



Machines & Aluminium Center

مركز ماكينات ومستلزمات الألومنيوم



PANORAMA 62

CURTAIN WALL SYSTEMS

2022

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.



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The profiles shown in this catalogue are patented.

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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/cm ²
■ Yield Strength:	At least 1100 kg/cm ²
■ 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

- Tolerance weights and dimensions according to standard ANSI H35.2 TABLE5 or (Din 1748).
- Many varieties are available in mullions and transoms profiles (62 mm. width) to suit a wide range of spans according to the Egyptian code (It is necessary to make calculations on strength and stiffness for each construction's member, as a quick reference there are some graphs for each mullion in the curtain wall construction demonstrate the maximum dimensions for mullions and transoms span according to the moment of inertia of selected profiles and wind load design as shown in the technical catalog.
- Panorama 62 system allows a certain extent of water infiltration in the construction (pressure equalized glazing system). The infiltrated water can be drained in a controlled way by the vertical suspension profiles or by the drainage holes applied in the horizontal profiles.
- Panorama 62 system is designed for continued façade by means of expansion joints which specially designed to avoid the thermal loads (resulting from temperature fluctuations) and also to absorb the vibrations



without any water leakage or air infiltration (expansion gap = 1.4 mm. per each meter length with max 30 mm.)

- The curtain wall element is fixed on the supporting structure by means of anchoring (Fixing Joints). The quantity, position and anchoring method must be applied according to the curtain wall elements (wind load, self-weight, sun protection, Etc..).
- Fixing joints are designed for allowing movements between the structural work and the curtain wall elements without cause any disturbing noise.
- Panorama 62 system allows opening fully concealed windows that are integrated with fixed panels, so the opened window has the same appearance of the fixed panel either from inside or outside the building.
- A wide range of accessories is available for the various designs and types (Corner Joints, aluminium T cleat, locking devices, brackets, friction stays hinges, Etc..).
- The glass panels are screwed down in the channels of the supporting structure by means of special screws In order to obtain a suitably sealed system.

Glazing

- Panorama 62 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 measures.
- Glass panels may not be in direct contact with the aluminium structure profiles, Panorama 62 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 EPDM gaskets that fixed on the aluminium structure mesh.
- This aluminium panels can hold the glass panels mechanically in a given U-shape in the aluminium frame that called Semi structural glazing or by glueing the glass to the aluminium frame using structural silicon 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 62 is designed to use an anodized bonding profile that enhances the compatibility with the structural silicon glue, 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 glue indicated in EOTA guide.
- For double glazing, structural silicon glue is also preferably used for the sealed joint between both glass plates.

Gaskets:

- All gaskets are of EPDM (ethylene propylene diene Monomer) resistant to weathering and ageing.
- 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 the supporting structure profiles for energy saving and condensation resistance.
- Water infiltration is confirmed to American standard A.S.T.M. E313, with no penetration up to 10.0 psf and not greater than 1.5 cubic meter per hour per meter length of opening vent at pressure 100 N/m².



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 ماكينات 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

Handwritten signature of the InterCert Head - Certifications

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
(القراء)

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



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: AA6060

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: AA6060

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

Gottfrey L. Brazil

Technical Service Executive



Jotun Powder Coatings U.A.E. (LLC)
P.O. Box 31053, Dubai | Inter-Arab Emirates
Tel: +971 4 347 2535 | Fax: +971 4 347 2615 | www.jotun.com

Bankers
Tasneem
Emirates NBD

Bank A/C: 707688101114184/1418
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.

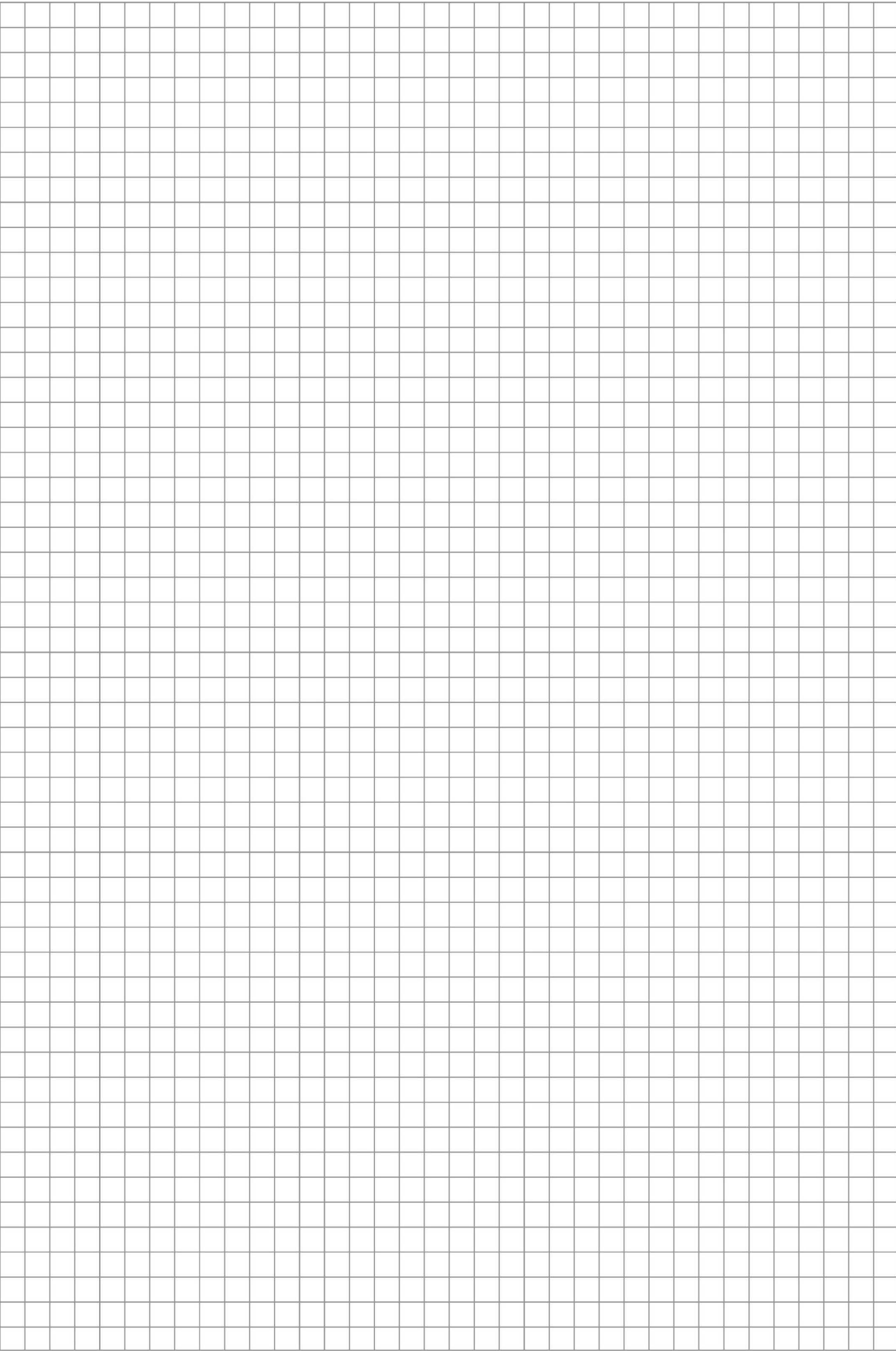
Authorized signature
CEO

Authorized signature
Commercial director

[Signature]

[Signature]

[Signature]

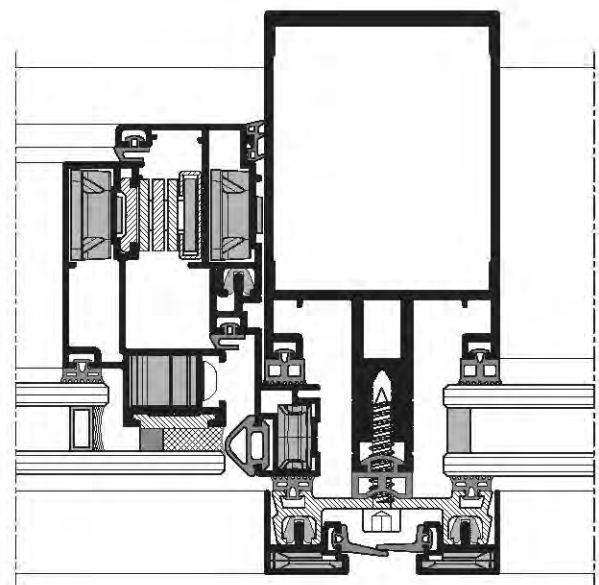




- Wide variety of profiles (mullions and transoms) with different dimensions and moment of inertia to fulfill the structural requirements.
- Available in 3 different glazing appearances, conventional curtain wall, full structural glazing and semi structural glazing (same appearance for fixed and opening panels internally & externally).
- Improved statical values due to inserted standard steel or aluminum profiles.
- unique transom connector for gapless.

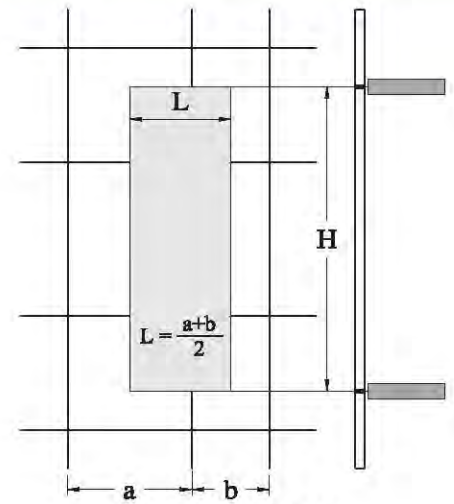
Technical Characteristics

Mullion	Depth	62 mm.
	Height	92 mm. to 187 mm.
Transoms	Depth	62 mm.
	Height	77 mm. to 122 mm.
Max Sash Weight (top hung)	130 kg.	



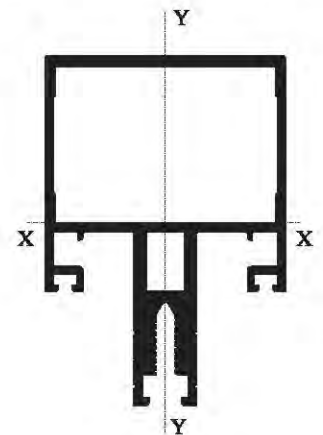
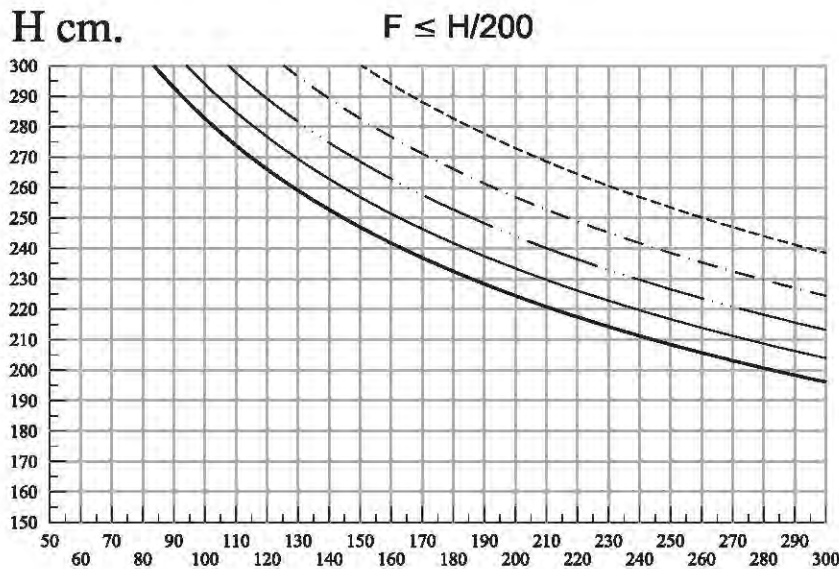


STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION



H = BEARING SPAN
L = LOAD WIDTH

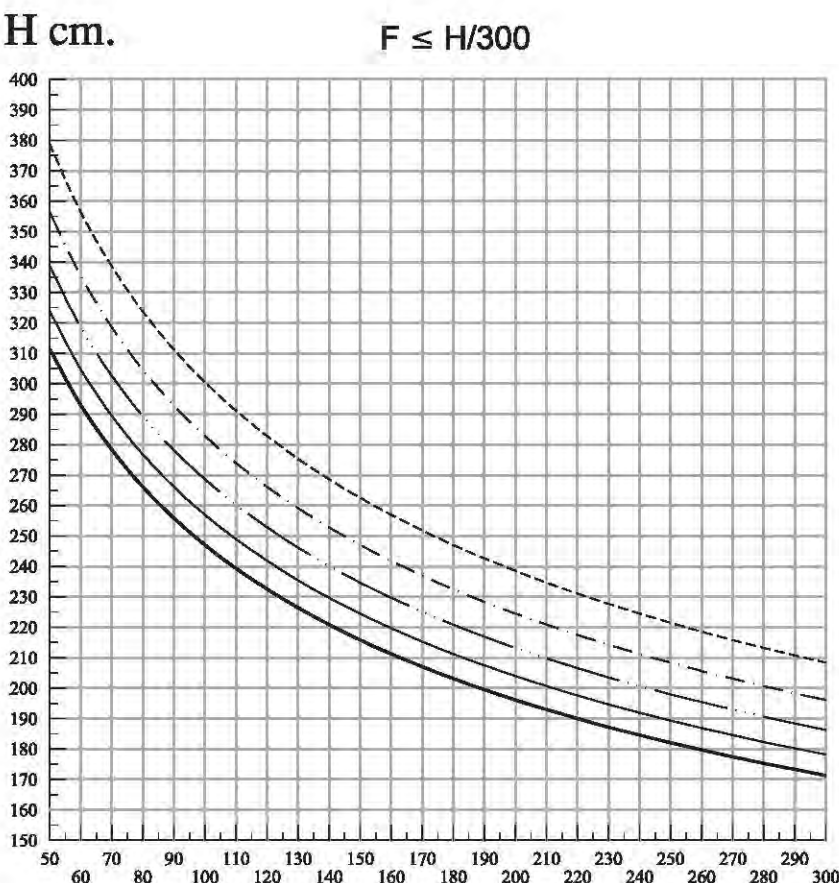
RECTANGLE LOAD CHART FOR WIND LOAD
SIMPLY SUPPORTED ON TWO SUPPORTS



CW 6215

$I_x = 75.89 \text{ Cm}^4$

$W_x = 15.76 \text{ Cm}^3$

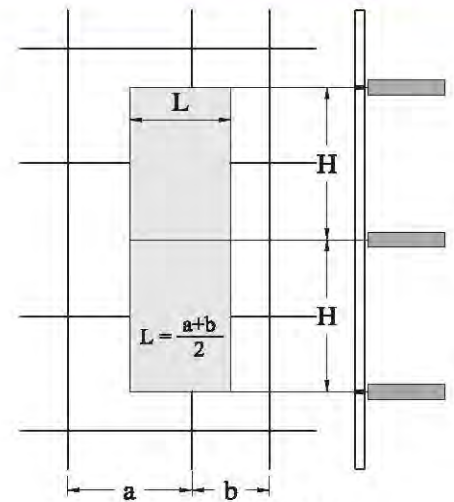


ALLOWABLE DEFLECTION (F)	
SINGLE GLASS 0 - 8 mm. UP TO 3 m. BEARING SPAN	H/200
SINGLE GLASS 0 - 8 mm. BEARING SPAN > 3 m	H/300
INSULATING DOUBLE GLASS	H/300

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

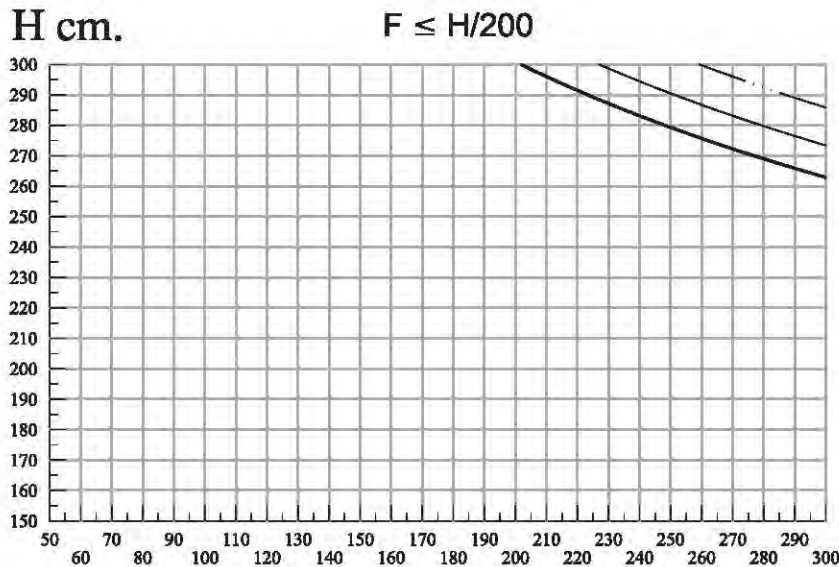


STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION

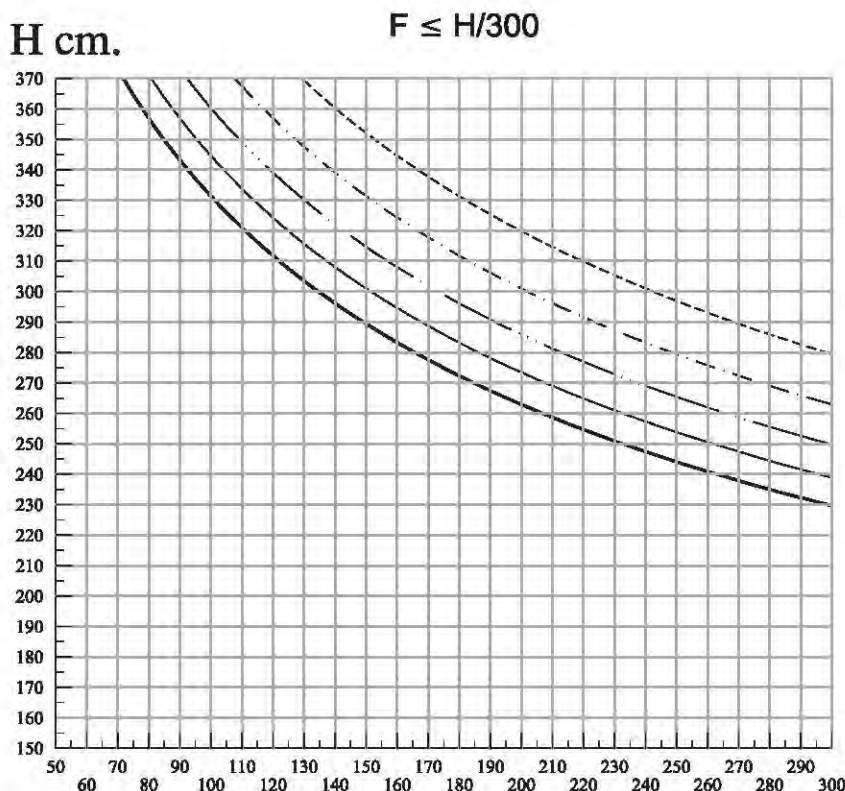
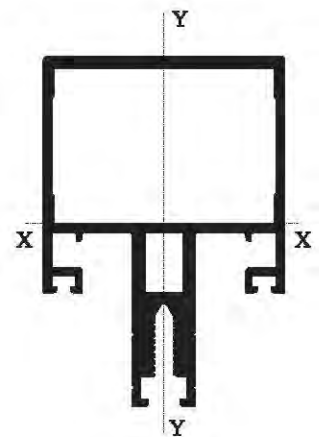


H = BEARING SPAN
L = LOAD WIDTH

RECTANGLE LOAD CHART FOR WIND LOAD CONTIGUES SUPPORTED ON THREE SUPPORTS



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



CW 6215

$I_x = 75.89 \text{ Cm}^4$

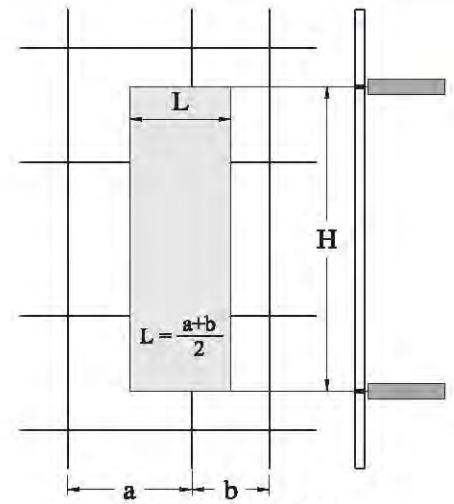
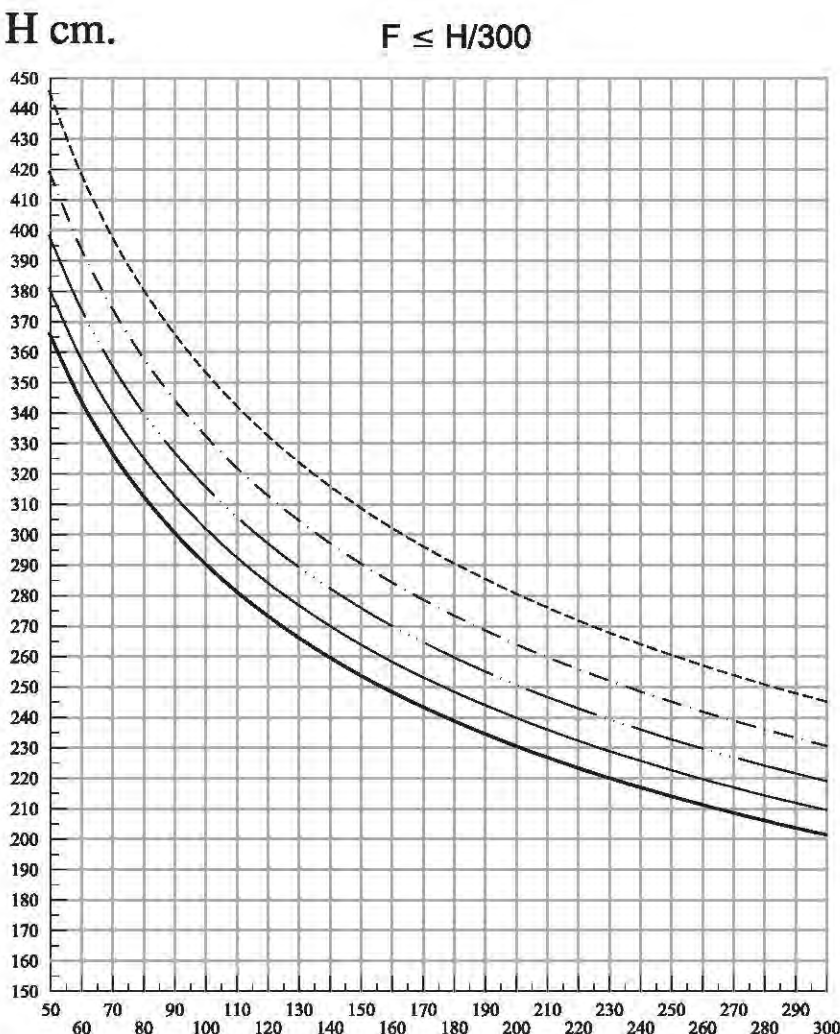
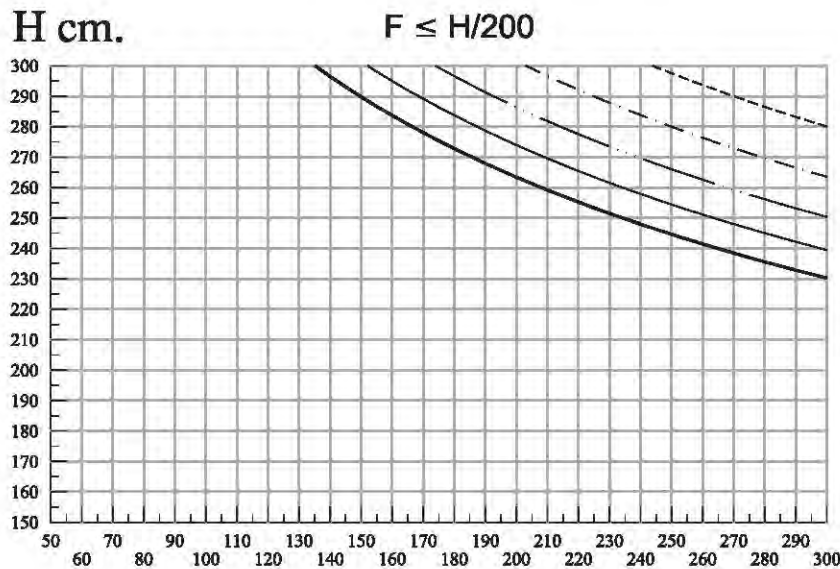
$W_x = 15.76 \text{ Cm}^3$

