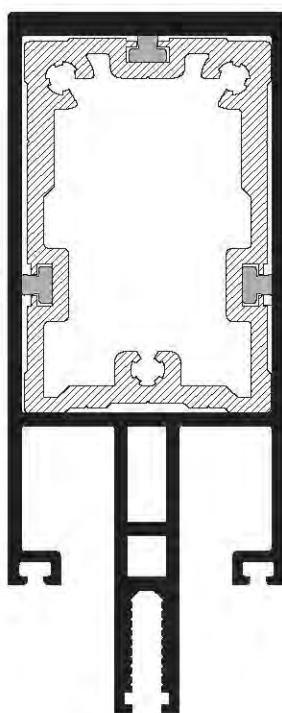


Expansion Profile For Mullion



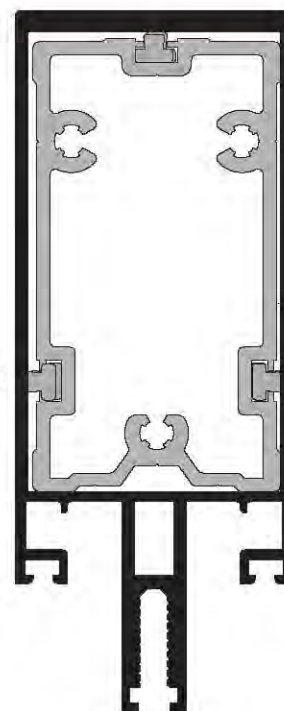
3 052 4058
(Expansion Profile)

3 052 1258



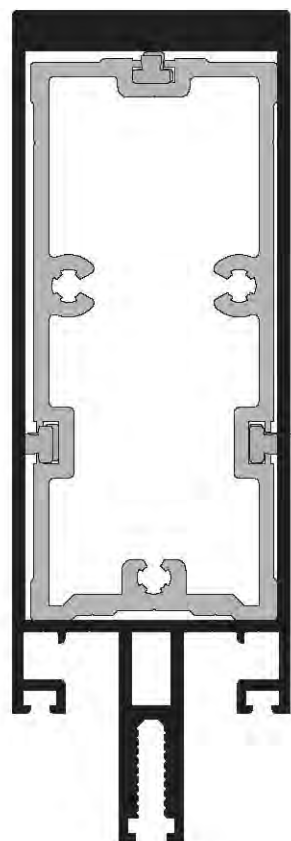
3 052 4061
(Expansion Profile)

3 052 1261



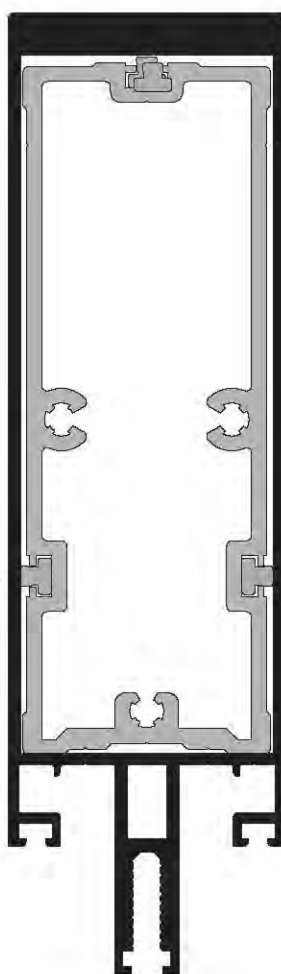
3 052 4011
(Expansion Profile)

3 052 1211



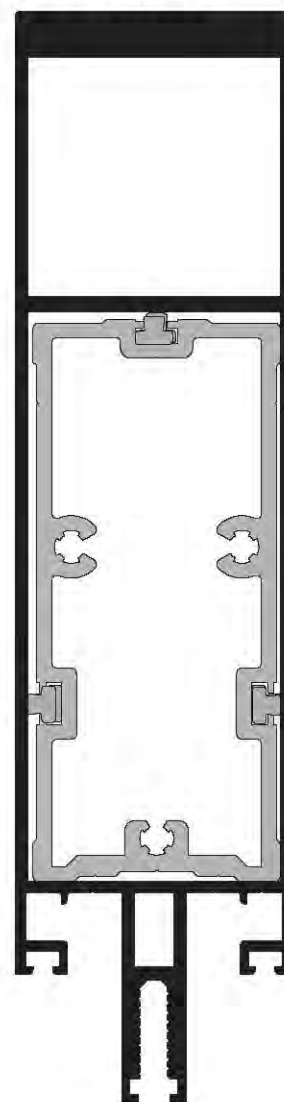
3 052 4013
(Expansion Profile)

3 052 1213



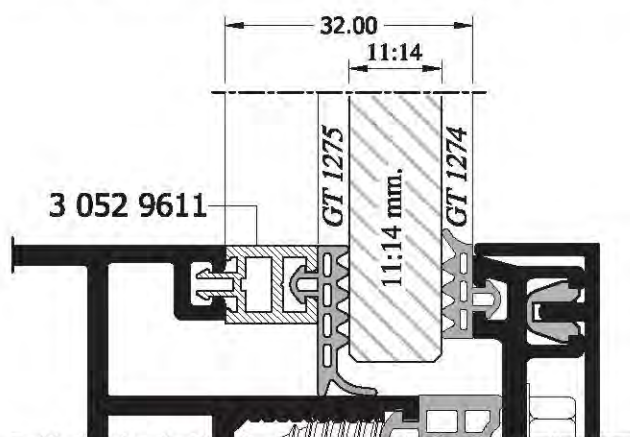
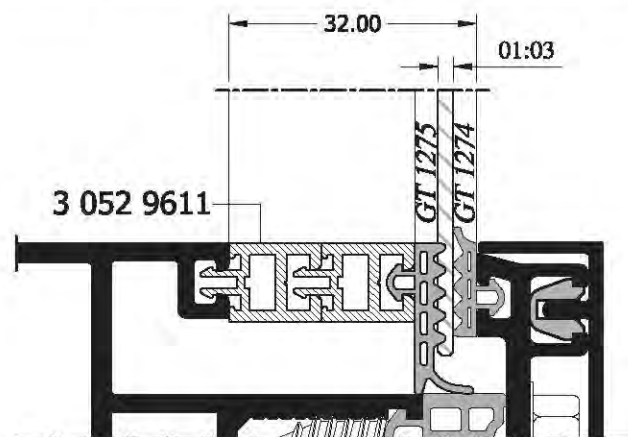
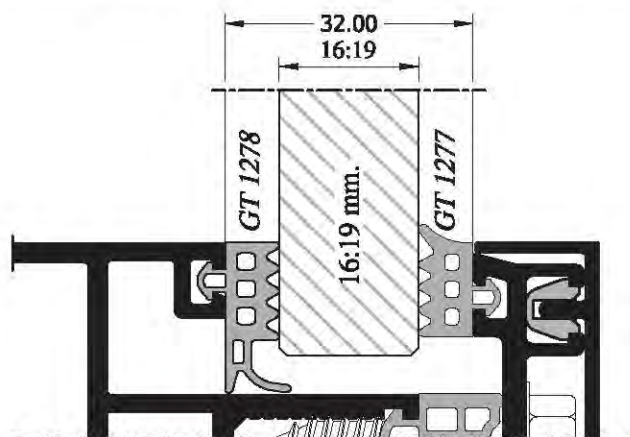
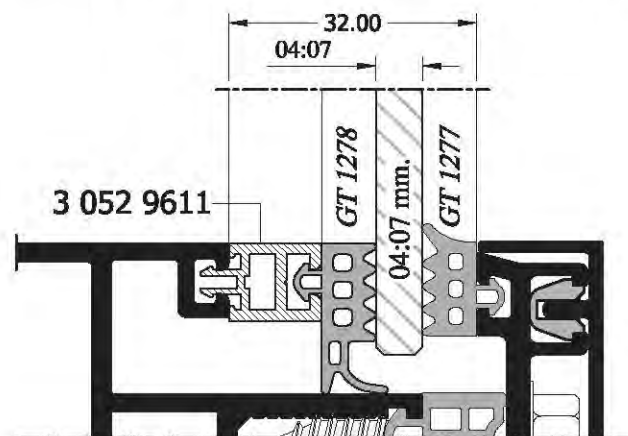
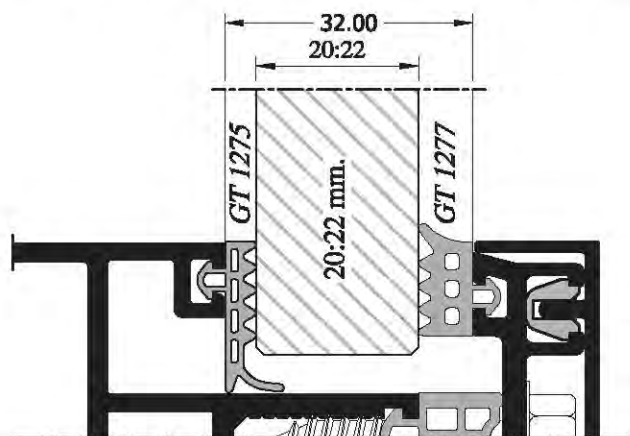
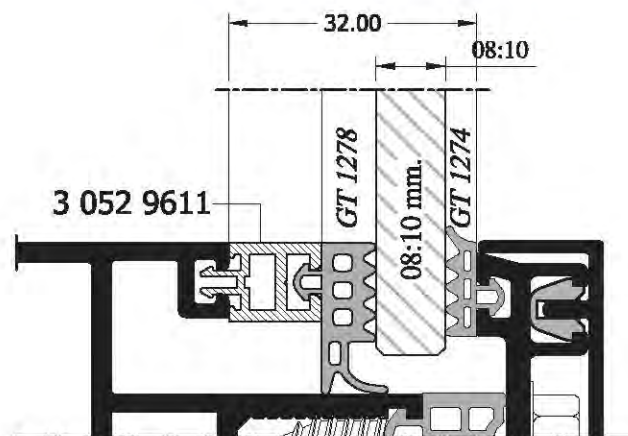
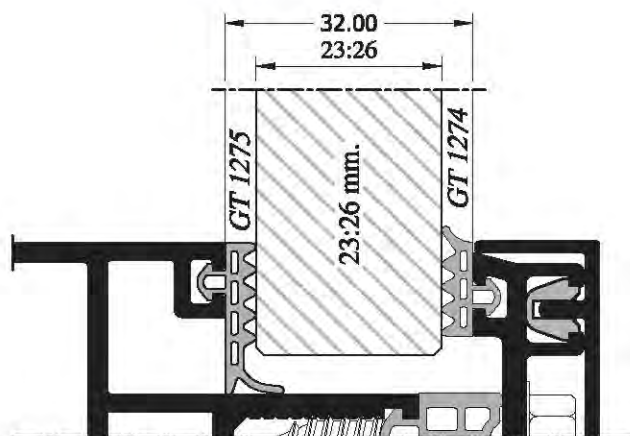
3 052 4016
(Expansion Profile)

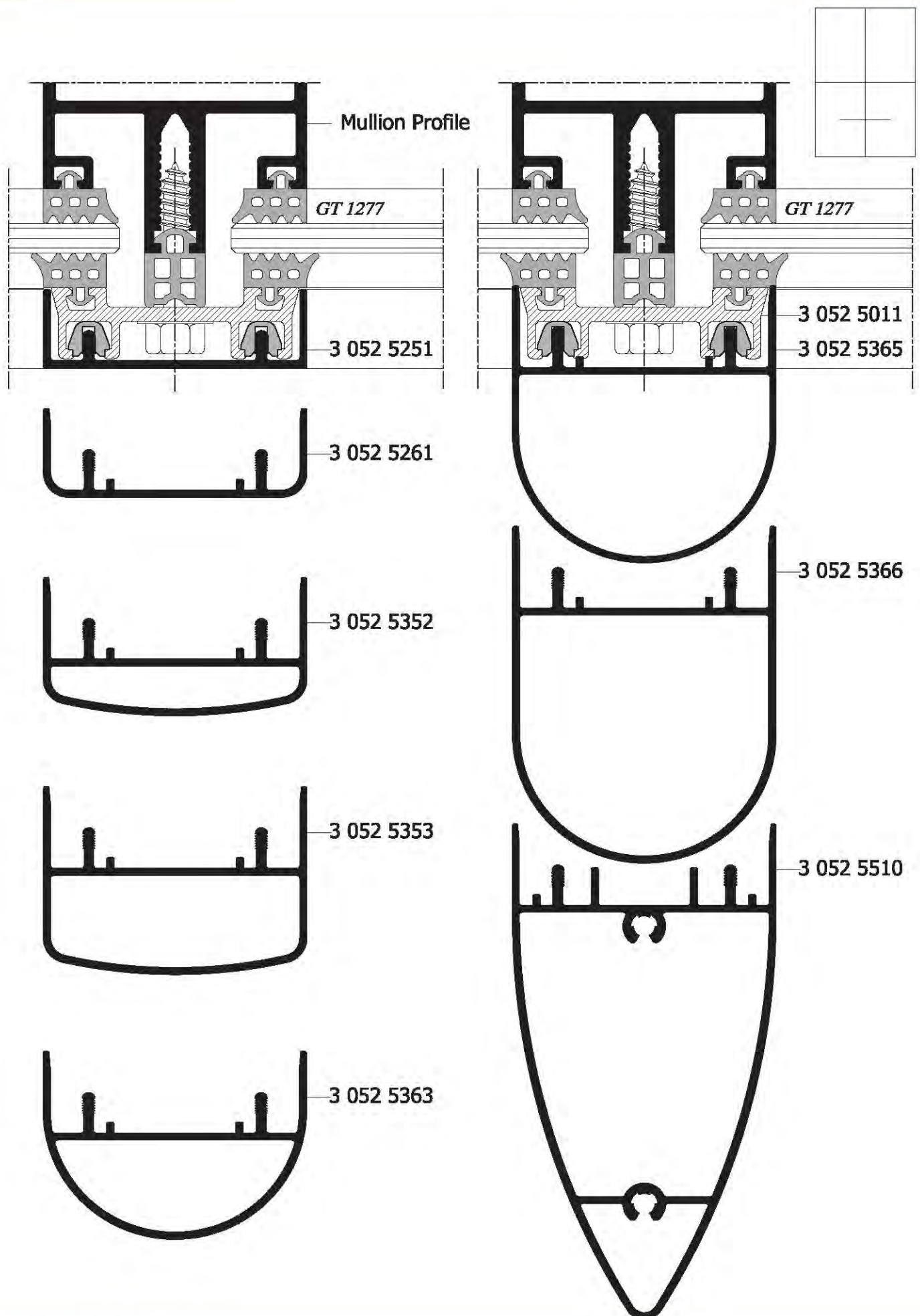
3 052 1216

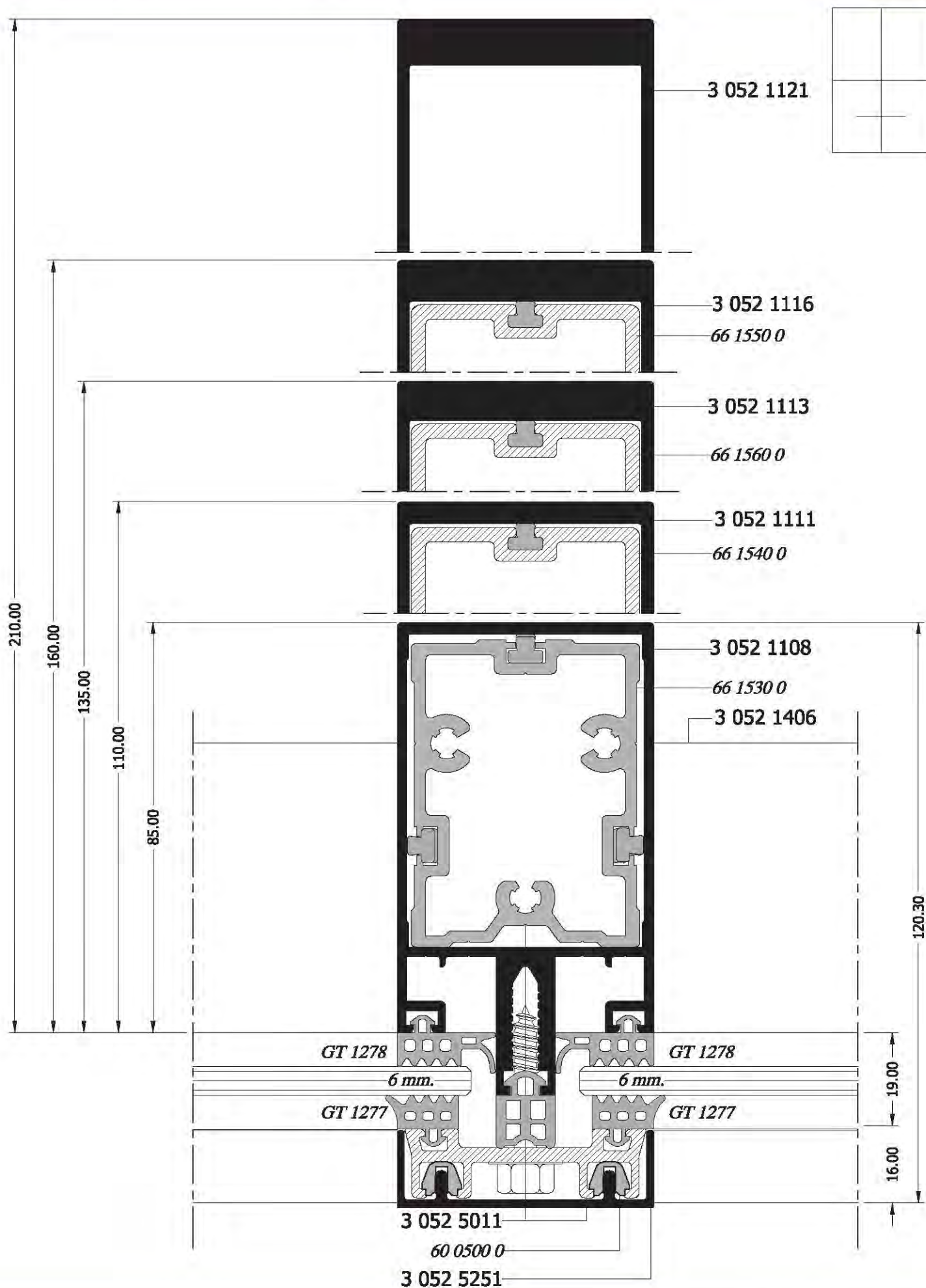


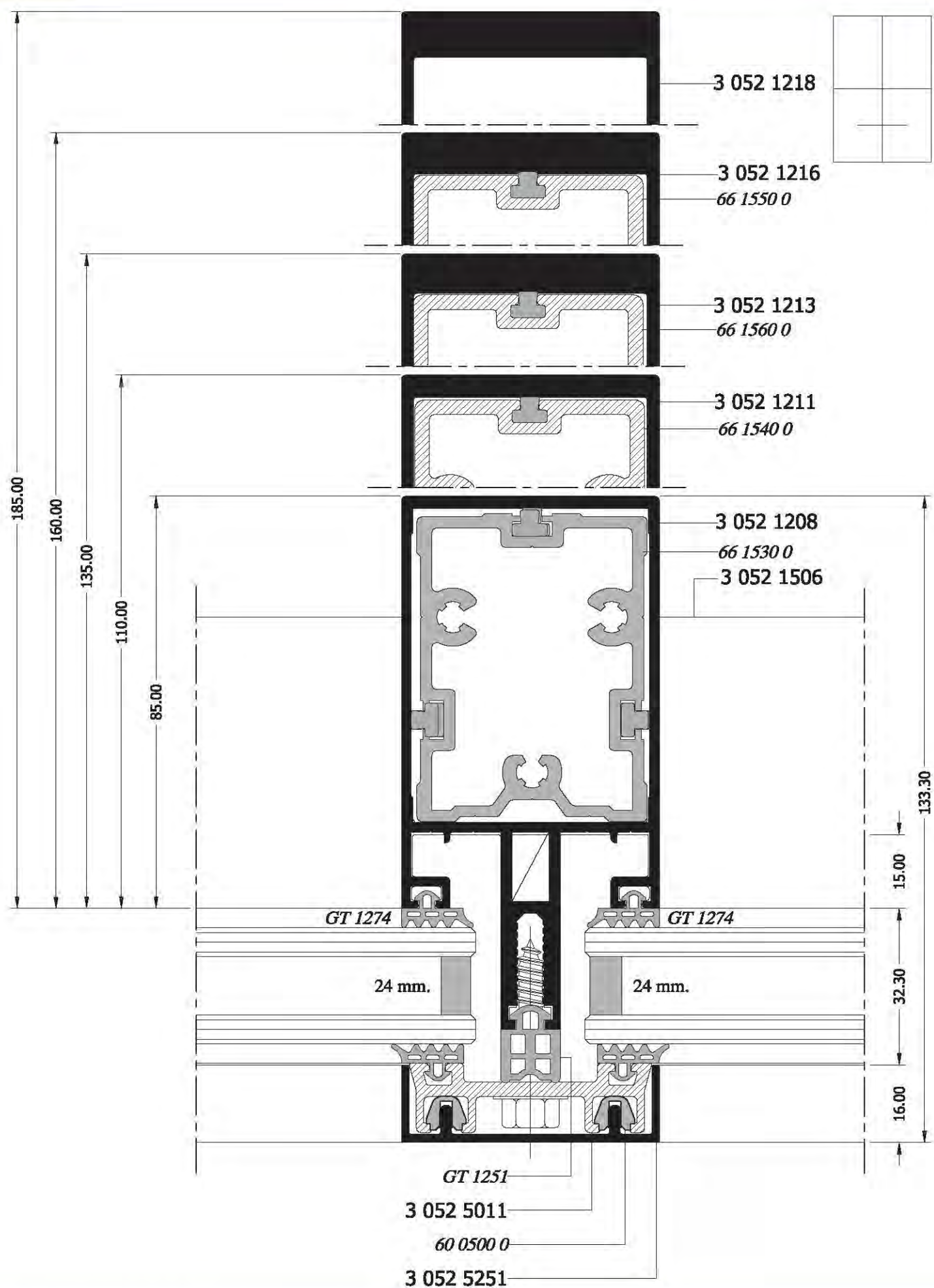
3 052 4013
(Expansion Profile)

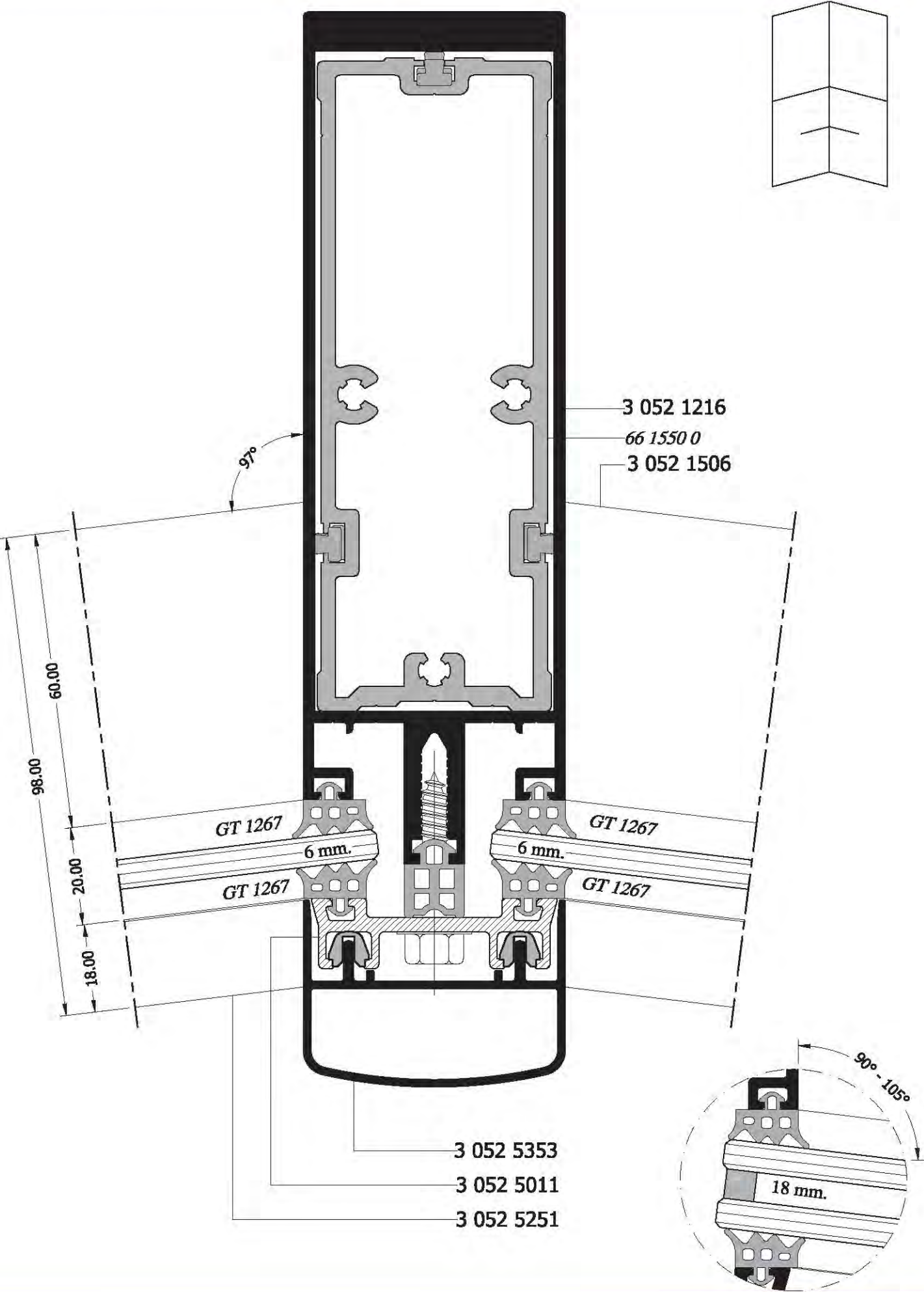
3 052 1218

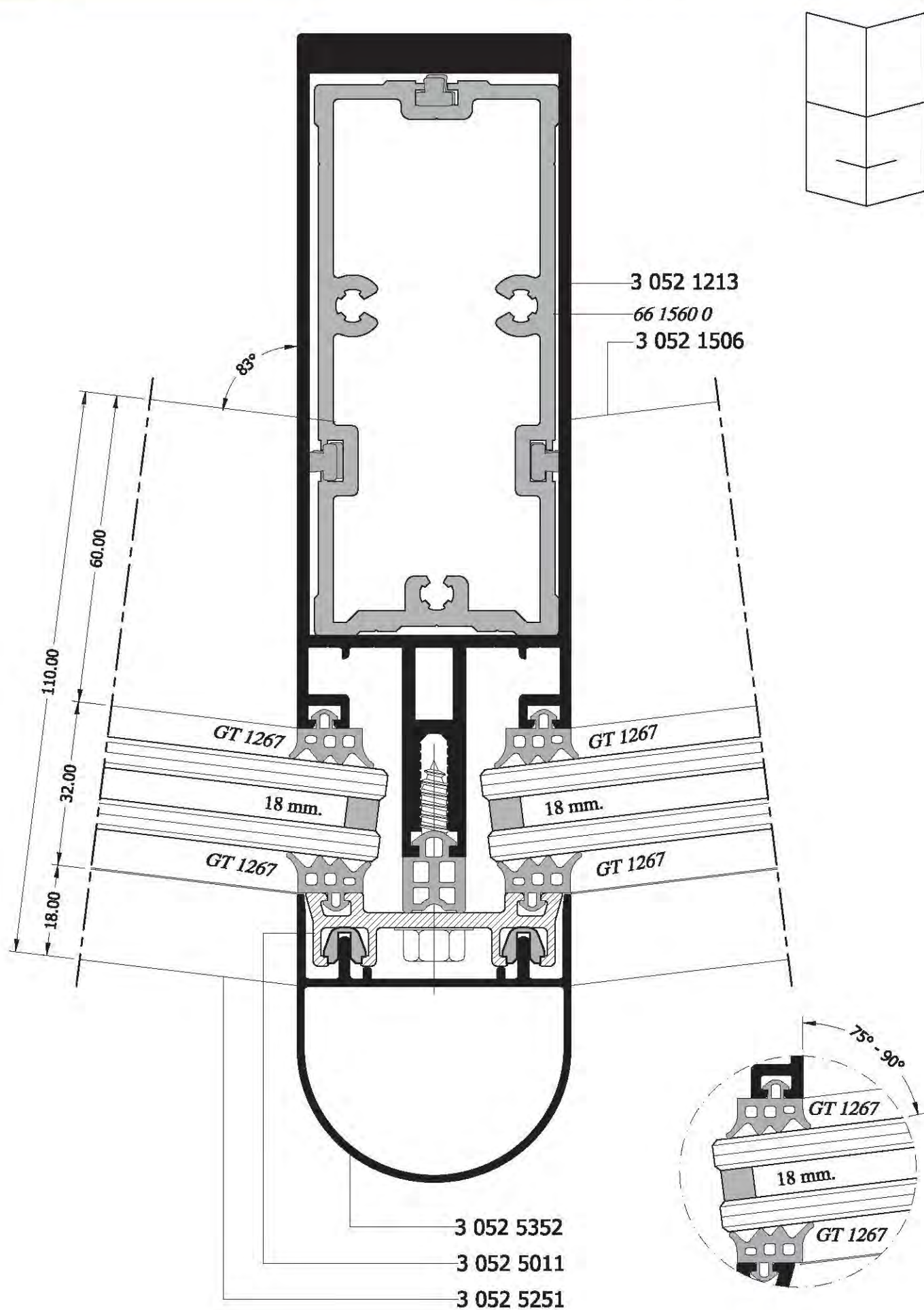


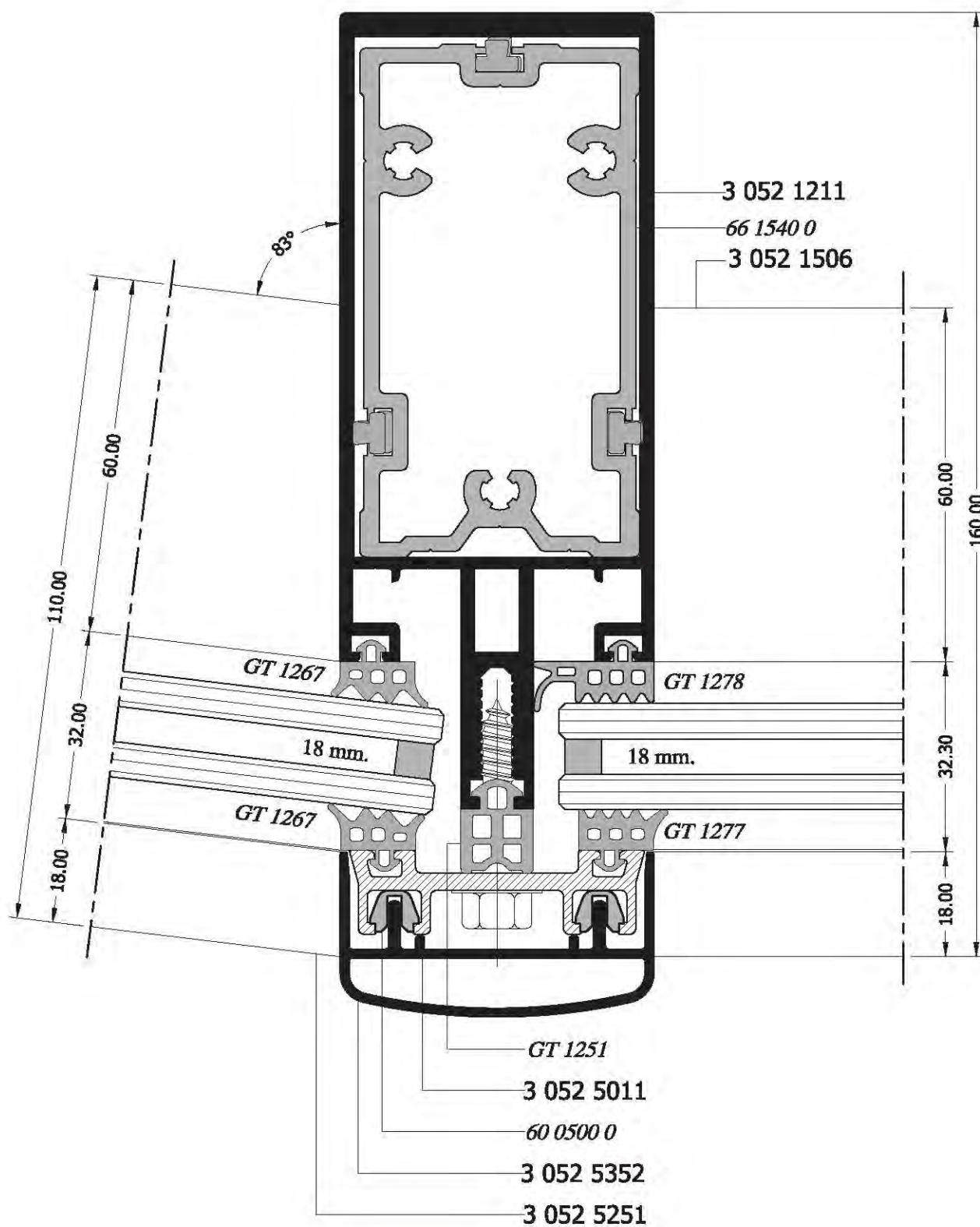
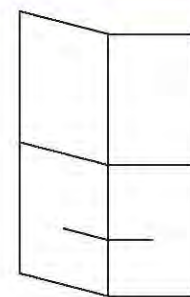


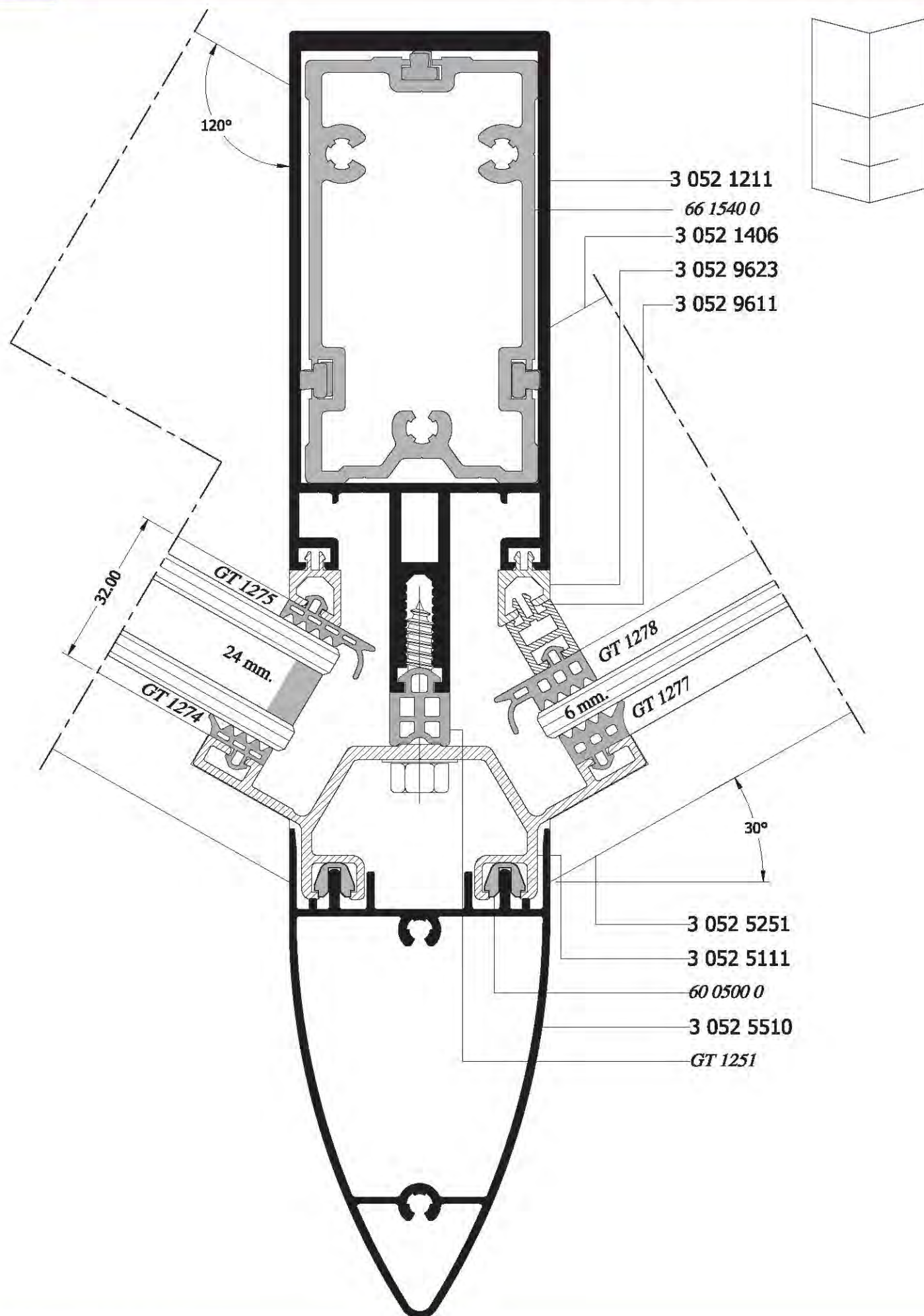


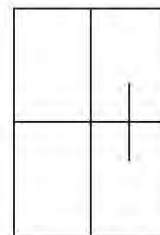


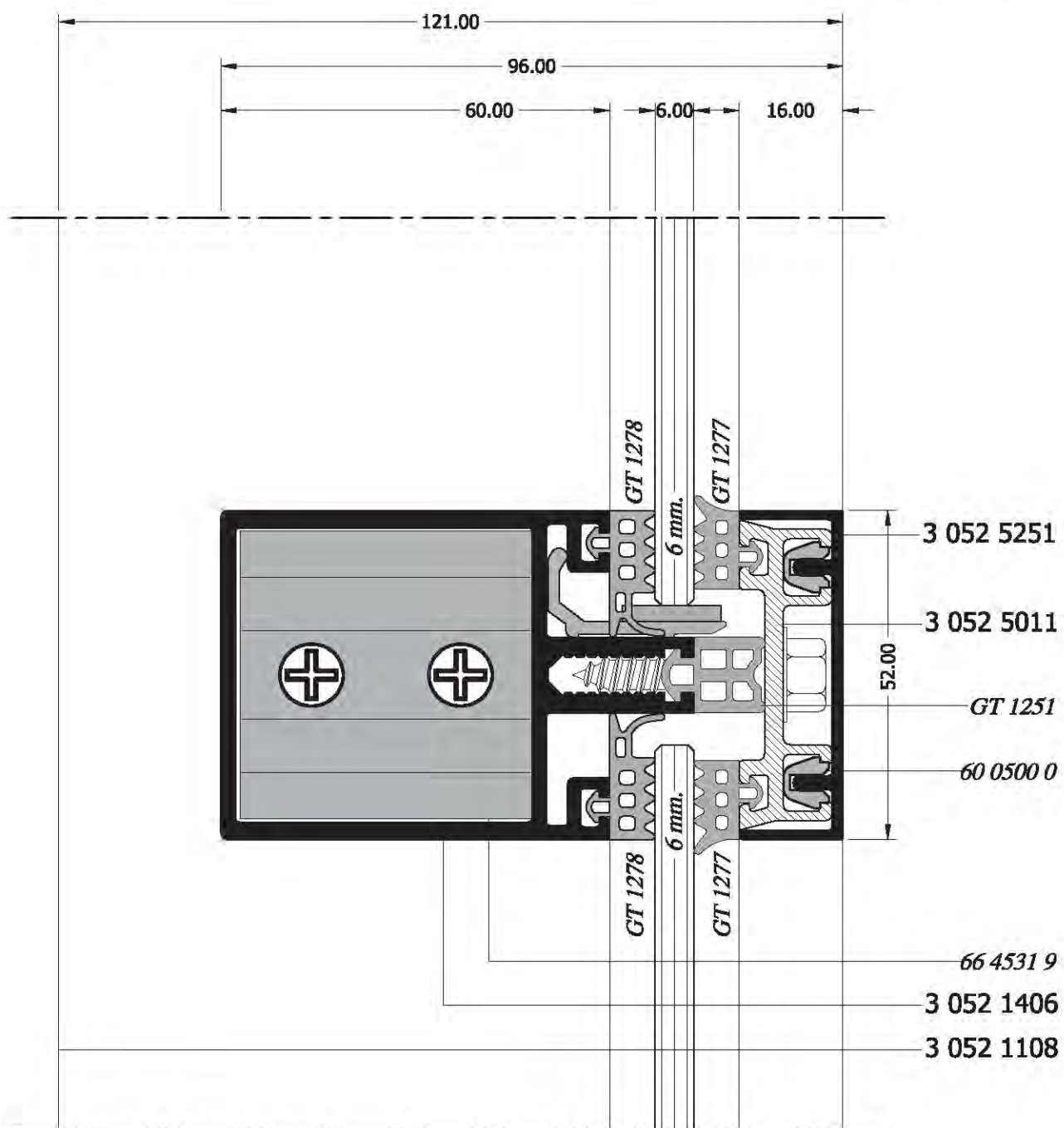
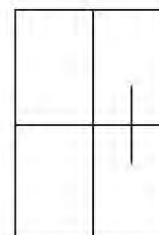


