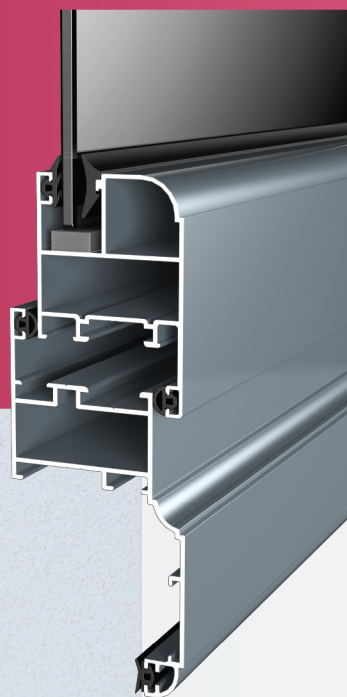




Machines & Aluminium Center
مركز ماكينات ومستلزمات الألومنيوم

VOLTA 40

Hinged System Catalogue



2026

Ver.06

MACHINES AND ALUMINUM 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.



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The profiles shown in this catalogue are patented.

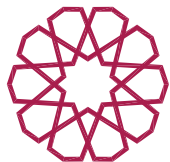
The items shown are the exclusive property of **MACHINES & ALUMINIUM CENTER** and may not be even partially reproduced without **MACHINES & ALUMINIUM CENTER** authorization.

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

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Materials

Aluminium Profiles:

All aluminium profiles are made of EN AW 6063 alloy in accordance with EN 755-1 or EN 12020-1, condition T5, T6. The alloy is resistant to corrosion and permits the production of high precision profiles according to EN 755-9.

Gaskets:

All rubber gaskets profiles are produced from ethylene-propylene rubber (EPDM) are used to seal infill units, window middle part in a hardness that suit its applications, ensuring condensate removal and frame-sash connection.

Accessories:

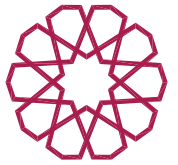
All systems are designed to use most of standard hardware. The hardware should be selected according to the minimum requirements mentioned in the system catalog.

Fixing elements:

All the connectors and fasteners used for profiles, accessories and hardware connection should be made from galvanized steel or stainless steel.

Surface treatment:

All exposed surfaces of the aluminium profiles is treated either by anodizing treatment (QUALANOD certified anodizing) or by electrostatic powder coating to meet international standards (QUALICOAT certified powder coating).



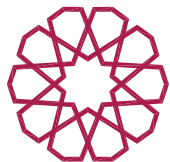
Technical Features

- In all systems there are varieties available in types and dimensions.
- Tolerances in weights & dimensions are according to standard EN 755-9, EN 12020-2 or ANSI H35.2-5.
- The profiles provide a large range of infill types and measures, due to the availability of different profile types and a wide range of gaskets sizes.
- Glazing gaskets inside and outside of E.P.D.M. all-around, gasket profiles visually are in the same level inside and outside to enhance the gasket visibility.
- General compatibility of profiles, accessories and gaskets to hence fewer system accessories and reduced warehouse inventory.
- Charts are available for each system and its profiles indicate allowable panel /sash sizes and the right profile regarding the effective moment of inertia, wind load and window's type to guarantee resistance avoiding any deformation greater than allowable deflection 1/200 of window span according to European Standard hEN 14351-1

under load 500 Pascal up to 1000 Pascal, and up to 2000 Pascal for curtain wall according to EN 13830, charts are available also if requested with deflection (1/175 max 19mm.) of window/façade span according to American Standard) AAMA/WDMA/CSA 101/I.S.2.

- Water resistance is confirmed to International standards, water tightness performance varies according to window type and system design with no water penetration under pressure up to 600 Pascal for sliding types, and not less than 900 Pascal for hinged window types and façade types.

- Air permeability performance varies according to window type and system design, air permeability at pressure 100 Pascal is not greater than 2.25 cubic meter per hour per meter length of opening joint for sliding systems, and not greater than 0.75 cubic meter per hour of opening joint for hinged window types and not greater than 1.5 cubic meter per hour for each square meter of façade types.



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

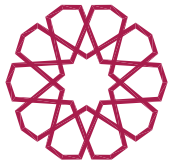
pretreatment and the use of enhanced chemical pretreatment process, with high etching degree, in accordance to QUALICOAT specifications, as well as a full control on the painting processes and polymerization during the whole surface treatment procedure. Therefore, through a unique blending system, stringent 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.

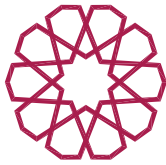
Standard Durable Class 1: Up to 10 years

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 2023 Specifications, applicable from 1 January 2023

Licence No.: 1609

Date of Granting: 06.05.2021

Valid until: 31.12.2023

Zurich, 1 January 2023

QUALICOAT

Ivo Vermeeren
President



Pascale Bellot
Secretary General

QUALICOAT | Tödistrasse 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.
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.

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



Issued on behalf of InterCert
Head - Certifications

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CERTIFICATE OF REGISTRATION

INTERCERT hereby certifies that the Occupational Health & Safety 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.

Has been successfully assessed as per the requirements of

ISO 45001:2018

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

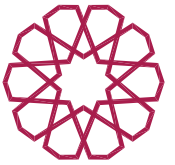
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Registration Number: IC-OS-2106053



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Interpon.
POWDER COATINGS

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
12th October 2022 to 11th October 2023

Approved for Aluminium Alloys: AA6060

Approved for Pre-treatment Type: Chrome

Wael Mahmoud
AKZO NOBEL
Powder Coatings SAE
Industrial Zone No.4
6th of October City, Egypt
Tel: +2028331415 - 8335028
Fax: +20235330368

Wael Mahmoud
Sales and Marketing Manager
North Africa & Levant

12/10/2022

AkzoNobel Industrial Paints

Interpon.
POWDER COATINGS

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
12th October 2022 to 11th October 2023

Approved for Aluminium Alloys: AA6060

Approved for Pre-treatment Type: Chrome

Wael Mahmoud
AKZO NOBEL
Powder Coatings SAE
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6th of October City, Egypt
Tel: +2028331415 - 8335028
Fax: +20235330368

Wael Mahmoud
Sales and Marketing Manager
North Africa & Levant

12/10/2022

AkzoNobel Industrial Paints

JOTUN

*Certificate
of Approval*

**Machines & Aluminium Center
(ALWAN)**

is certified as an Approved Applicator to coat
Jotun SuperDurable
a product from Jotun Powder Coatings

This Company fulfils the requirements set by Jotun Powder Coatings for pre-treatment and application of powder coatings. These include having the necessary equipment, process controls and technical knowledge to comply with Jotun Powder Coatings' standards.



December 31, 2025
(Certificate valid until above date)

m. Rosta
Authorised Signatory
Jotun Powder Coatings UAE (LLC)

JOTUN

*Certificate
of Approval*

**Machines & Aluminium Center
(ALWAN)**

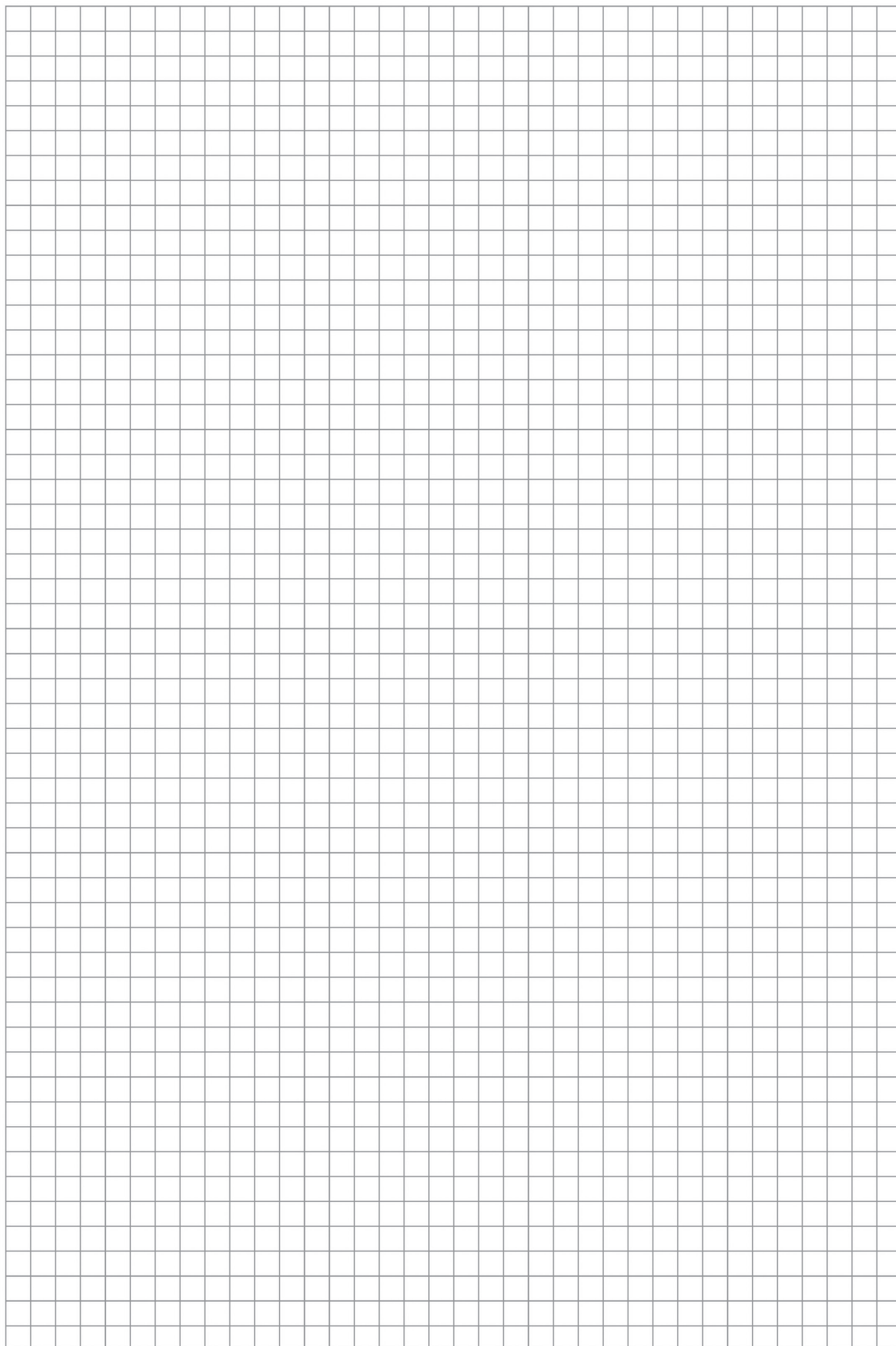
is certified as an Approved Applicator to coat
Jotun Facade
a product from Jotun Powder Coatings

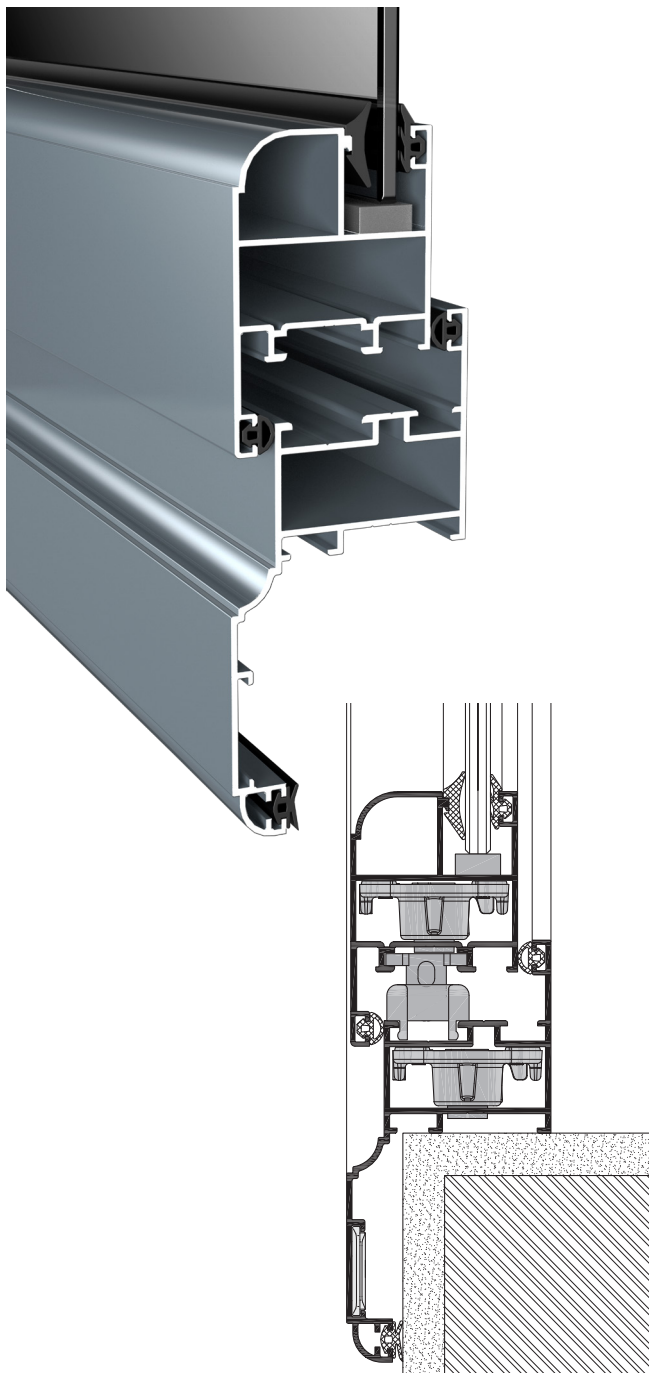
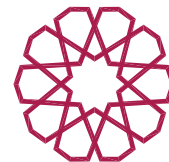
This Company fulfils the requirements set by Jotun Powder Coatings for pre-treatment and application of powder coatings. These include having the necessary equipment, process controls and technical knowledge to comply with Jotun Powder Coatings' standards.



December 31, 2023
(Certificate valid until above date)

m. Rosta
Authorised Signatory
Jotun Powder Coatings UAE (LLC)





**Complies with European norm
hEN 1435-1**

Air Permeability	(Class 4) up to 600 pa.
Water Tightness	(Class E1050) up to 1050 pa.
Resistance to wind load	(Class C4) up to 1600 pa.

- Ideal solution for small to medium openings for economic residential buildings.
- The system is available in inward and outward opening windows and doors.
- Same profile can be used as frame or sash (optional).
- Offers an extensive range of profiles for the construction of elegant and moderately priced aluminium frames in functional style.
- Allows the fabrication, production and easy assembly of windows and doors in less time.

Technical Characteristics

Frame depth

40 mm. to 64 mm.

Frame Height

46 mm. to 110 mm.

Sash Depth

40 mm. to 48 mm.

Sash Height

65 mm. to 75 mm.

Max Glass Thickness

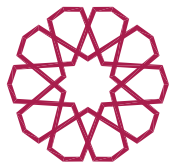
Up to 18 mm.

Max Sash Weight

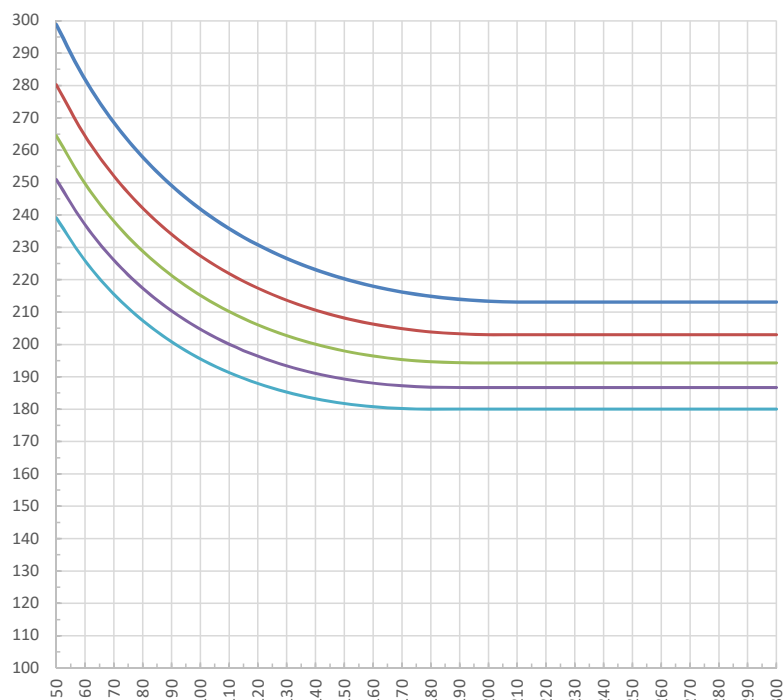
Up to 90 kg.

Sealing type

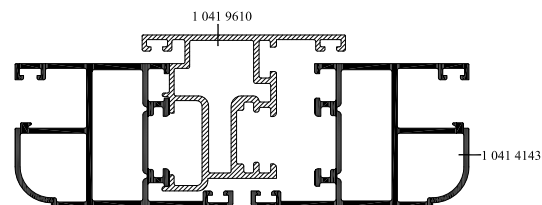
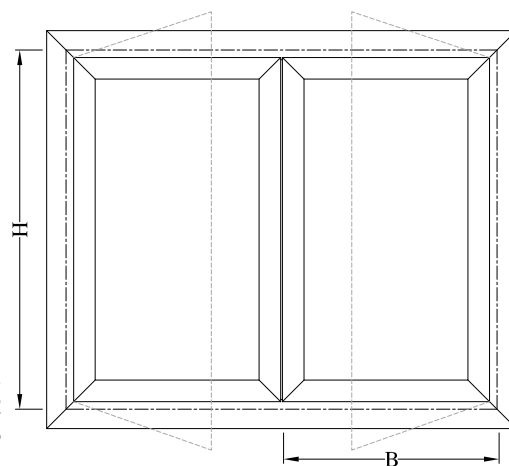
EPDM gasket



H cm. f max 1/200



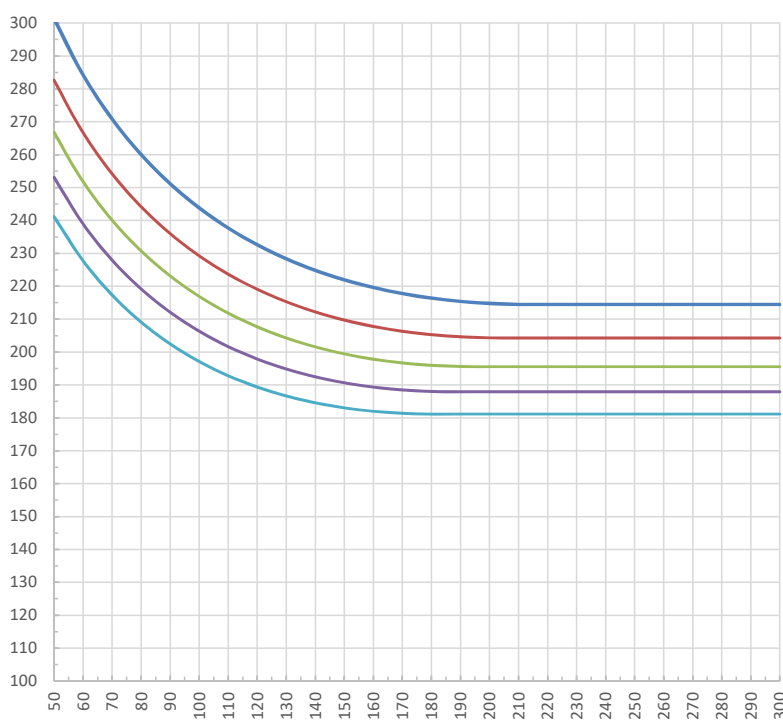
Zone 1
Zone 2
Zone 3
Zone 4
Zone 5



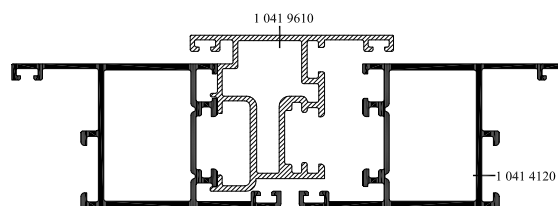
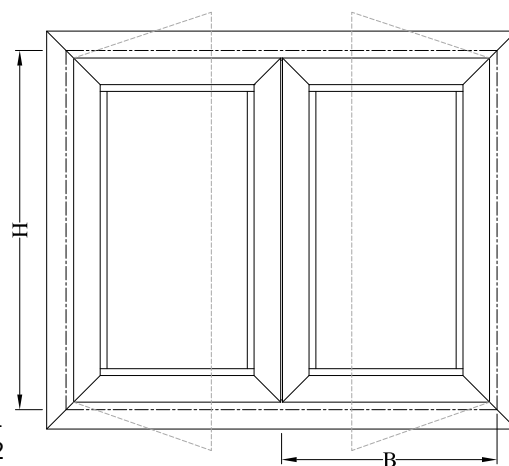
B cm.

$$I_x = 21.99 \text{ cm}^4$$

H cm. f max 1/200

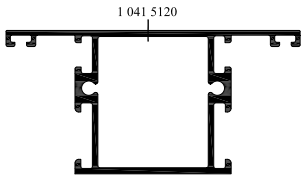
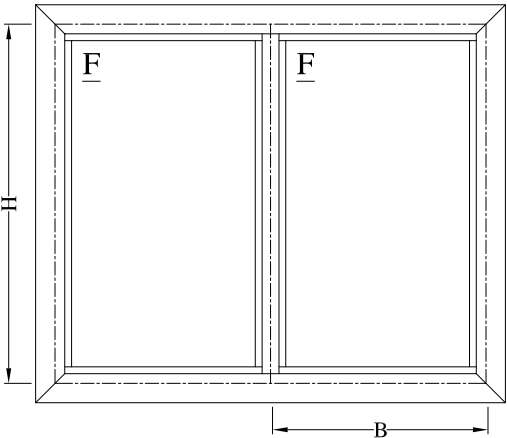
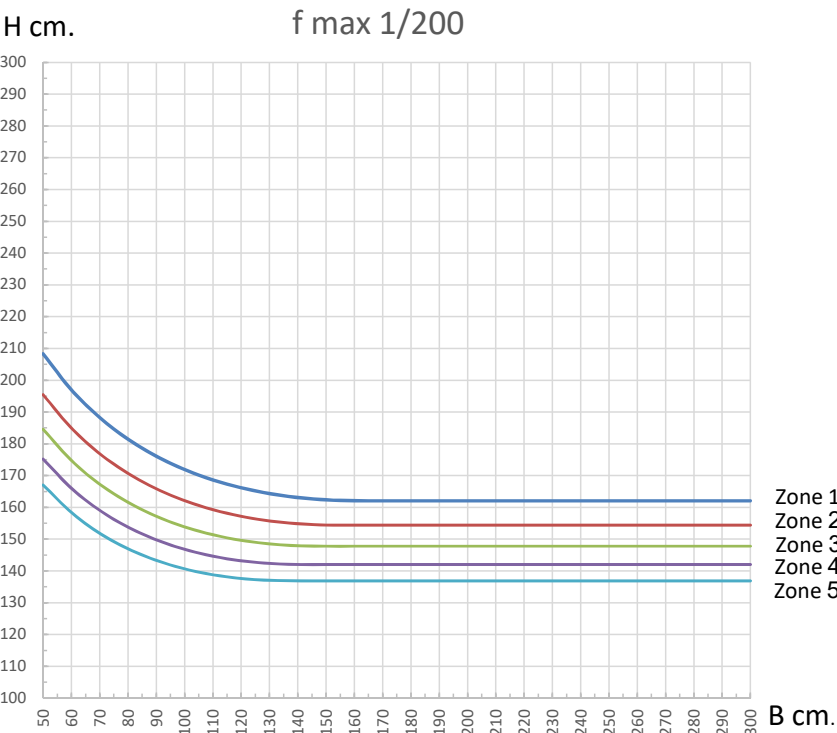
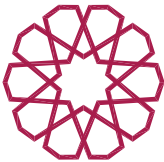


Zone 1
Zone 2
Zone 3
Zone 4
Zone 5

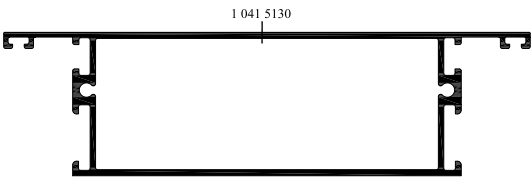
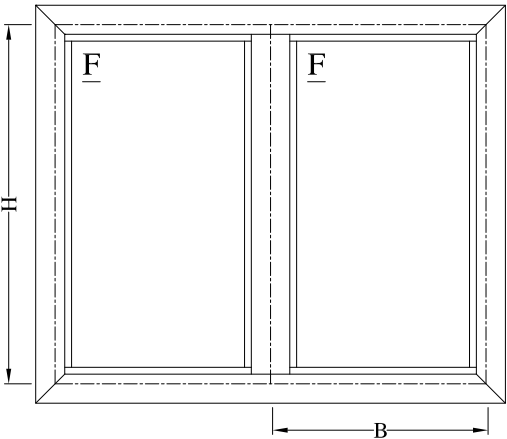
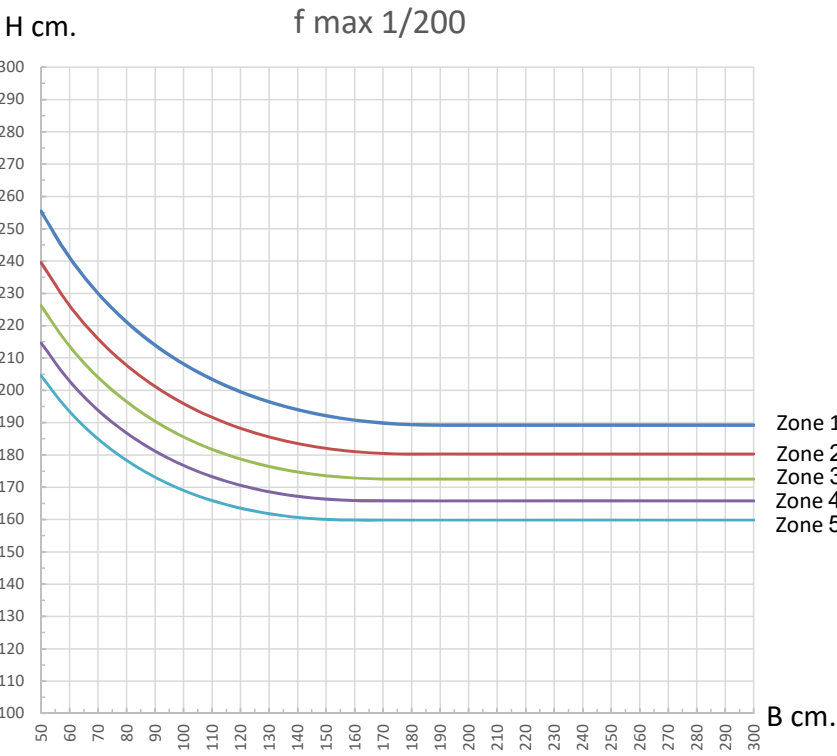


B cm.

