



## WT 260 TECHNICAL CATALOG

**GENERAL INFORMATION**

**TECHNICAL SPECIFICATIONS OF PROFILES**

**REINFORCEMENT PROFILES**

**ASSEMBLY OF PROFILES**

**ACCESSORIES**

## GENERAL INFORMATION

Exclusive specifications and benefits of UPVC doors and windows:

New UPVC windows with multi-glazed glasses are construction materials that are simply applicable with the common walls and, even, improve their functions.

The UPVC windows are easily usable, nicely depicted and in accordance with the above mentioned information, have a high grade of thermal and low sound conduction insulation.

The technical specifications of the WT260 profile series, submitted the evidence and highly efficient documents of these products to the purchasers.

1. High grade of thermal transfer resistance and low sound-conduction capability of UPVC profile, creates comfort inside. Temperature-exchange resistance for the UPVC frame profile is equal to 0.93m<sup>2</sup>, grade C/W (class1), for the UPVC sash profile is equal to 0.88 m<sup>2</sup>, grade C/W (class1). prevention of the infiltration of the sound of traffic flow is also 35 decibels ( in class B).
2. The special specifications of manufacturing UPVC profiles, provide the possibility of numerous manufacturing of different types of windows with multi-mode sliding systems, not only with using the standard essentials but also with anti-theft equipments, these profiles are suitable for the double-glazed glasses up to 32mm in thickness.
3. Galvanized reinforcements profile is contrived in order to increase the static strength inside the frame, sash and mullion profile.
4. The cross-sectional shape of the width of the profiles and the thickness of the UPVC networks guarantee the strength of the welded profiles (weld 90°c or weld in shape of V).
5. Special canal for installing locking mechanism (13 mm) provides the possibility of installation for amplifying equipment, therefore, the security and anti-theft characteristics increases in these products
6. Complete removal of undesirable moisture for use in seals and rubber gasket.
7. Height of the part that glass is contrived to protect the edges of the object from the Ultraviolet-Ray and UVB-Ray. Moreover, it makes the possibility of darkening and cooling of the indoor space minimum.
8. Double seal (outdoor and indoor), prevents excessive dryness and provides maximum protection against the wind and rain and prevents freezing of the pipes in below zero temperatures, therefore, it guarantees the resistance of temperature exchange and sound protection to be extremely high.

9. Applying high-standard UPVC raw-materials, guarantees the physical and chemical characteristics of the products produced from these raw productions. Durability in below zero temperatures, tensional strength, considerable toughness, thermal resistance, satisfaction level of quality and long life cycle are some of these characteristics.

10. UPVC profiles have health certificate for a wide range of users and are completely safe for the human health.

11. Because of the fireproof nature of the UPVC materials, UPVC profiles are incombustible. According to the fire-fighting certificate, UPVC profiles are in accordance with the fire-fighting rules and conforms to the combustibility rate G2 (limited ignition) and burning-rate B2 (medium-ignition).

12. It is possible to produce profile with any color spectrum and laminate coating.

13. The multi-glazed glass is the main part of the raw materials of UPVC windows. Based on the technical test of life cycle of the multi-glazed glasses, the longevity of these glasses could be guaranteed upto 20 years. Application of multi-glazed glasses has many advantages, for instance: increasing the temperature-protection (B2), decreasing noisiness (reduction of audio-disturbance about 30-50 decibel), moreover, these glasses are anti-freeze and anti-steam (upto temperature 40°c).

New technology provides the possibility of manufacturing two-phase pressure insulated glasses and thereupon promotion of the quality and reliability. Suitable function of UPVC door or window is not only limited to the technical features or the quality of applied necessities but also is dependent on the montage accuracy. The Experienced and Skillful manufacturers use new connections in manufacturing the products. The relation between windows and various opening systems has its own specifications and special connections. Based on the purchaser's request, creating exclusive user connections is possible (Reinforcement of heat and thermal insulation or water-proofing). UPVC profiles surfaces don't require being covered with color-layer and they are easy to protect. Because of being smooth and having polished surface, dust does not accumulate on the profiles. The UPVC windows that successfully have been installed and operated are very suitable insulators against the environmental conditions for the residential and administrative complexes. However, this insulation leads to excessive moisture. Sometimes, this results in wet windows and the walls, especially in the cases of lack of a good ventilation inside the house. One of the actions that are applicable to prevention in this cases, is repairing the ventilation with using the tools that make the air-stream limited. The UPVC windows with the mentioned tools could create a passing air-stream with the size of 1.2 mm., and, meanwhile, preventing air-dryness and condensation in the inside space.

**For increasing the longevity of UPVC windows, it's necessary to take the following preventive measures once in a year:**

1. All the moving components should be lubricated by appropriate lubricants.
2. Seals must be checked to make sure that they are in an ideal mood, it shall be more attention to the tires of the glass part (all the damaged tires should be replaced).
3. Water evacuation grooves (grooves of rain water), must be checked, and if it is necessary, they should be cleaned.
4. Outer surface of the UPVC profiles should be cleaned with water, and if it is needed, with detergent. Avoid using oil, petrol and other similar materials which are oil-based.

**Heat Protection:**

The UPVC windows guarantee a high level of thermal protection in order to ensure inside comfort. WT260 Multi-hole profiles, they provide excellent heat insulation. The rate of these profiles is 1.3 Wt. /m<sup>2</sup>.

**Sound Protection:**

Audio-insulation depends on the manufacturing factors of UPVC windows to a large extent, nevertheless, not only the frame, sash and mullion profile, but also the type of glass and execution of its function has a high importance.

**Humidity and Ventilation:**

The UPVC windows also provide air-circulation in the buildings. Room ventilation is necessary in order to ensure keeping fresh air inside (in order to eliminating the causes of pollution like CO<sub>2</sub>) and to create natural heat ventilation (stream outlet). The human beings are one of the main sources of moisture in the building. The moisture increases with their breathing. It is completely obvious that, breathing of this air once happened and then the moisture should get out of the room, otherwise, could lead to density of humidity in the internal surface of the windows and the edge of the walls.

Constant humidity concentration in the air could lead to growth of fungus on the furniture, walls and ceiling. UPVC profiles are suitable heat protectors and usually don't sweat or freeze.

The specifications of the UPVC Profiles provide using the standard and anti-theft equipments and essentials. Moreover, filling the holes and grooves doesn't need any special equipment.

**Maintenance of the UPVC Profile:**

Maintaining the UPVC profiles is very easy. They don't need any special repair or care but several simple rules should be considered in order to save the life cycle of these windows.

**Annual care of the UPVC windows:**

Periodically, check the outer side of the windows and if necessary, clean the outer sides. Water drain slots must be checked and if necessary, they must be patched. The caulk rubbers should be checked. Pay attention to the rubbers which are associated with glass and ,in case of damage, they must be changed. All the mobile components must be lubricated using suitable lubrication.

**Cleaning of UPVC Profiles:**

The UPVC profiles can be cleaned with regular water and detergent. Do not use any detergent that can cause wear, including powerful organic compounds.

The dust from the production process as well as the installation of the window on which it is accumulated can easily be eliminated by ordinary water and warm water. The use of oil, petrol and other substances should be strictly avoided.

Damages caused by machining and unwanted holes can be repaired with special adhesives and then filled. Different filling tools can be used for this purpose, but the filled space should be as small as possible. The filled surface should then be polished using a roller. Surface roughness and small scratches can be eliminated by finishing the surface.

Damaged UPVC profiles caused by machining can be repaired with parts of the same damaged profile. A small piece of the same profile should be turned into dough in the boiling process with hot air and to be used to cover the damaged part. This operation must be performed after all the steps mentioned above have been applied.

Well-installed UPVC windows provide a high degree of insulation against environmental factors. However, this insulation leads to excessive moisture. Occasionally, the lack of proper ventilation leads to wet walls and windows.

The only way to prevent this condensation is to improve ventilation conditions. Improvement of ventilation by means of fittings that limit the air flow to a limited extent. The UPVC windows with the mentioned specifications can create as much as 1-2 mm airflow space and prevent indoor air from condensation.

**Specification of Wintech UPVC Profiles:**

Wintech UPVC Windows are produced using high-quality PVC compound in the best structural condition. In the production of Wintech profiles, the production method is used in extrusion mode. Continuous monitoring of production not only ensures the dimensional quality but also the quality of the produced profiles. Production profiles are in accordance with the RAL RG 716/1 requirements.

UPVC compound used in production:	Wintech UPVC compound in compliance with EN 7748
Density:	1.46 g/cm <sup>3</sup>
Impact Strength (up to -40 °C):	no crack or rupture
Resistance to windloads:	Class C4/B4 according to EN 12210
Resistance to driving rain:	Class 9A according to EN 12208
Permeability of air:	Class 4 according to EN 12207
Tensile strength:	$\geq 40$ N/mm <sup>2</sup>
Elasticity of Modulus:	$\geq 2500$ N/mm <sup>2</sup>
Coefficient of linear thermal expansion:	$0.8 \cdot 10^{-4}$ K <sup>-1</sup>
Thermal conductivity:	0.16 W/mK
Specific resistance:	1016 $\Omega$ cm
Fire behaviour:	self extinguishing, flame retardant
Resistant to:	acids, salts, salt solutions, bases, sea water, benzene, oil, lime, cement, fumes of all sorts
Wall thickness:	up to 3.5 mm
Possible processing techniques:	boring, milling, sawing, filing, welding, grinding
Corner joints:	welded
Types of openings:	turn, turn and tilt, tilt, sliding, folding
Possible glass types:	insulating or non-insulating glass types with all common glass thicknesses between 4 and 32 mm.
Seals:	EPDM-TPV and TPE
Seal Color:	BLACK
Main application areas:	residential houses, high-rise buildings, schools, administrative buildings, industrial buildings
Coefficient of heat transfer:	$k =$ between 2.6 - 1.4 W/m <sup>2</sup> K depending on the insulating glass used.

Frame Profile (Single Rail)  
Code: 41260-02000

Frame Profile (Double Rail)  
Code: 41260-01000

Frame Profile (Fly Screen inside)  
Code: 41260-01300

Frame Profile (Fly Screen outside)  
Code: 41260-01400

Sliding Sash Profile  
Code: 41260-05000

Frame Profile  
Code: 41100-01000

Mullion Profile  
Code: 41100-03000

Sliding Cornice Profile  
Code: 41260-07000

Sliding Fly Screen Sash Profile  
Code: 41240-05100

Sash Cover Profile  
Code: 41260-03000

Mullion Cover Profile  
Code: 41260-04000

Frame Cover Profile (Single Rail)  
Code: 41260-06000

Single Glazing Bead Profile (4-6 mm)  
Code: 40101-96400

Double Glazing Bead Profile (20 mm)  
Code: 40101-96100

Double Glazing Bead Profile (20 mm)  
Code: 40101-96200

Double Glazing Bead Profile (24 mm)  
Code: 40101-96500

Triple Glazing Bead Profile (32 mm)  
Code: 40101-96300

Coupling Profile  
Code: 40106-01000

Border Profile 70 x 50 mm  
Code: 40108-02000

Border Profile 30 x 48 mm  
Code: 40108-01000

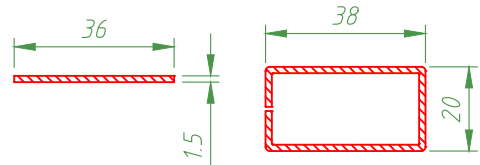
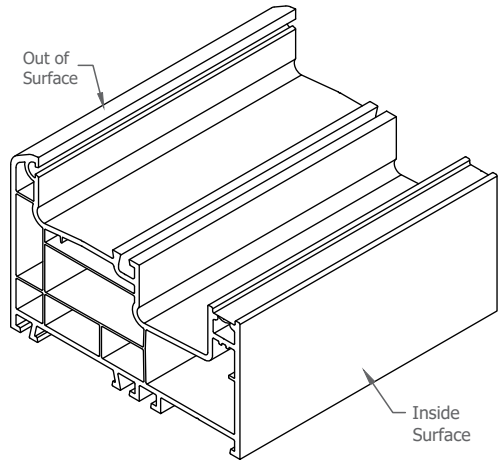
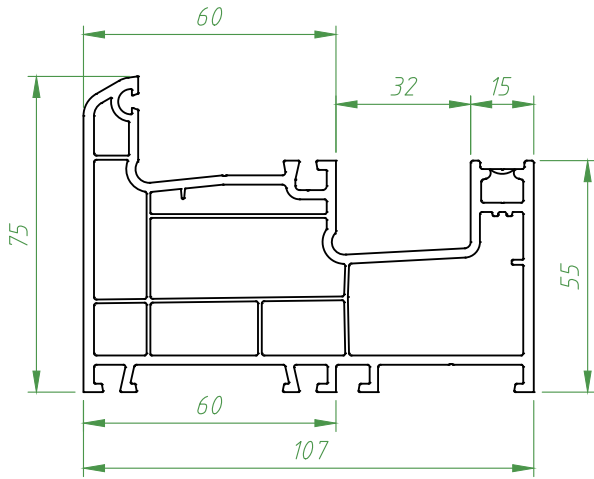
Holder Profile  
Code: 40106-04000

Panel Profile (20x125 mm)  
Code: 40102-04000

Panel Profile (20x125 mm - Groove) new  
Code: 40102-02000

Panel Profile (20x100 mm)  
Code: 40102-03000

### Sliding Frame Profile (Single Rail)

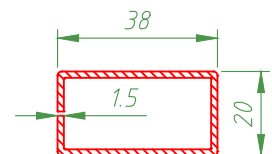
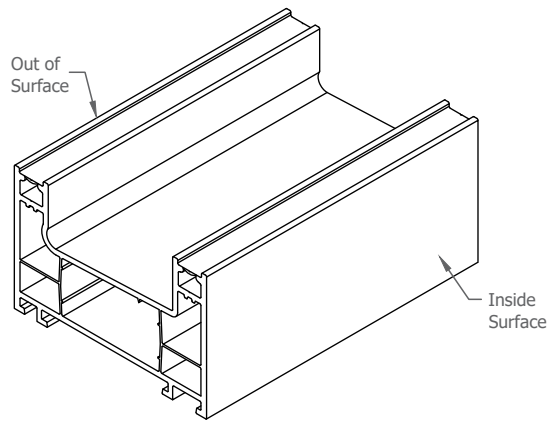
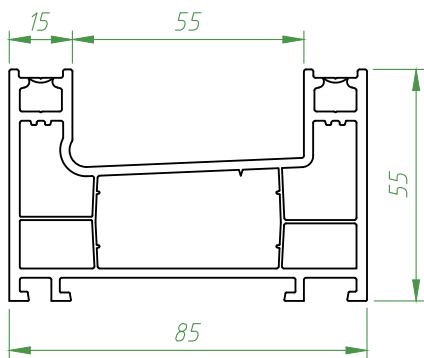


Quantity in the package: 4 x 6mt = 24 meters

Profile Code	White / Without Rubber	White / With Rubber	41260- 02000	Inside Lmainate	Outside Lmainate
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	<input type="radio"/>	<input type="radio"/>	41260- 22003	41260- 02001	41260- 02002
	<input type="radio"/>	<input type="radio"/>	41260- 22033	41260- 02031	41260- 02032
	<input type="radio"/>	<input type="radio"/>	41260- 22053	41260- 02051	41260- 02052
	<input type="radio"/>	<input type="radio"/>	41260- 22063	41260- 02061	41260- 02062