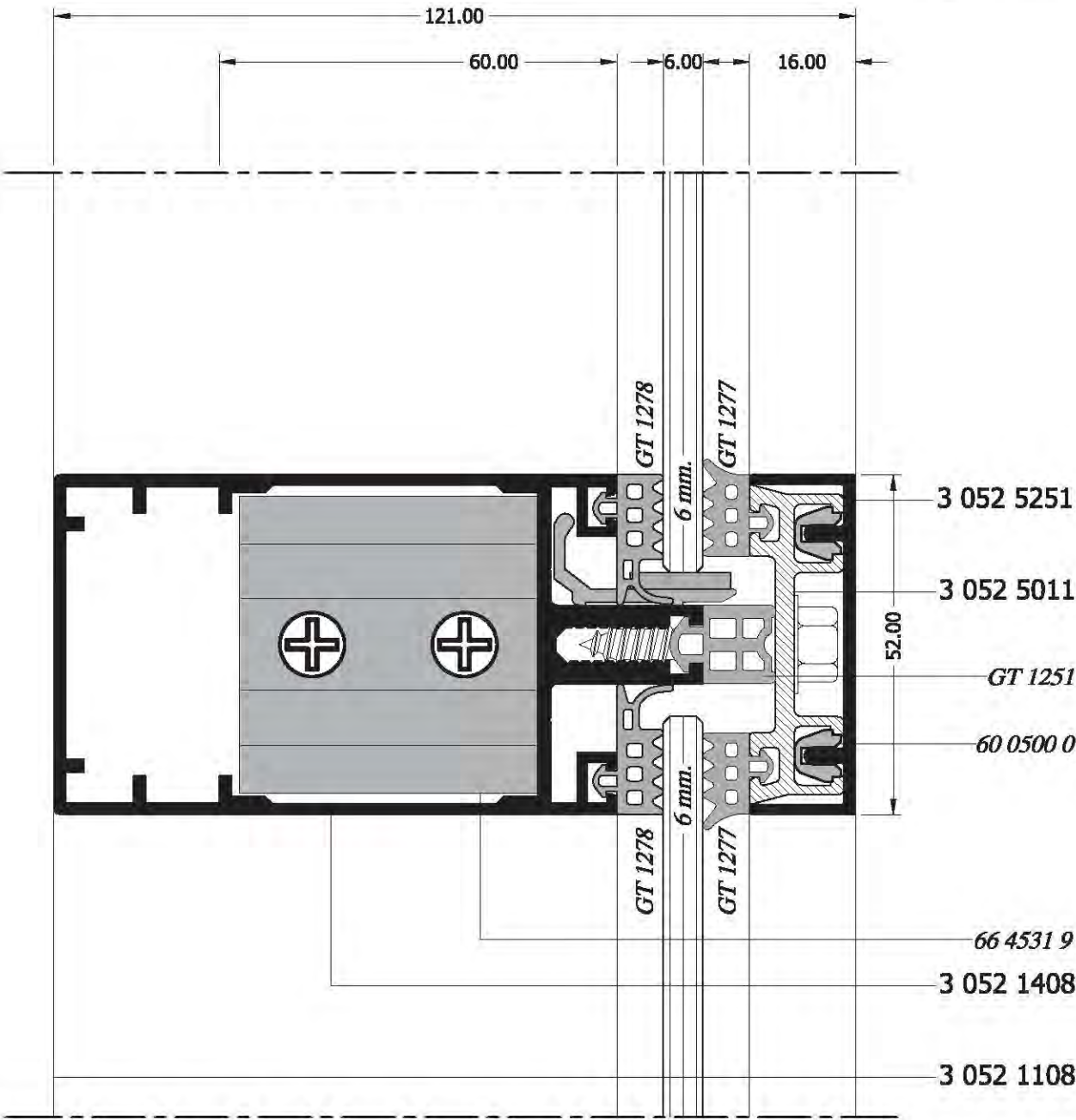
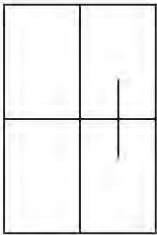


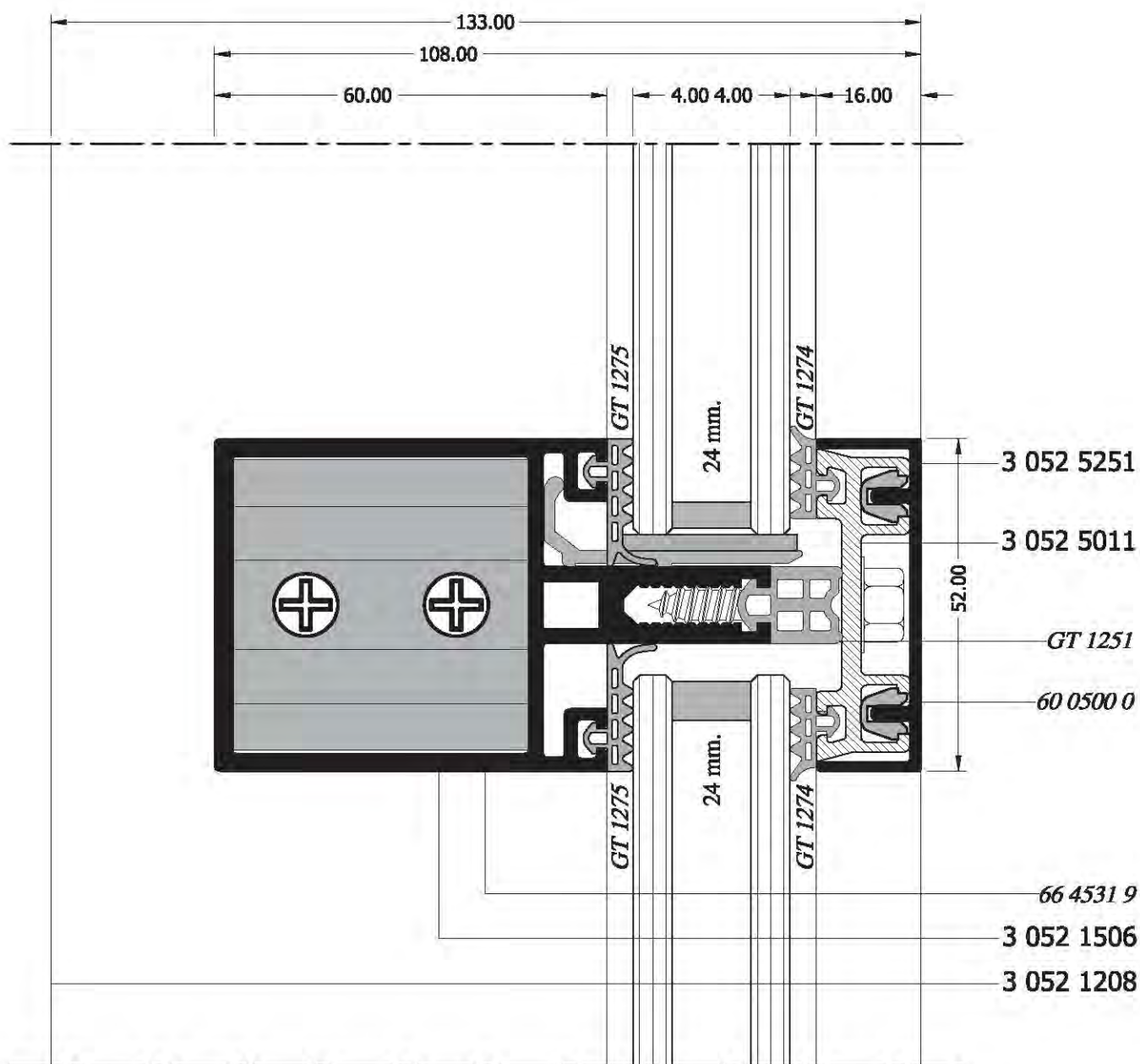
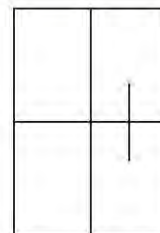


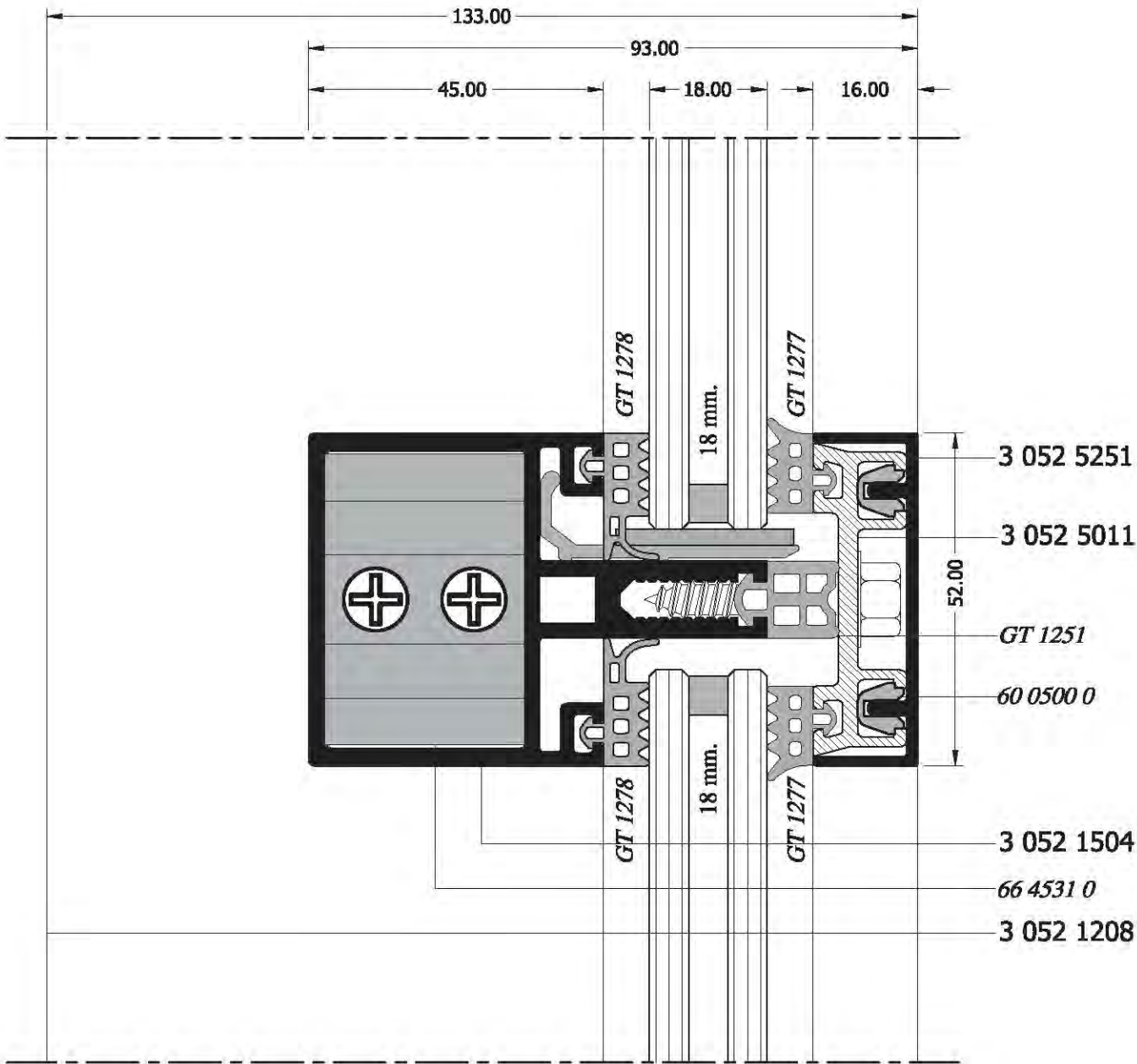
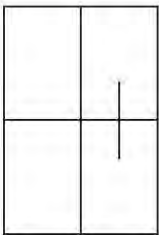


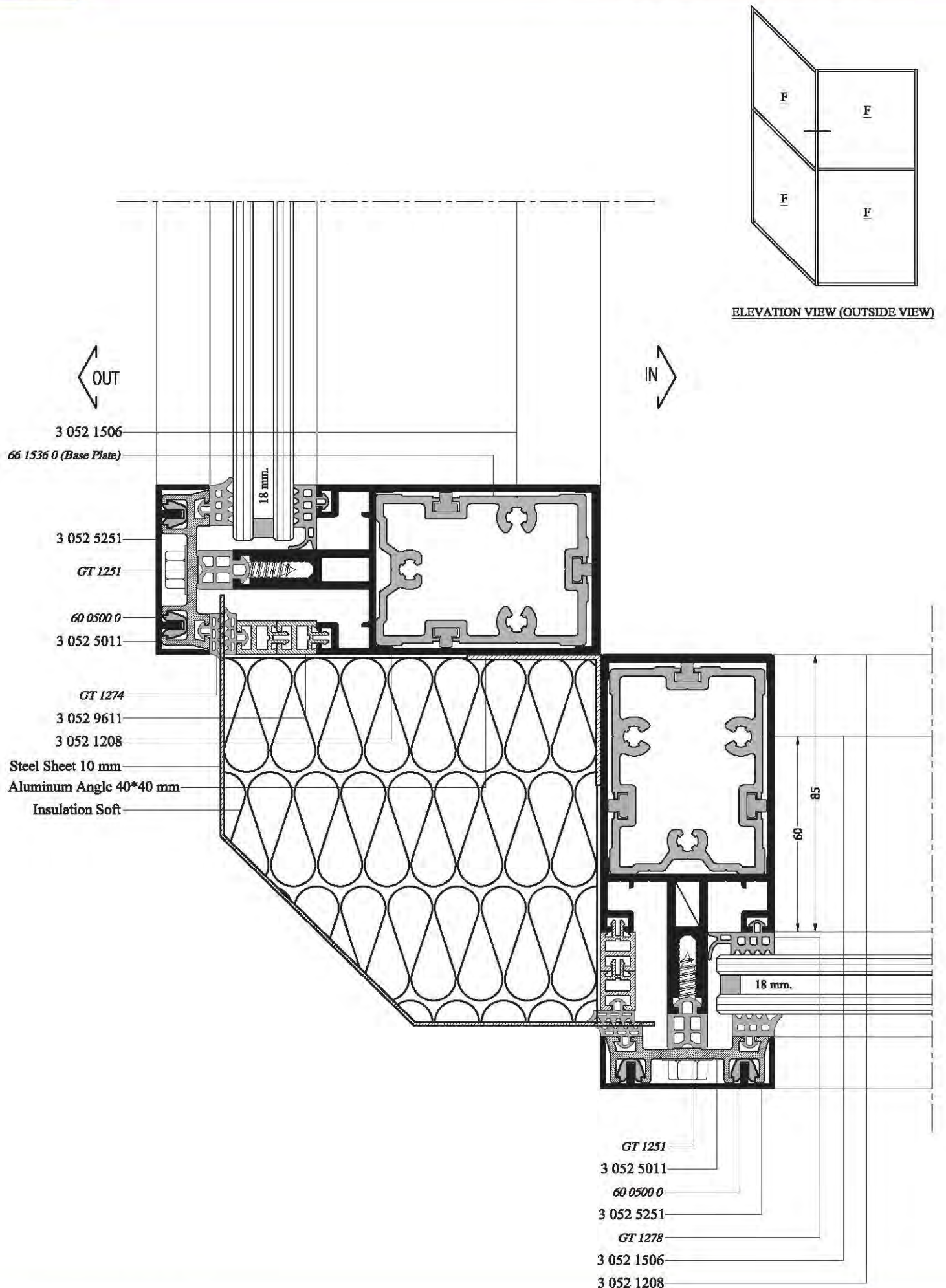


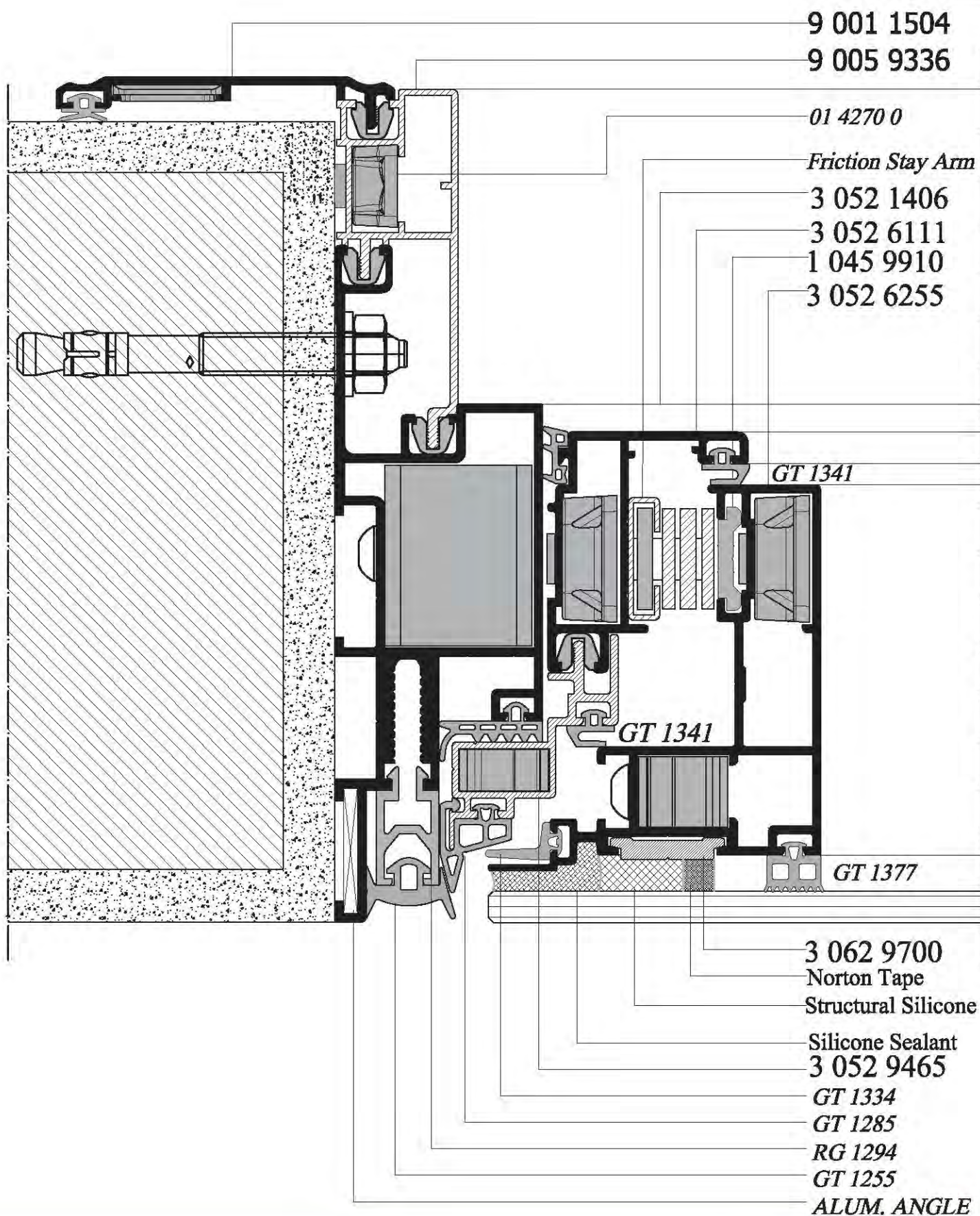
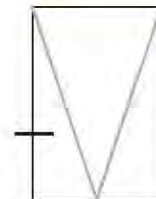


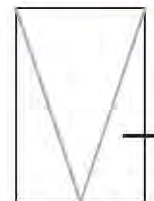












9 001 1504

9 005 9336

01 4270 0

Friction Stay Arm

3 052 1406

3 052 6111

1 045 9910

3 052 6255

GT 1341

GT 1341

GT 1377

3 062 9700

Norton Tape

Structural Silicone

Silicone Sealant

3 052 9465

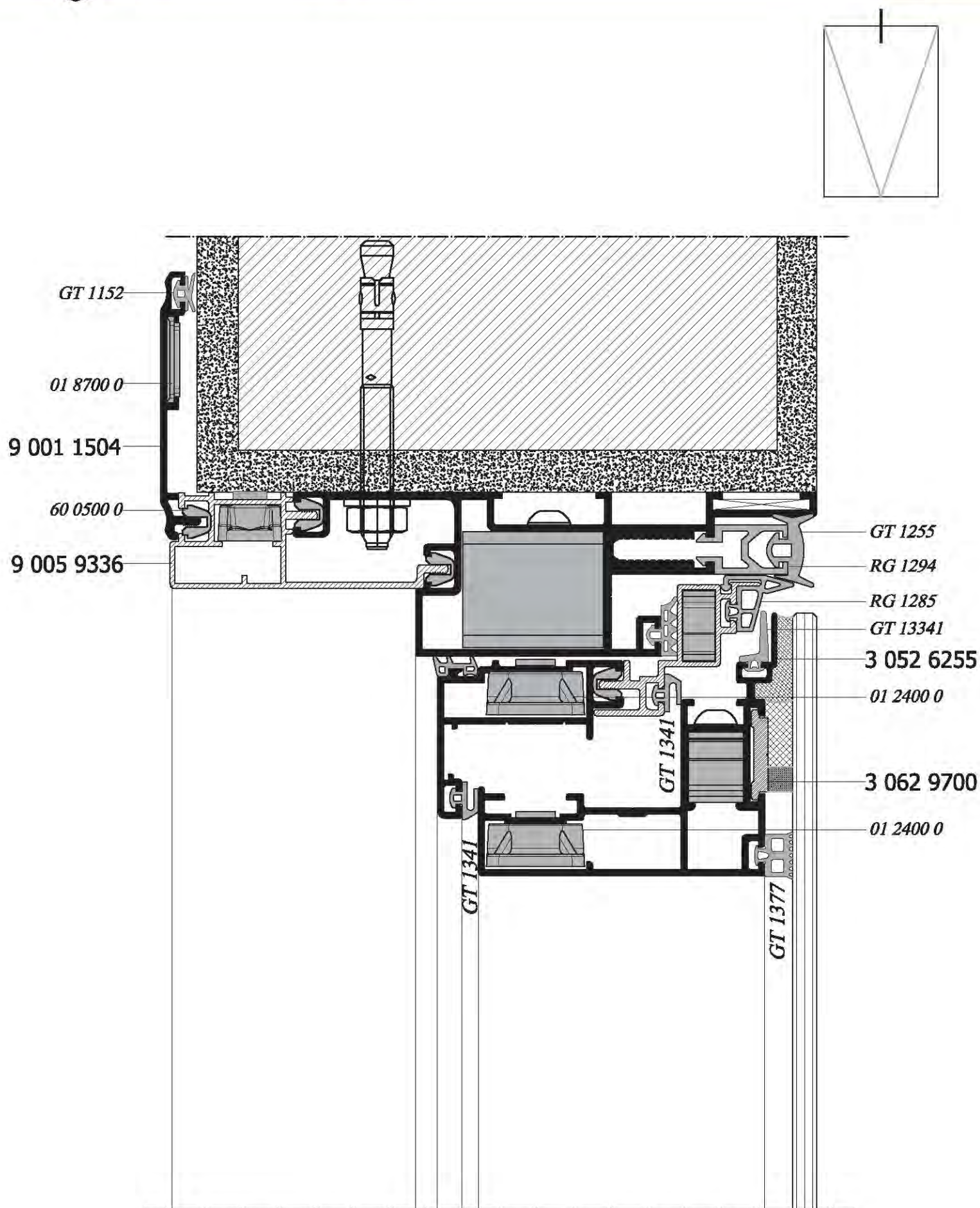
GT 1334

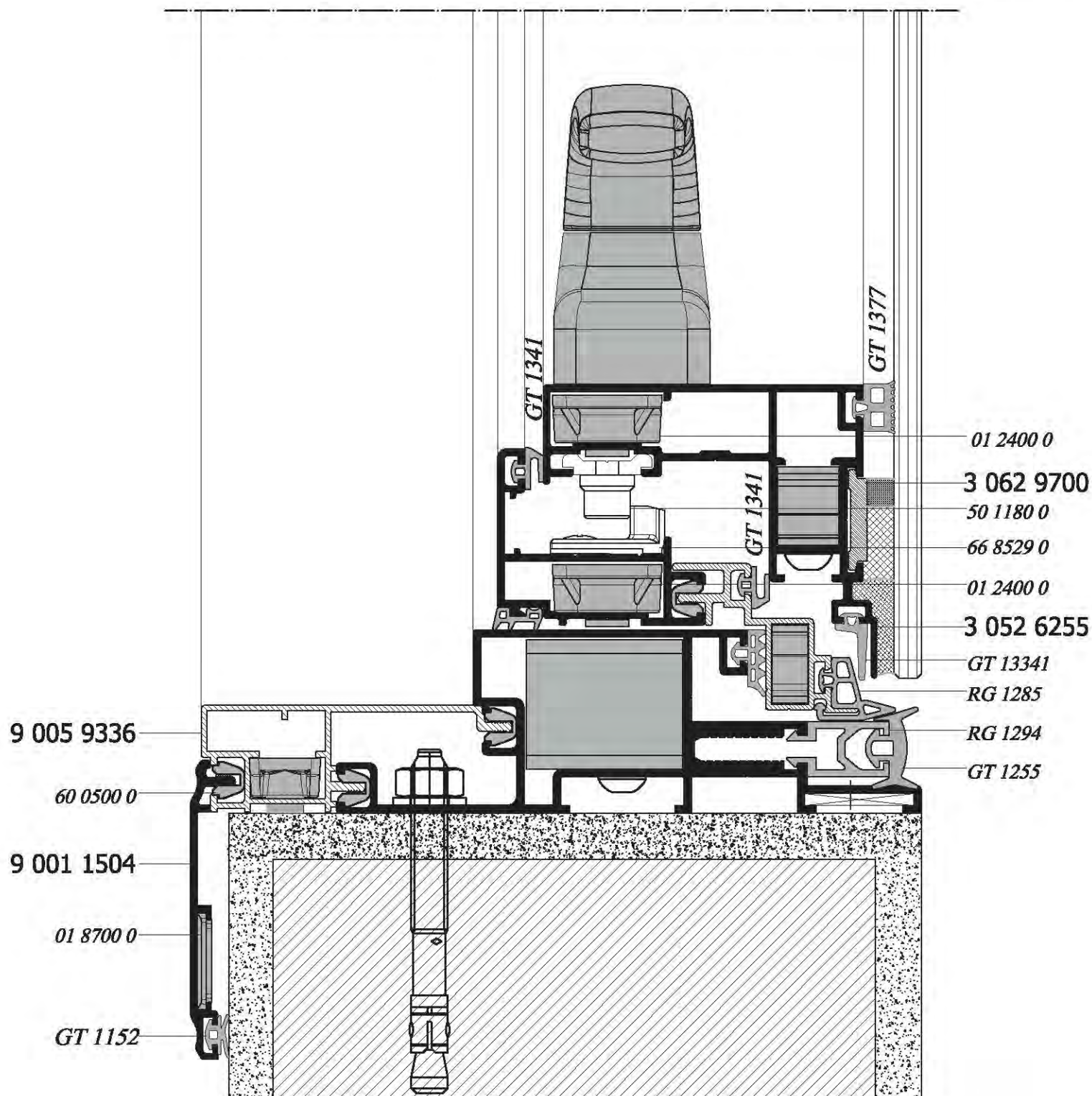
GT 1285

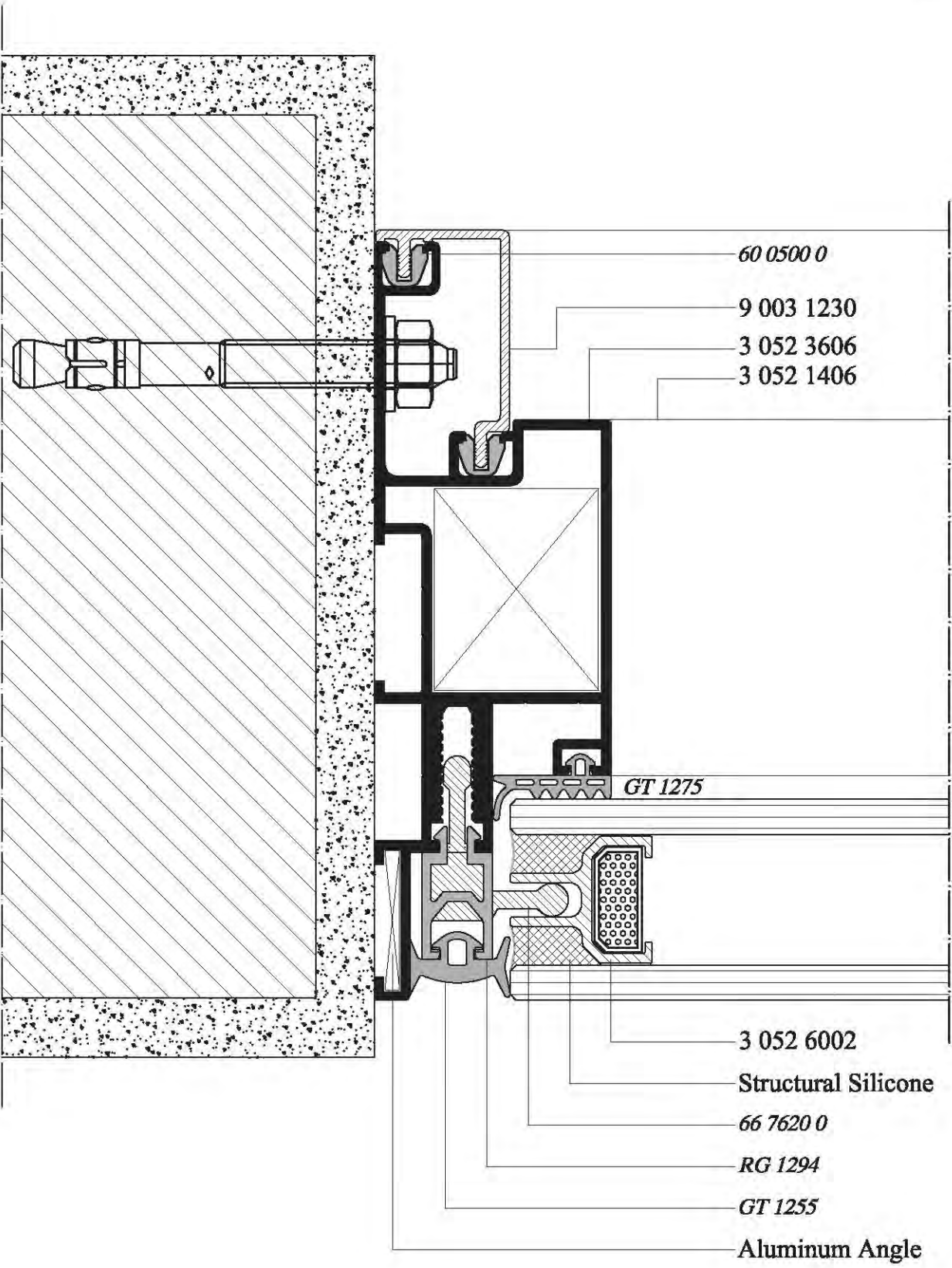
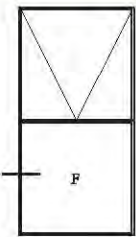
RG 1294

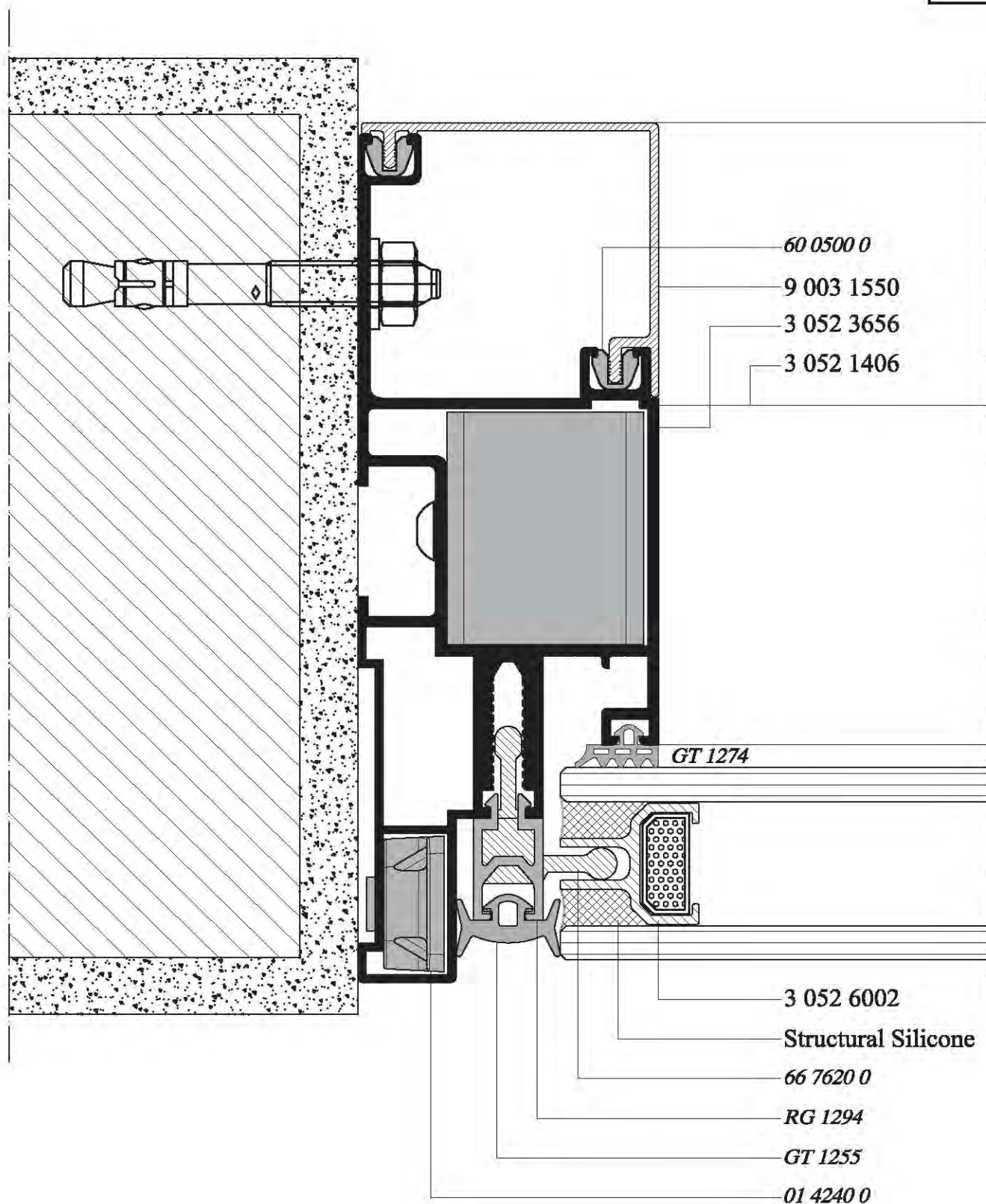
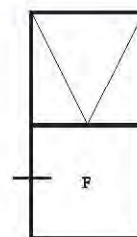
GT 1255

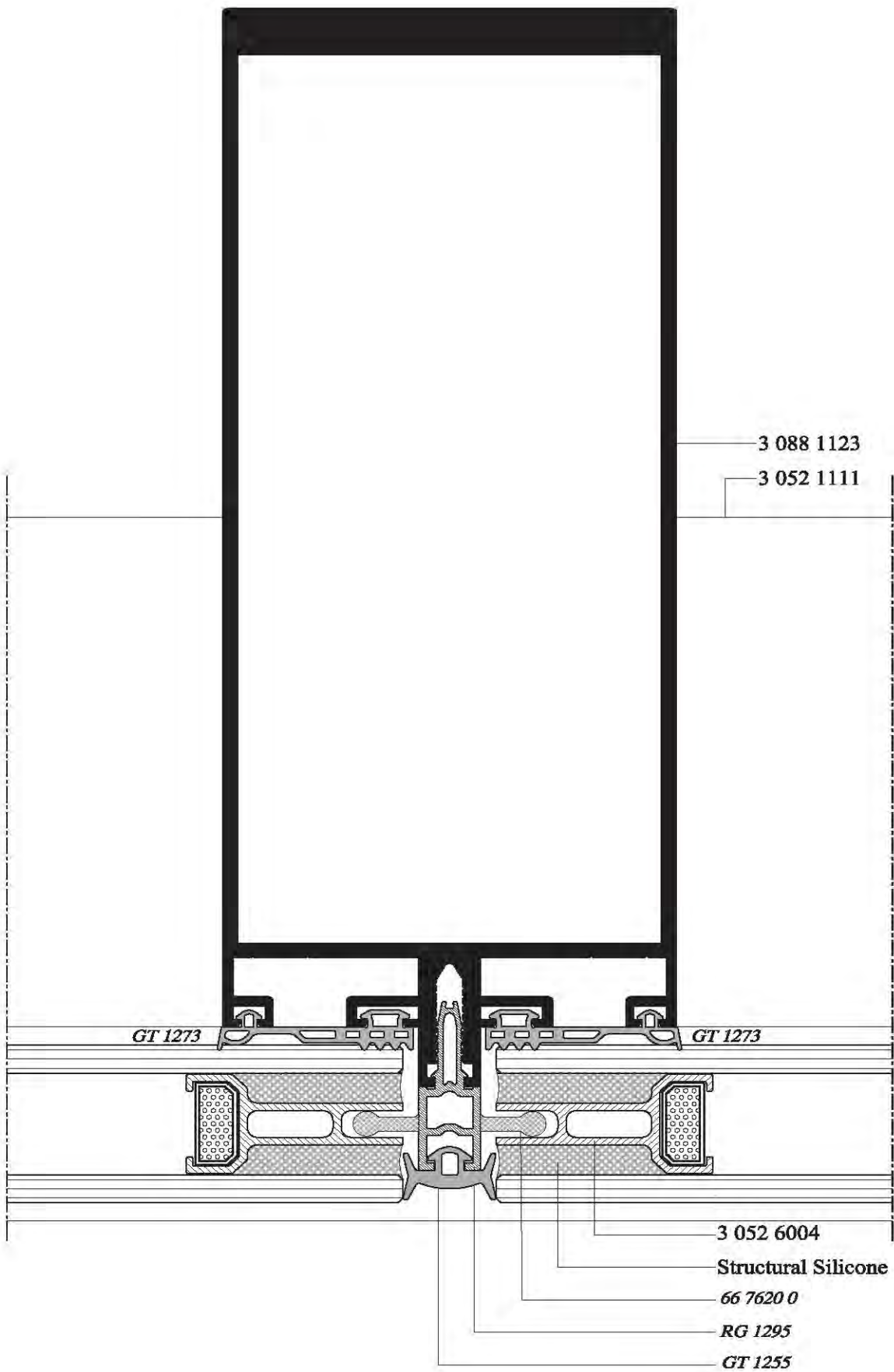
ALUM. ANGLE

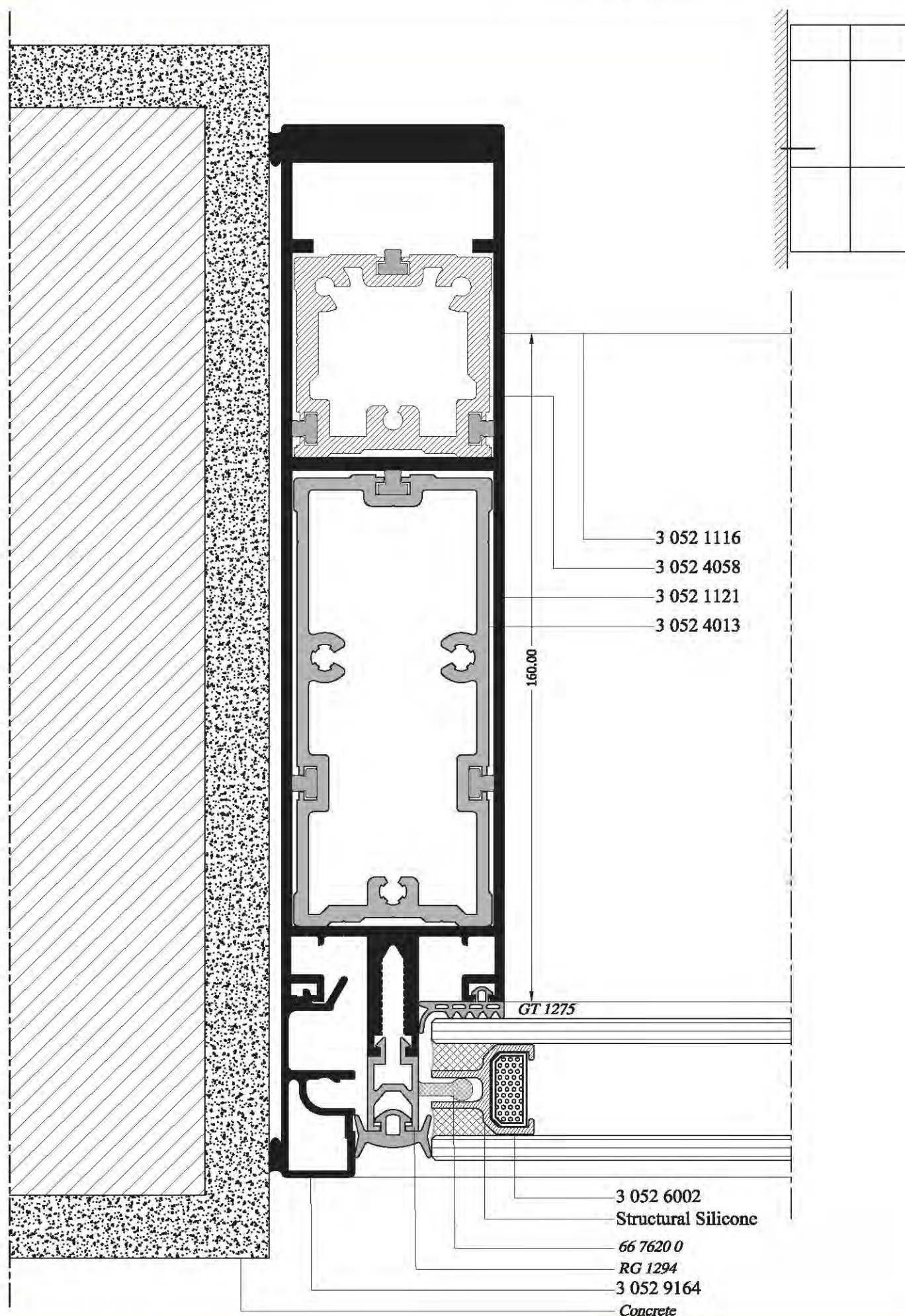


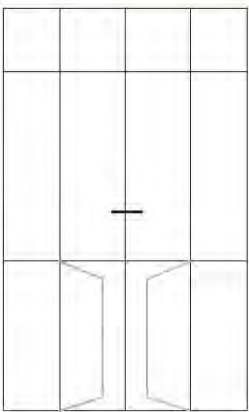
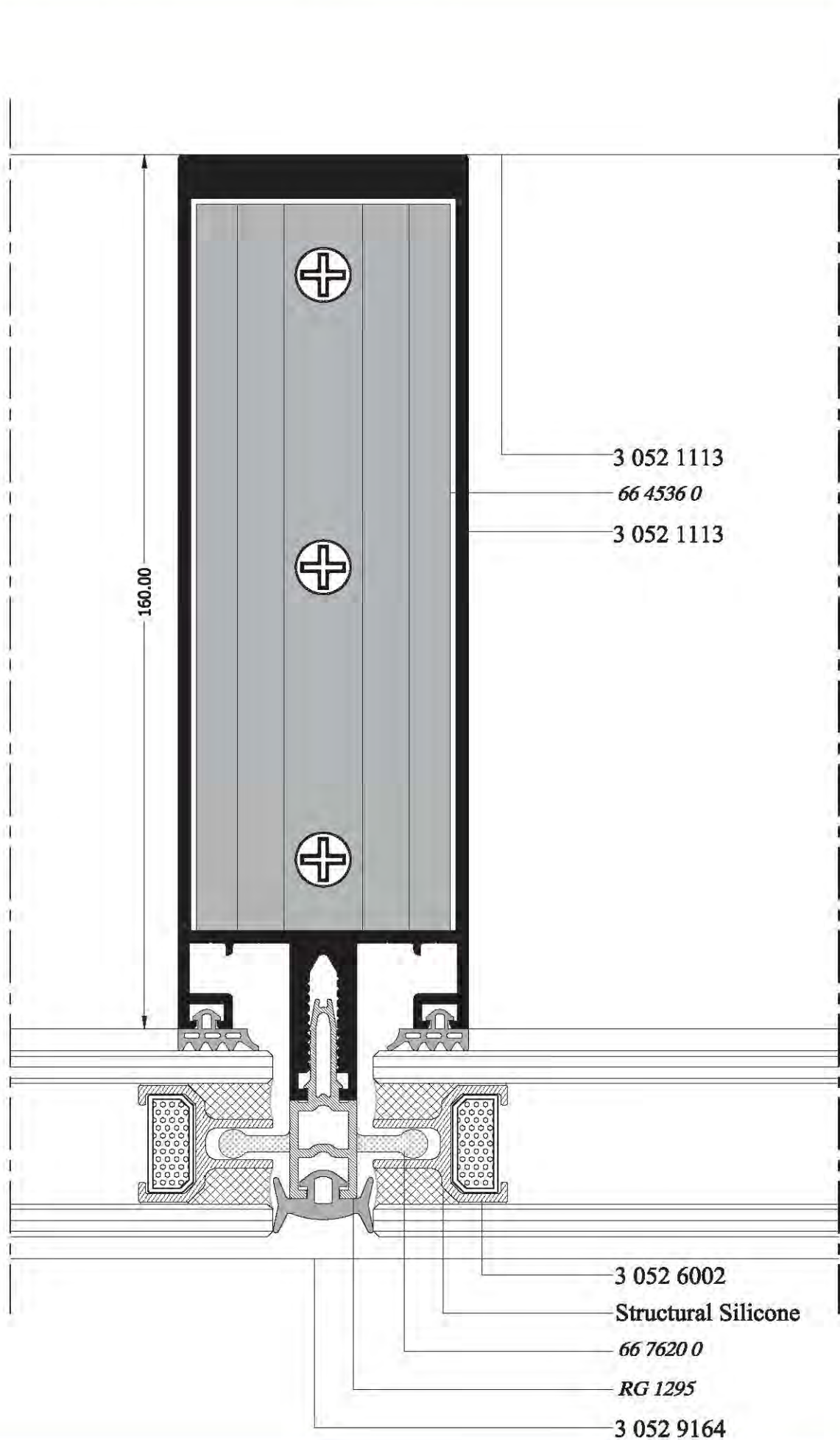