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

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ZONE 5	—————	90kgf/m ²

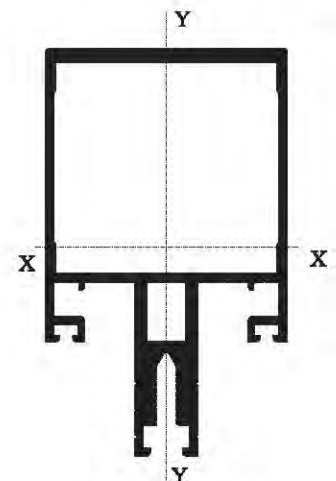


STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION



H = BEARING SPAN
L = LOAD WIDTH

RECTANGLE LOAD CHART FOR WIND LOAD
SIMPLY SUPPORTED ON TWO SUPPORTS



CW 6216

$I_x = 122.79 \text{ Cm}^4$

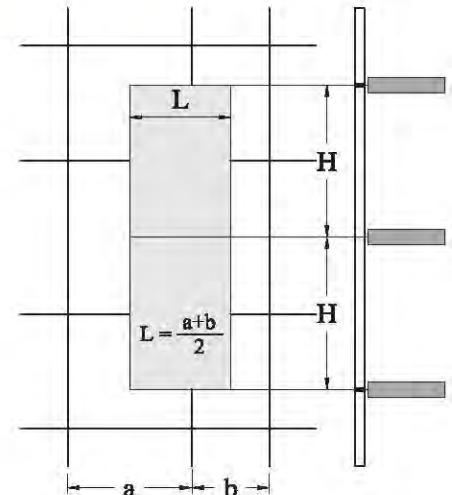
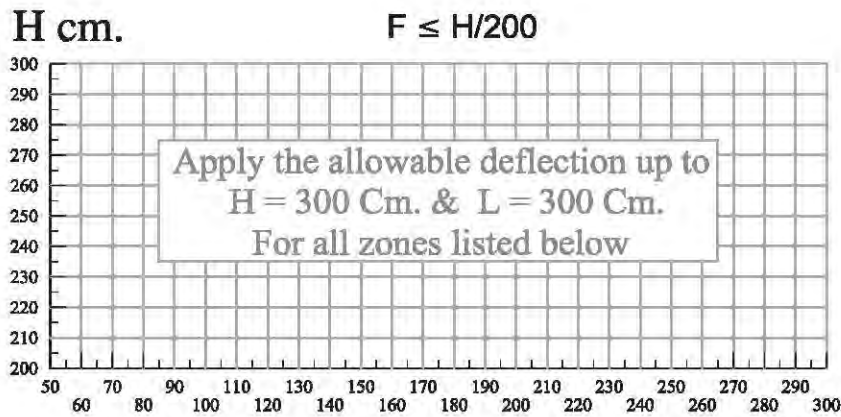
$W_x = 23.55 \text{ Cm}^3$

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

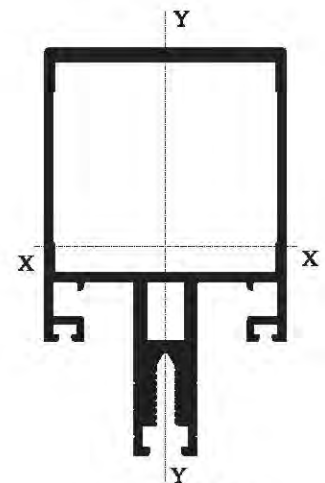
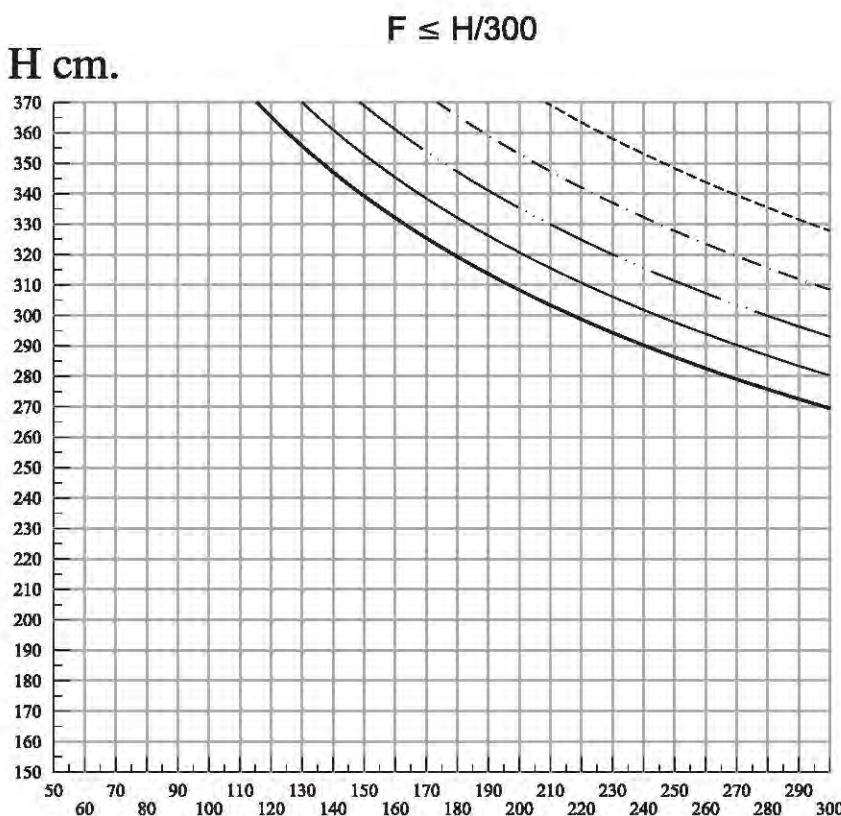
ZONE 1 ----- 50kgf/m²
 ZONE 2 - - - - - 60kgf/m²
 ZONE 3 ———— 70kgf/m²
 ZONE 4 ———— 80kgf/m²
 ZONE 5 ———— 90kgf/m²



STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION



RECTANGLE LOAD CHART FOR WIND LOAD CONTINUES SUPPORTED ON THREE SUPPORTS



CW 6216

$$I_x = 122.79 \text{ Cm}^4$$

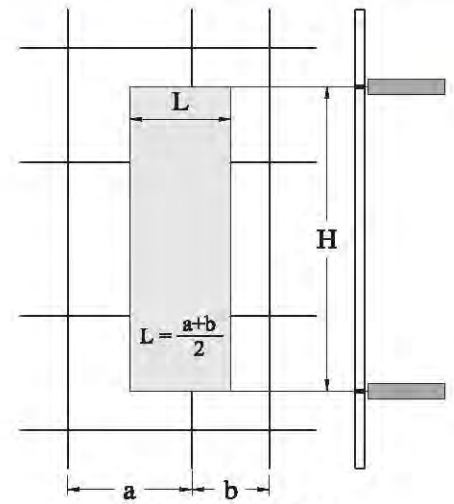
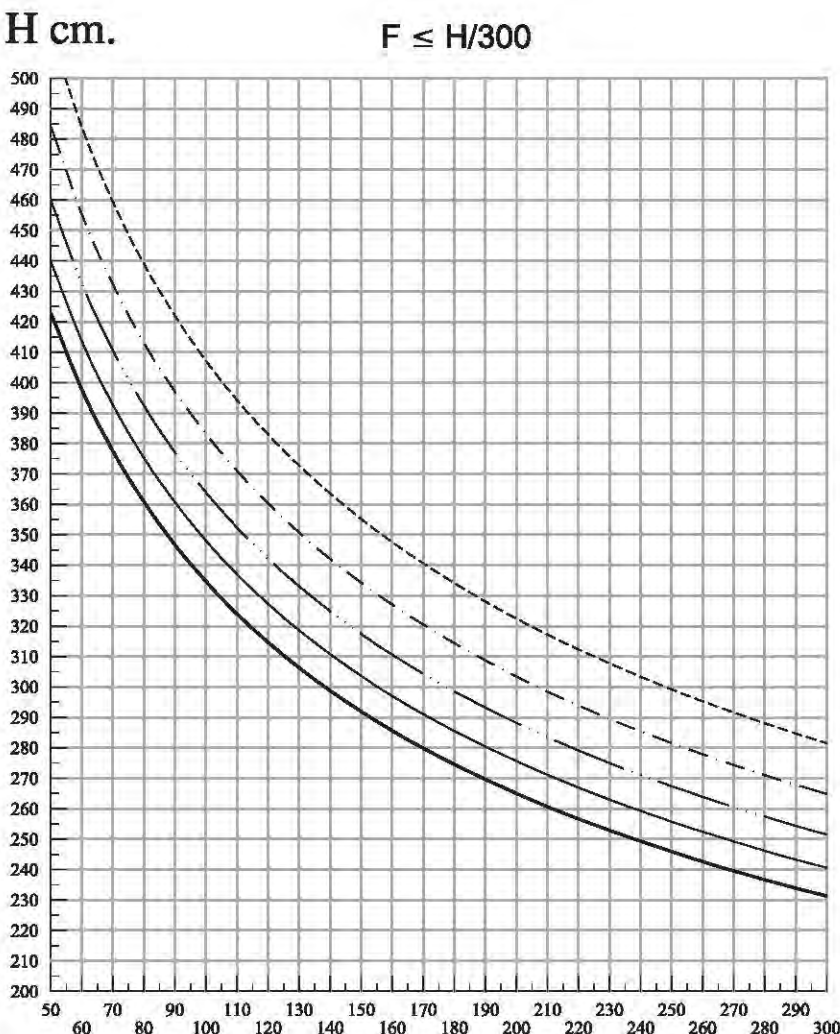
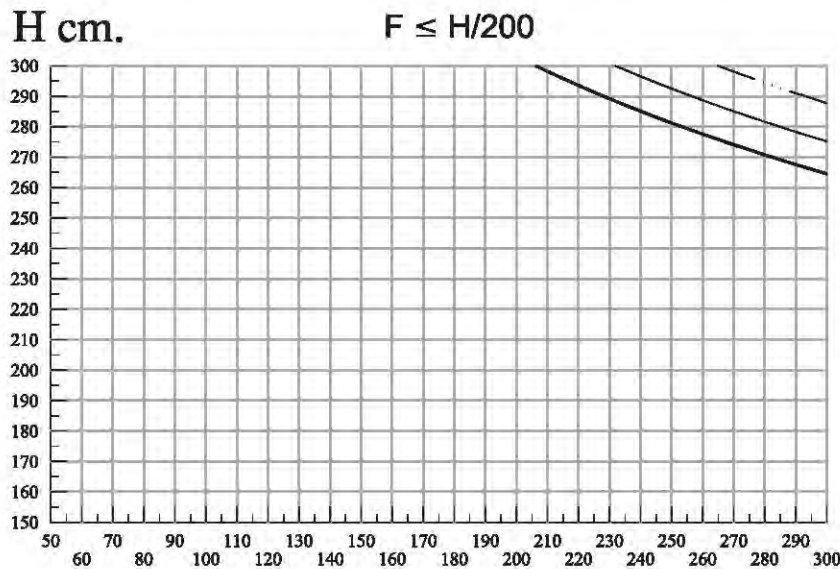
$$W_x = 23.55 \text{ Cm}^3$$

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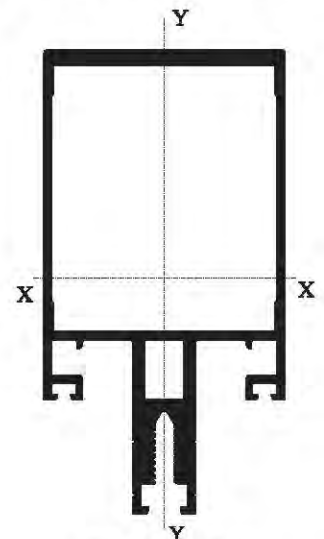


STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION



H = BEARING SPAN
L = LOAD WIDTH

RECTANGLE LOAD CHART FOR WIND LOAD
SIMPLY SUPPORTED ON TWO SUPPORTS



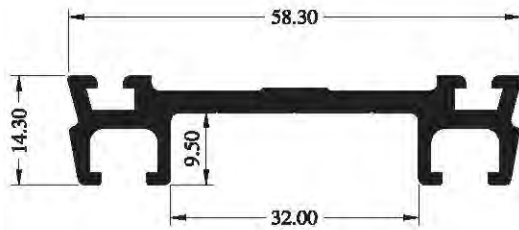
CW 6217

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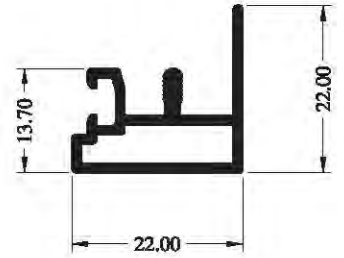
$W_x = 31.04 \text{ Cm}^3$

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

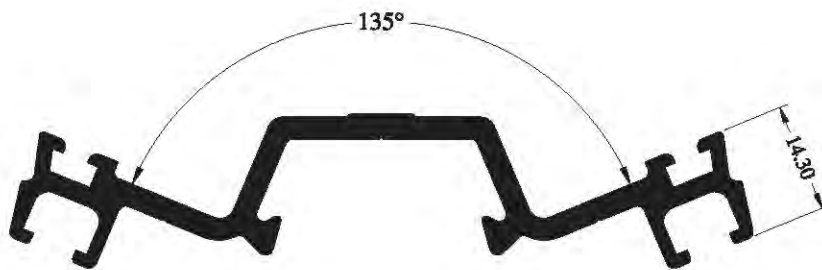
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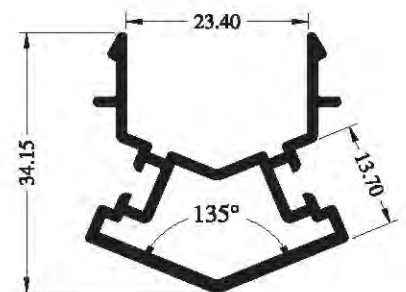
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0.719 Kg./ml.



3 062 5272
0.296 Kg./ml.

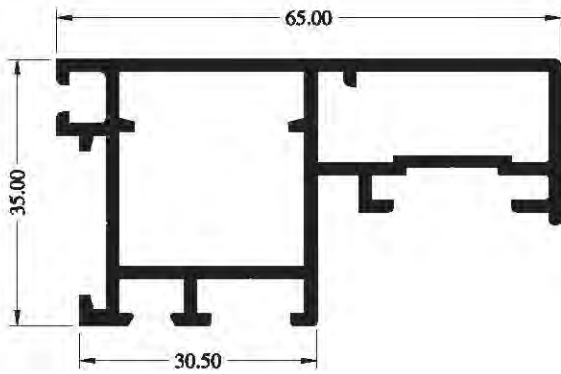


3 062 5121
1.196 Kg./ml.

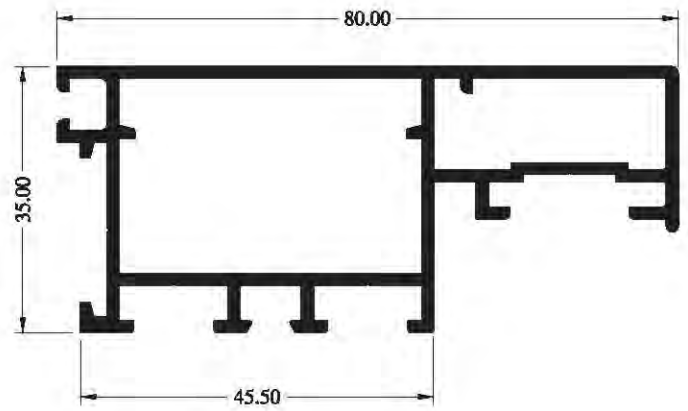


3 062 5426
0.487 Kg./ml.

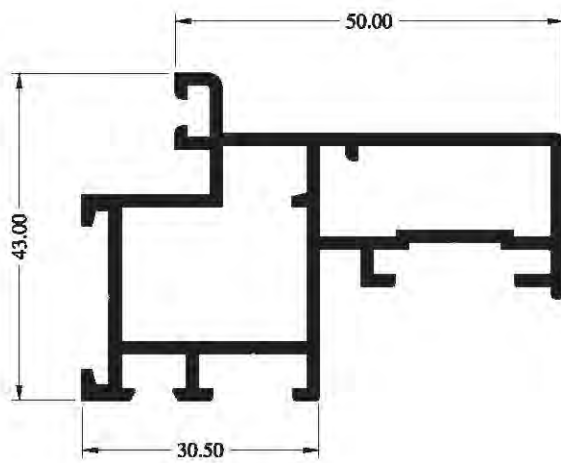
Profile No.	3 062 5011	3 062 5121	3 062 5272	3 062 5426
Profile Old No.	CW 6221	CW 6222	CW 6224	CW 6229



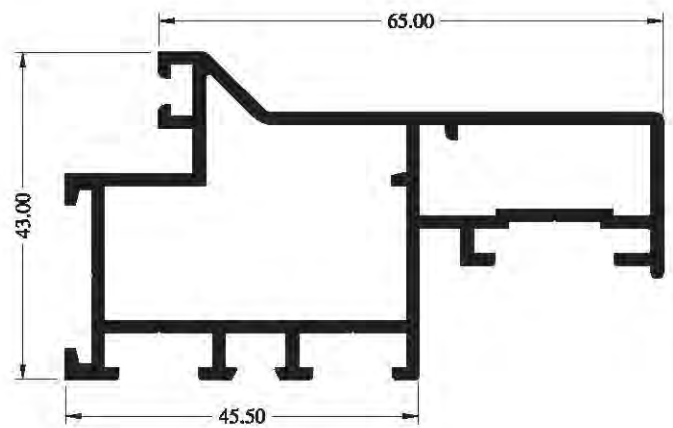
3 062 6417
1.040 Kg./ml.



3 062 6419
1.204 Kg./ml.

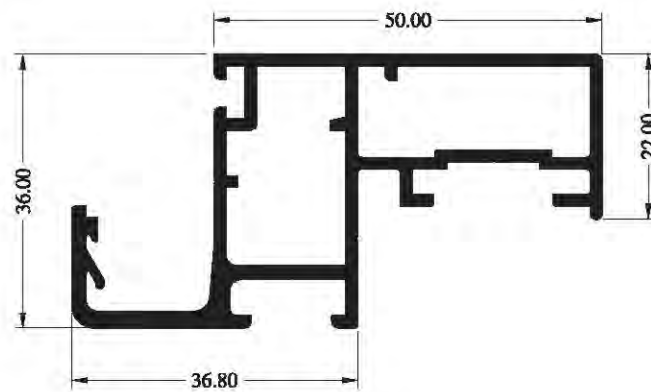


3 062 6427
1.064 Kg./ml.

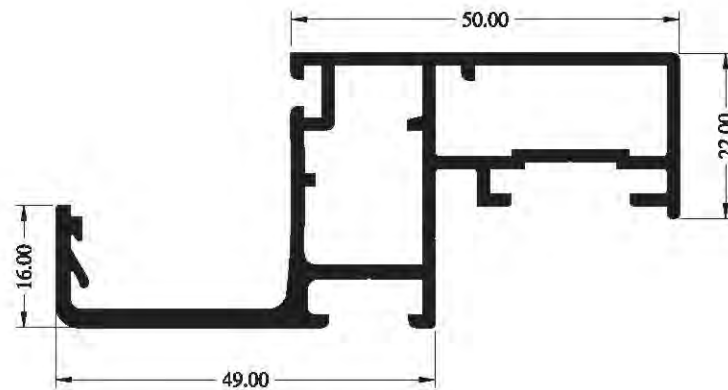


3 062 6429
1.238 Kg./ml.