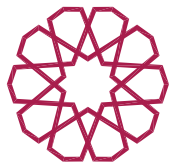
$$I_x = 22.55 \text{ cm}^4$$



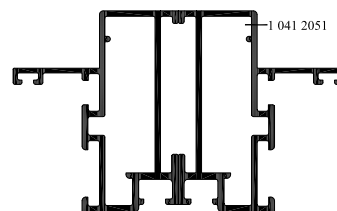
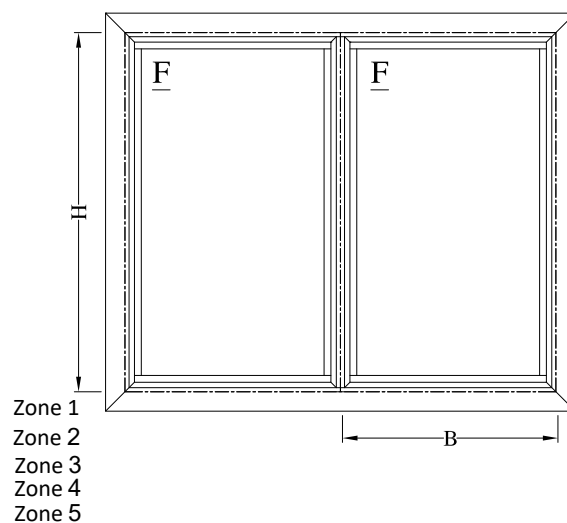
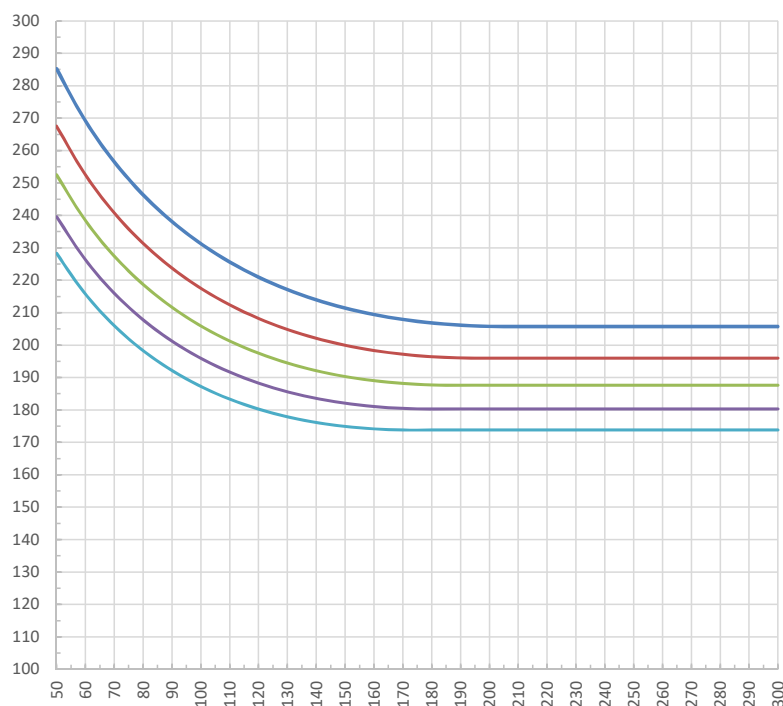
$I_x = 7.36 \text{ cm}^4$



$I_x = 13.67 \text{ cm}^4$

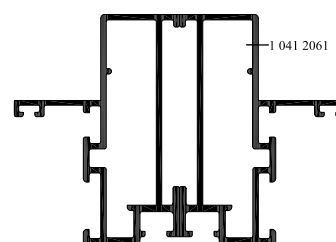
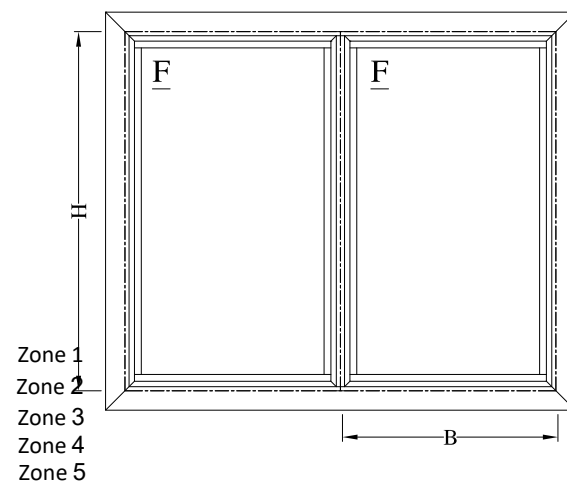
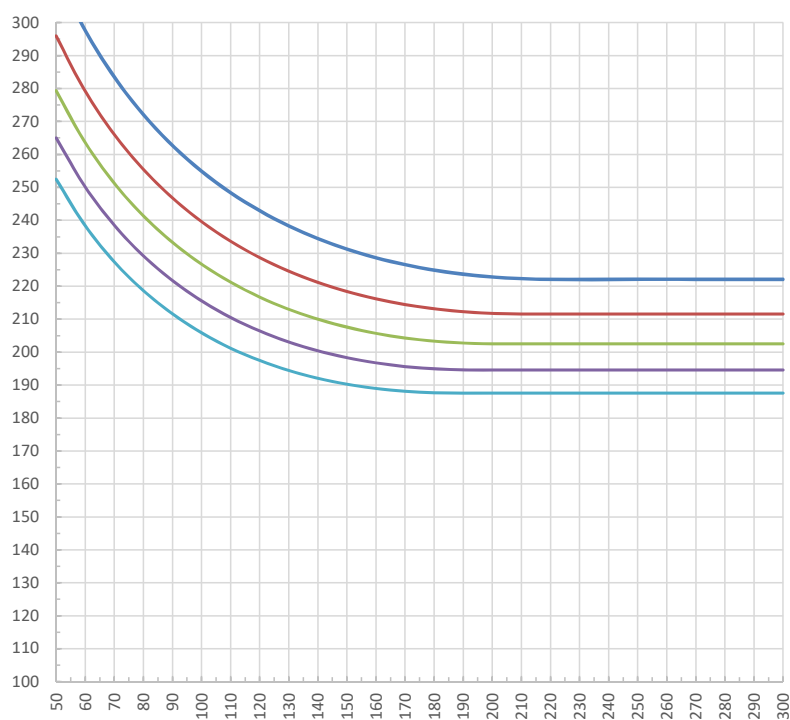


H cm. f max 1/200

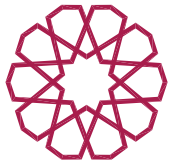


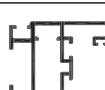
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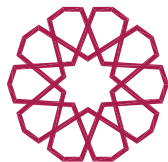
H cm. f max 1/200

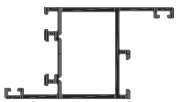
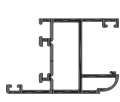
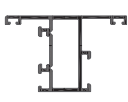
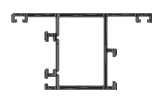
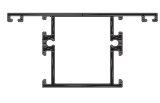
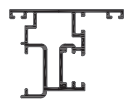


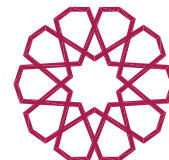
$I_x = 25,93 \text{ cm}^4$



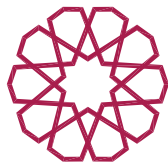
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	10411150	Frame Profile	0.874	392	8.07	19.37	24
	10411153	Frame Profile	0.935	428	11.13	23.47	24
	10411200	Frame Profile	0.708	273	6.12	6.17	24
	10411250	Frame Profile	0.948	412	9.07	26.24	25
	10411421	Frame Profile	0.909	365	9.30	7.21	25
	10412051	Frame Profile	0.819	307	9.63	3.83	25
	10412061	Frame Profile	0.875	323	12.95	3.97	25
	10412071	Frame Profile	0.939	343	18.62	4.14	25
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	10414119	Leaf Profile	0.801	364	9.12	6.98	26

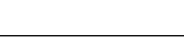
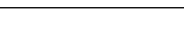


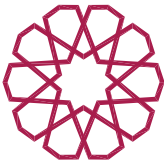
Section	Profile no.	Description	Weight kg/m	Perimeter mm	Inertia		Page No.
					Ix	Iy	
	10414120	Leaf Profile	0.771	340	7.11	9.18	26
	10414143	Leaf Profile	0.830	323	6.56	7.56	26
	10414153	Leaf Profile	0.797	324	6.73	6.76	26
	10414210	Leaf Profile	0.706	320	5.72	5.36	27
	10414220	Leaf Profile	0.771	340	6.66	9.18	27
	10415120	Transom Profile	0.905	343	7.36	13.54	27
	10415130	Transom Profile	1.360	471	13.67	92.43	27
	10415330	Bottom Profile	1.482	528	15.25	111.20	28
	10416120	Glass Beading Profile	0.263	172	0.68	0.54	28
	10416160	Glass Beading Profile	0.204	138	0.29	0.46	28
	10419610	Insert Profile	0.820	332	6.61	5.00	27
	1 045 9910	Control Rod	0.146	48.00	0.19	0.01	28



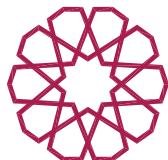
Section	Profile no.	Description	Weight kg/m	Perimeter mm	Inertia		Page No.
					I _x	I _y	
	50254810	Fly Screen Leaf Profile	0.165	79	0.15	0.21	29
	50254830	Fly Screen Leaf Profile	0.307	145	0.69	0.40	29
	50254832	Fly Screen Leaf Profile	0.420	158	0.81	1.09	29
	50281210	Fly Screen Frame Profile	0.634	248	7.89	3.09	29
	50284310	Fly Screen Leaf Profile	0.477	165	1.02	2.11	29
	50284311	Fly Screen Leaf Profile	0.514	179	1.40	2.23	29
	50284460	Fly Screen Leaf Profile	0.630	195	2.08	4.65	29
	50284461	Fly Screen Leaf Profile	0.618	200	1.91	4.00	29
	50289210	Fly Screen Leaf Profile	0.615	230	4.89	1.62	30
	50289610	Insert Profile	0.302	186	1.06	0.41	30
	50289620	Insert Profile	0.672	250	3.13	10.51	30
	59005020	Fly Screen Transom Profile	0.375	107	3.13	0.07	30
	59005410	Fly Screen Transom Profile	0.610	198	5.99	5.70	30

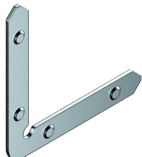


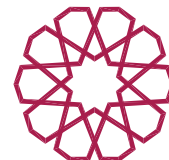
Section	Profile no.	Description	Weight kg/m	Perimeter mm	Inertia		Page No.
					Ix	Iy	
	59009100	Additional Profile	0.100	53	0.01	0.08	30
	9 001 1100	Additional Profile	0.092	41.99	0.01	0.01	31
	9 001 1300	Additional Profile	0.240	115.66	1.66	0.03	31
	9 001 1302	Additional Profile	0.308	153.80	2.05	0.24	31
	9 001 1303	Additional Profile	0.285	156.35	1.95	0.17	31
	9 001 1304	Additional Profile	0.259	130.82	1.81	0.05	31
	9 001 1305	Additional Profile	0.263	139.31	1.76	0.05	31
	9 001 1308	Additional Profile	0.291	140.07	1.89	0.27	31
	9 001 1500	Additional Profile	0.348	183.22	6.10	0.03	32
	9 001 1502	Additional Profile	0.424	204.48	6.64	0.38	32
	9 001 1503	Additional Profile	0.401	219.02	7.49	0.32	32
	9 001 1504	Additional Profile	0.370	191.22	6.73	0.07	32
	9 001 1505	Additional Profile	0.383	194.11	6.40	0.07	32
	9 001 1507	Additional Profile	0.383	186.07	6.30	0.04	32

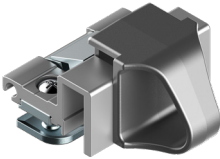
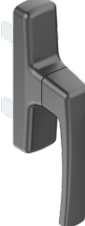
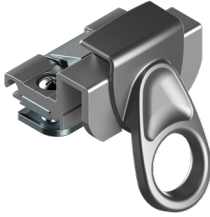


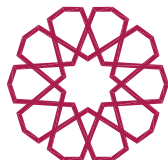
Section	Profile no.	Description	Weight kg/m	Perimeter mm	Inertia		Page No.
					Ix	Iy	
	9 001 1700	Additional Profile	0.418	215.22	11.29	0.04	32
	9 001 1702	Additional Profile	0.473	232.62	11.31	0.43	32
	9 002 1200	Additional Profile	0.181	81.24	0.01	0.11	32

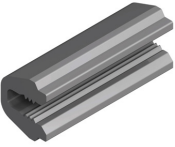
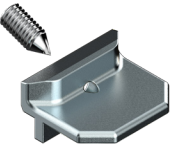
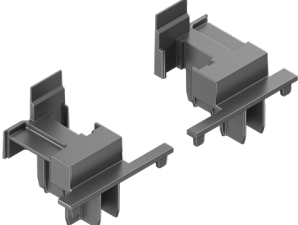
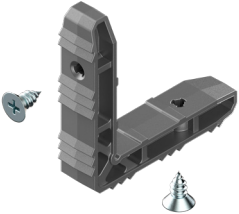
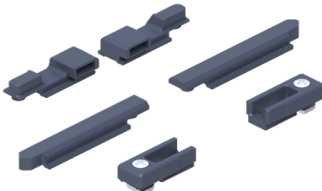
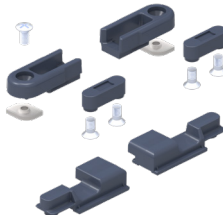


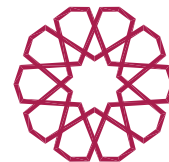
 01 4110 0	Corner Joint Material: Aluminium Finish: Raw	 06 3740 0	2 Wings Hinge Material: Aluminium Finish: Raw, Anodized, RAL
 01 4160 0	Corner Joint Material: Aluminium Finish: Raw	 10 1830 1	Balance Arm (Pair) Material: Aluminium Finish: Anodized, RAL
 01 4170 0	Corner Joint Material: Aluminium Finish: Raw	 10 1860 1	Balance Arm (Pair) Material: Aluminium Finish: Anodized, RAL
 01 7710 0	Alignment Angle Material: Steel Finish: Galvanized	 10 1950 1	Balance Arm (Pair) Material: Stainless Steel Finish: Natural
 01 8700 0	Alignment Angel Material: Polyamide Finish: Black	 10 1960 1	Balance Arm (Pair) Material: Stainless Steel Finish: Natural
 06 2650 0	2 Wings Hinge Material: Aluminium Finish: Raw, Anodized, RAL	 28 1100 0	Drainage cap Material: Polyamide Finish: Black

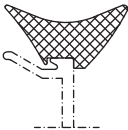
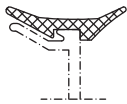
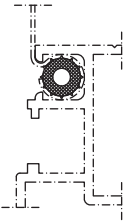
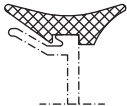
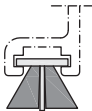


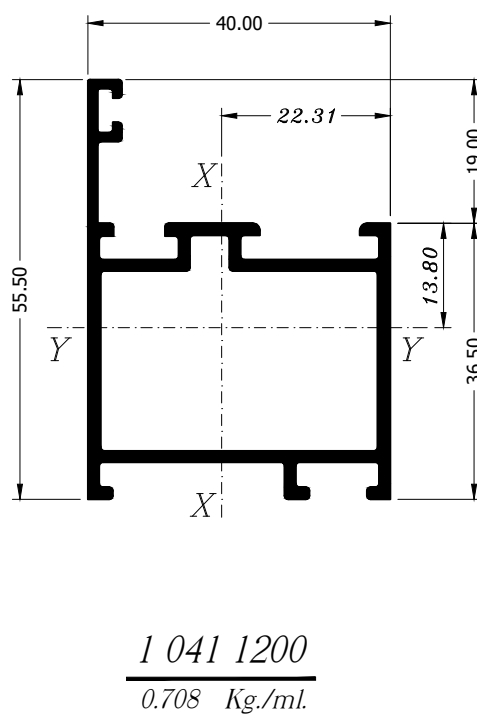
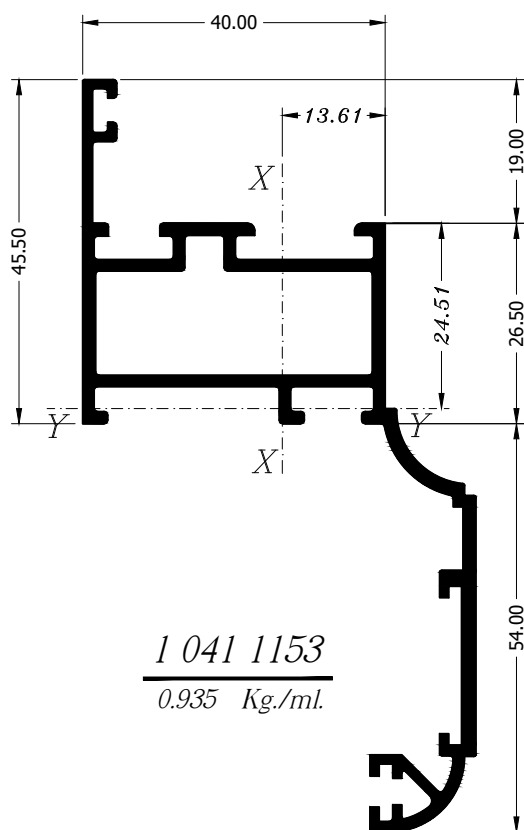
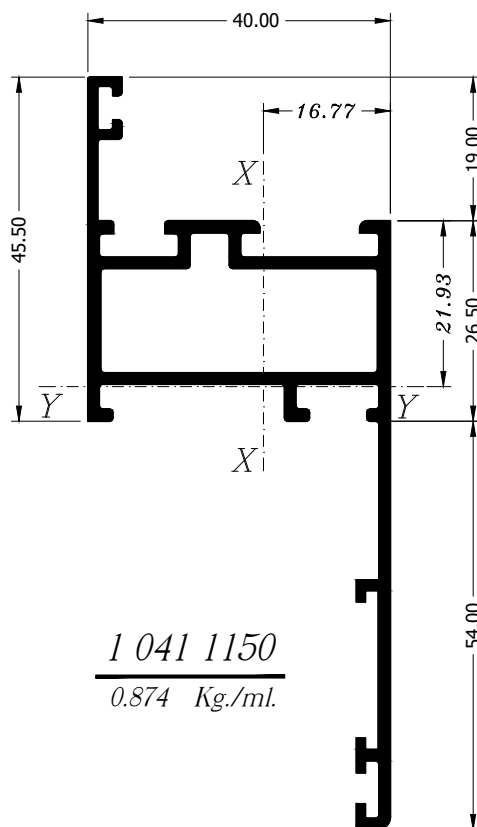
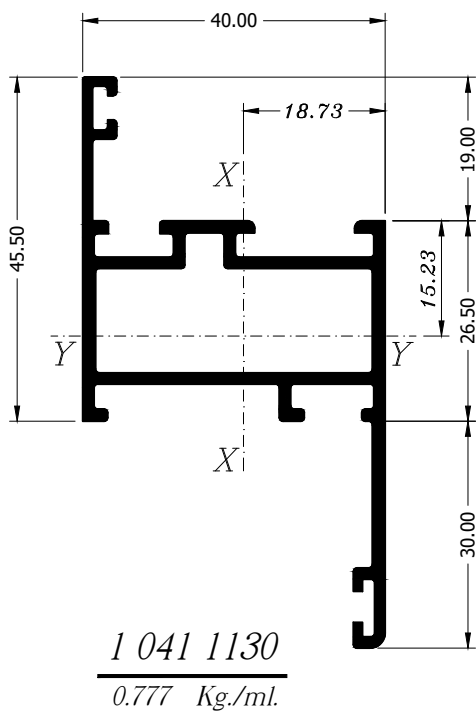
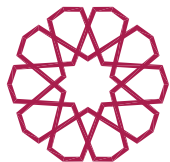
 30 1200 1	OMEGA Cremone Handle Material: Aluminium Finish: Raw, Anodized, RAL	 34 2460 1	LUNA Finger Catch Material: Aluminium Finish: Anodized, RAL
 30 1700 1	SIGMA Cremone Handle Material: Aluminium Finish: Raw, Anodized, RAL	 34 2470 1	SWIFT Finger Catch Material: Aluminium Finish: Anodized, RAL
 30 1750 1	GAMA Cremone Handle Material: Aluminium Finish: Raw, Anodized, RAL	 34 2480 1	FLAMENGO Finger Catch Material: Aluminium Finish: Anodized, RAL
 30 1790 0	DELTA Cremone Handle Material: Aluminium Finish: Raw, Anodized, RAL	 36 1220 0	Door Handle Material: Aluminium Finish: Raw, Anodized, RAL
 30 2740 0	ATON Cremone Handle Material: Aluminium Finish: Raw, Anodized, RAL	 50 1150 0	Additional Locking Point Material: Polyamide Finish: Black
 34 2450 1	Dove Finger Catch Material: Aluminium Finish: Anodized, RAL	 50 1160 1	Additional Locking Point Material: Zama Finish: Galvanized

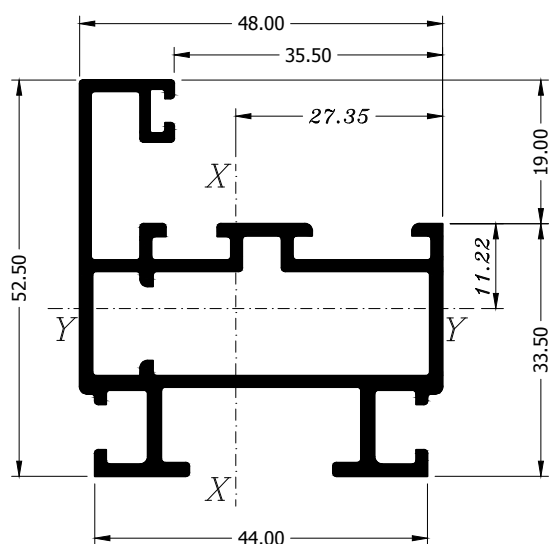
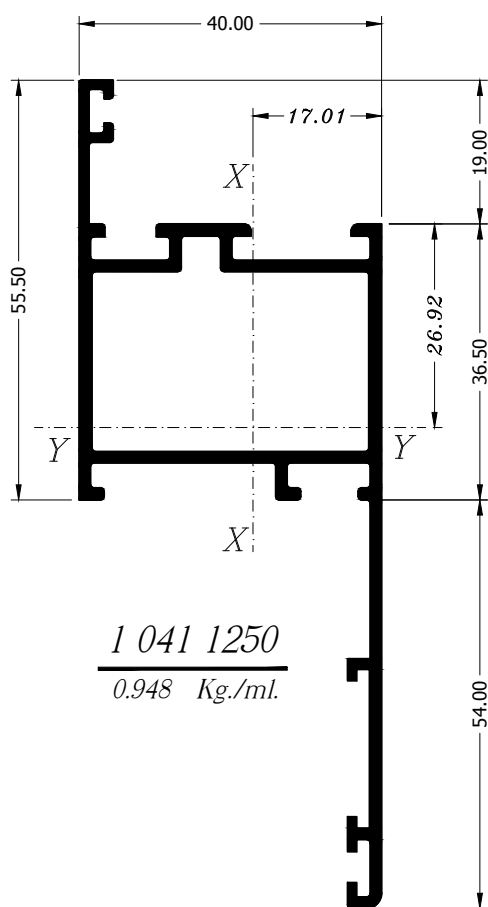
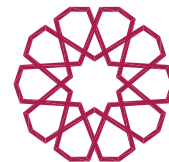


 50 1180 1	Additional Locking Point Material: Zama Finish: Galvanized	 54 11400	Lock Striker Material: Polyamide Finish: Black
 50 3250 0	Striker Material: Polyamide Finish: Black	 60 0500 0	Clip Material: Polyamide Finish: Black
 50 3260 0	Striker Material: Zama Finish: Galvanized	 62 1441 0	Plug Material: Polyamide Finish: Black
 50 3610 0	Striker Material: Polyamide Finish: Black	 72 1014 0	Flyscreen Corner Angle Material: Polyamide Finish: Black
 50 8800 0	Connection Kit Material: Polyamide Finish: Black	 KIT 10451	Locking Point Kit Material: Polyamide Finish: Black
 52 1480 0	Bolt Material: Polyamide Finish: Black	 KIT 10452	Locking Point Kit Material: Polyamide Finish: Black

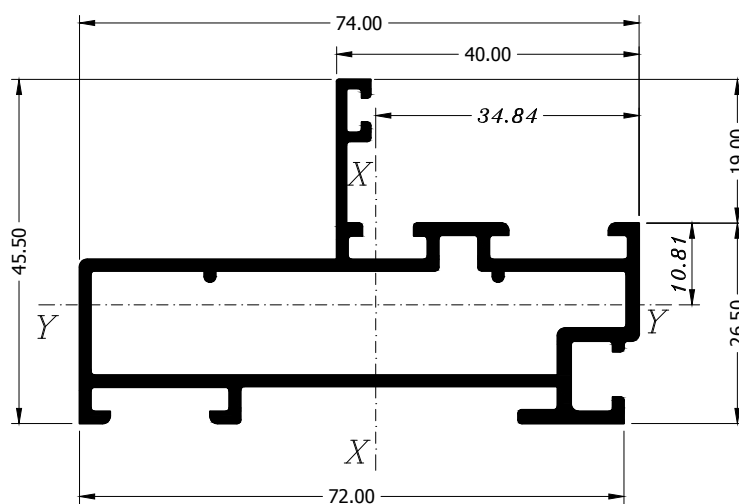
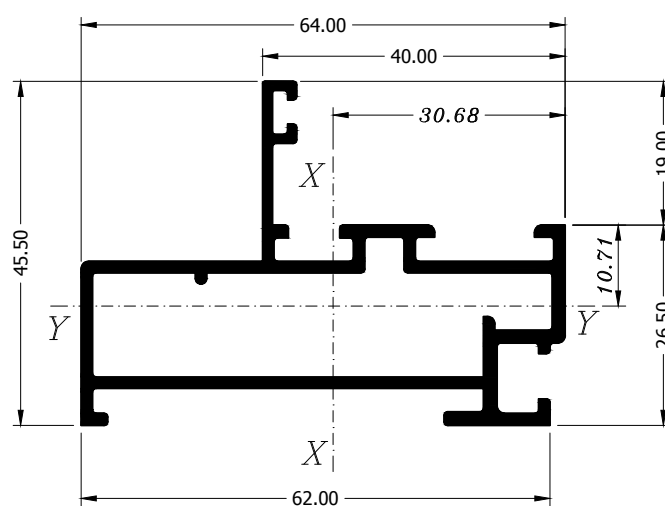
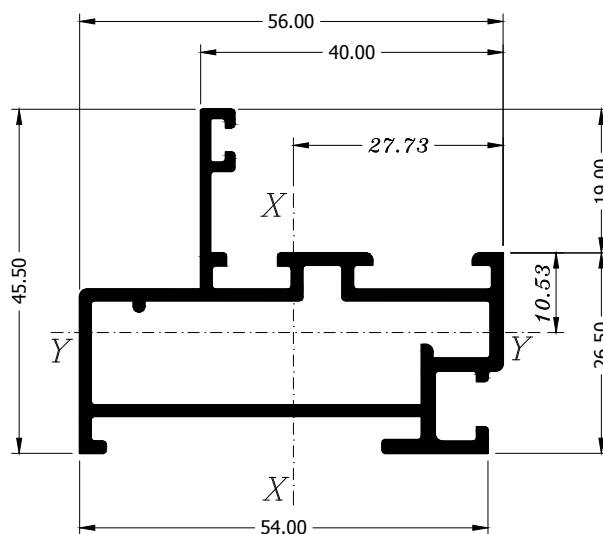