Without Rubber     With Rubber

### Sliding Frame Profile (Double Rail)



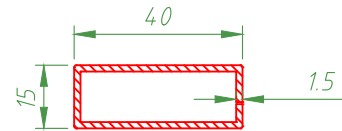
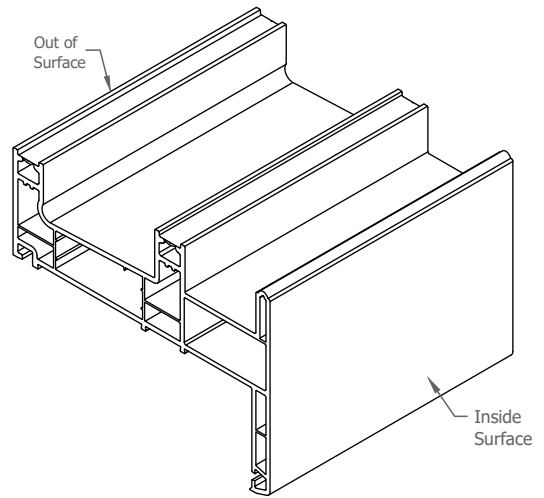
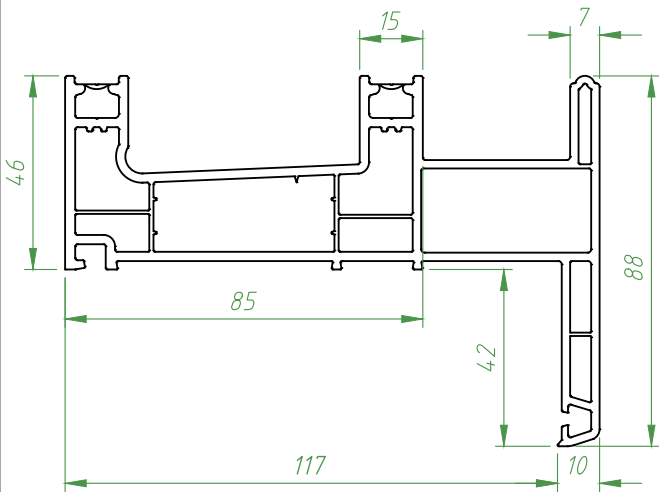
Quantity in the package: 6 x 6mt = 36 meters

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	<input type="radio"/>	<input type="radio"/>	41260- 21003	41260- 01001	41260- 01002
	<input type="radio"/>	<input type="radio"/>	41260- 21033	41260- 01031	41260- 01032
	<input type="radio"/>	<input type="radio"/>	41260- 21053	41260- 01051	41260- 01052
	<input type="radio"/>	<input type="radio"/>	41260- 21063	41260- 01061	41260- 01062

Without Rubber     With Rubber



### Sliding Fly Screen Frame profile - inside

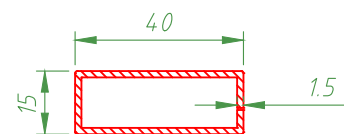
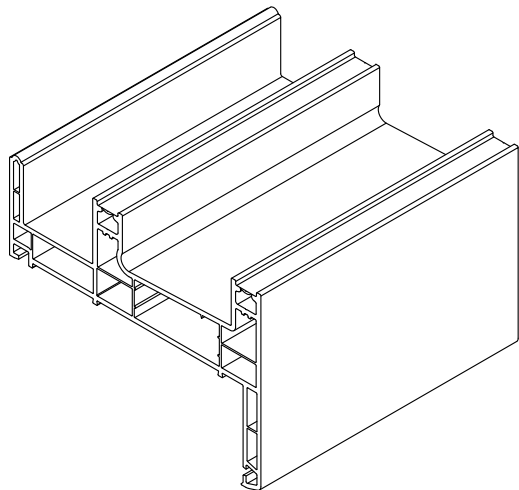
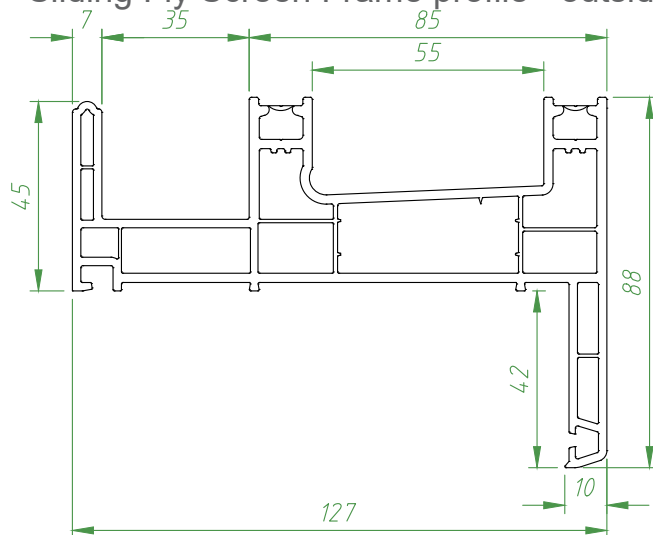


Quantity in the package: 4 x 6mt =24 meters

Profile Code	White / Without Rubber	○	41260- 01300	Inside Lmainate	Outside Lmainate
	White / With Rubber	●	*****		
	Brown Laminate / Golden Oak	○	41260- 21303	41260- 01301	41260- 01302
	Brown Laminate / Dark Oak	○	41260- 21333	41260- 01331	41260- 01332
	Brown Laminate / Charcoal Brown	○	41260- 21353	41260- 01351	41260- 01352
	Gray Laminate / Wintech Gray	○	41260- 21363	41260- 01361	41260- 01362

○ Without Rubber ● With Rubber

### Sliding Fly Screen Frame profile - outside

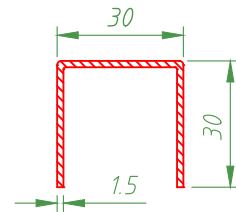
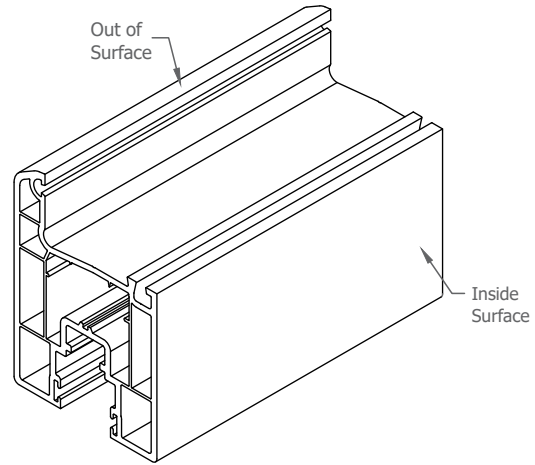
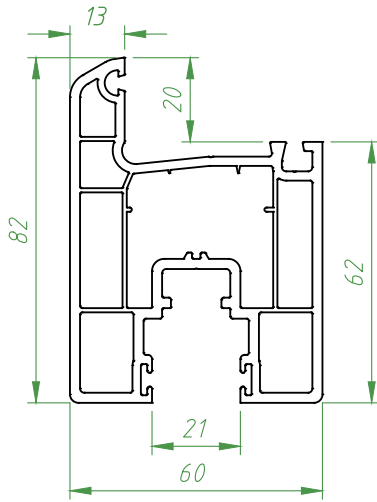


Quantity in the package: 4 x 6mt =24 meters

Profile Code	White / Without Rubber	○	41260- 01400	Inside Lmainate	Outside Lmainate
	White / With Rubber	●	*****		
	Brown Laminate / Golden Oak	○	41260- 21403	41260- 01401	41260- 01402
	Brown Laminate / Dark Oak	○	41260- 21433	41260- 01431	41260- 01432
	Brown Laminate / Charcoal Brown	○	41260- 21453	41260- 01451	41260- 01452
	Gray Laminate / Wintech Gray	○	41260- 21463	41260- 01461	41260- 01462

○ Without Rubber ● With Rubber

### Sliding Sash Profile

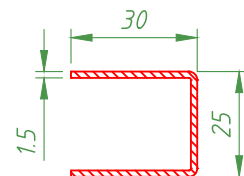
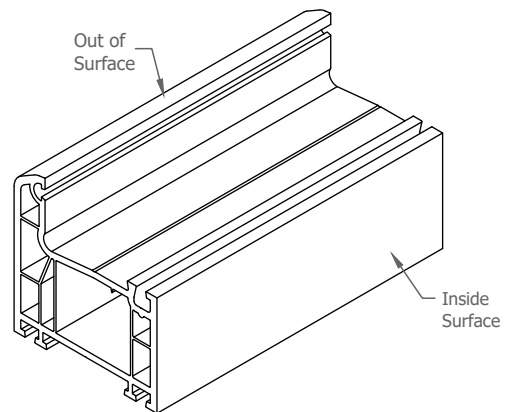
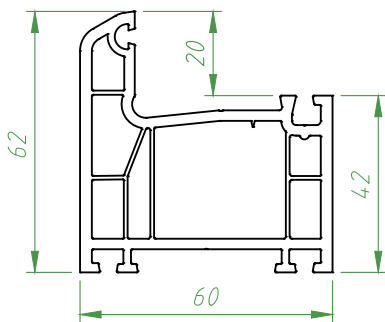


Quantity in the package: 6 x 6mt = 36 meters

Profile Code	White / Without Rubber	White / With Rubber	41260- 05000	*****	Inside Lmainate	Outside Lmainate
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	<input type="radio"/>	<input type="radio"/>	41260- 25063	41260- 05061	41260- 05061	41260- 05062

Without Rubber     With Rubber

### Frame Profile

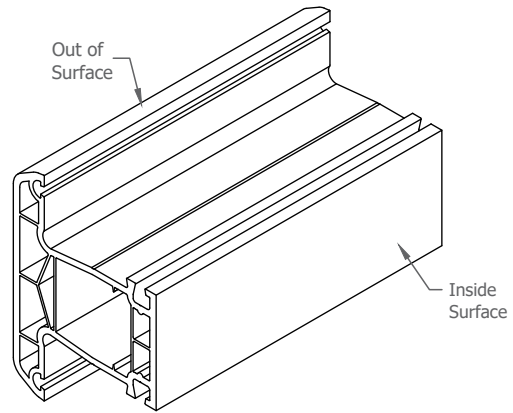
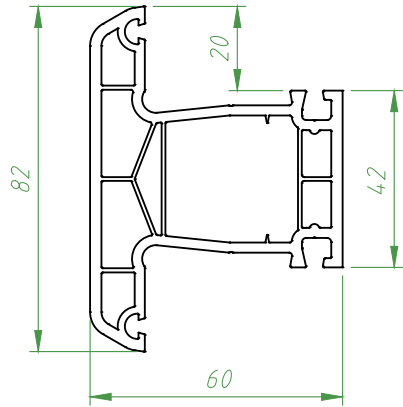


Quantity in the package: 6 x 6mt = 36 meters

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	<input type="radio"/>	<input type="radio"/>	41100- 21053	41100- 91051	41100- 91051	41100- 91052
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Without Rubber     With Rubber

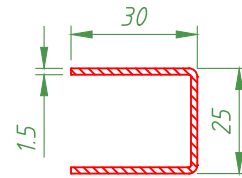
### Mullion Profile



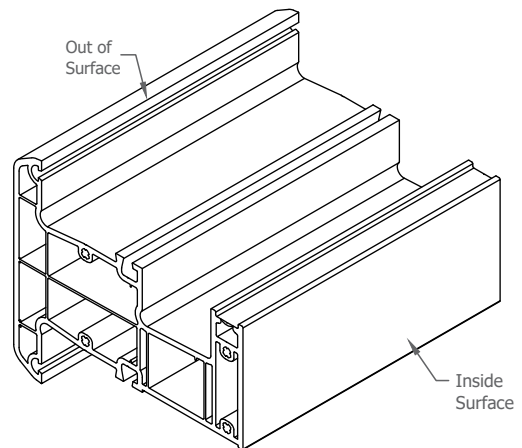
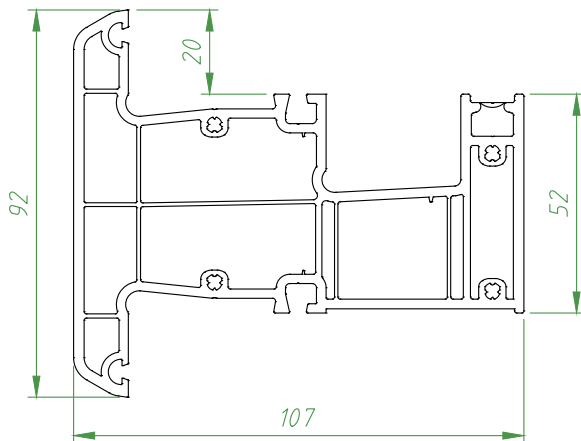
Quantity in the package: 6 x 6mt = 36 meters

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Without Rubber     With Rubber



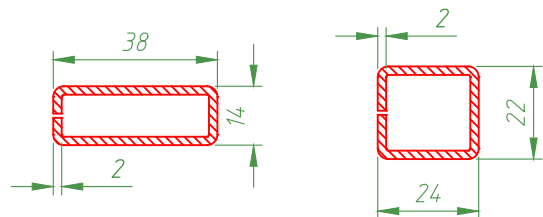
### Sliding Cornice Profile (Single Rail)



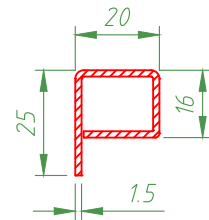
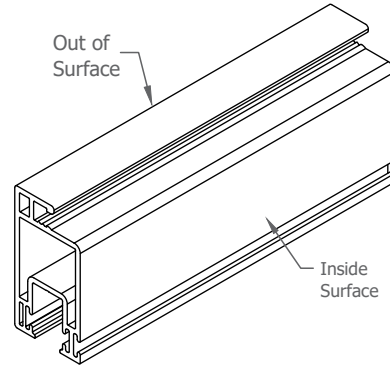
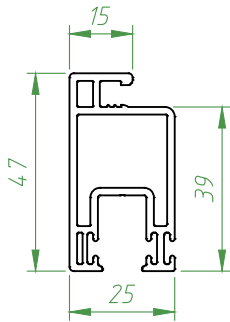
Quantity in the package: 3 x 6mt = 18 meters

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Without Rubber     With Rubber



### Sliding Fly Screen Sash Profile

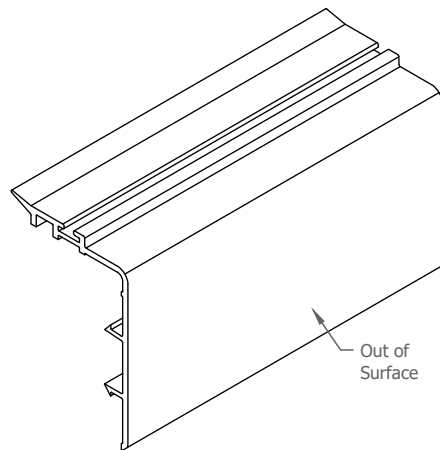
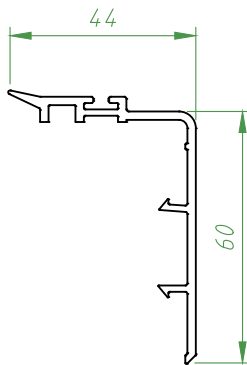


Quantity in the package: 12 x 6mt =72 meters

Profile Code	White / Without Rubber	○	41240- 05100	Inside Lmainate	Outside Lmainate
	White / With Rubber	●	*****		
	Brown Laminate / Golden Oak	○	41240- 25103	41240- 95101	41240- 95102
	Brown Laminate / Dark Oak	○	41240- 25133	41240- 95131	41240- 95132
	Brown Laminate / Charcoal Brown	○	41240- 25153	41240- 95151	41240- 95152
	Gray Laminate / Wintech Gray	○	41240- 25163	41240- 95161	41240- 95162