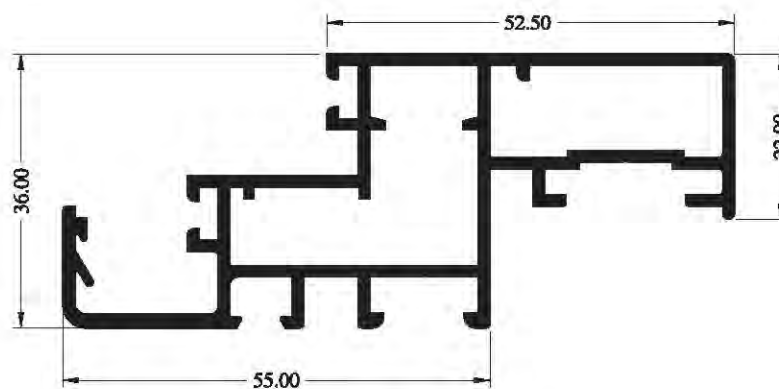
Profile No.	3 062 6417	3 062 6419	3 062 6427	3 062 6429
Profile Old No.	CW 6243	CW 6245	CW 6244	CW 6246



3 062 6436
1.102 Kg./ml.



3 062 6447
1.185 Kg./ml.

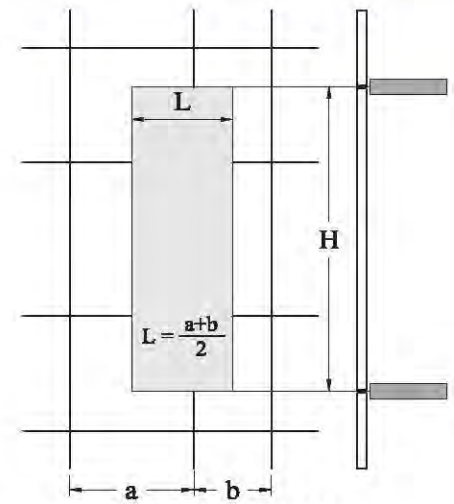
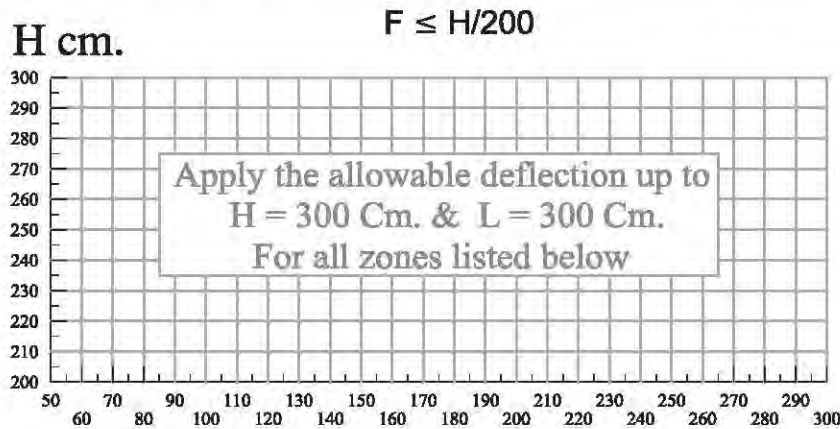


3 062 6488
1.320 Kg./ml.

Profile No.	3 062 6436	3 062 6447	3 062 6488
Profile Old No.	CW 6253	CW 6254	CW 6256



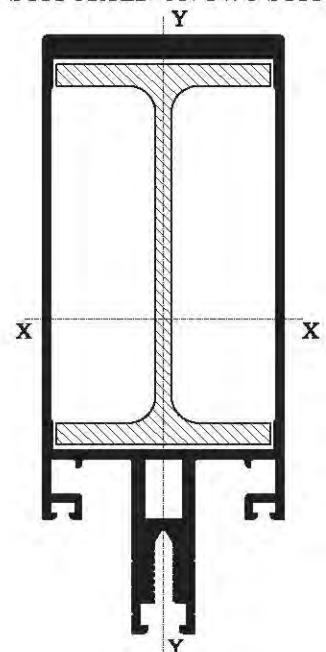
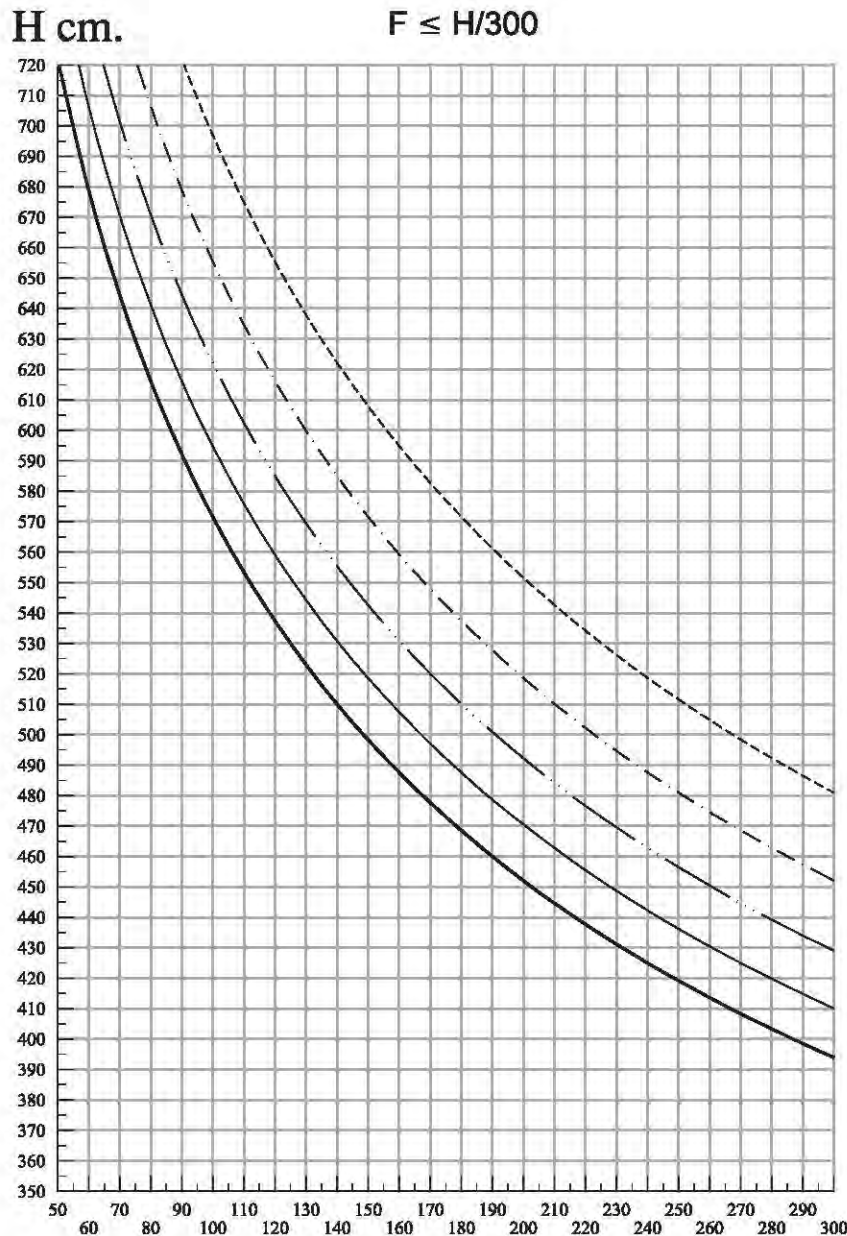
STATIC CHART AND DIMENSIONING FOR ALUMINIUM CURTAIN WALL AND GLASS CONSTRUCTION



L cm.

H = BEARING SPAN
L = LOAD WIDTH

RECTANGLE LOAD CHART FOR WIND LOAD
SIMPLY SUPPORTED ON TWO SUPPORTS

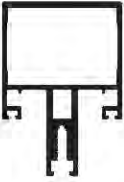
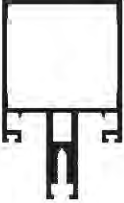
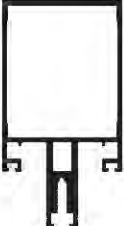
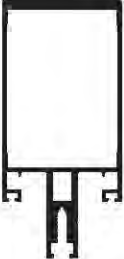


CW 6219 + IPE 100
 $I_x = 430.6 \text{ Cm}^4$ $I_x = 171.0 \text{ Cm}^4$
 $W_x = 57.78 \text{ Cm}^3$ $W_x = 34.20 \text{ Cm}^3$

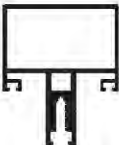
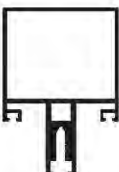
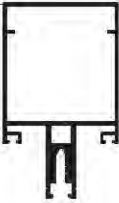
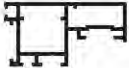
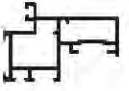
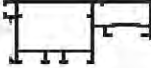
ALLOWABLE DEFLECTION (F)	
SINGLE GLASS 0 - 8 mm. UP TO 3 m. BEARING SPAN	H/200
SINGLE GLASS 0 - 8 mm. BEARING SPAN > 3 m	H/300
INSULATING DOUBLE GLASS	H/300

ZONE 1 ----- 50kgf/m²
 ZONE 2 - - - - - 60kgf/m²
 ZONE 3 ———— 70kgf/m²
 ZONE 4 ———— 80kgf/m²
 ZONE 5 ———— 90kgf/m²

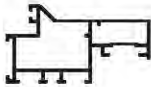
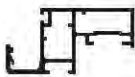


PROFILE SHAPE	Prof. No.	DESCRIPTION	WEIGHT	PER.	I _x	I _y
	CW 6215	Mullion Profile (62mm.)	2.741 Kg/m.	504.53 mm.	75.89 cm ⁴	36.81 cm ⁴
	CW 6216	Mullion Profile (77mm.)	2.981 Kg/m.	534.53 mm.	122.79 cm ⁴	43.02 cm ⁴
	CW 6217	Mullion Profile (92mm.)	3.221 Kg/m.	564.53 mm.	186.11 cm ⁴	49.24 cm ⁴
	CW 6218	Mullion Profile (107mm.)	3.540 Kg/m.	394.53 mm.	278.60 cm ⁴	56.27 cm ⁴
	CW 6219	Mullion Profile (127mm.)	3.910 Kg/m.	634.53 mm.	430.60 cm ⁴	65.10 cm ⁴



PROFILE SHAPE	Prof. No.	DESCRIPTION	WEIGHT	PER.	I _x	I _y
	CW 6234	Transom Profile (47mm.)	2.103 Kg/m.	445.68 mm.	36.80 cm ⁴	25.42 cm ⁴
	CW 6235	Transom Profile (47mm.)	2.249 Kg/m.	475.68 mm.	60.29 cm ⁴	30.31 cm ⁴
	CW 6236	Transom Profile (47mm.)	2.435 Kg/m.	505.68 mm.	94.66 cm ⁴	36.27 cm ⁴
	CW 6243	Single Leaf	1.040 Kg/m.	308.4 mm.	4.90 cm ⁴	15.45 cm ⁴
	CW 6244	Double Leaf	1.064 Kg/m.	323.1 mm.	5.29 cm ⁴	13.80 cm ⁴
	CW 6245	Single Leaf	1.199 Kg/m.	356.56 mm.	6.20 cm ⁴	27.29 cm ⁴



PROFILE SHAPE	Prof. No.	DESCRIPTION	WEIGHT	PER.	I _x	I _y
	CW 6246	Double Leaf	1.238 Kg/m.	367.61 mm.	6.94 cm ⁴	25.26 cm ⁴
	CW 6253	Single Leaf	1.102 Kg/m.	315.60 mm.	5.85 cm ⁴	15.95 cm ⁴
	CW 6256	Double Leaf	1.323 Kg/m.	412.79 mm.	6.51 cm ⁴	28.80 cm ⁴
	CW 6270	Bonding Profile	0.194 Kg/m.	51.36 mm.		
	CW 6271	Bonding Profile	0.306 Kg/m.	72.22 mm.		
	CW 6276	Transom Profile	1.089 Kg/m.	336.30 mm.	2.42 cm ⁴	35.20 cm ⁴



PROFILE SHAPE	Prof. No.	DESCRIPTION	WEIGHT	PER.	I _x	I _y
	CW 6286	Telescopic Joint (55mm.)	2.037 Kg/m.	276.12 mm.	29.71 cm ⁴	29.63 cm ⁴
	CW 6287	Telescopic Joint (70mm.)	2.357 Kg/m.	304.39 mm.	56.47 cm ⁴	36.99 cm ⁴
	CW 6288	Telescopic Joint (85mm.)	2.570 Kg/m.	331.36 mm.	88.91 cm ⁴	42.35 cm ⁴
	CW 6296	Additional Profile (85mm.)	0.535 Kg/m.	227.94 mm.		



	0304
	Connecting Angle
	<i>Material:</i> Aluminium
	<i>Finish:</i> Raw

	0463-32
	Transom Joint
	<i>Material:</i> Aluminium
	<i>Finish:</i> Raw

	0305
	Conneting Angle
	<i>Material:</i> Aluminium
	<i>Finish:</i> Raw

	0516
	Locking Point
	<i>Material:</i> Zama
	<i>Finish:</i> Galvanized

	0305/23
	Conneting Angle
	<i>Material:</i> Aluminium
	<i>Finish:</i> Raw

	0518
	Locking Point
	<i>Material:</i> Zama
	<i>Finish:</i> Galvanized

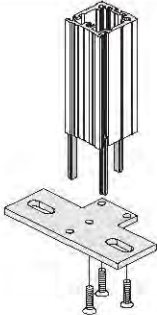
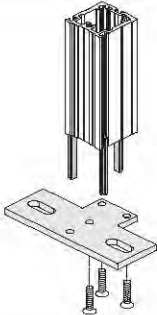
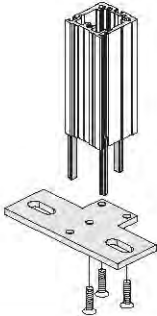
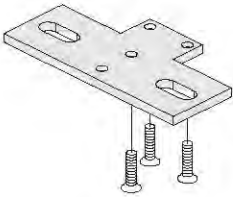
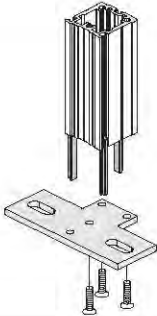
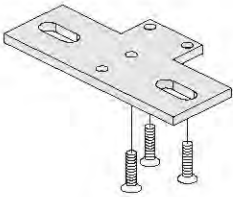
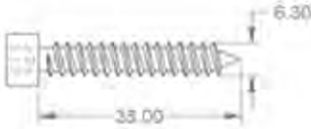
	0325
	Corner Joint
	<i>Material:</i> Aluminium
	<i>Finish:</i> Raw

	0527
	Striker
	<i>Material:</i> Zama
	<i>Finish:</i> Galvanized

	0463
	Transom Joint
	<i>Material:</i> Aluminium
	<i>Finish:</i> Raw

	0565
	Fixing Base
	<i>Material:</i> Aluminium
	<i>Finish:</i> Anodized

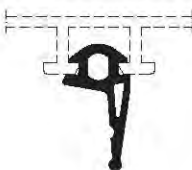
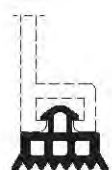
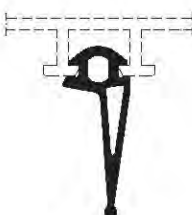
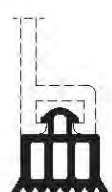
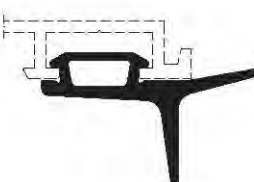
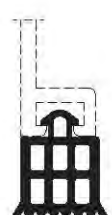
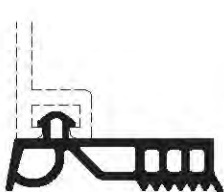
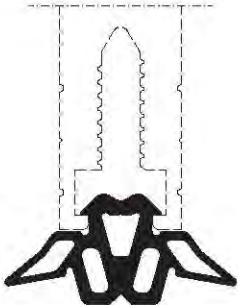


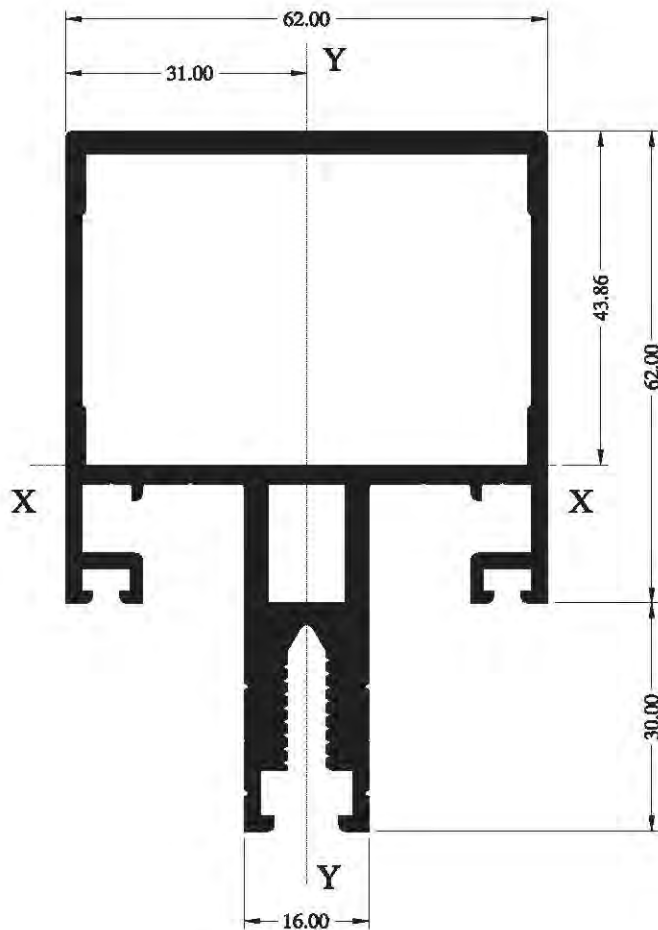
	0566 Fixing Part <i>Material:</i> Aluminium <i>Finish:</i> Raw		4465 Fixing Joint(CW6215) <i>Material:</i> Aluminium <i>Finish:</i> Raw
	4461 Fixing Joint <i>Material:</i> Aluminium <i>Finish:</i> Raw		4466 Fixing Joint(CW6216) <i>Material:</i> Aluminium <i>Finish:</i> Raw
	4462 Fixing Joint <i>Material:</i> Aluminium <i>Finish:</i> Raw		4467 Fixing Joint(CW6217) <i>Material:</i> Aluminium <i>Finish:</i> Raw
	4463 Fixing Joint <i>Material:</i> Aluminium <i>Finish:</i> Raw		4468 Fixing Joint(CW6218) <i>Material:</i> Aluminium <i>Finish:</i> Raw
	4464 Fixing Joint <i>Material:</i> Aluminium <i>Finish:</i> Raw		202-632s Fixing Screw <i>Material:</i> S.S. <i>Finish:</i> Raw



	SCPRES730A		HDTH22PA
	Arms (784 mm.)		Arms
	<i>Material:</i> S.S.		<i>Material:</i> S.S.
	<i>Finish:</i> Raw		<i>Finish:</i> Raw
	SCSEN550		HDTH26PA
	Arms (567mm.)		Arms
	<i>Material:</i> S.S.		<i>Material:</i> S.S.
	<i>Finish:</i> Raw		<i>Finish:</i> Raw
	SCST22		KIT10621
	Arms (567mm.)		Locking Kit
	<i>Material:</i> S.S.		<i>Material:</i>
	<i>Finish:</i> Raw		<i>Finish:</i> Raw
	SCST26		
	Arms (685mm.)		
	<i>Material:</i> S.S.		
	<i>Finish:</i> Raw		
	SCST26ADJ		
	Arms (685mm.)		
	<i>Material:</i> S.S.		
	<i>Finish:</i> Raw		



	0331 Central Gasket Material: E.P.D.M. Finish: Black		0374 Glazing Gasket 3:4mm. Material: E.P.D.M. Finish: Black
	0332 Central Gasket Material: E.P.D.M. Finish: Black		0377 Glazing Gasket 5:7mm. Material: E.P.D.M. Finish: Black
	0333 Central Gasket Material: E.P.D.M. Finish: Black		0379 Glazing Gasket 9:11mm. Material: E.P.D.M. Finish: Black
	0341 Striker Gasket Material: E.P.D.M. Finish: Black		0386 Glazing Gasket 5:7mm. Material: E.P.D.M. Finish: Black
	0351 Inset Filler Gasket Material: E.P.D.M. Finish: Black		