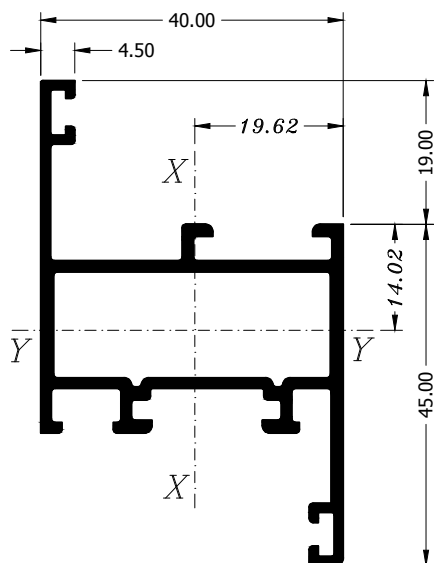
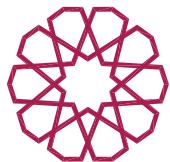
 GT 1114	Glazing Gasket 2:3.5 mm. Material: E.P.D.M Finish: Black	 GT 1126	Glazing Gasket 6:7 mm. Material: E.P.D.M Finish: Black
 GT 1121	Glazing Gasket 1:2 mm. Material: E.P.D.M Finish: Black	 GT 1145	Striker Gasket Material: E.P.D.M Finish: Black
 GT 1122	Glazing Gasket 2:3 mm. Material: E.P.D.M Finish: Black	 GT 1181	FlyScreen Gasket Material: E.P.D.M Finish: Black
 GT 1124	Glazing Gasket 4:5 mm. Material: E.P.D.M Finish: Black	 WS 0710 F	Weather Strip 7x10 Material: Finish: Black



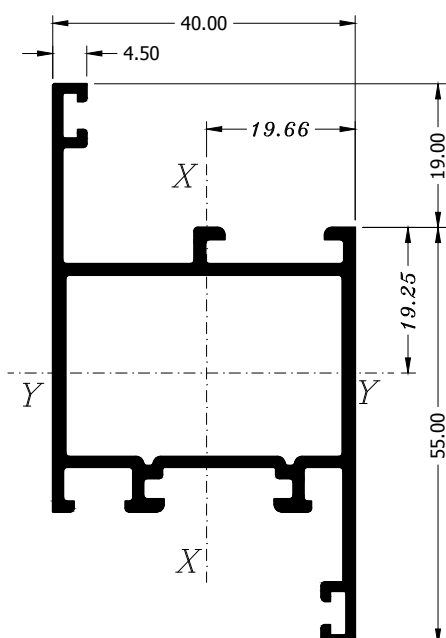


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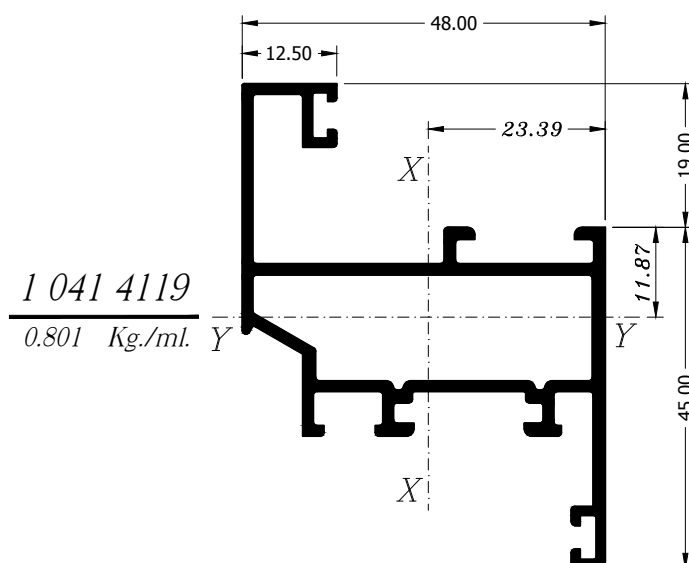




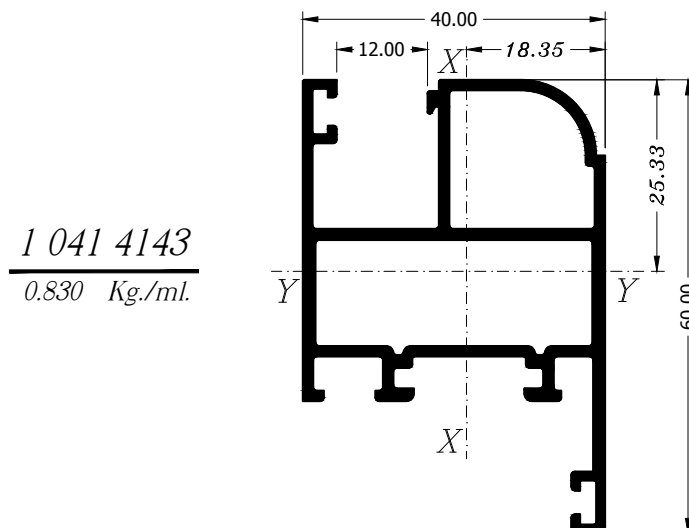
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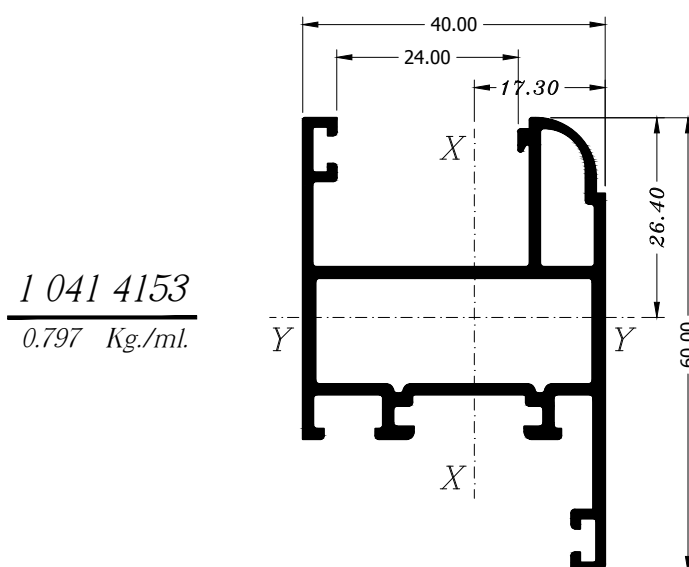
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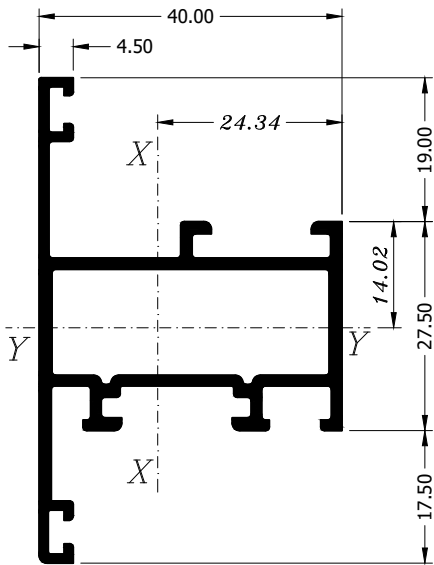
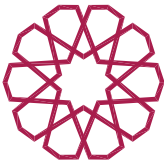
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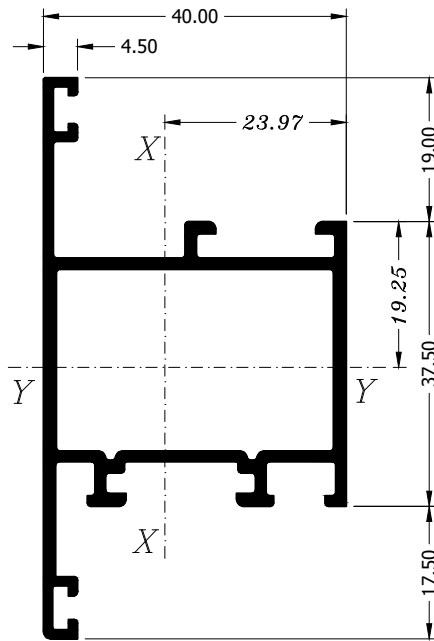
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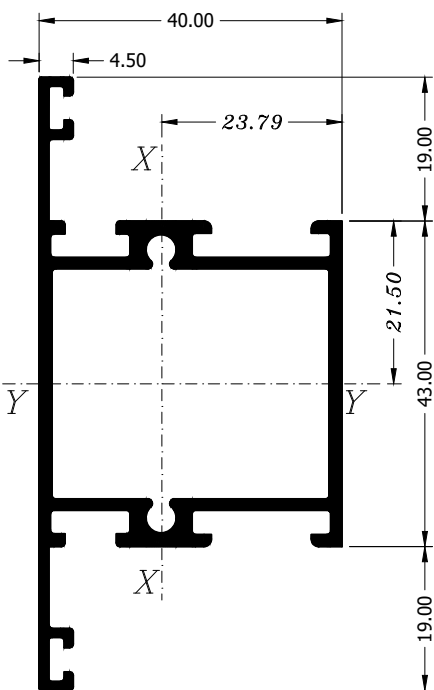
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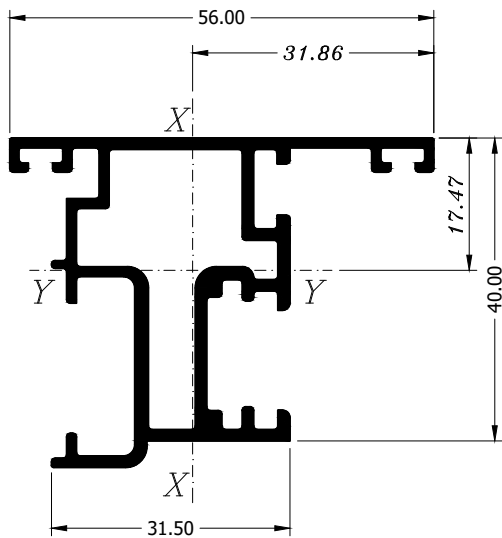
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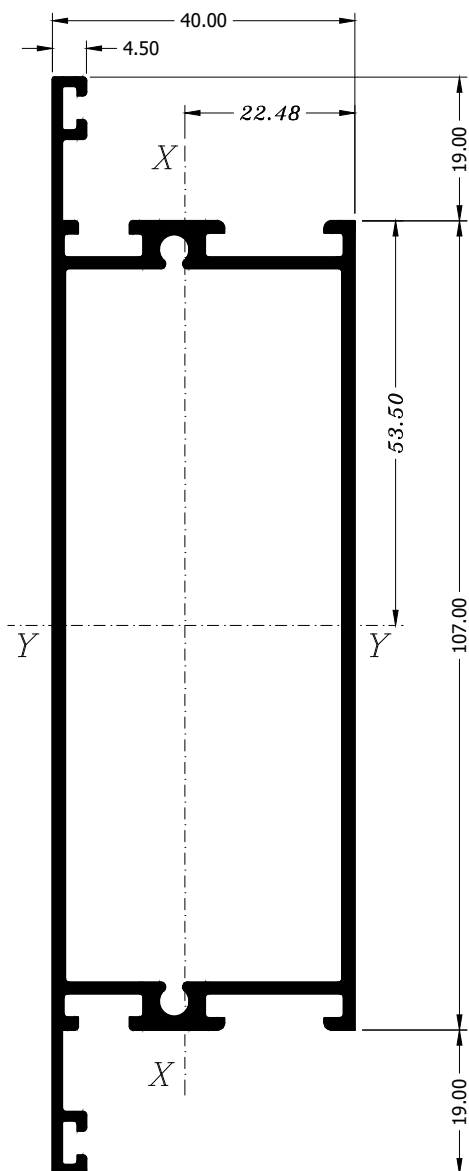
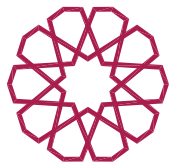
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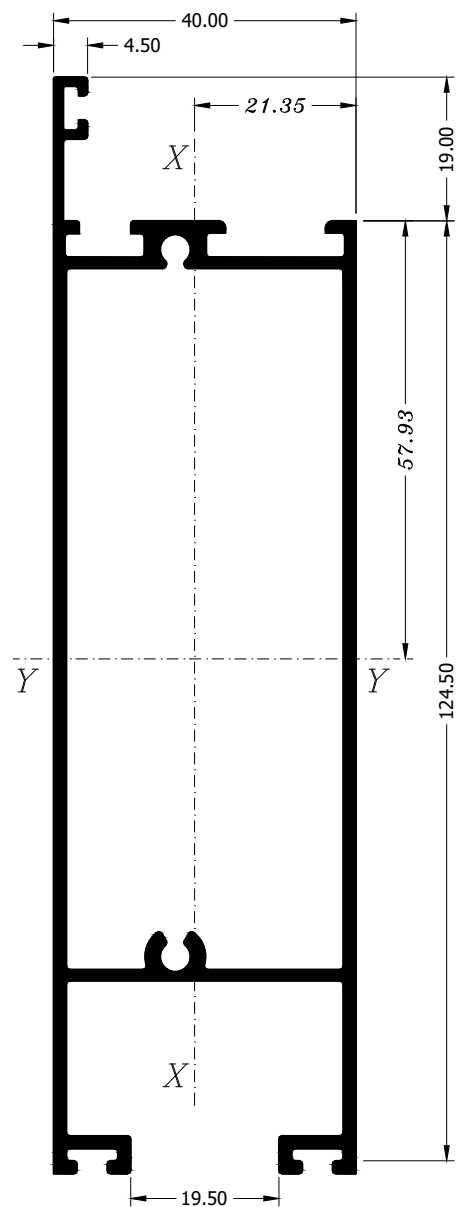
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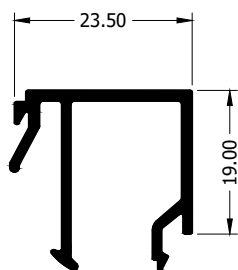
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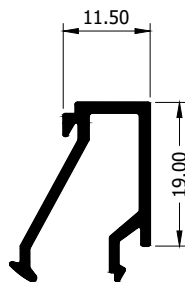
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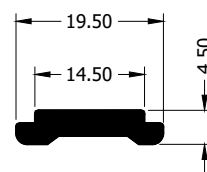
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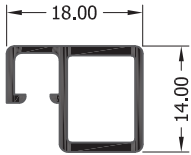
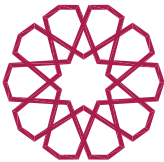
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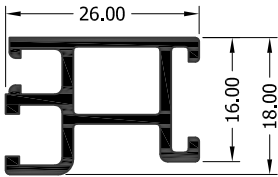
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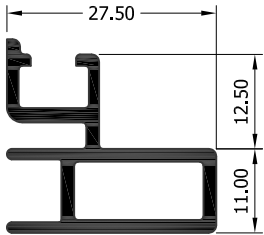
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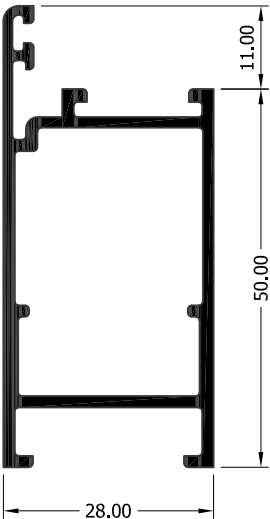
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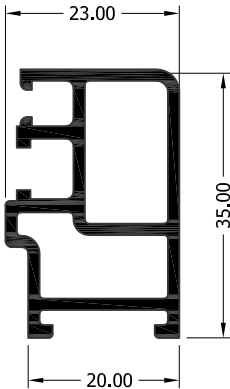
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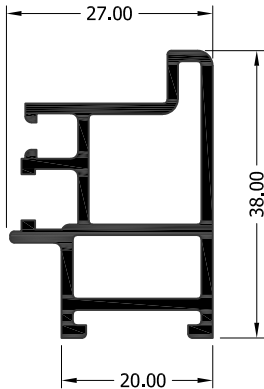
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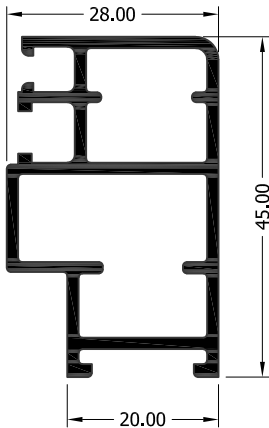
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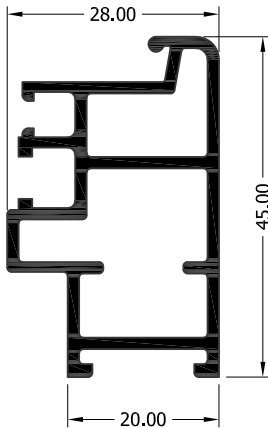
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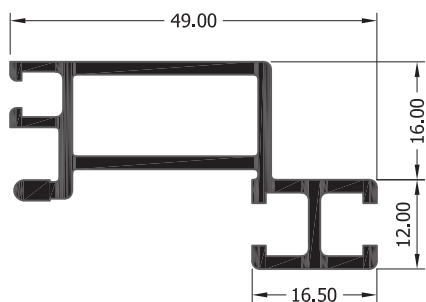
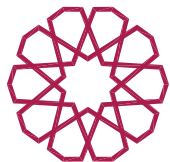
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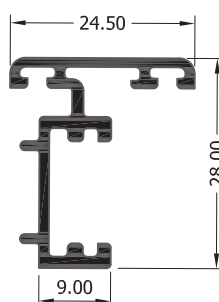
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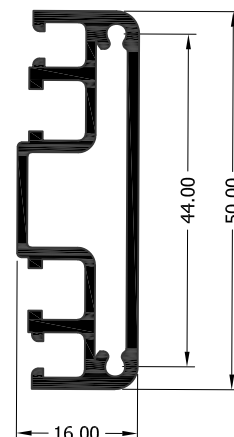
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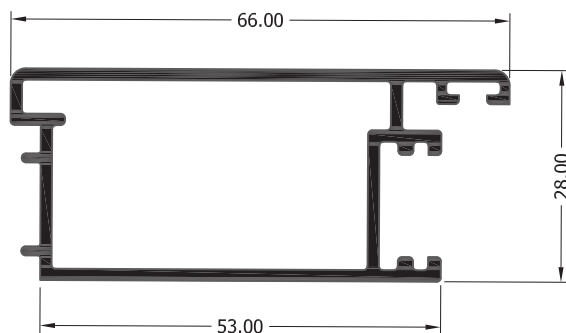
5 028 9210
0.615 Kg./ml.



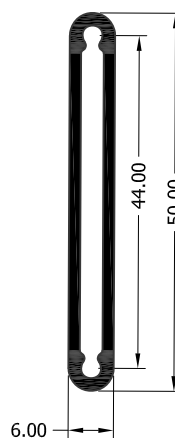
5 028 9610
0.302 Kg./ml.



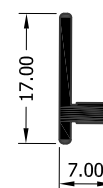
5 900 5410
0.610 Kg./ml.



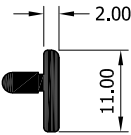
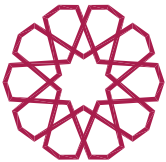
5 028 9620
0.672 Kg./ml.



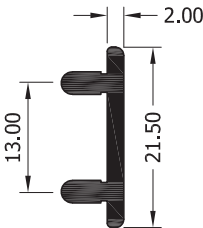
5 900 5020
0.375 Kg./ml.



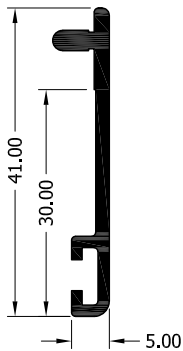
5 900 9100
0.100 Kg./ml.



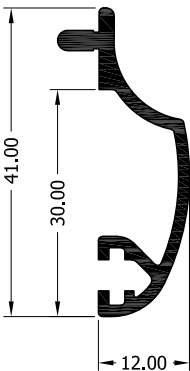
9 001 1100
0.092 Kg./ml.



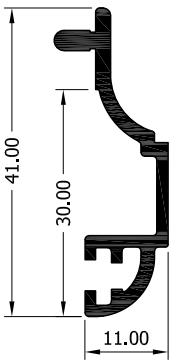
9 002 1200
0.181 Kg./ml.



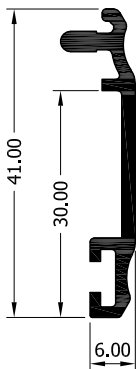
9 001 1300
0.240 Kg./ml.



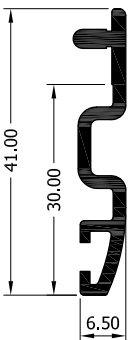
9 001 1302
0.311 Kg./ml.



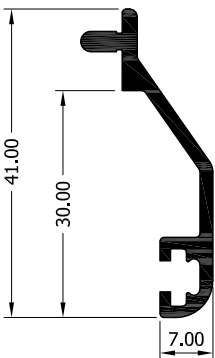
9 001 1303
0.284 Kg./ml.



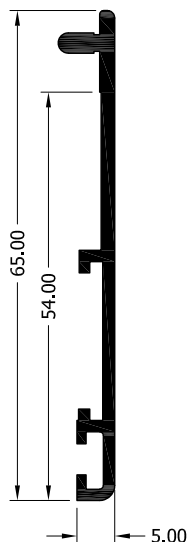
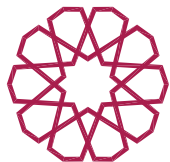
9 001 1304
0.259 Kg./ml.



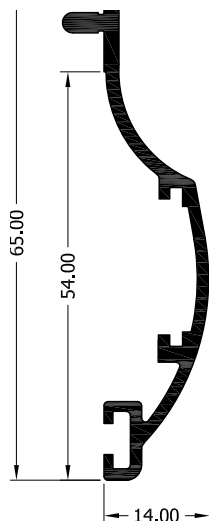
9 001 1305
0.275 Kg./ml.



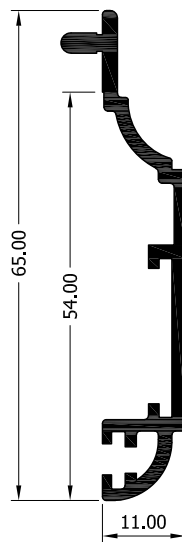
9 001 1308
0.291 Kg./ml.



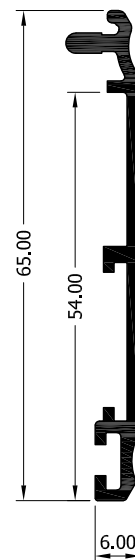
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0.348 Kg./ml.



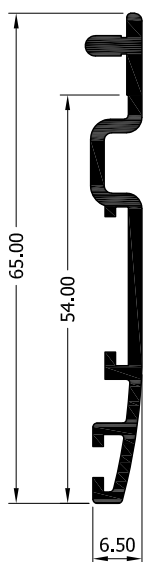
9 001 1502
0.424 Kg./ml.



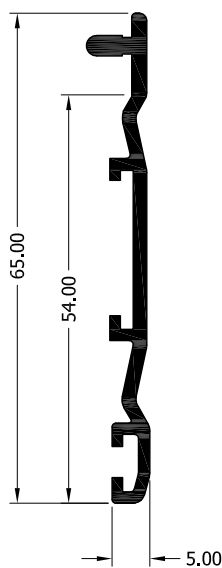
9 001 1503
0.402 Kg./ml.



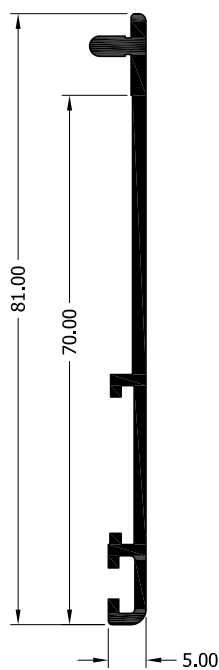
9 001 1504
0.370 Kg./ml.



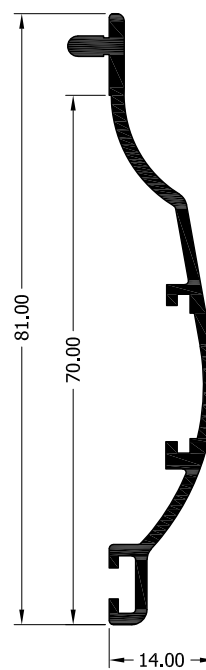
9 001 1505
0.383 Kg./ml.