○ Without Rubber ● With Rubber

### Sash Cover Profile

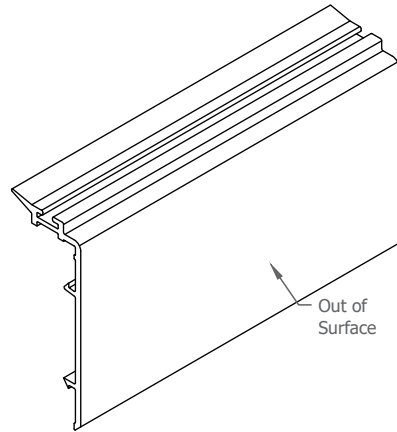
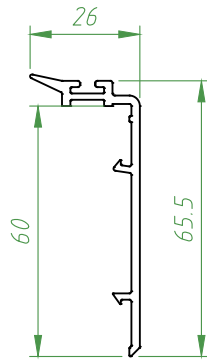


Quantity in the package: 20 x 6mt =120 meters

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	White / With Rubber	●	*****		
	Brown Laminate / Golden Oak	○	41260- 23003	*****	41260- 03002
	Brown Laminate / Dark Oak	○	41260- 23033	*****	41260- 03032
	Brown Laminate / Charcoal Brown	○	41260- 23053	*****	41260- 03052
	Gray Laminate / Wintech Gray	○	41260- 23063	*****	41260- 03062

○ Without Rubber ● With Rubber

### Mullion Cover Profile

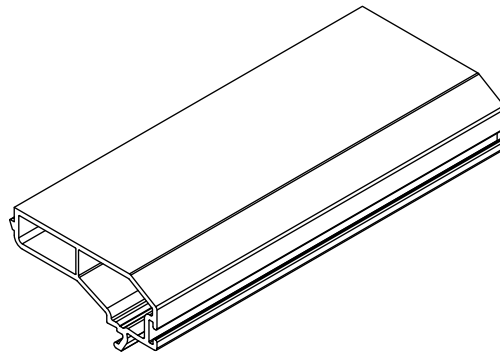
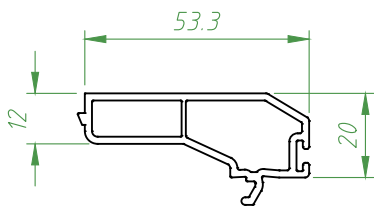


Quantity in the package: 30 x 6mt =180 meters

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	<input type="radio"/>	<input type="radio"/>	41260- 24033	*****	41260- 04032
	<input type="radio"/>	<input type="radio"/>	41260- 24053	*****	41260- 04052
	<input type="radio"/>	<input type="radio"/>	41260- 24063	*****	41260- 04062

Without Rubber     With Rubber

### Frame Cover Profile (Single Rail and Cornice Profile)



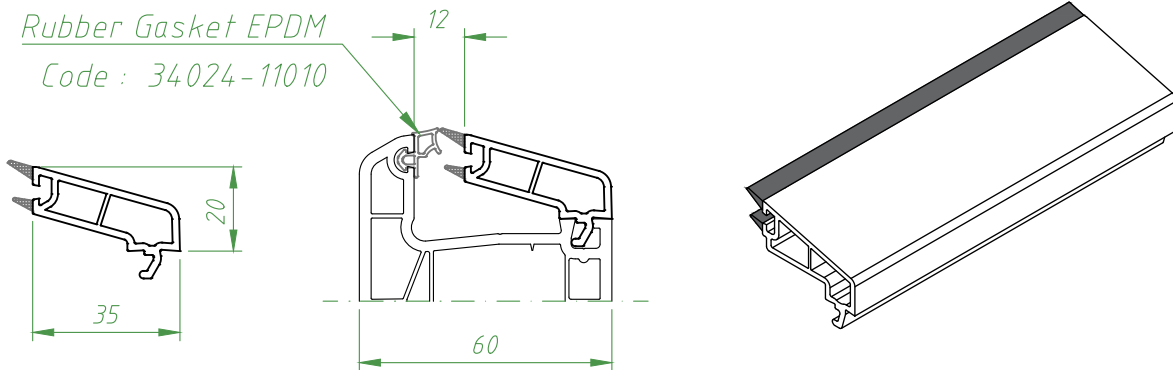
Quantity in the package: 20 x 6mt =120 meters

Profile Code	White / Without Rubber	White / With Rubber	41260- 06000	Inside Lmainate	Outside Lmainate *
	<input type="radio"/>	<input checked="" type="radio"/>	*****		
	<input type="radio"/>	<input type="radio"/>	41260- 26003	*****	*****
	<input type="radio"/>	<input type="radio"/>	41260- 26033	*****	*****
	<input type="radio"/>	<input type="radio"/>	41260- 26053	*****	*****
	<input type="radio"/>	<input type="radio"/>	41260- 26063	*****	*****

Without Rubber     With Rubber

### Single Glazing Bead Profile (4-6 mm)

Rubber Gasket EPDM  
Code : 34024-11010

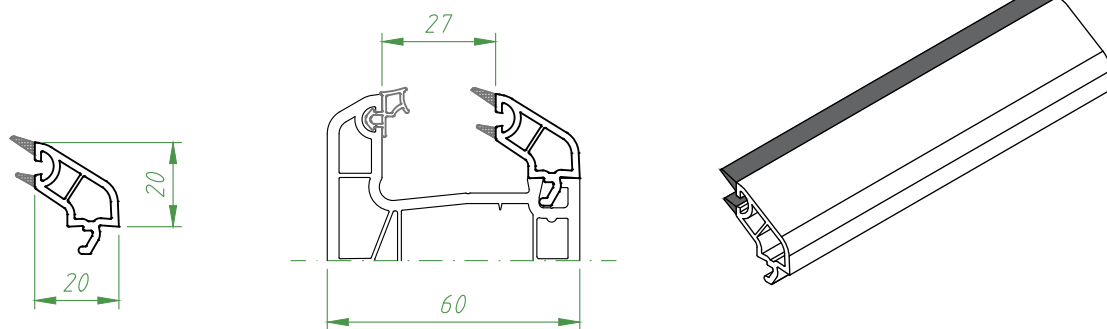


Quantity in the package: 20 x 6mt =120 meters

Profile Code	White / Without Rubber	○	*****	Inside Lmainate	Outside Lmainate
	White / With Rubber	●	40101- 96400		
	Brown Laminate / Golden Oak	●	40101- 26402	*****	*****
	Brown Laminate / Dark Oak	●	40101- 26432	*****	*****
	Brown Laminate / Charcoal Brown	●	40101- 26452	*****	*****
	Gray Laminate / Wintech Gray	●	40101- 26462	*****	*****

○ Without Rubber ● With Rubber

### Double Glazing Bead Profile (20 mm)

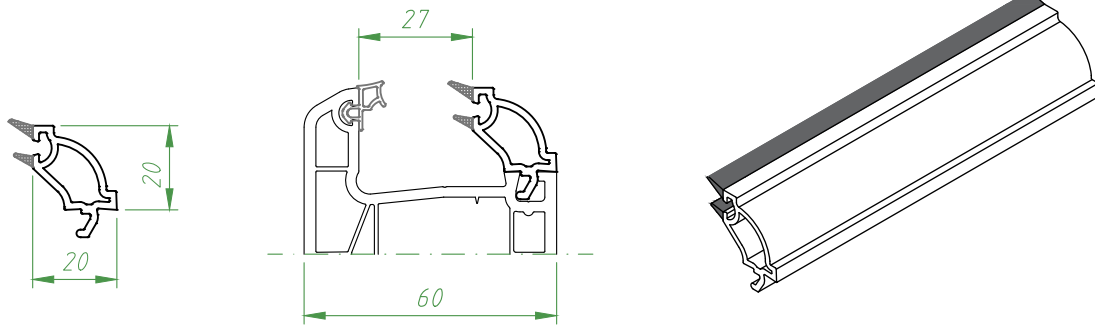


Quantity in the package: 30 x 6mt =180 meters

Profile Code	White / Without Rubber	○	*****	Inside Lmainate	Outside Lmainate
	White / With Rubber	●	40101- 96200		
	Brown Laminate / Golden Oak	●	40101- 26202	*****	*****
	Brown Laminate / Dark Oak	●	40101- 26232	*****	*****
	Brown Laminate / Charcoal Brown	●	40101- 26252	*****	*****
	Gray Laminate / Wintech Gray	●	40101- 26262	*****	*****

○ Without Rubber ● With Rubber

### Double Glazing Bead Profile (20 mm)

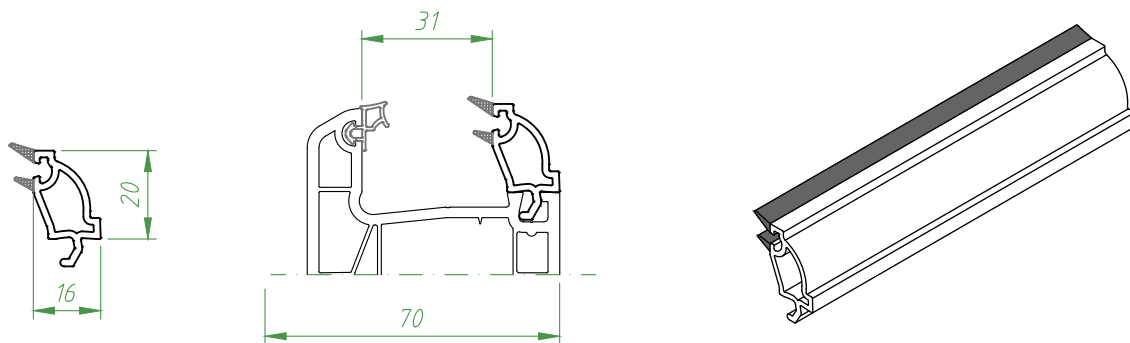


Quantity in the package: 30 x 6mt =180 meters

Profile Code	White / Without Rubber	White / With Rubber	*****	Inside Lmainate	Outside Lmainate
	<input type="radio"/>	<input checked="" type="radio"/>	40101- 96100	*****	*****
	<input checked="" type="radio"/>	<input type="radio"/>	40101- 26102	*****	*****
	<input checked="" type="radio"/>	<input type="radio"/>	40101- 26132	*****	*****
	<input checked="" type="radio"/>	<input type="radio"/>	40101- 26152	*****	*****
	<input checked="" type="radio"/>	<input type="radio"/>	40101- 26162	*****	*****

Without Rubber     With Rubber

### Double Glazing Bead Profile (24 mm)

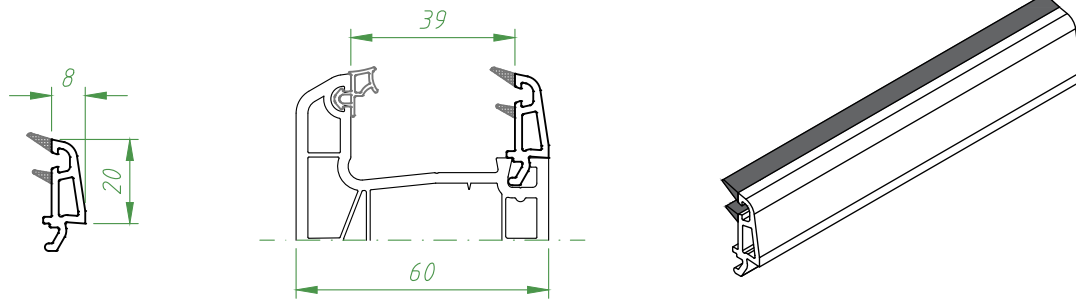


Quantity in the package: 30 x 6mt =180 meters

Profile Code	White / Without Rubber	White / With Rubber	*****	Inside Lmainate	Outside Lmainate
	<input type="radio"/>	<input checked="" type="radio"/>	40101- 96500	*****	*****
	<input checked="" type="radio"/>	<input type="radio"/>	40101- 26502	*****	*****
	<input checked="" type="radio"/>	<input type="radio"/>	40101- 26532	*****	*****
	<input checked="" type="radio"/>	<input type="radio"/>	40101- 26552	*****	*****
	<input checked="" type="radio"/>	<input type="radio"/>	40101- 26562	*****	*****

Without Rubber     With Rubber

### Triple Glazing Bead Profile (32 mm)

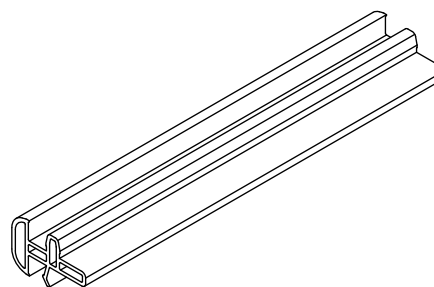
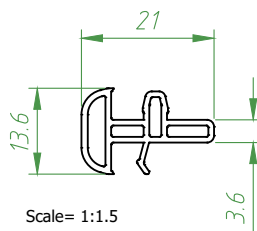


Quantity in the package: 30 x 6mt =180 meters

Profile Code	White / Without Rubber	○	*****	Inside Lmainate	Outside Lmainate
	White / With Rubber	●	40101- 96300		
	Brown Laminate / Golden Oak	●	40101- 26302	*****	*****
	Brown Laminate / Dark Oak	●	40101- 26332	*****	*****
	Brown Laminate / Charcoal Brown	●	40101- 26352	*****	*****
	Gray Laminate / Wintech Gray	●	40101- 26362	*****	*****

○ Without Rubber ● With Rubber

### Coupling Profile



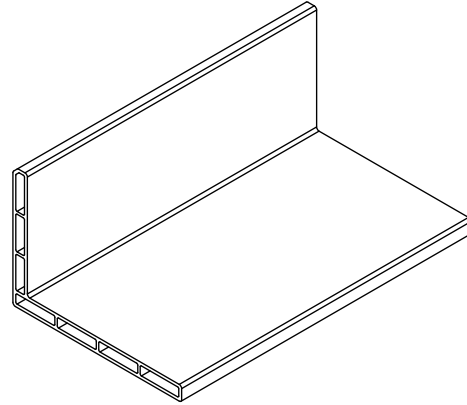
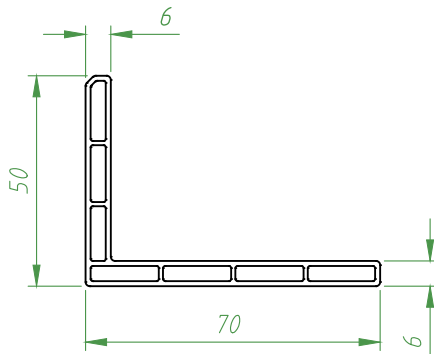
Quantity in the package: 30 x 6mt =180 meters

Profile Code	White / Without Rubber	○	40106- 01000
	White / With Rubber	●	*****
	Brown / Without Laminate	○ <td>40106- 21000</td>	40106- 21000
	Gray / Without Laminate	○ <td>40106- 61000</td>	40106- 61000
	*****	○ <td>*****</td>	*****
	*****	○ <td>*****</td>	*****

○ Without Rubber ● With Rubber



### Border Profile (50 X 70 mm)

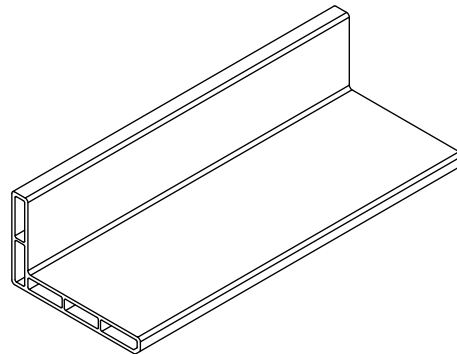
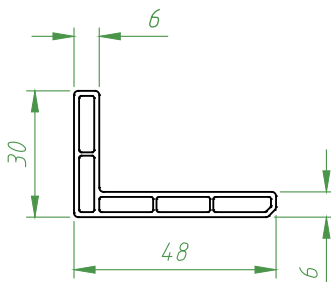