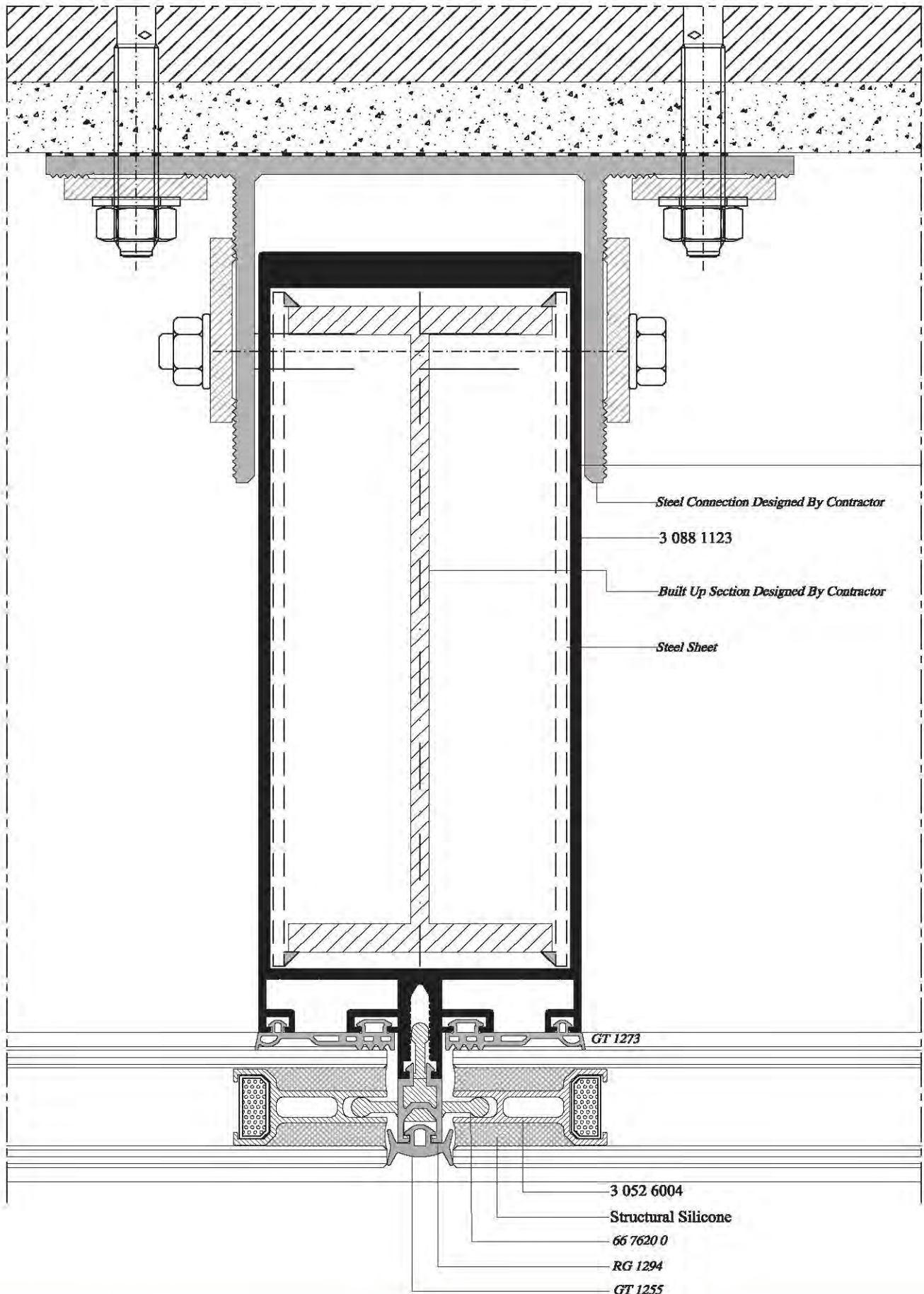
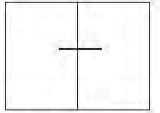


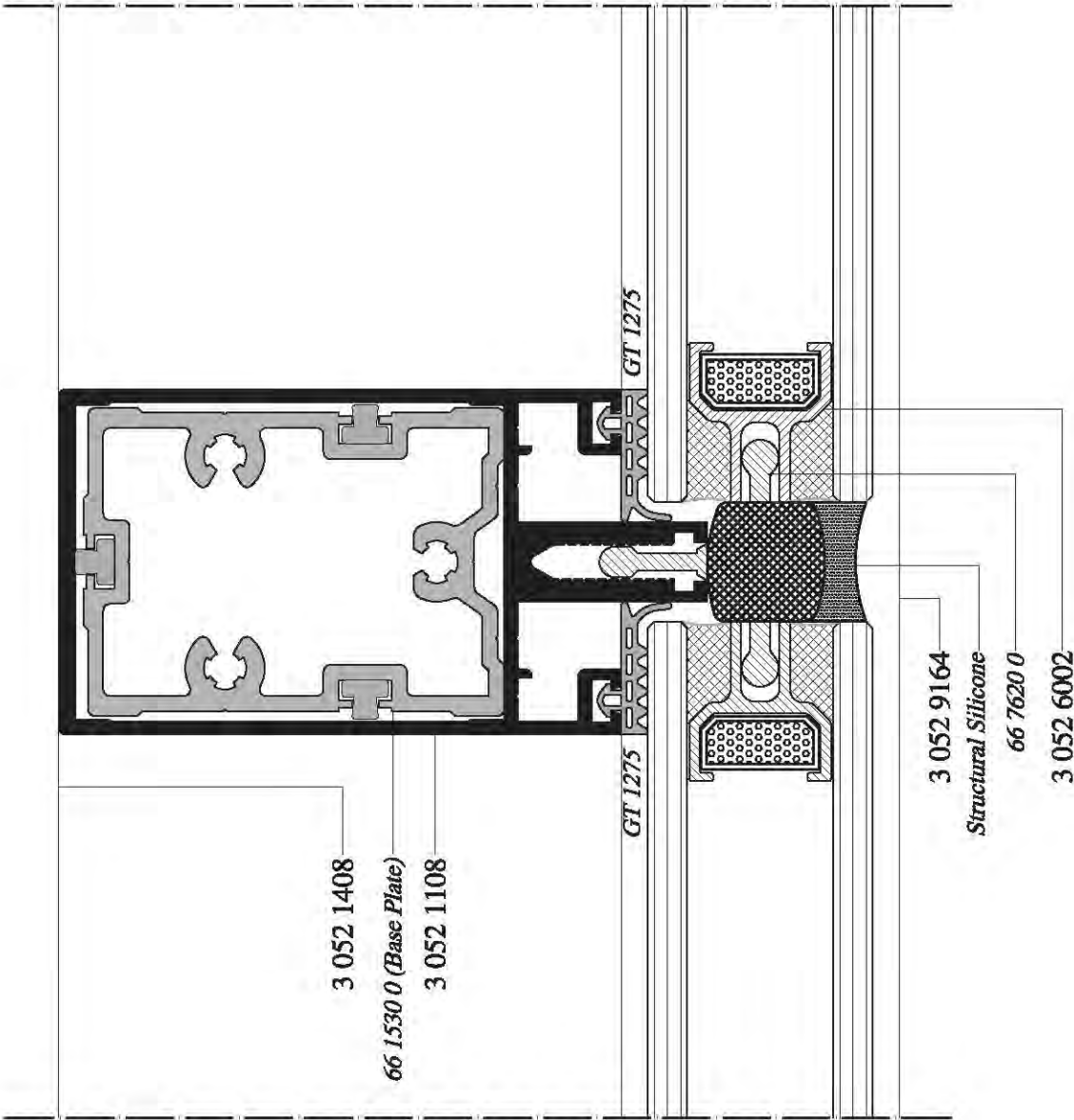
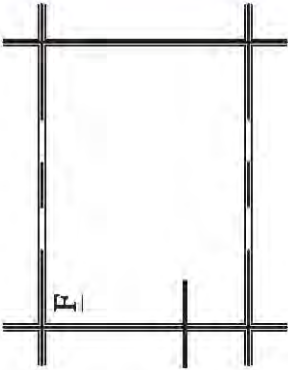


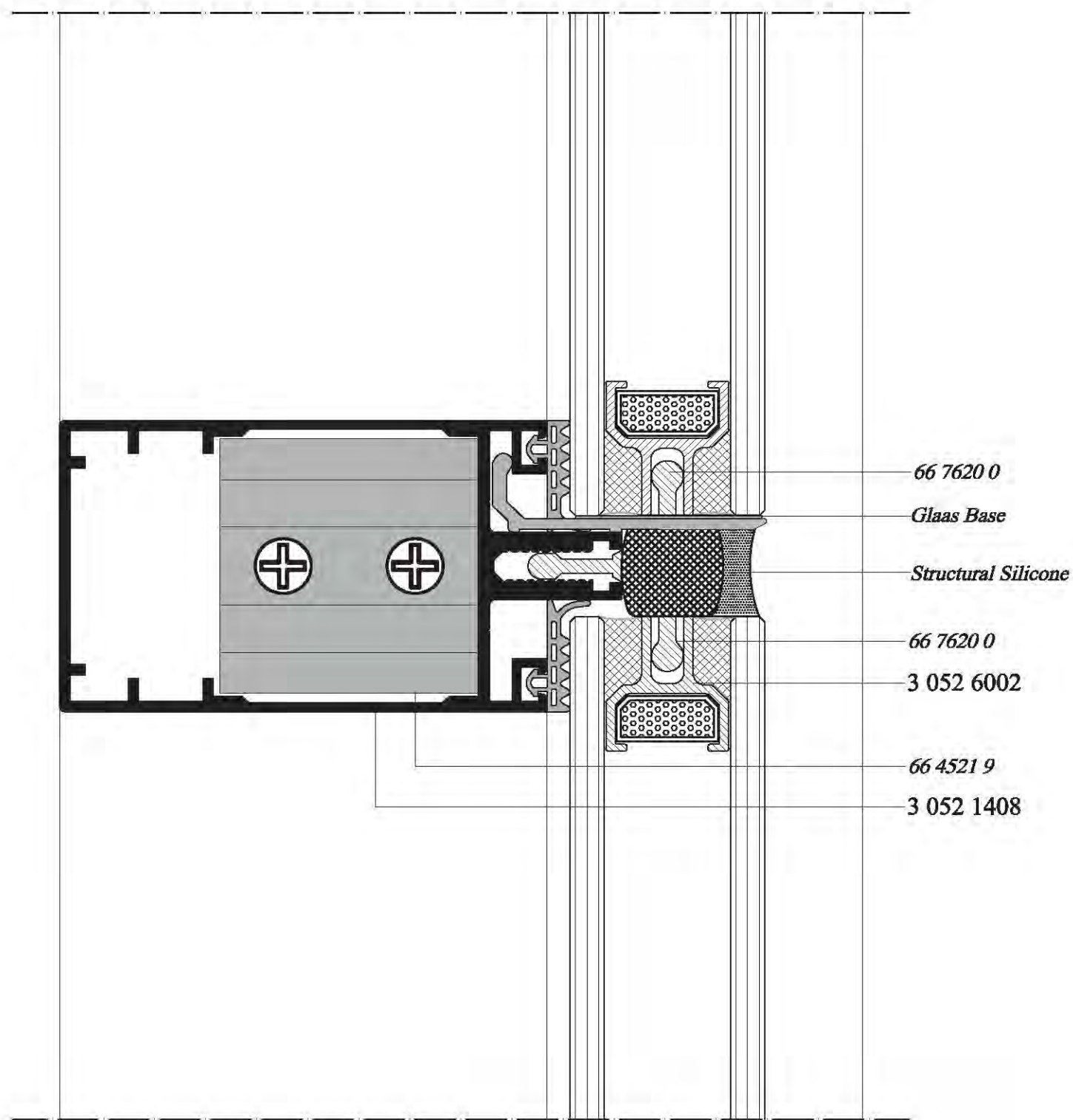
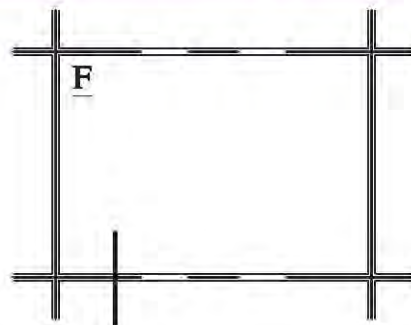


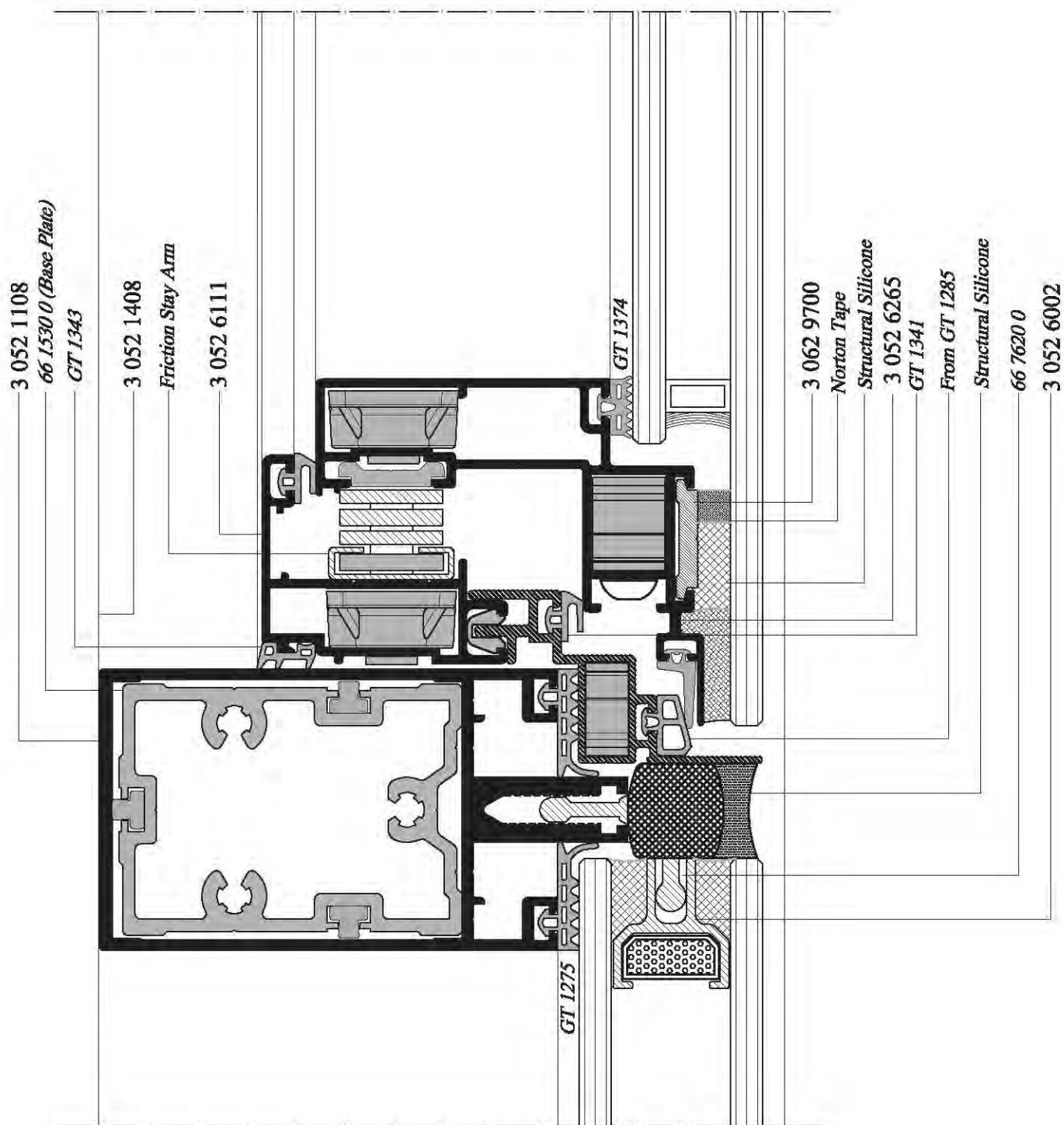
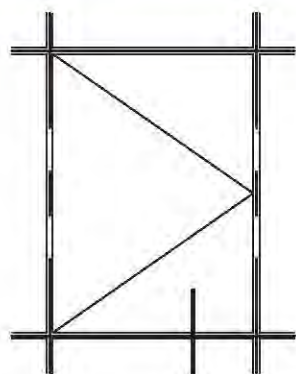


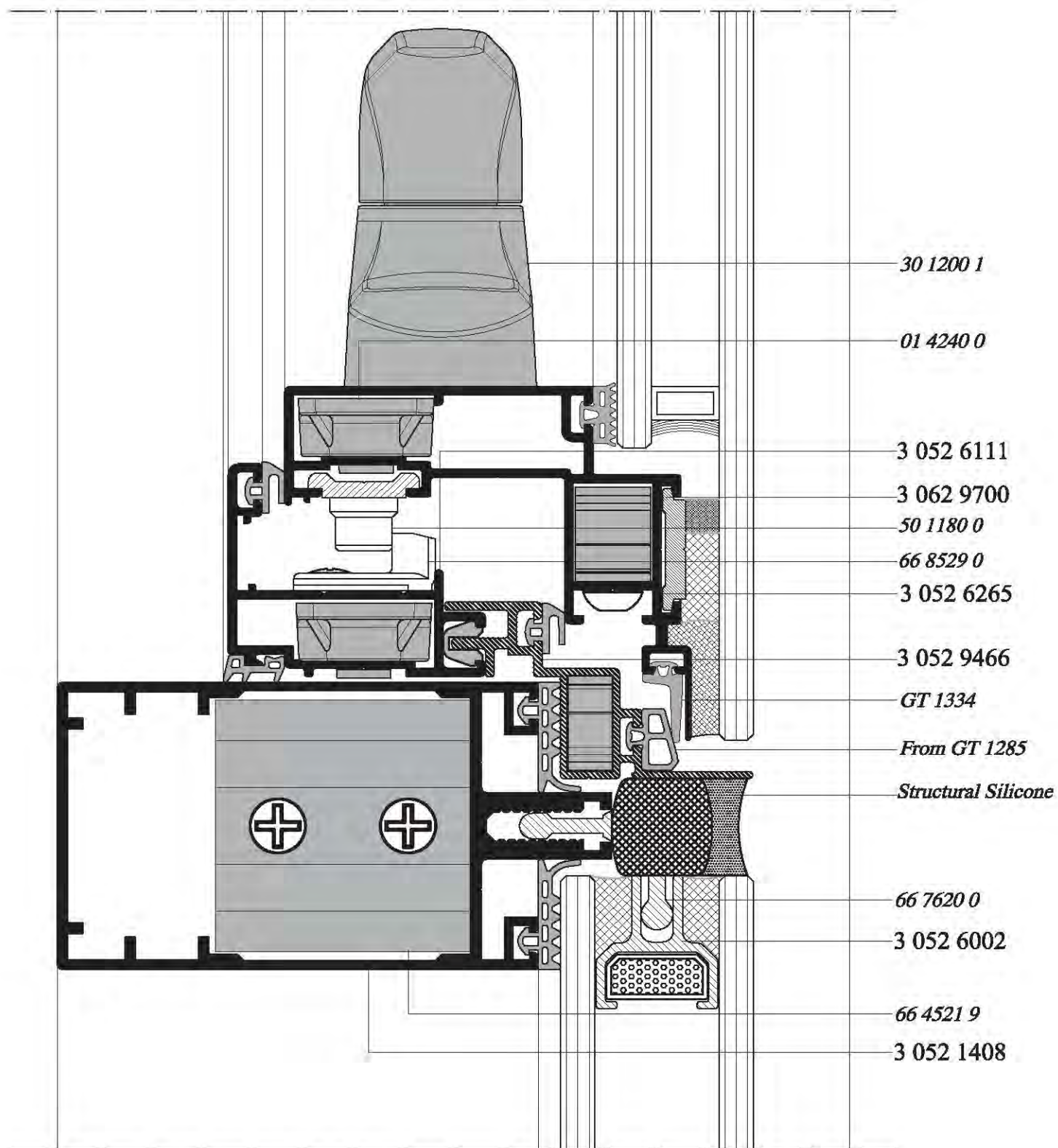
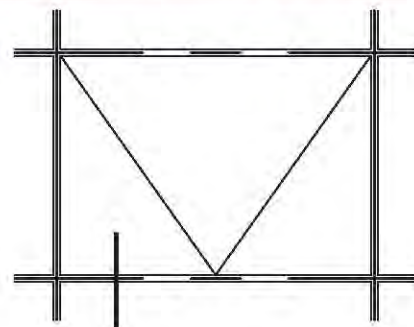


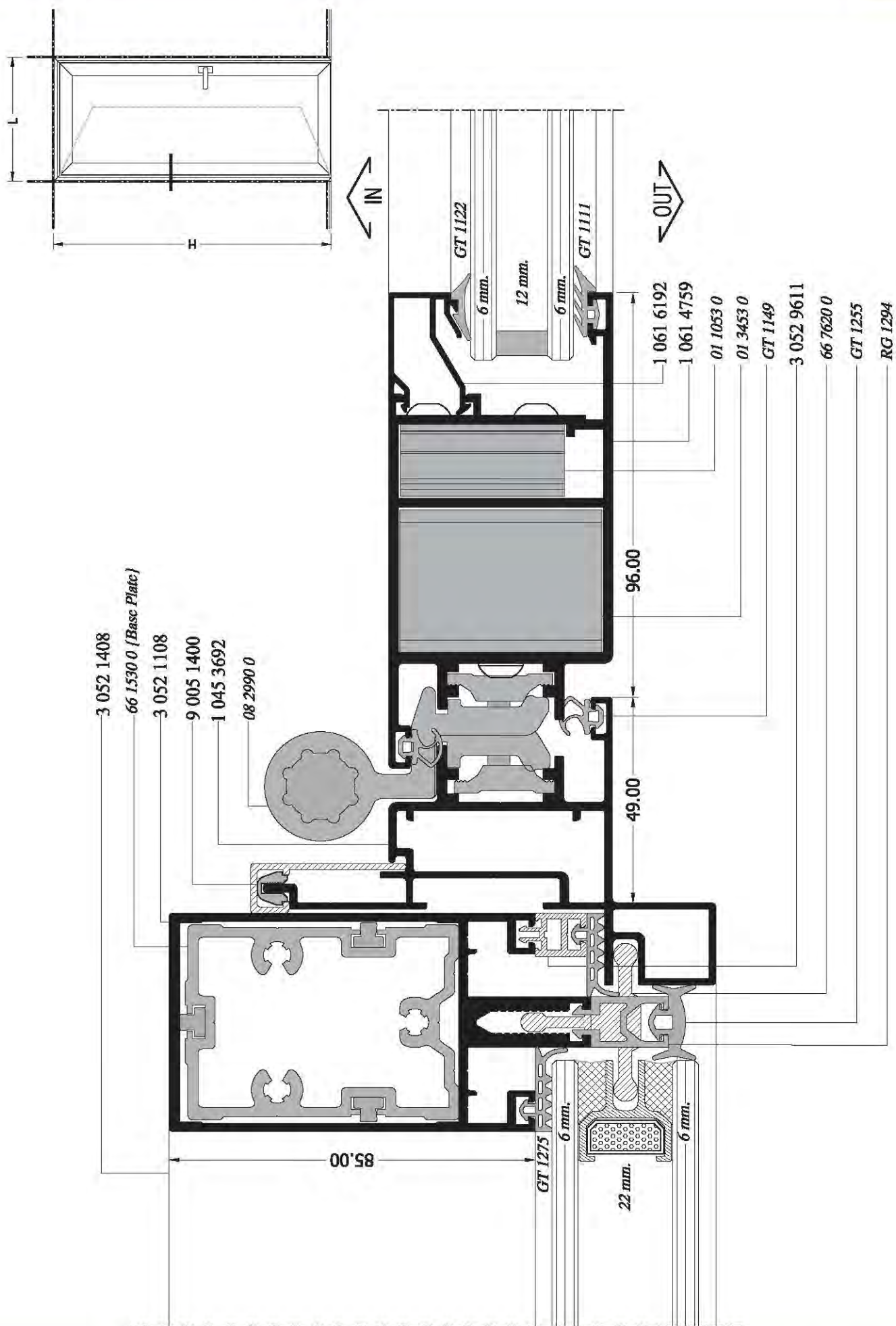


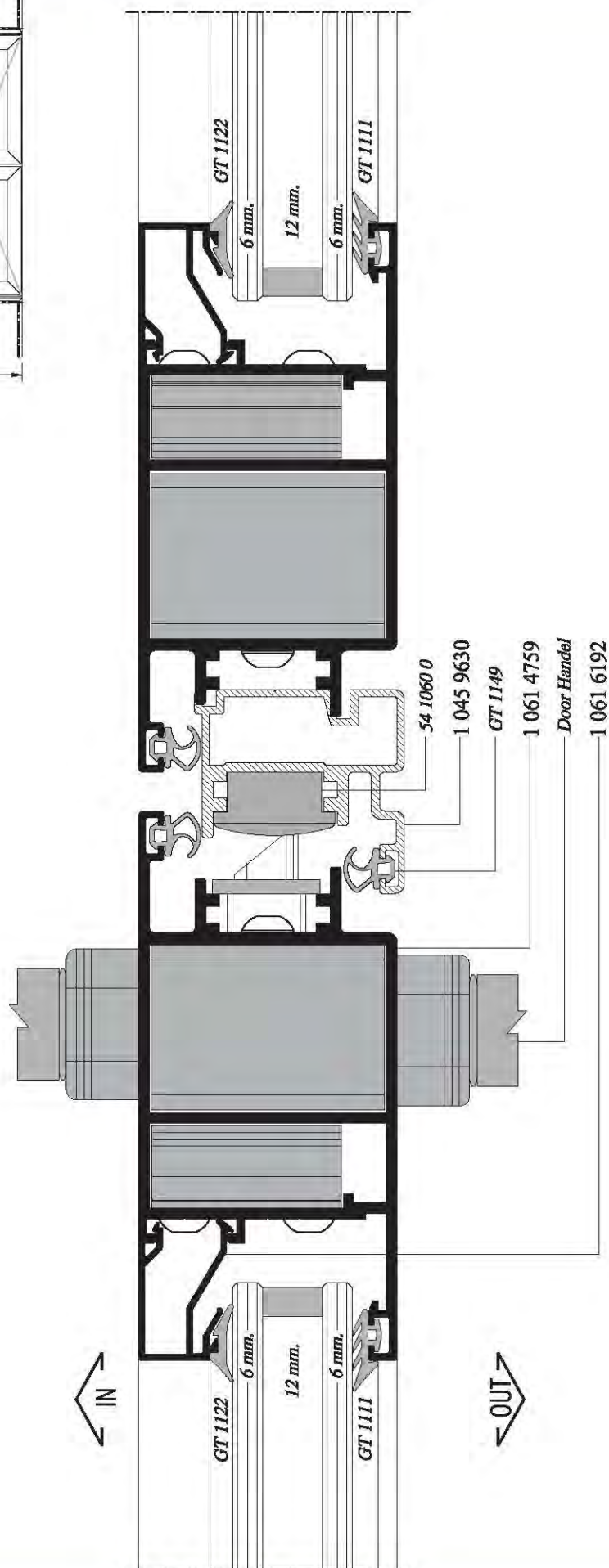
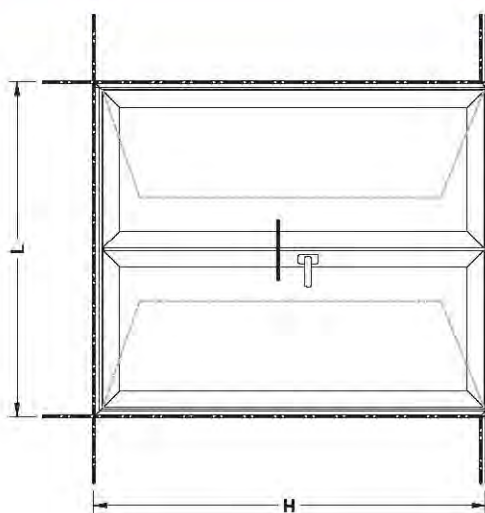


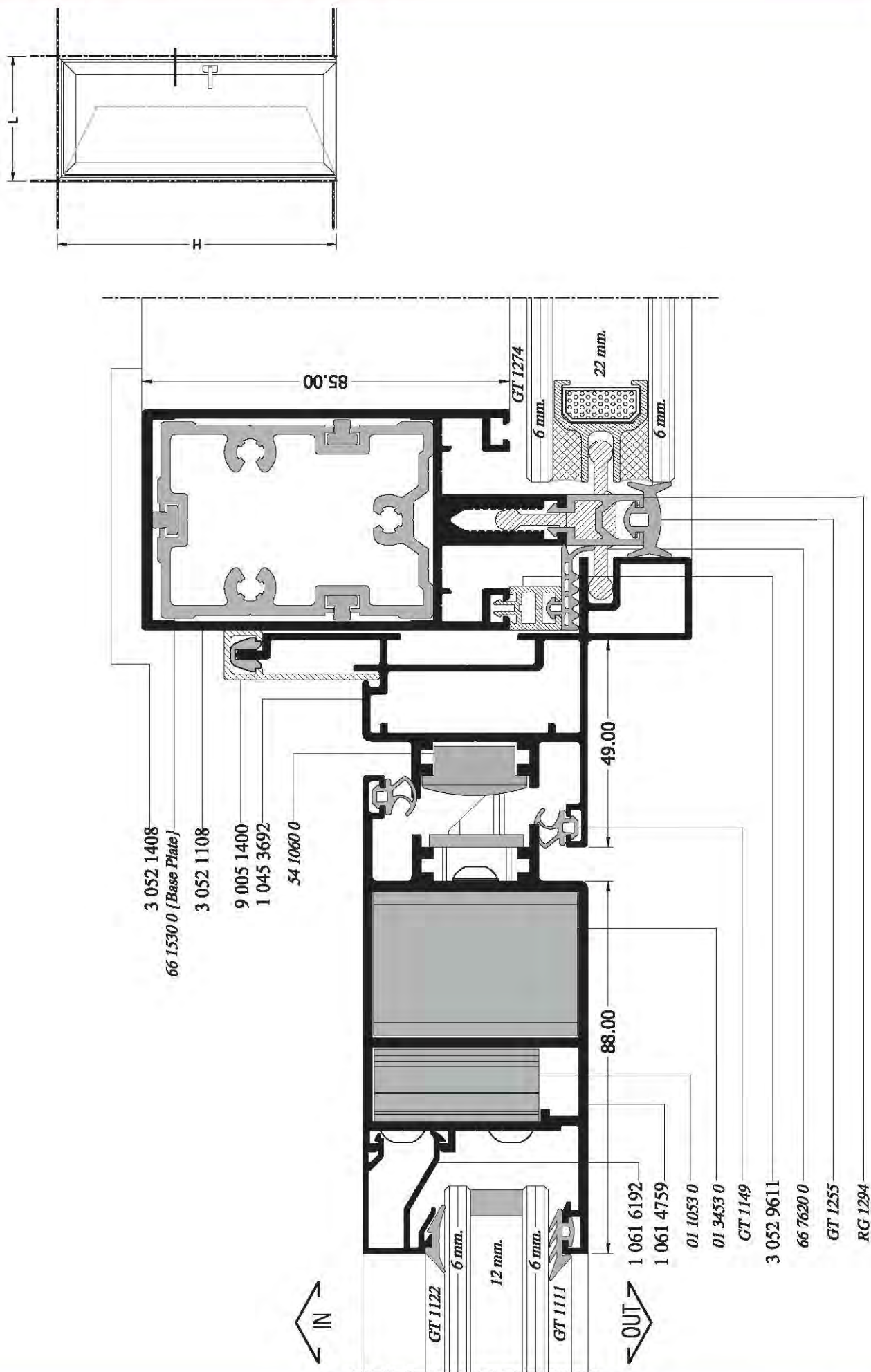


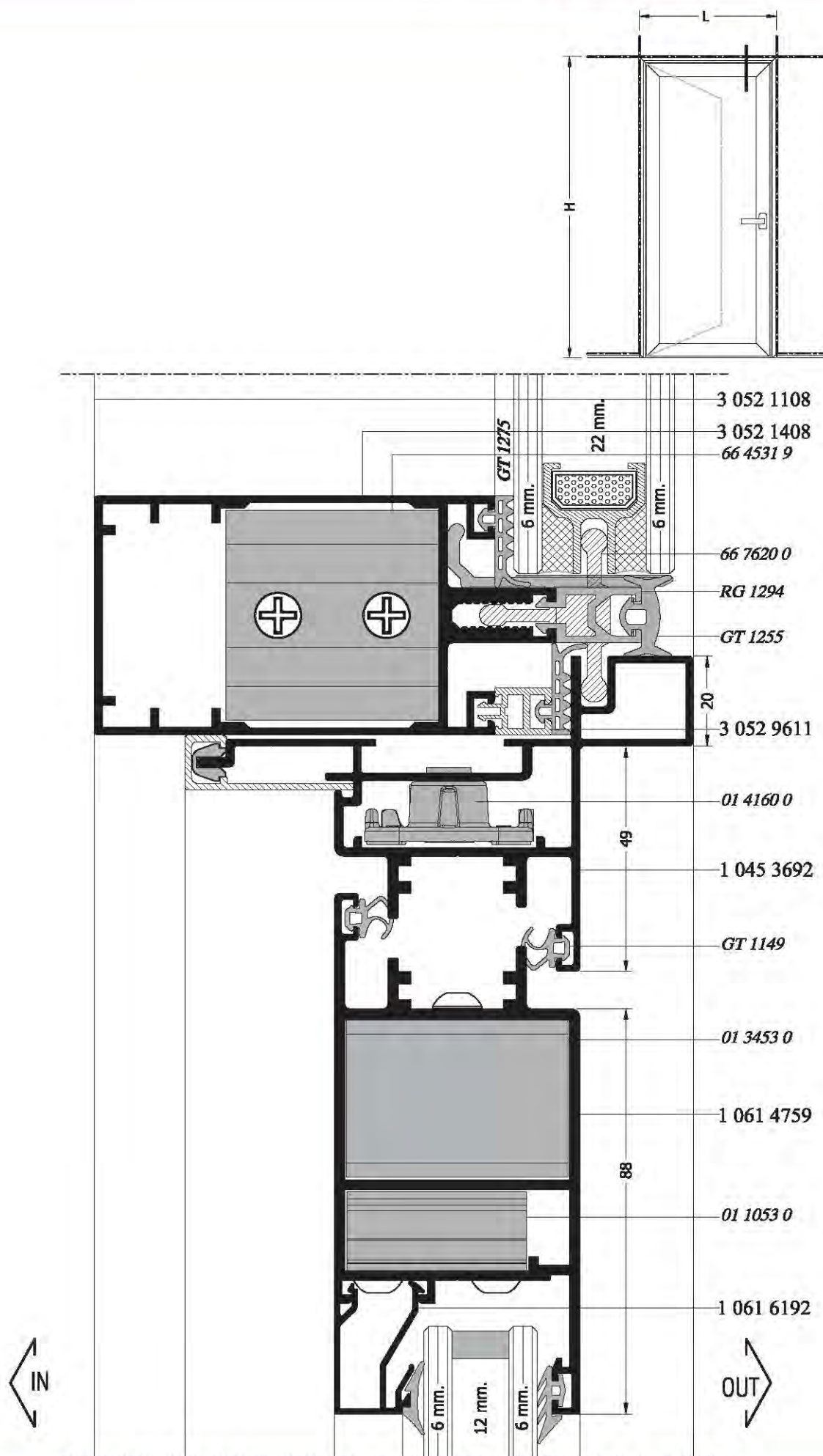


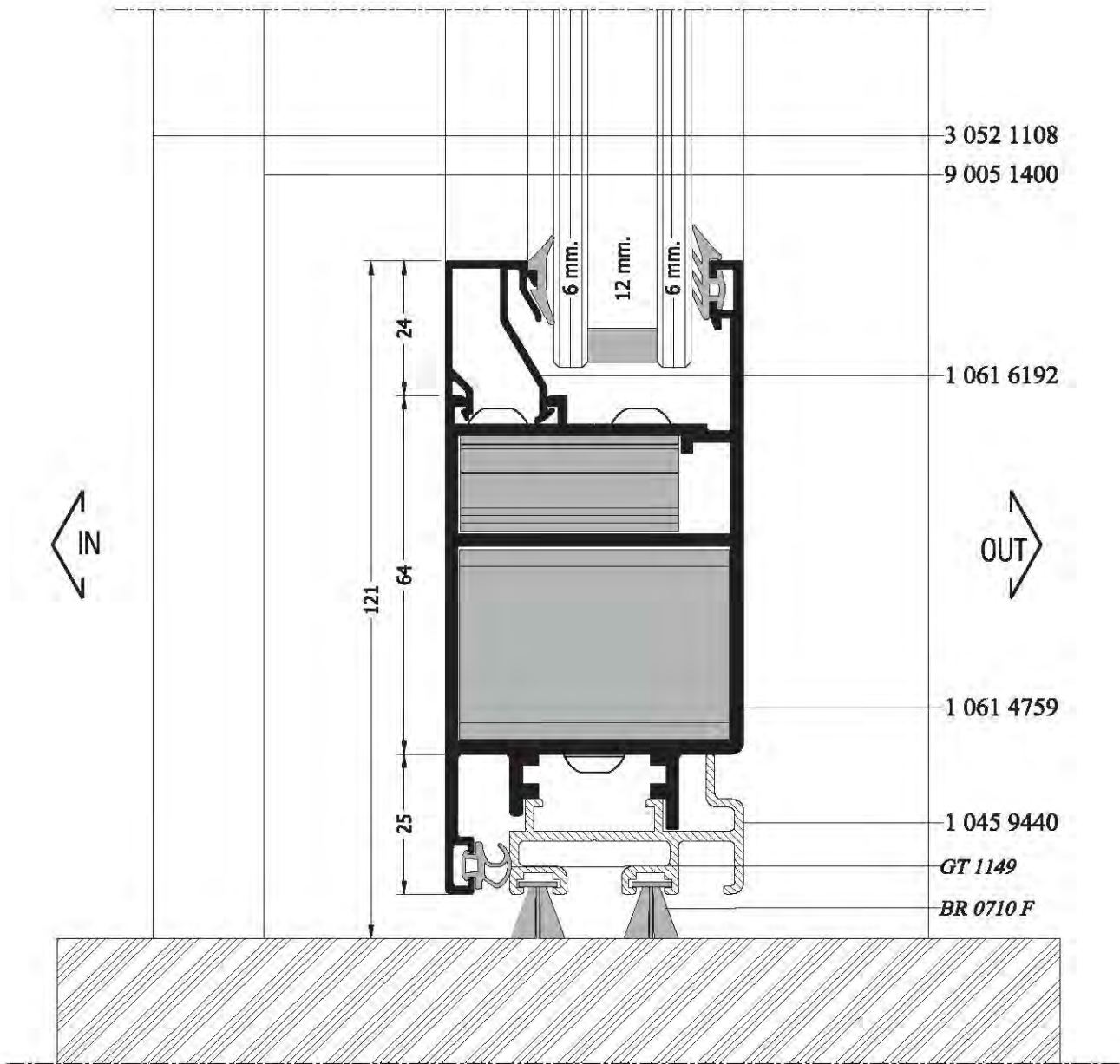
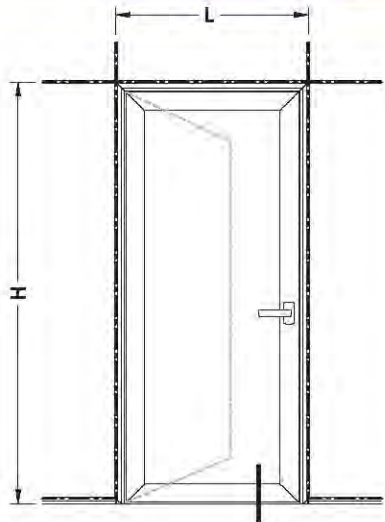