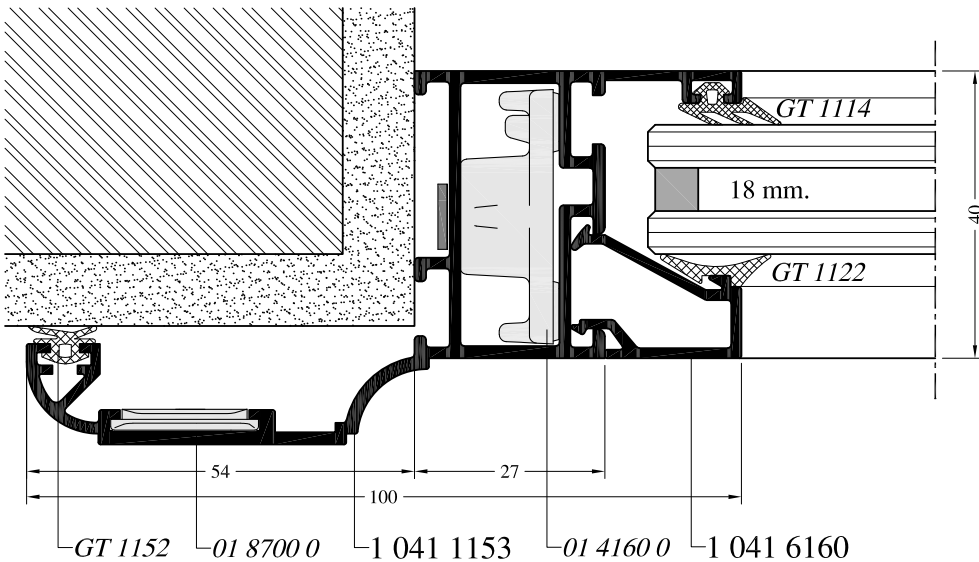
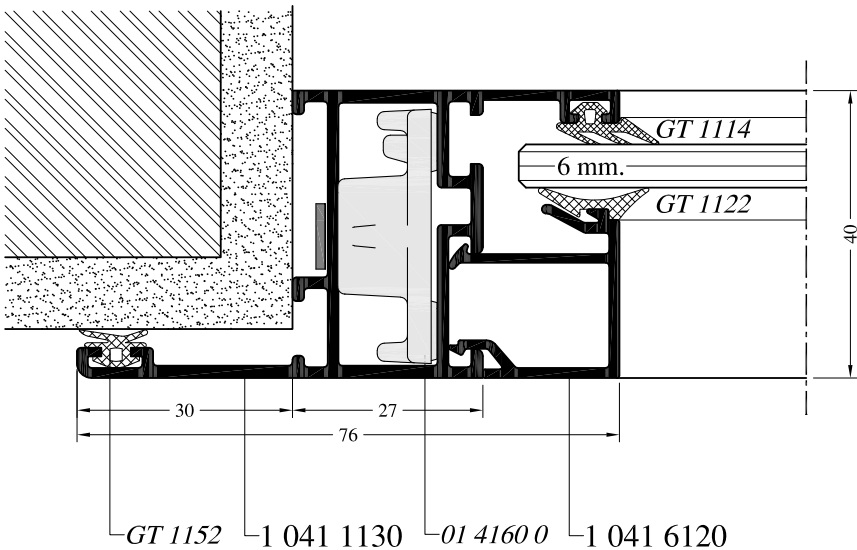
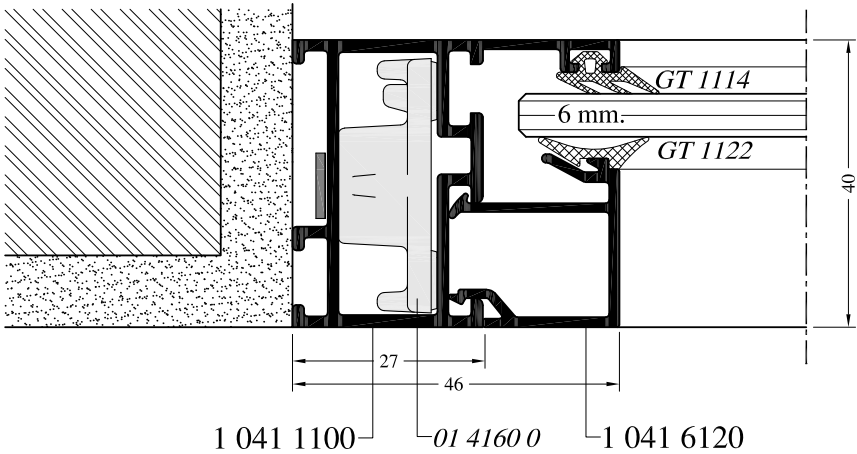
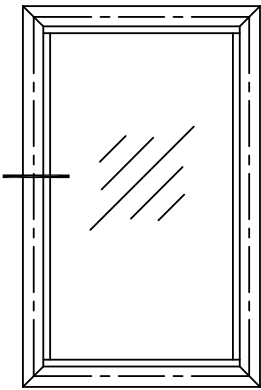
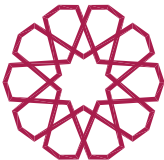
9 001 1507
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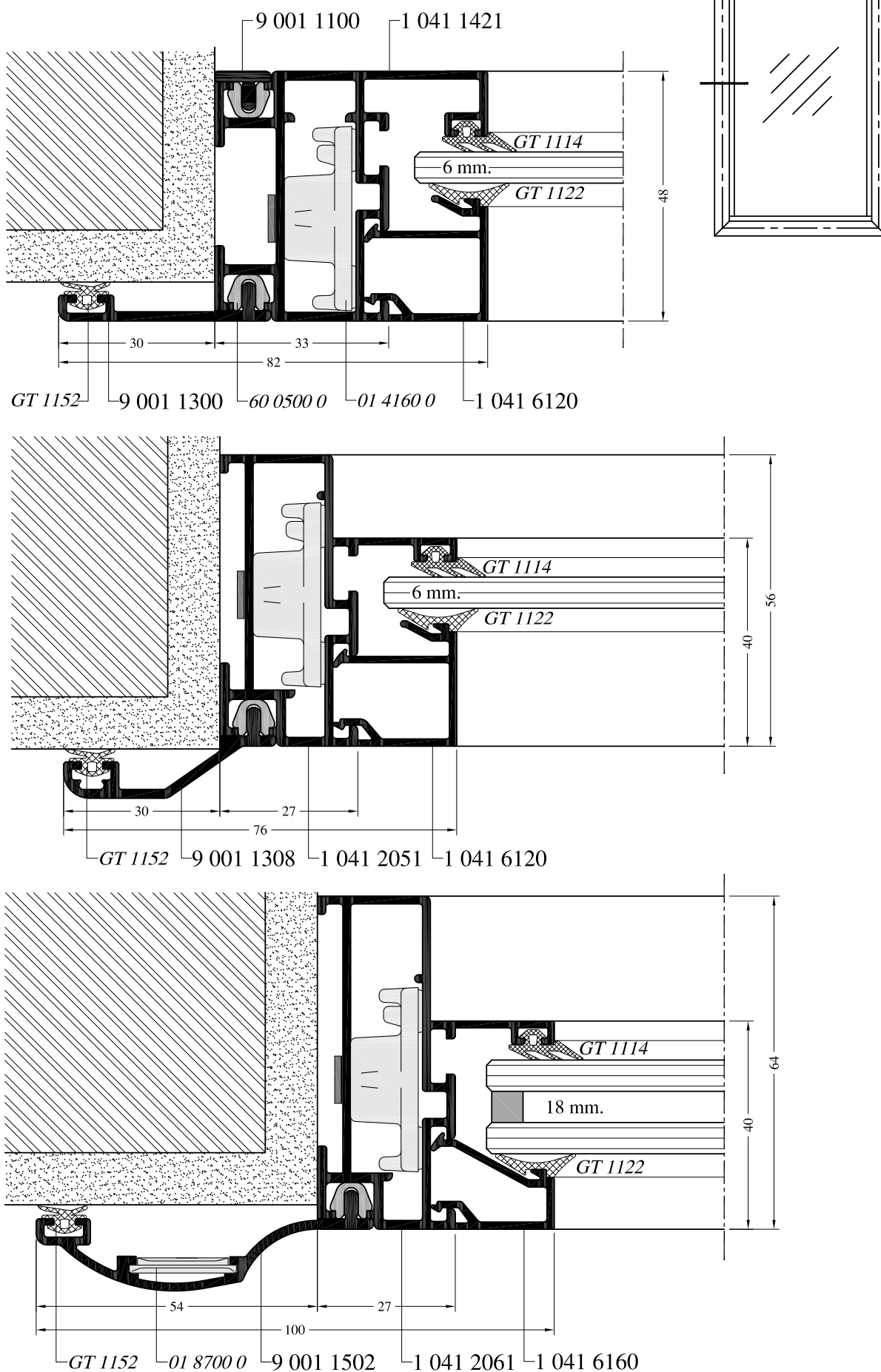
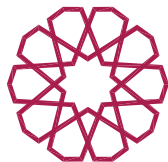


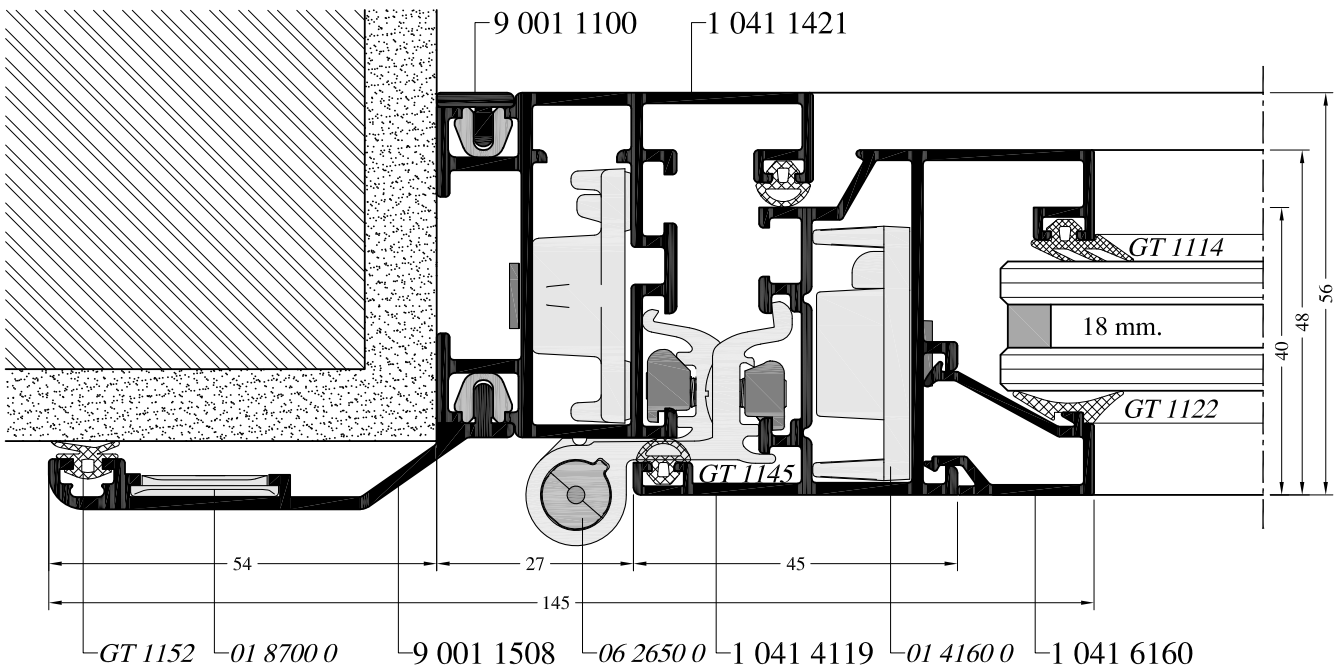
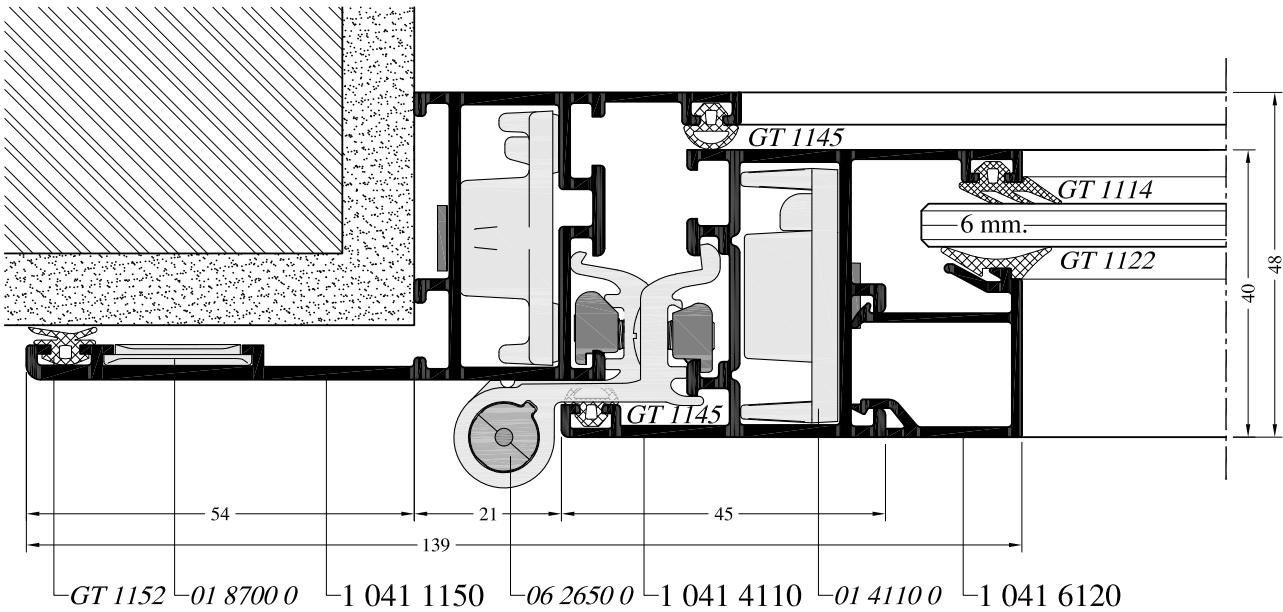
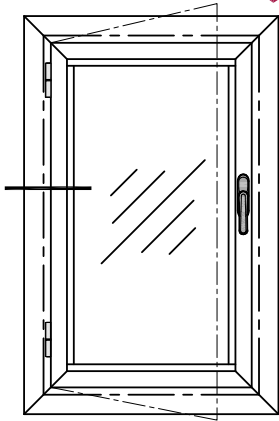
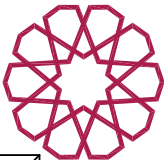
9 001 1700
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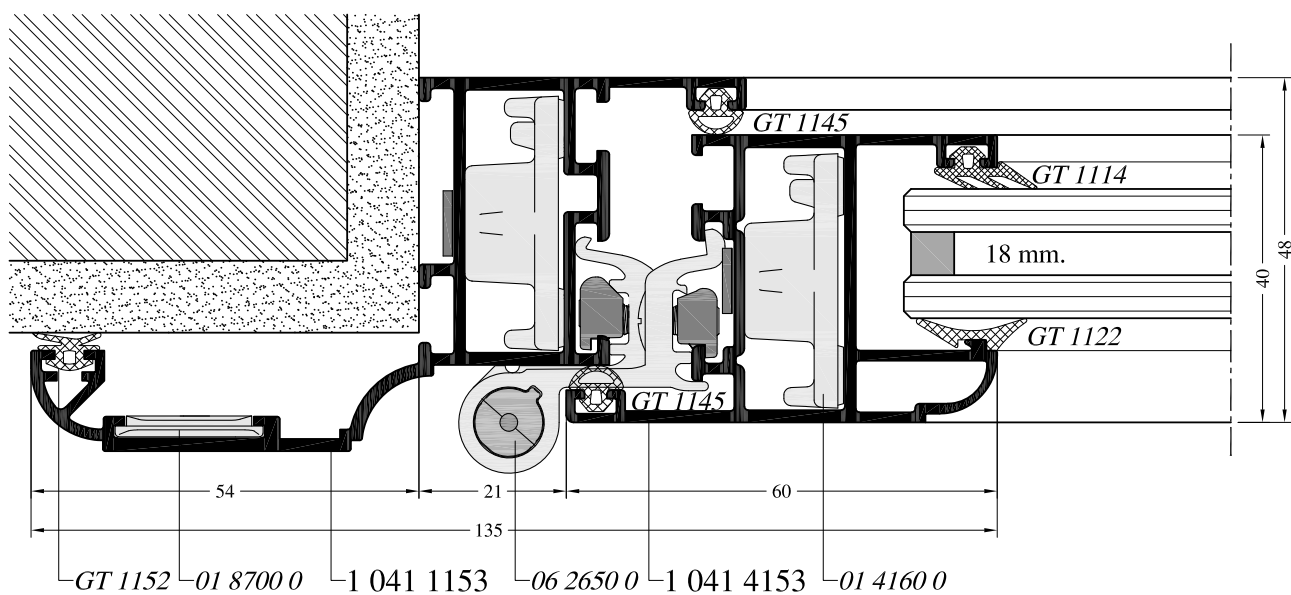
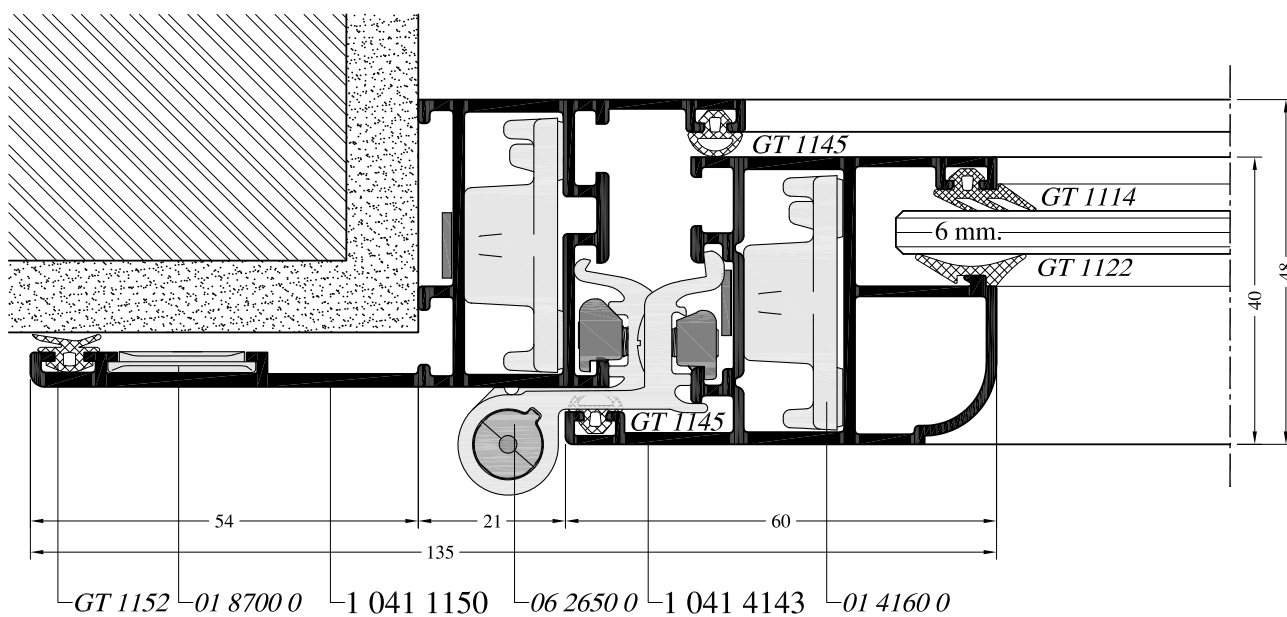
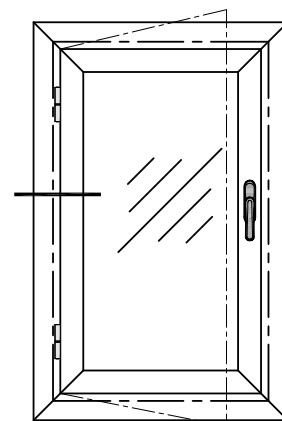
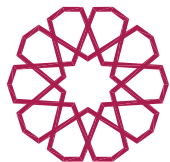


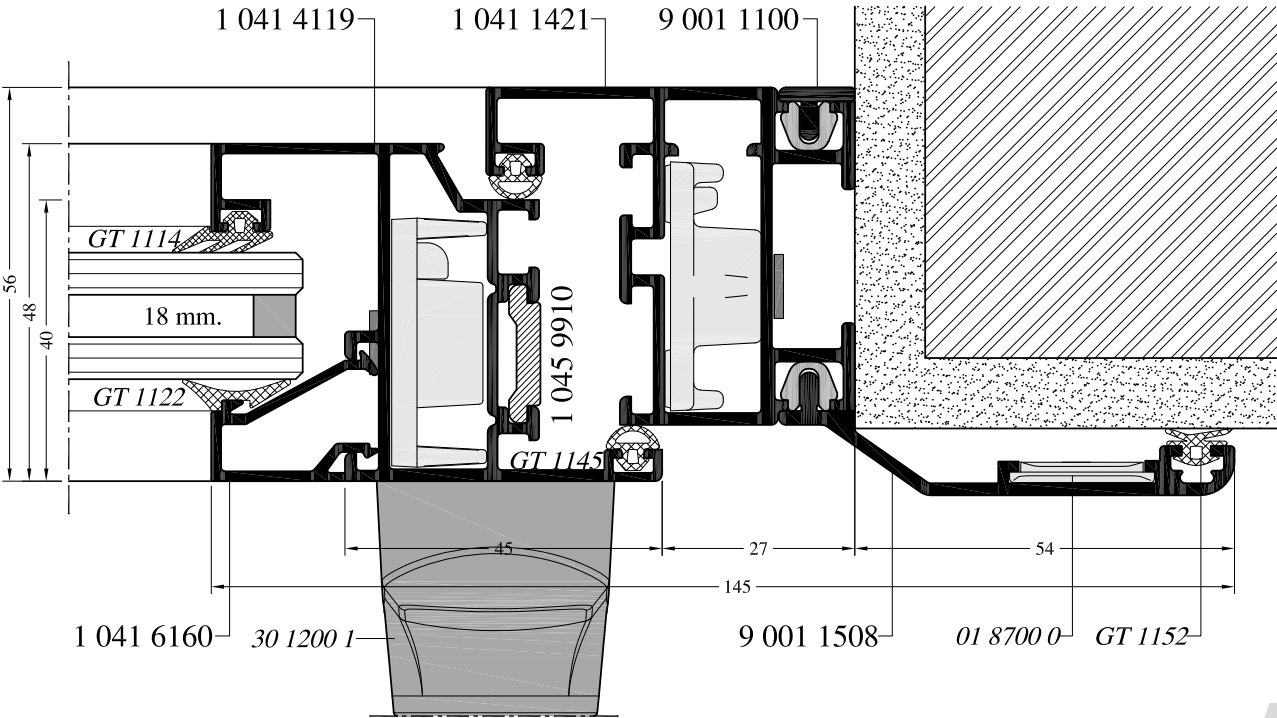
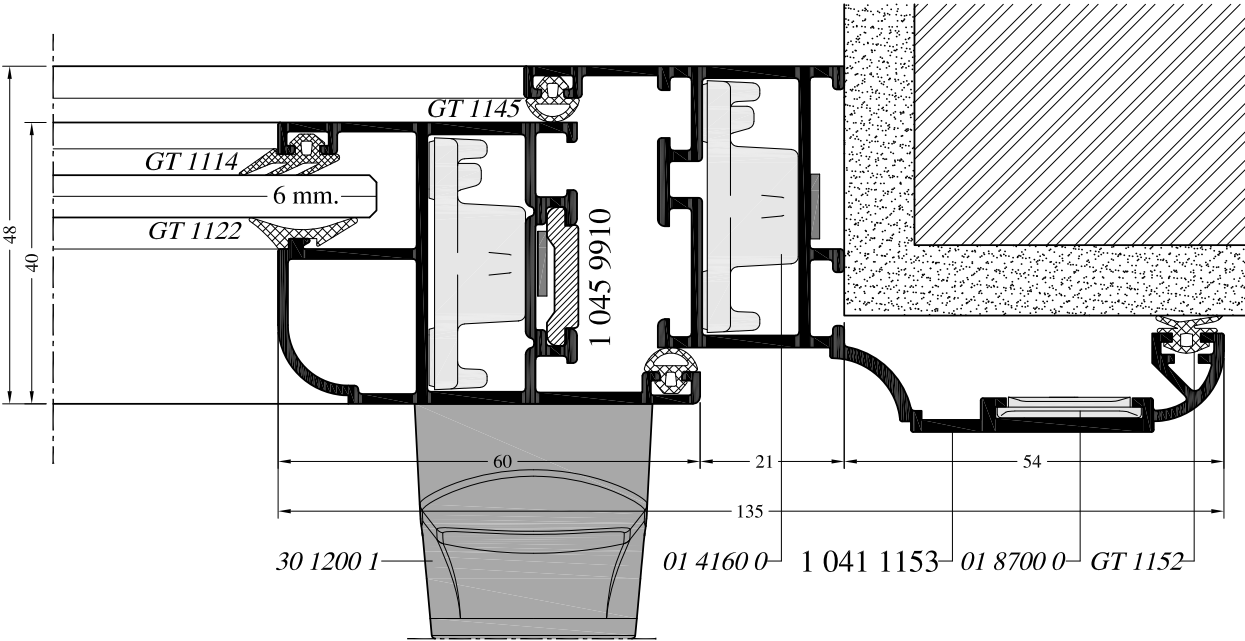
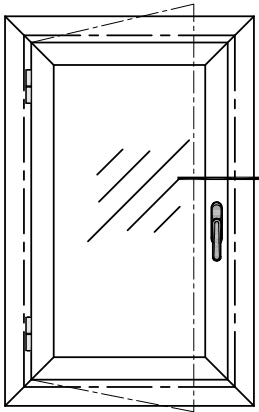
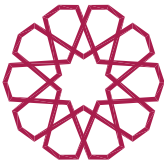
9 001 1702
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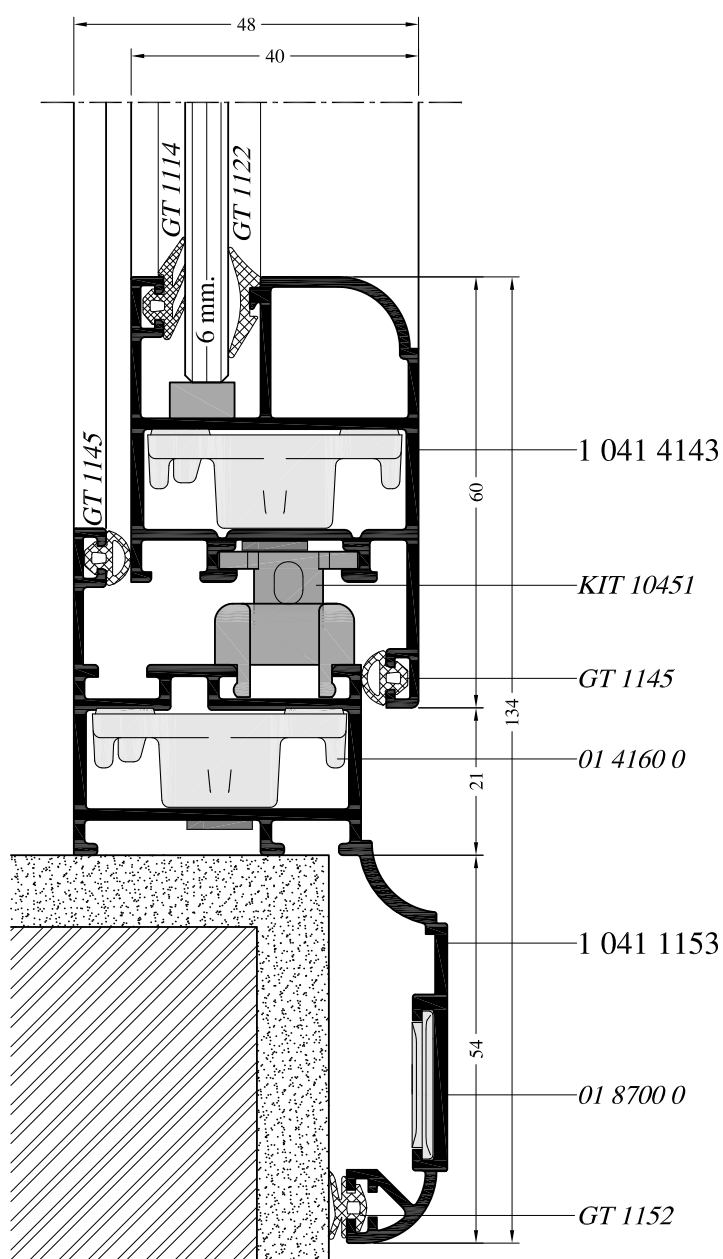
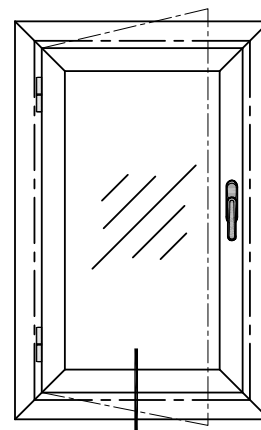
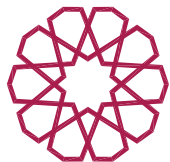