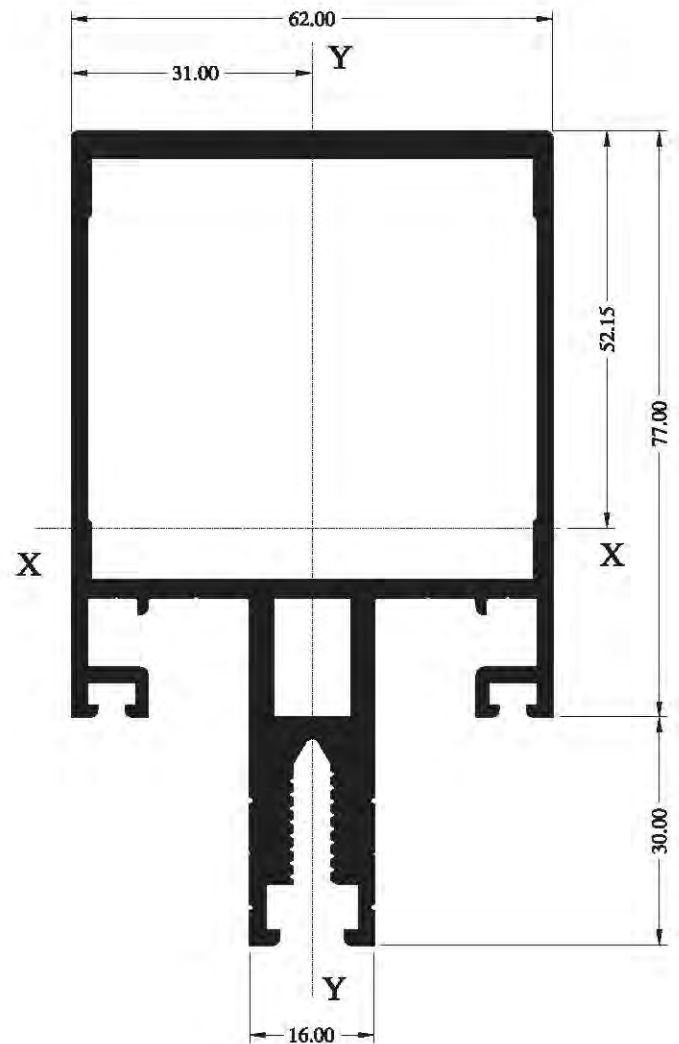


3 062 1206

2.741 Kg./ml.

$I_x = 75.89 \text{ Cm}^4$

$I_y = 36.81 \text{ Cm}^4$



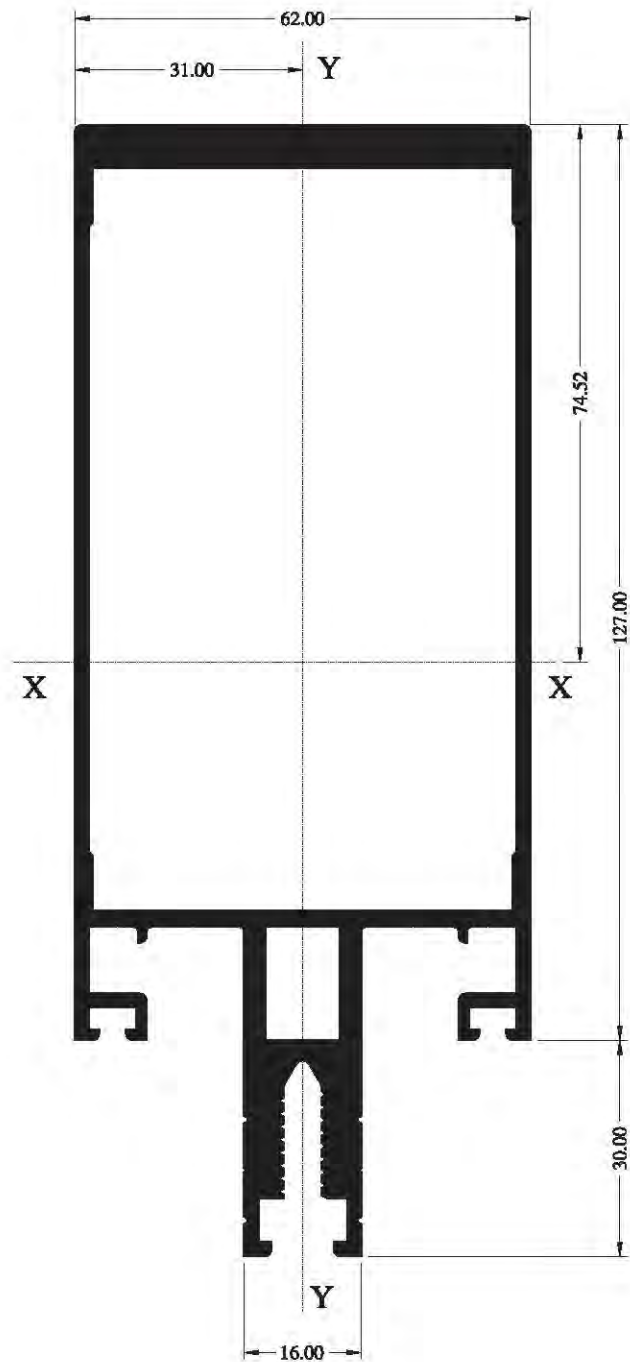
3 062 1207

2.981 Kg./ml.

$I_x = 122.79 \text{ Cm}^4$

$I_y = 43.02 \text{ Cm}^4$

Profile No.	3 062 1206	3 062 1207
Profile Old No.	CW 6215	CW 6216



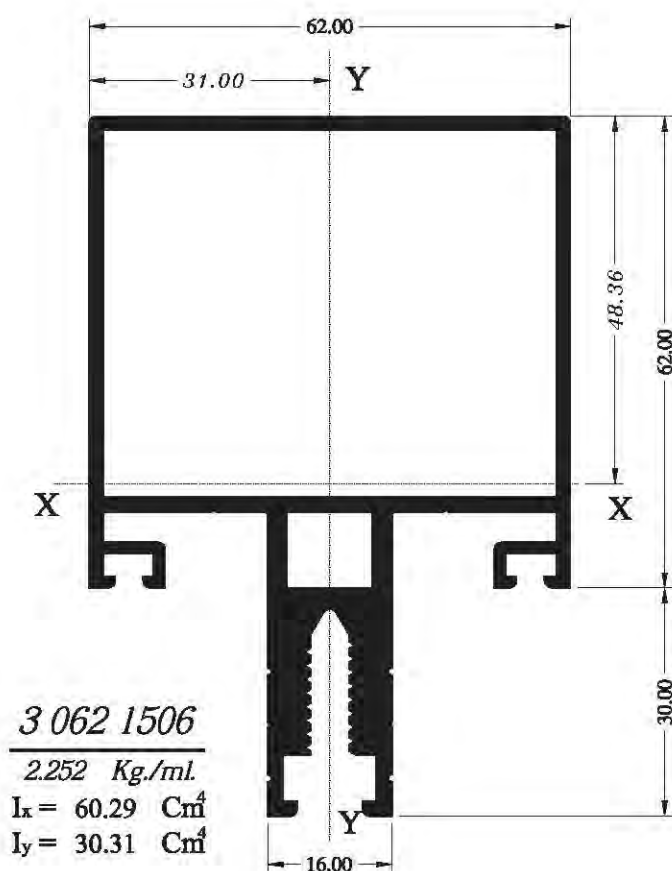
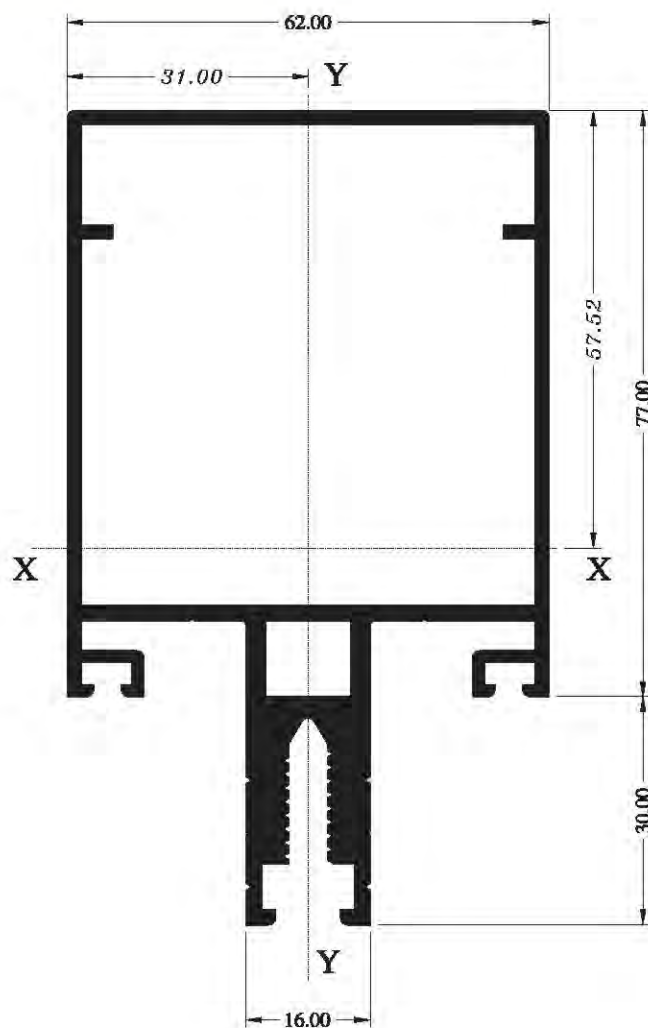
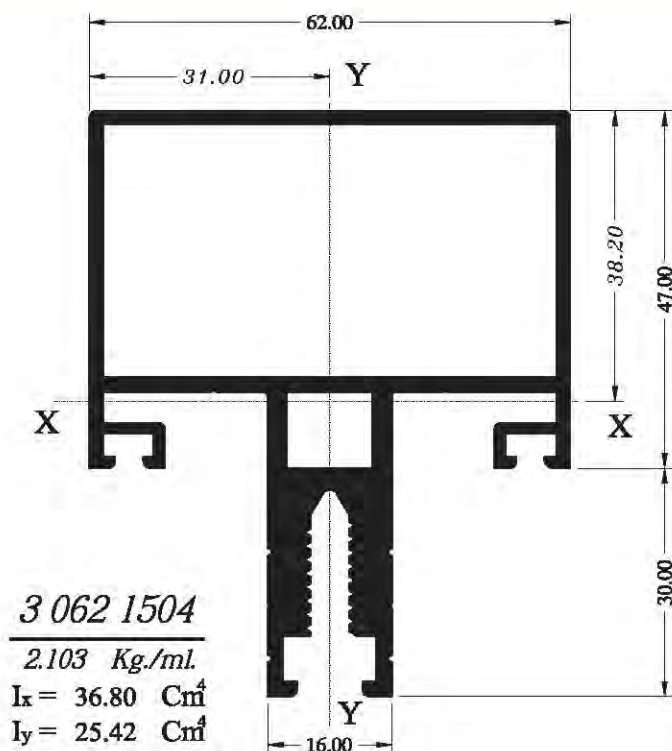
3 062 1212

3.910 Kg./ml.

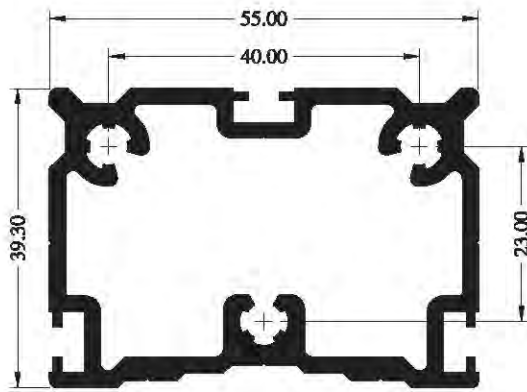
$I_x = 430.60 \text{ Cm}^4$

$I_y = 65.10 \text{ Cm}^4$

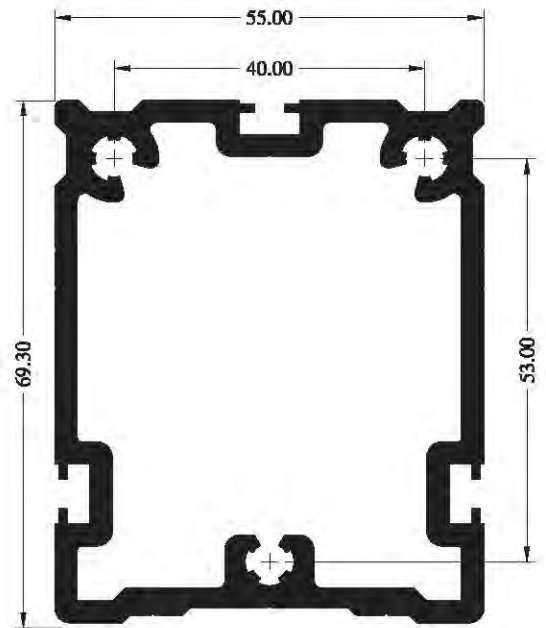
Profile No.	3 062 1212
Profile Old No.	CW 6219



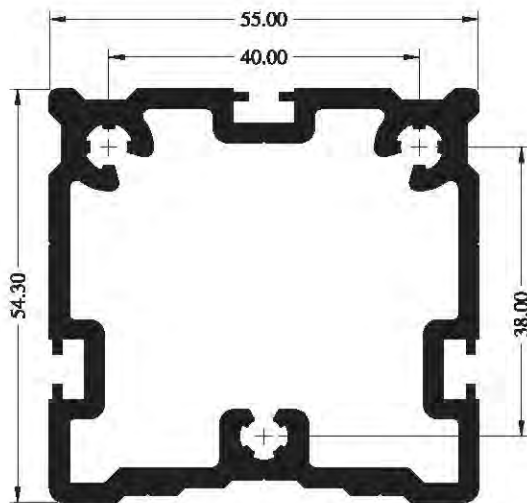
Profile No.	3 062 1504	3 062 1506	3 062 1507
Profile Old No.	CW 6234	CW 6235	CW 6236



3 062 4006
1.469 Kg./ml.

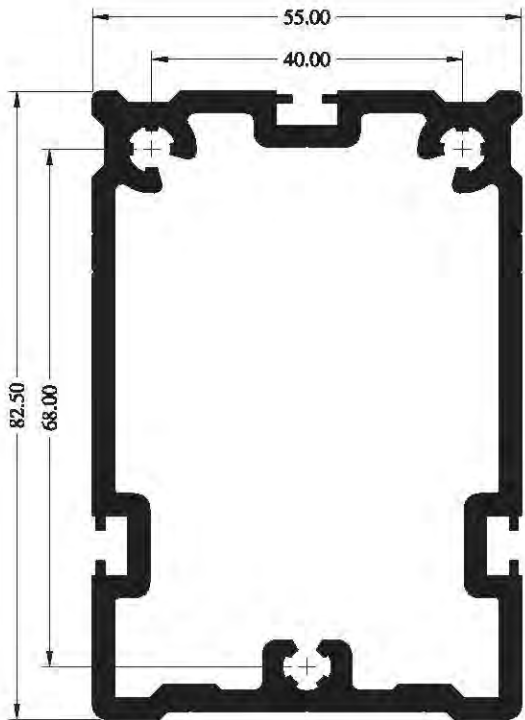


3 062 4009
2.357 Kg./ml.

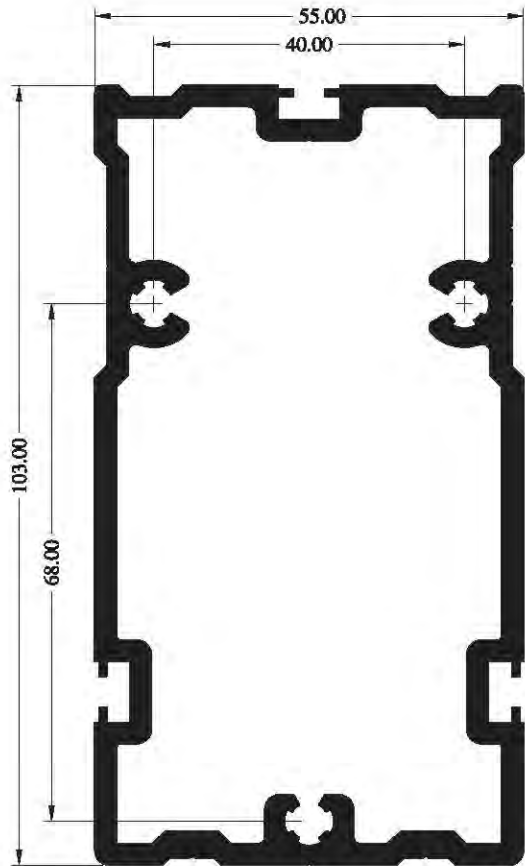


3 062 4007
2.017 Kg./ml.

Profile No.	3 062 4006	3 062 4007	3 062 4009
Profile Old No.	CW 6285	CW 6286	CW 6287

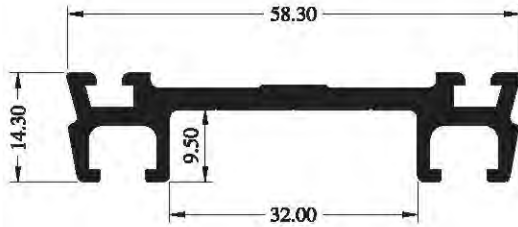


3 062 4010
2.570 Kg./ml.

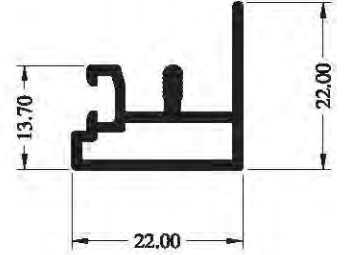


3 062 4012
2.965 Kg./ml.

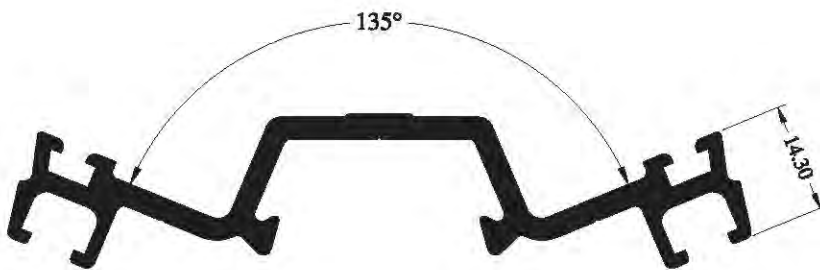
Profile No.	3 062 4010	3 062 4012
Profile Old No.	CW 6288	CW 6289



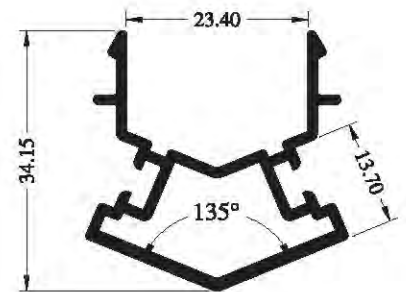
3 062 5011
0.719 Kg./ml.



3 062 5272
0.296 Kg./ml.

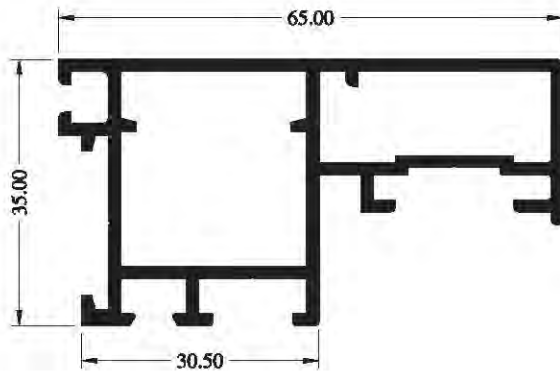


3 062 5121
1.196 Kg./ml.

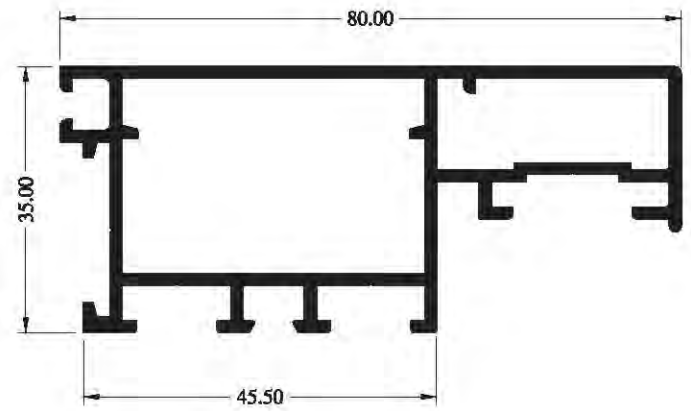


3 062 5426
0.487 Kg./ml.

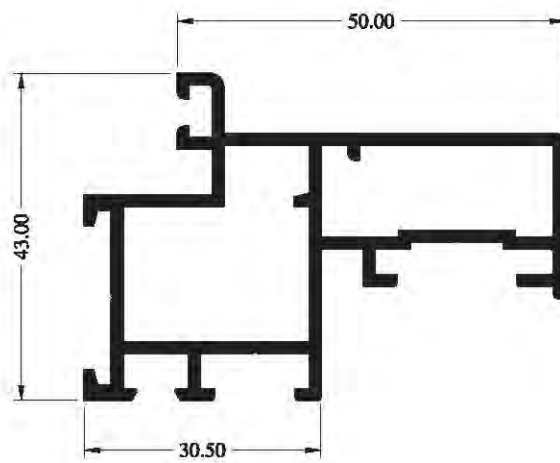
Profile No.	3 062 5011	3 062 5121	3 062 5272	3 062 5426
Profile Old No.	CW 6221	CW 6222	CW 6224	CW 6229



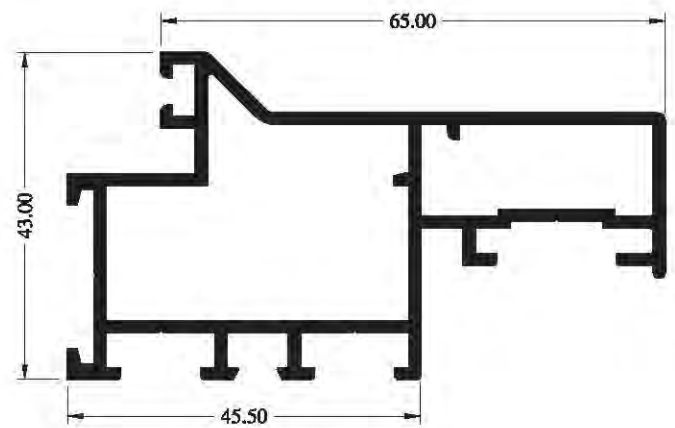
3 062 6417
1.040 Kg./ml.



3 062 6419
1.204 Kg./ml.

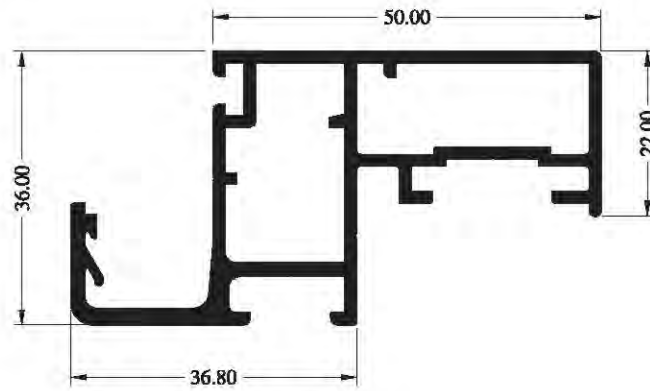


3 062 6427
1.064 Kg./ml.



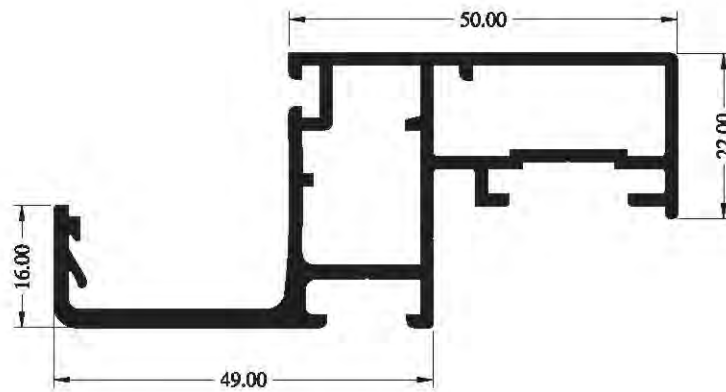
3 062 6429
1.238 Kg./ml.