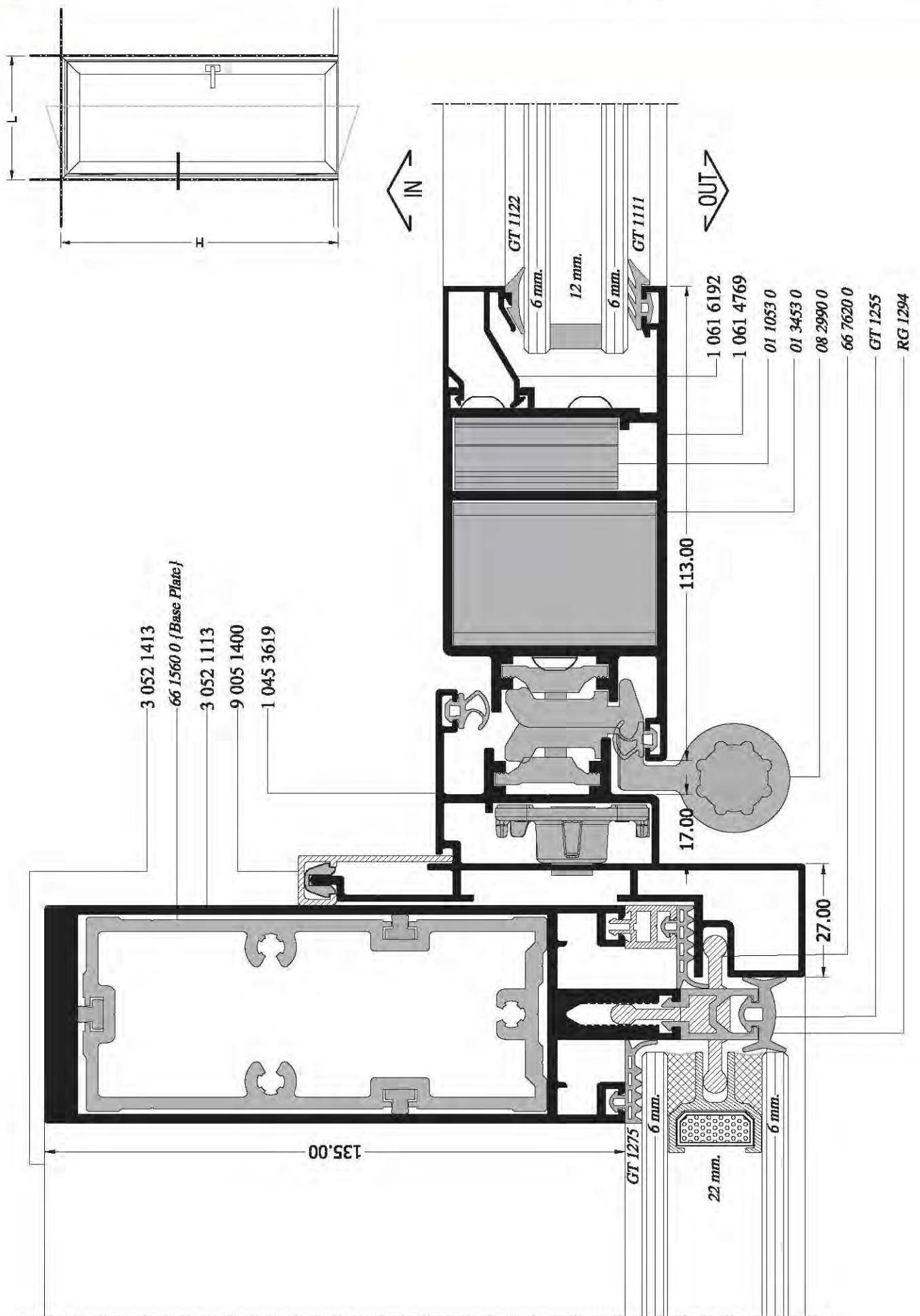


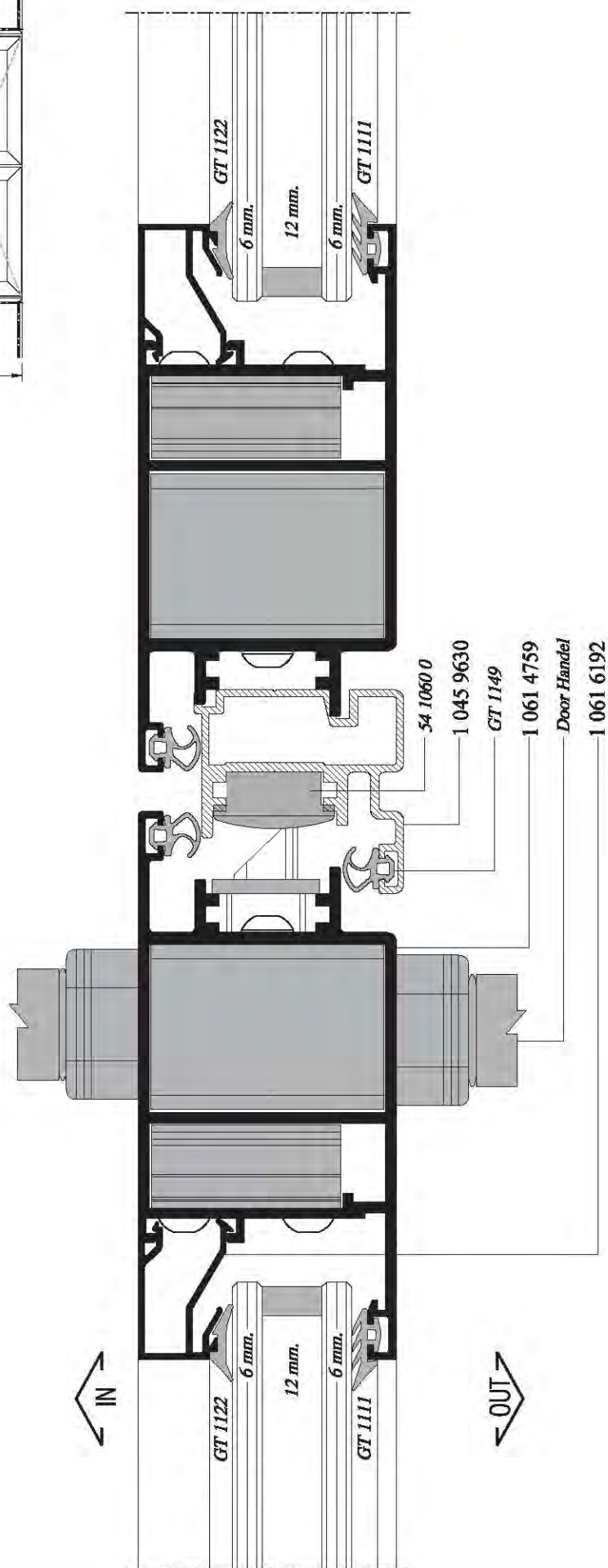
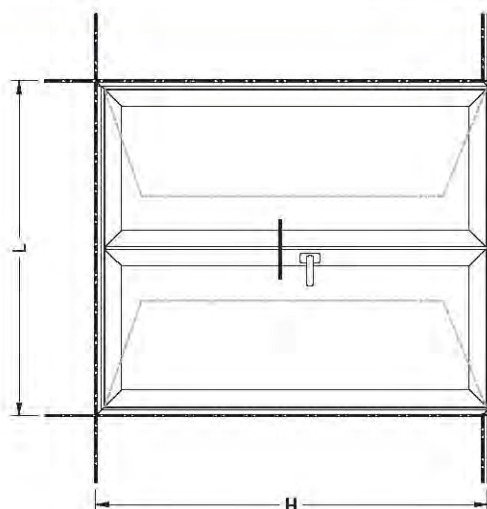


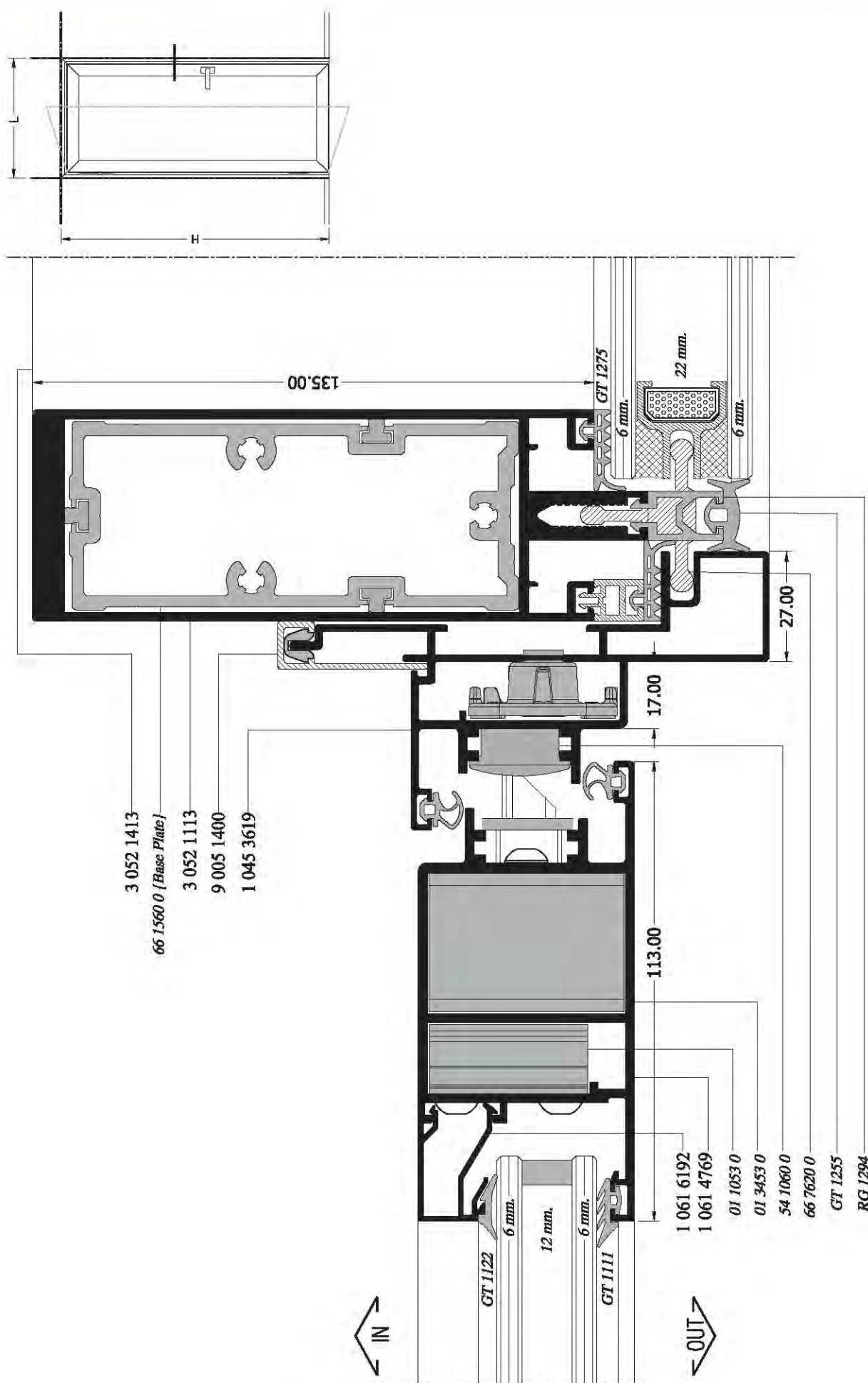






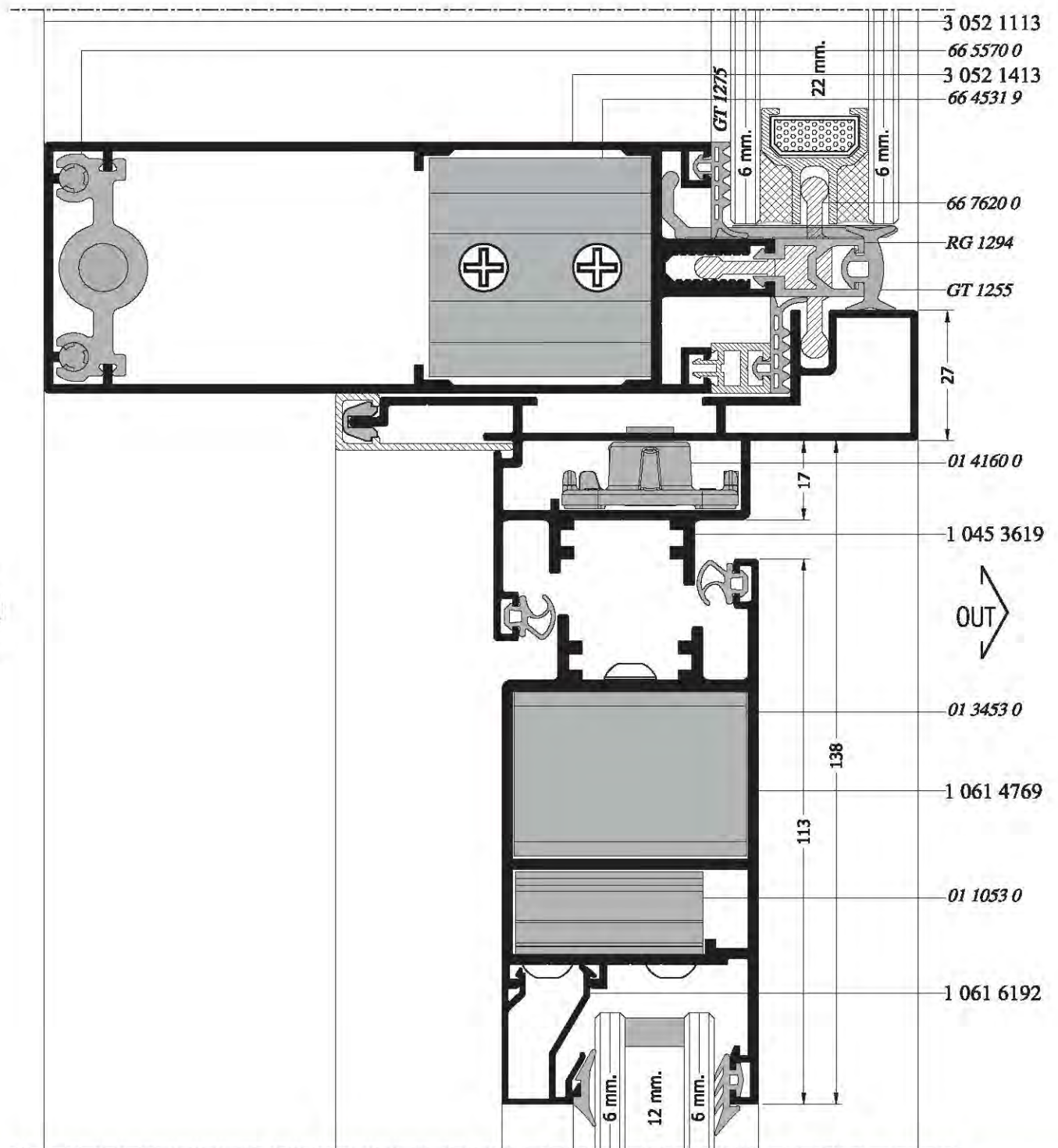
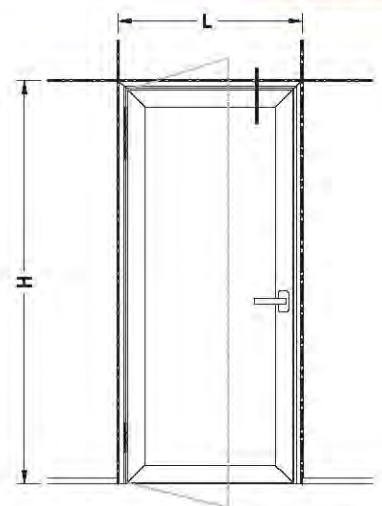


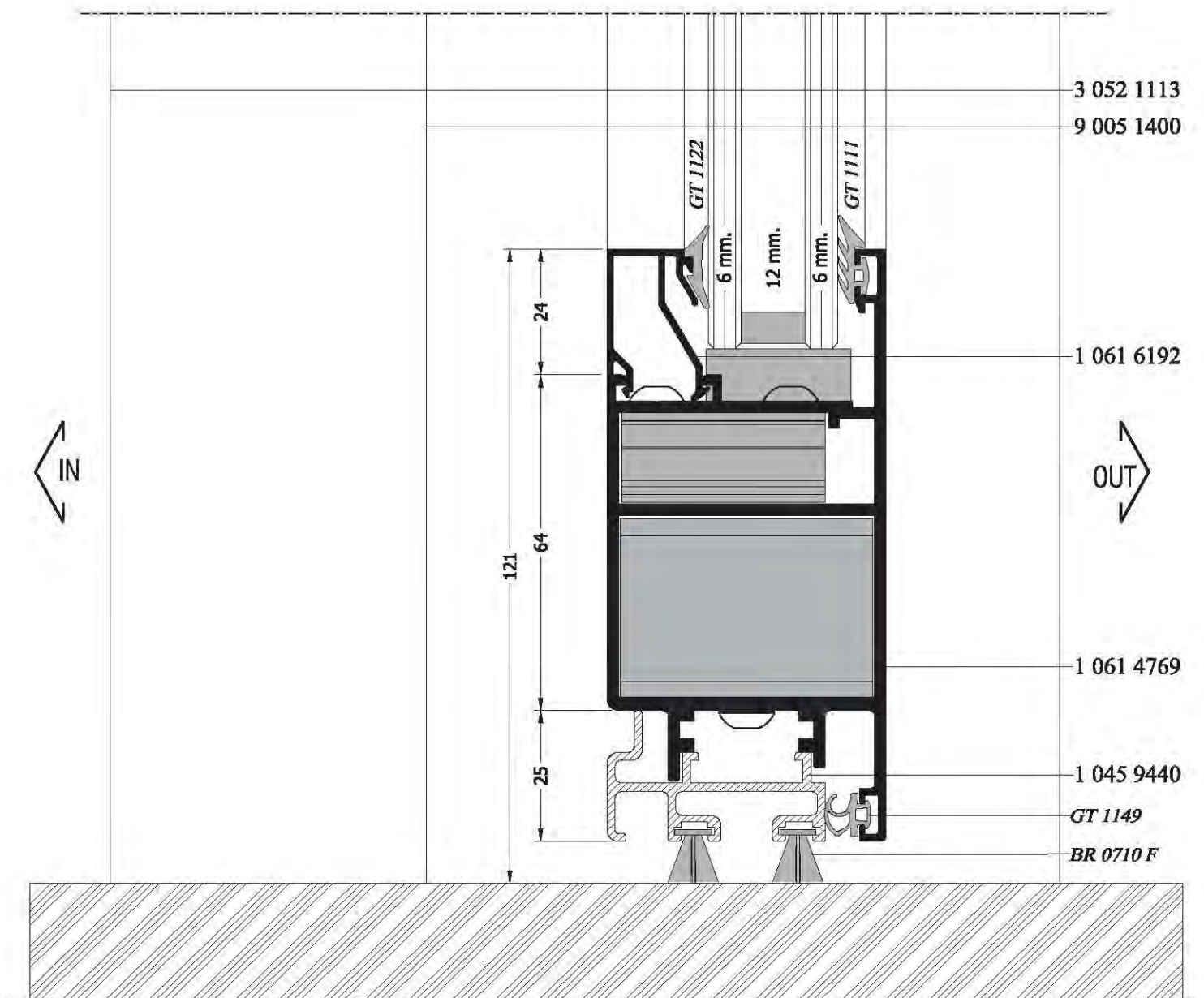
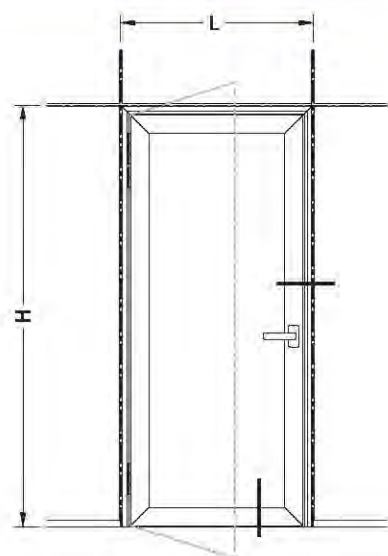


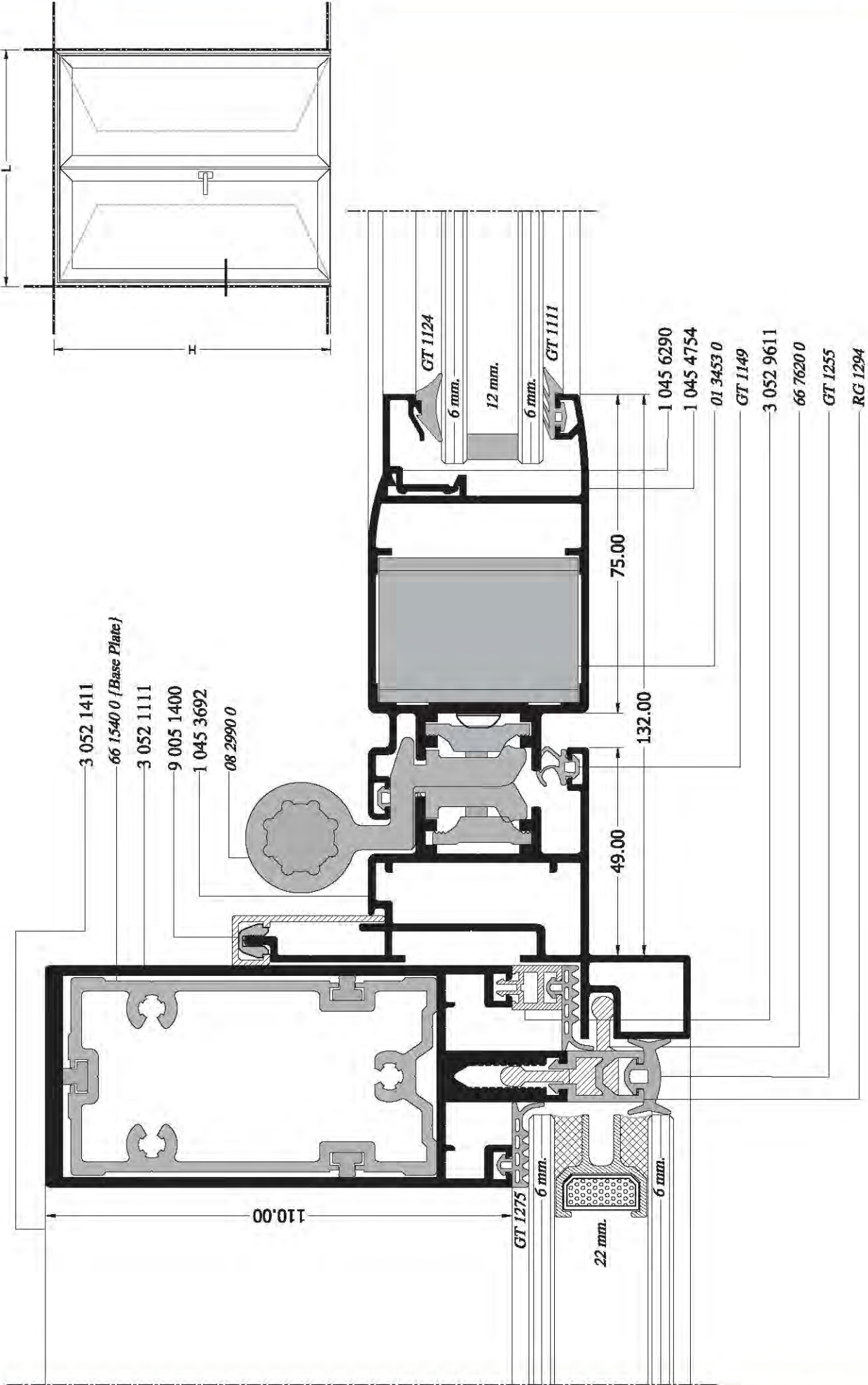


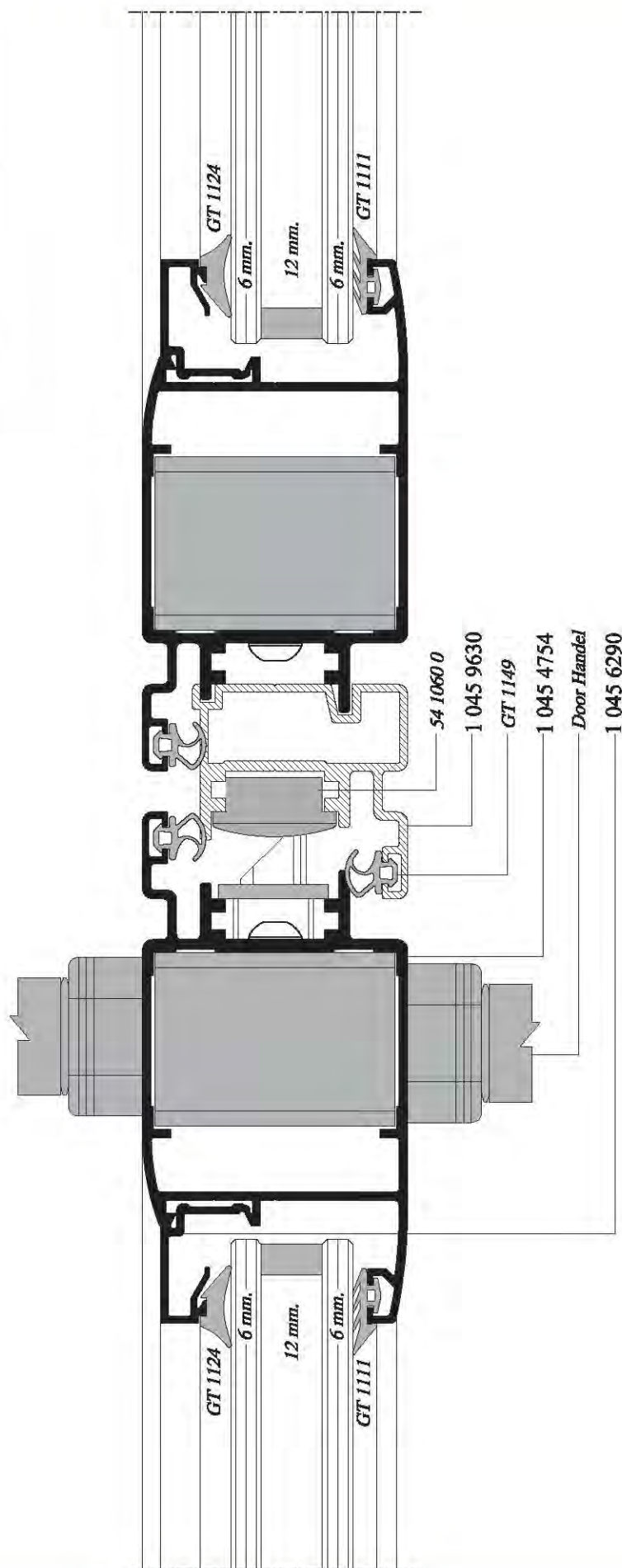
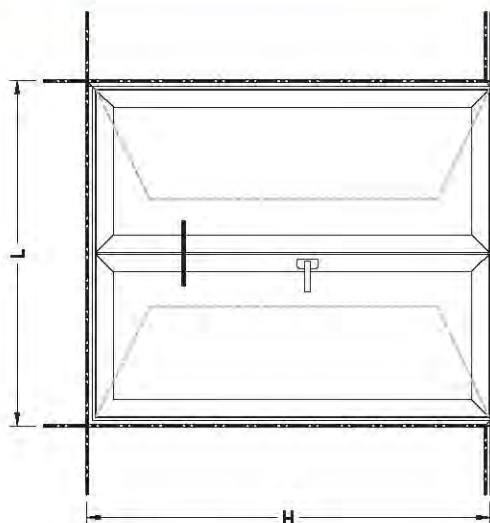


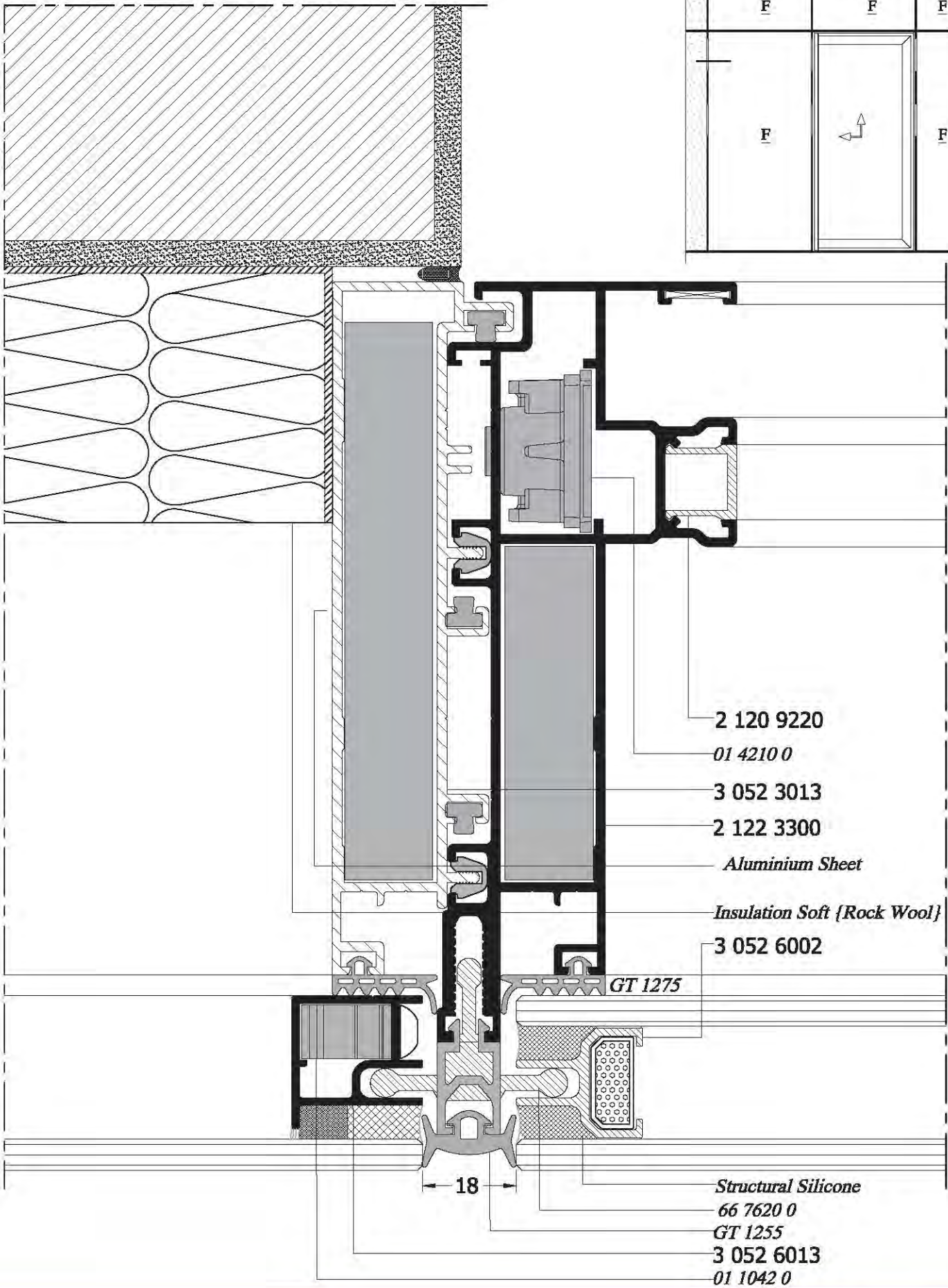
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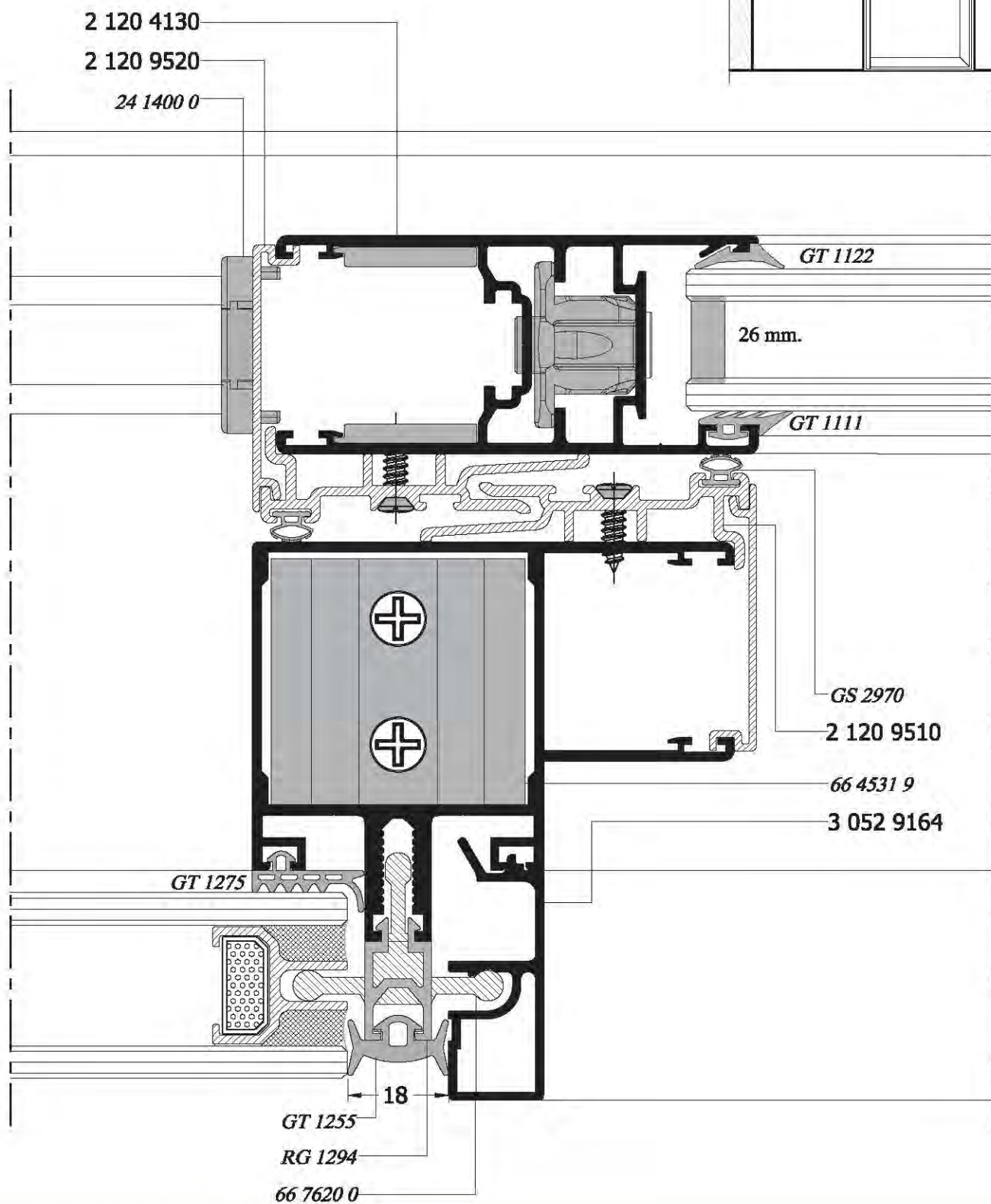
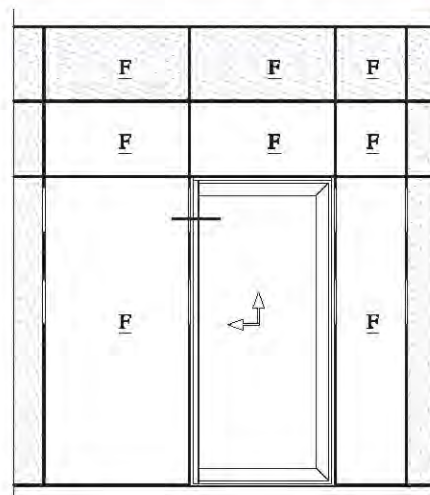


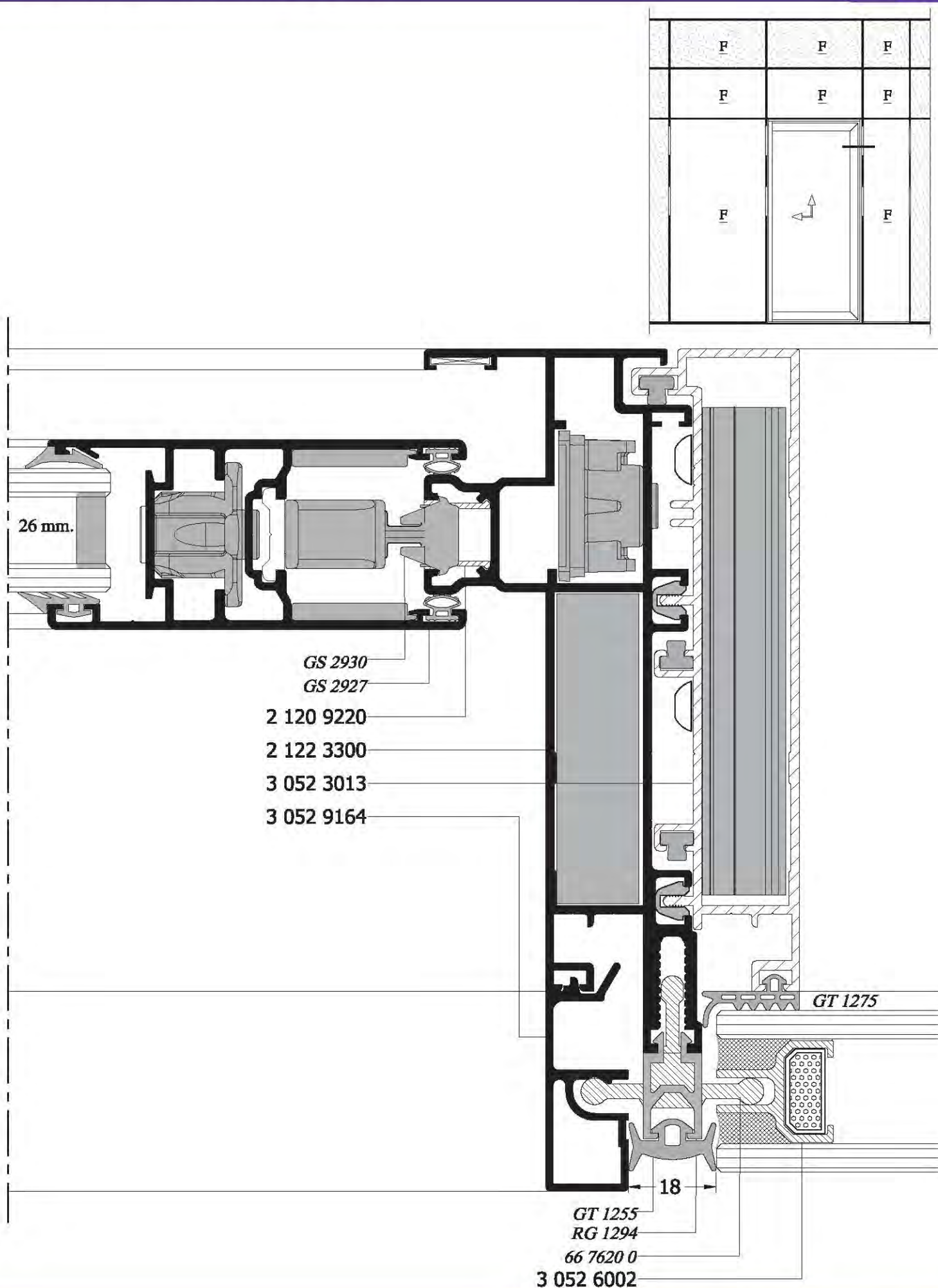


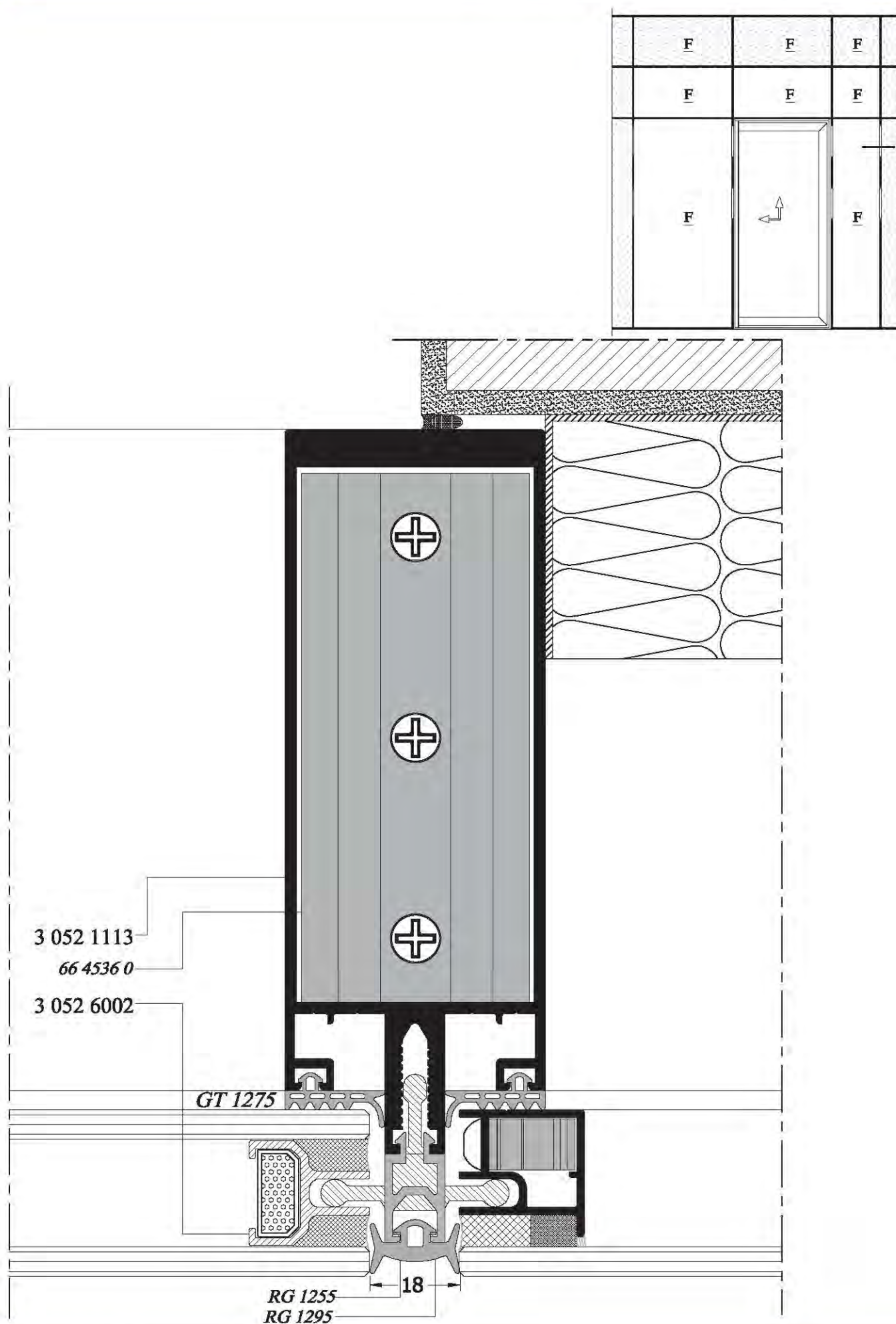


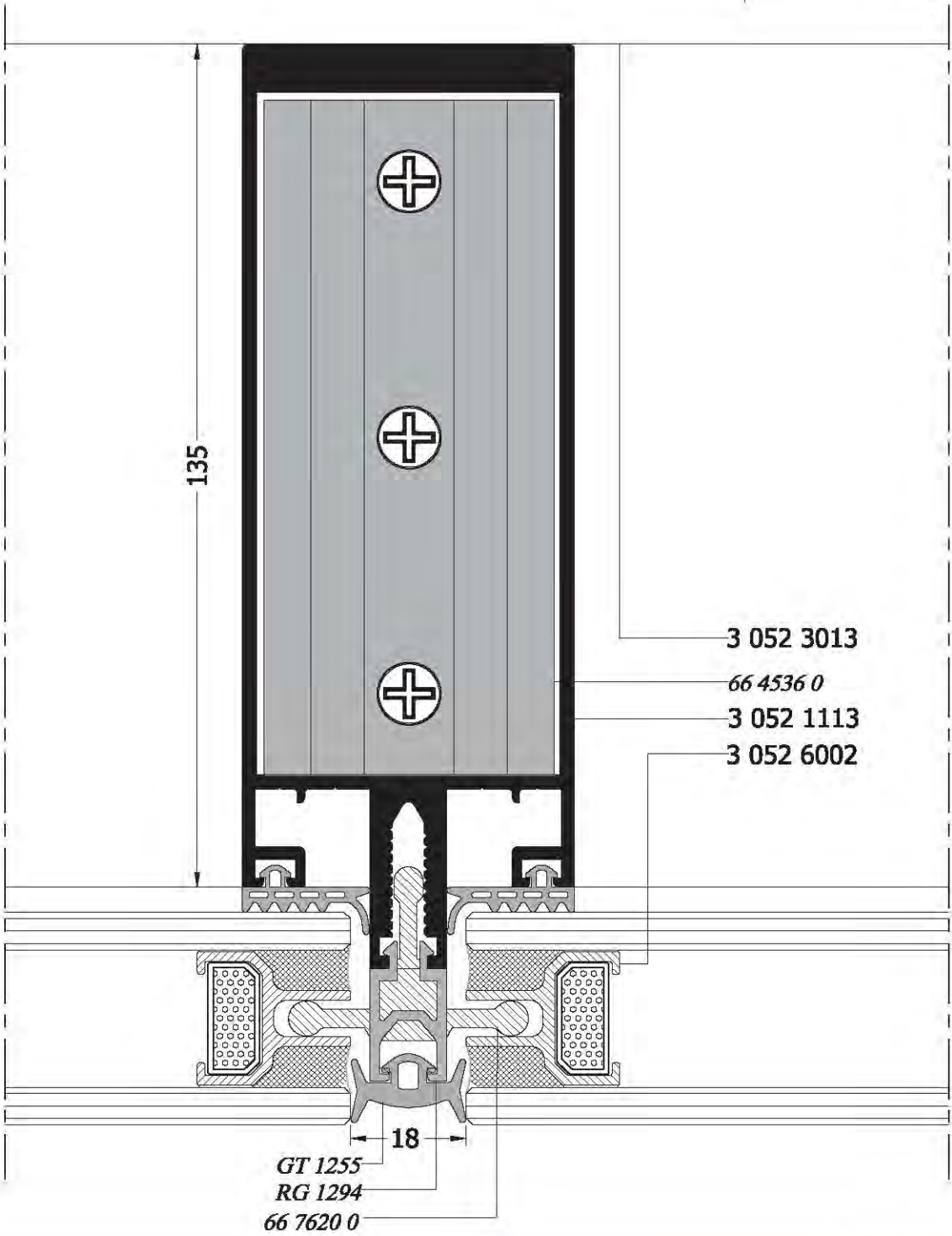
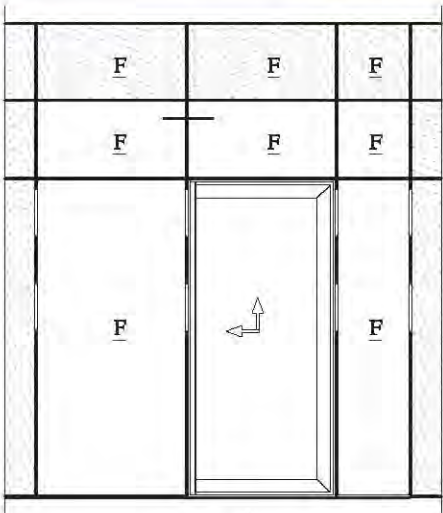