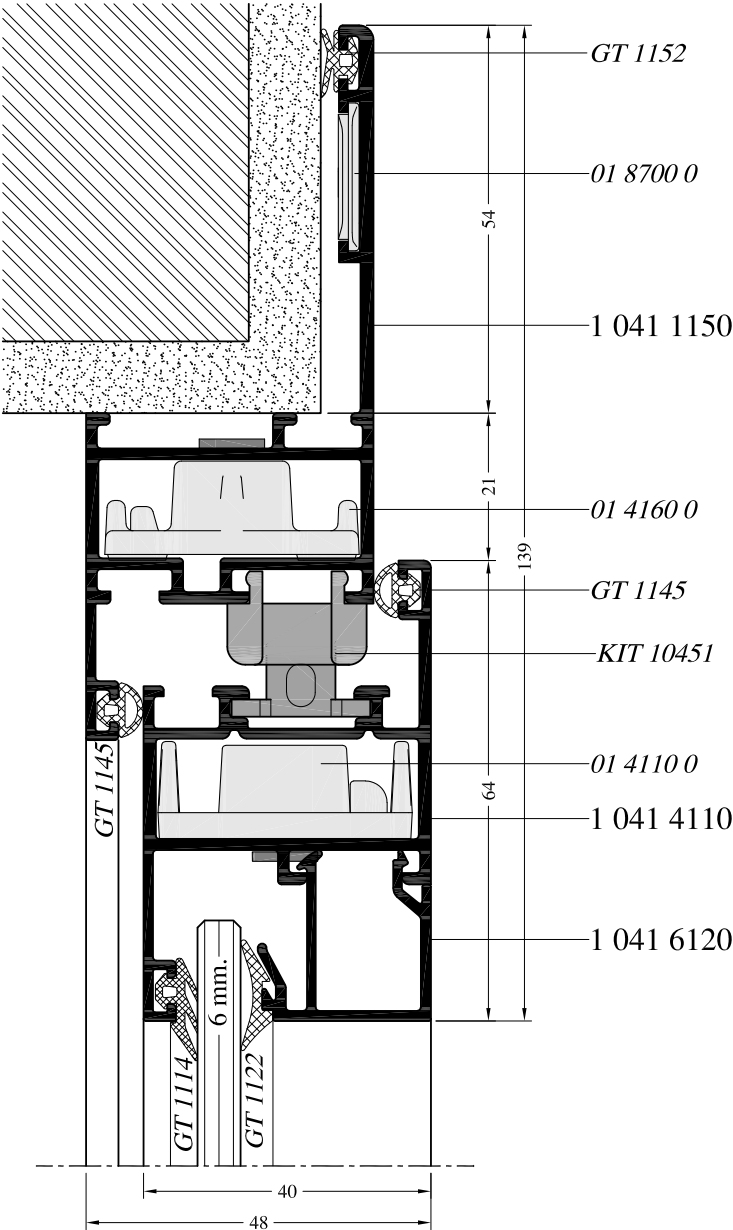
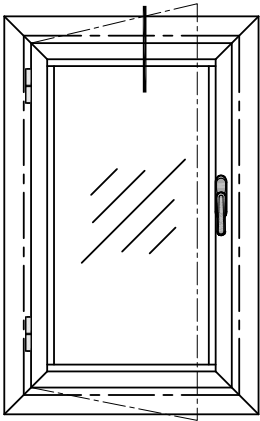
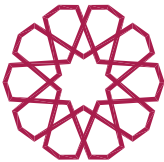


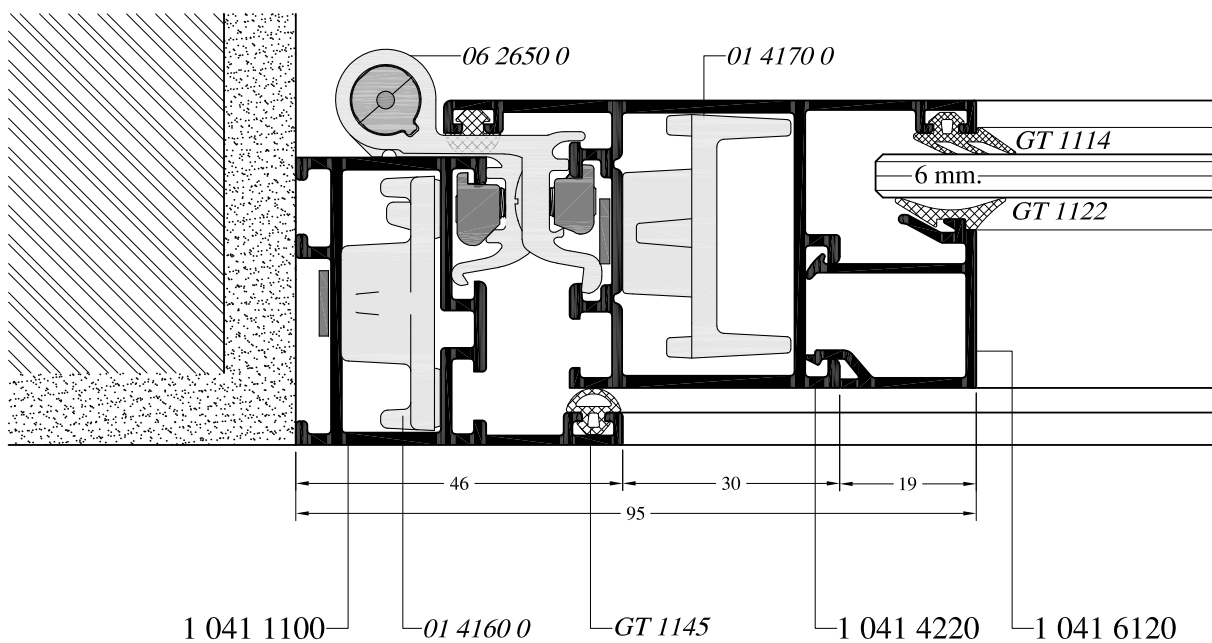
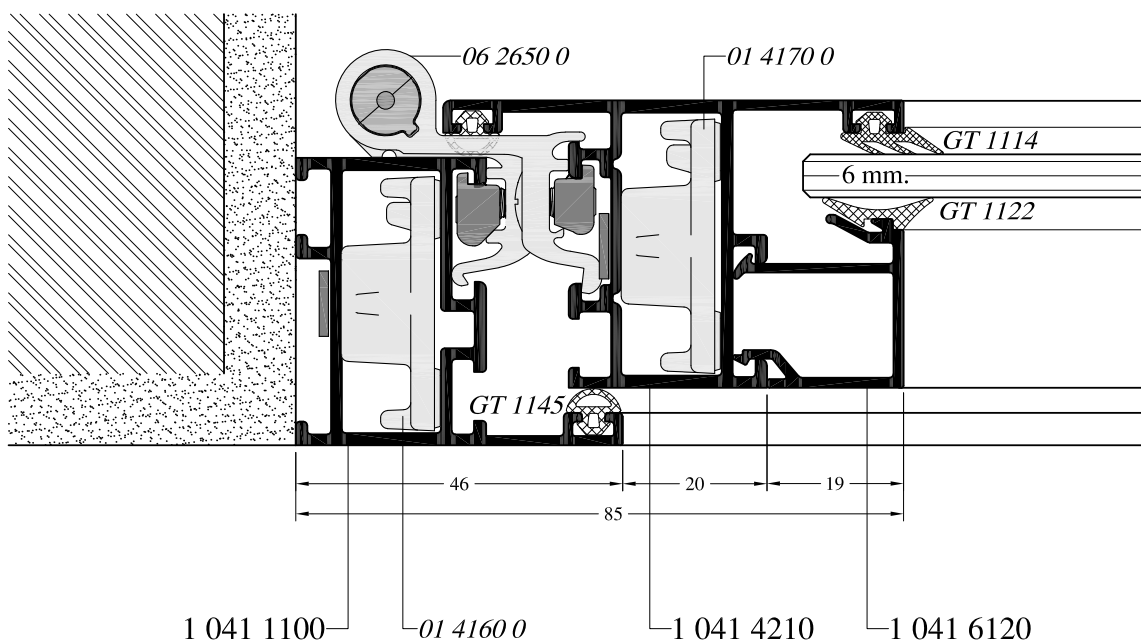
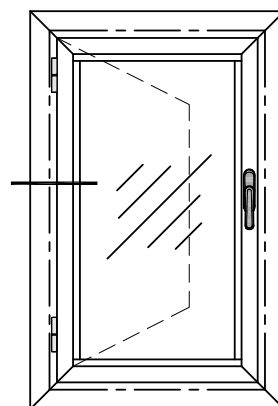
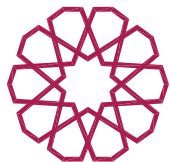


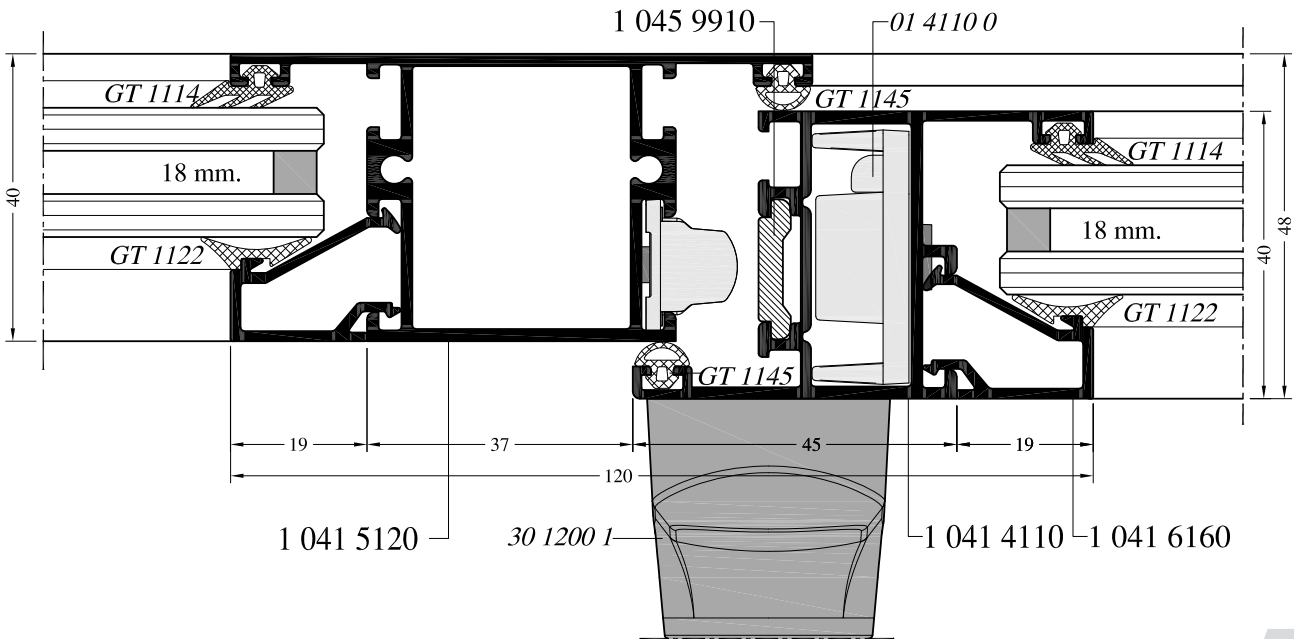
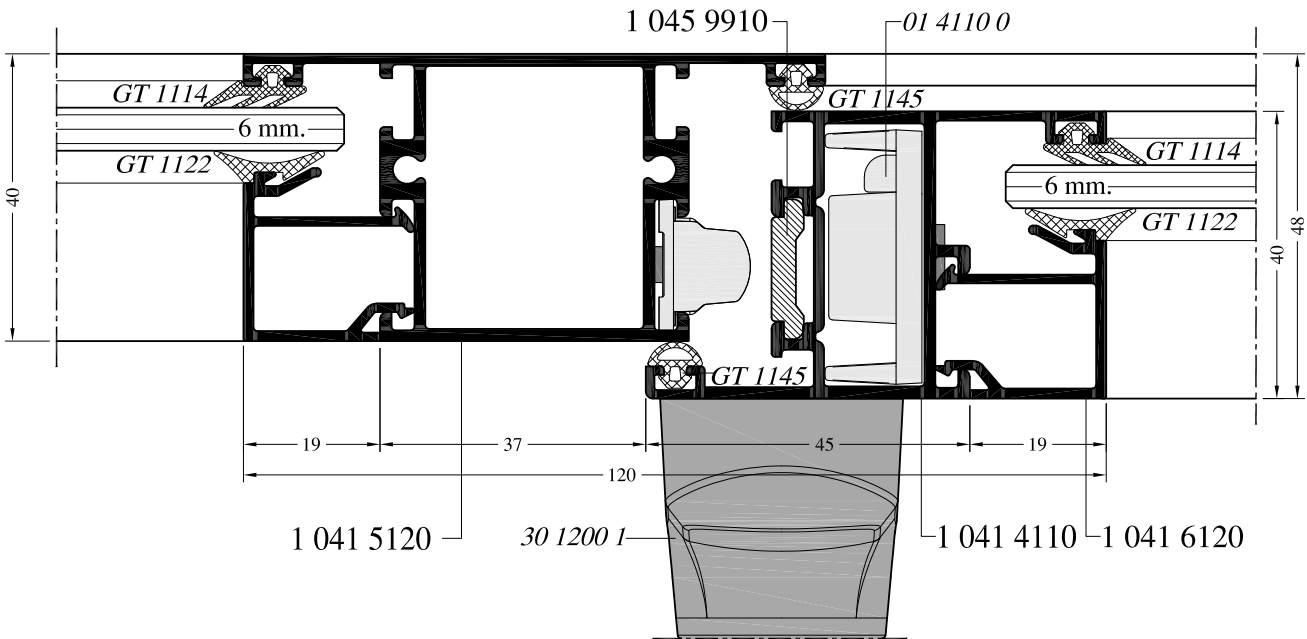
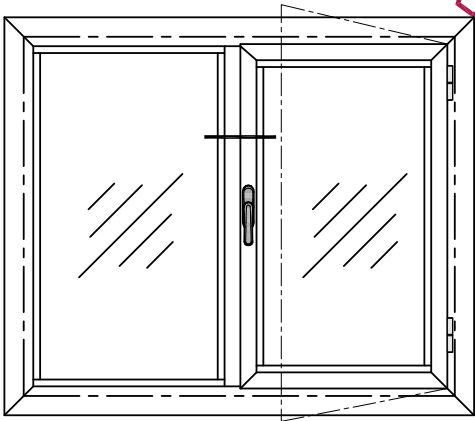


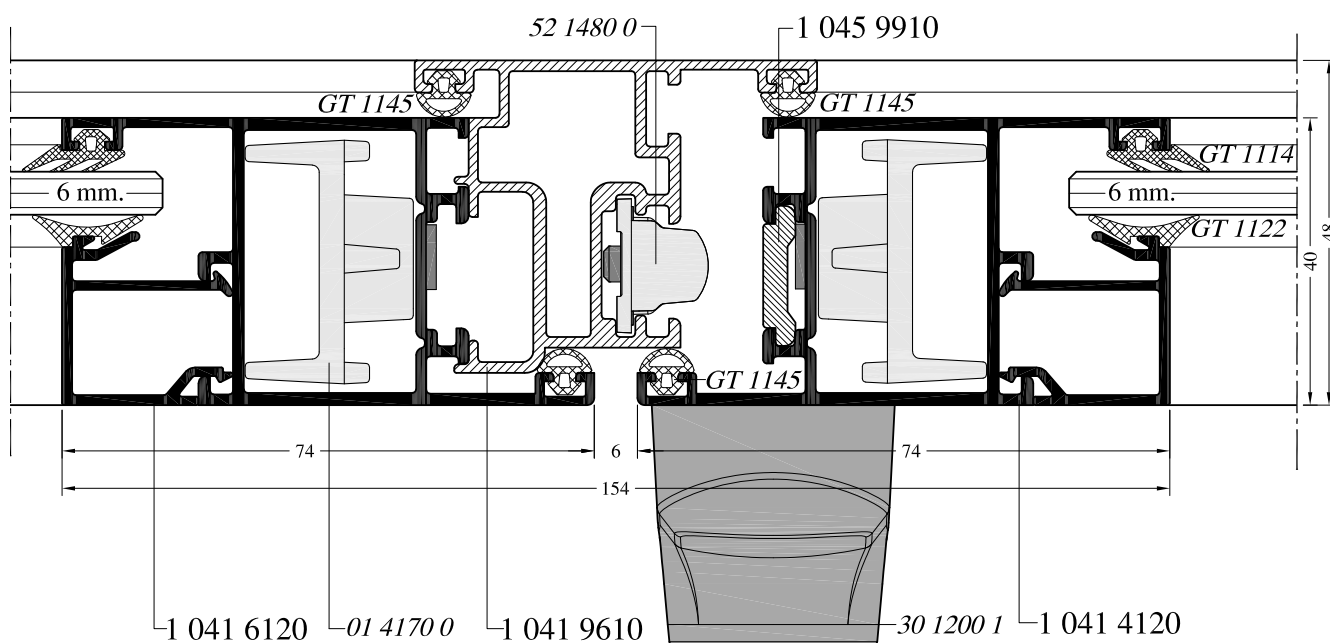
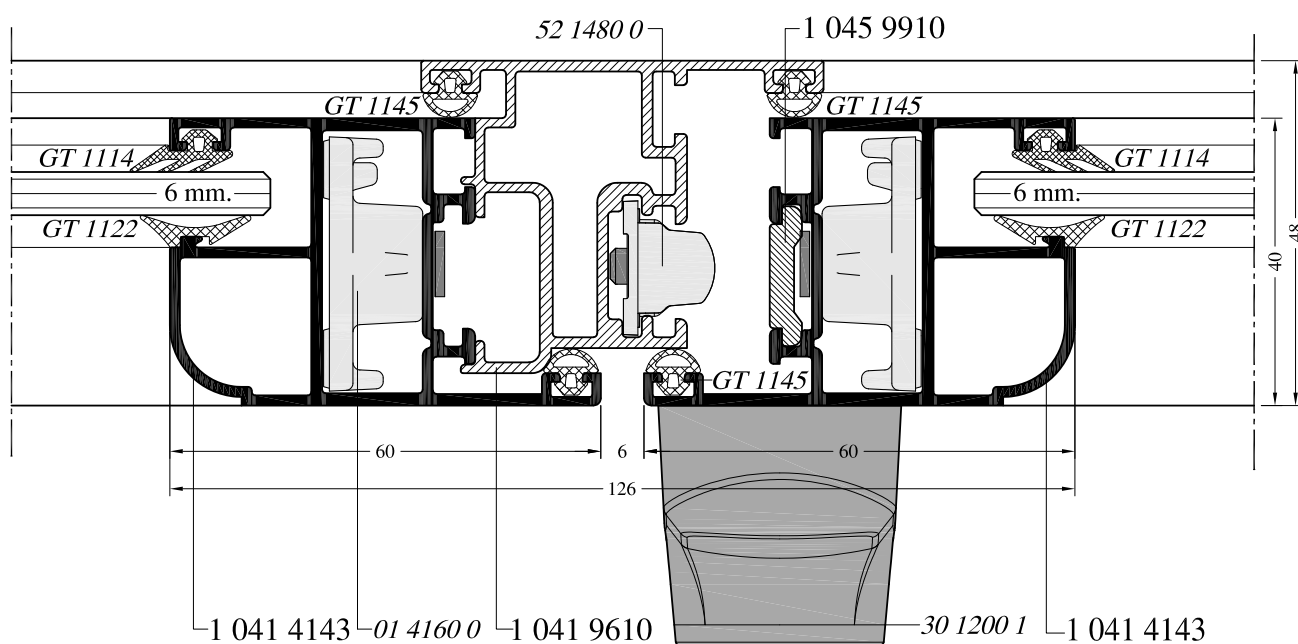
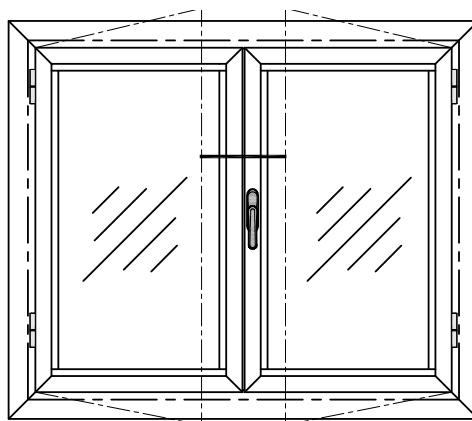
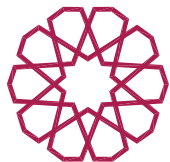


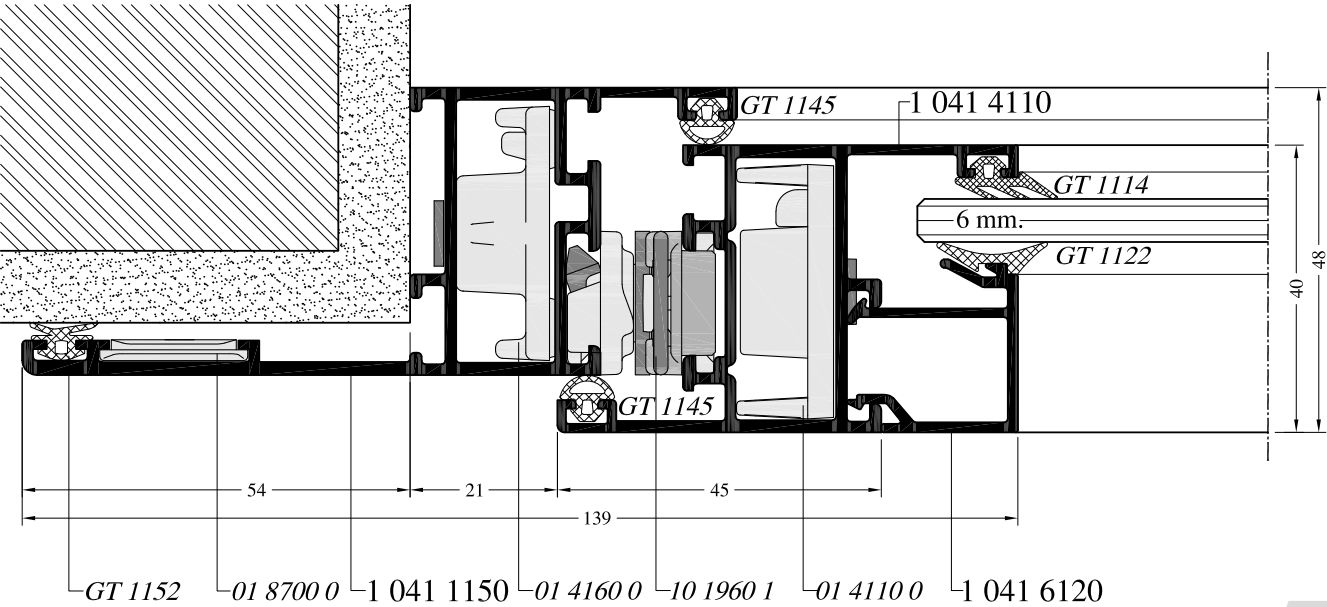
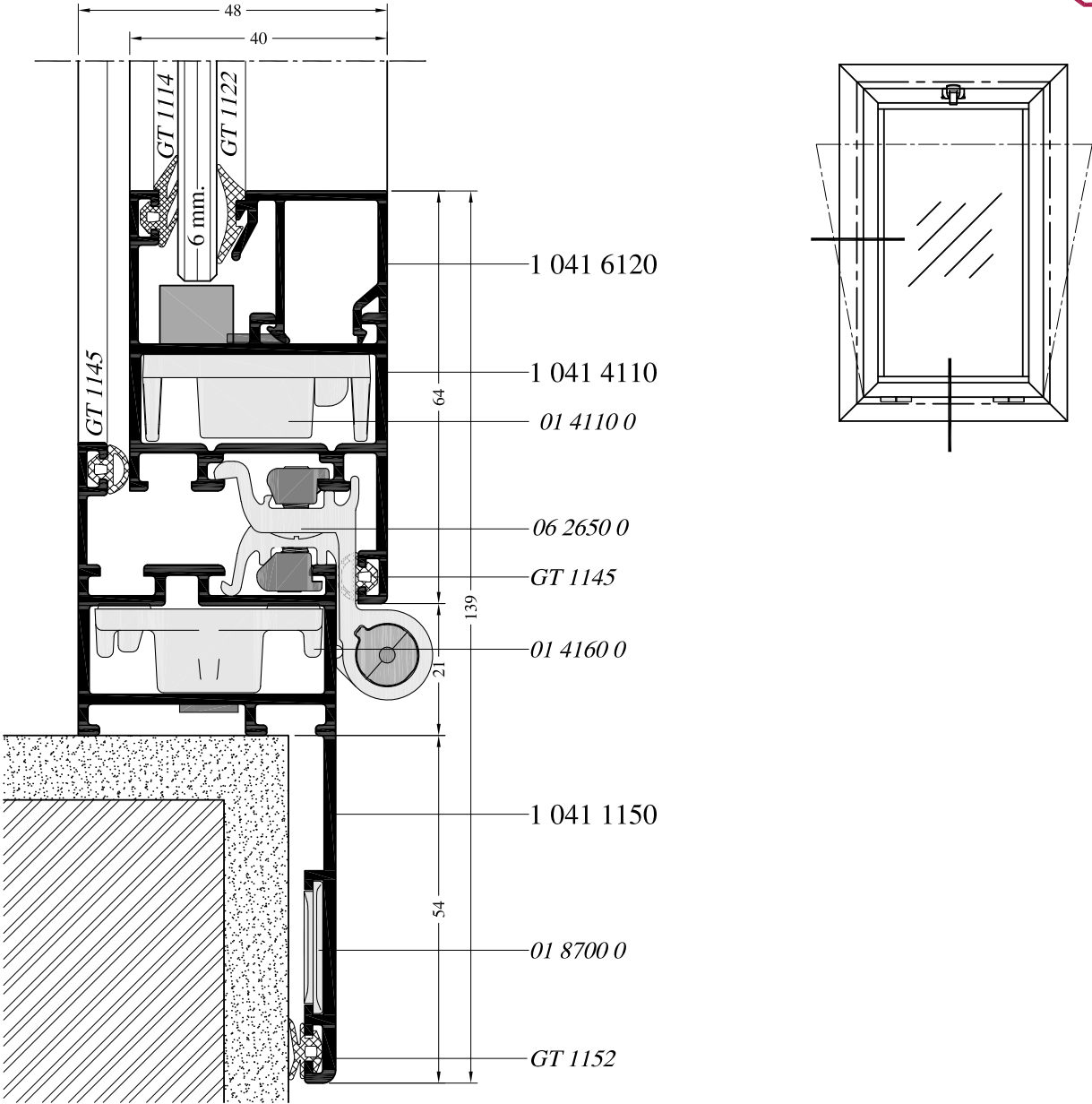