Quantity in the package: 12 x 6mt = 72 meters

Profile Code	White / Without Rubber	White / With Rubber	40108- 02000	Inside Lmainate	Outside Lmainate
	<input type="radio"/>	<input checked="" type="radio"/>	*****		
	<input type="radio"/>	<input type="radio"/>	40108- 22001	*****	*****
	<input type="radio"/>	<input type="radio"/>	40108- 22031	*****	*****
	<input type="radio"/>	<input type="radio"/>	40108- 22051	*****	*****
	<input type="radio"/>	<input type="radio"/>	40108- 22061	*****	*****

Without Rubber     With Rubber

### Border Profile (30 X 48 mm)

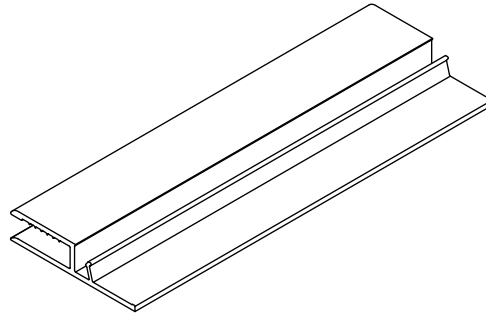
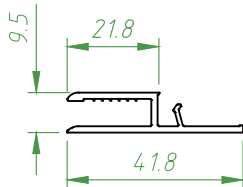


Quantity in the package: 12 x 6mt = 72 meters

Profile Code	White / Without Rubber	White / With Rubber	40108- 01000	Inside Lmainate	Outside Lmainate
	<input type="radio"/>	<input checked="" type="radio"/>	*****		
	<input type="radio"/>	<input type="radio"/>	40108- 21001	*****	*****
	<input type="radio"/>	<input type="radio"/>	40108- 21031	*****	*****
	<input type="radio"/>	<input type="radio"/>	40108- 21051	*****	*****
	<input type="radio"/>	<input type="radio"/>	40108- 21061	*****	*****

Without Rubber     With Rubber

### Holder Profile

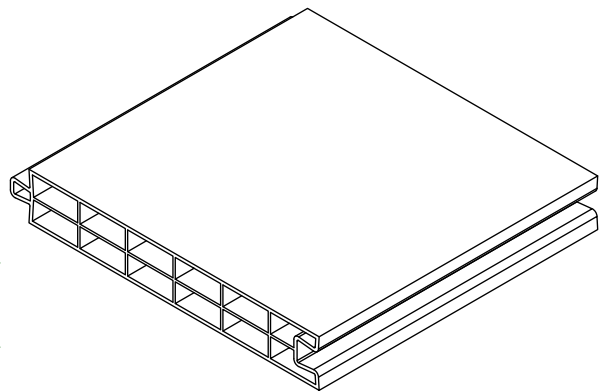
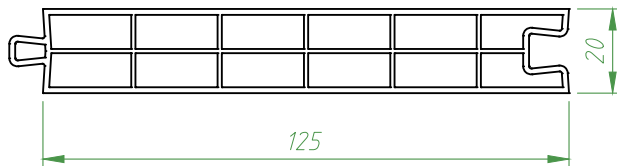


Quantity in the package: 20 x 6mt =120 meters

Profile Code	White / Without Rubber	<input type="radio"/>	40106- 04000
	White / With Rubber	<input checked="" type="radio"/>	*****
	Brown / Without Laminate	<input type="radio"/>	40106- 24000
	Gray / Without Laminate	<input type="radio"/>	40106- 64000
	*****	<input type="radio"/>	*****
	*****	<input type="radio"/>	*****

Without Rubber     With Rubber

### Panel Profile (20 X125 mm)

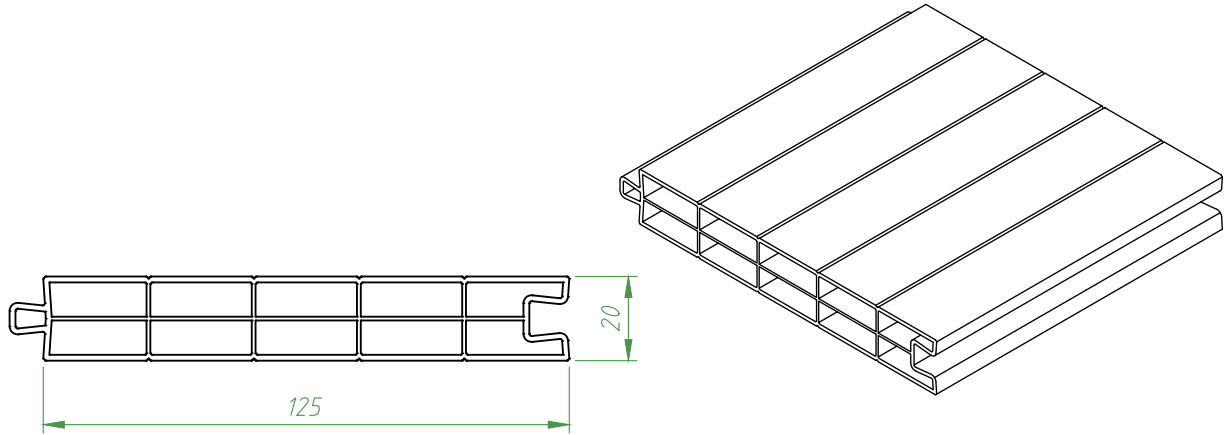


Quantity in the package: 6 x 6mt =36 meters

Profile Code	White / Without Rubber	<input type="radio"/>	40102- 04000	One side
	White / With Rubber	<input checked="" type="radio"/>	*****	Lmainate *
	Brown Laminate / Golden Oak	<input type="radio"/>	40102- 24003	40102- 04003
	Brown Laminate / Dark Oak	<input type="radio"/>	40102- 24033	40102- 04033
	Brown Laminate / Charcoal Brown	<input type="radio"/>	40102- 24053	40102- 04053
	Gray Laminate / Wintech Gray	<input type="radio"/>	40102- 24063	40102- 04063

Without Rubber     With Rubber

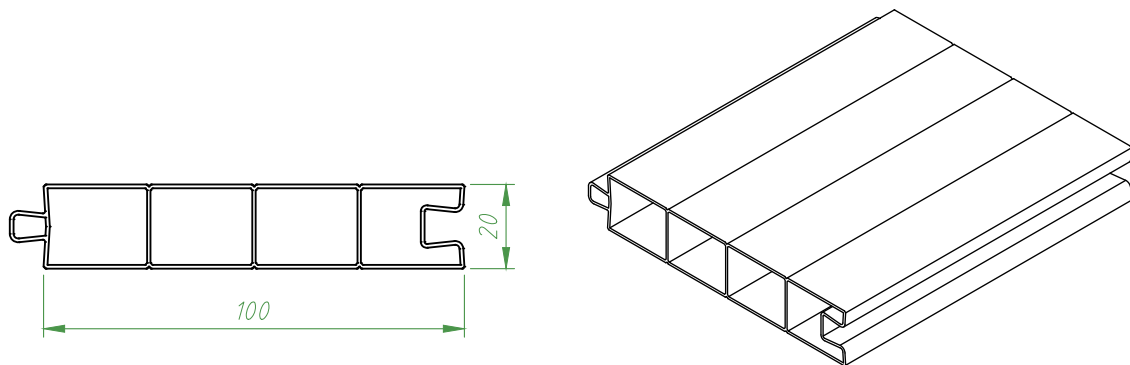
### Panel Profile (20 x 125 mm- Groove)



Quantity in the package: 6 x 6mt = 36 meters

Profile Code	White / Without Rubber	<input type="radio"/>	40102- 02000	One side
	White / With Rubber	<input checked="" type="radio"/>	*****	Lmainate
	Brown Laminate / Golden Oak	<input type="radio"/>	40102- 22003	40102- 02003
	Brown Laminate / Dark Oak	<input type="radio"/>	40102- 22033	40102- 02033
	Brown Laminate / Charcoal Brown	<input type="radio"/>	40102- 22053	40102- 02053
	Gray Laminate / Wintech Gray	<input type="radio"/>	40102- 22063	40102- 02063
<input type="radio"/> Without Rubber <input checked="" type="radio"/> With Rubber				

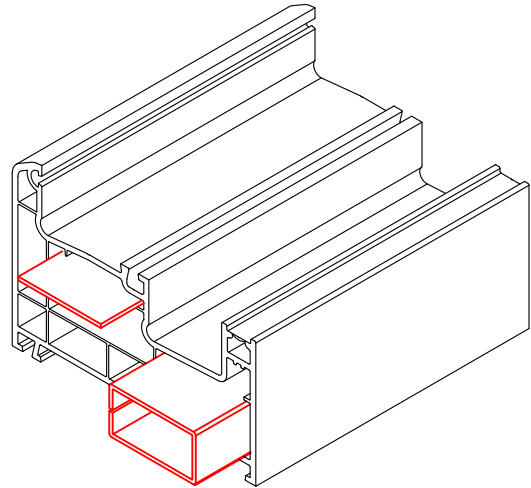
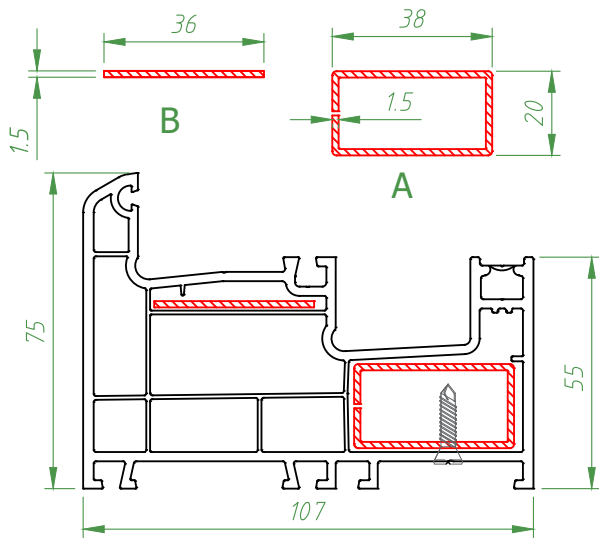
### Panel Profile (20 X100 mm)



Quantity in the package: 6 x 6mt = 36 meters

Profile Code	White / Without Rubber	<input type="radio"/>	40102- 03000	One side
	White / With Rubber	<input checked="" type="radio"/>	*****	Lmainate *
	Brown Laminate / Golden Oak	<input type="radio"/>	*****	*****
	Brown Laminate / Dark Oak	<input type="radio"/>	*****	*****
	Brown Laminate / Charcoal Brown	<input type="radio"/>	*****	*****
	Gray Laminate / Wintech Gray	<input type="radio"/>	*****	*****
<input type="radio"/> Without Rubber <input checked="" type="radio"/> With Rubber				

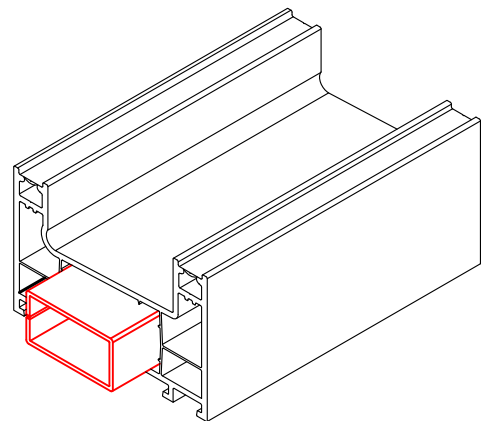
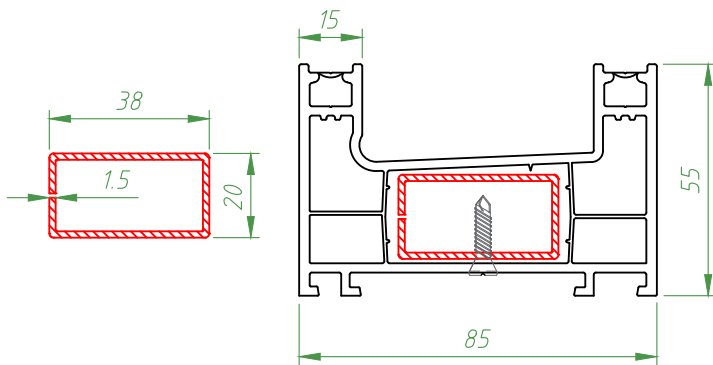
Galvanized Reinforcing Profile Systems



Thickness ( A )	$I_x \text{ (cm)}^4$	$I_y \text{ (cm)}^4$	Area	Weight
1.25 mm	0.92	2.49	135	1059 gr /mt
1.5 mm	1.09	2.99	162.6	1276 gr /mt
2 mm	1.32	3.66	208	1632 gr /mt

Reinforced profiles with a thickness of less than 1.25 mm are not approved.

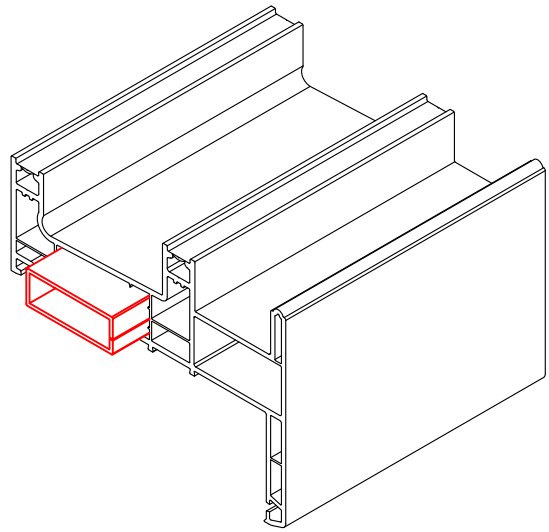
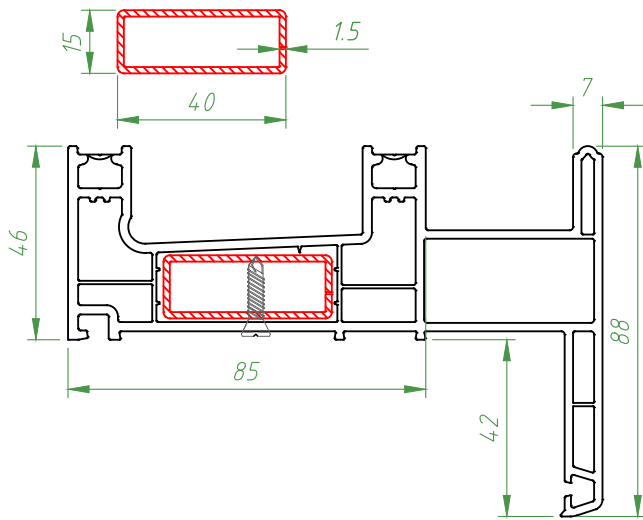
Galvanized Reinforcing Profile Systems



Thickness ( A )	$I_x \text{ (cm)}^4$	$I_y \text{ (cm)}^4$	Area	Weight
1.25 mm	0.92	2.49	135	1059 gr /mt
1.5 mm	1.09	2.99	162.6	1276 gr /mt
2 mm	1.32	3.66	208	1632 gr /mt

Reinforced profiles with a thickness of less than 1.25 mm are not approved.