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	F		F	



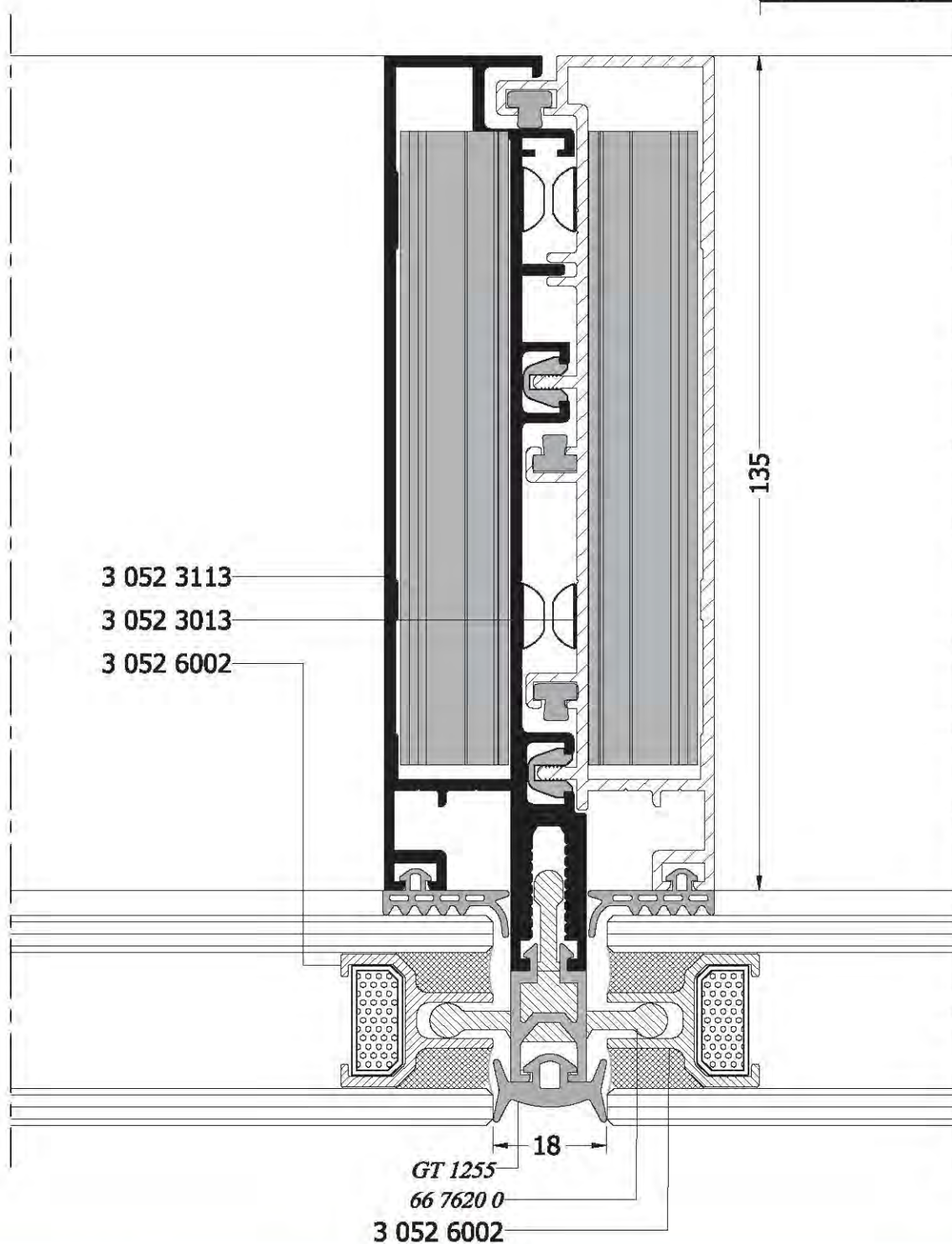






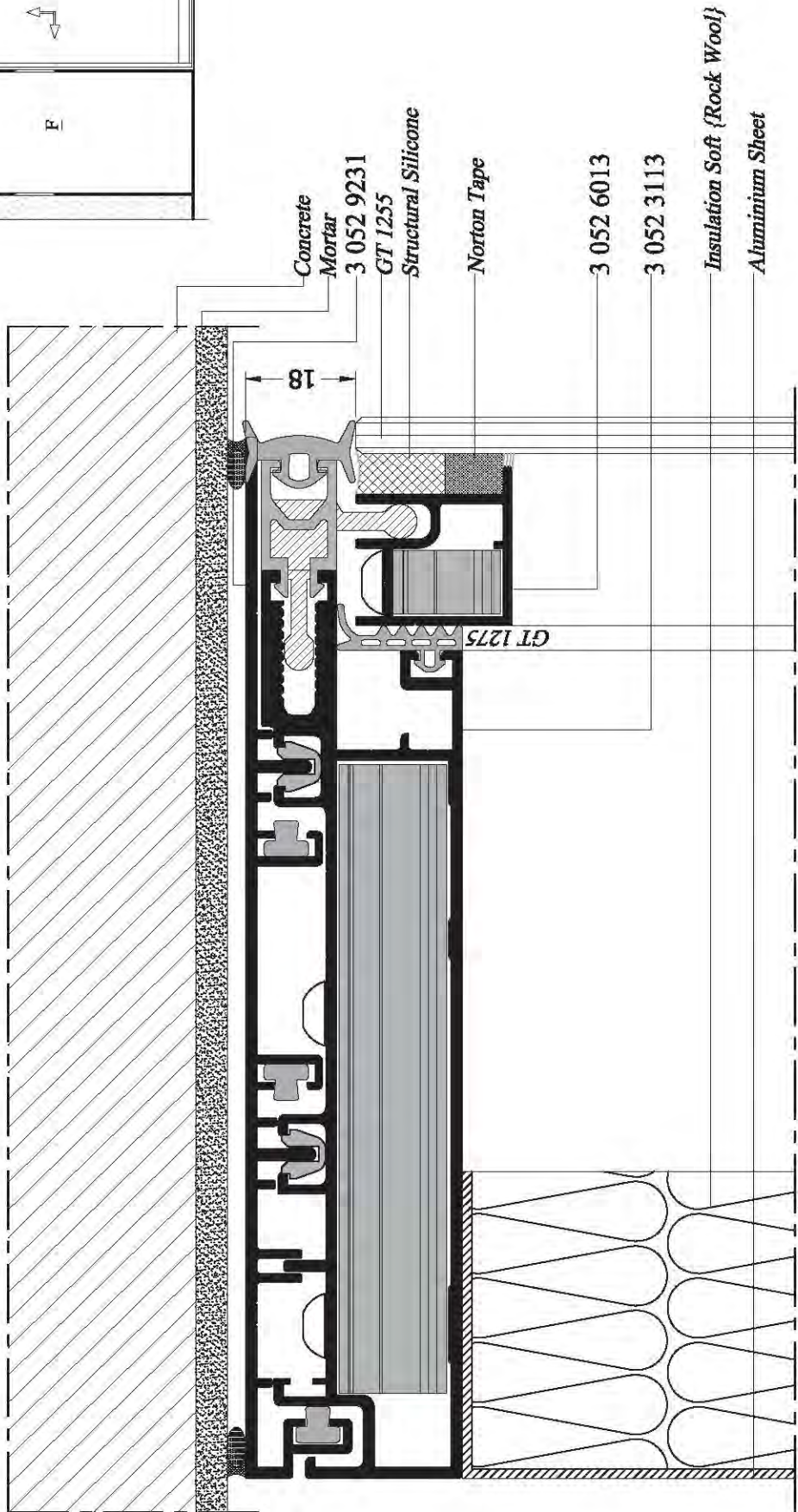


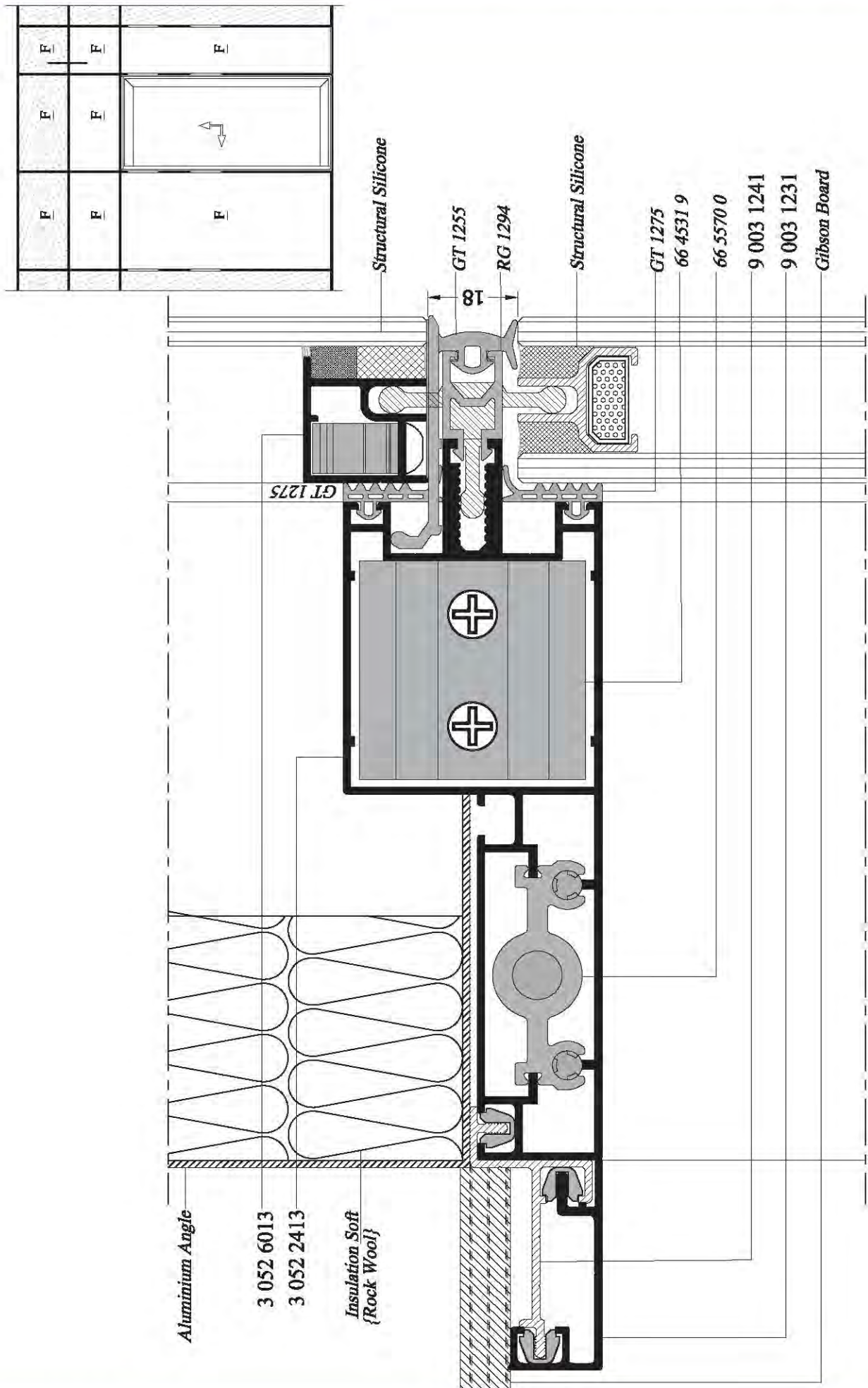
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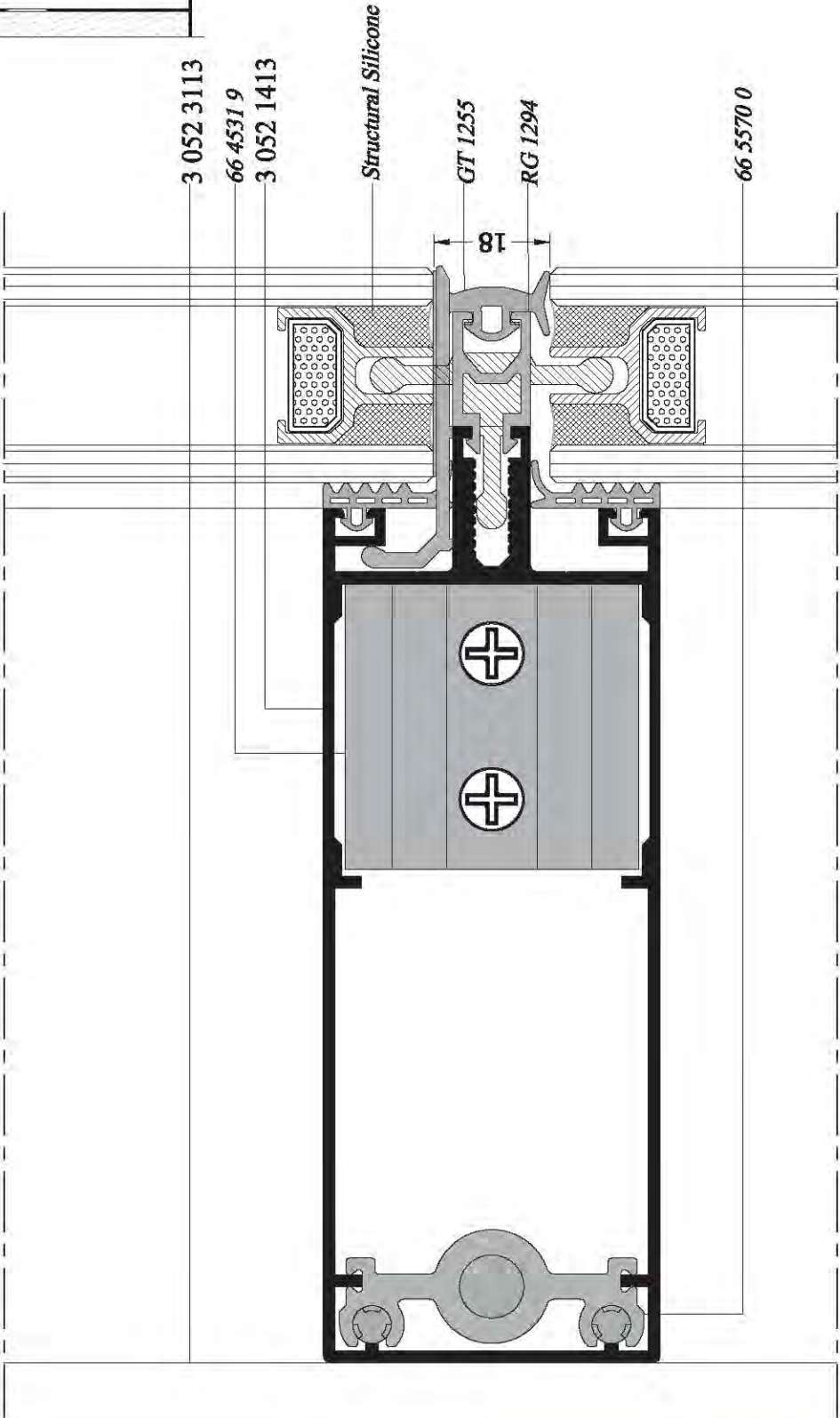
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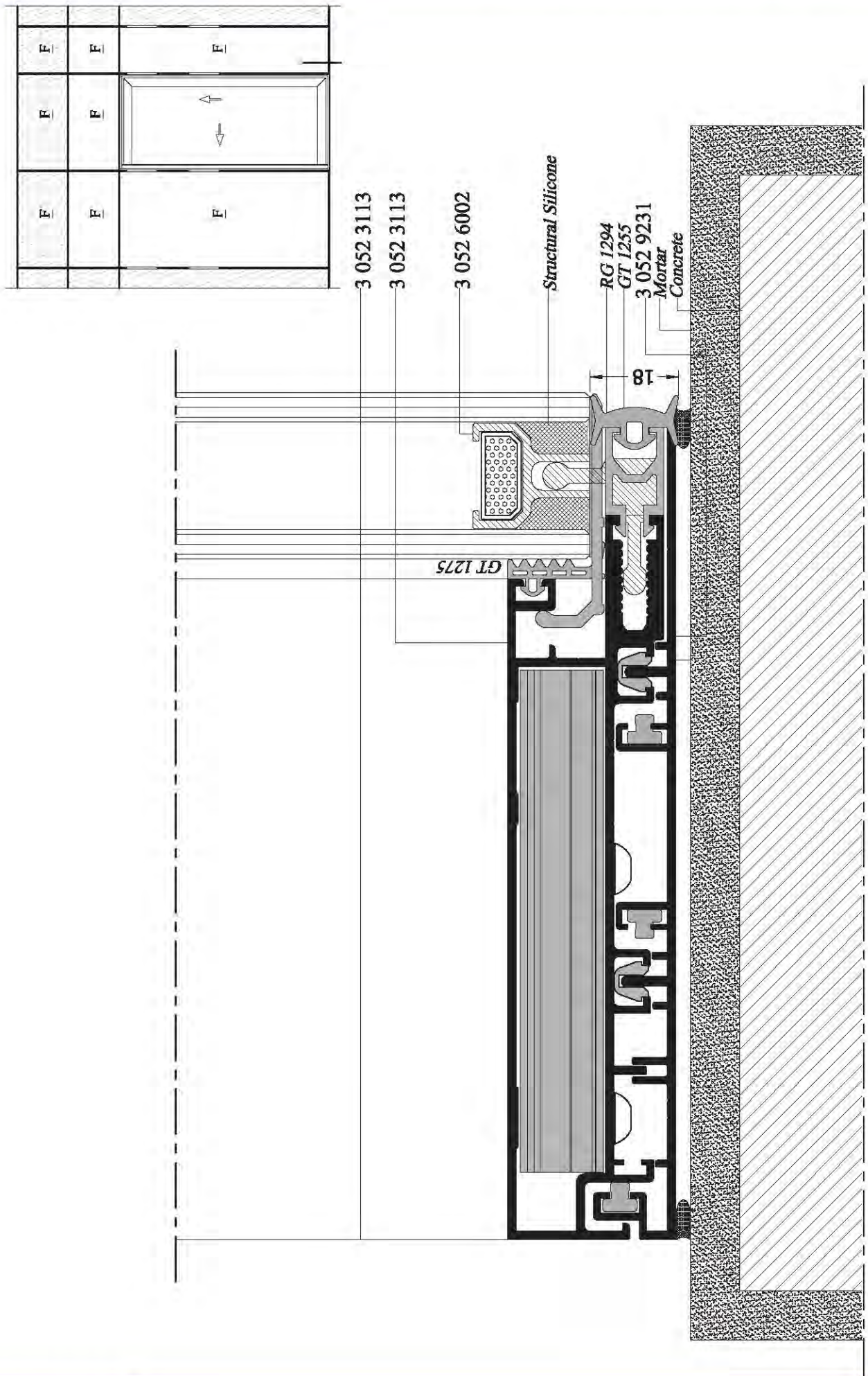


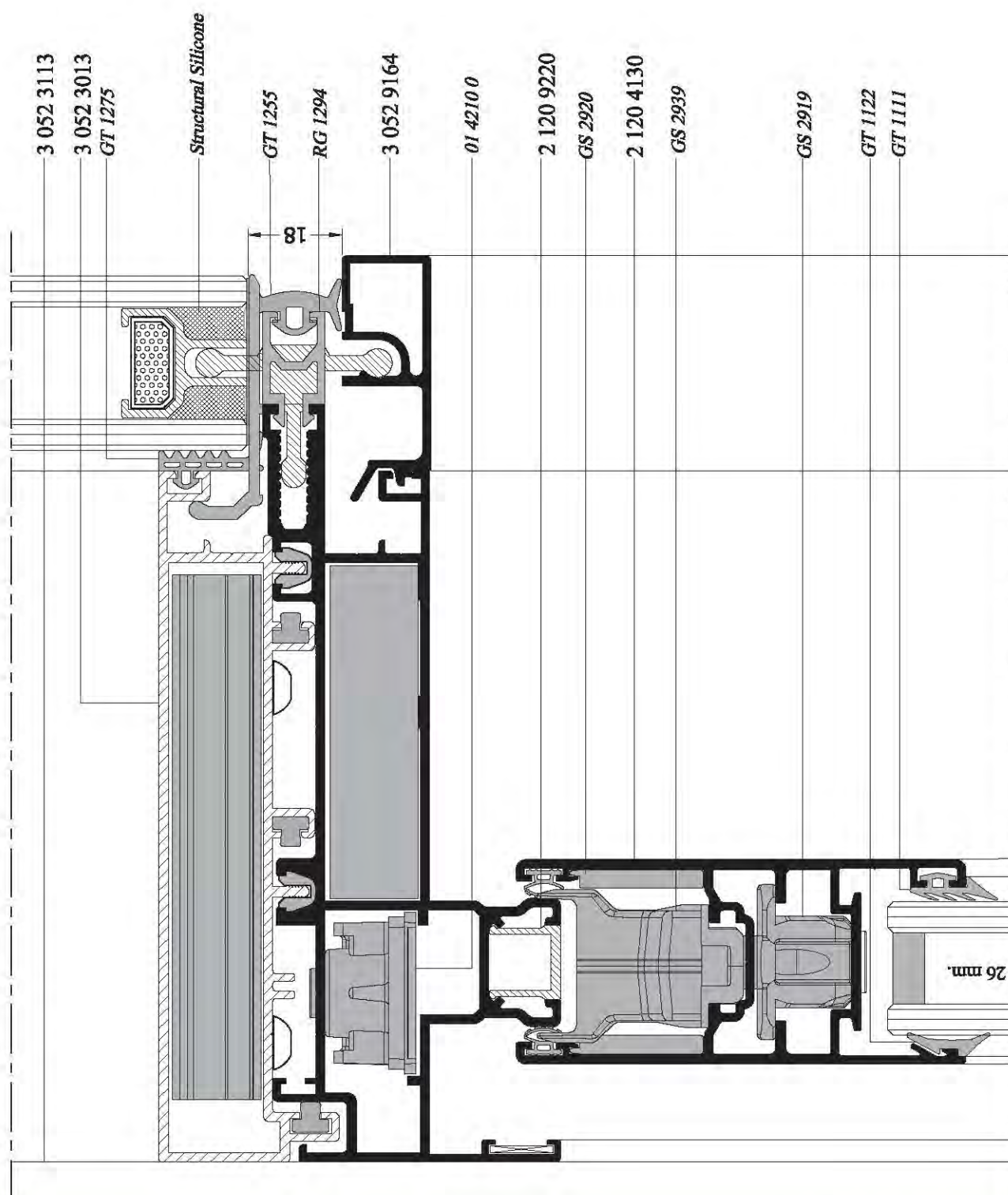


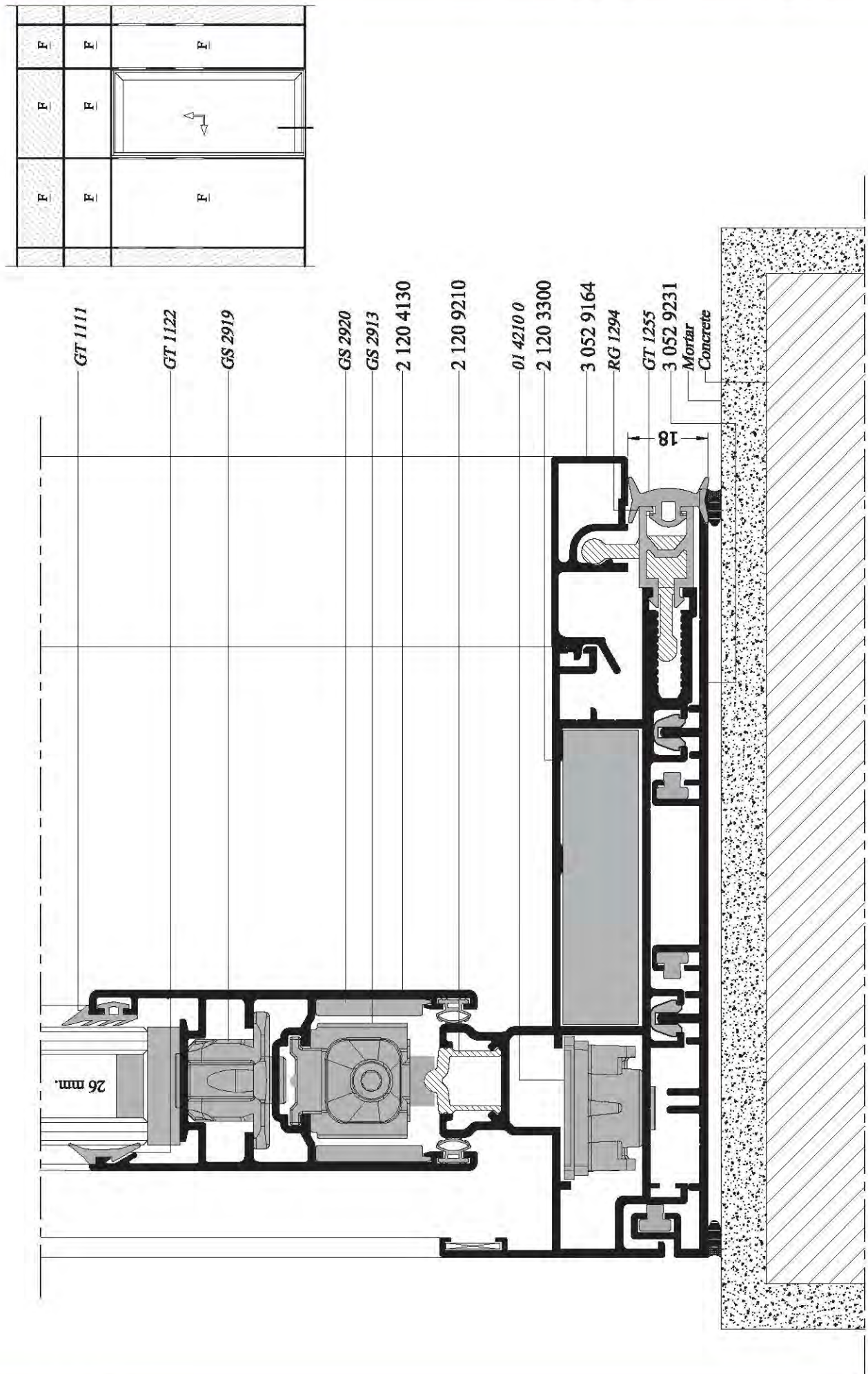


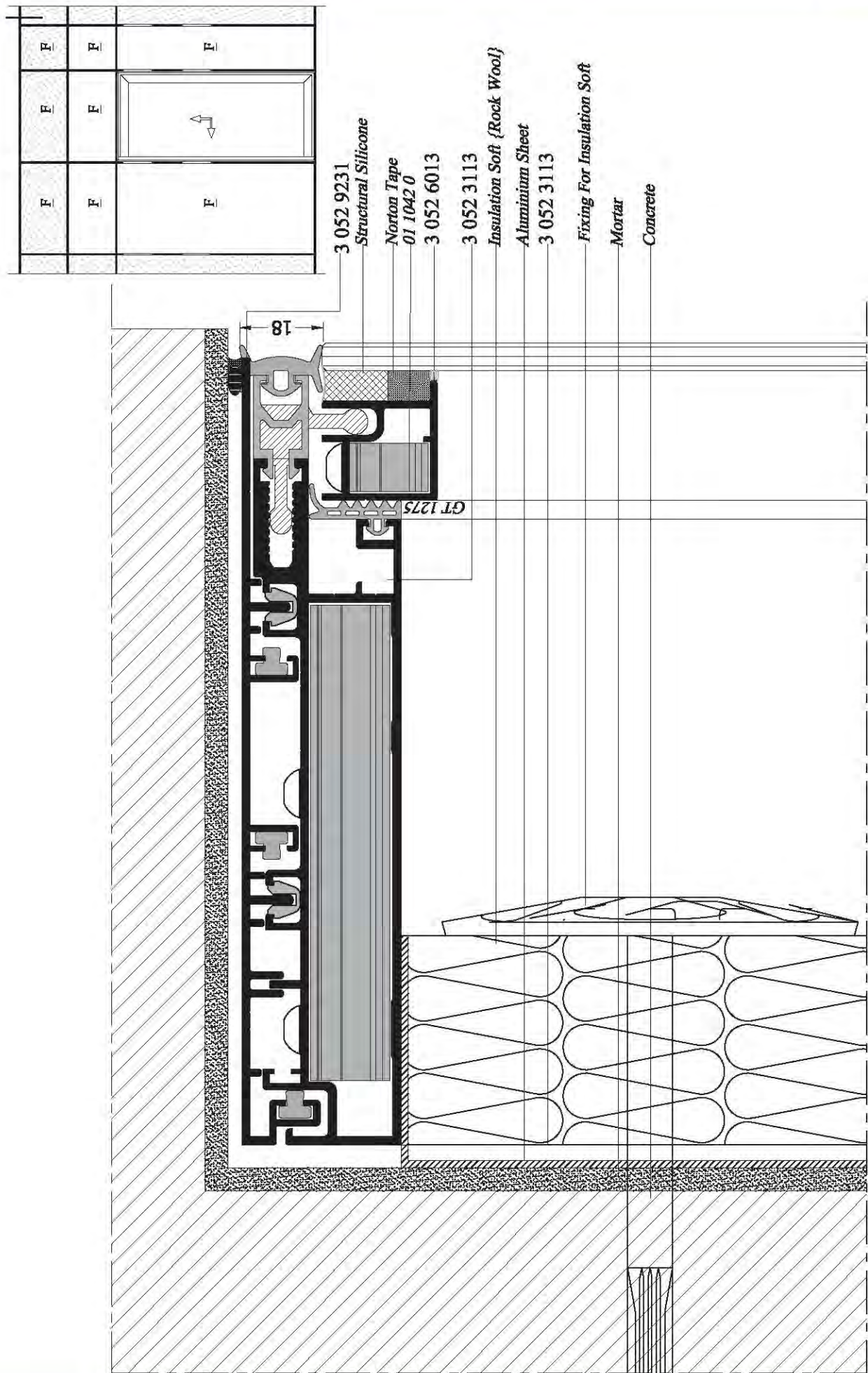
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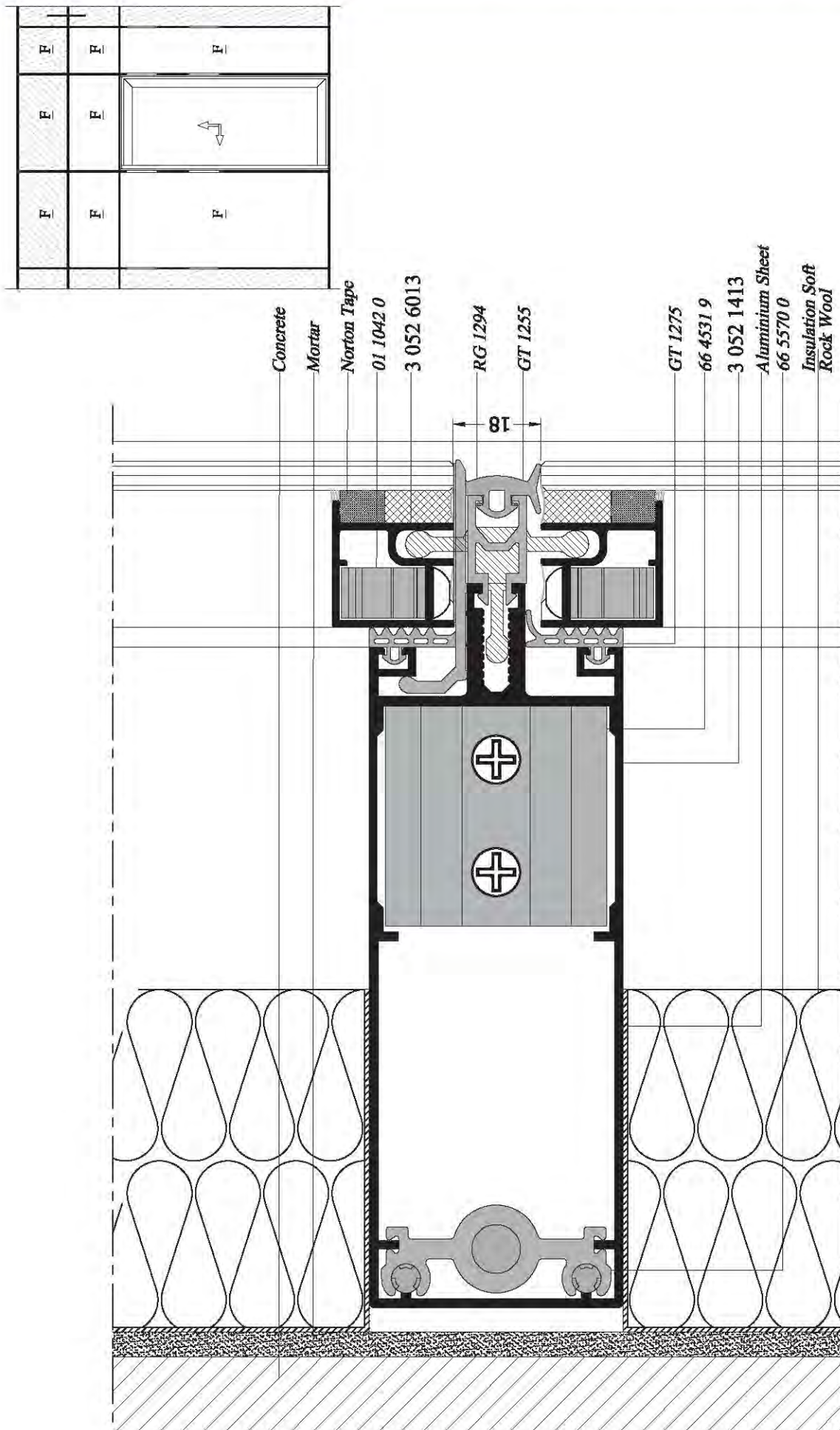