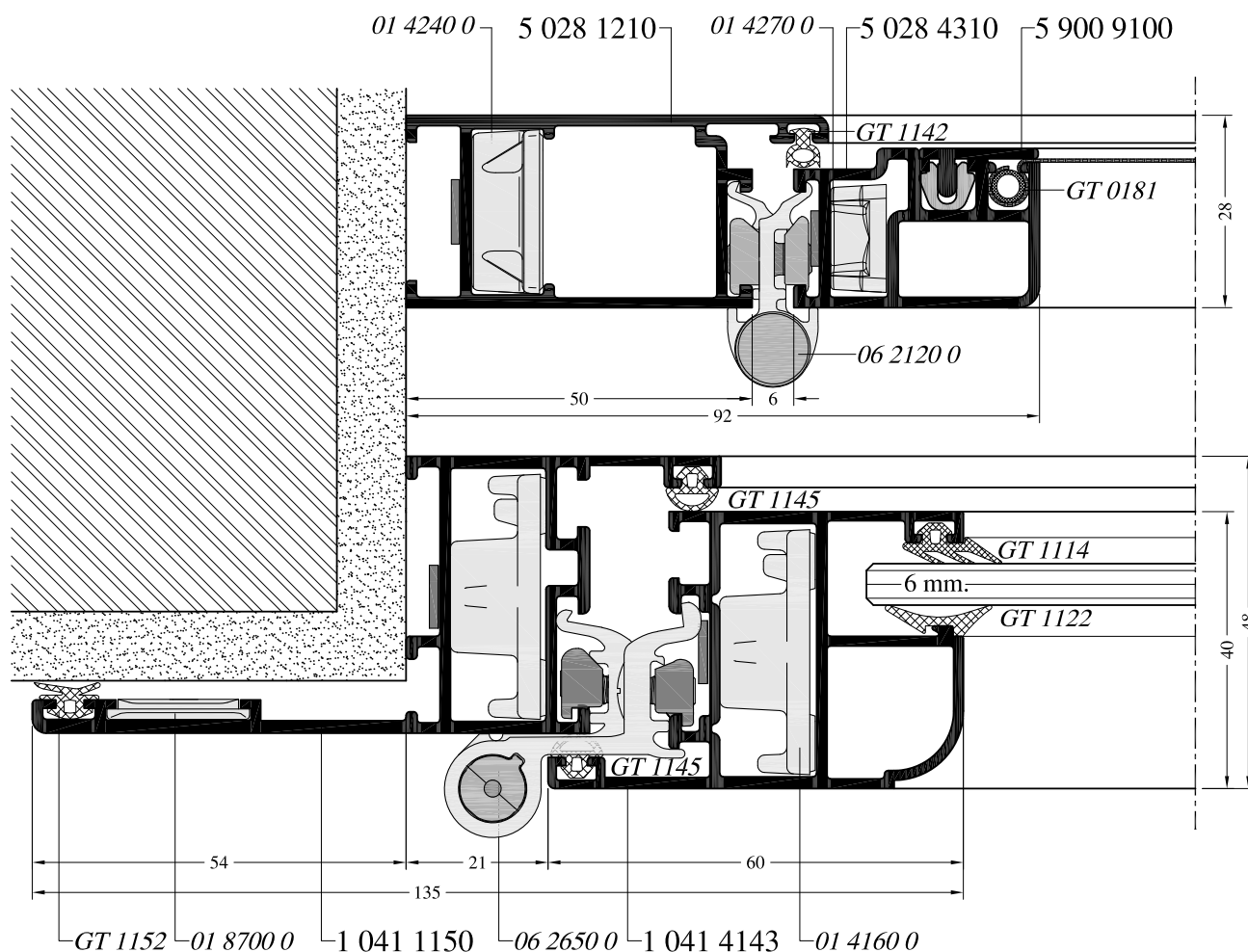
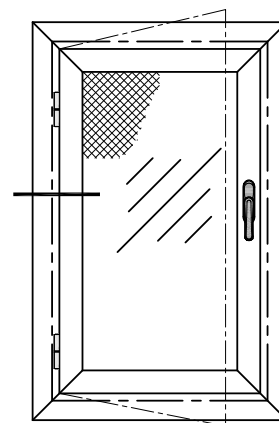
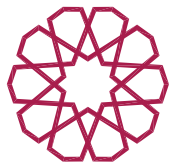


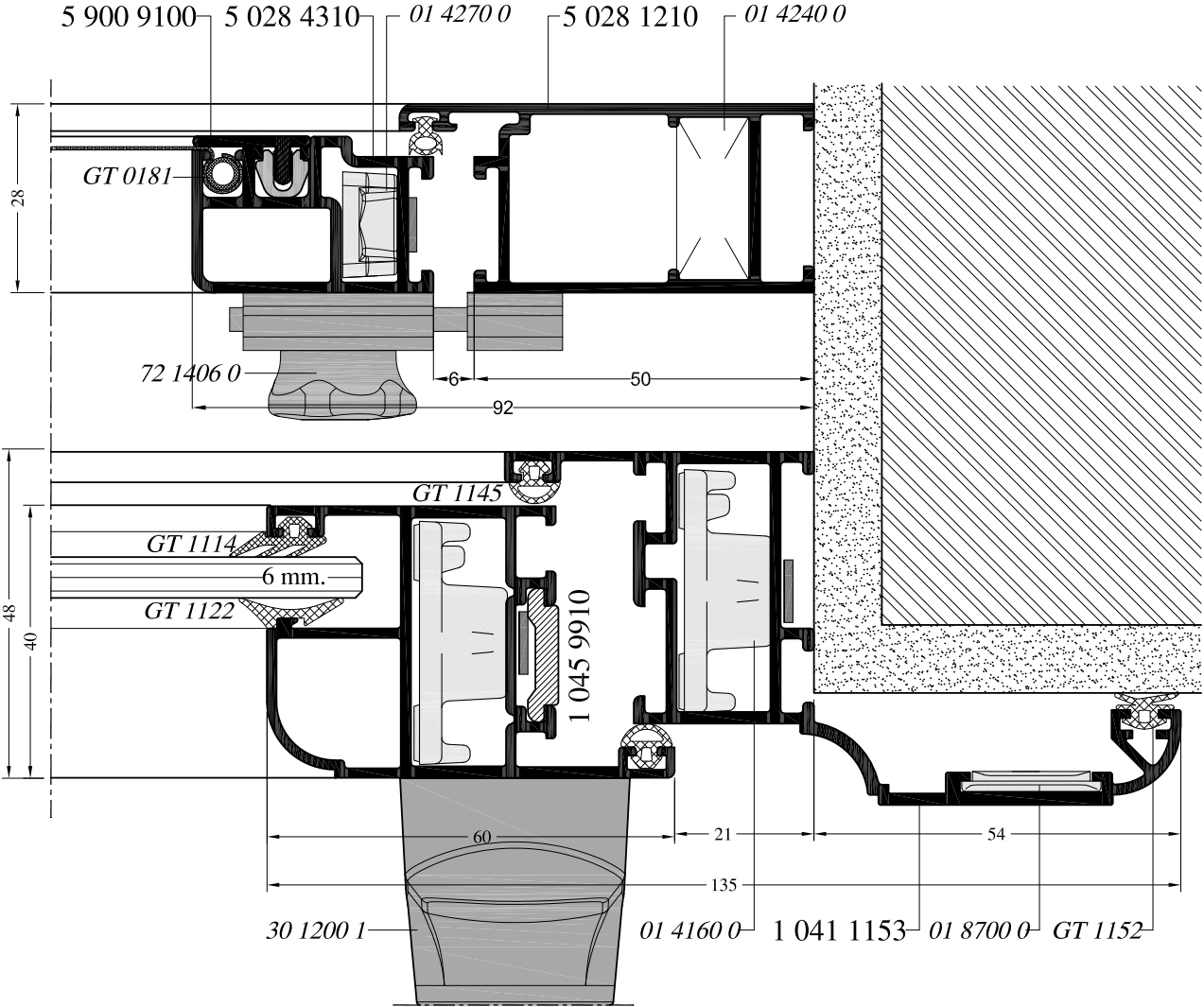
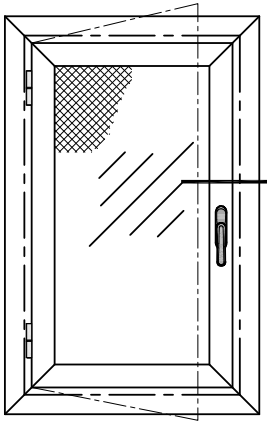


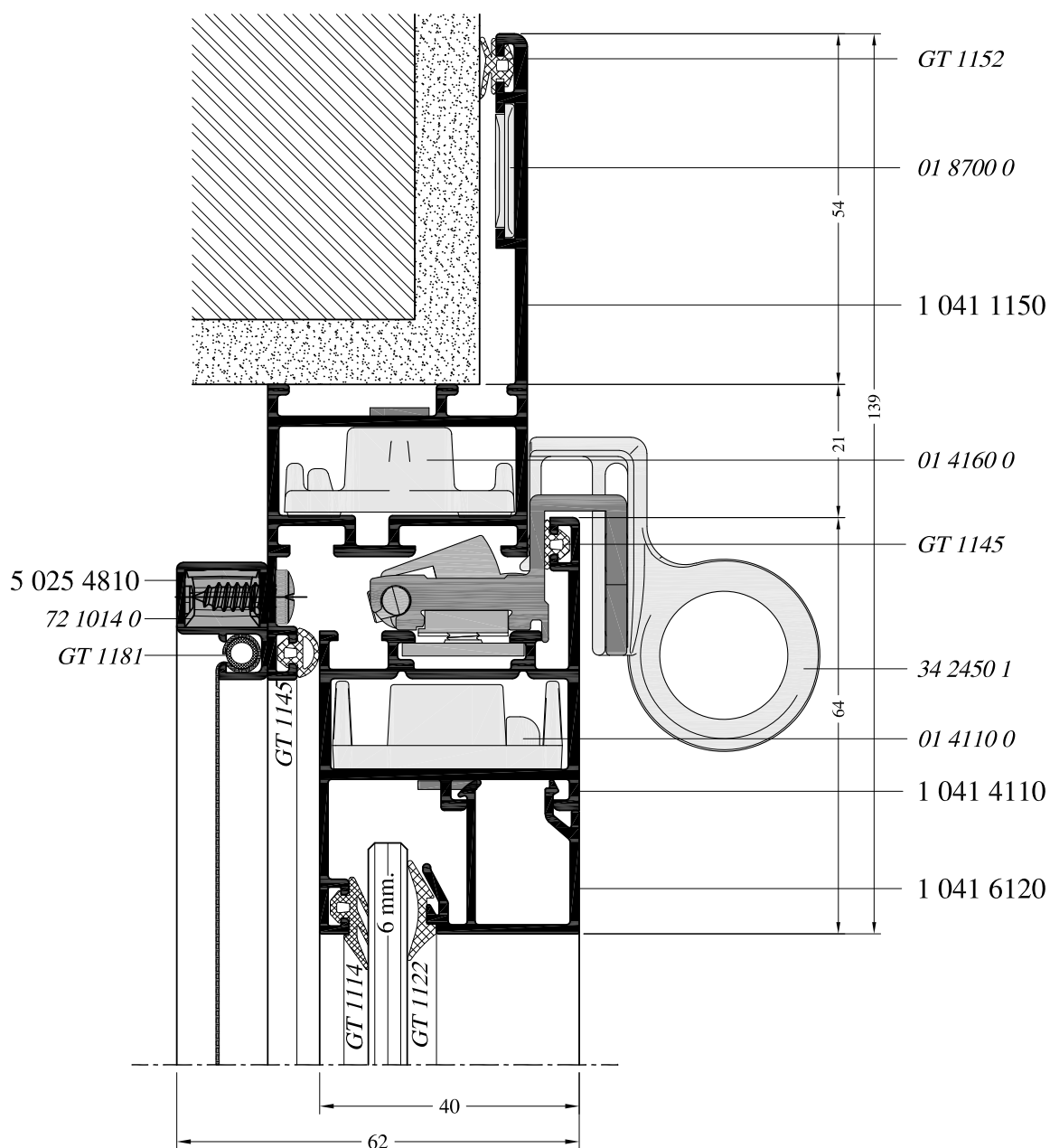
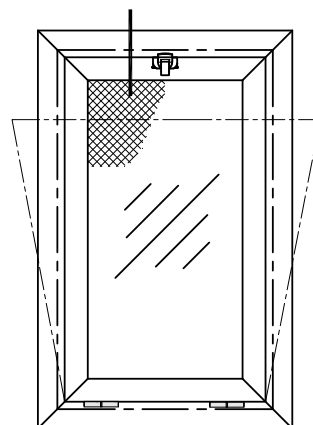
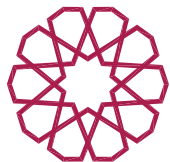


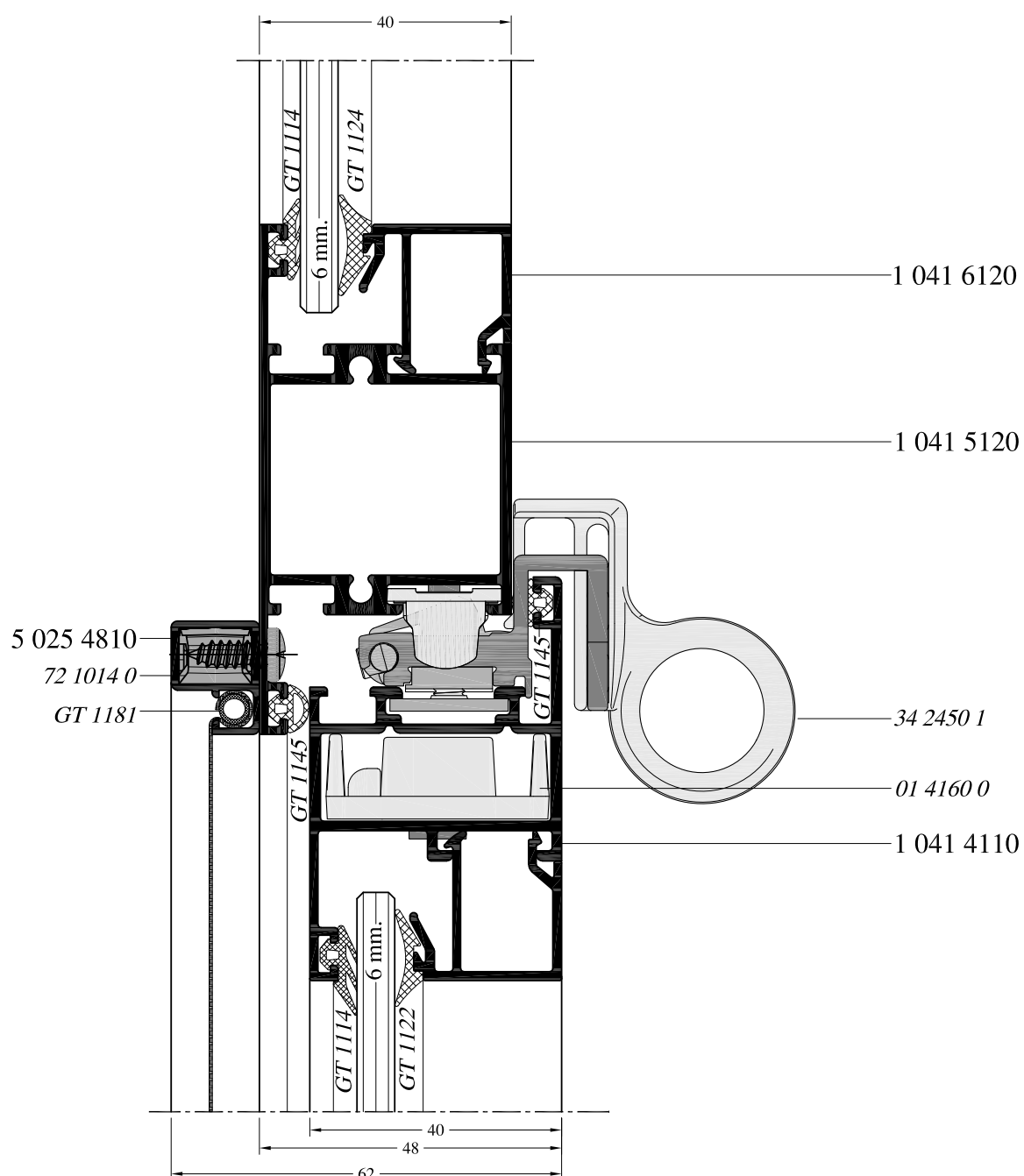
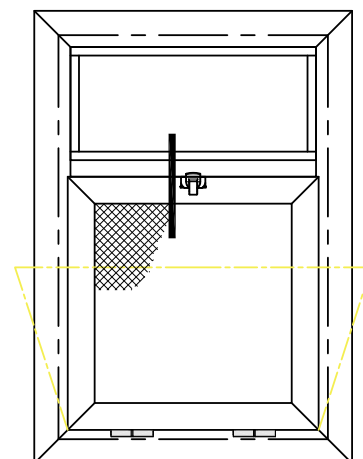
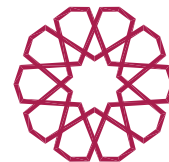


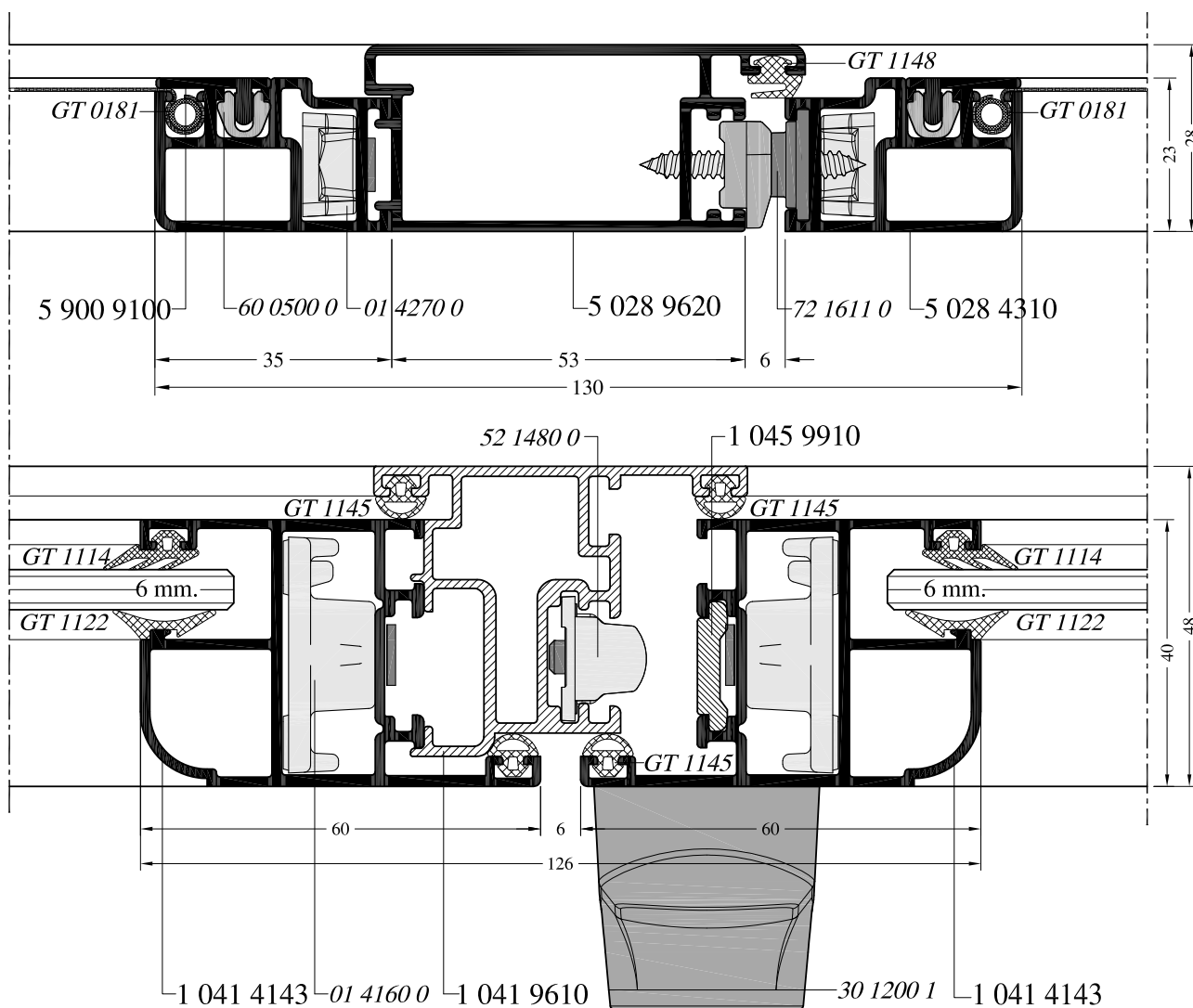
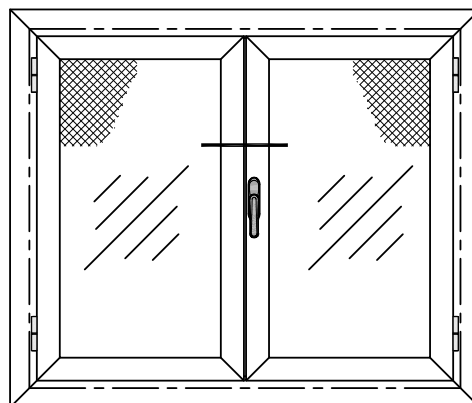
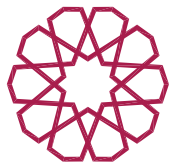


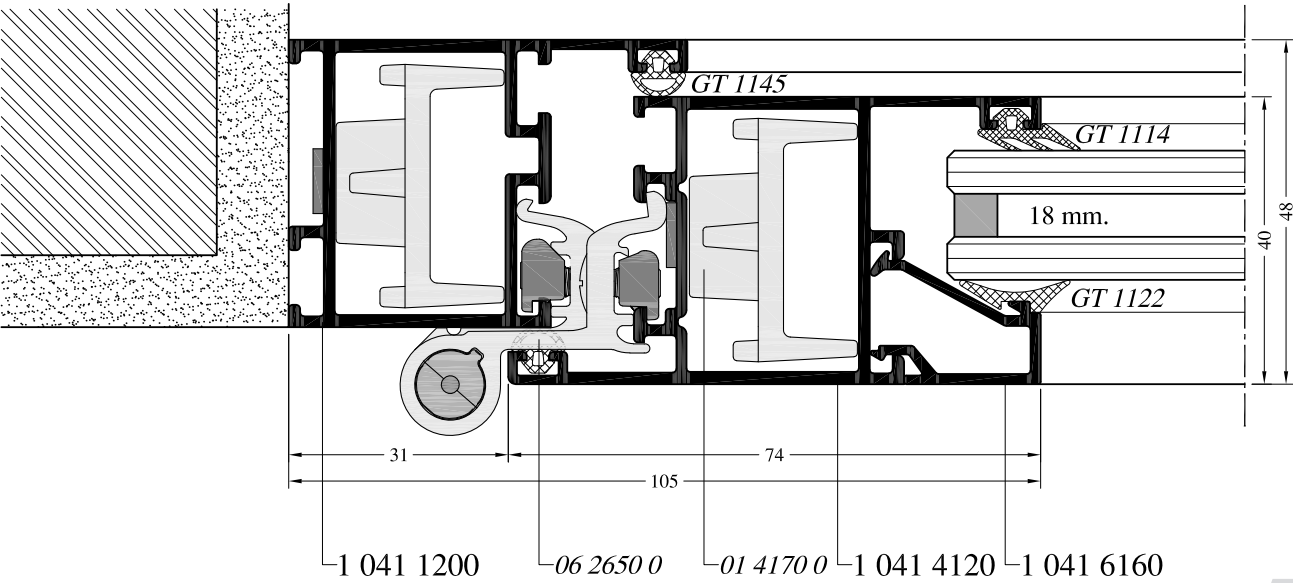
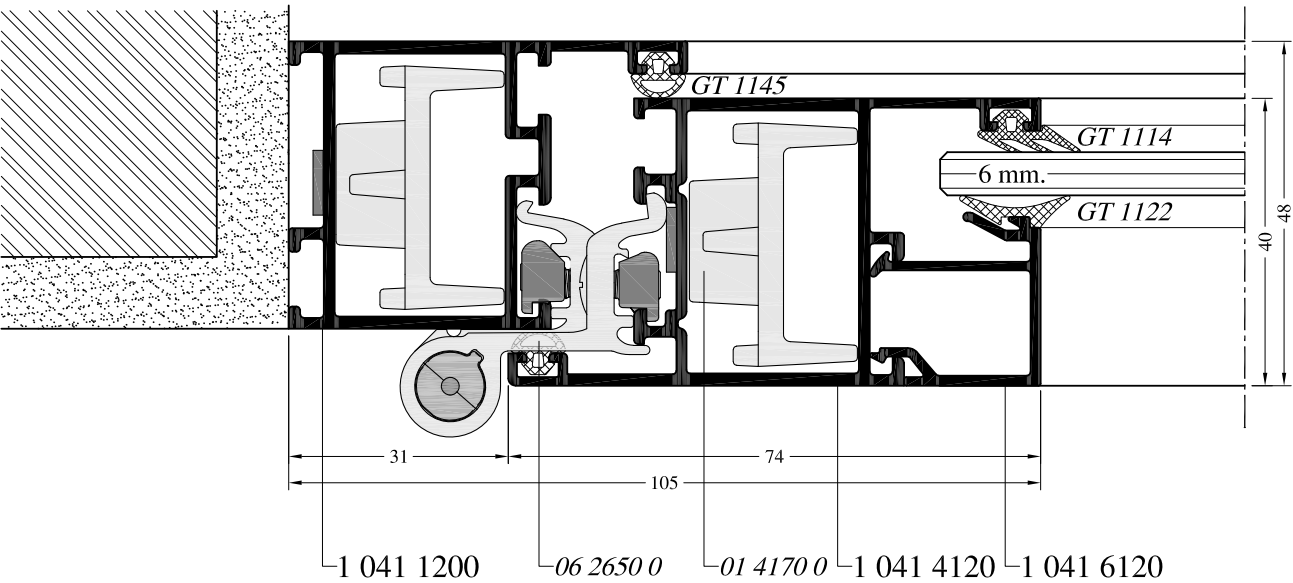
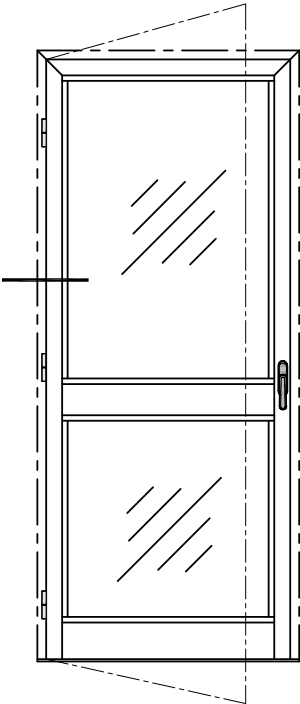
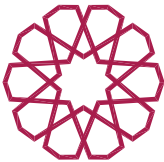