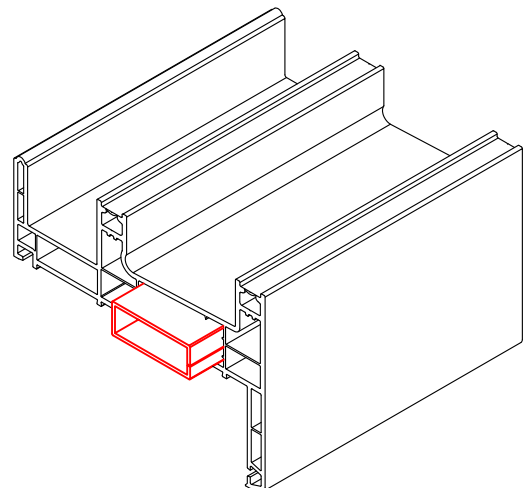
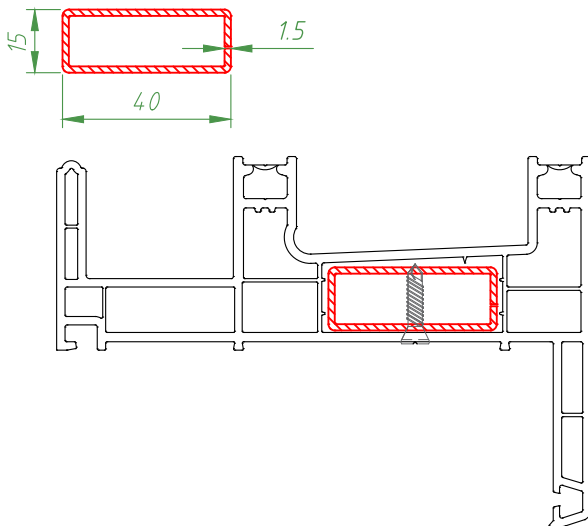
### Galvanized Reinforcing Profile Systems



Thickness ( A )	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.50	2.42	128.7	1010 gr /mt
1.5 mm	0.59	2.84	153.4	1204 gr /mt
2 mm	0.71	3.61	201	1577 gr /mt

Reinforced profiles with a thickness of less than 1.25 mm are not approved.

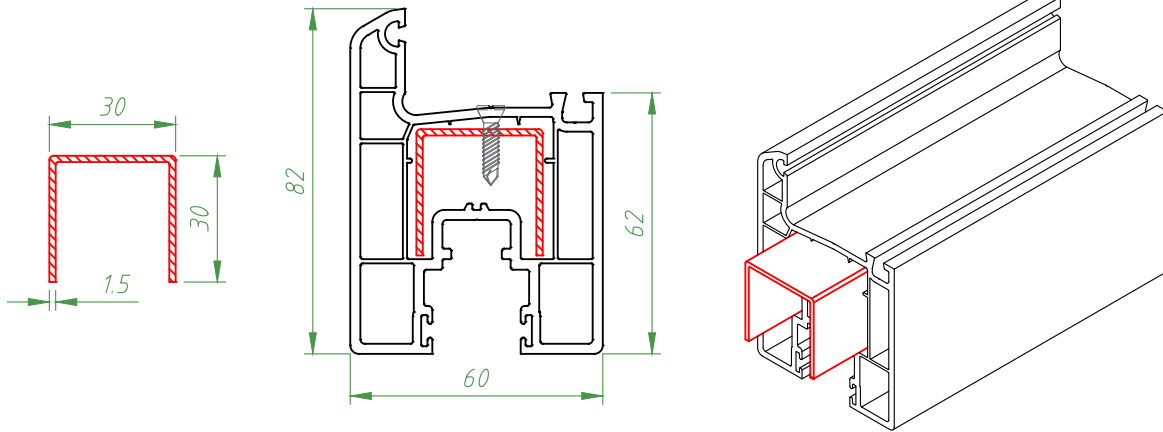
### Galvanized Reinforcing Profile Systems



Thickness ( A )	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.50	2.42	128.7	1010 gr /mt
1.5 mm	0.59	2.84	153.4	1204 gr /mt
2 mm	0.71	3.61	201	1577 gr /mt

Reinforced profiles with a thickness of less than 1.25 mm are not approved.

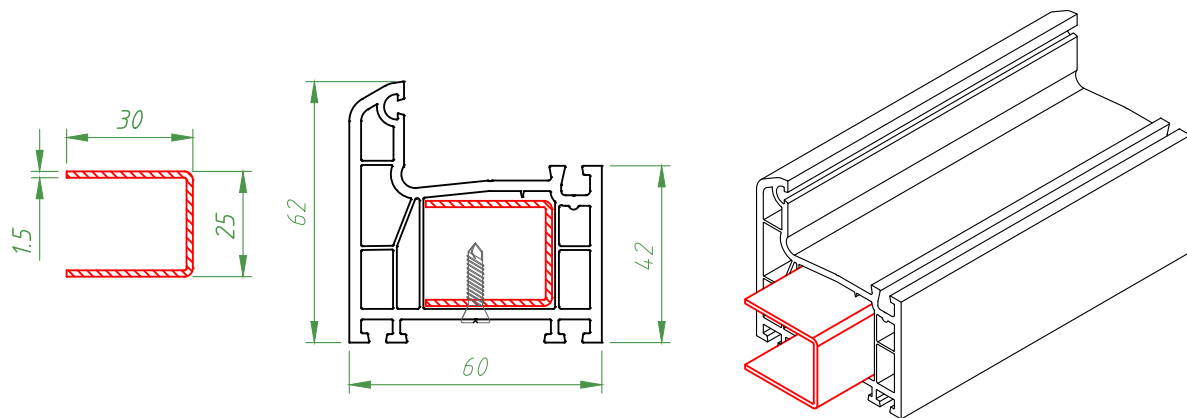
### Galvanized Reinforcing Profile Systems



Thickness	$I_x \text{ (cm)}^4$	$I_y \text{ (cm)}^4$	Area	Weight
1.25 mm	1.03	1.74	108.1	848 gr /mt
1.5 mm	1.23	2.06	130.1	1021 gr /mt
2 mm	1.58	2.59	169.4	1330 gr /mt

Reinforced profiles with a thickness of less than 1.25 mm are not approved.

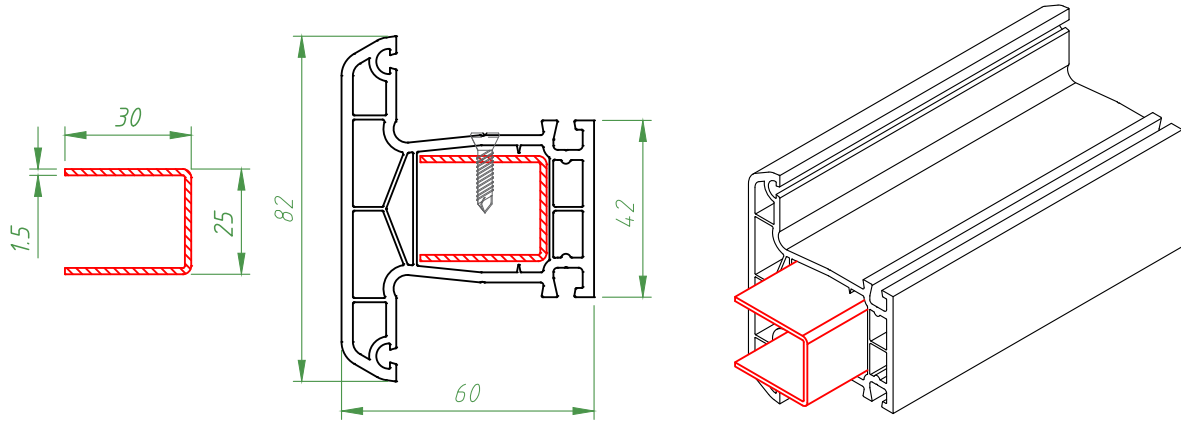
### Galvanized Reinforcing Profile Systems



Thickness	$I_x \text{ (cm)}^4$	$I_y \text{ (cm)}^4$	Area	Weight
1.25 mm	0.96	1.15	101.6	797 gr /mt
1.5 mm	1.35	1.14	121.4	953 gr /mt
2 mm	1.70	1.48	159.4	1251 gr /mt

Reinforced profiles with a thickness of less than 1.25 mm are not approved.

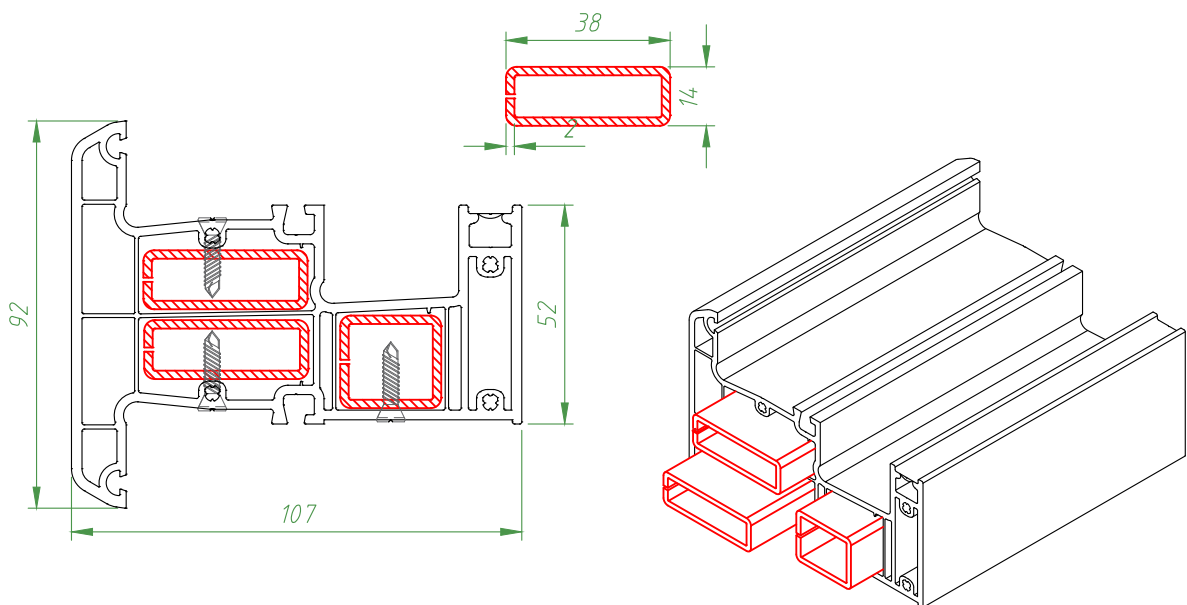
### Galvanized Reinforcing Profile Systems



Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.96	1.15	101.6	797 gr /mt
1.5 mm	1.35	1.14	121.4	953 gr /mt
2 mm	1.70	1.48	159.4	1251 gr /mt

Reinforced profiles with a thickness of less than 1.25 mm are not approved.

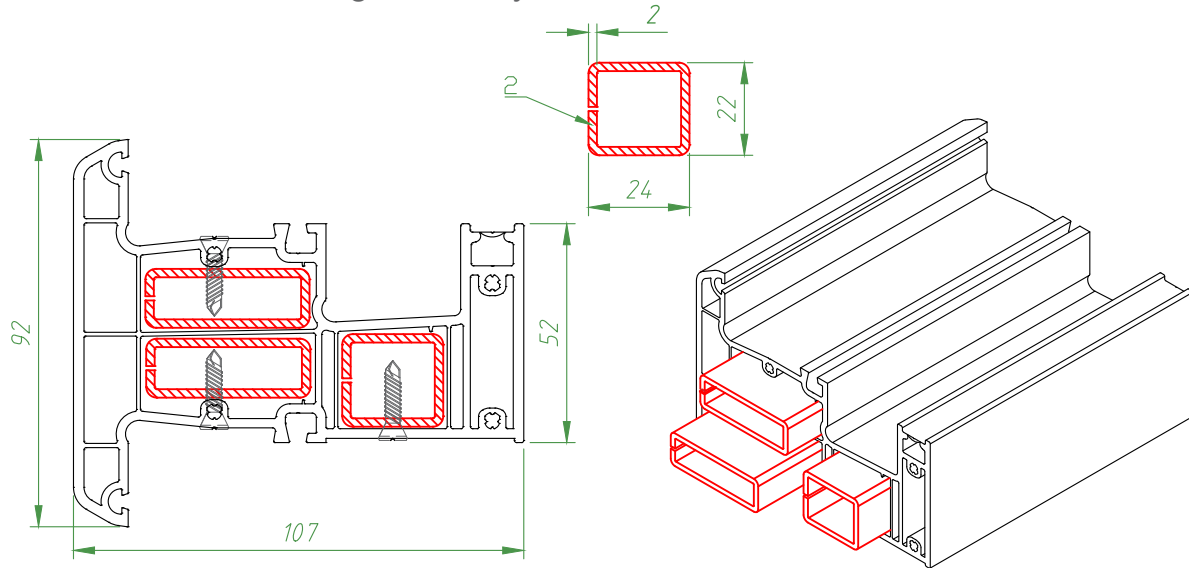
### Galvanized Reinforcing Profile Systems



Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.41	2.12	122.5	961 gr /mt
1.5 mm	0.47	2.47	145.2	1139 gr /mt
2 mm	0.57	3.09	188.8	1482 gr /mt

Reinforced profiles with a thickness of less than 1.25 mm are not approved.

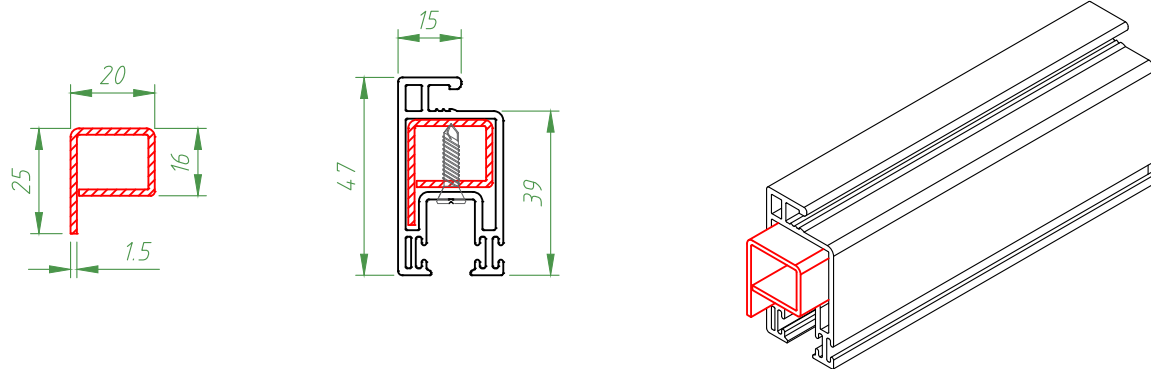
### Galvanized Reinforcing Profile Systems



Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.77	0.87	105	824 gr /mt
1.5 mm	0.89	1.00	124.2	975 gr /mt
2 mm	1.1	1.24	160.8	1262 gr /mt

Reinforced profiles with a thickness of less than 1.25 mm are not approved.