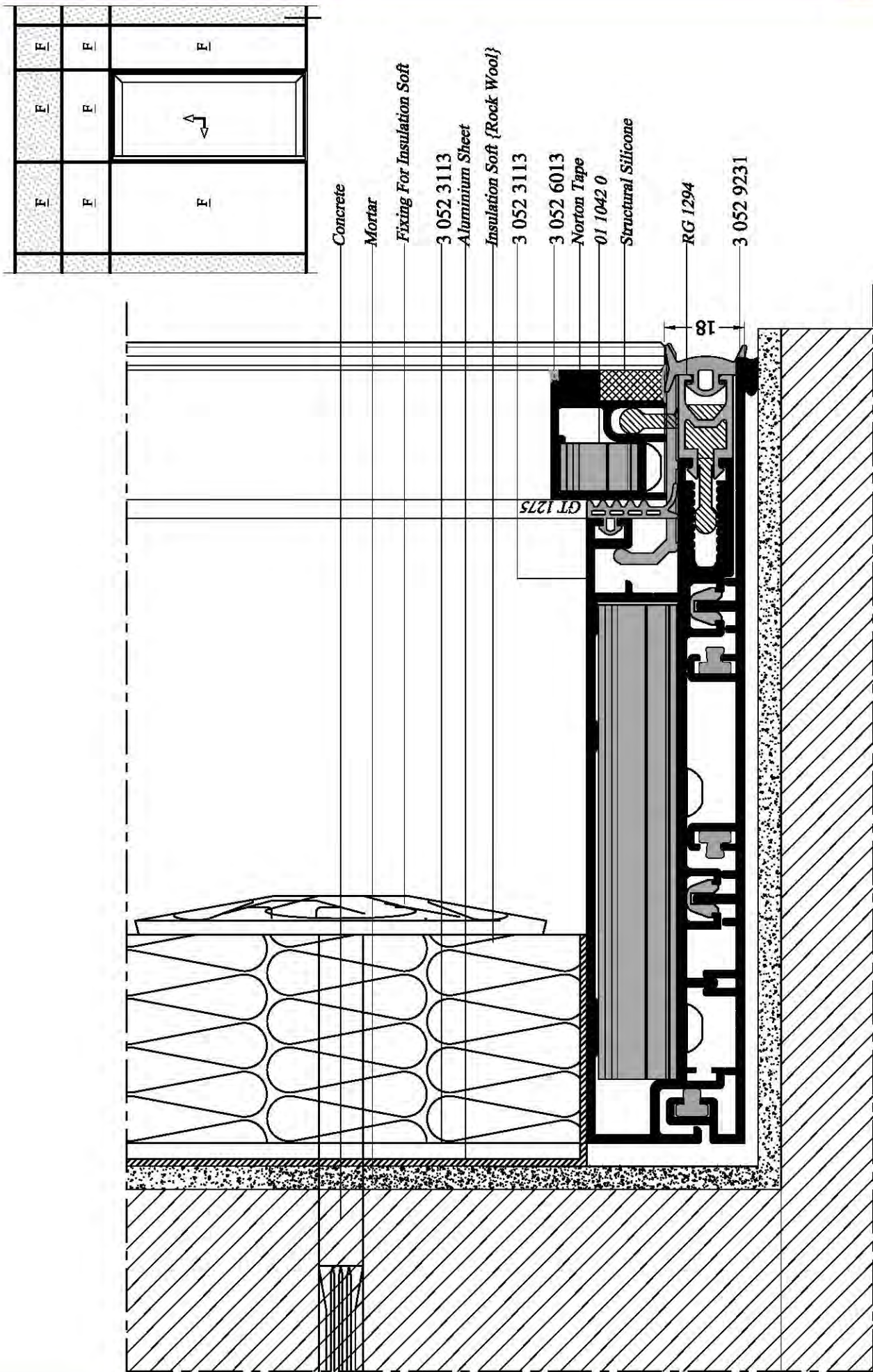








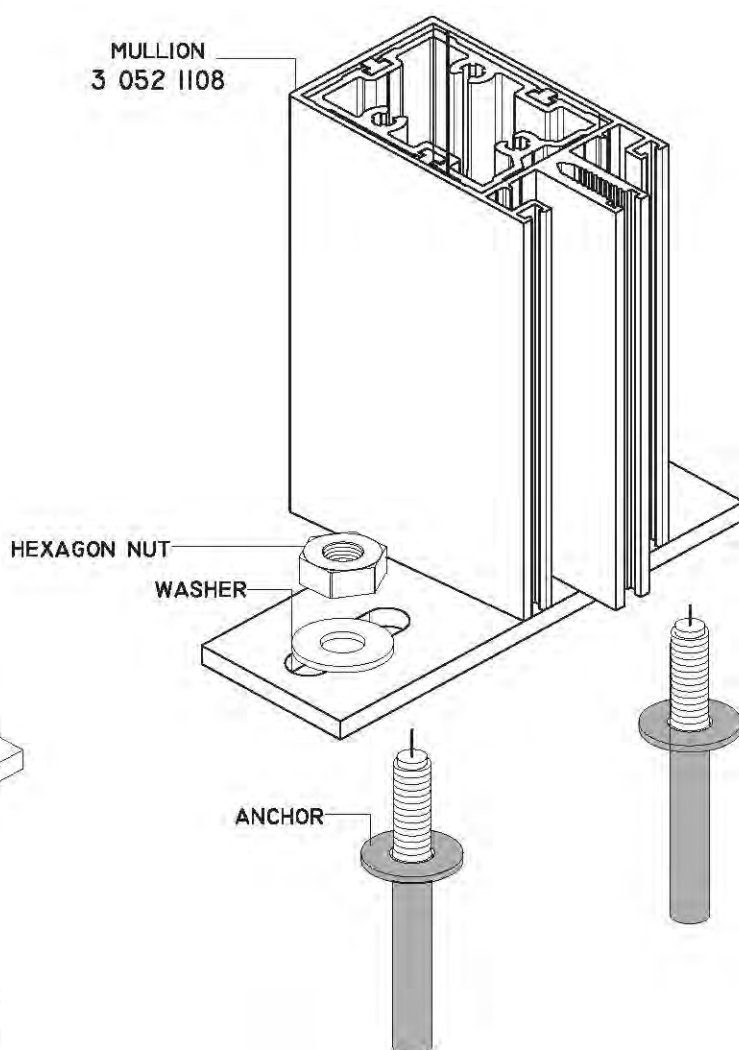
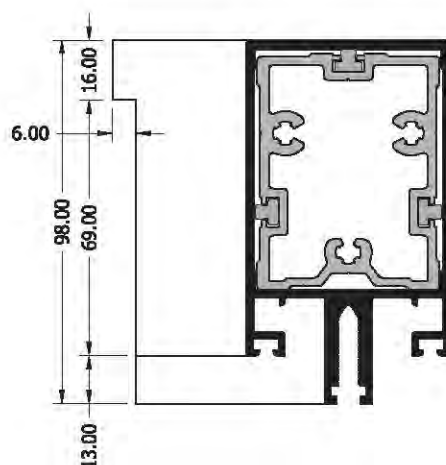
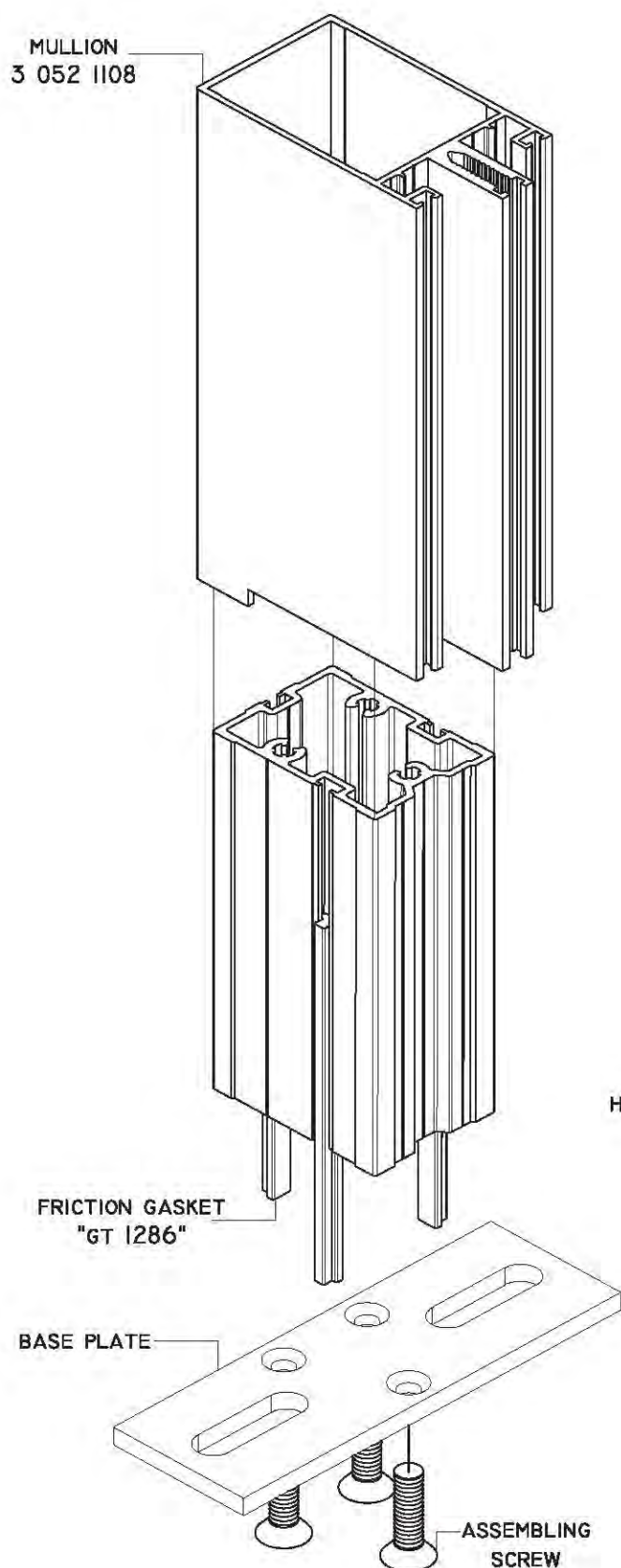






Base Plate

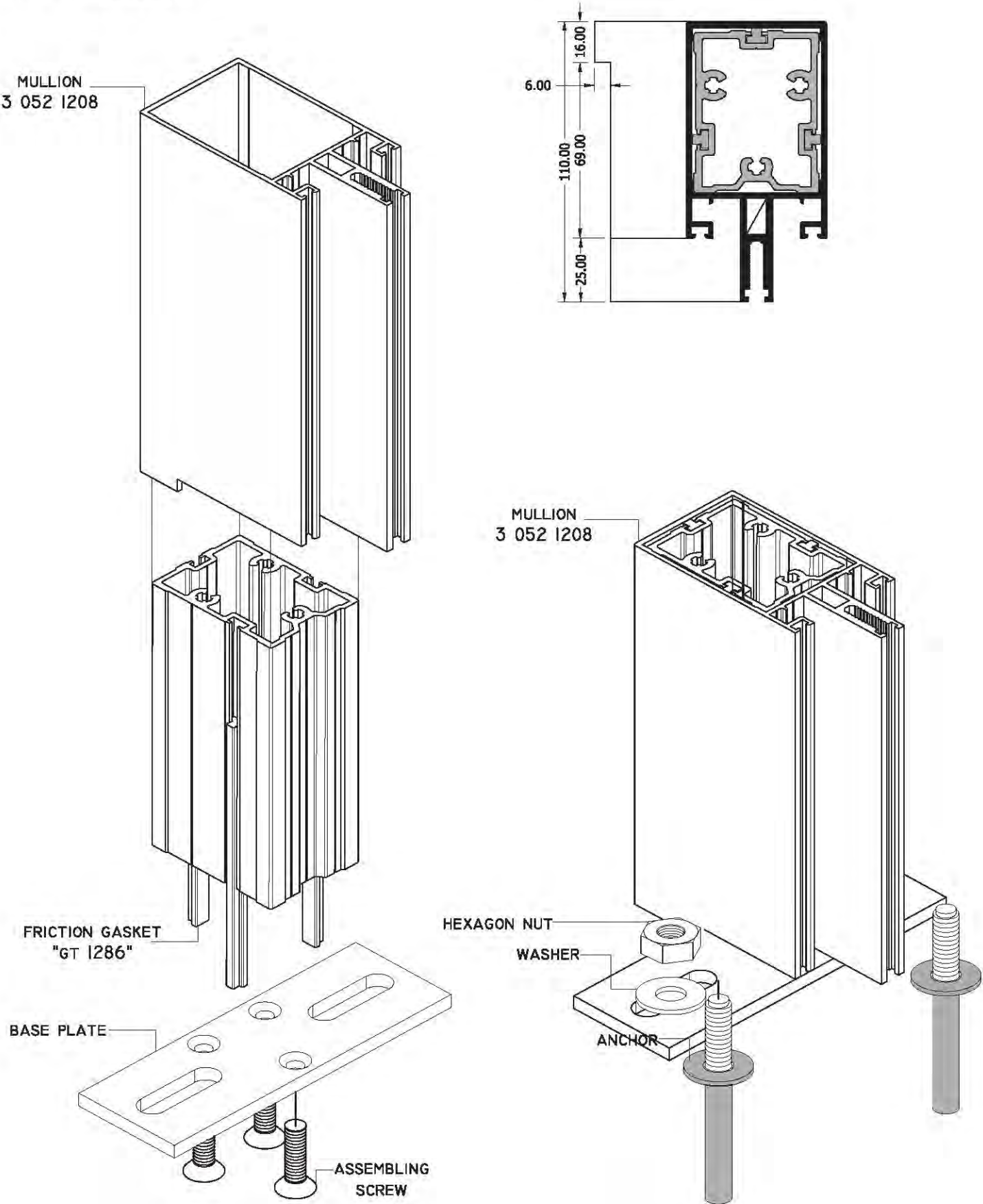
ART NO. 66 1530 0





Base Plate

ART NO. 66 1530 0

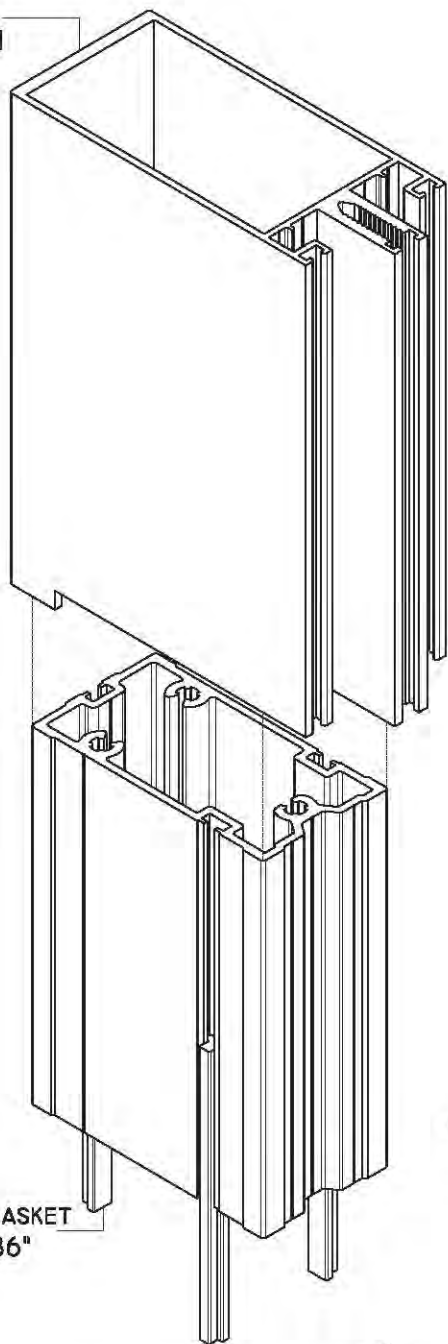




Base Plate

ART NO. 66 1540 0

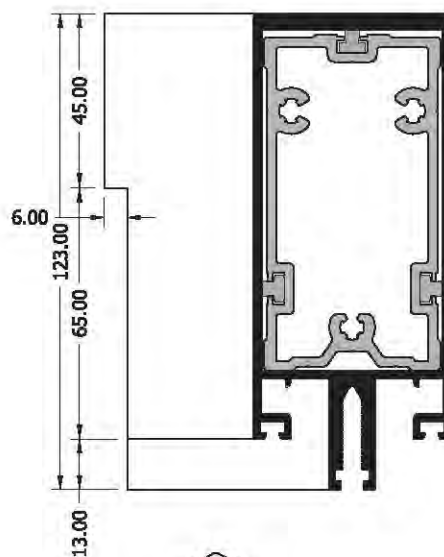
MULLION
3 052 IIII



FRICTION GASKET
"GT 1286"

BASE PLATE

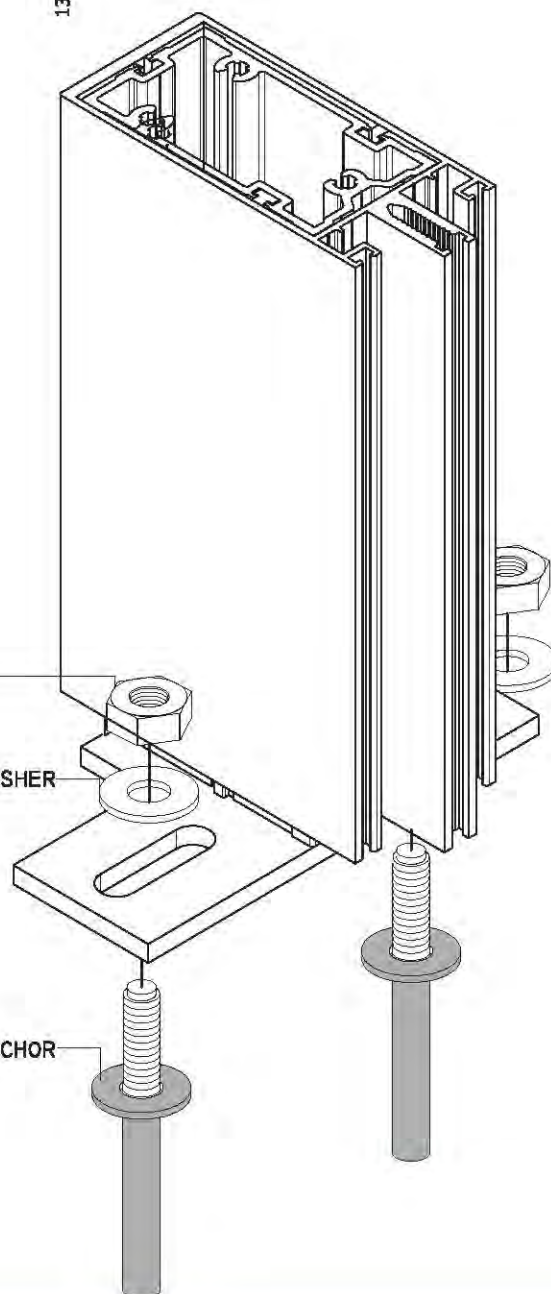
ASSEMBLING
SCREW



HEXAGON NUT

WASHER

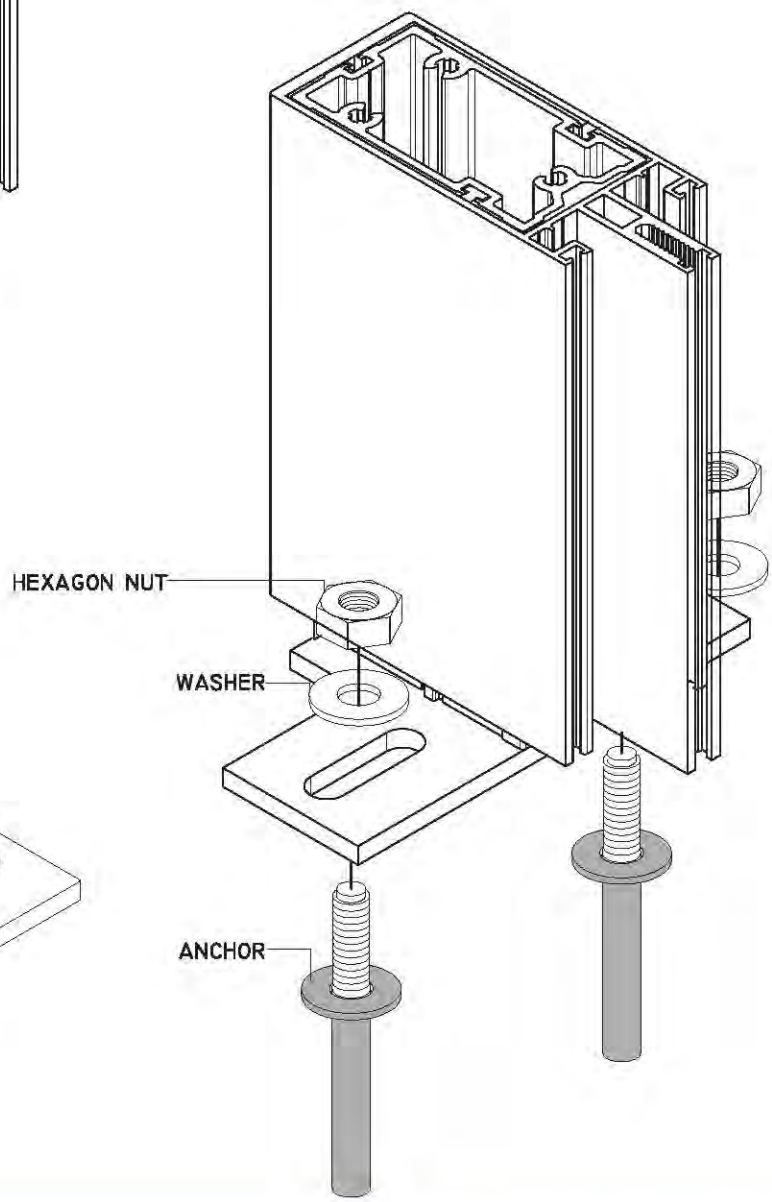
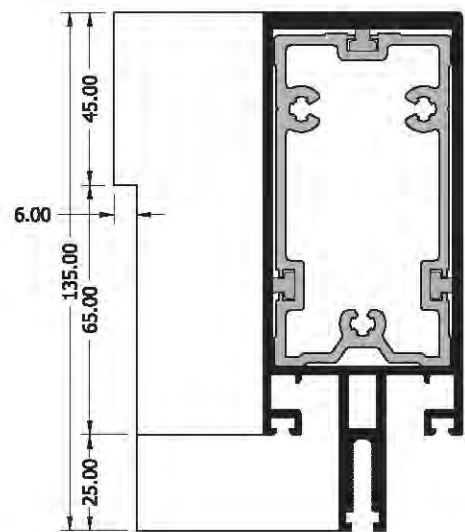
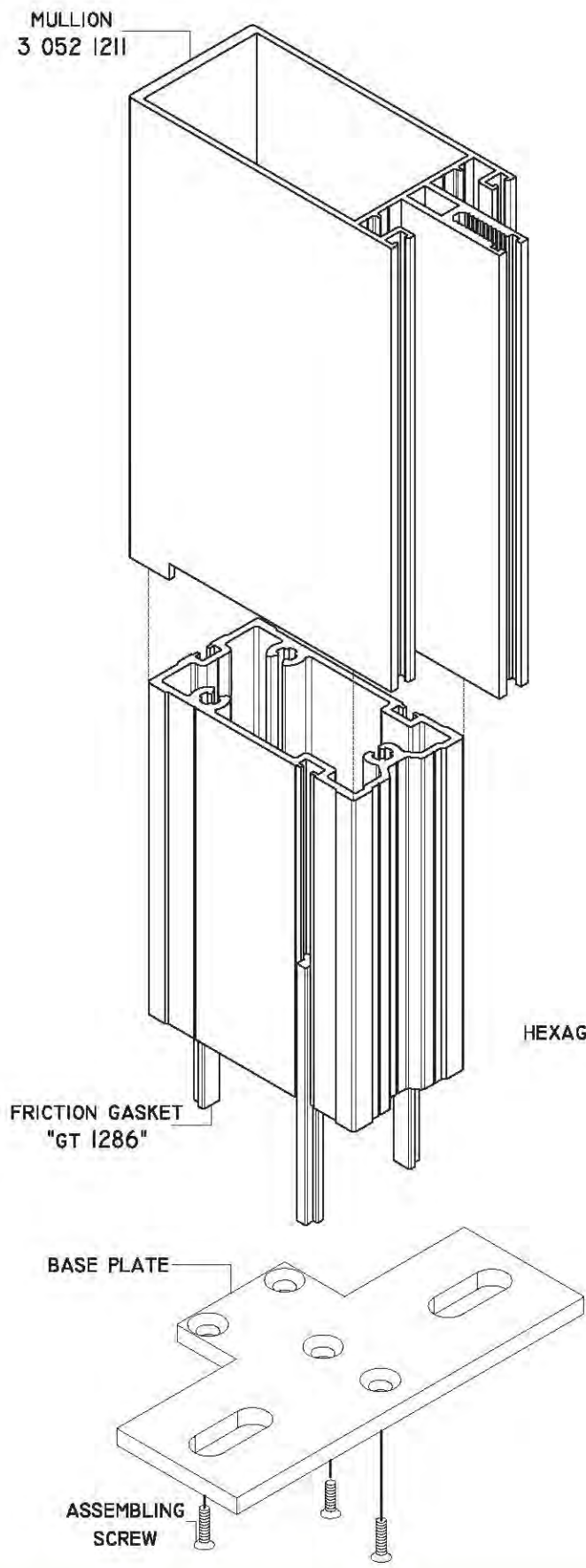
ANCHOR





Base Plate

ART NO. 66 1540 0





Base Plate

ART NO. 66 1550 0

MULLION
3 052 III6

FRICTION GASKET
"GT 1286"

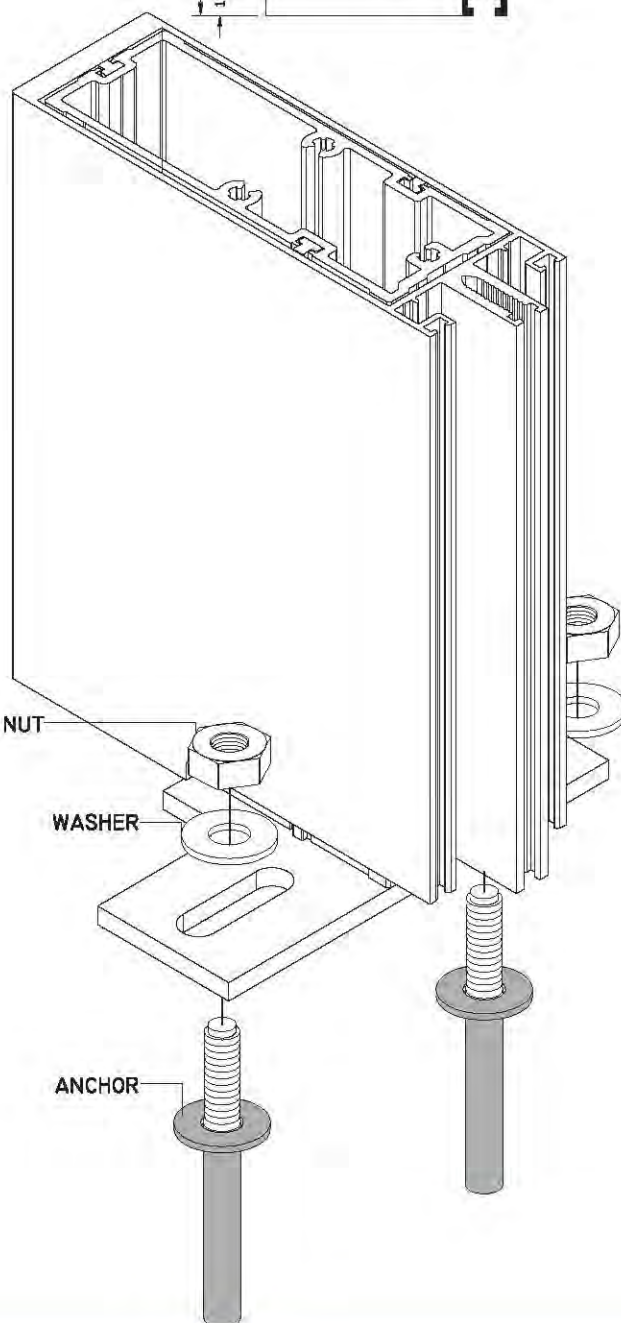
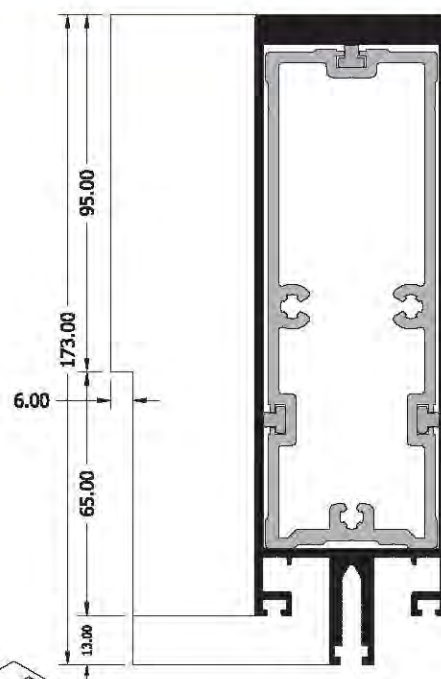
BASE PLATE

ASSEMBLING
SCREW

HEXAGON NUT

WASHER

ANCHOR





Base Plate

ART NO. 66 1550 0

MULLION
3 052 1216

FRICTION GASKET
"GT 1286"

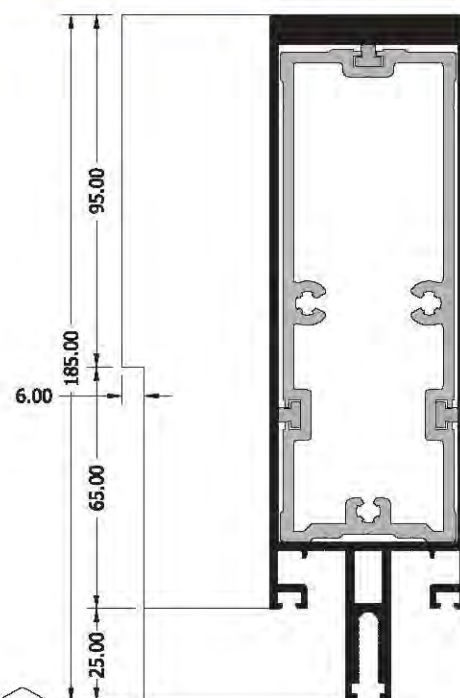
BASE PLATE

ASSEMBLING
SCREW

HEXAGON NUT

WASHER

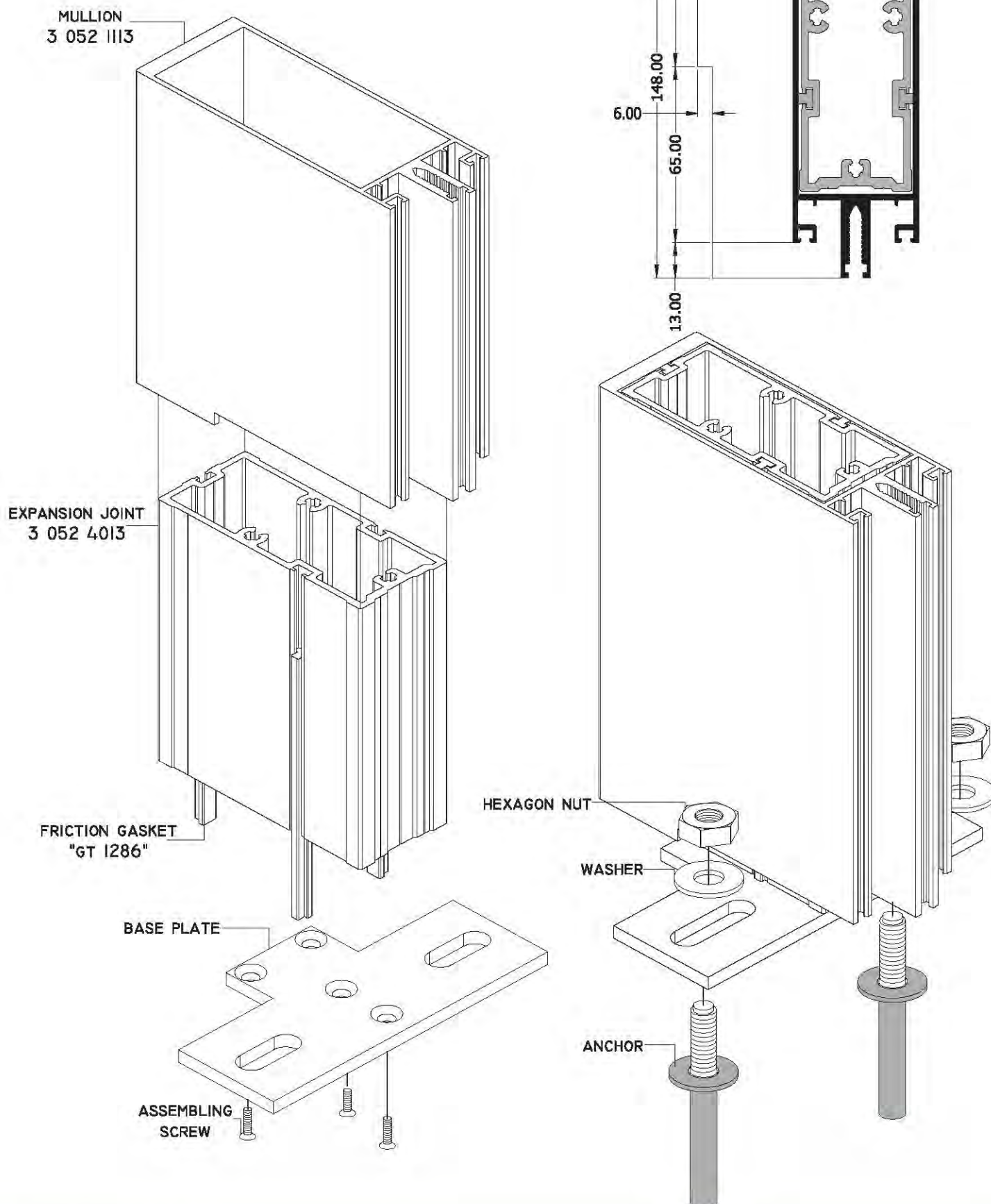
ANCHOR





Base Plate

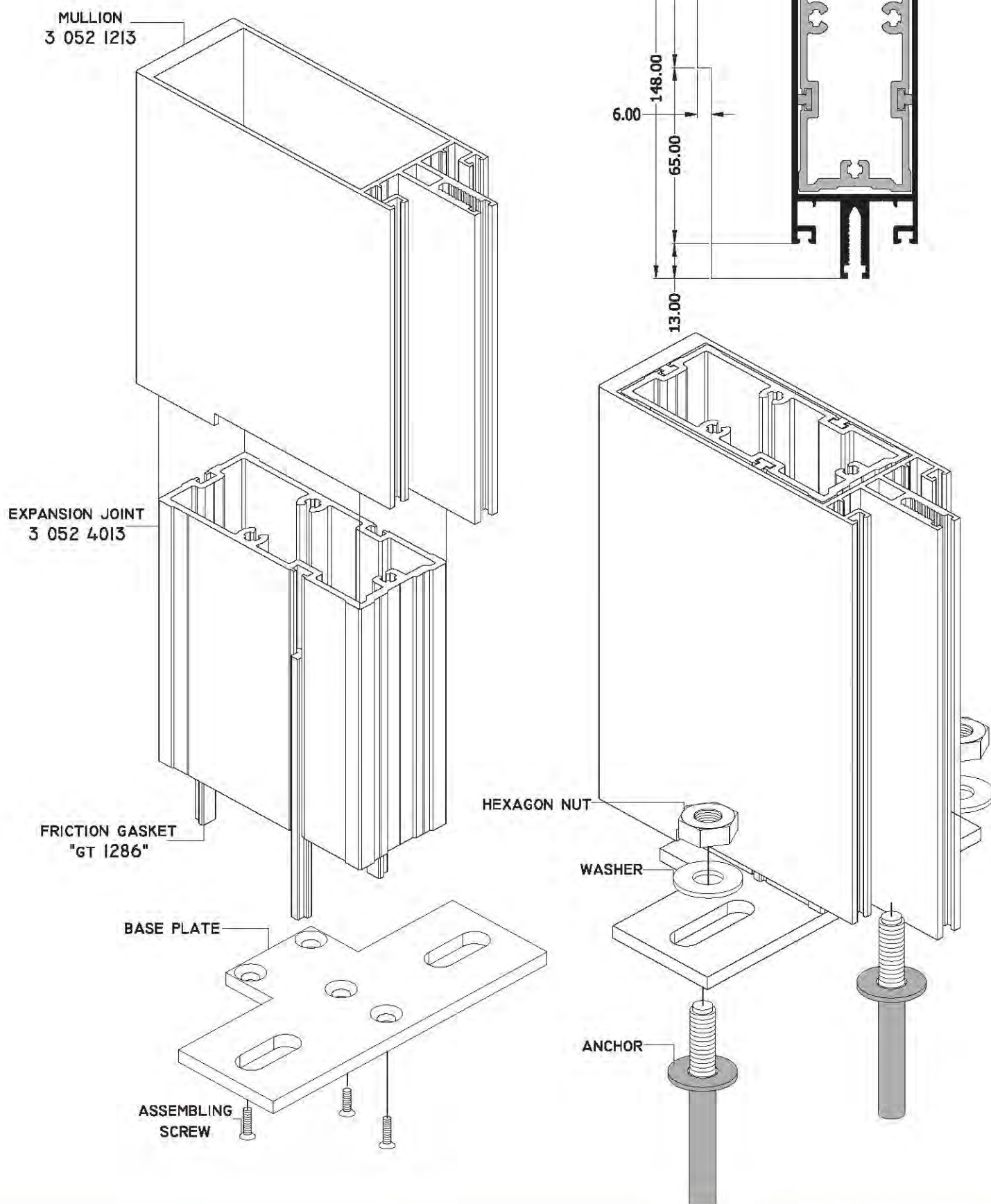
ART NO. 66 1560 0





Base Plate

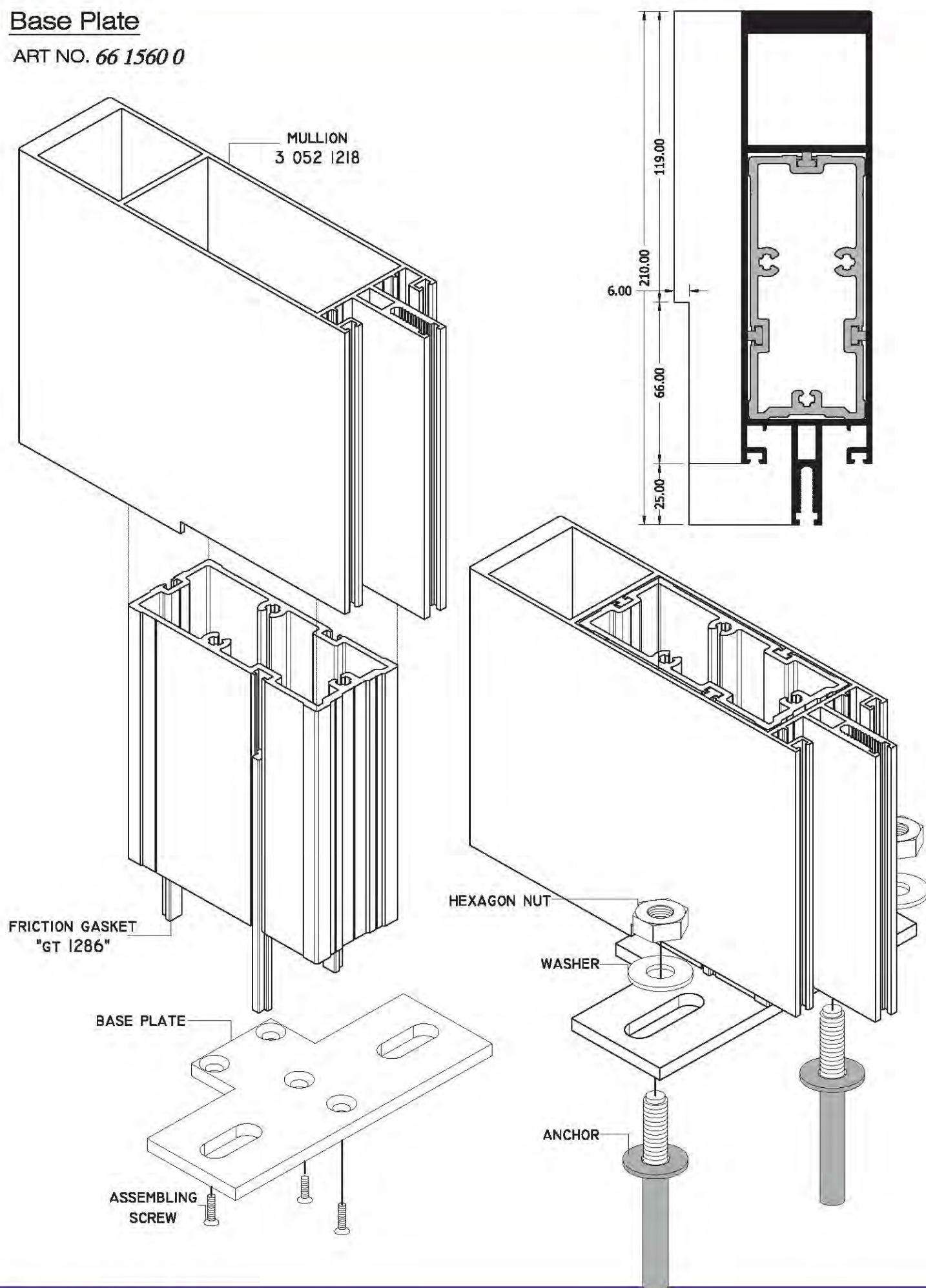
ART NO. 66 1560 0





Base Plate

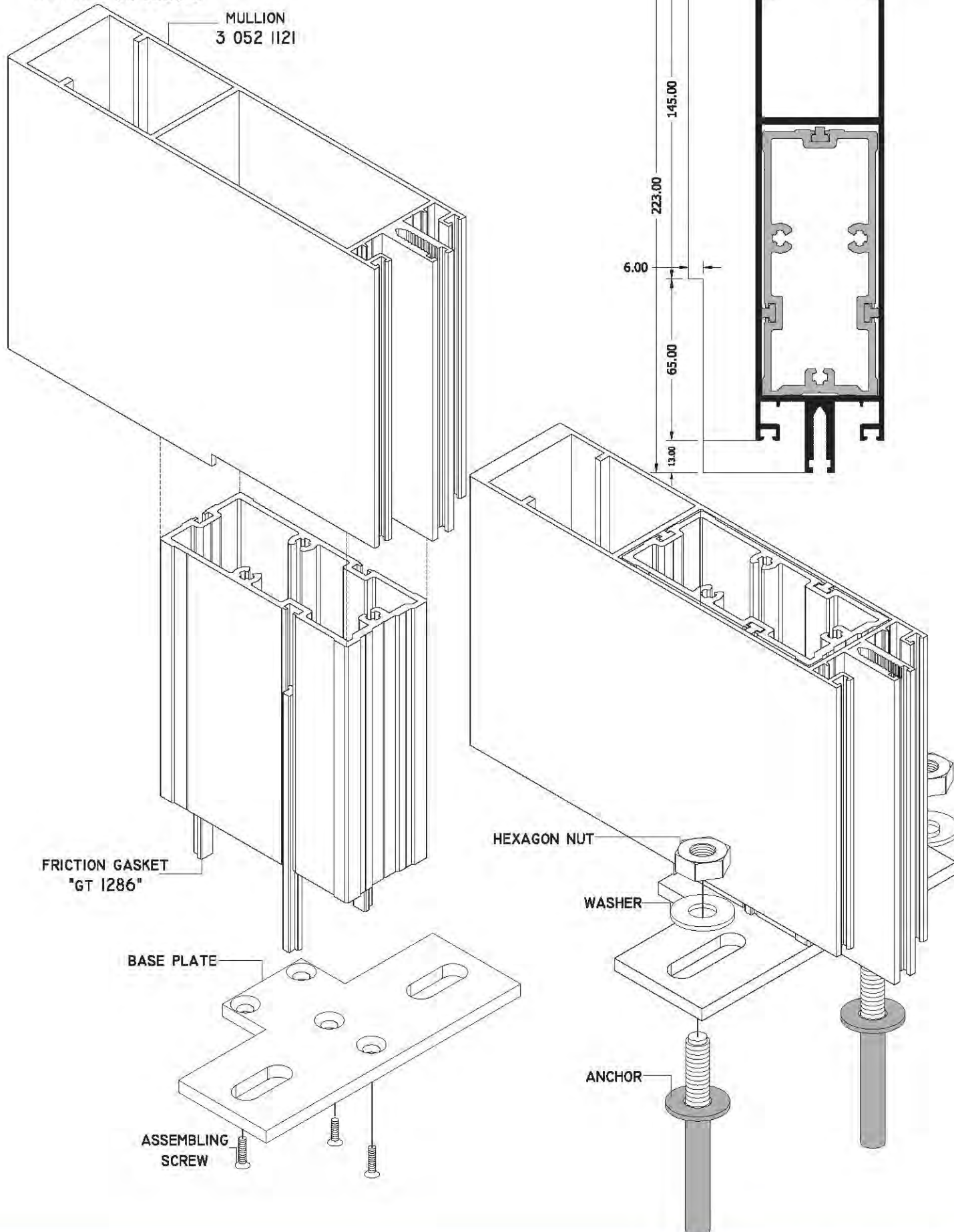
ART NO. 66 1560 0





Base Plate

ART NO. 66 1560 0





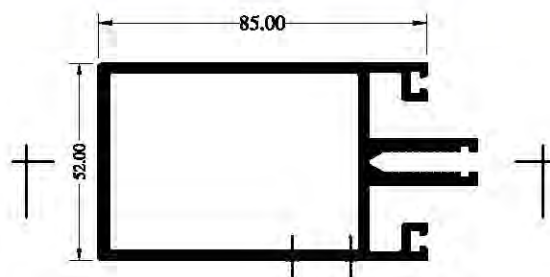
Transom Joint

ART NO. 66 4531 0

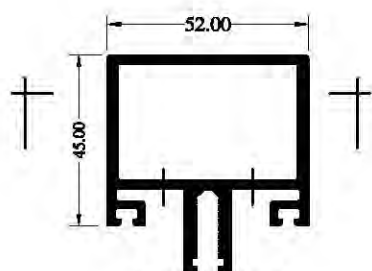
Applied With

3 052 1404

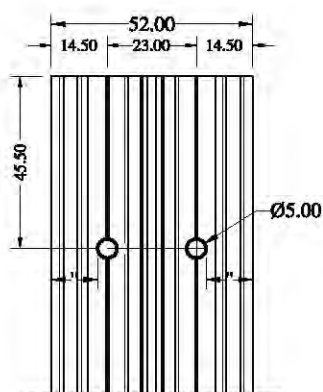
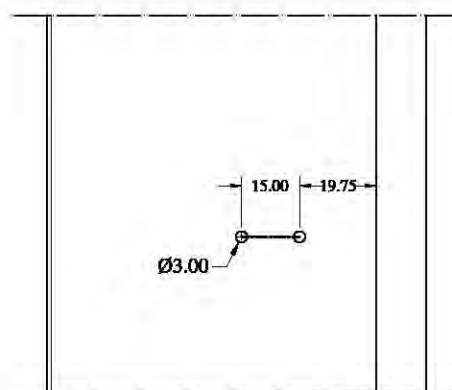
3 052 1504