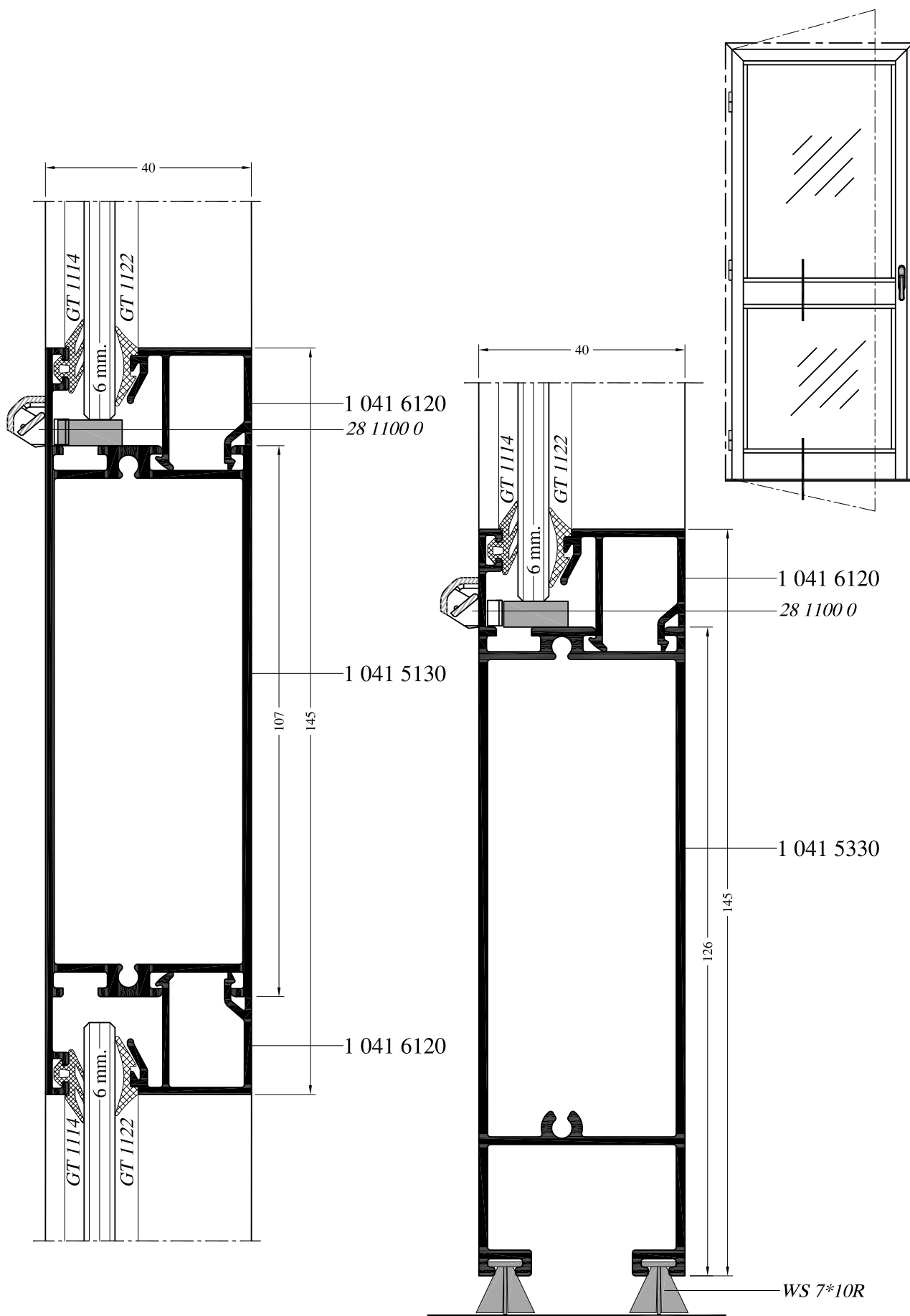
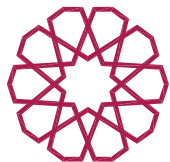


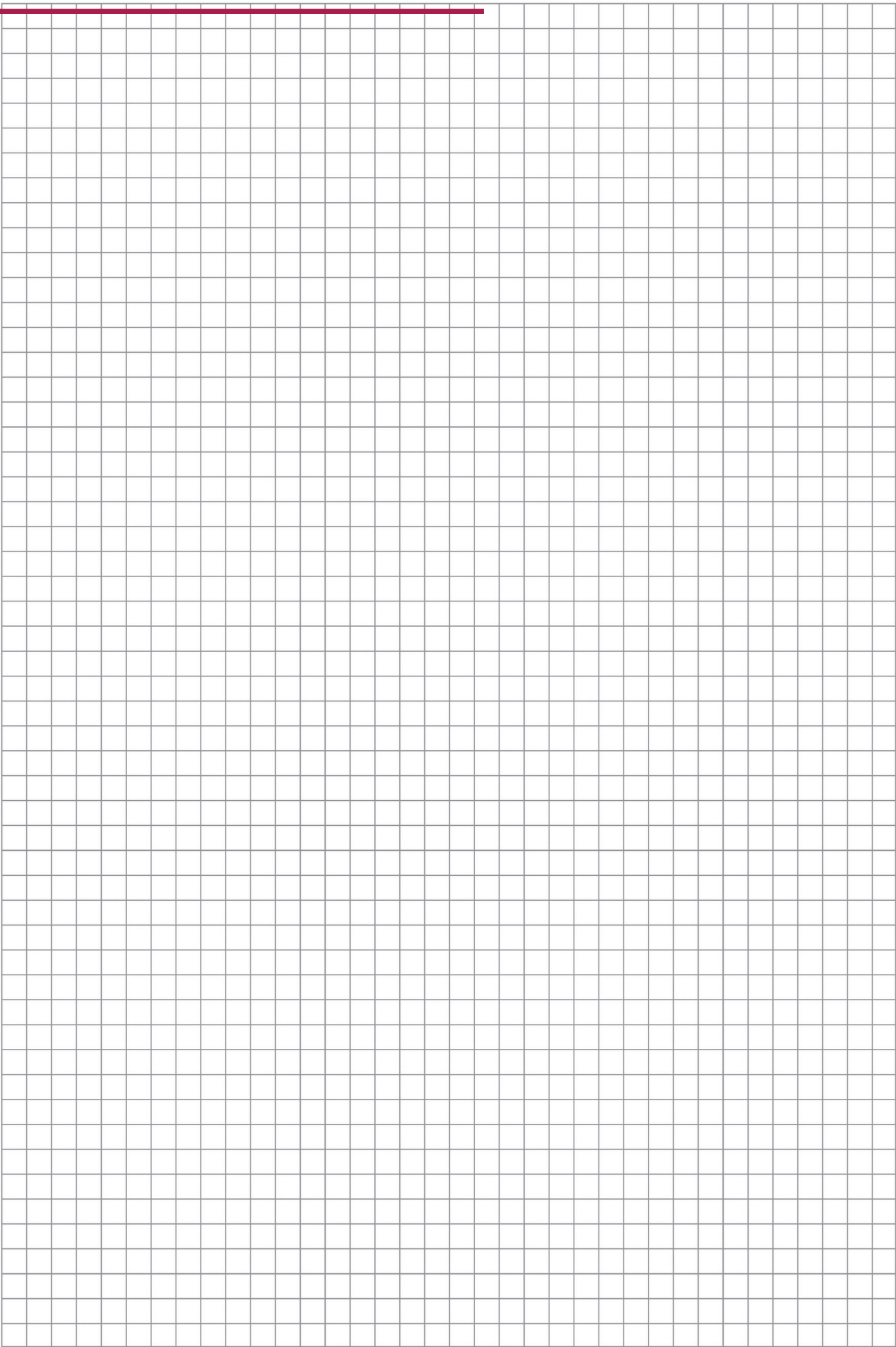


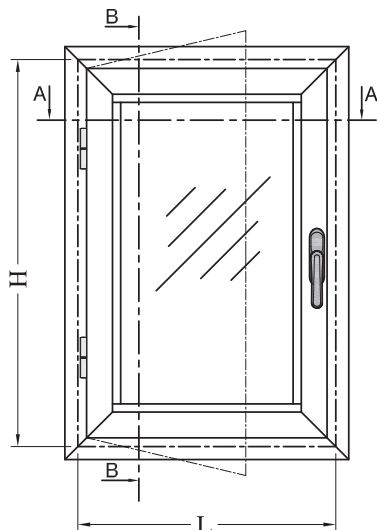
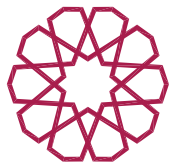






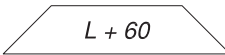
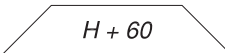
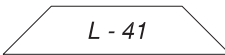
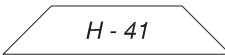
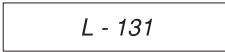
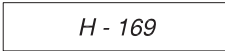
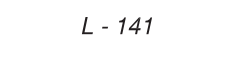
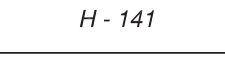


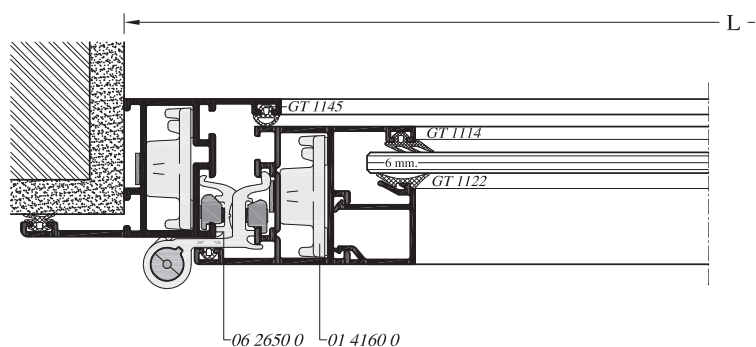




TOTAL WEIGHT	
L (m.) × 3.682 Kg.	+
H (m.) × 3.828 Kg.	

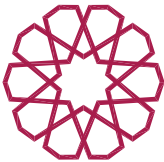
TOTAL=	Kg.

PROFILES CUTTING LIST			
FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	1 041 1130	2	
		2	
	1 041 4110	2	
		2	
	1 041 6120	2	
		2	
SINGLE GLASS"4-6mm"		1	
			
ALL DIMENSIONS IN mm.			

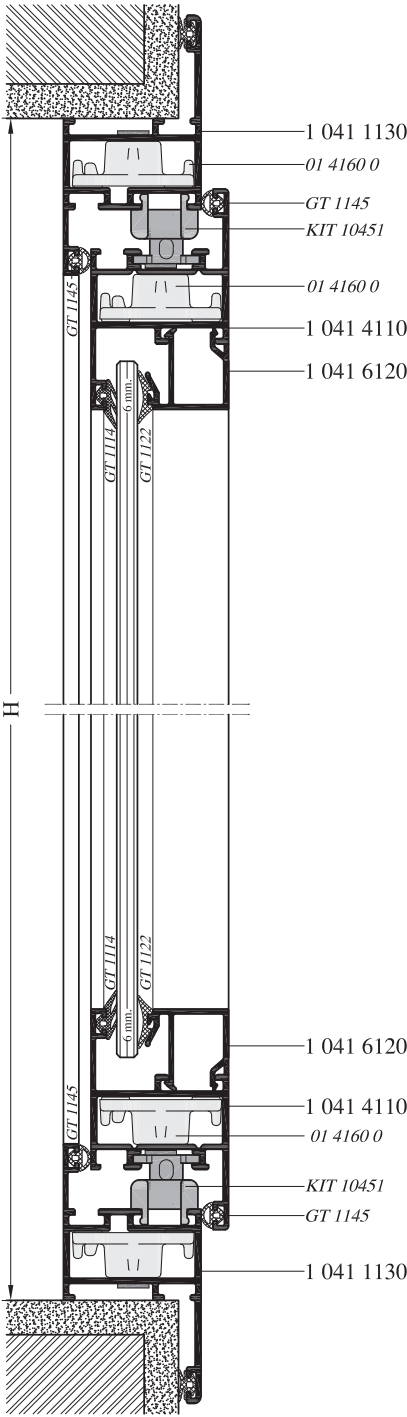
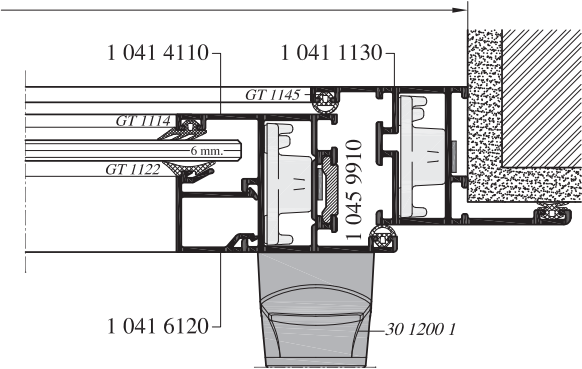


SEC A-A

*HINGED WINDOW " 1 LEAF "

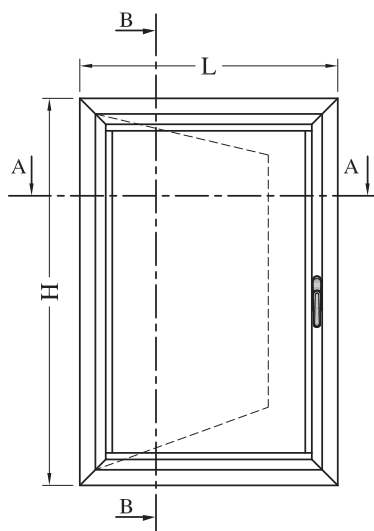
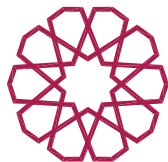


ACCESSORIES LIST			
FIGURE	ACC. NO	QTY.	DESCRIPTION
	01 4160 0	8	Corner Joint
	06 2650 0	2	Hinges
	30 1200 1	1	Cremone Handle
	KIT 10451	1	Locking Kit
	28 1100 0	1	Drainage Cover
	GT 1114	2L+2H	Glass Gasket
	GT 1122	2L+2H	Glass Gasket
	GT 1145	4L+4H	Striker Gasket
	GT 1152	2L+2H+240	Frame Gasket



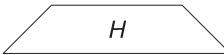
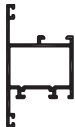
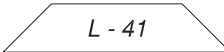
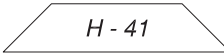
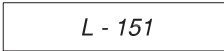
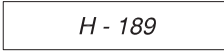
SEC. B-B

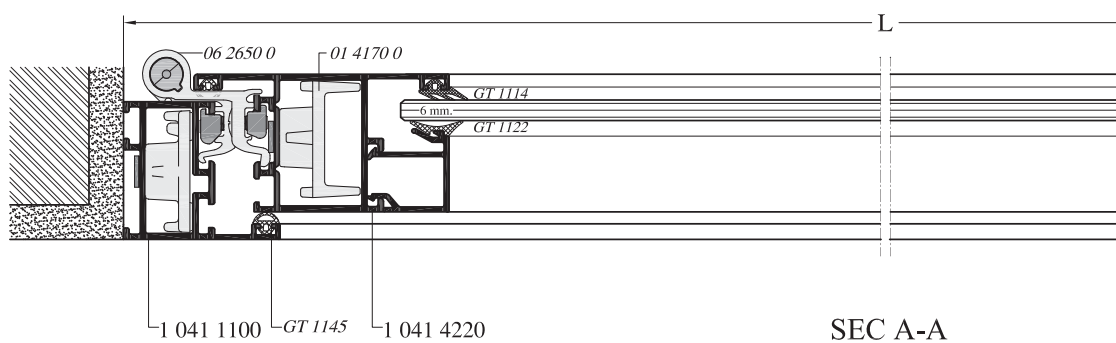
Scale 1:2



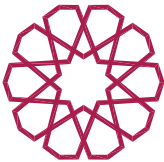
TOTAL WEIGHT	
L (m.) X 3.342 Kg.	+
H (m.) X 3.488 Kg.	

TOTAL=	Kg.

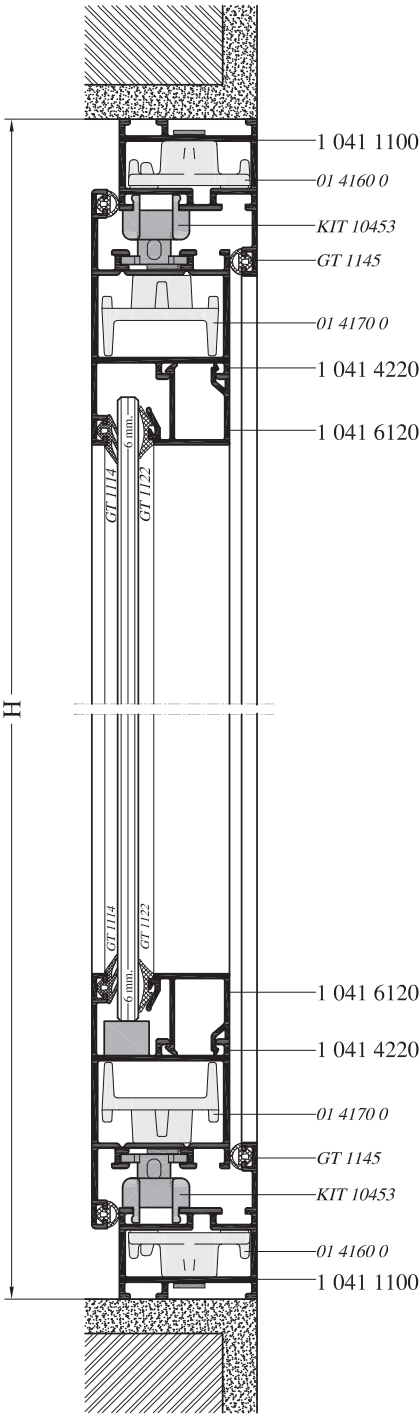
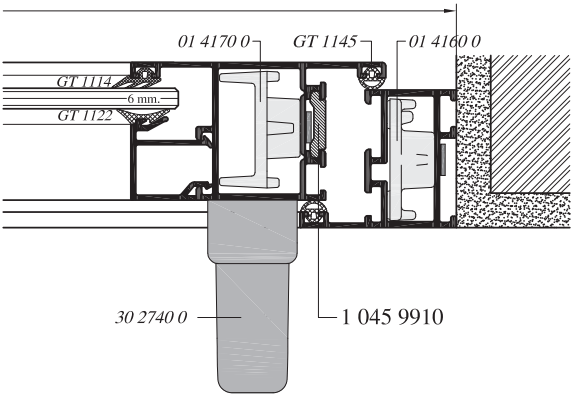
PROFILES CUTTING LIST			
FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	1 041 1100	2	
		2	
	1 041 4220	2	
		2	
	1 041 6120	2	
		2	
SINGLE GLASS"4-6mm"		1	L - 161
			H - 161
ALL DIMENSIONS IN mm.			



*HINGED WINDOW " 1 LEAF-OPENING OUT "

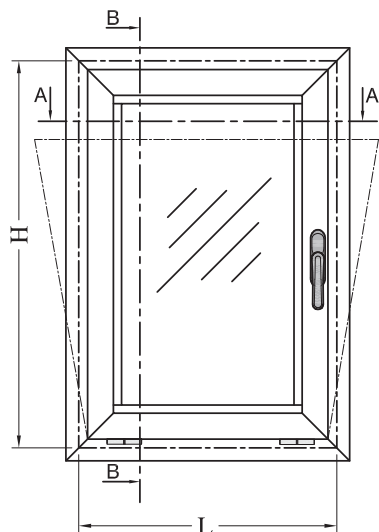
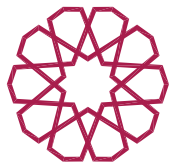


ACCESSORIES LIST			
FIGURE	ACC. NO	QTY.	DESCRIPTION
	01 4160 0	4	Corner Joint
	01 4170 0	4	Corner Joint
	06 2650 0	2	Hinges
	30 2740 0	1	Aton Cremone Handle
	KIT 10453	1	Locking Kit
	50 8800 0	1	Connection Kit
	28 1100 0		Drainage Cover
	GT 1114	2L+2H	Glass Gasket
	GT 1122	2L+2H	Glass Gasket
	GT 1145	4L+4H	Striker Gasket



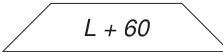
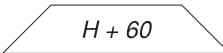
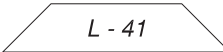
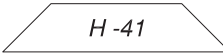
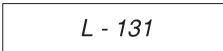
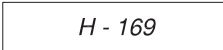
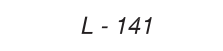
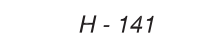
SEC B-B

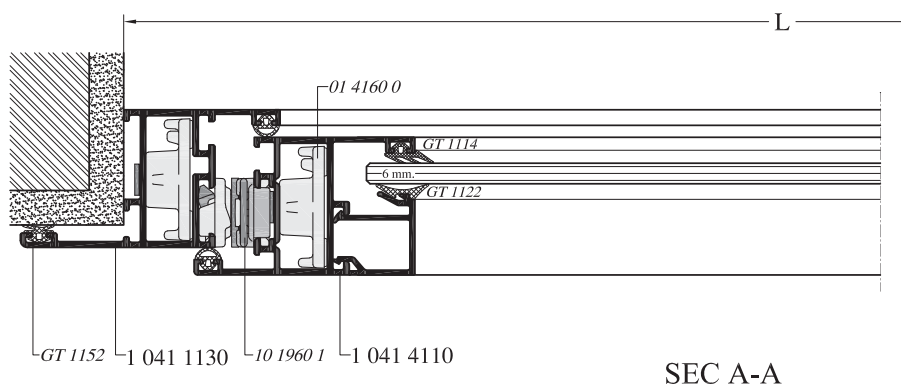
Scale 1:2



TOTAL WEIGHT	
L (m.) × 3.682 Kg.	+
H (m.) × 3.828 Kg.	

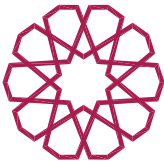
TOTAL=	Kg.

PROFILES CUTTING LIST			
FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	1 040 1130	2	
		2	
	1 040 4110	2	
		2	
	1 041 6120	2	
		2	
SINGLE GLASS"4-6mm"		1	
			
ALL DIMENSIONS IN mm.			

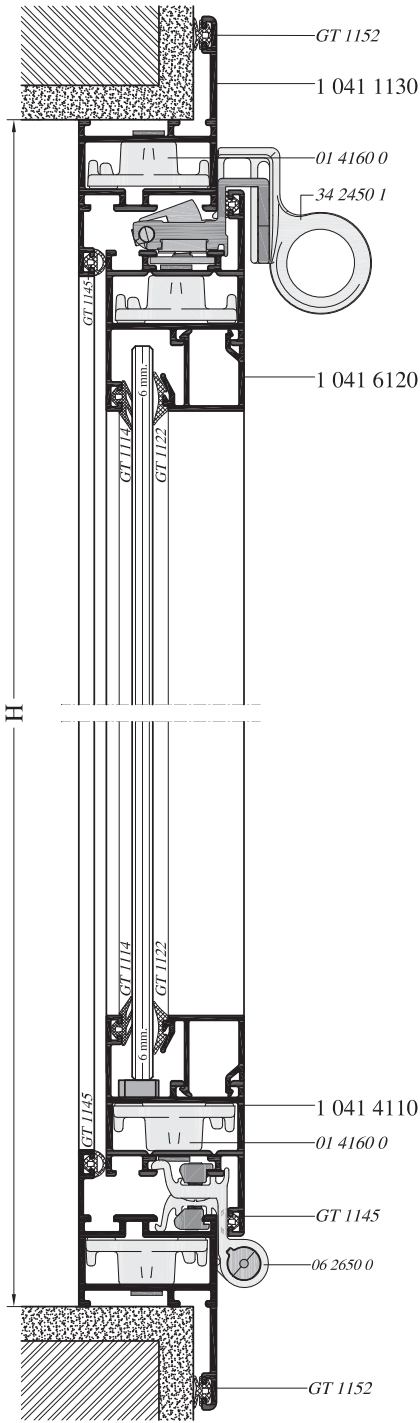
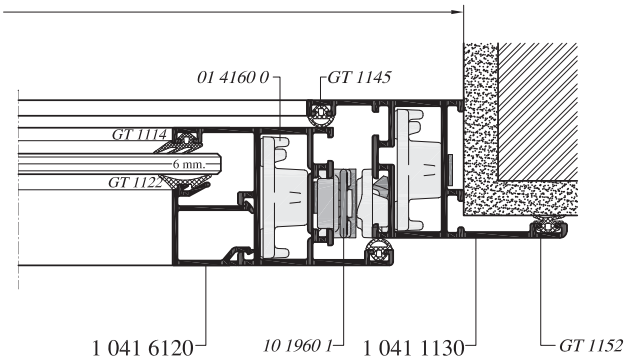


SEC A-A

*TILT WINDOW " 1 LEAF"

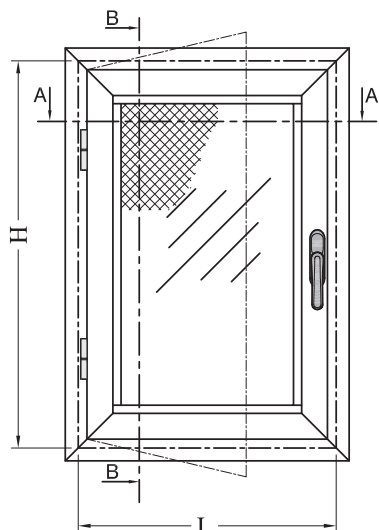
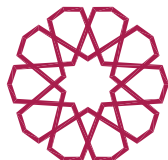


ACCESSORIES LIST			
FIGURE	ACC. NO	QTY.	DESCRIPTION
	01 4160 0	8	Corner Joint
	06 2650 0	2	Hinges
	34 2450 1	1	Finger Catch Handle
	10 1960 1	1	Balancing arm
	28 1100 0	1	Drainage Cover
	GT 1114	2L+2H	Glass Gasket
	GT 1122	2L+2H	Glass Gasket
	GT 1145	4L+4H	Striker Gasket
	GT 1152	2L+2H+240	Frame Gasket



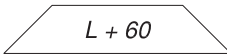
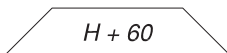
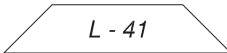
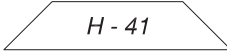
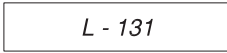
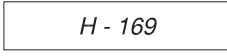
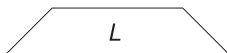
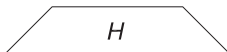
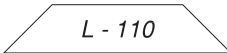
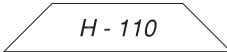
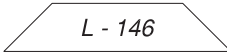
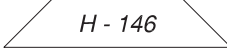
SEC B-B

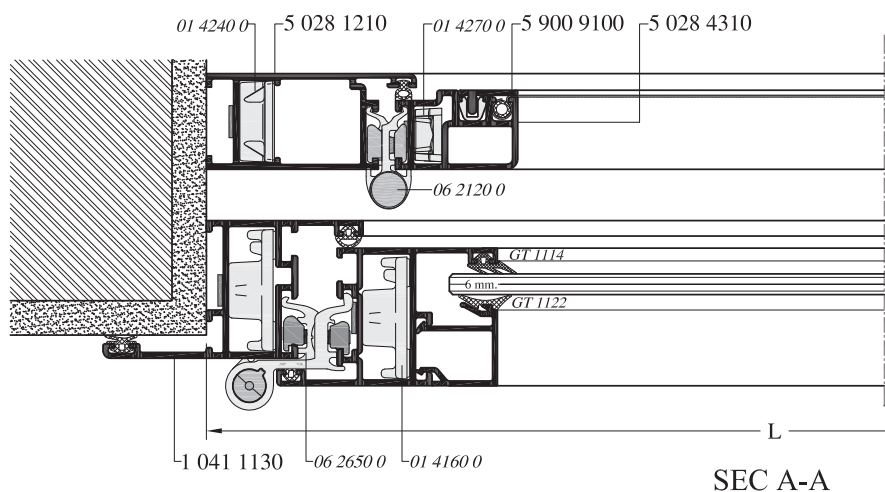
Scale 1:2



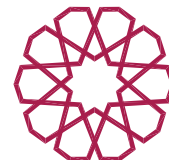
TOTAL WEIGHT	
L (m.) × 6.104 Kg.	+
H (m.) × 6.250 Kg.	