Profile No.	3 062 6417	3 062 6419	3 062 6427	3 062 6429
Profile Old No.	CW 6243	CW 6245	CW 6244	CW 6246



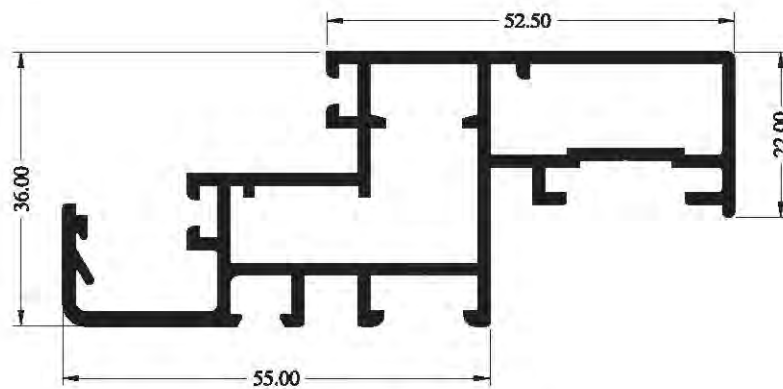
3 062 6436

1.102 Kg./ml.



3 062 6447

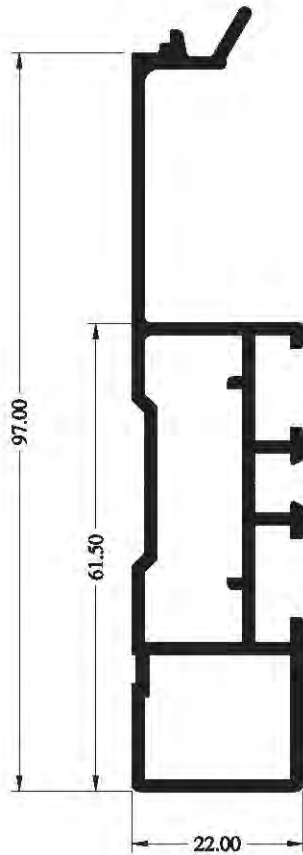
1.185 Kg./ml.



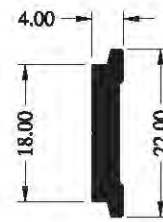
3 062 6488

1.320 Kg./ml.

Profile No.	3 062 6436	3 062 6447	3 062 6488
Profile Old No.	CW 6253	CW 6254	CW 6256



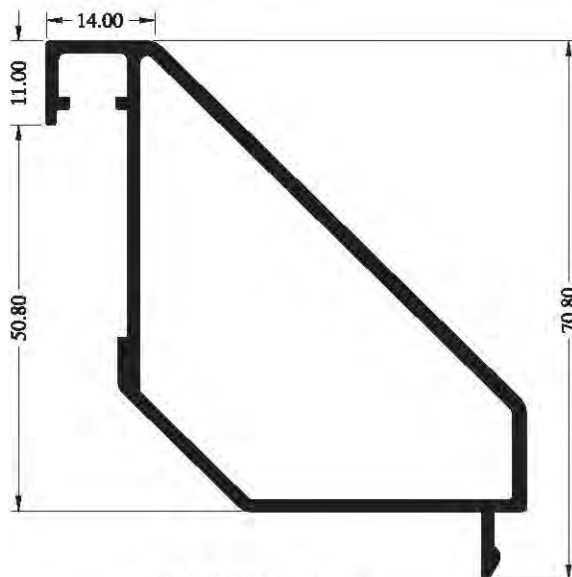
3 062 9169
1.088 Kg./ml.



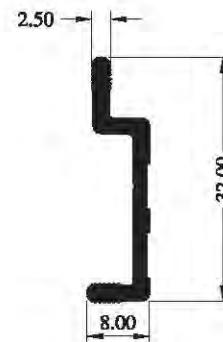
3 062 9700
0.194 Kg./ml.



3 062 9703
0.305 Kg./ml.

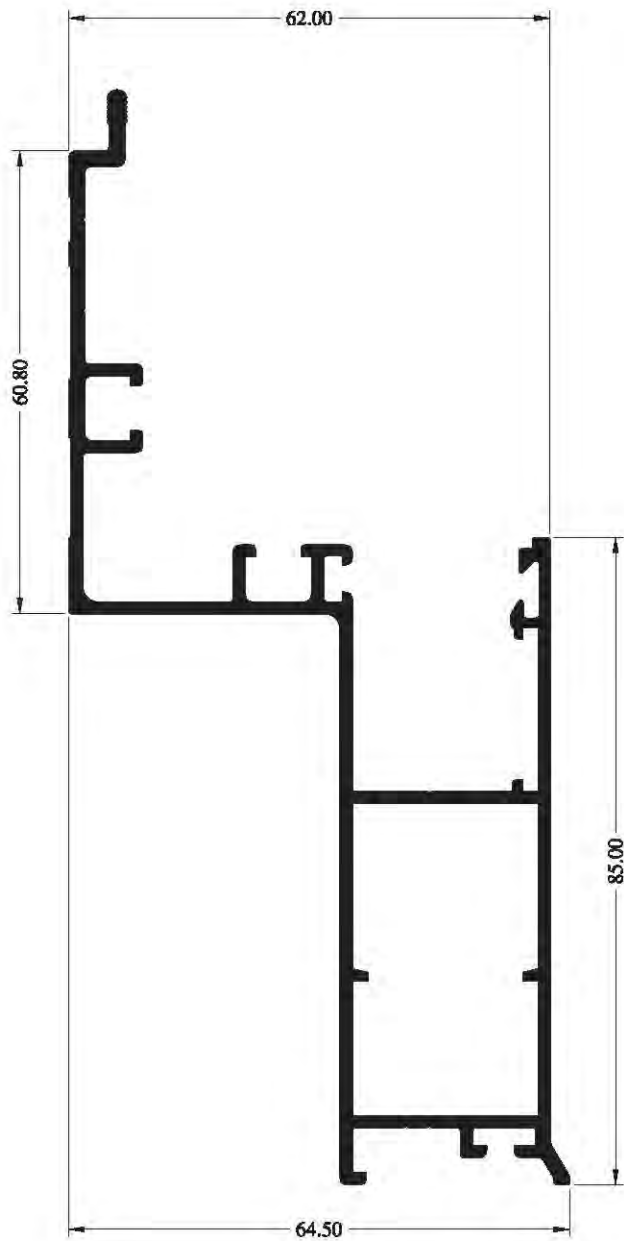


3 062 9826
0.943 Kg./ml.

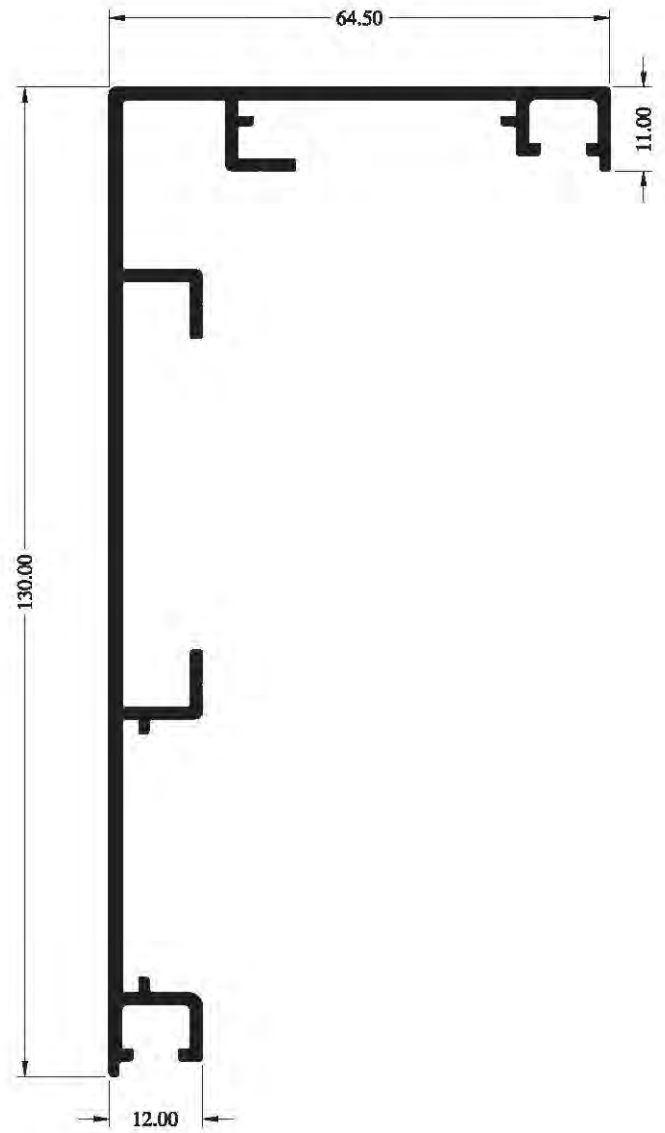


3 062 4612
0.227 Kg./ml.

Profile No.	3 062 4612	3 062 9169	3 062 9700	3 062 9703	3 062 9826
Profile Old No.	CW 6291	CW 6276	CW 6270	CW 6271	CW 6294

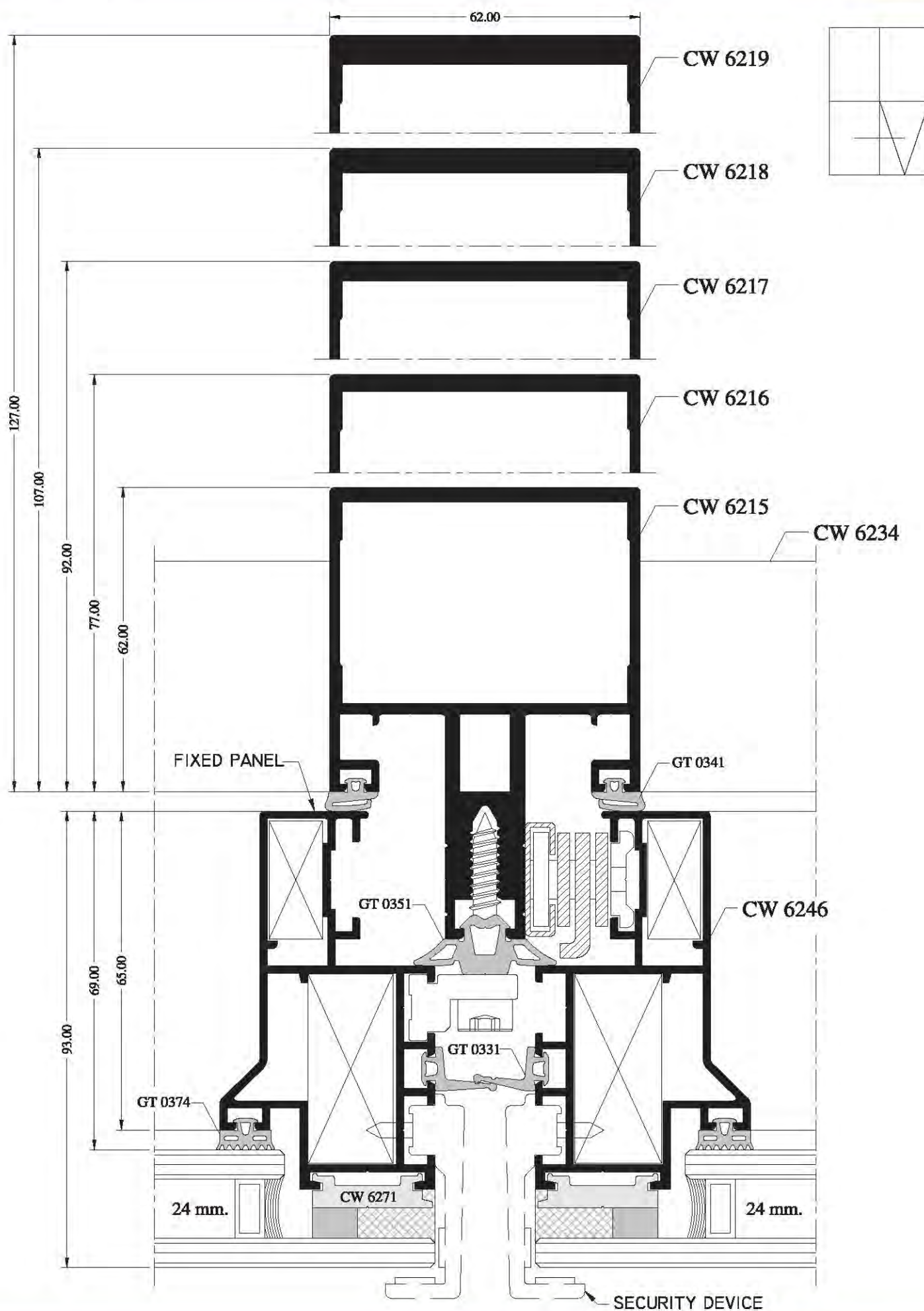


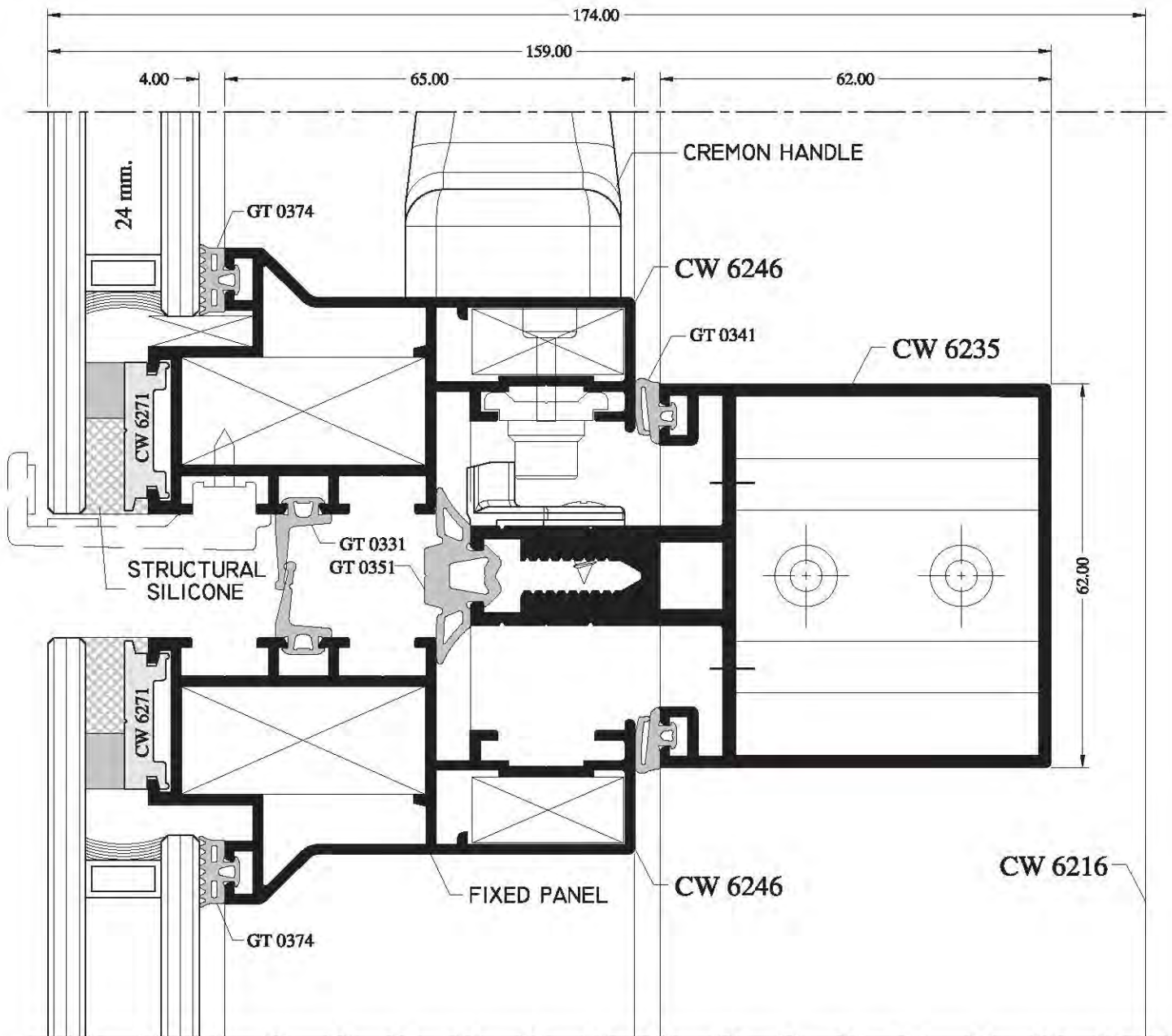
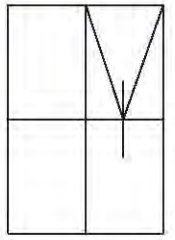
3 062 9816
1.617 Kg./ml.

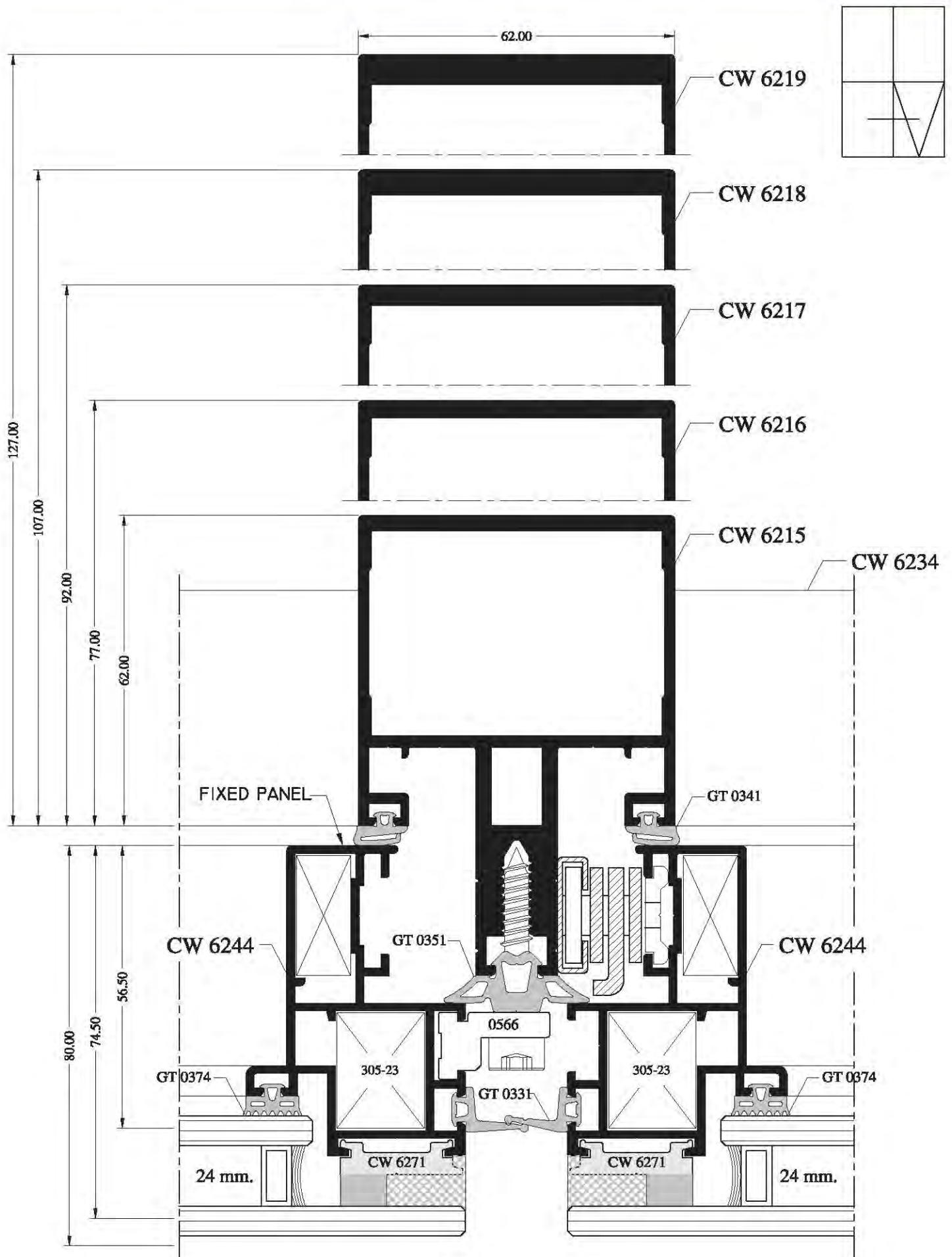


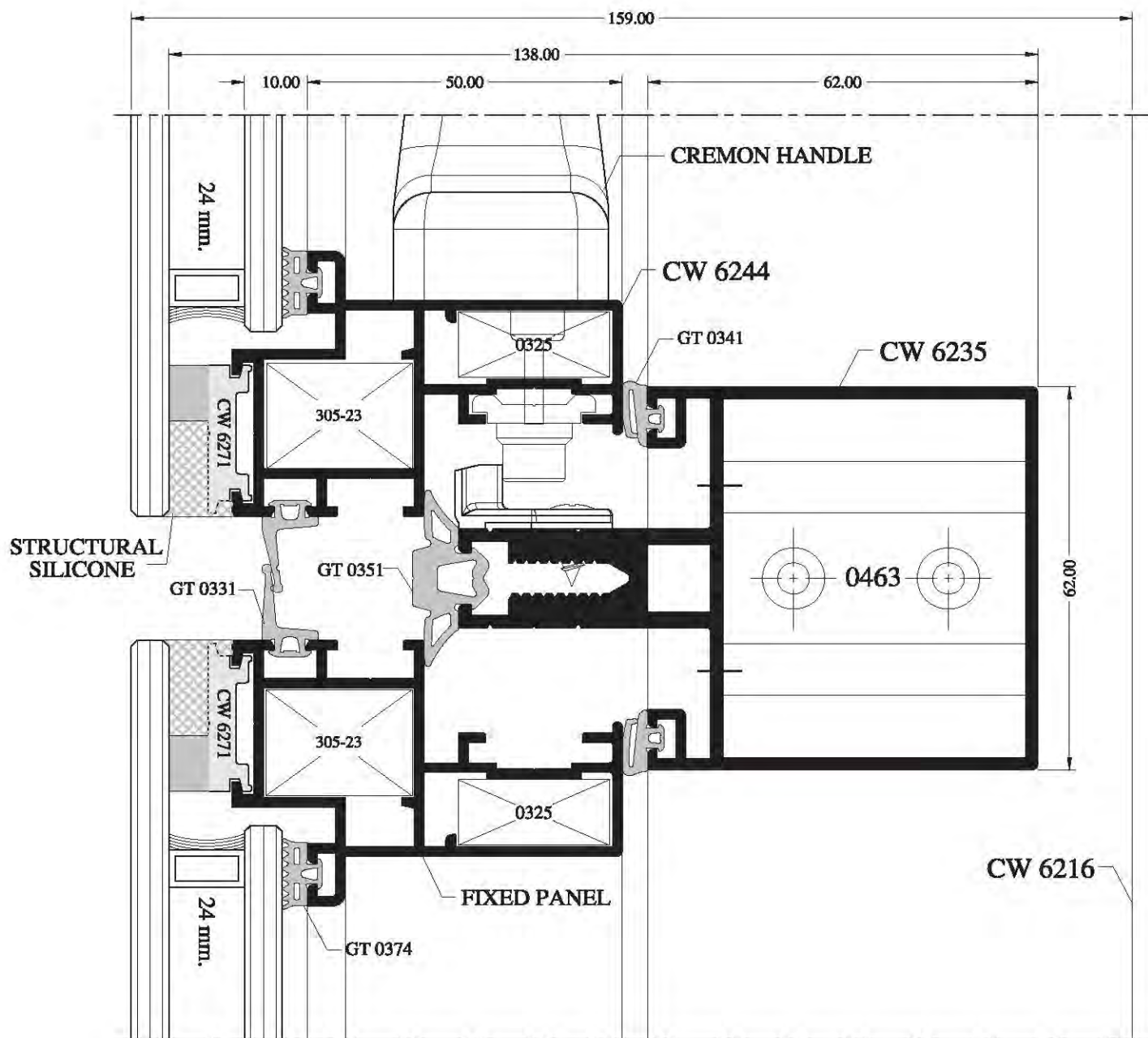
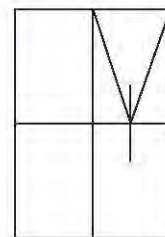
3 062 9246
1.269 Kg./ml.