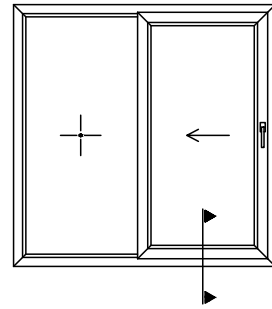
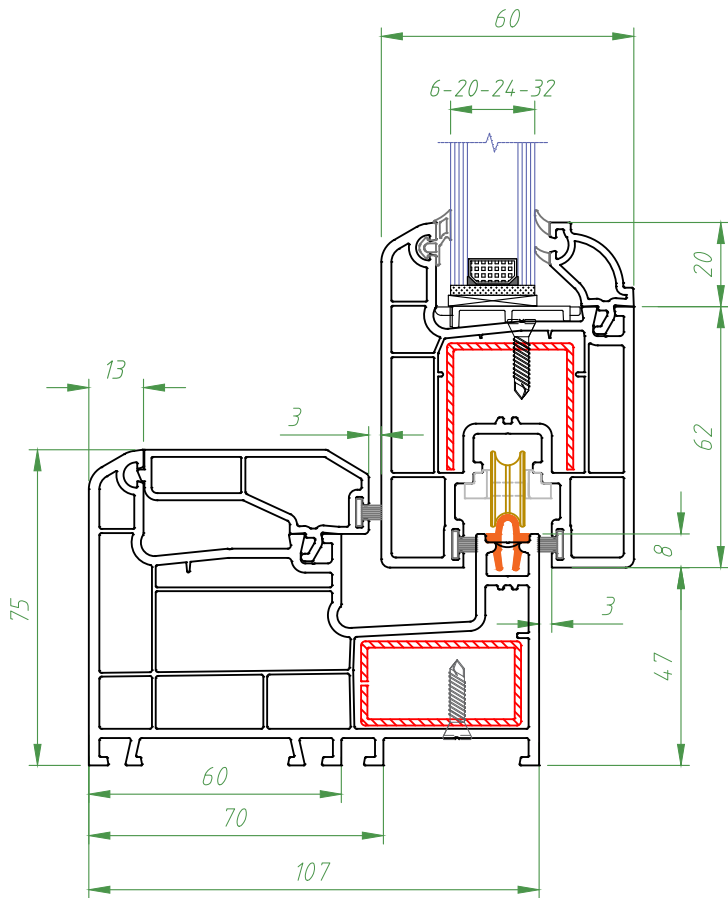
### Galvanized Reinforcing Profile Systems



Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.37	0.61	92	722 gr /mt
1.5 mm	0.43	0.71	109.2	857 gr /mt
2 mm	0.54	0.9	142.5	1118 gr /mt

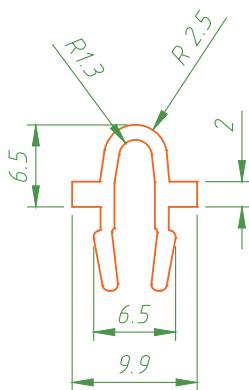
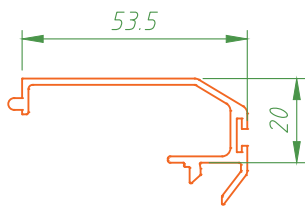
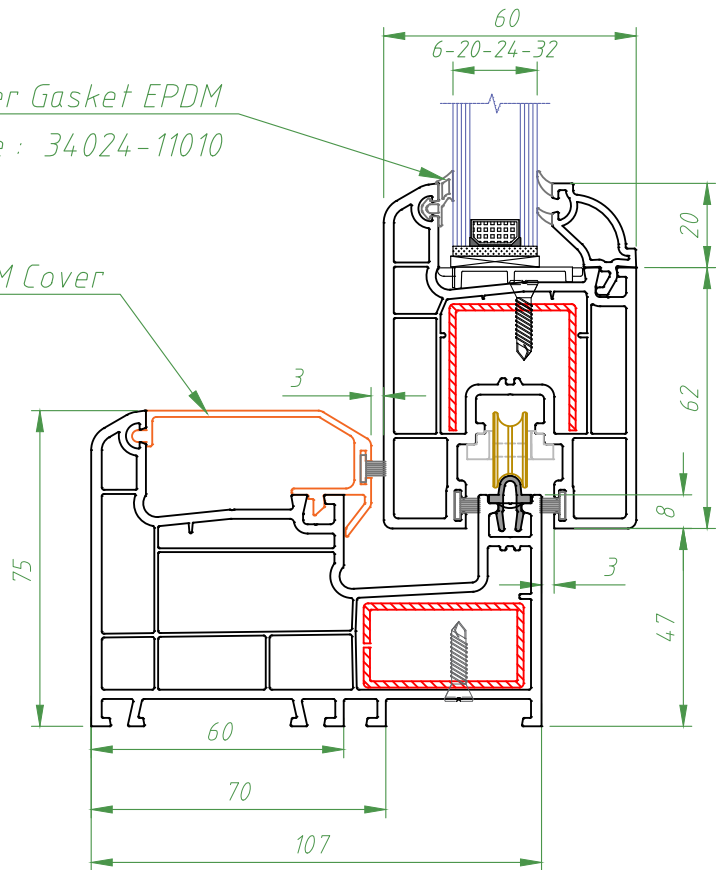
Reinforced profiles with a thickness of less than 1.25 mm are not approved.



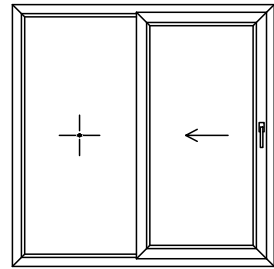
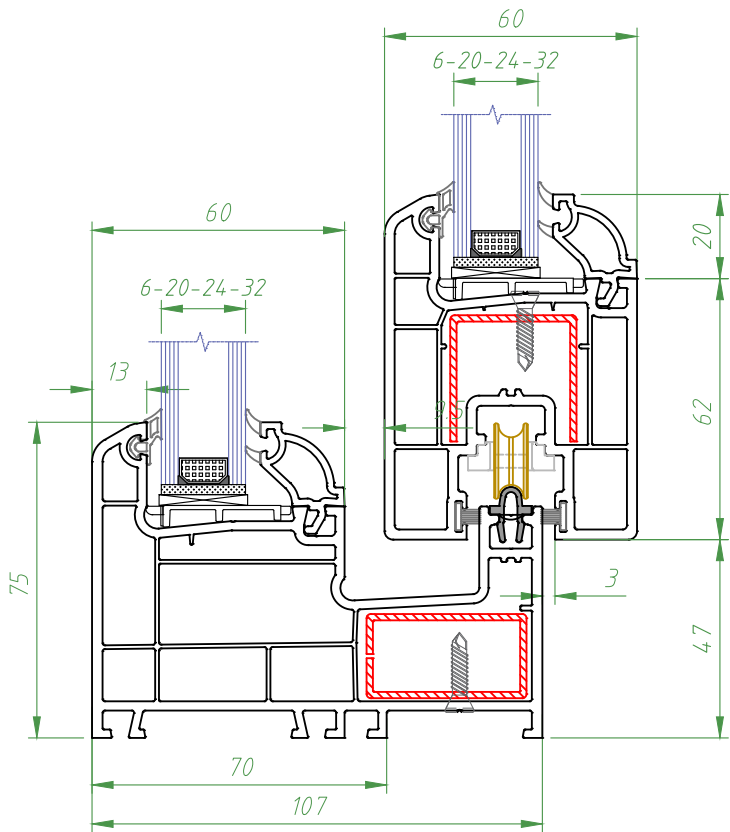


Rubber Gasket EPDM  
Code : 34024-11010

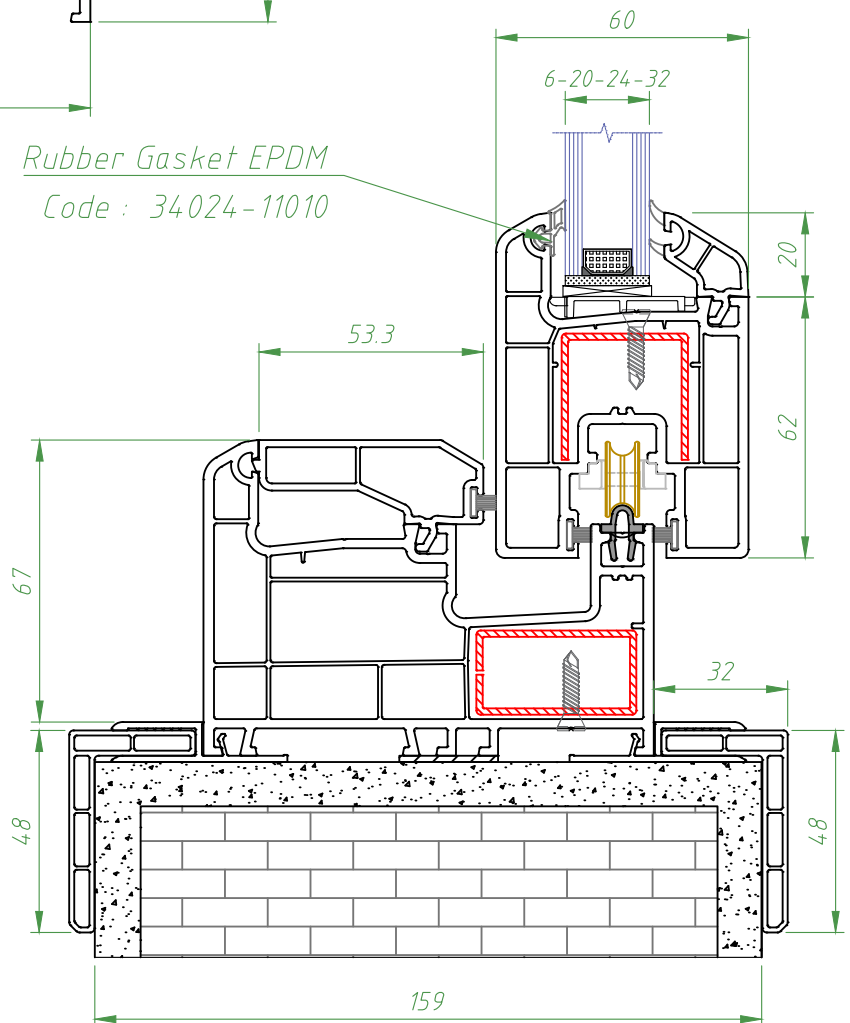
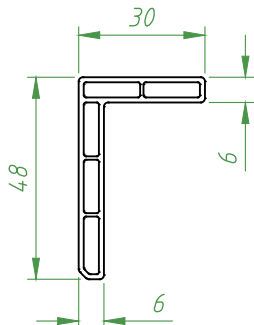
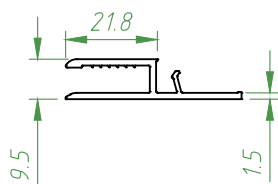
ALM Cover

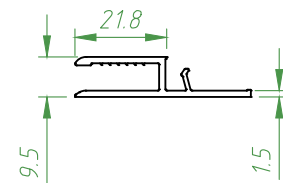
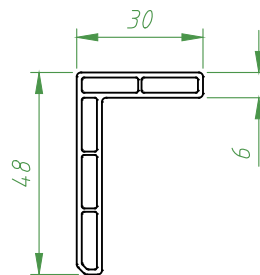
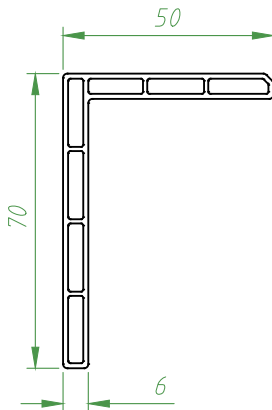
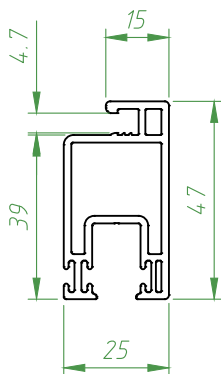
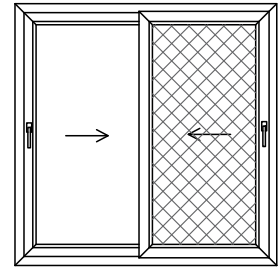
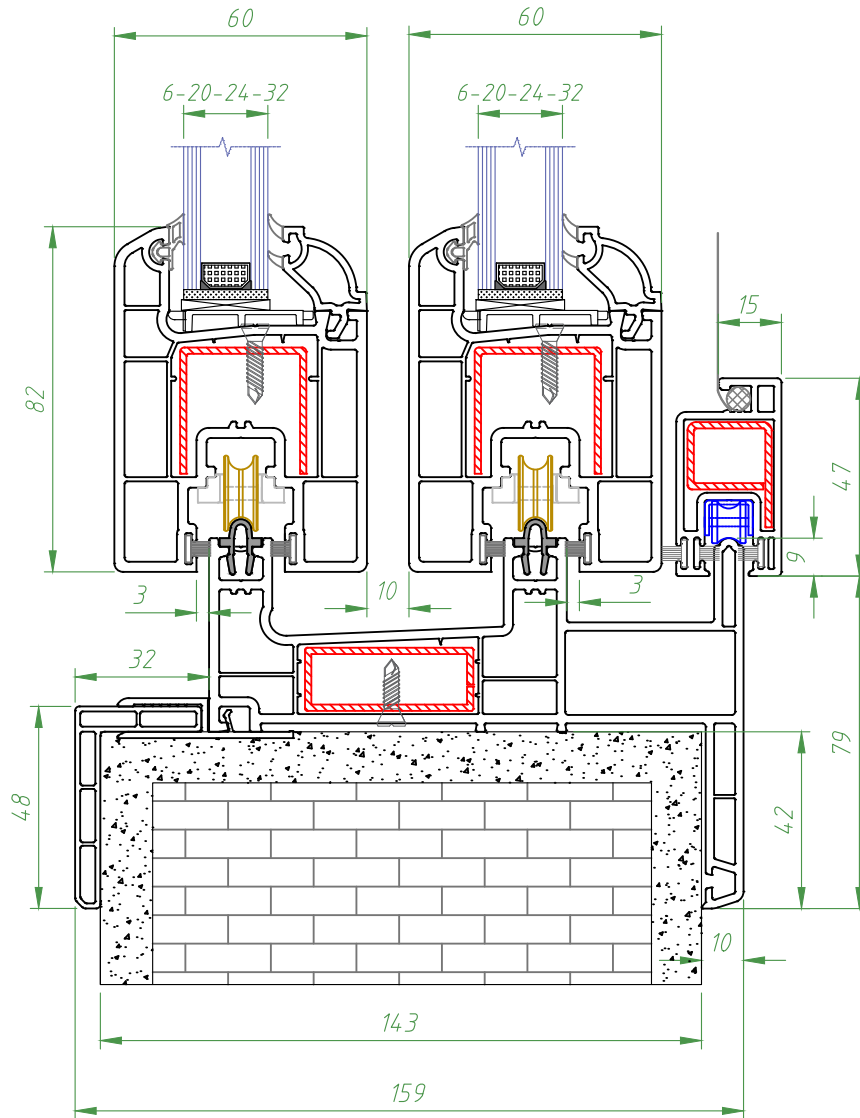