TOTAL=	Kg.

PROFILES CUTTING LIST			
FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	1 041 1130	2	
		2	
	1 041 4110	2	
		2	
	1 041 6120	2	
		2	
	5 028 1210	2	
		2	
	5 208 4310	2	
		2	
	5 900 9100	2	
		2	
SINGLE GLASS"4-6mm"		1	
			
ALL DIMENSIONS IN mm.			



*HINGED WINDOW+SCREEN "1 LEAF"

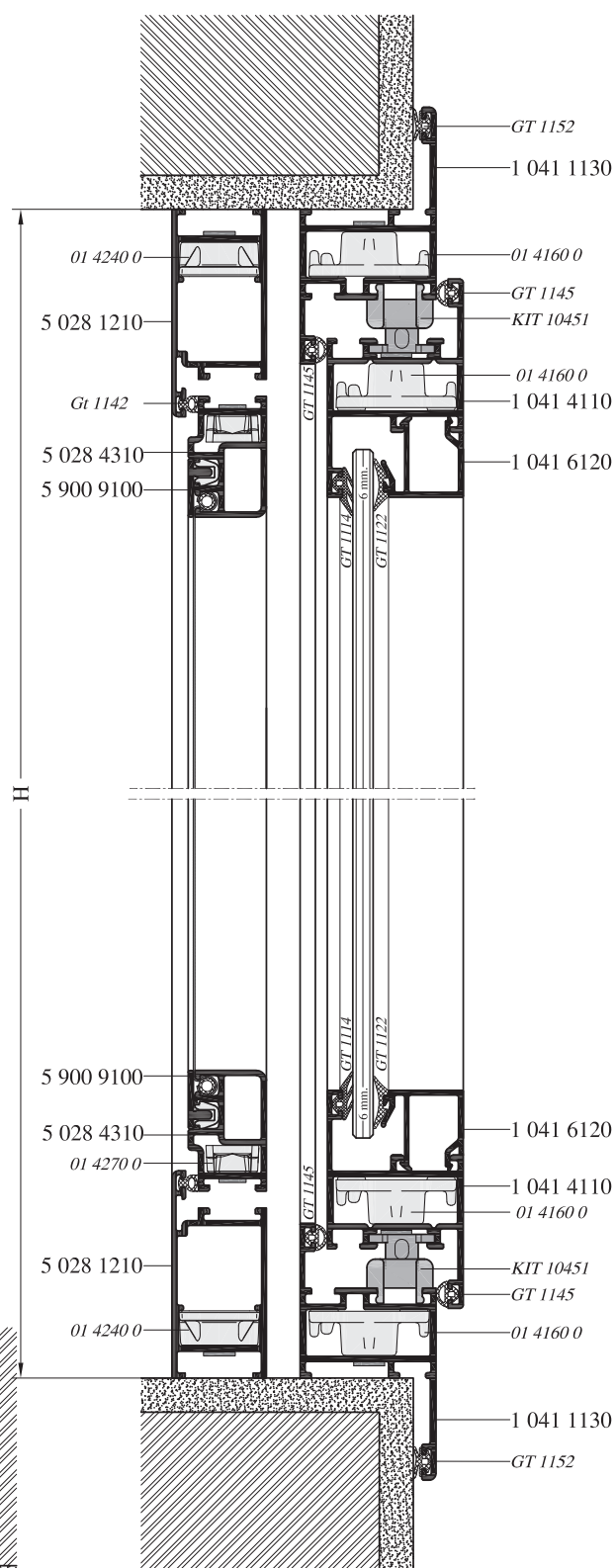
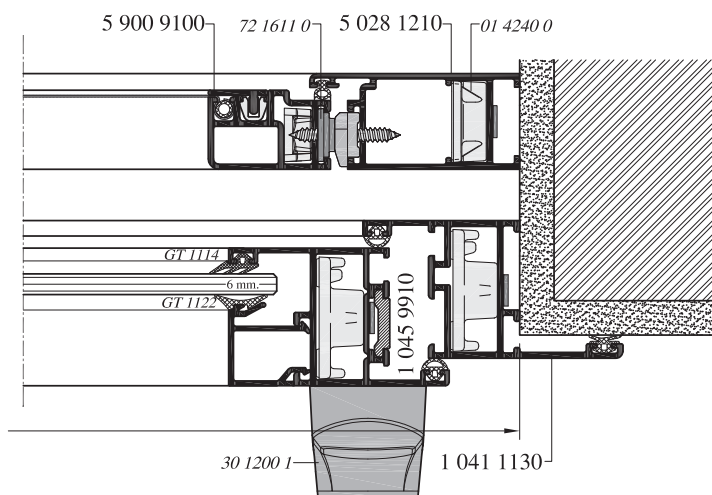


ACCESSORIES LIST

FIGURE	ACC. NO	QTY.	DESCRIPTION
	01 4160 0	8	Corner Joint
	06 2650 0	2	Hinges
	30 1200 1	1	Cremone Handle
	KIT 10451	1	Locking Kit
	28 1100 0	1	Drainage Cover
	GT 1114	2L+2H	Glass Gasket
	GT 1122	2L+2H	Glass Gasket
	GT 1145	4L+4H	Striker Gasket
	GT 1152	2L+2H+240	Frame Gasket

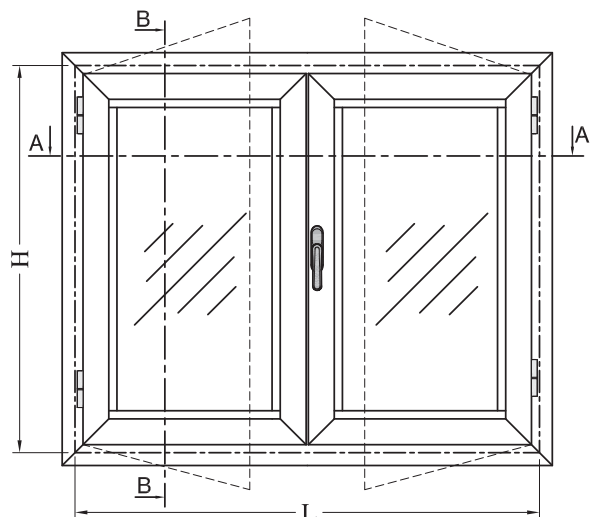
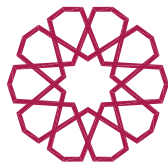
SCREEN ACCESSORIES LIST

	01 4240 0	4	Screen Corner Joint
	01 4270 0	4	Screen Corner Joint
	60 0500 0	$\frac{2L+2H}{0.30}$	Clip
	06 2120 0	2	Screen Hinges
	GT 0142	4L+4H	Striker Gasket
	GT 0181	2L+2H	Screen Round Gasket



SEC. B-B

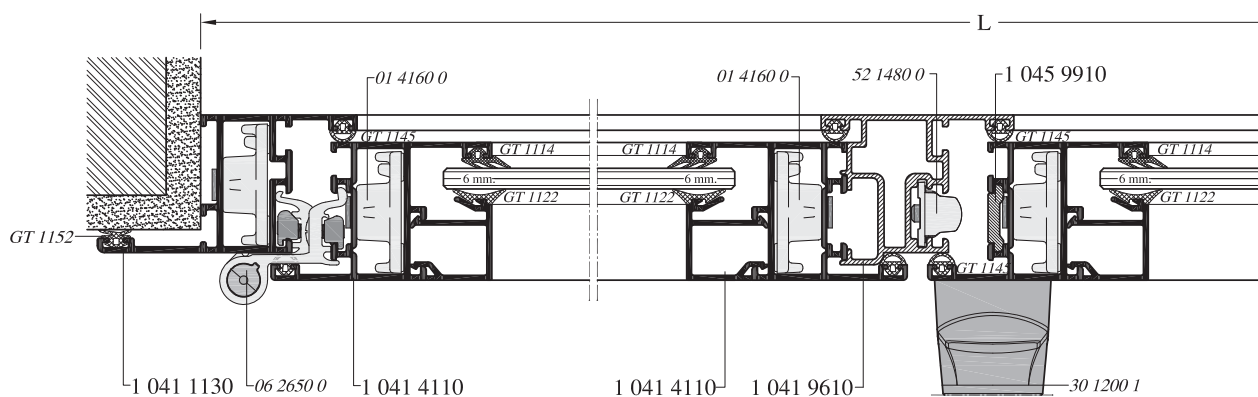
Scale 1:2



TOTAL WEIGHT	
L (m.) X 3.682 Kg.	+
H (m.) X 5.956 Kg.	

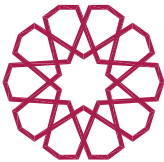
TOTAL=	Kg.

PROFILES CUTTING LIST			
FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	1 041 1130	2	L + 60
		2	H + 60
	1 041 4110	4	L - 47 2
		4	H - 41
	1 041 6120	4	L - 227 2
		4	H - 131
	1 041 9610	1	H - 106
SINGLE GLASS"4-6mm"		2	L - 247 2
			H - 141
ALL DIMENSIONS IN mm.			



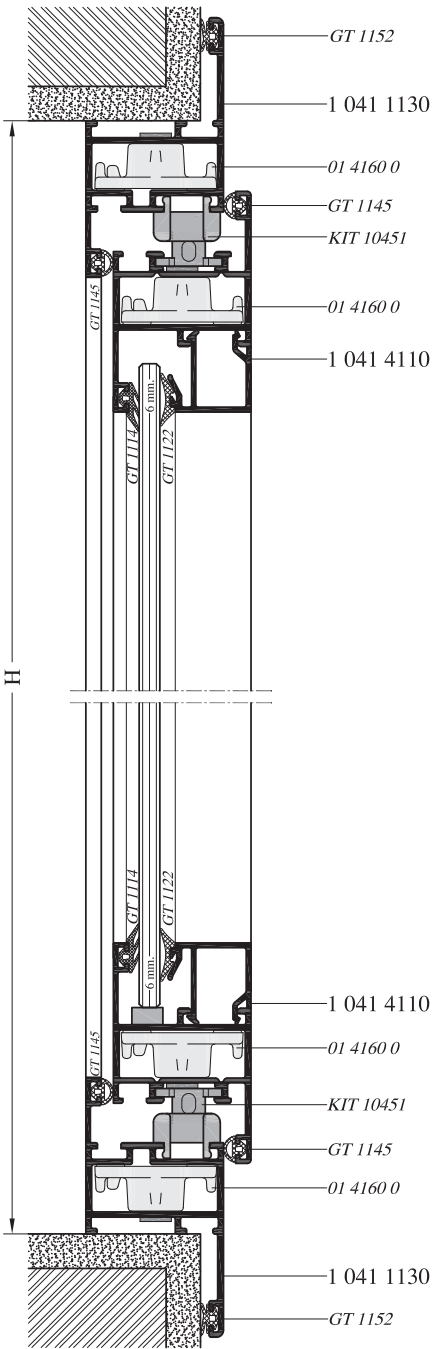
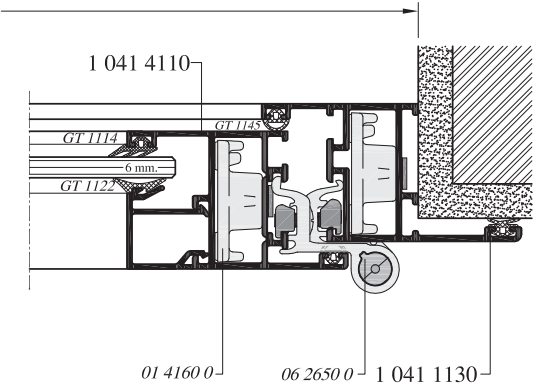
SEC A-A

*HINGED WINDOW " 2 LEAVES "



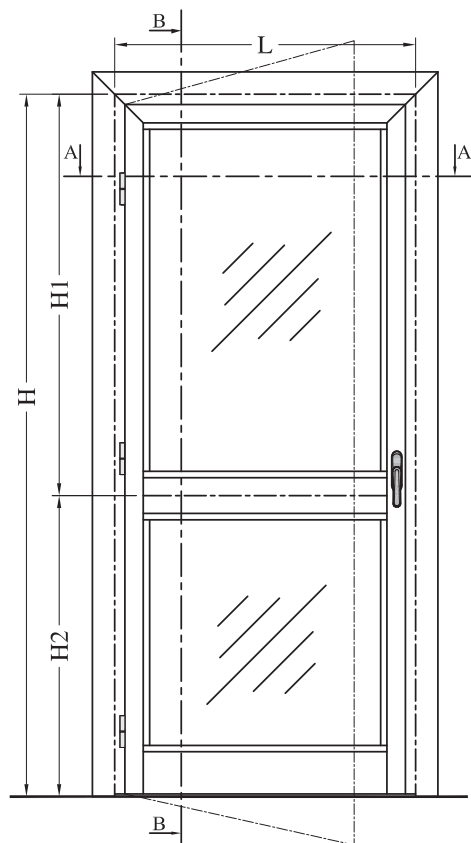
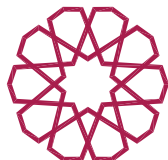
ACCESSORIES LIST

FIGURE	ACC. NO	QTY.	DESCRIPTION
	01 4160 0	12	Corner Joint
	06 2650 0	4	Hinges
	62 1441 0	1	Central Rabbet Plug
	28 1100 0	1	Drainage Cover
	52 1480 0	2	Bolt
	30 1200 1	1	Cremone Handle
	KIT 10451	1	Locking Kit
	GT 1114	2L+4H	Glass Gasket
	GT 1122	2L+4H	Glass Gasket
	GT 1145	4L+8H	Striker Gasket
	GT 1152	2L+2H+240	Frame Gasket

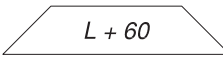
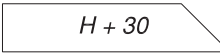
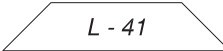
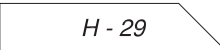
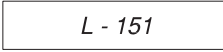
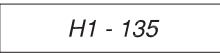
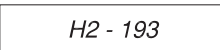
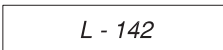
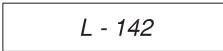


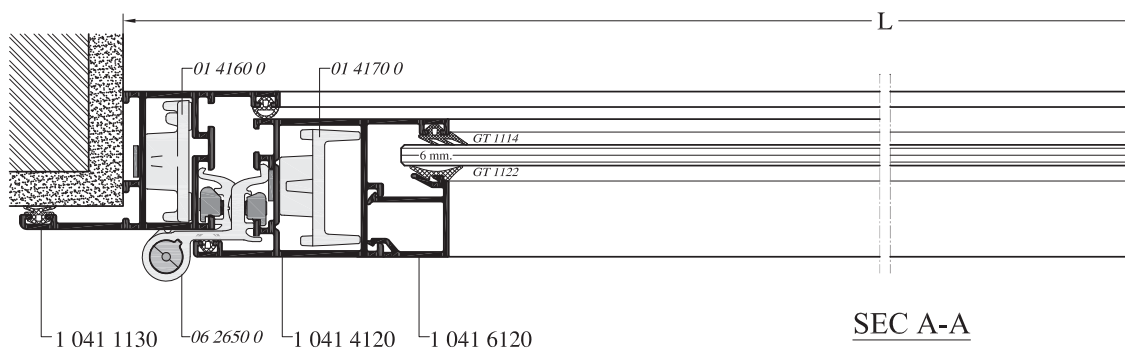
SEC. B-B

Scale 1:2

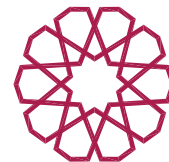


TOTAL WEIGHT	
L (m.) X	4.978 Kg.
H1 (m.)X	3.616 Kg.
H2 (m.)X	3.616 Kg.
TOTAL =	Kg.

PROFILES CUTTING LIST			
FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	1 041 1130	1	
		2	
	1 041 4120	1	
		2	
	1 041 6120	4	
		2	
		2	
	1 041 5120	1	
	1 041 5330	1	
SINGLE GLASS"4-6mm"	1		
			
	1		
			
ALL DIMENSIONS IN mm.			

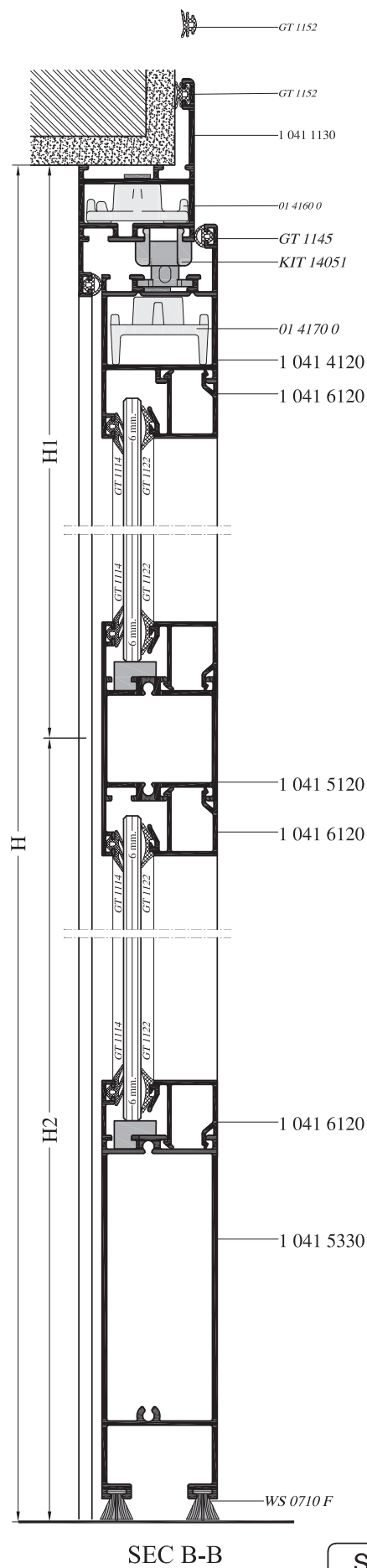
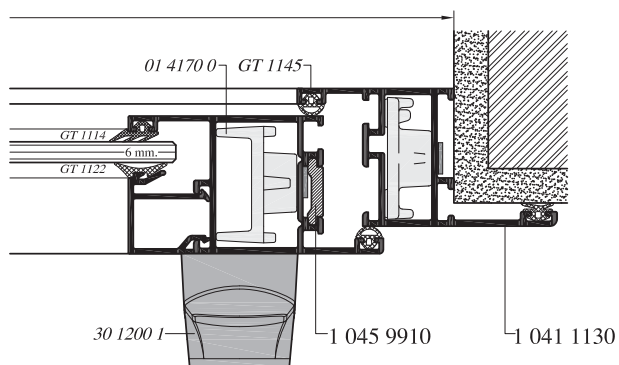


*HINGED DOOR " 1 LEAF "

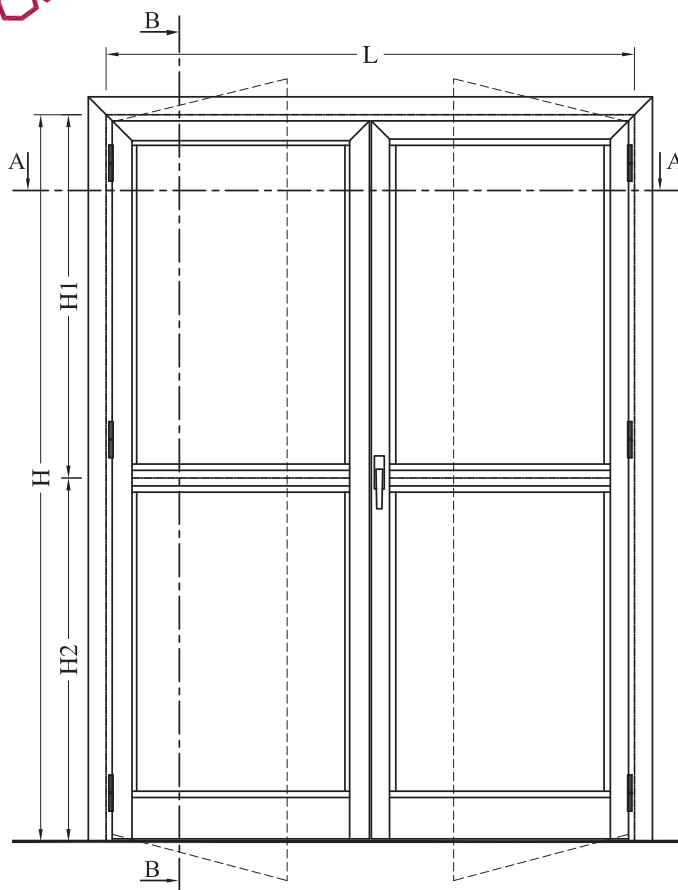
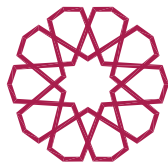


ACCESSORIES LIST

FIGURE	ACC. NO	QTY.	DESCRIPTION
	01 4160 0	2	Corner Joint
	01 4170 0	2	Corner Joint
	01 8700 0	2	Alignment Angle
	06 2650 0	6	Hinges
	28 1100 0	1	Drainage Cover
	52 1480 0	2	Bolt
	30 1200 1	1	Cremone Handle
	KIT 10451	1	Locking Kit
	GT 1114	4L+2H	Glass Gasket
	GT 1122	4L+2H	Glass Gasket
	GT 1145	2L+4H	Striker Gasket
	GT 1152	1L+2H+216	Frame Gasket
	WS 0710 F	2L	Weather Strip



Scale 1:2

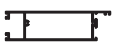


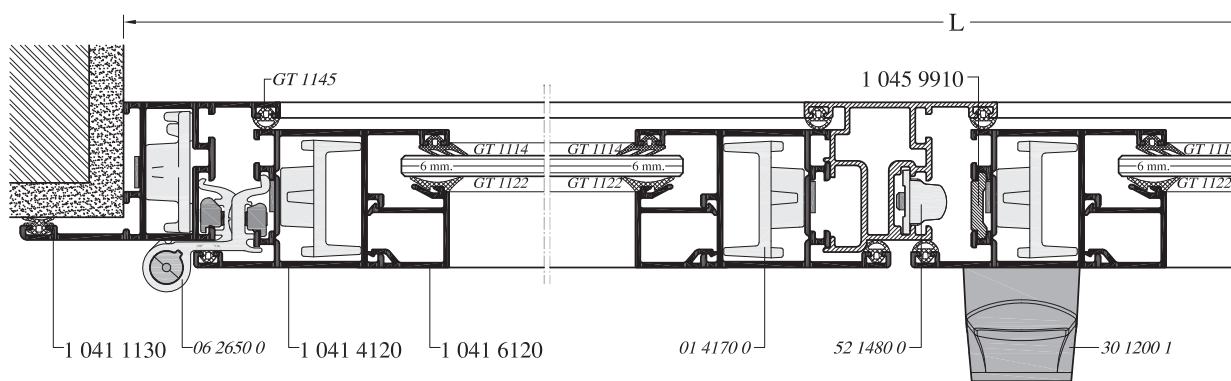
TOTAL WEIGHT

L (m.) X 4.981 Kg.
H1 (m.) X 6.647 Kg. +
H2 (m.) X 6.647 Kg.

TOTAL = Kg.

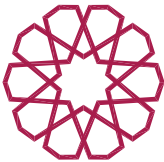
PROFILES CUTTING LIST

FIGURE	PROF. NO	QTY.	CUTTING LENGTH
	1 041 1130	1	L + 60
		2	H + 30
	1 041 4120	2	$\frac{L - 47}{2}$
		4	H - 29
	1 041 6120	8	$\frac{L - 268}{2}$
		4	H1 - 135
		4	H2 - 193
	1 041 9610	1	H - 94
	1 041 5120	2	$\frac{L - 248}{2}$
	1 041 5330	2	$\frac{L - 248}{2}$
SINGLE GLASS"4-6mm"		2	$\frac{L - 288}{2}$
			H1 - 107
		2	$\frac{L - 288}{2}$
			H2 - 165
ALL DIMENSIONS IN mm.			

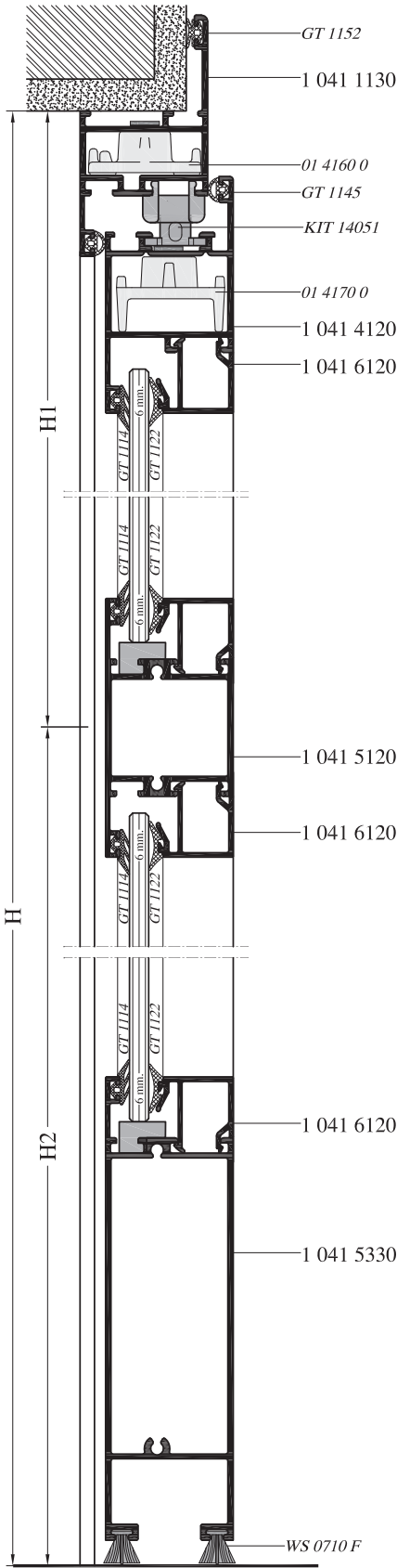
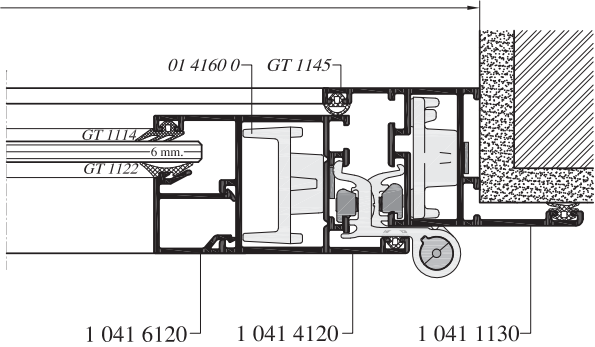


SEC A-A

*HINGED DOOR " 2 LEAVES "



ACCESSORIES LIST			
FIGURE	ACC. NO	QTY.	DESCRIPTION
	01 4160 0	2	Corner Joint
	01 4170 0	4	Corner Joint
	06 2650 0	6	Hinges
	62 1441 0	1	Central Rabbet Plug
	28 1100 0	1	Drainage Cover
	GT 1114	4L+4H	Glass Gasket
	GT 1122	4L+4H	Glass Gasket
	GT 1145	2L+8H	Striker Gasket
	GT 1152	1L+2H+120	Frame Gasket
	WS 0710 F	2L	Weather Strip



SEC B-B

Scale 1:2

All profiles are registered as the property of

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