3 052 1108



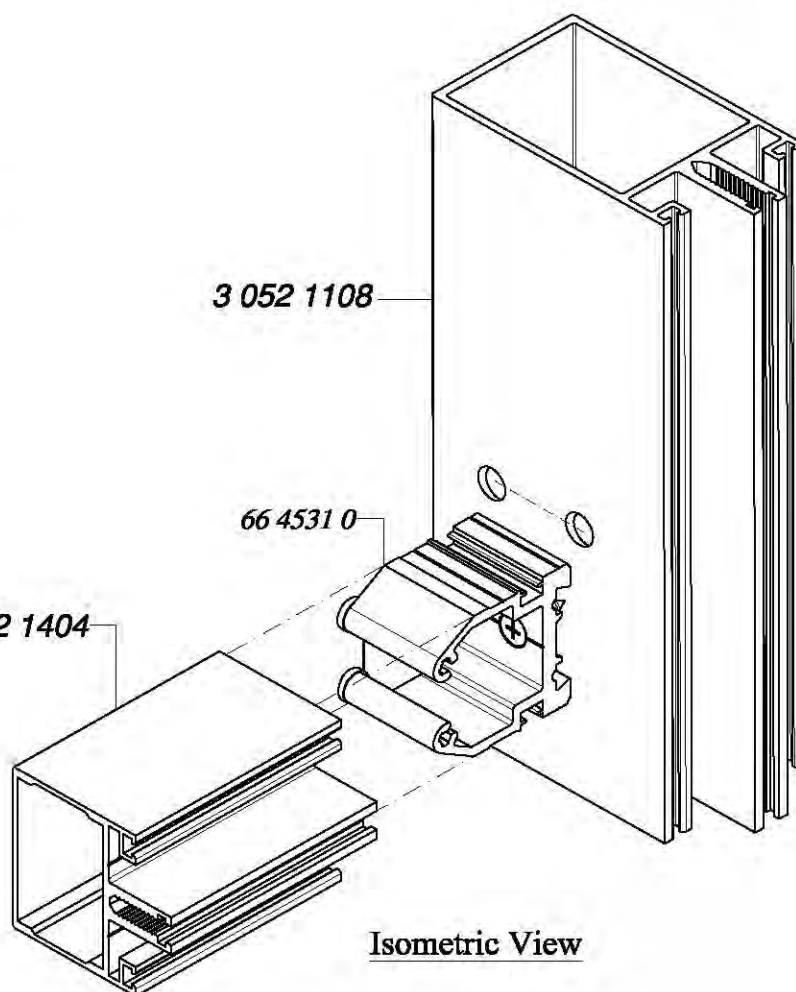
3 052 1404



3 052 1108

66 4531 0

3 052 1404



Isometric View

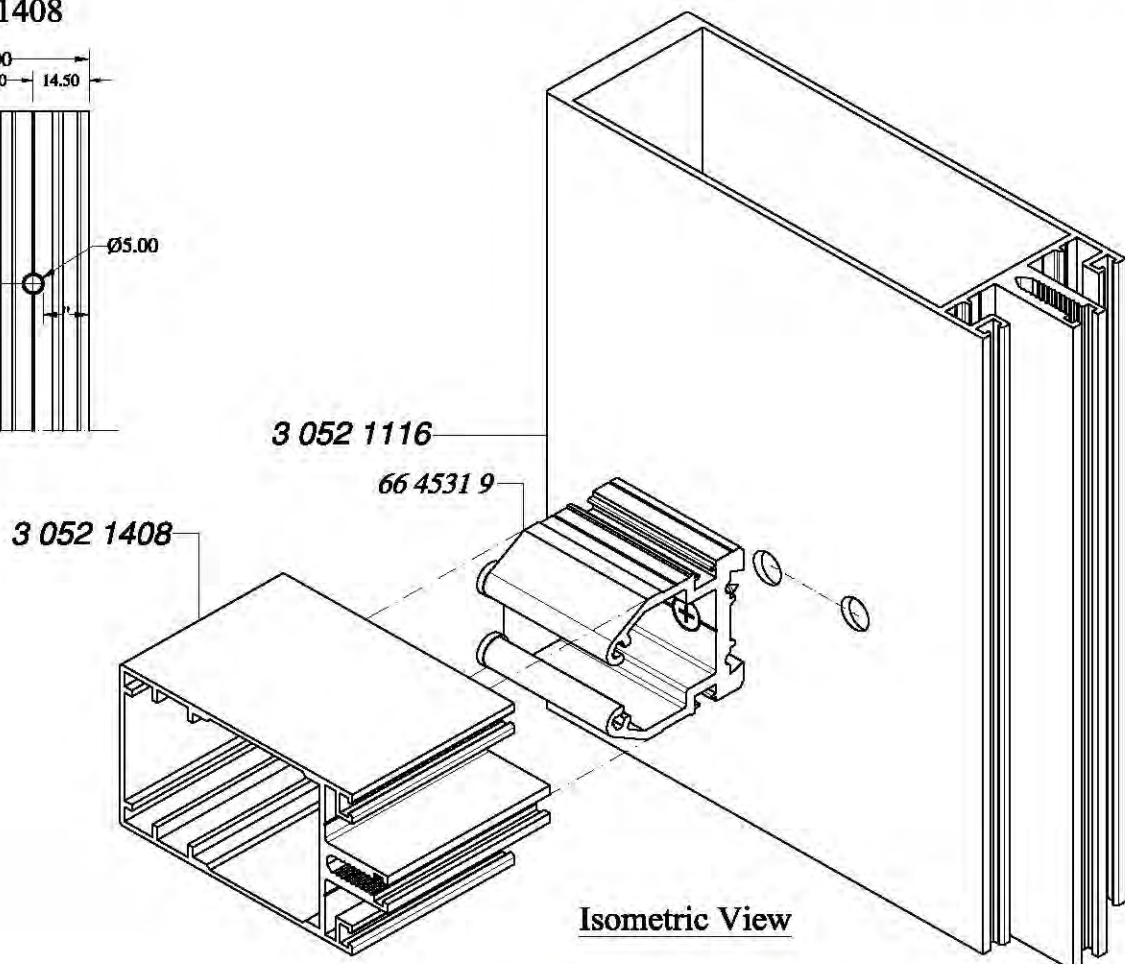
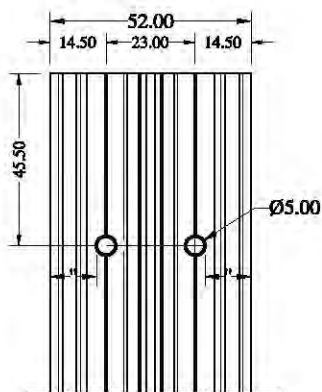
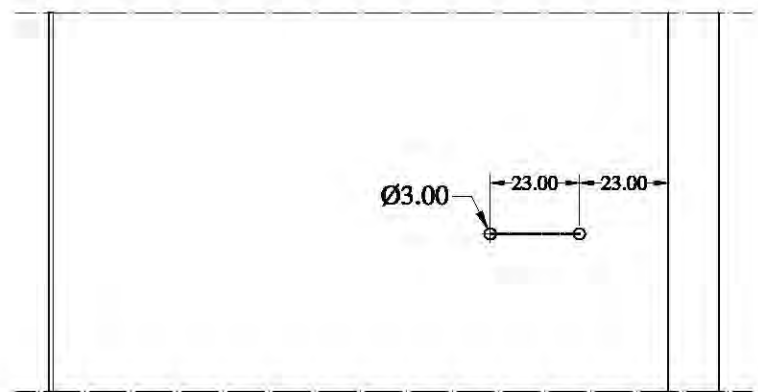
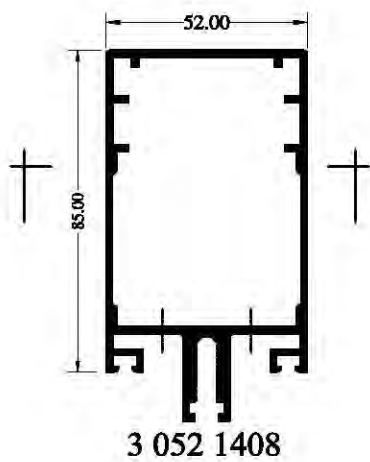
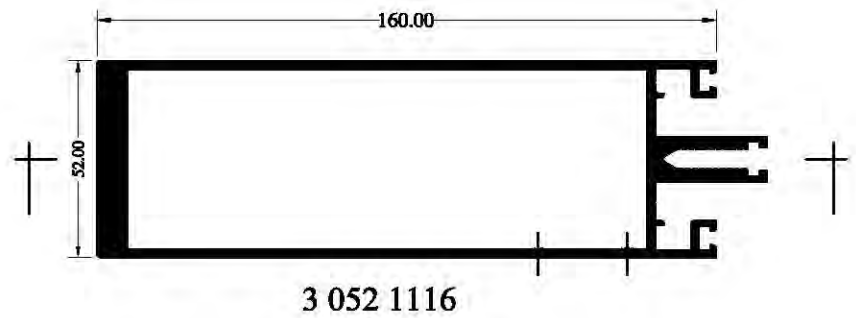


Transom Joint

ART NO. 66 4531 9

Applied With

3 052 1406
3 052 1506
3 052 1408
3 052 2413
3 052 1411
3 052 1413



Isometric View



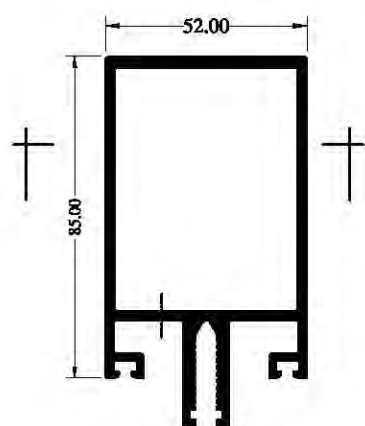
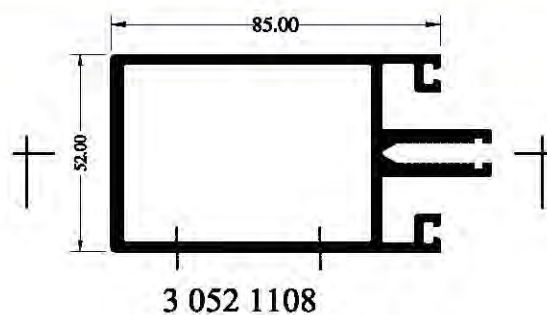
Transom Joint

ART NO. 66 4533 0

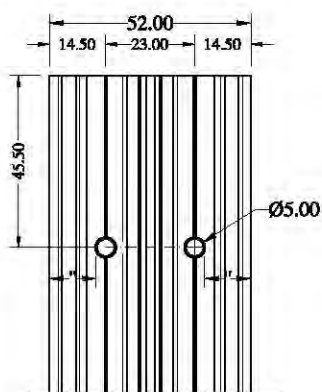
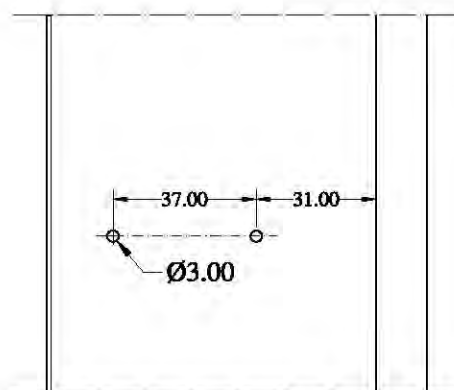
Applied With

3 052 1108

3 052 1208



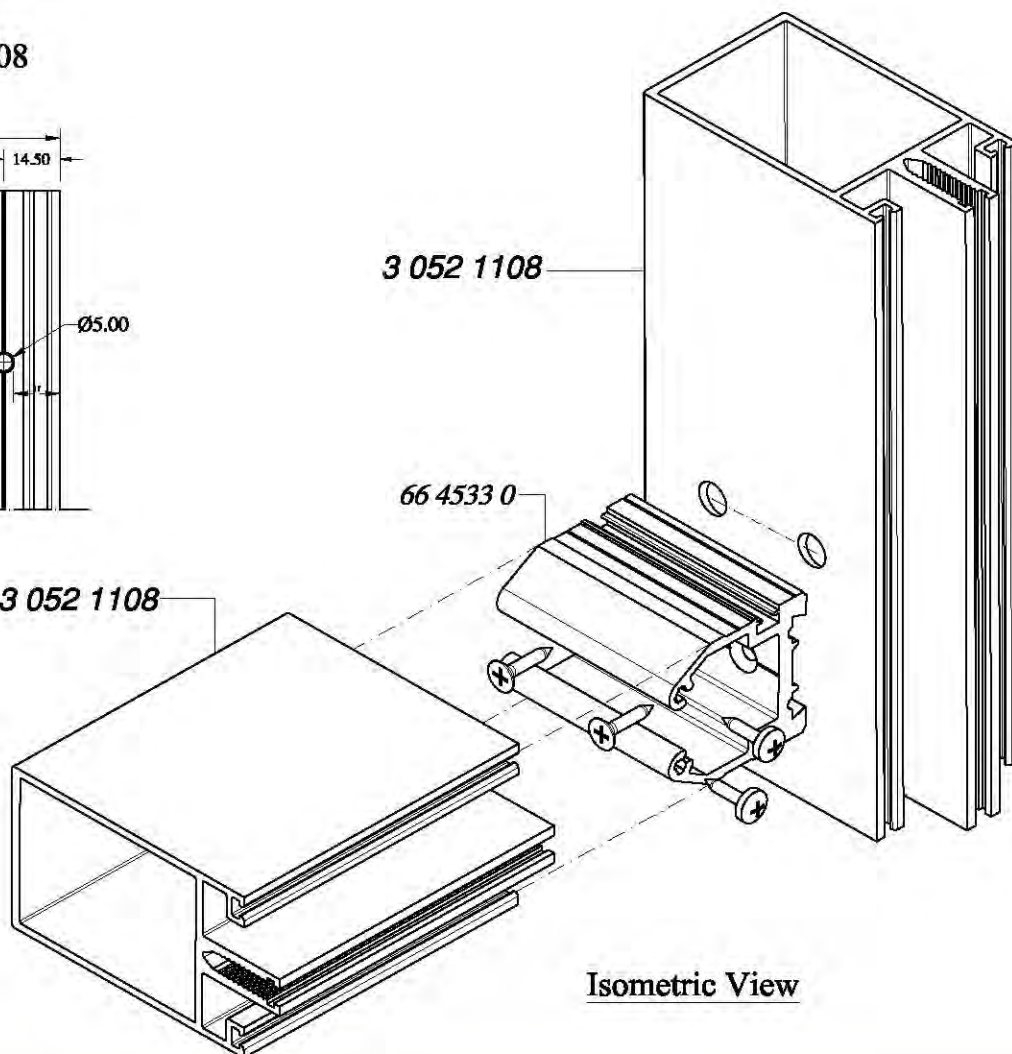
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3 052 1108

3 052 1108

66 4533 0



Isometric View



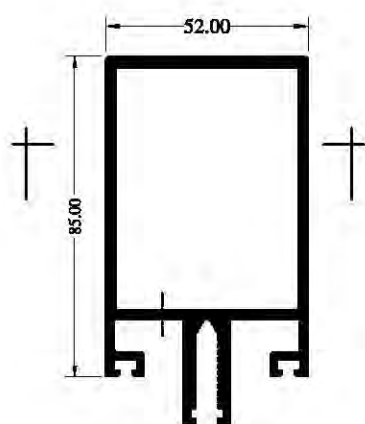
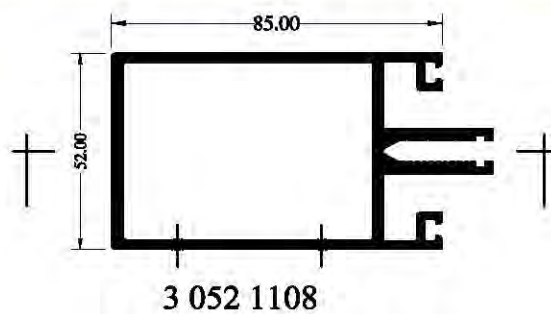
Transom Joint

ART NO. 66 4533 0

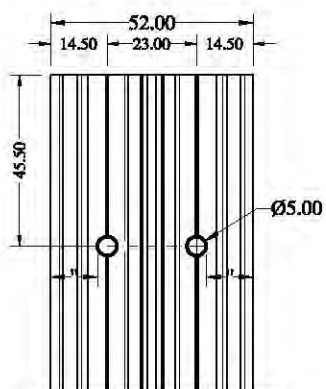
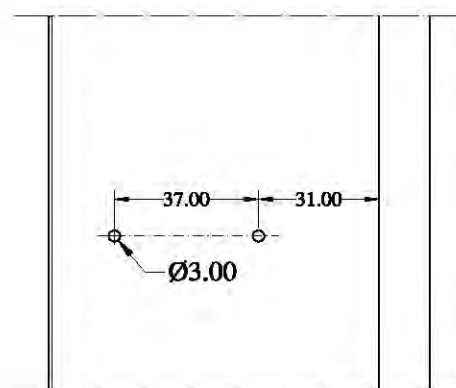
Applied With

3 052 1108

3 052 1208



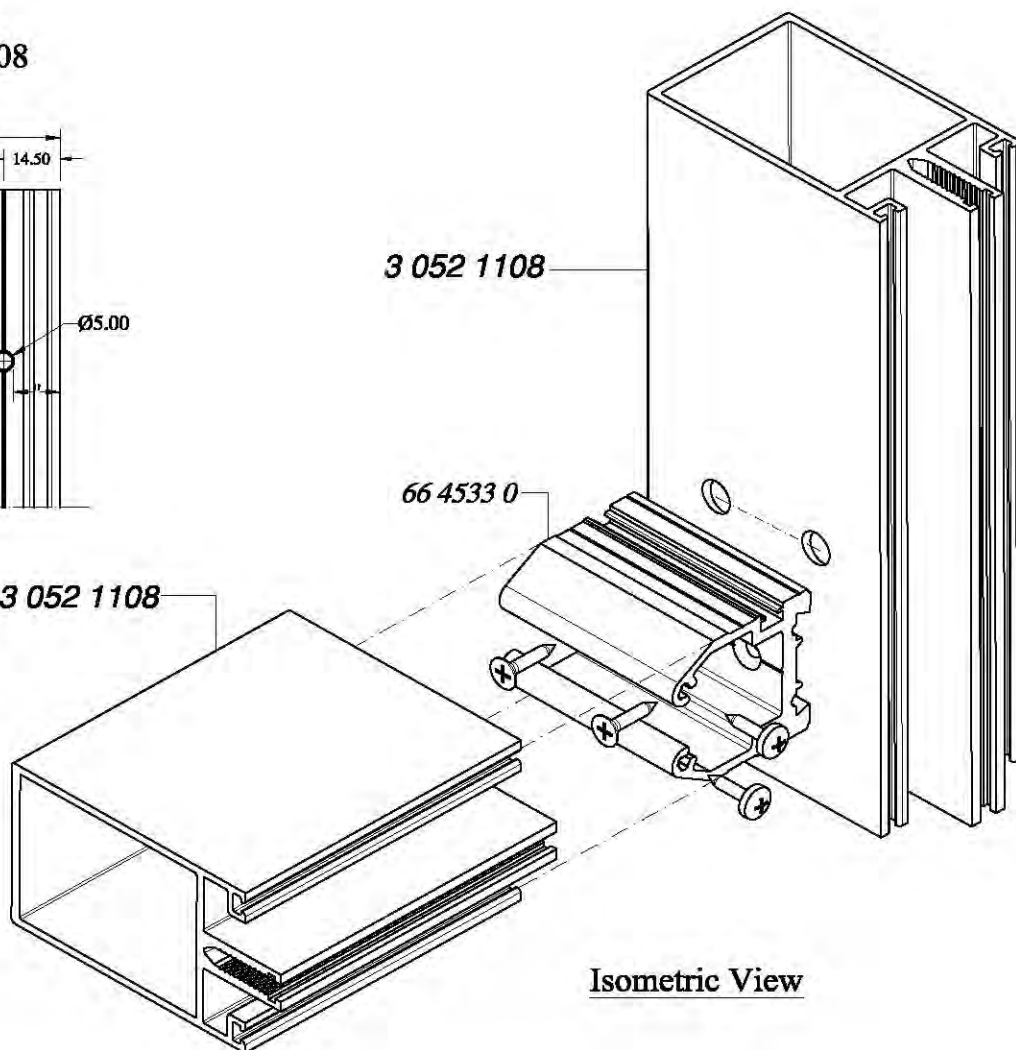
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3 052 1108

66 4533 0

3 052 1108



Isometric View



Transom Joint

ART NO. 66 4536 0

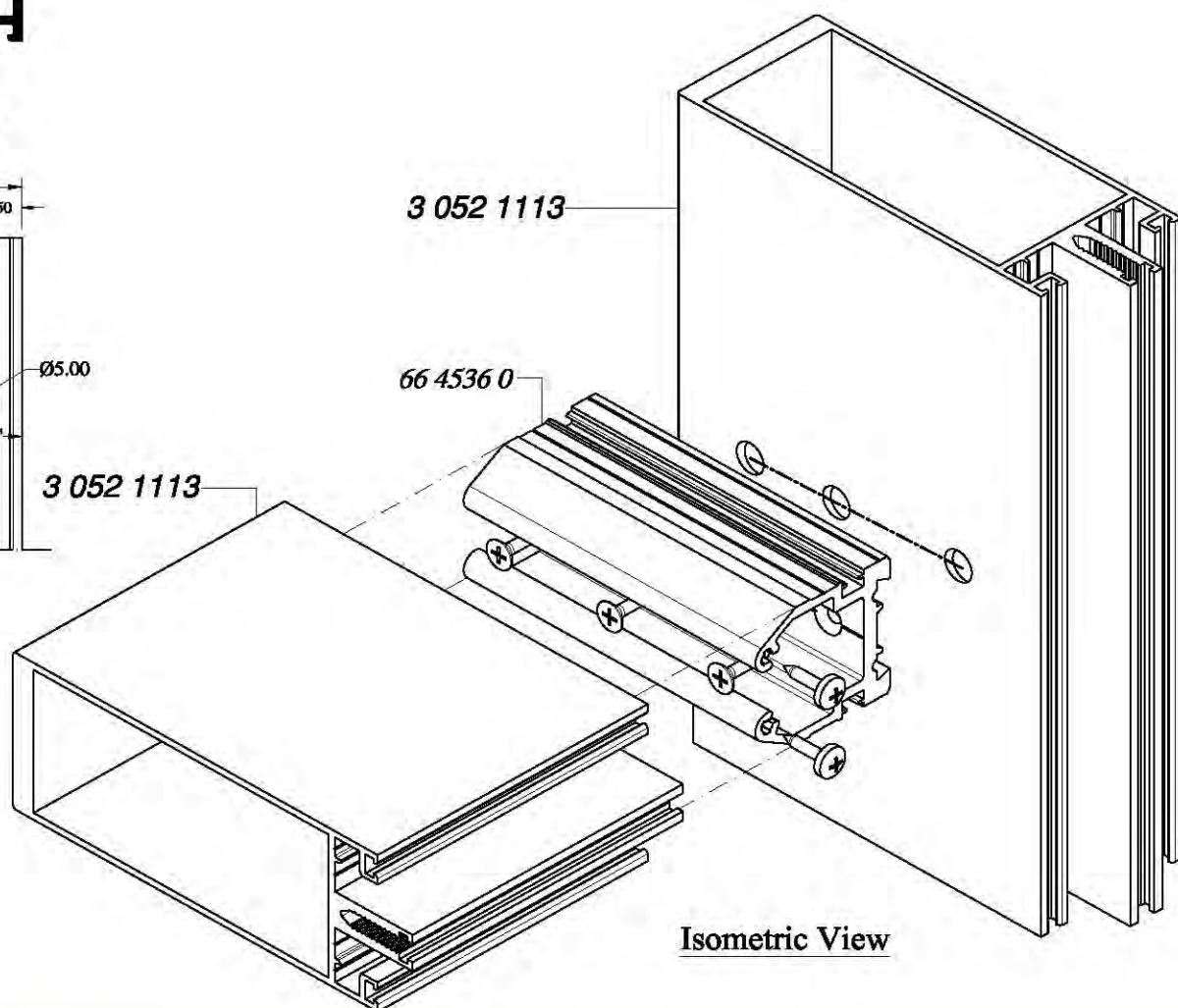
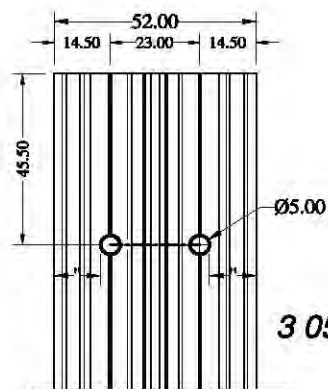
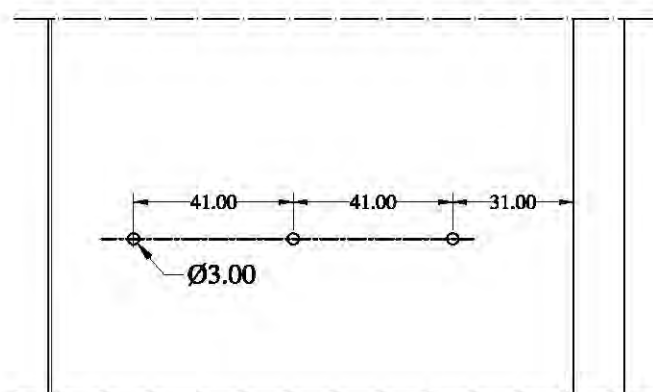
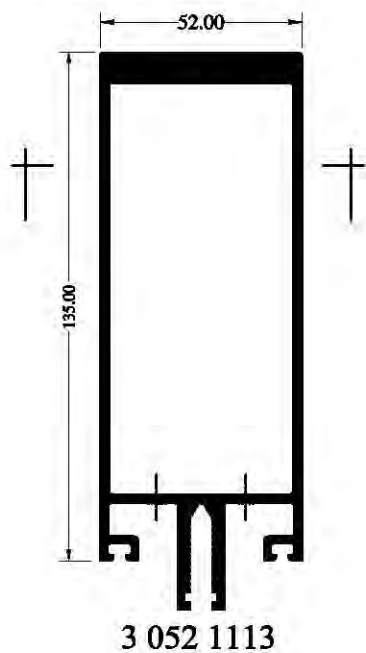
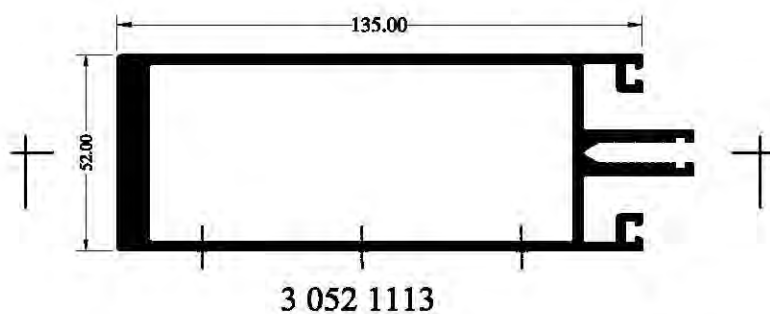
Applied With

3 052 1113

3 052 1121

3 052 1213

3 052 1218





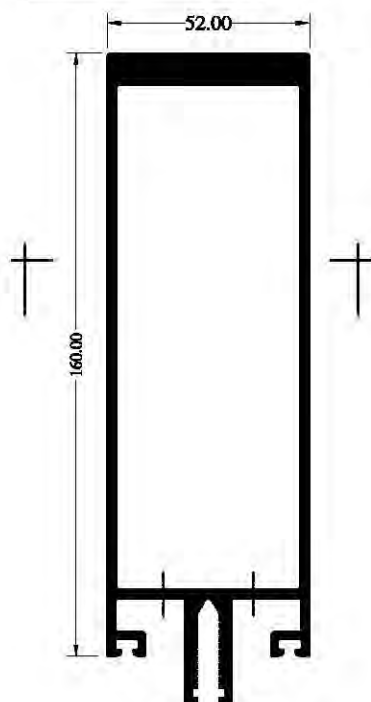
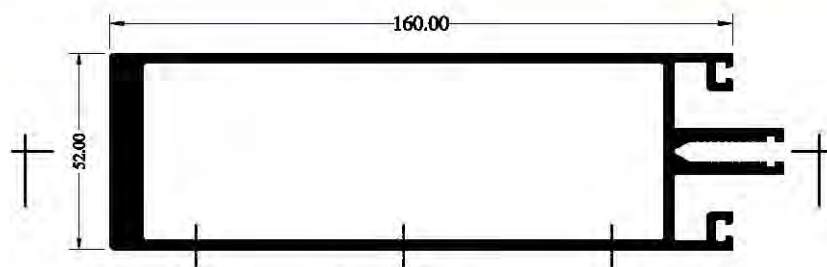
Transom Joint

ART NO. 66 4537 0

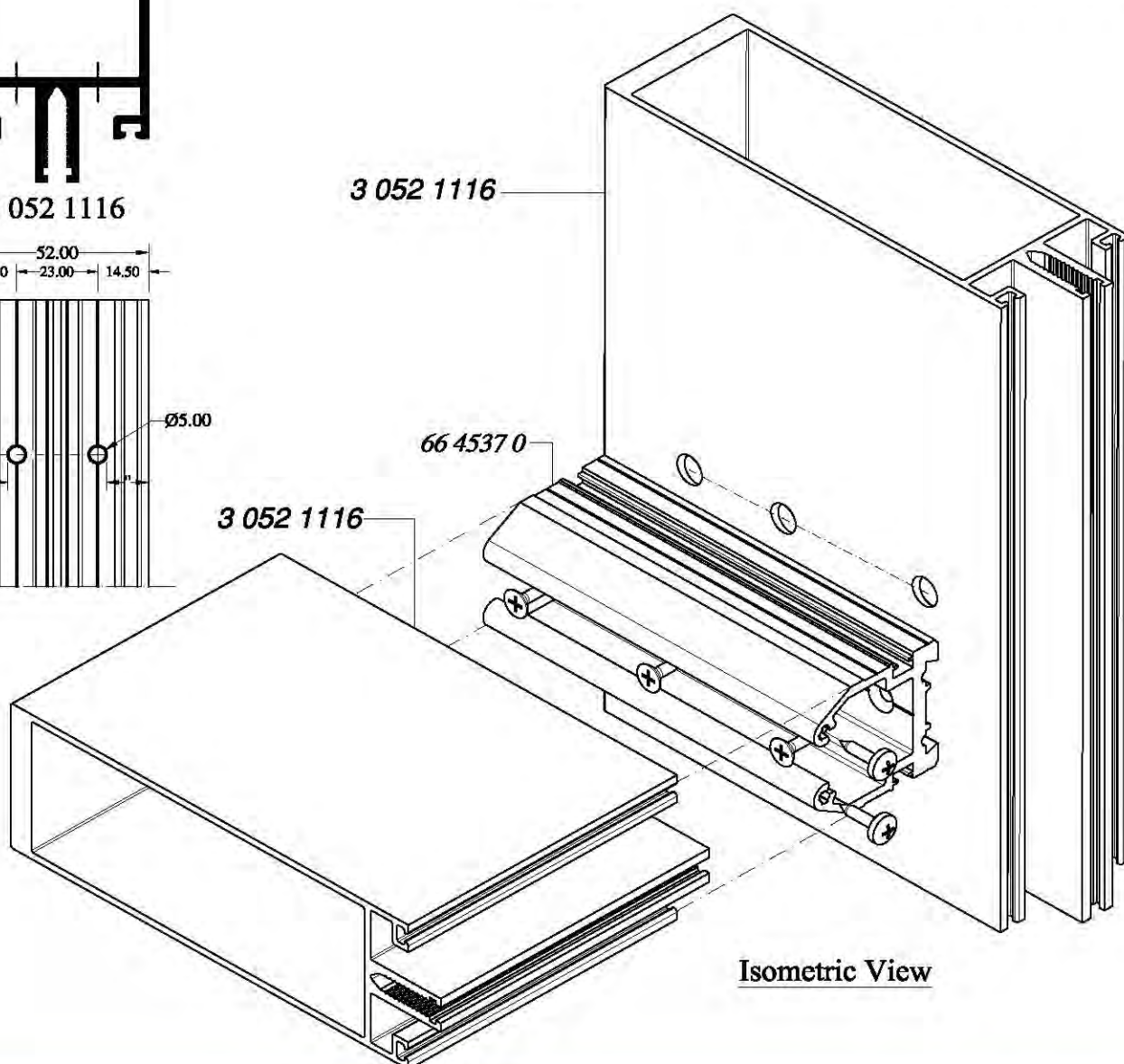
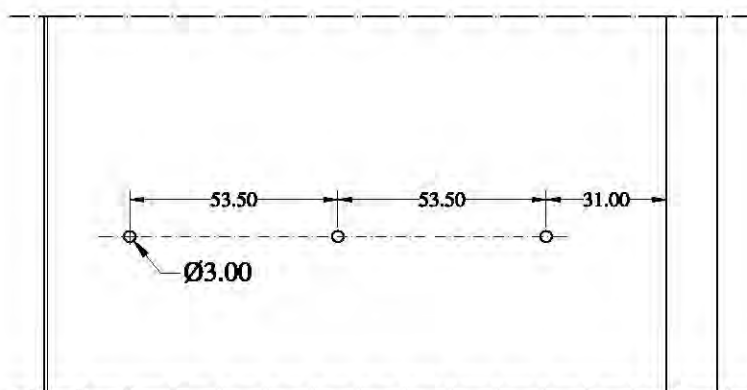
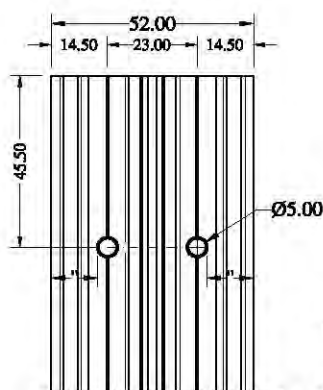
Applied With

3 052 1116

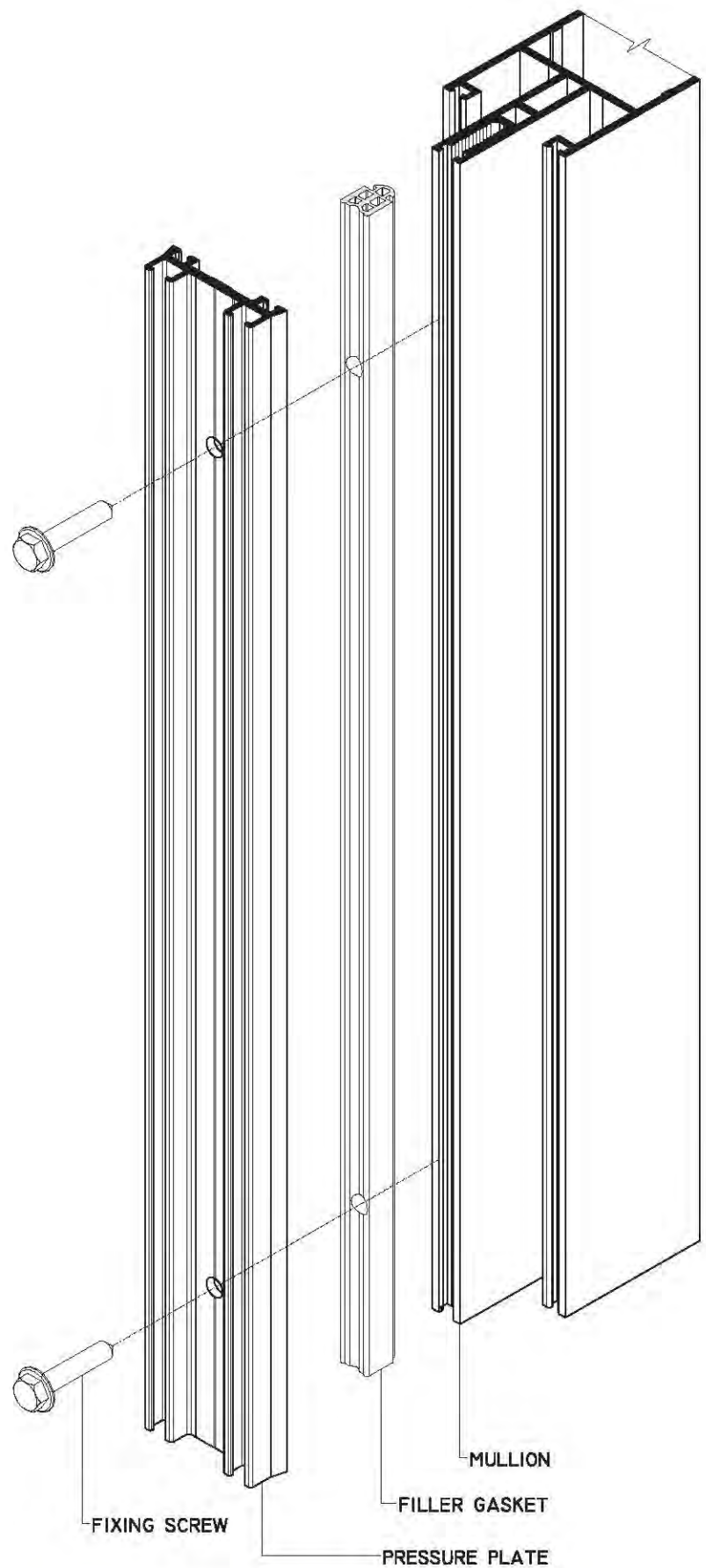
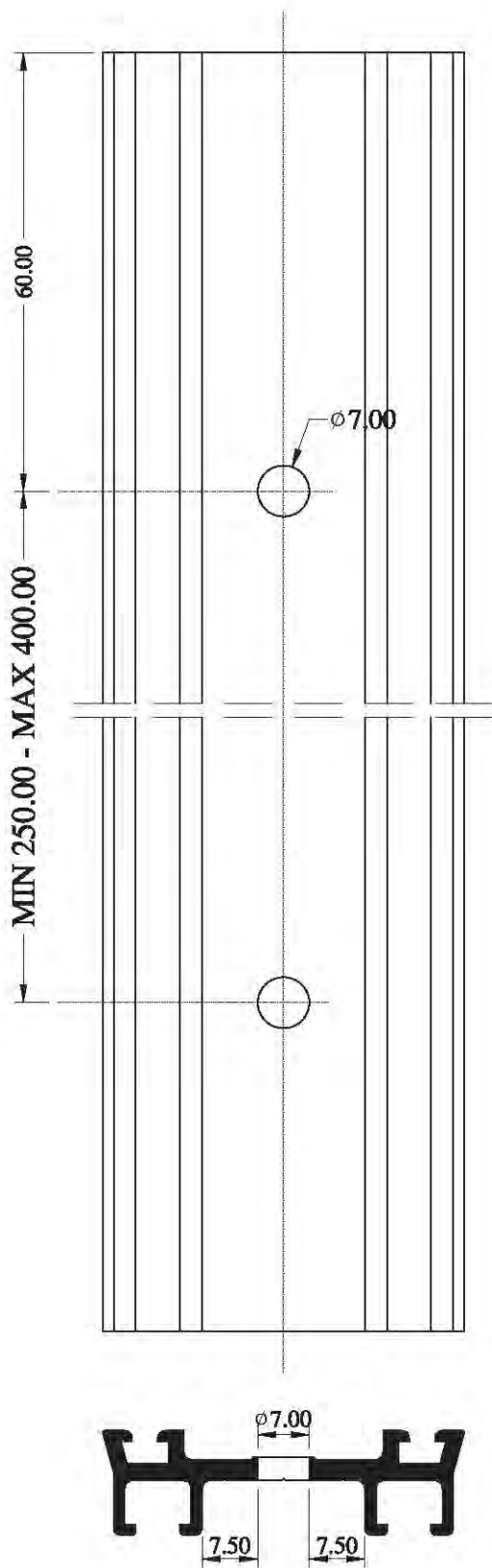
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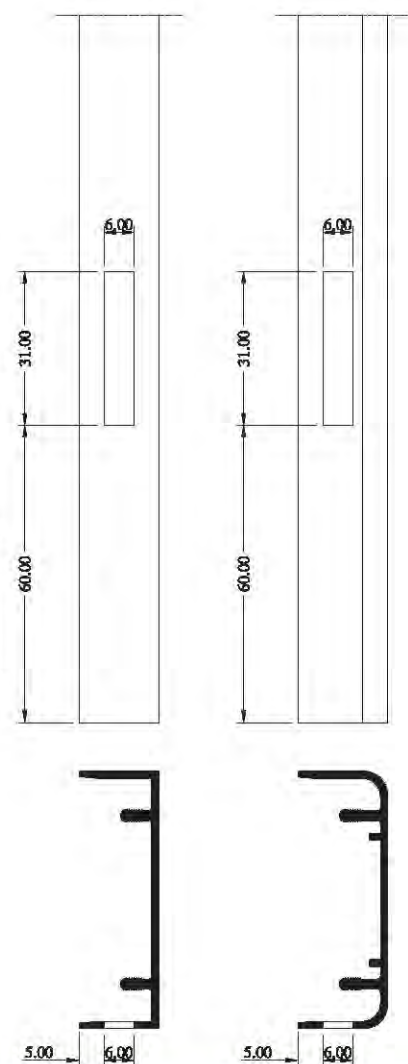
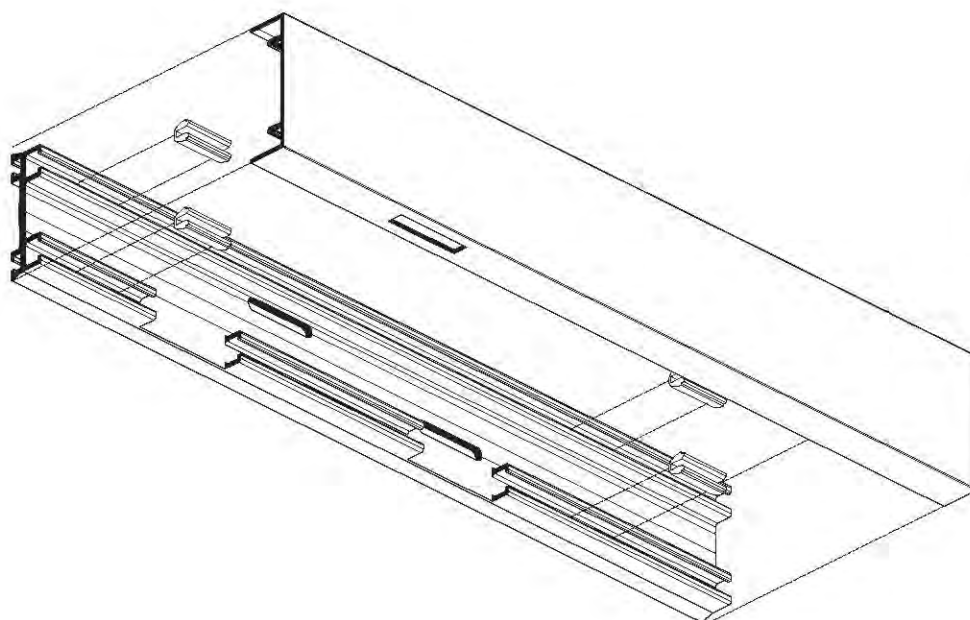
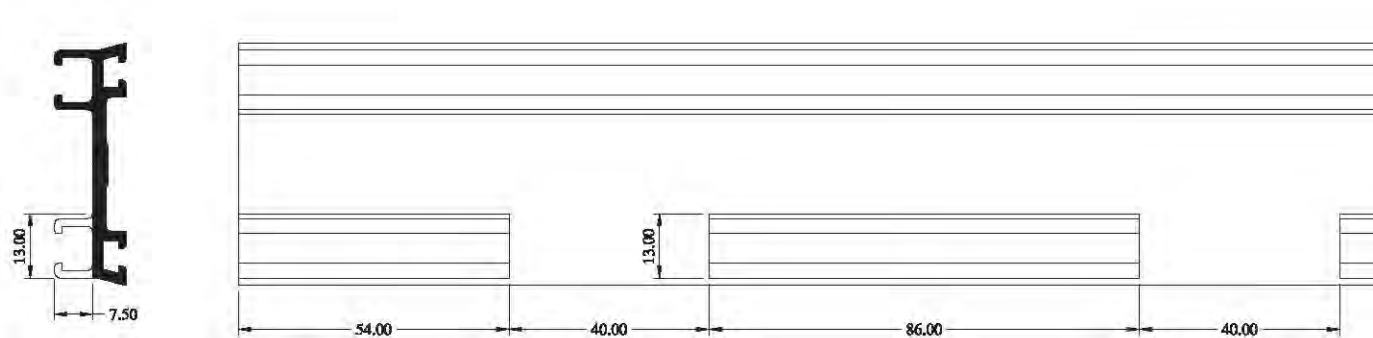
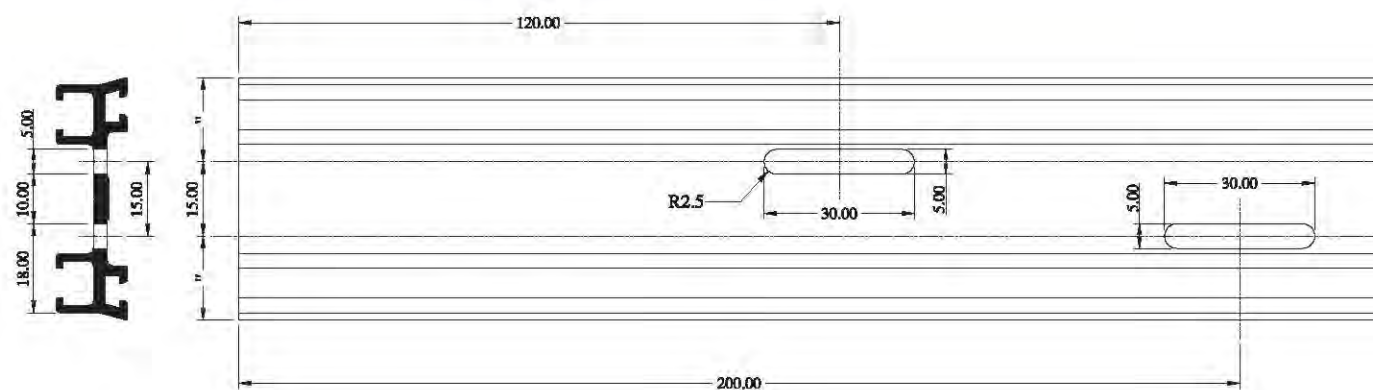