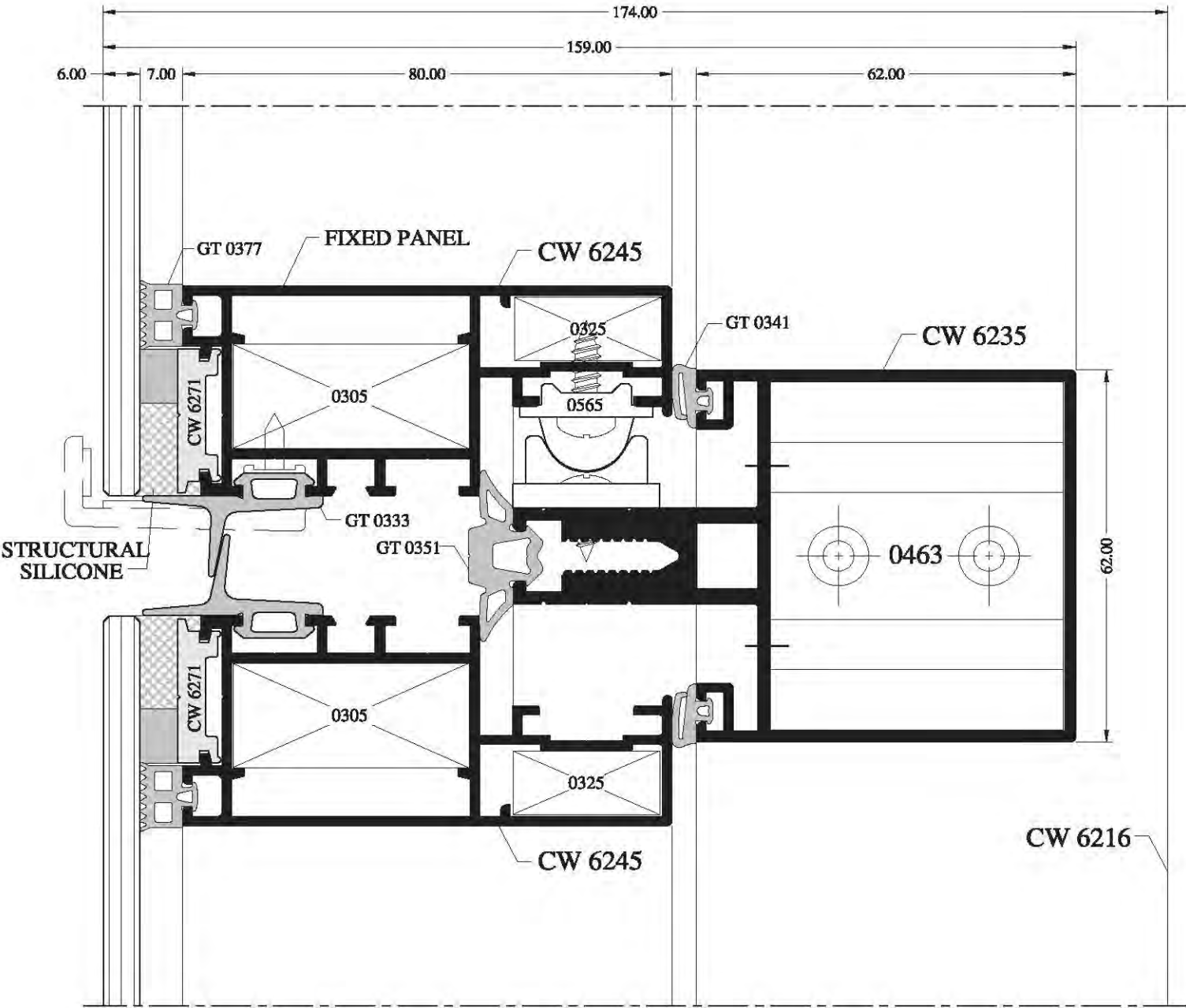
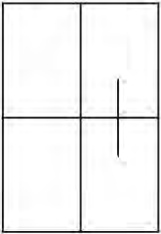
Profile No.	3 062 9246	3 062 9816
Profile Old No.	CW 6292	CW 6293

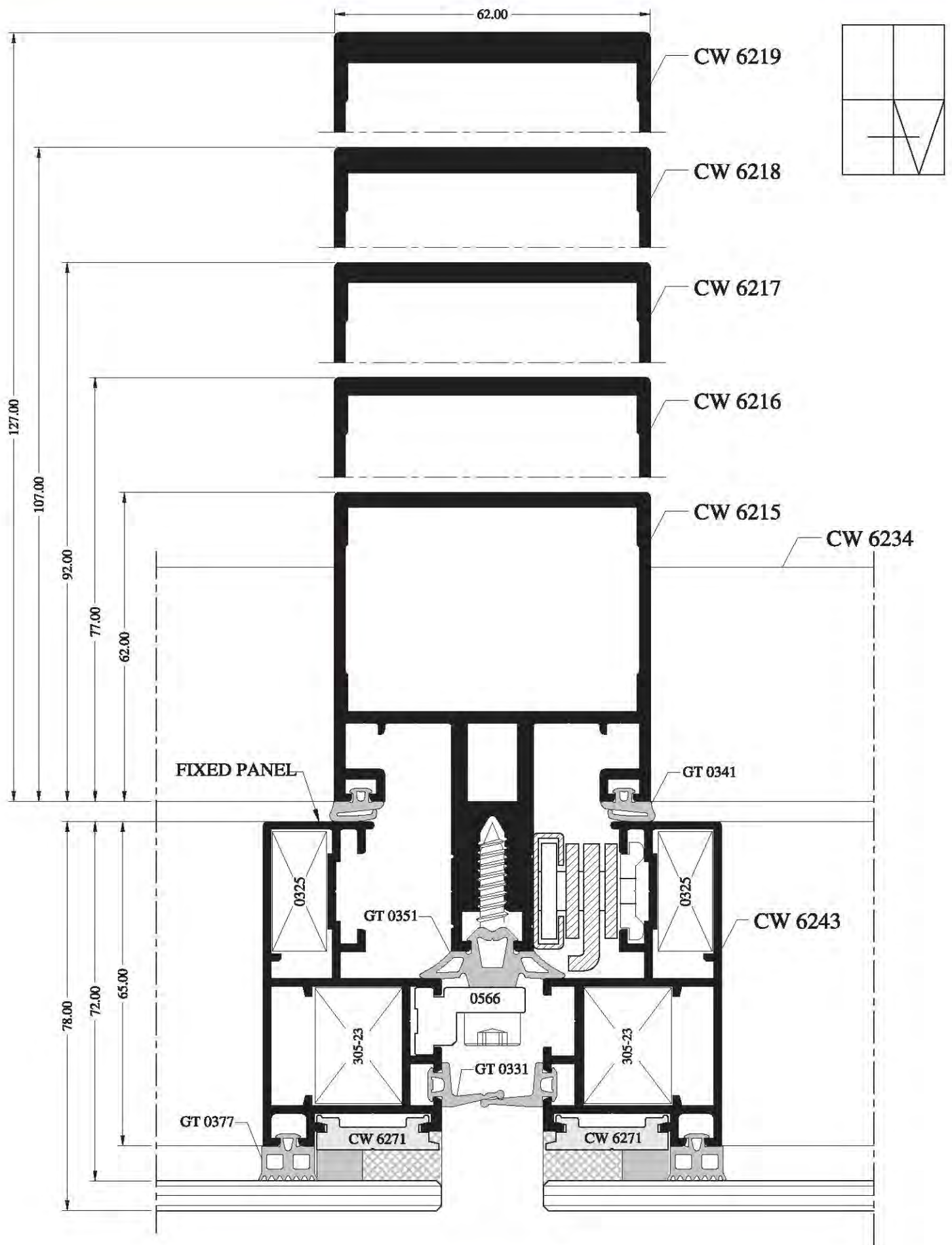


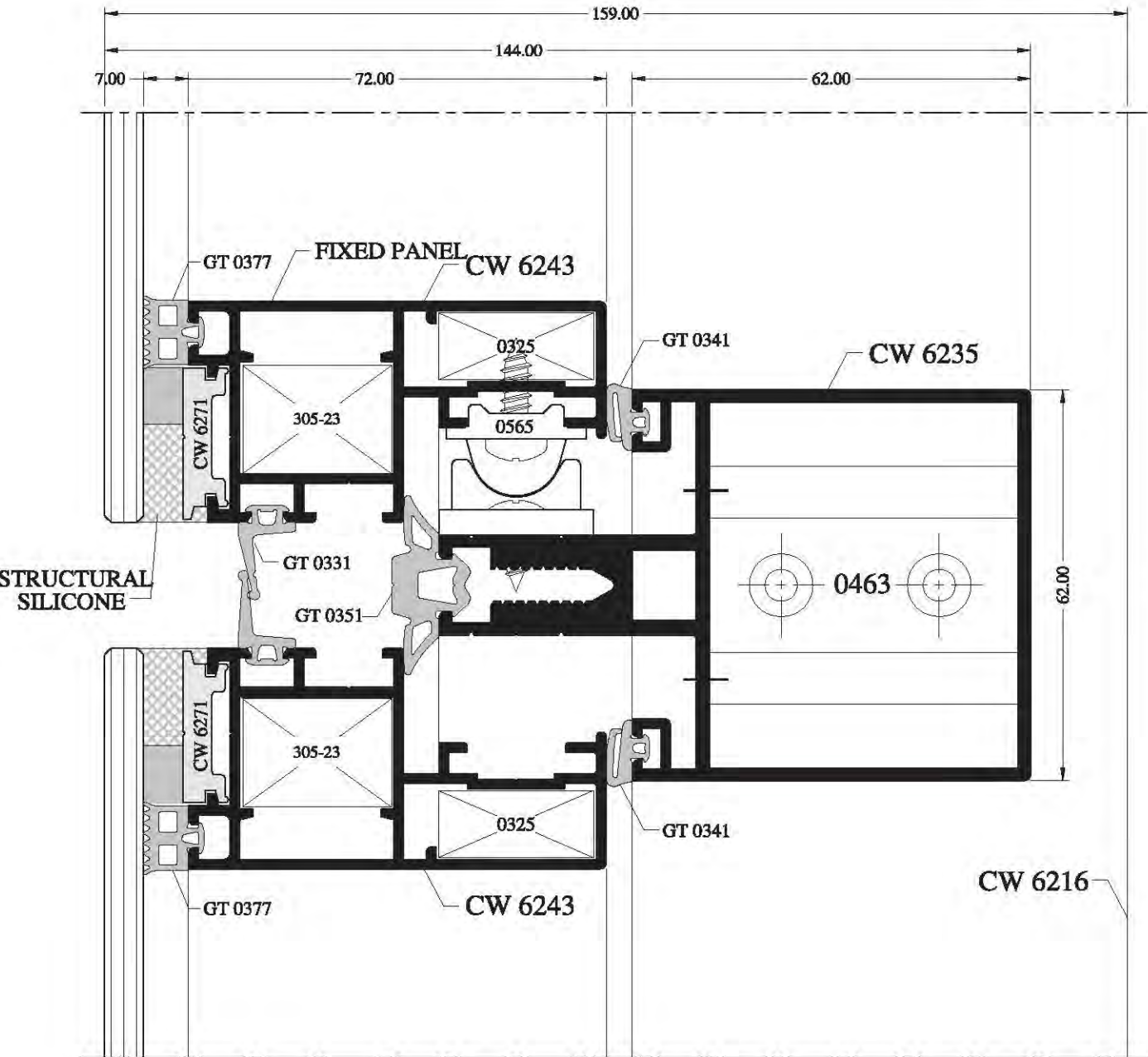
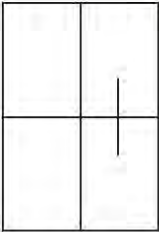


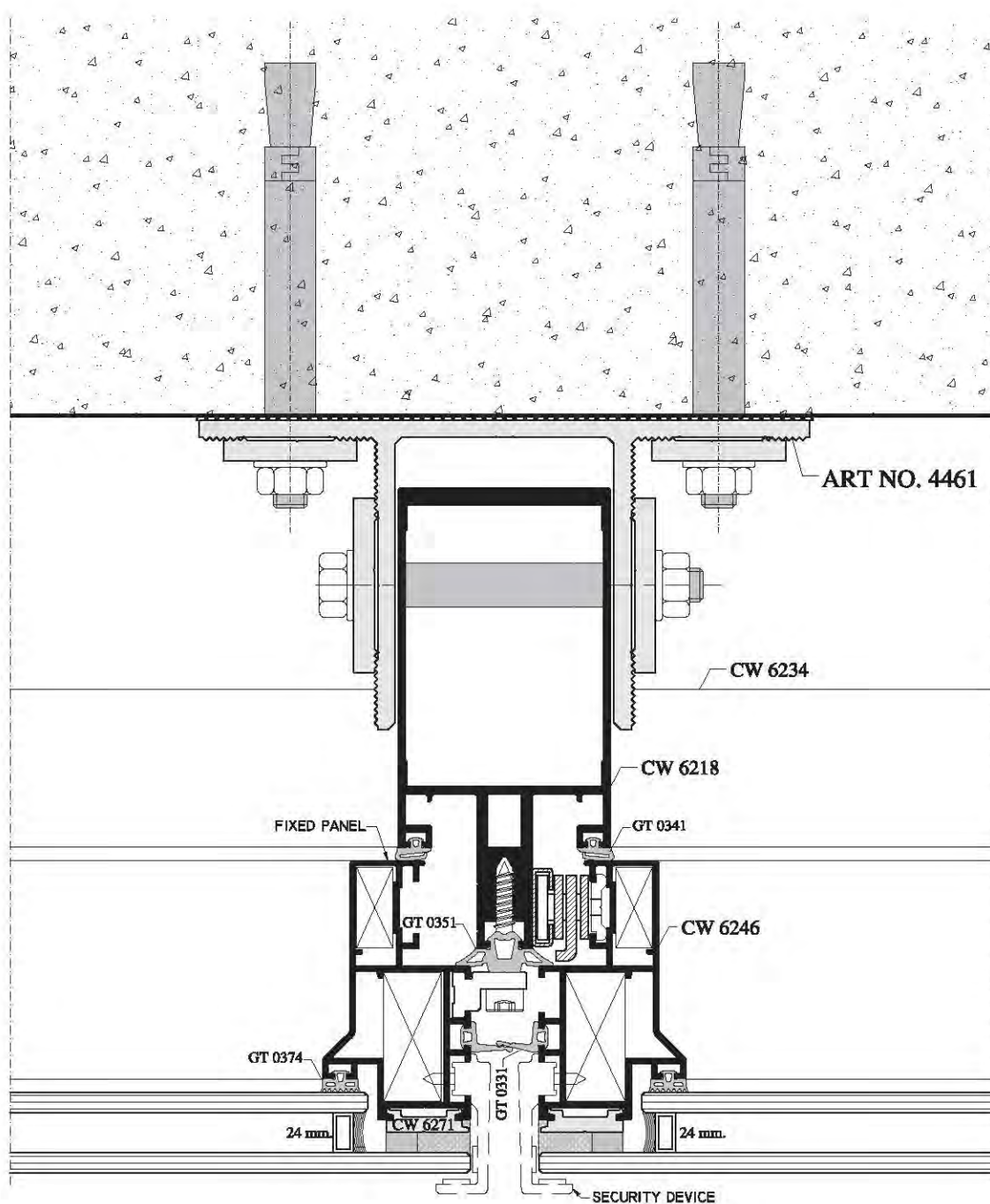
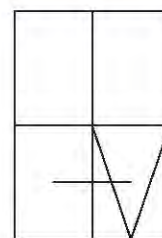