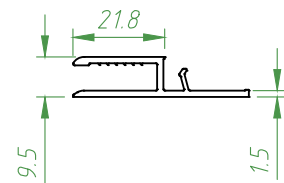
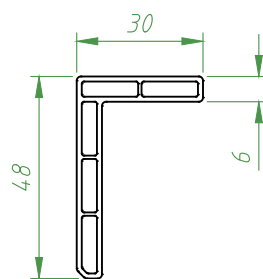
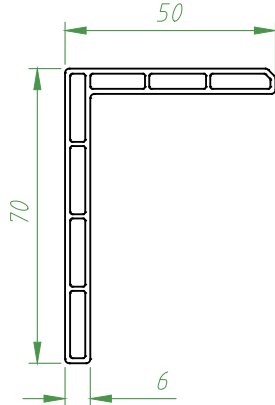
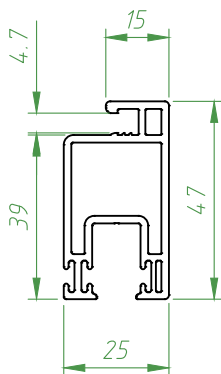
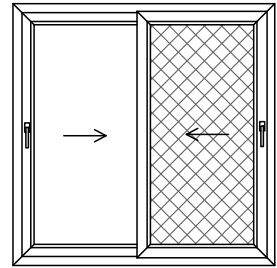
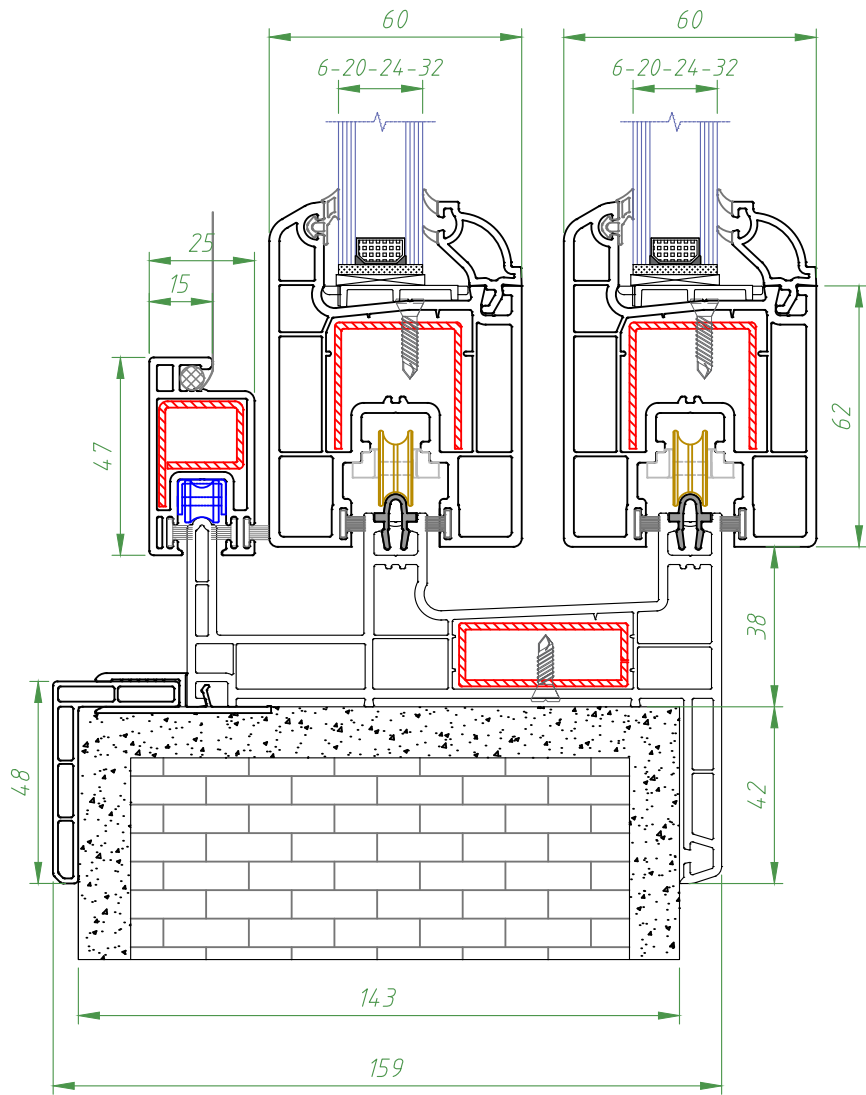
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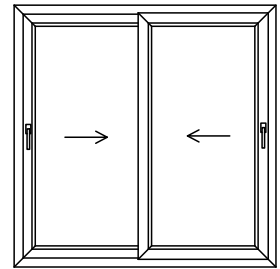
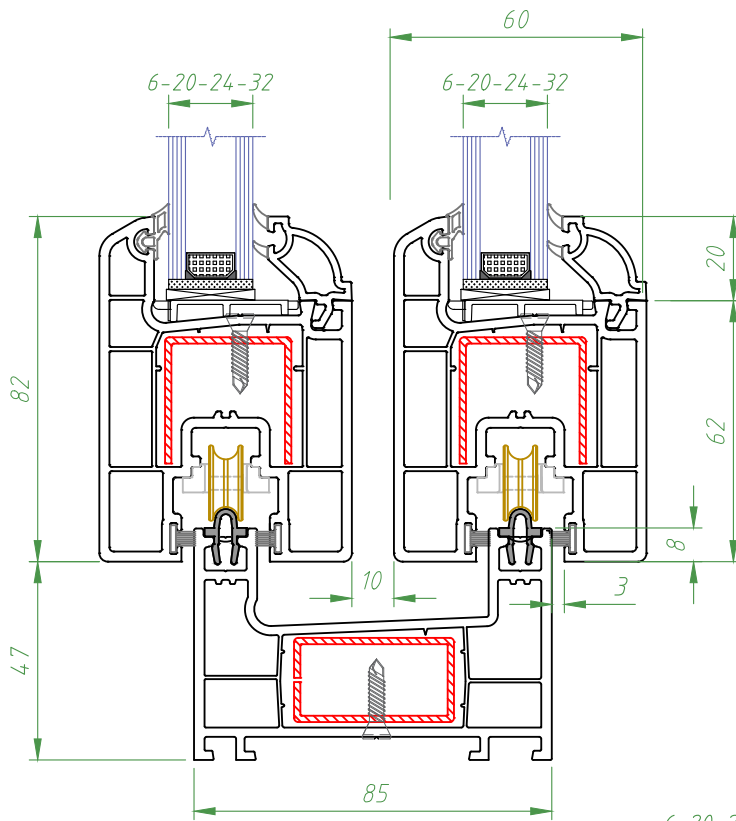


Rubber Gasket EPDM  
Code : 34024-11010

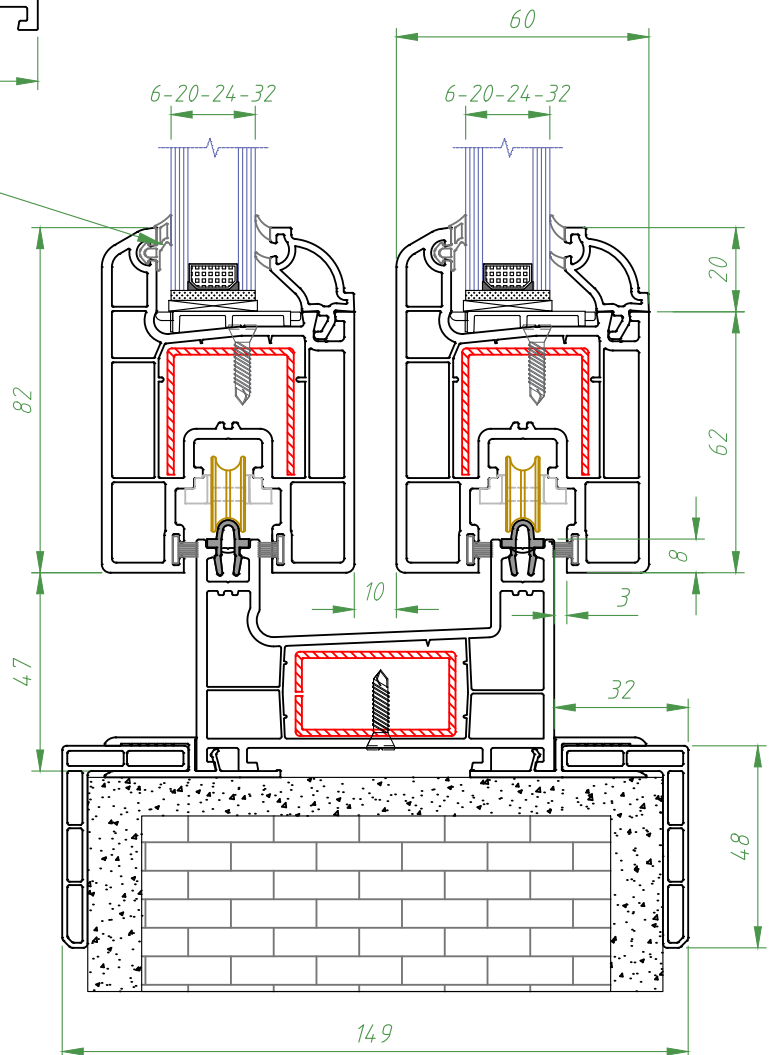
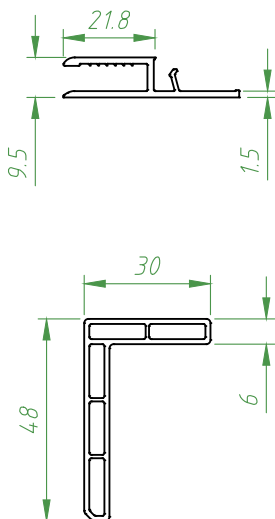


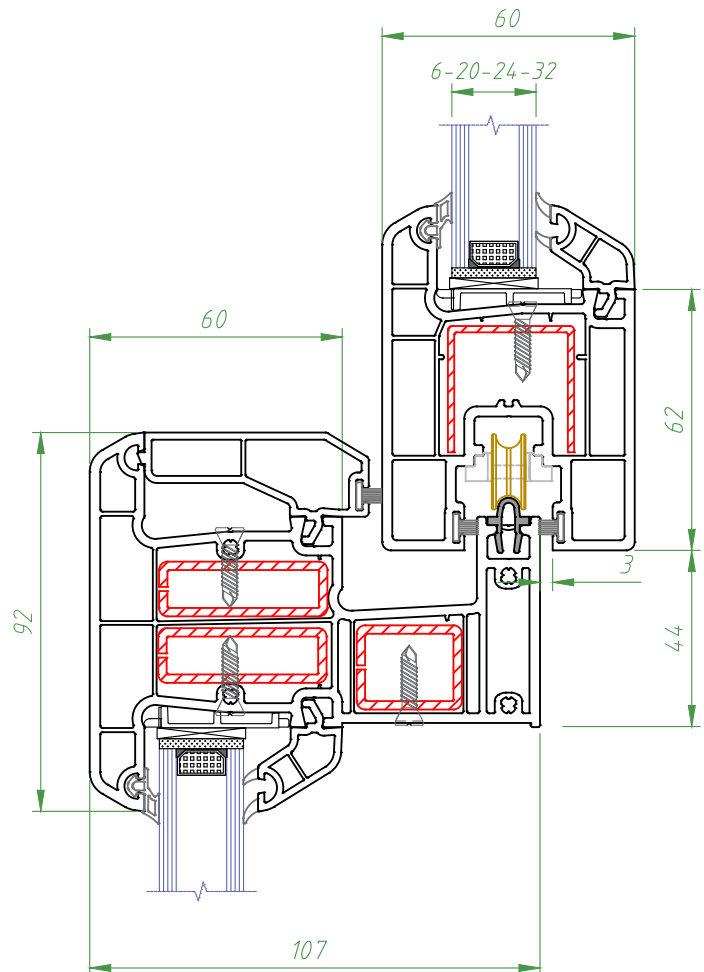
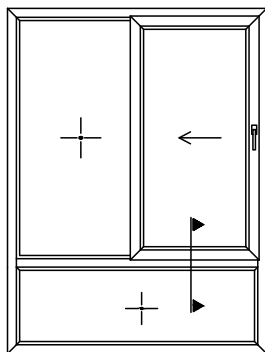
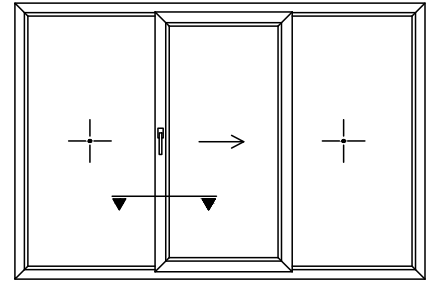
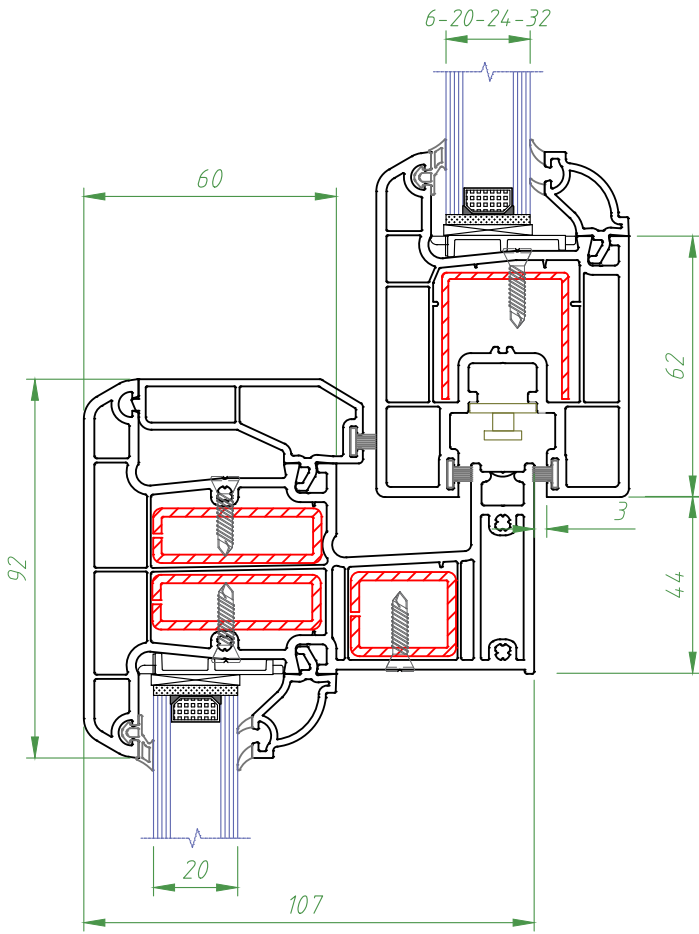


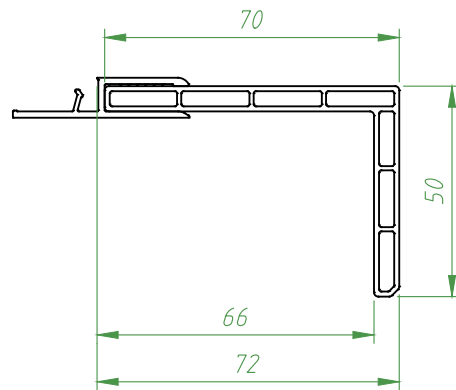
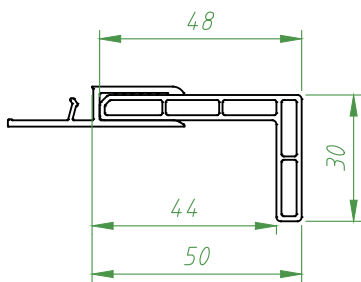
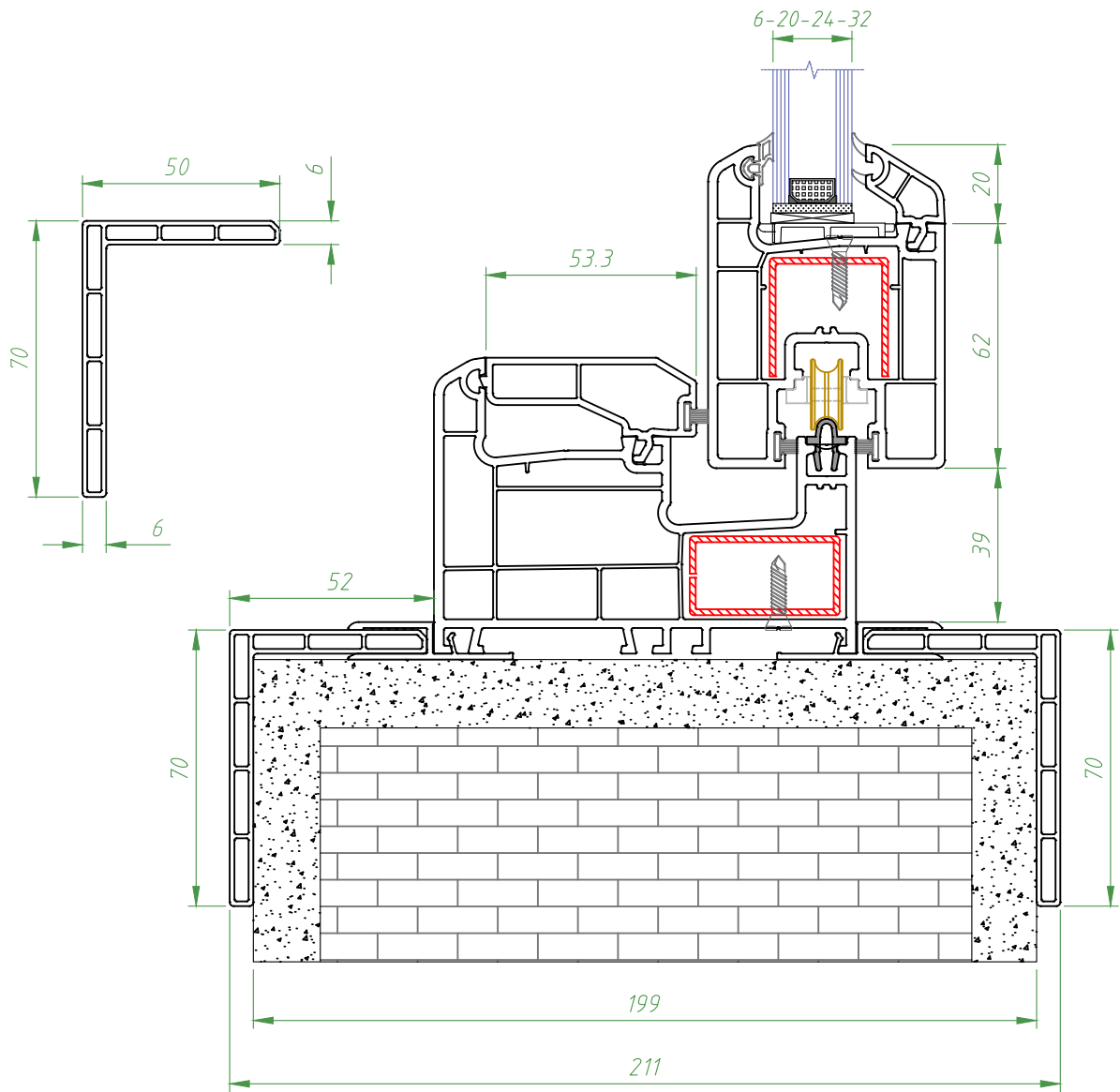