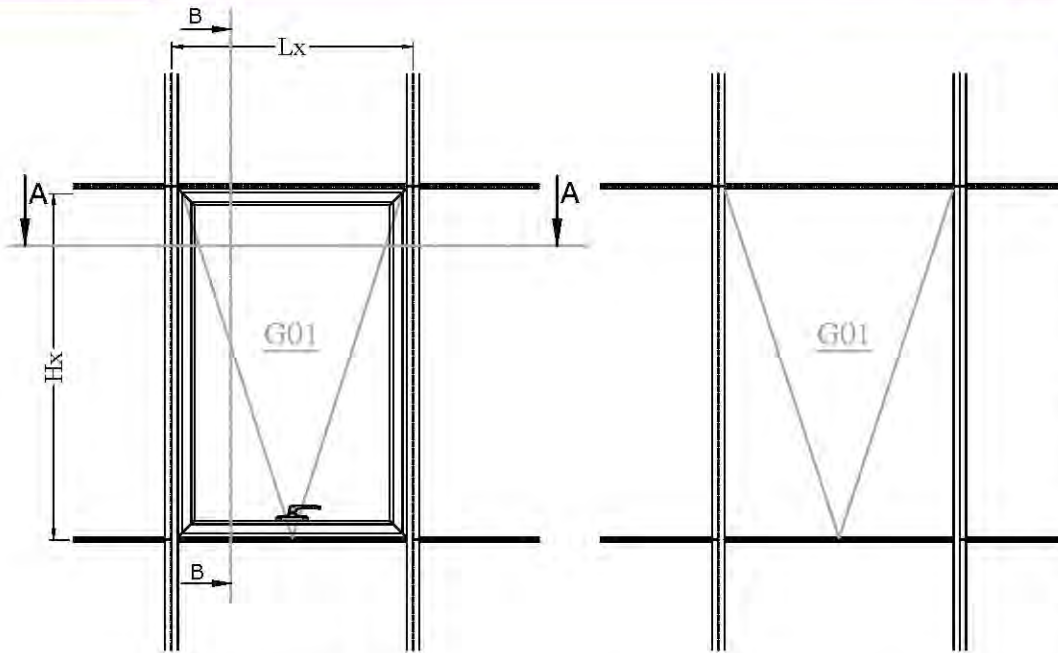
3 052 1116



Isometric View

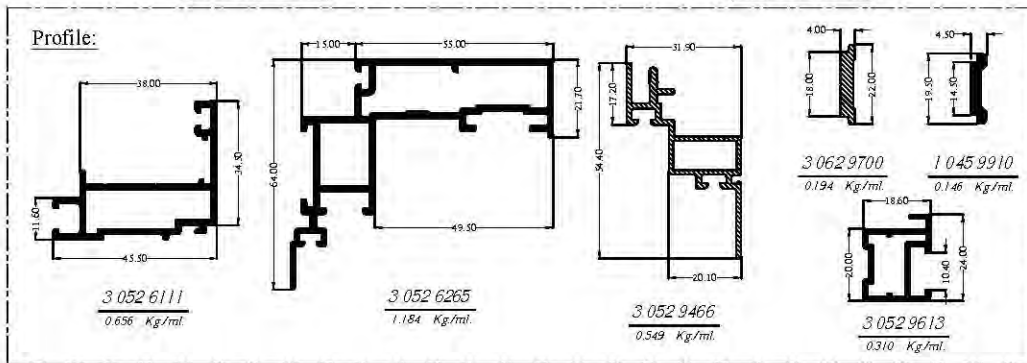




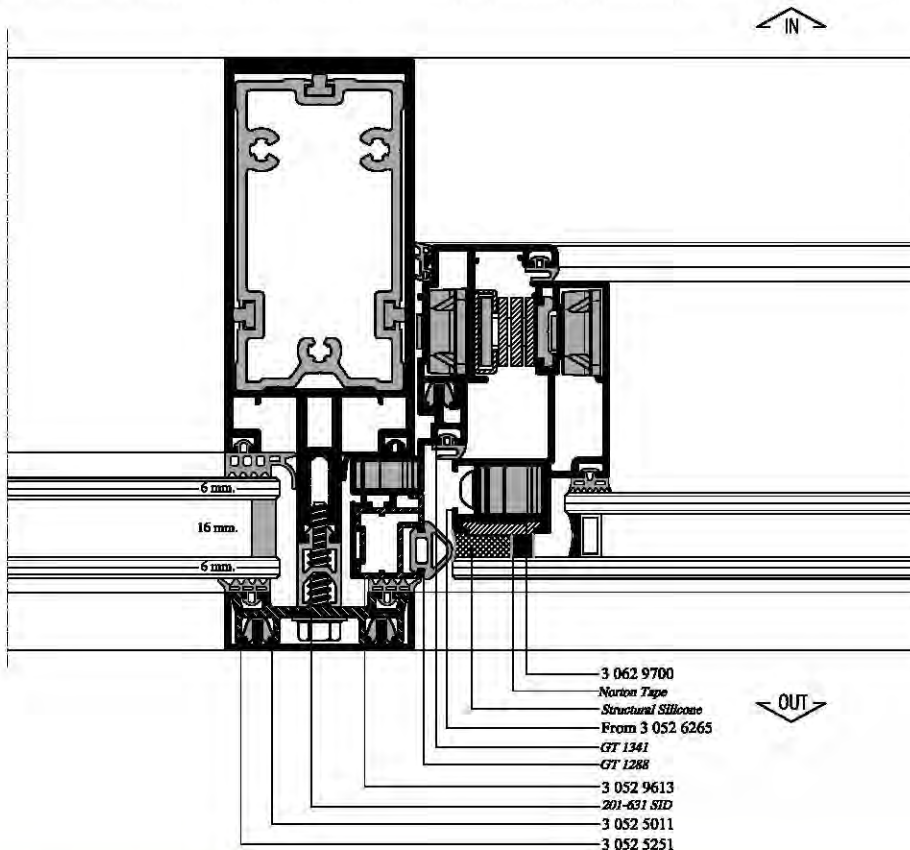


ELEVATION {INSIDE VIEW}
SCALE 1:15

ELEVATION {OUTSIDE VIEW}
SCALE 1:15



ACCESSORIES LIST			
FIGURE	ACC. NO	QTY.	DESCRIPTION
	01 4240 0	8	Corner Joint
	01 1043 0	4	Connecting Angle
	01 1041 0	4	Connecting Angle
	01 1041 0	1	Friction Stay Arm MAG-23FHJ-20"/T-16.5
	30 12 00 1	1	Cremone Handle
	66 8529 0	2	Locking Point Striker
	50 1180 0	2	Locking Point
	60 0500 0	$\frac{2Lx+2Hx}{250}$	Clip
	RG 1294	2Hx	Inset Filler Adeptor
	GT 1278	2Lx+2Hx	Glazing Gasket
	GT 1274	4Hx	Glazing Gasket
	GT 1270	2Lx+2Hx	Glazing Gasket
	GT 1268	2Hx	Glazing Gasket
	GT 1334	2Lx	Striker Gasket
	GT 1374	2Lx+2Hx	Glazing Gasket
	GT 1341	4Lx+4Hx	Striker Gasket
	GT 1343	2Lx+2Hx	Striker Gasket
	GT 1285	2Lx	Striker Gasket





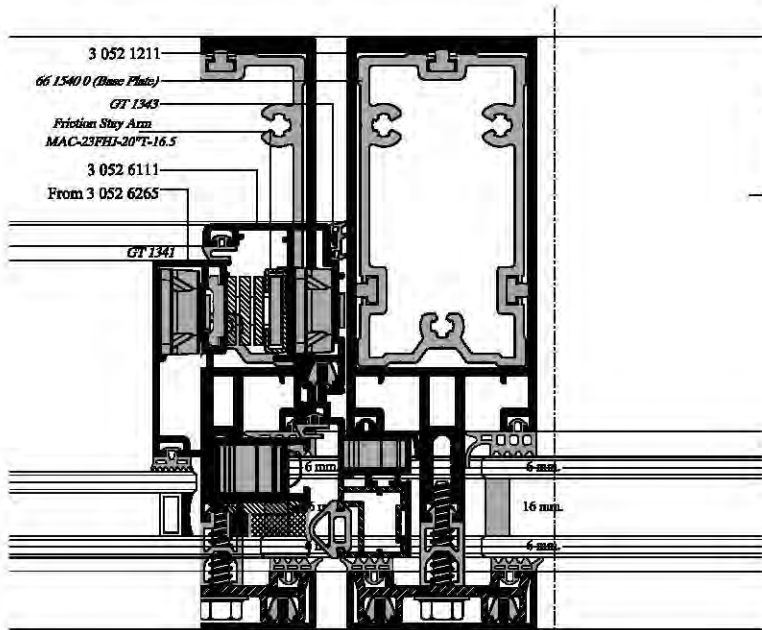
GLASS CUTTING LIST			
FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	3 052 6111	2	Lx - 54
		2	Hx - 54
	3 052 9466	2	Lx - 17
		2	Hx - 17
	3 052 6265	2	Lx - 31
		2	Hx - 31
	3 062 9700	2	Lx - 78
		2	Hx - 78
	3 052 9613	1	Hx - 20

GLASS CUTTING LIST			
FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	Outer layer For Moving Panel For (G01)	1	Lx - 73
			Hx - 31
	Inner layer For Moving Panel For (G01)	2	Lx - 135
		2	Hx - 135

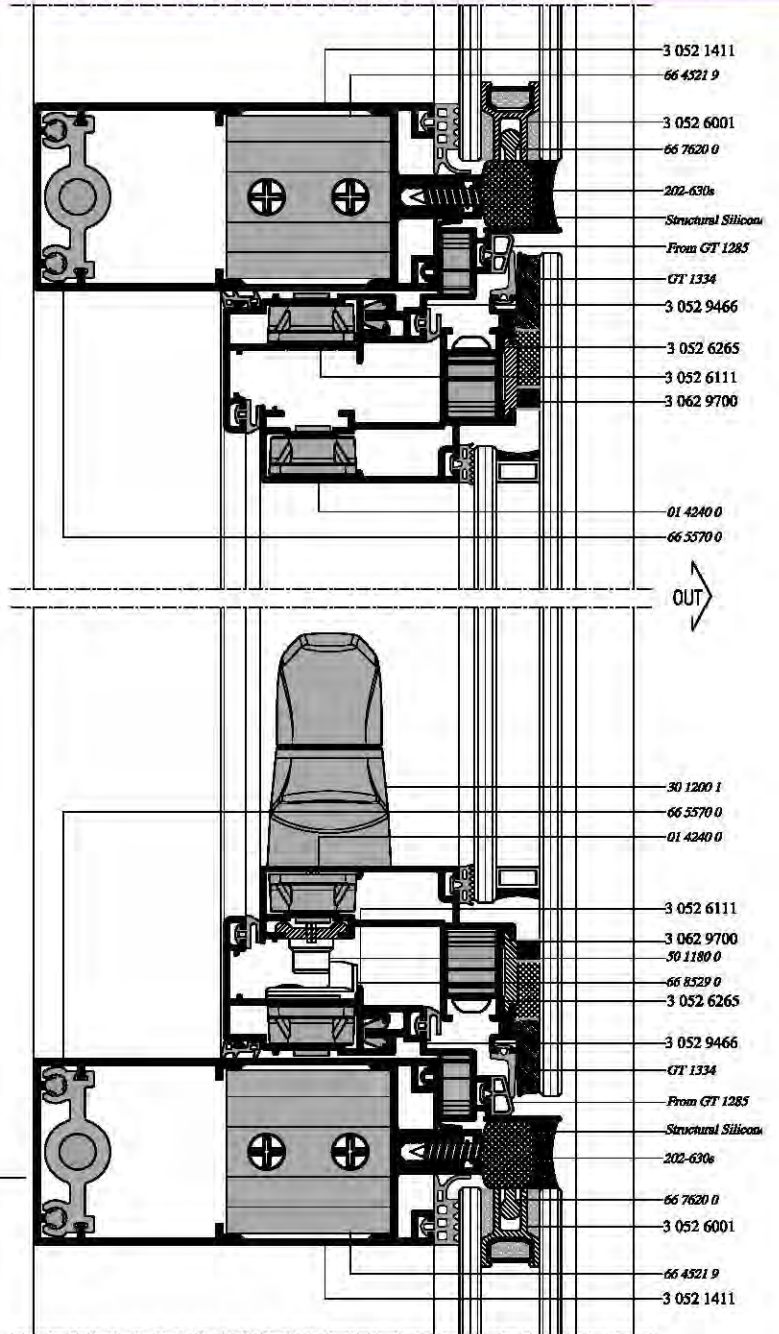
ALL DIMENSIONS IN mm.

IN

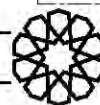
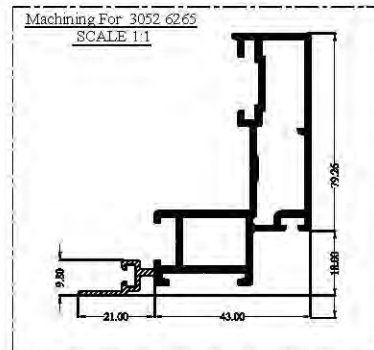
OUT



SECTION A-A



SECTION A-A



MACHINES & ALUMINIUM CENTER.

CW52 Panorama 52 System

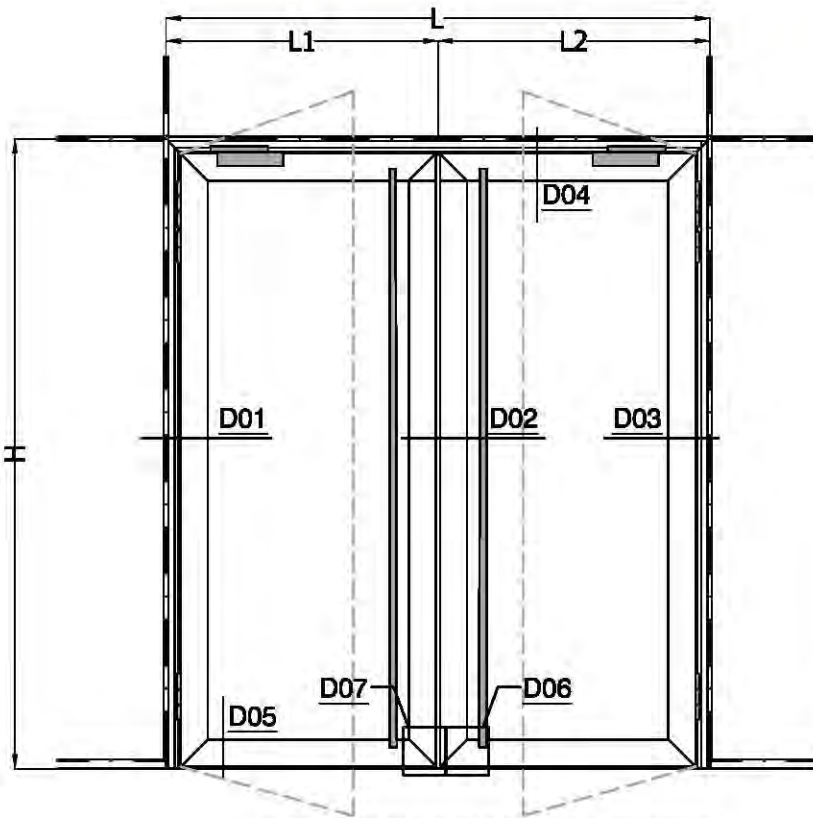
I TOP HUNG WINDOW LEAF

09/2020

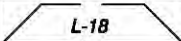
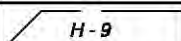
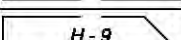
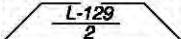
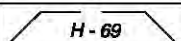
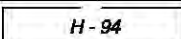
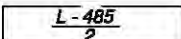
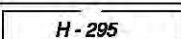
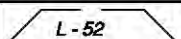
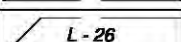
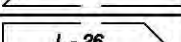
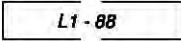
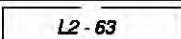
ELEVATION & DETAILS

SCALE:1:1

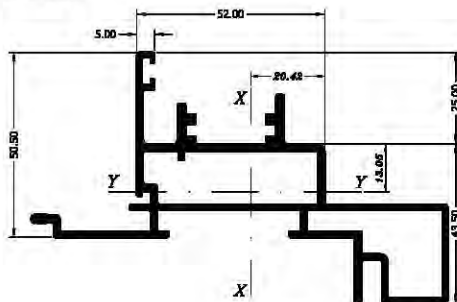
C 01



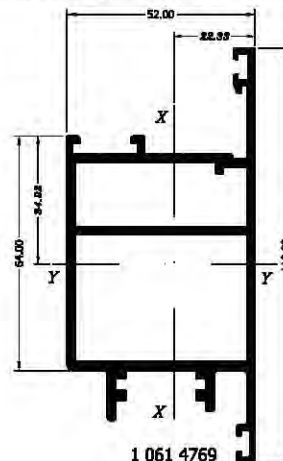
OPTION3-ELEVATION VIEW (OUTSIDE VIEW)
SCALE 1:15

PROFILES CUTTING LIST			
FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	1 045 3619	1	
		1	
		1	
	1 061 4769	4	
		4	
	1 045 9630	1	
	1 061 6192	4	
		4	
	9 005 1400	1	
		1	
		1	
	1 045 9440	1	
		1	
Double Glass "24mm"	Outer layer For Moving Panel	2	
			
ALL DIMENSIONS IN mm.			

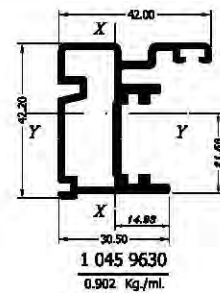
Profiles
SCALE 1:1



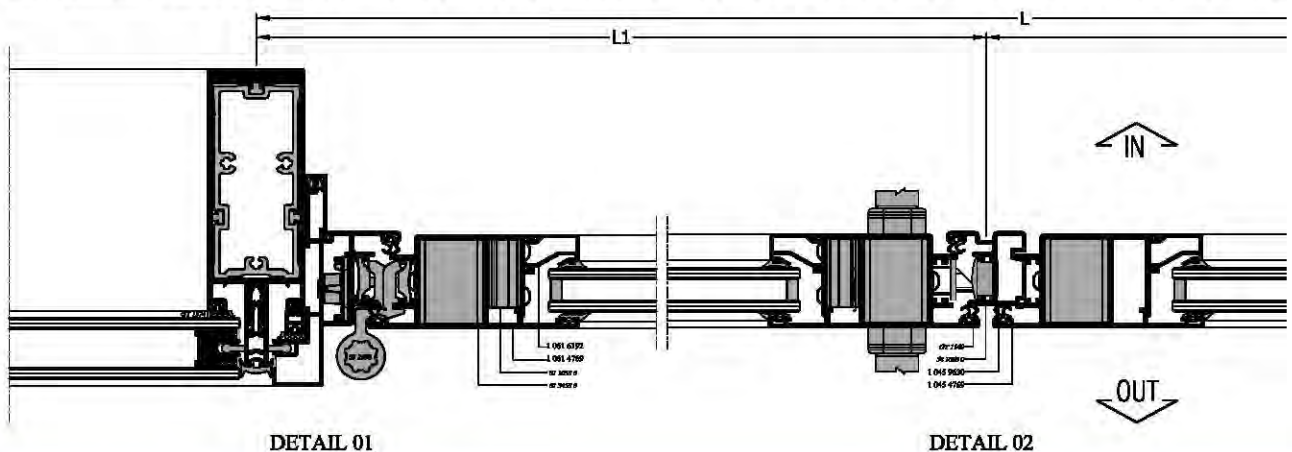
1 045 3619
1.835 Kg./ml.



1 061 4769
2.257 Kg./ml.

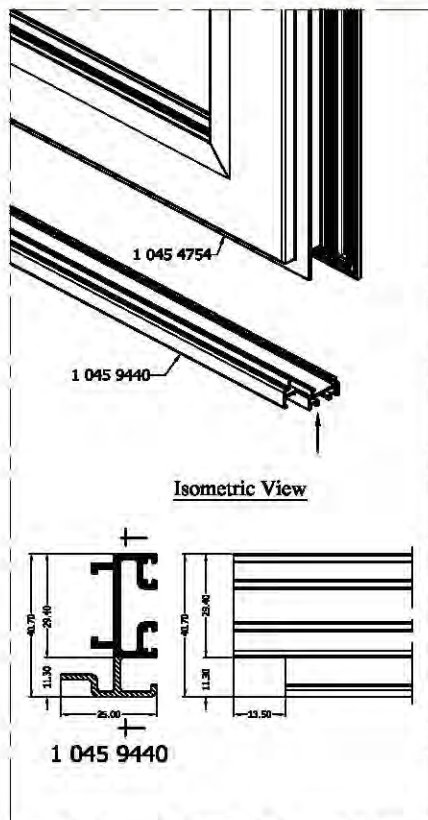


1 045 9630
0.902 Kg./ml.

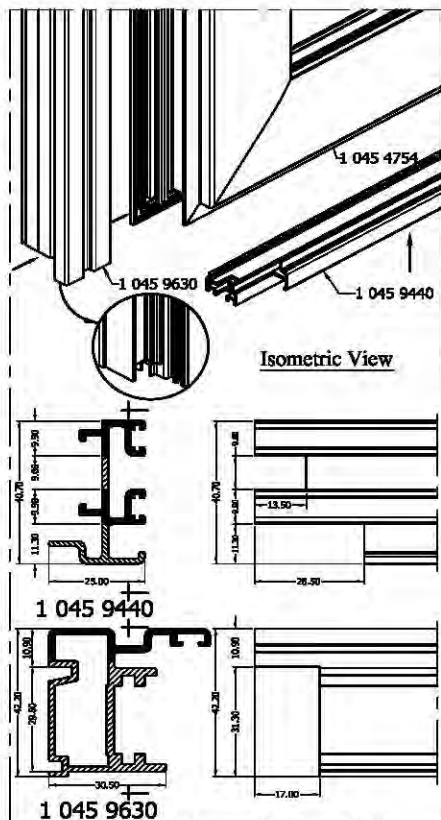


DETAIL 01

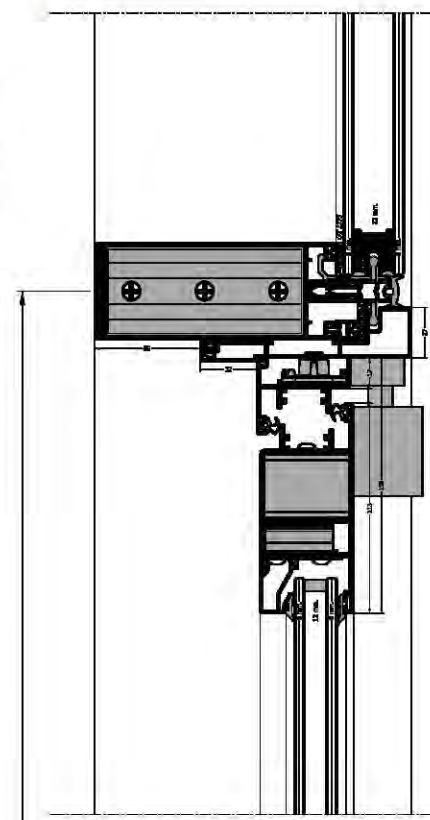
DETAIL 02



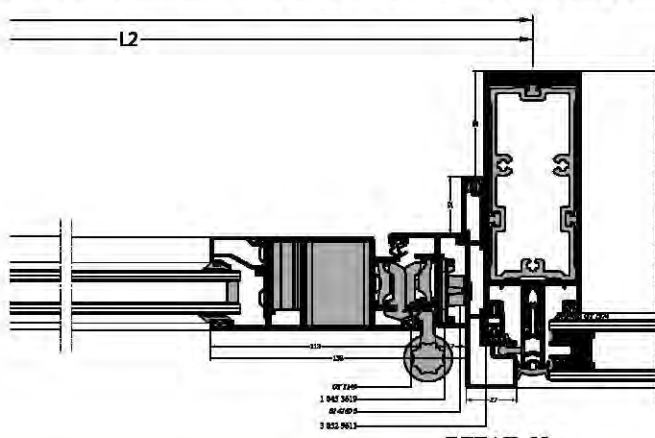
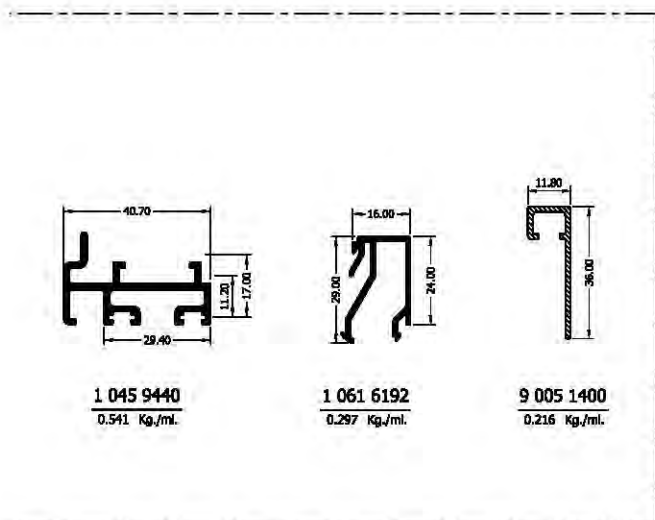
DETAIL 07



DETAIL 06



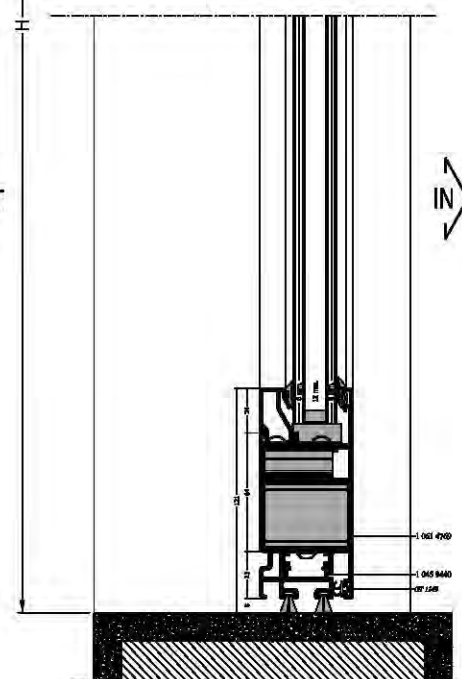
DETAIL 04



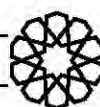
DETAIL 03

OUT

IN



DETAIL 05



MACHINES & ALUMINIUM CENTER.

CW52 Panorama 52 SYSTEM

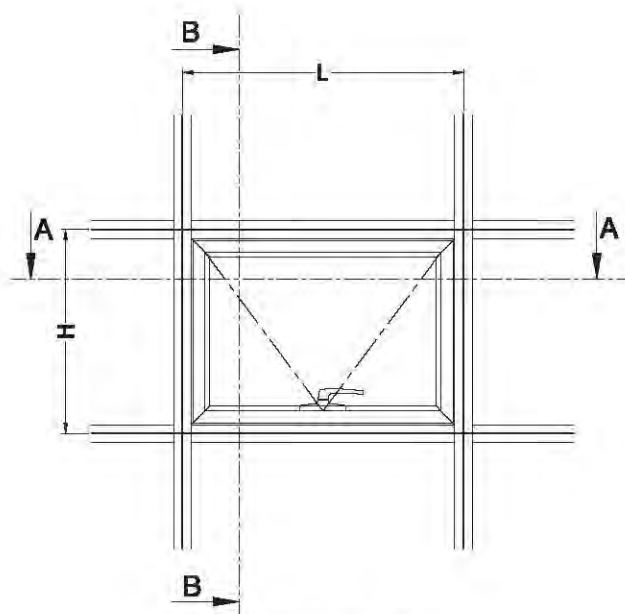
2 HINGED DOOR LEAVES

09/2019

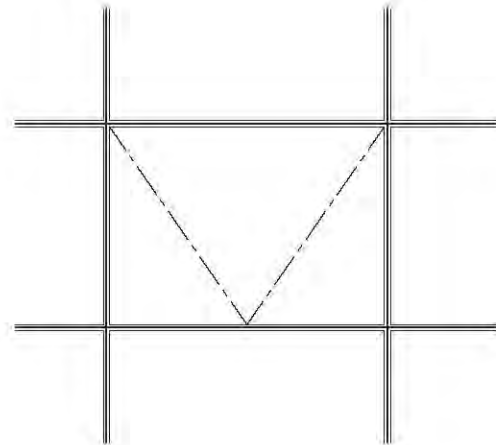
ELEVATION , PROFILES & DETAILS

SCALE 1:1

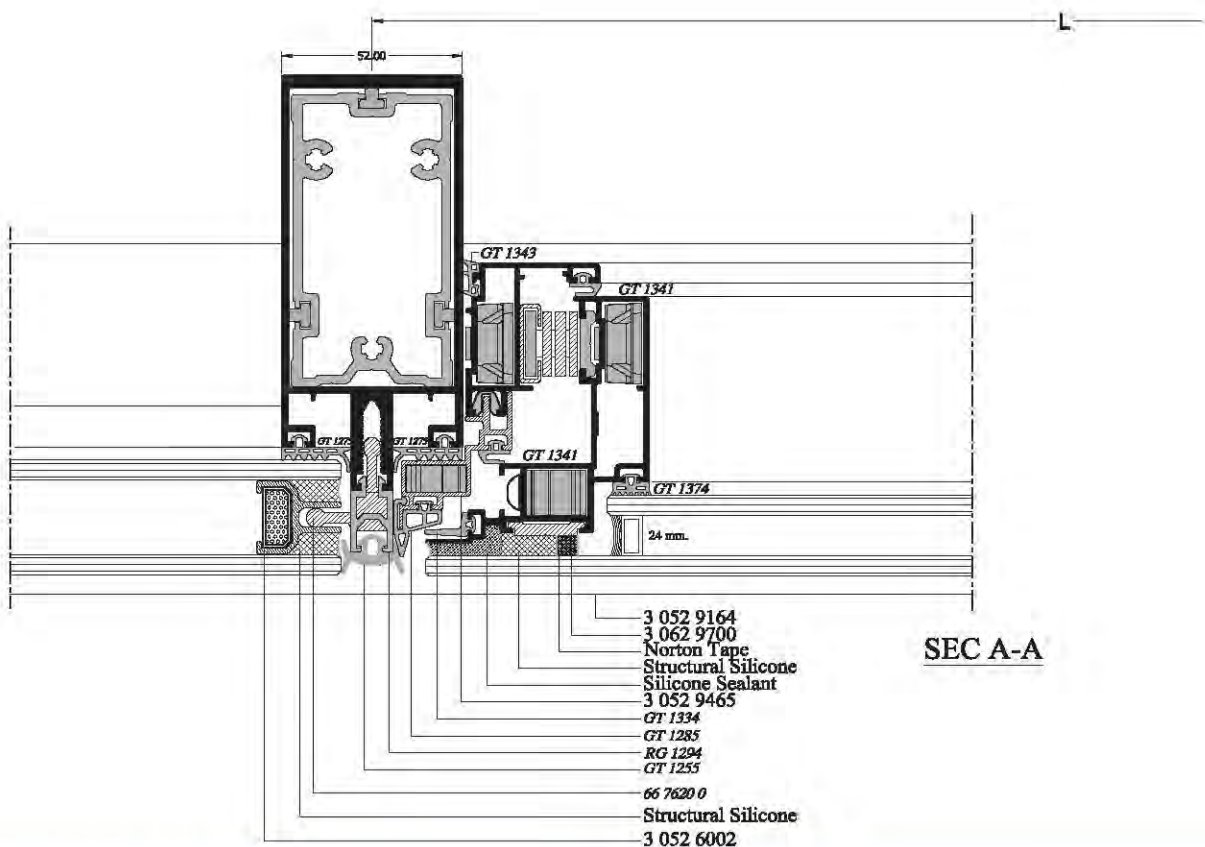
A 01



**ELEVATION
INSIDE VIEW**
Scale 1:10



**ELEVATION
OUTSIDE VIEW**
Scale 1:10

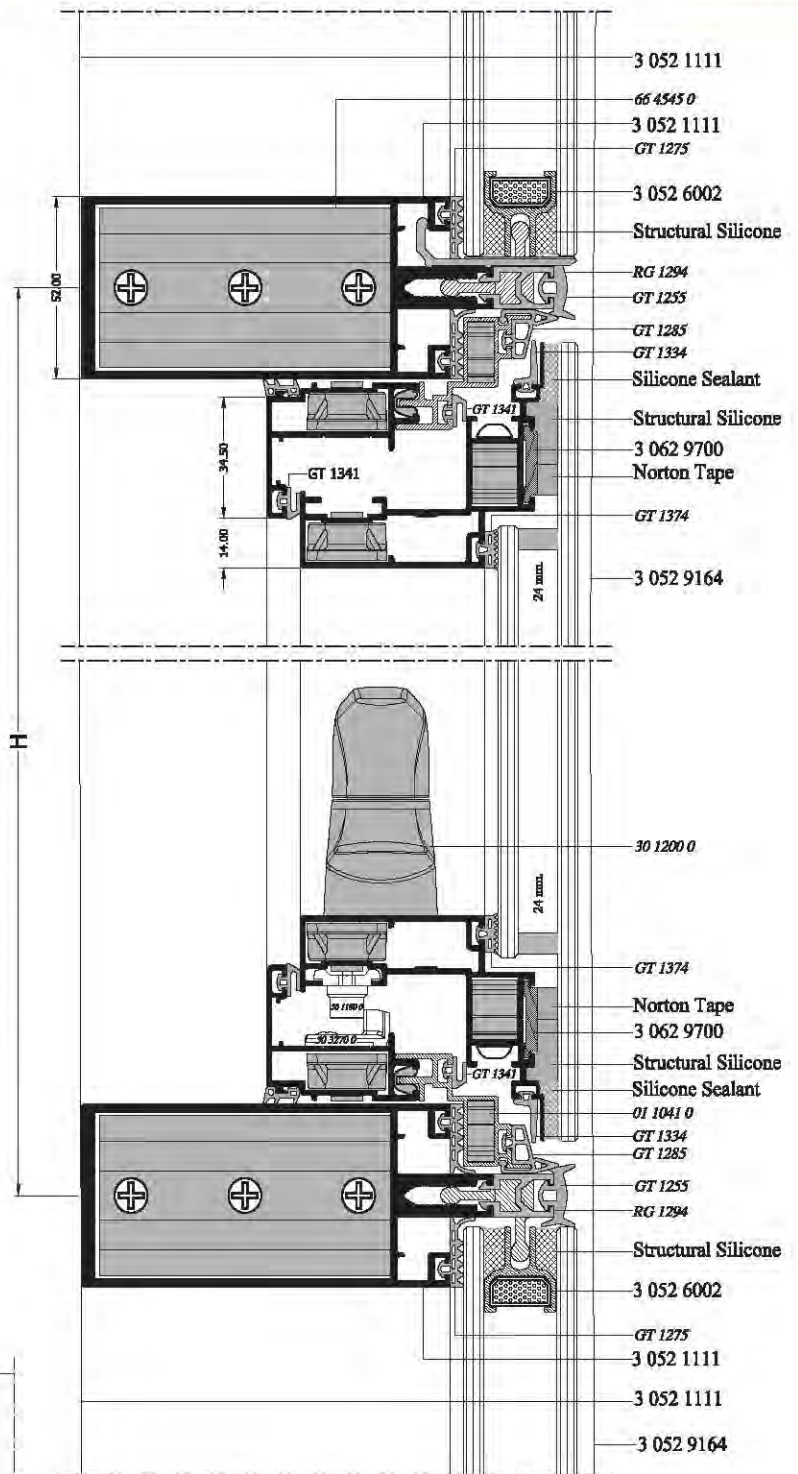
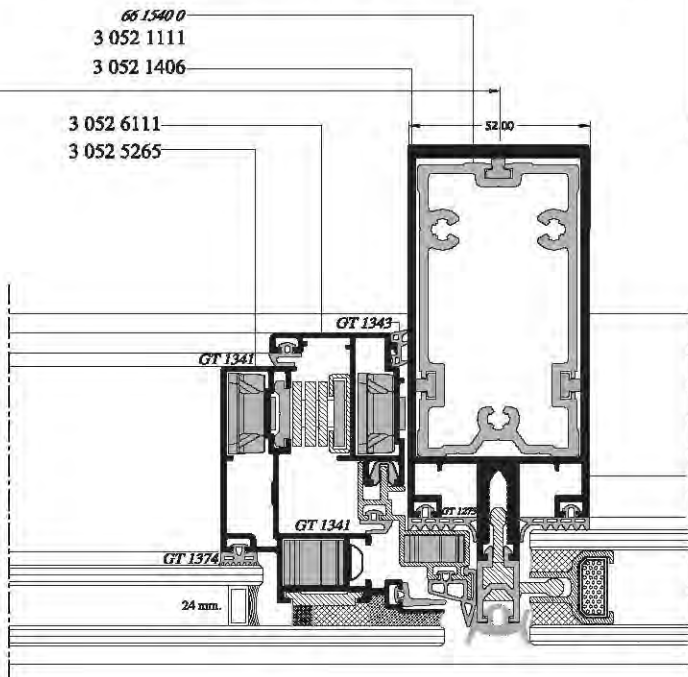




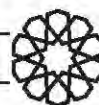
PROFILES CUTTING LIST

FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	3 052 6111	2	L-54
		2	H-54
	3 052 5265	2	L-31
		2	H-31
	3 052 9465	2	L-16
		2	H-16
	3 062 9700	2	L-78
		2	H-78
Double Glass "24mm"	Outer layer For Moving Panel	1	L - 31
			H - 31
	inner layer For Moving Panel	1	L - 135
			H - 135

ALL DIMENSIONS IN mm.



SEC B-B



MACHINES & ALUMINIUM CENTER.

CW52 TENDU SLIDING SYSTEM

PANORAMA 52 SYSTEM

09/2020

CUTTING LIST

SCALE:1:2

D 03

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A decorative graphic in the bottom right corner consisting of several overlapping, irregular purple outlines that form a complex, geometric pattern resembling a stylized honeycomb or molecular structure.