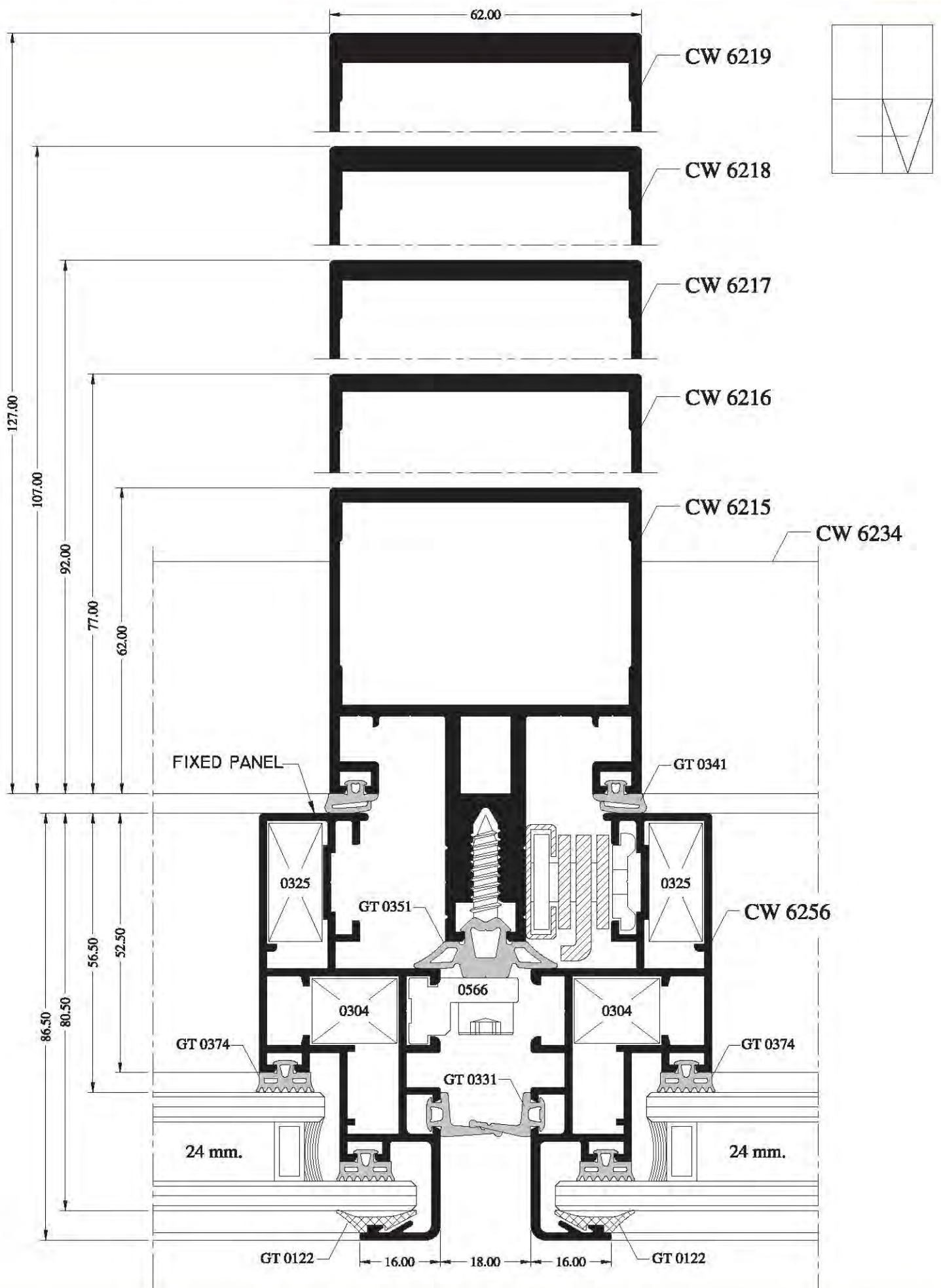


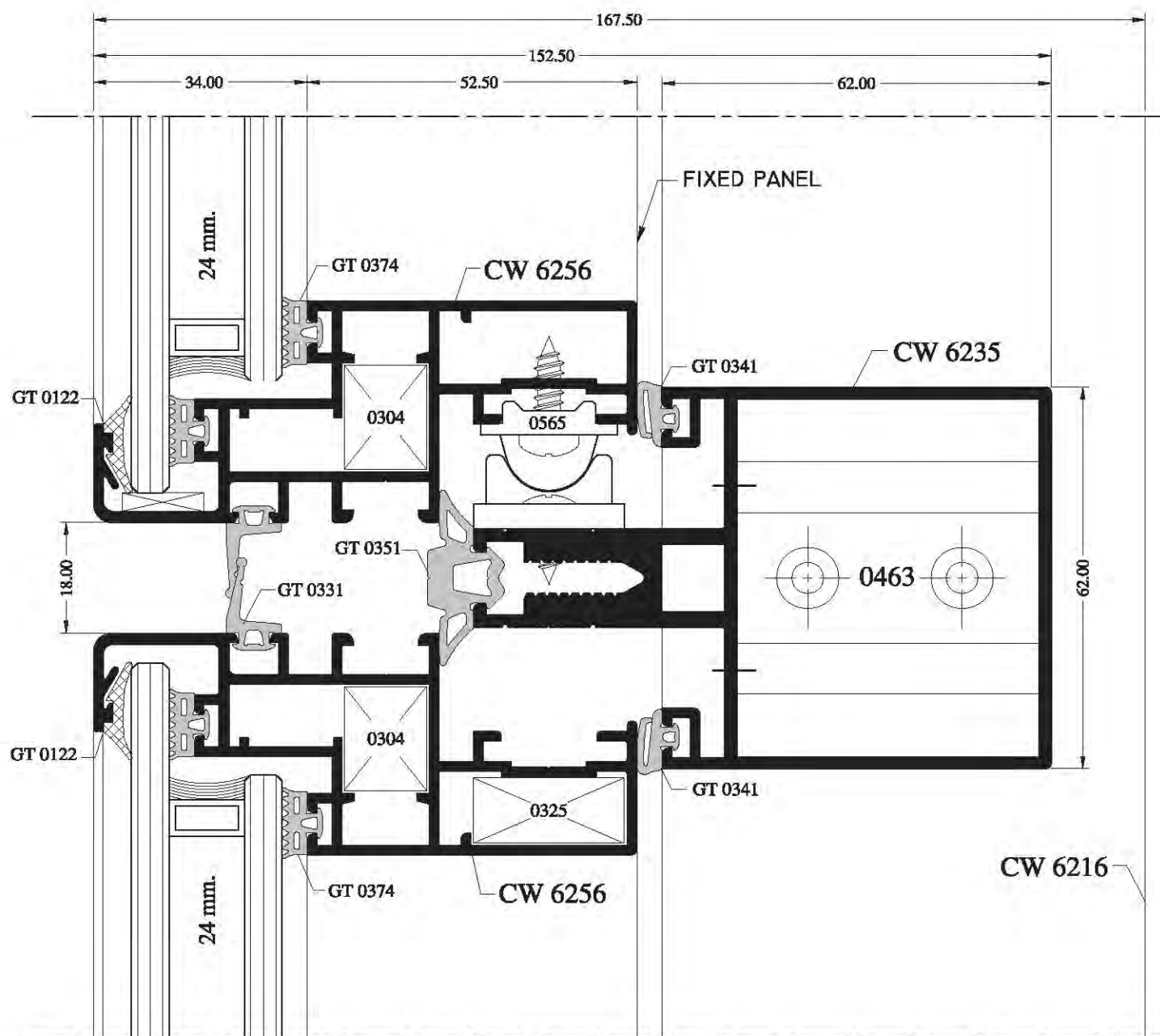
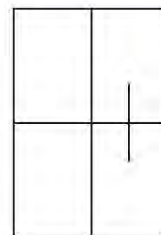


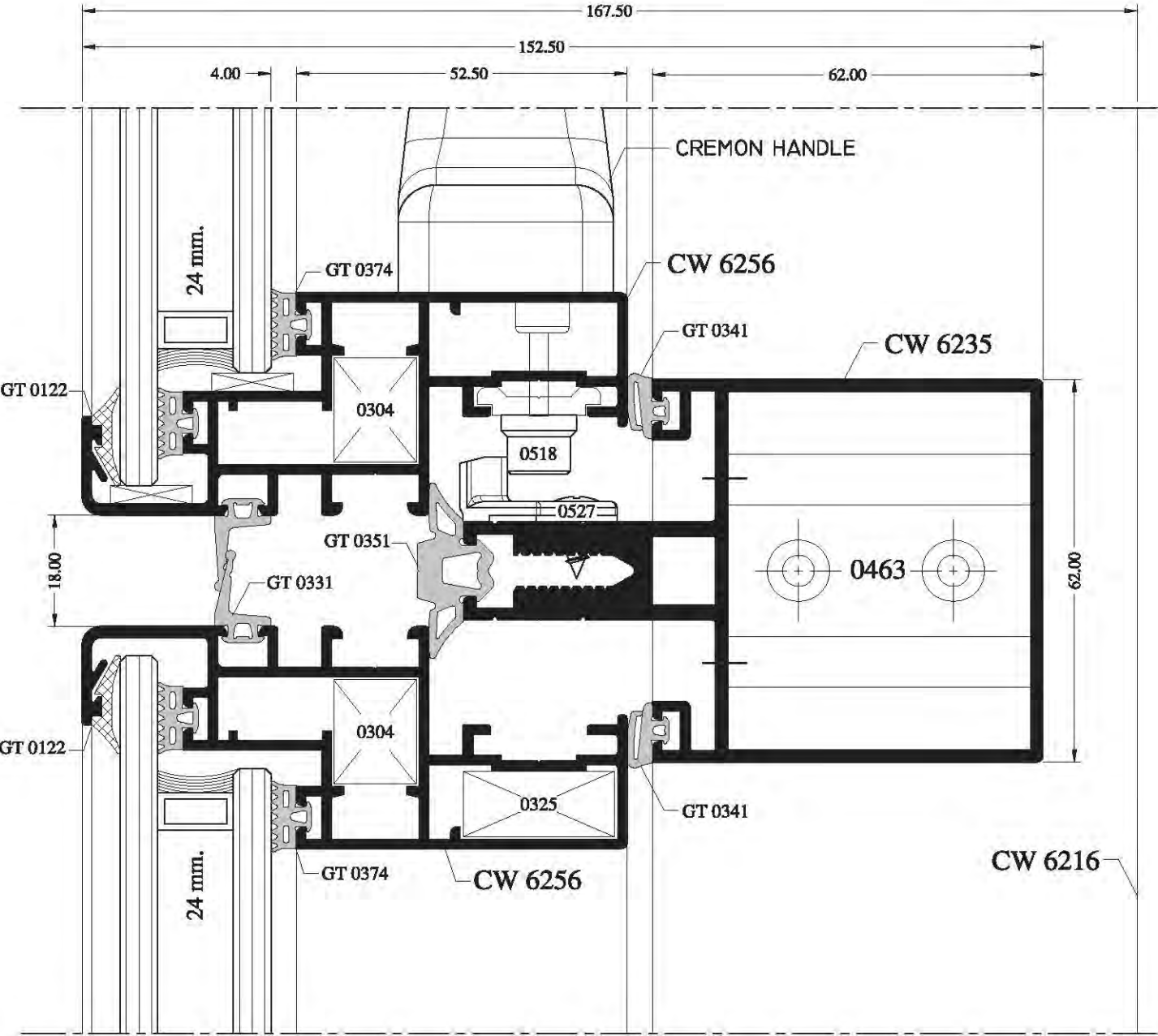
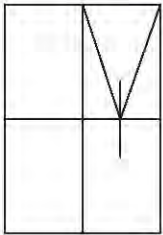


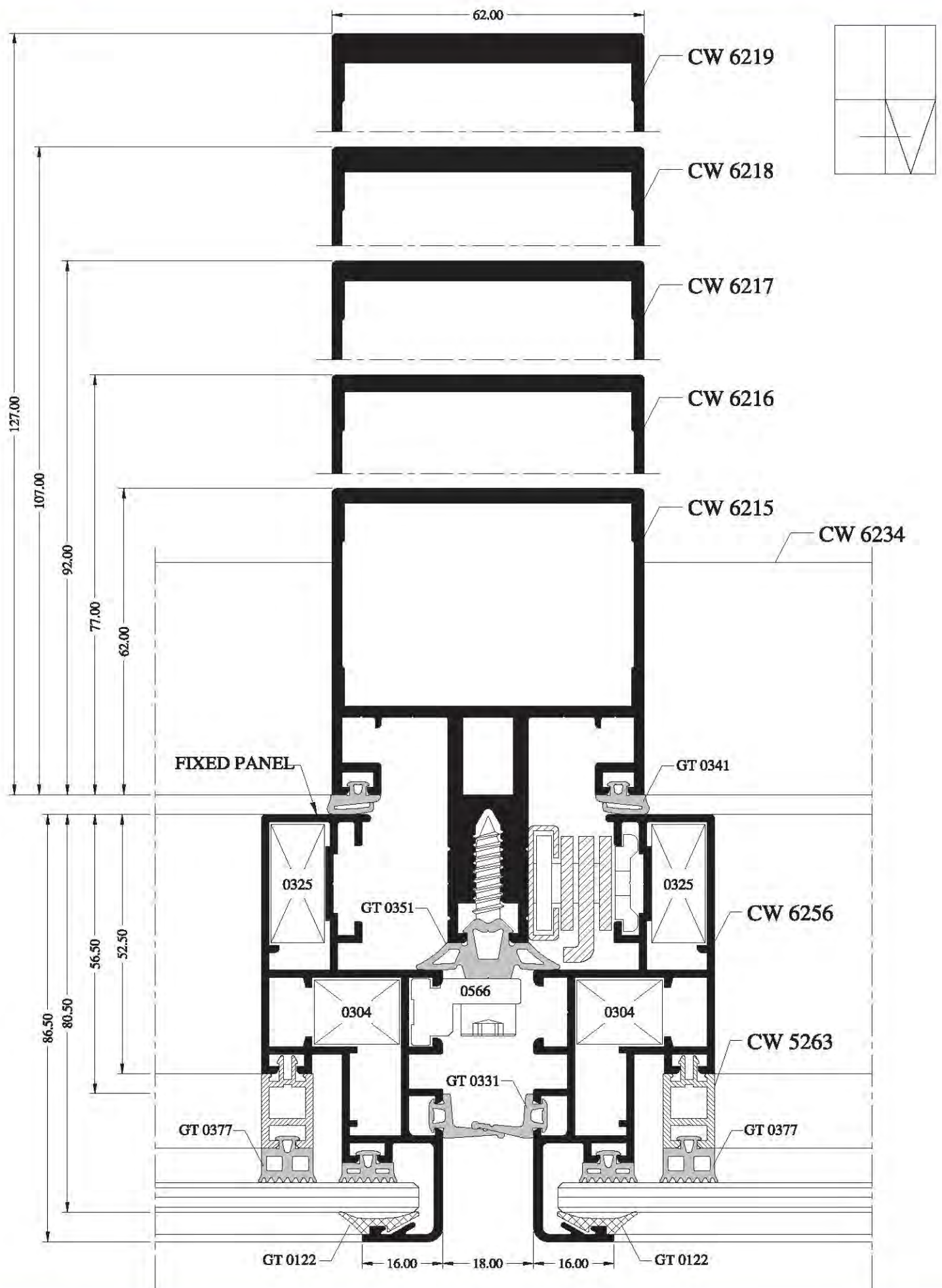


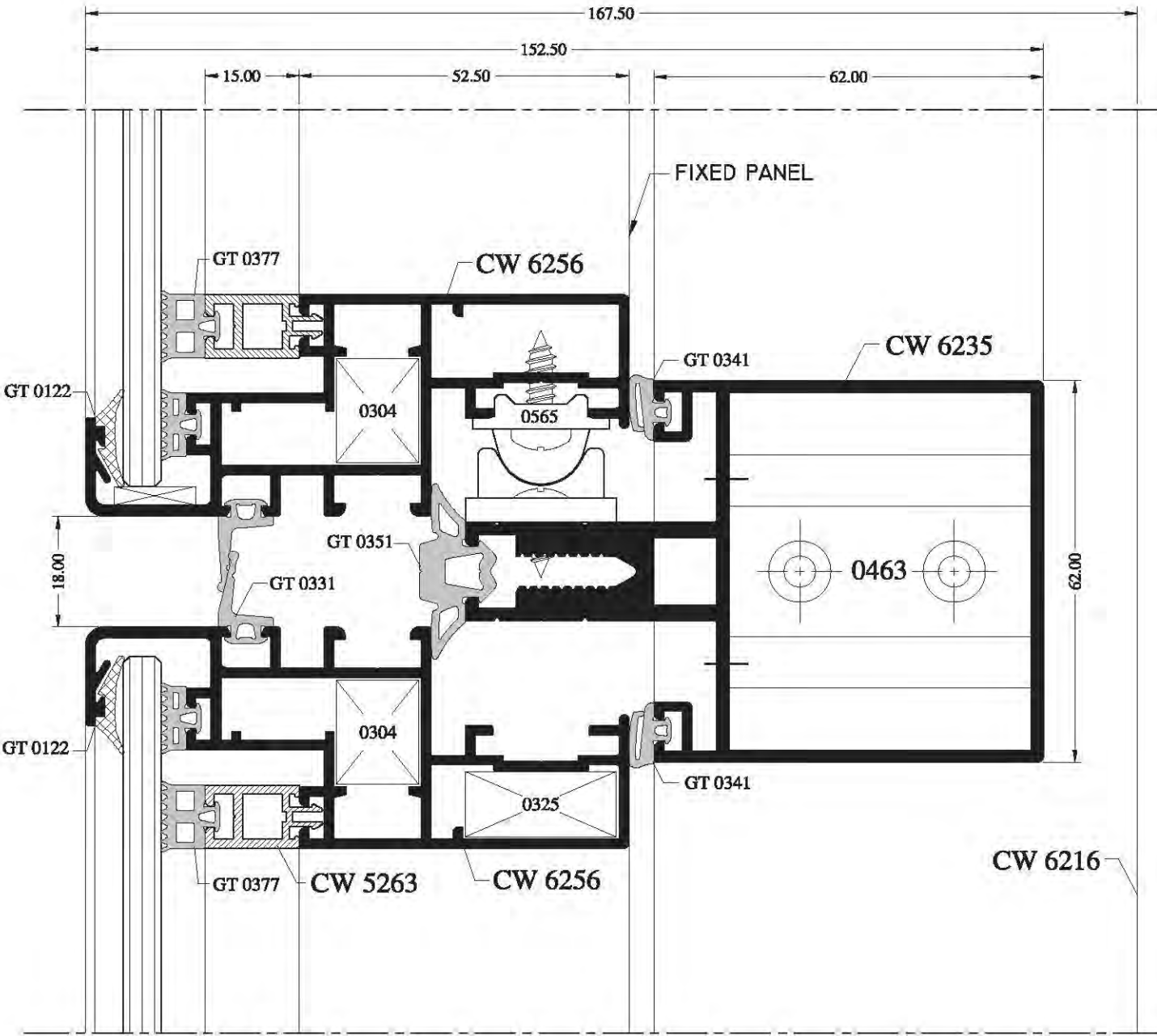
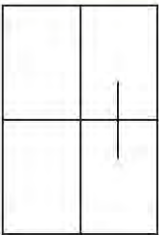


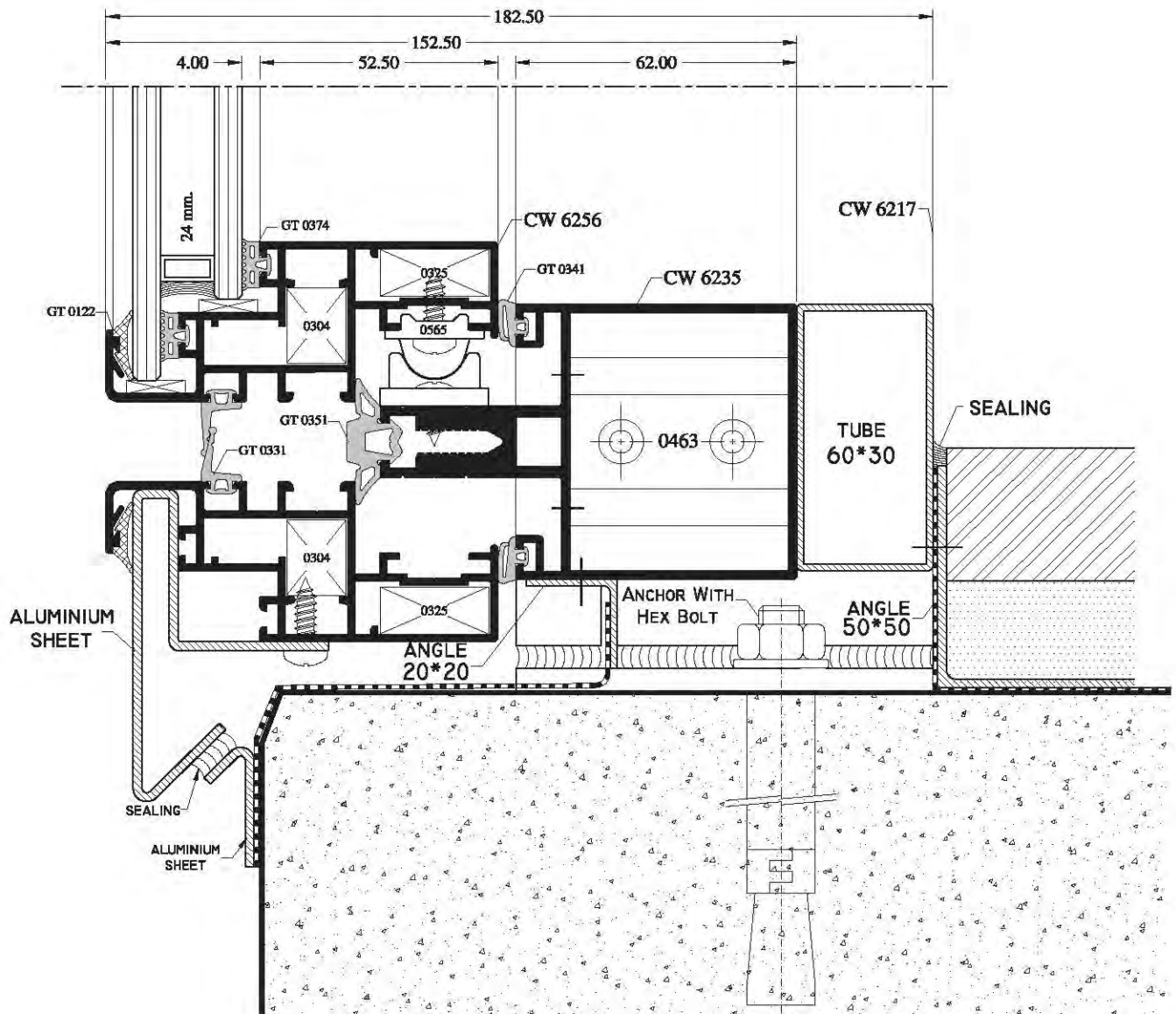
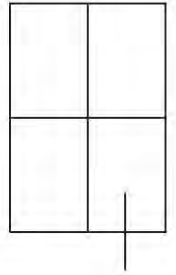


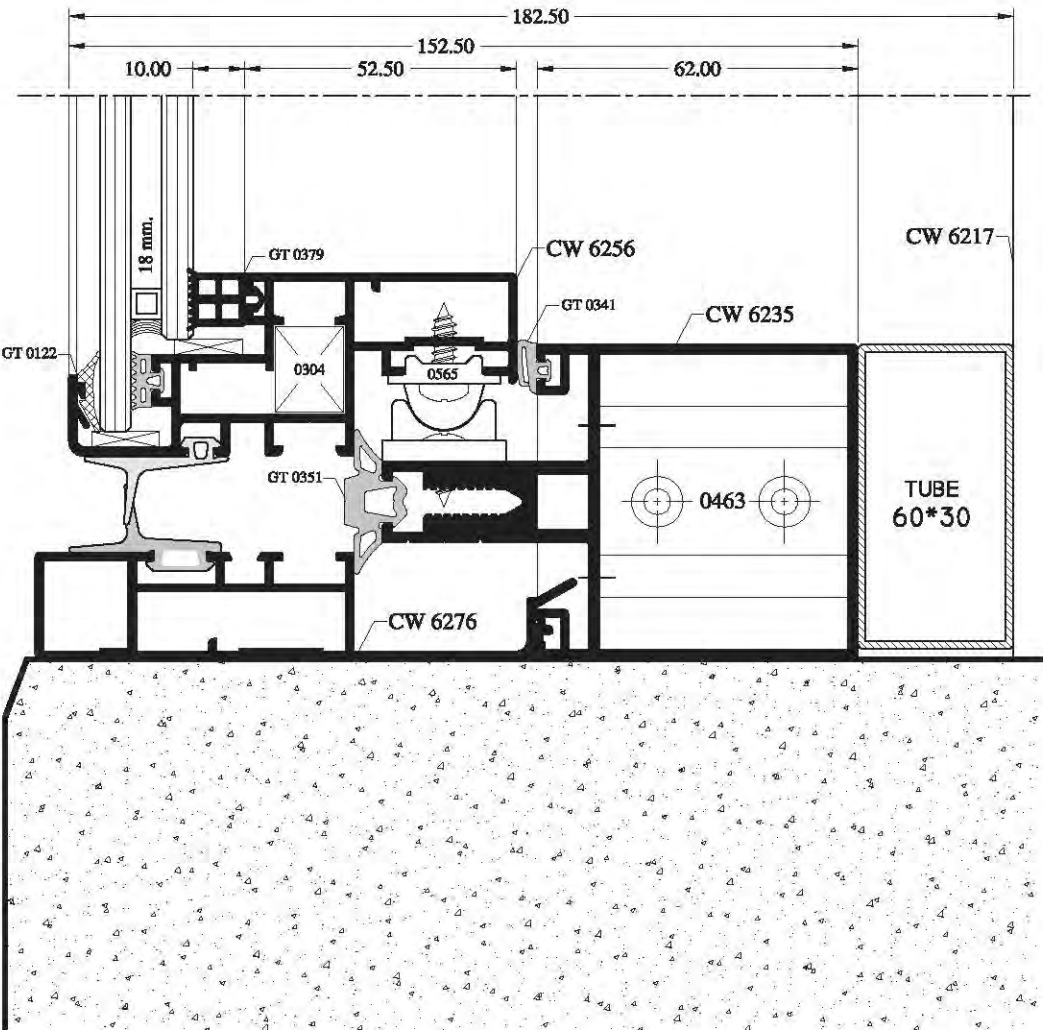
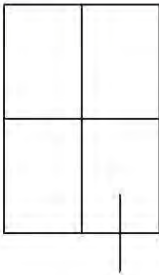


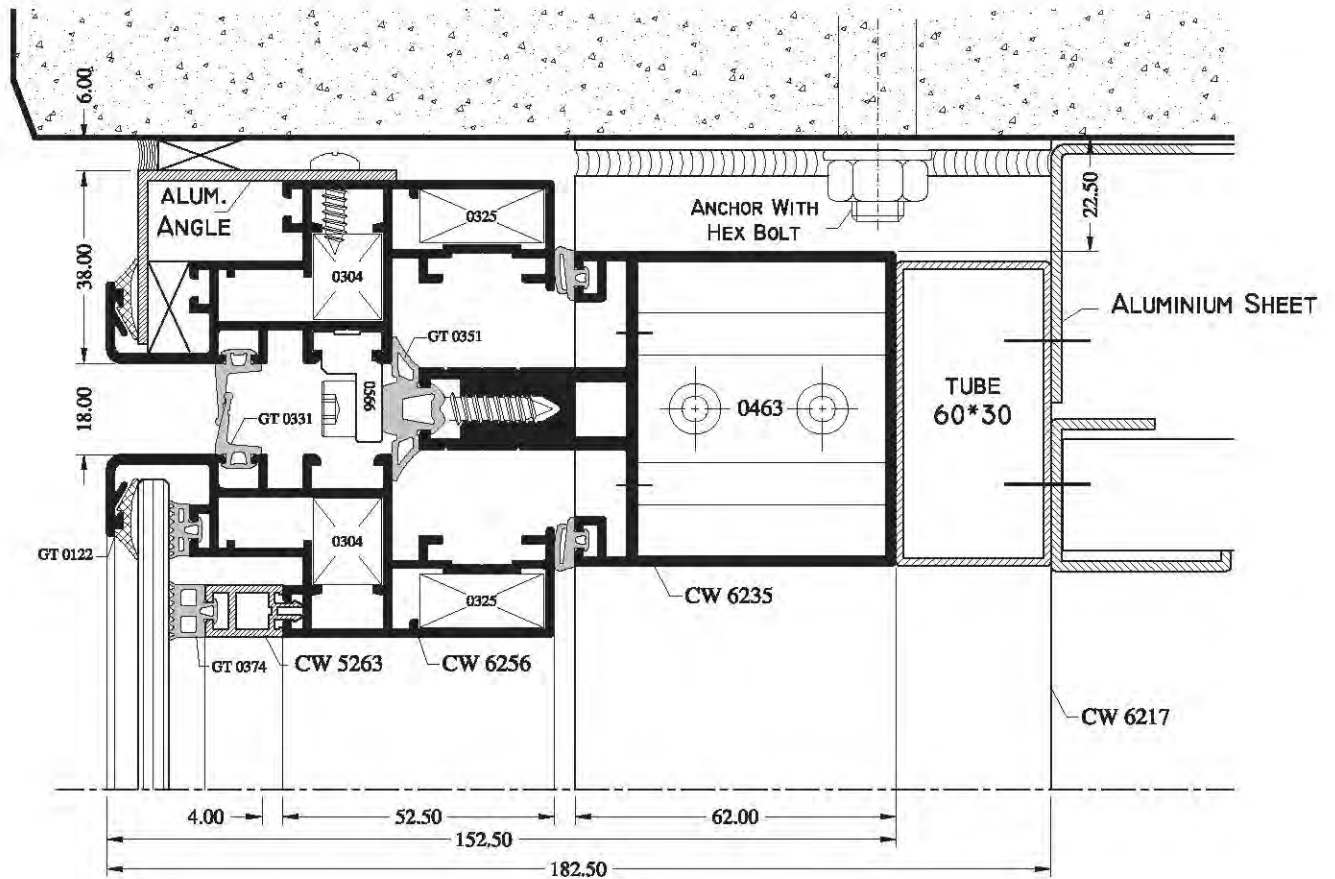
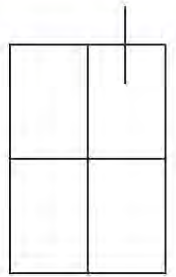


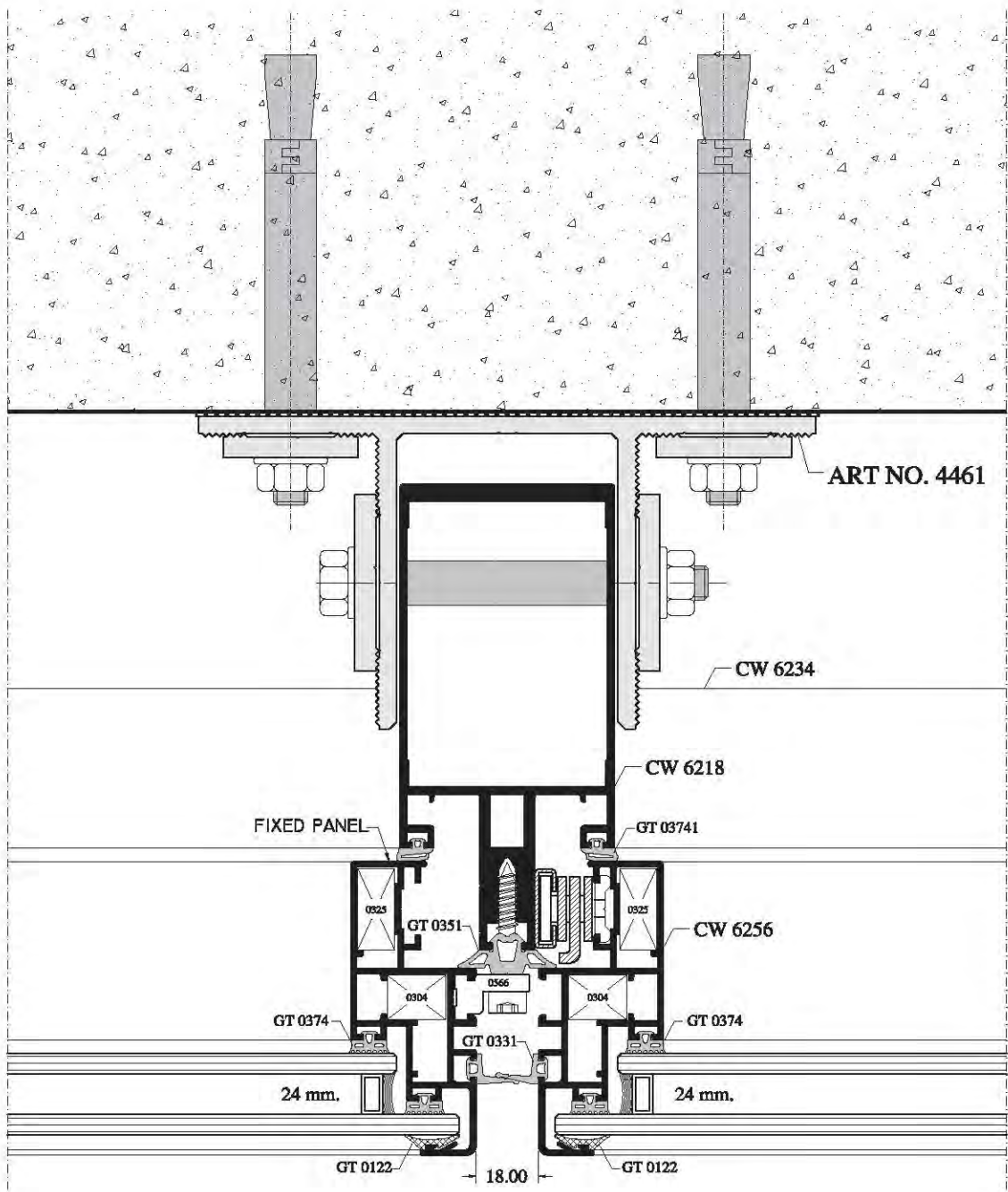
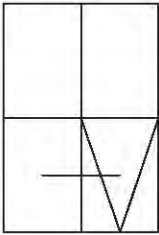


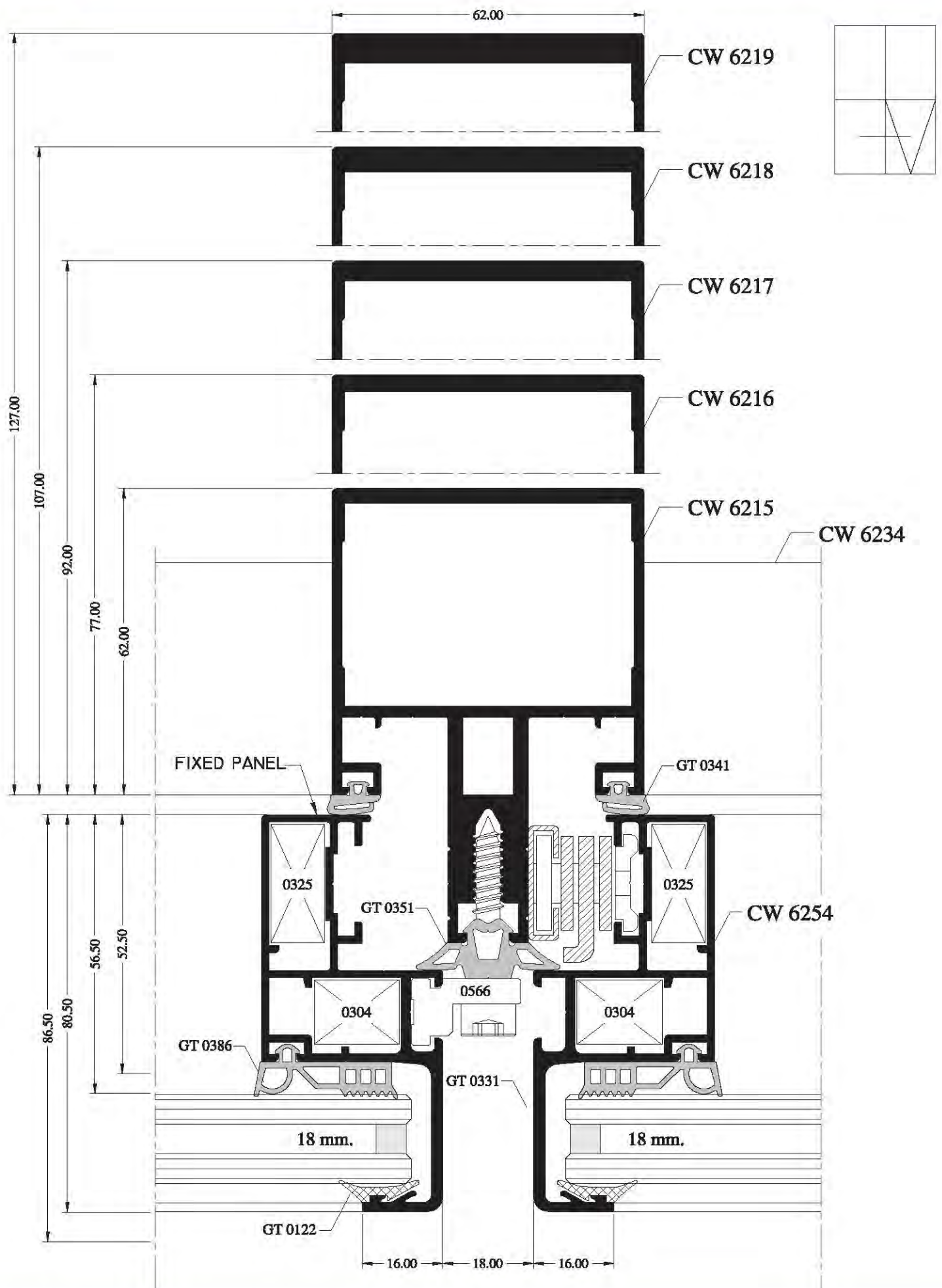










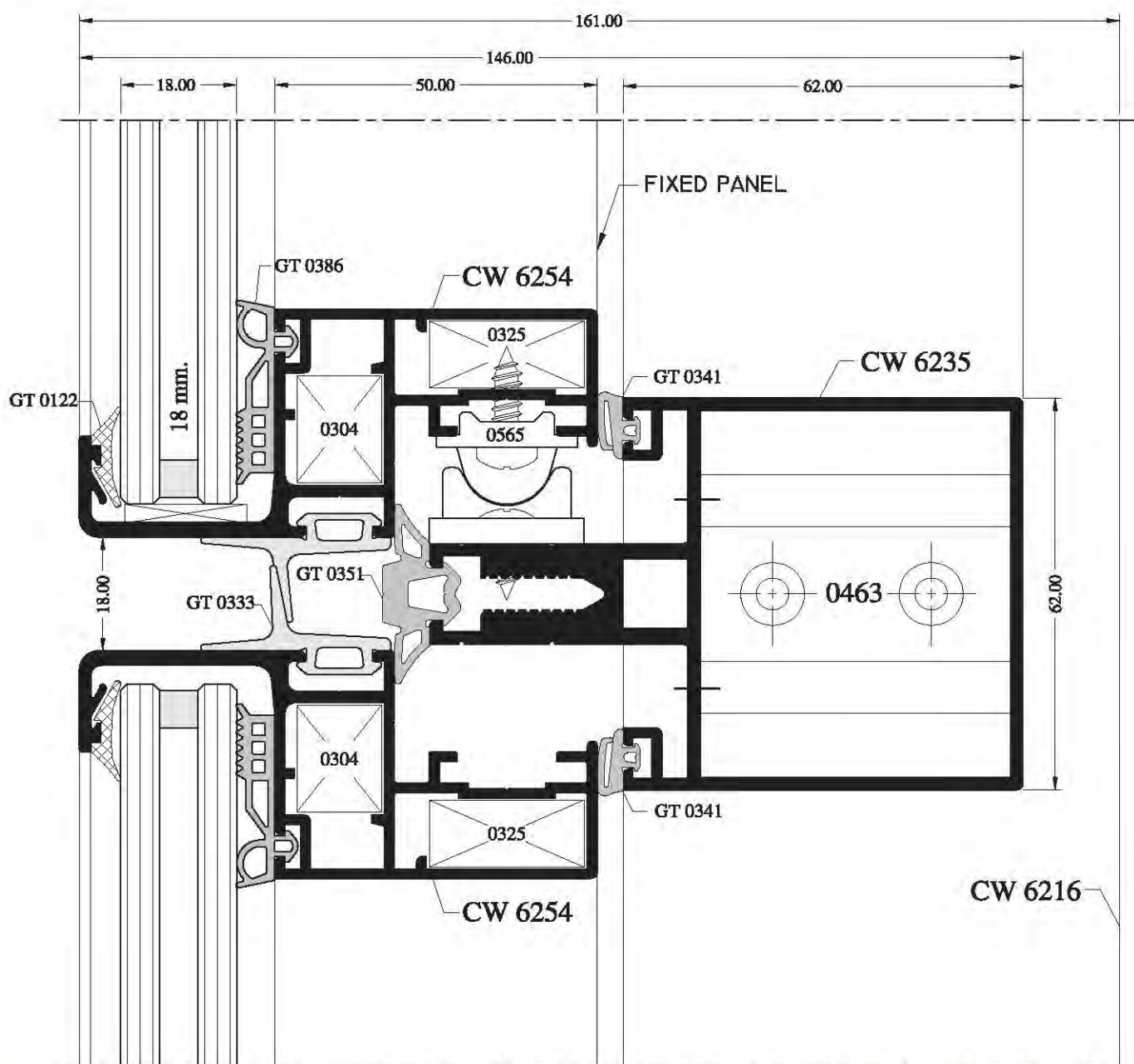
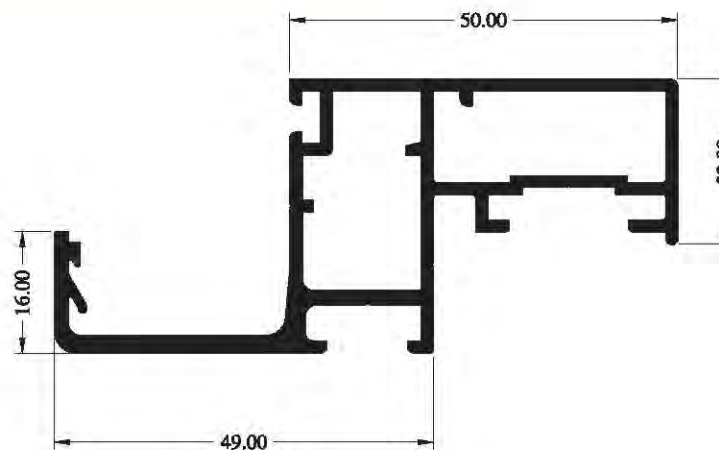




NEW

CW 6254

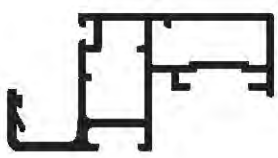
CW 6254		
	Leaf	
Weight	1.186	Kg/m.
Per.	338.98	mm.
J _x	6.70	cm ⁴
J _y	22.72	cm ⁴

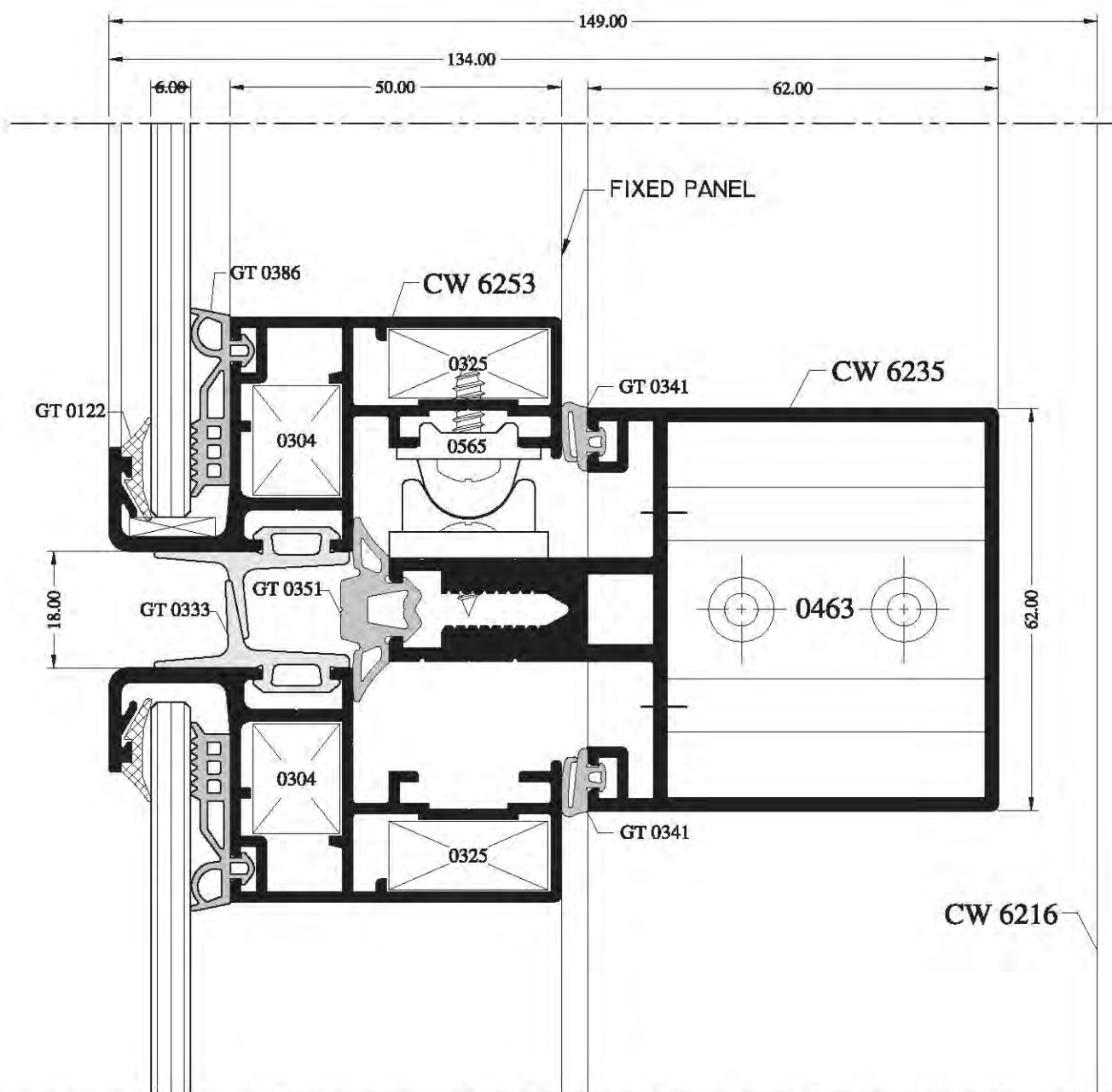
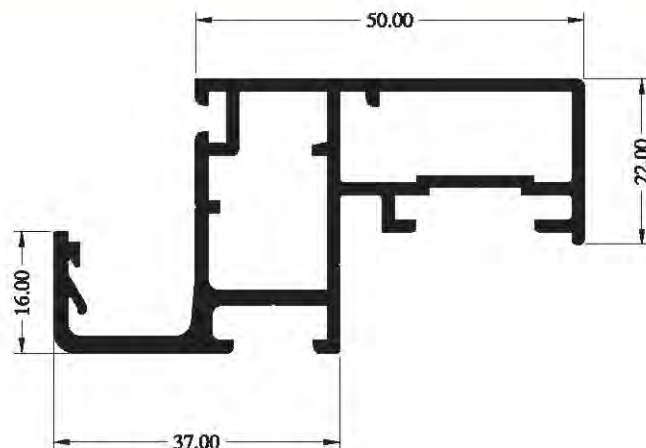




NEW

CW 6253

	CW 6253		
	Leaf		
	Weight	1.153	Kg/m.
	Per.	315.6	mm.
	J _x	5.85	cm ⁴
	J _y	15.95	cm ⁴



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Machines & Aluminium Center

122, Mohiy Al-Din Abu Al-Ezz st. , Dokki , Giza. P.O Box: 329 Dokki 12411

Tel: +20 (2) 33363658 - 33363657 - 33360568 Fax: +20 (2) 33356237

Email: info@machalum.com

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.