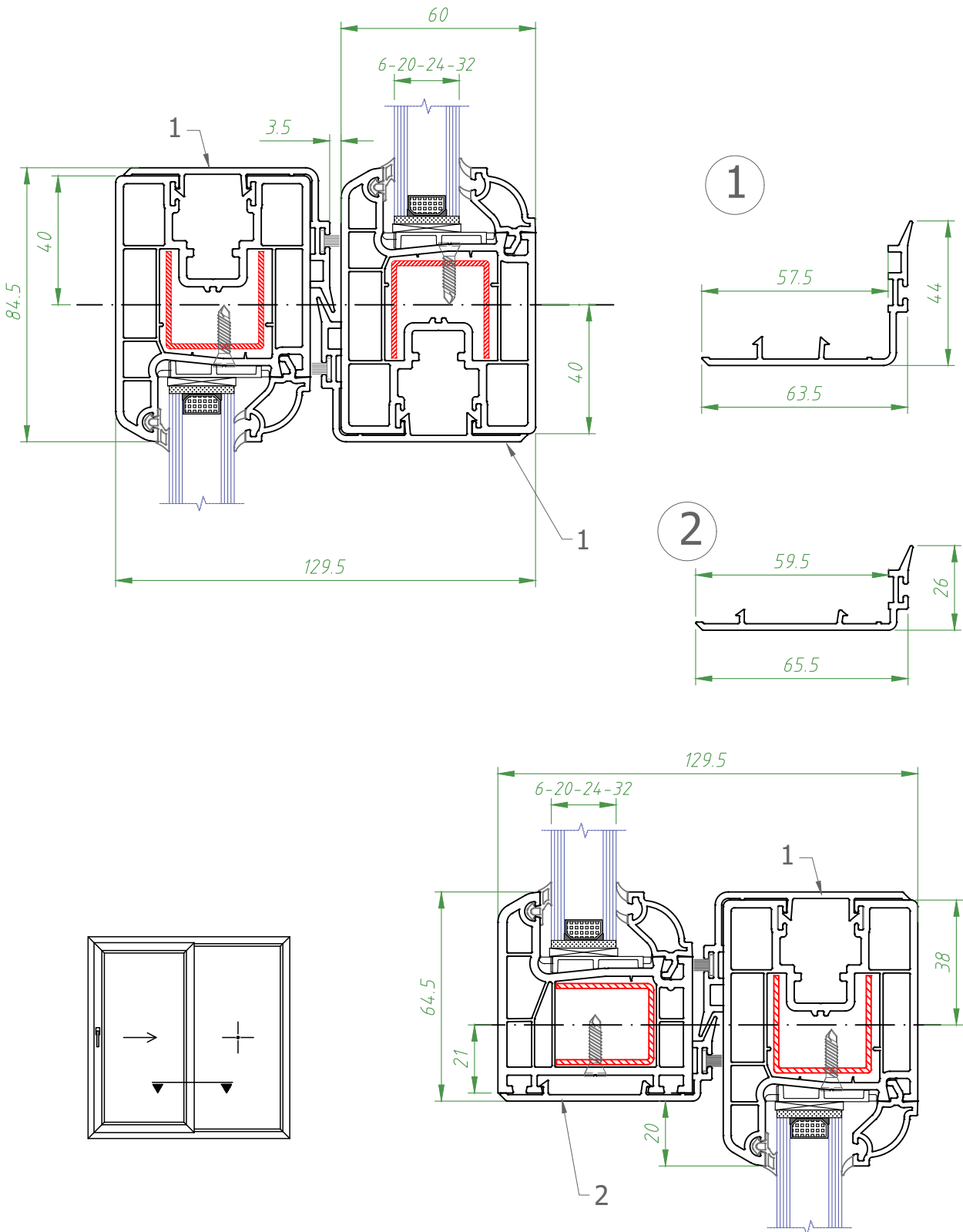


Rubber Gasket EPDM  
Code : 34024-11010

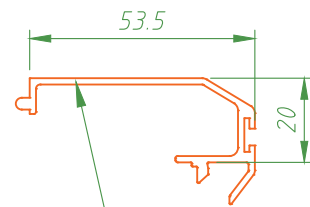
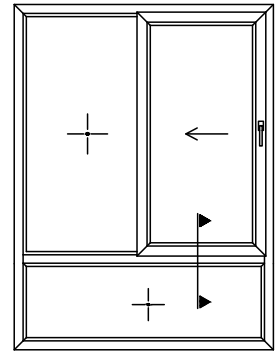
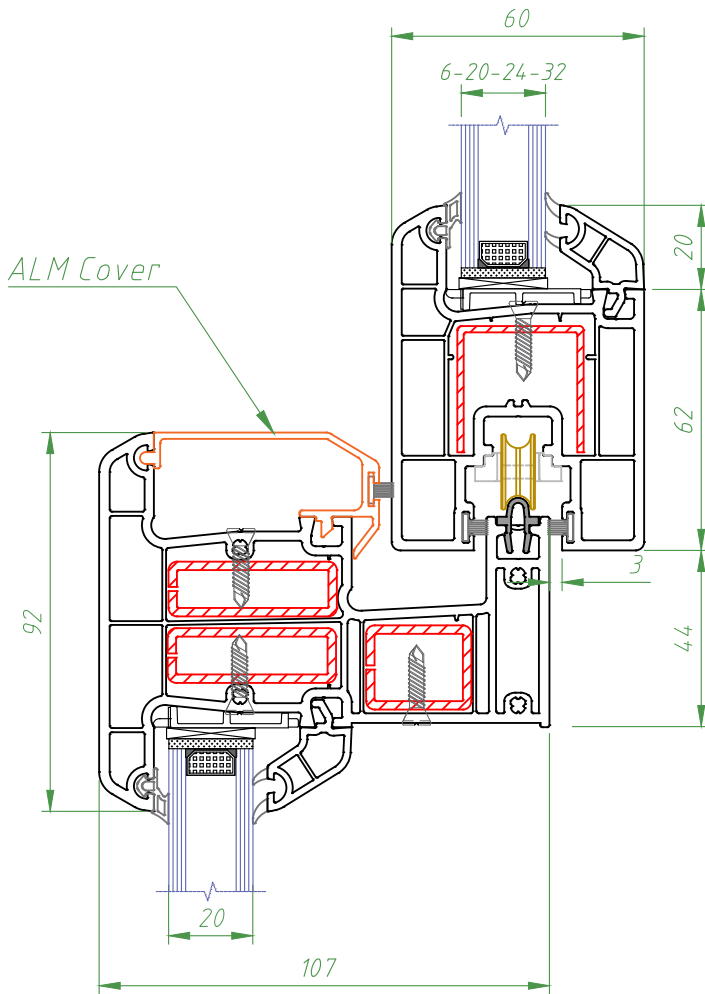




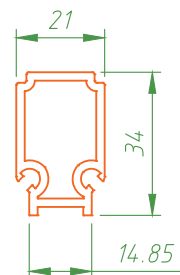
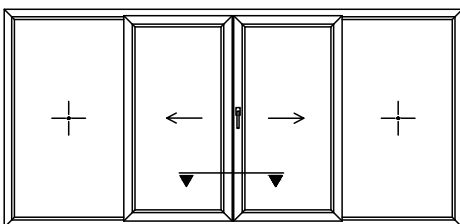
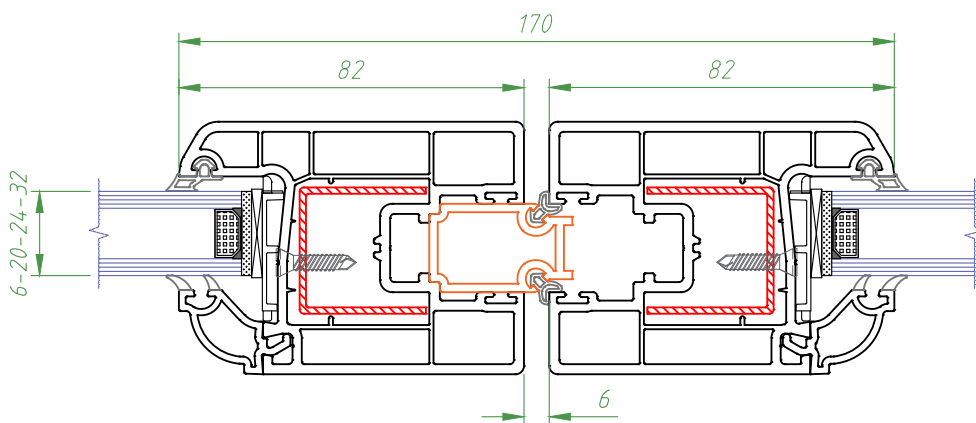




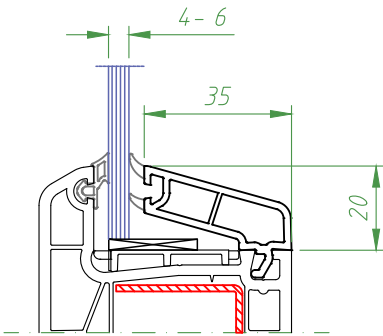




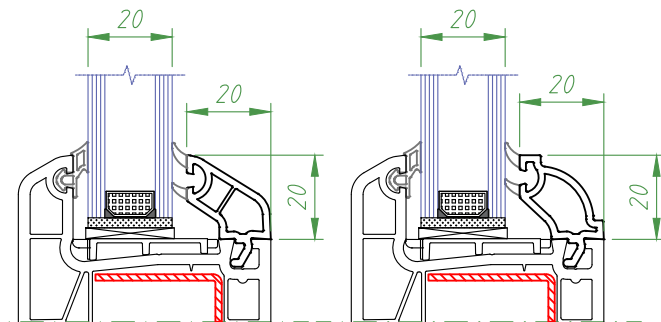
ALM Cover  
Code : 34025-13020



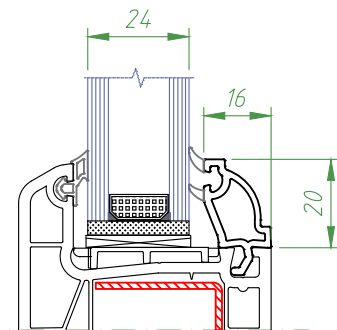
Alm Adaptor profile  
Code : 34025-12010 (White)  
Code : 34025-12011 (Brown)



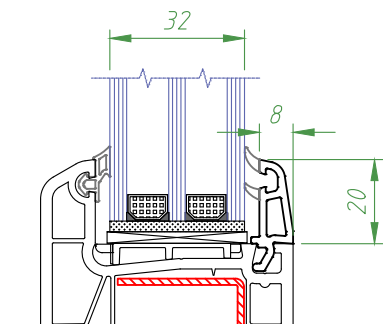
Single Glazing Bead 4 - 6 mm



Double Glazing Bead 20 mm



Double Glazing Bead 24 mm



Triple Glazing Bead 32 mm

## STATIC CALCULATION

### General Information :

According to DIN 18056 standard, the mechanical strength of the corner fittings for an area larger than 9 meters or an area where the smaller part is greater than 2 meters should be calculated without any exceptions. There is usually no need to figure out these calculations for windows that are installed at short distances on the wall. However, vertical and horizontal intermediate components and interfaces should always be calculated.

In DIN 18056, the maximum deviation for these is given below:

For a thickness that has a storage space of up to 300 cm. Distance from space  $F=L/200$

For the thickness of the storage space that is greater than 300 cm Distance from space  $F=L/300$

Space is used when the insulated glass is used. production values are used, but the general rule is the distance from the space :  $F=L/300$ .

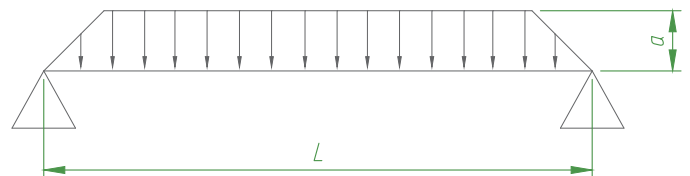
### CALCULATION OF WINDOW:

$a$  = Height of Loading cm

$L$  = Distances Between Abutments cm

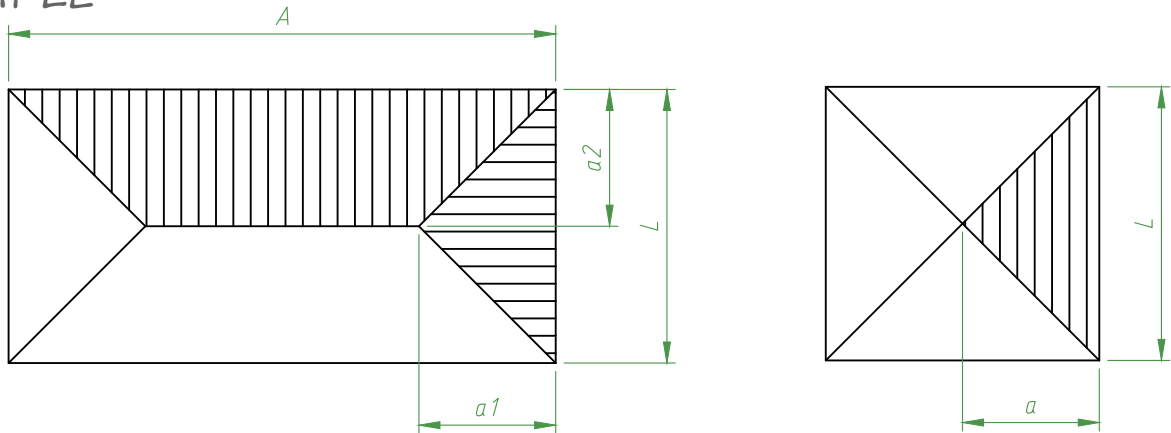
$W$  = Wind Load :  $c.q$  (kN\m)

$J$  = Moment of Inertia



category of forcing	height of buliding	wind speed	dynamic pressure (Q)		multiplied with coefficient $c=1.2$ $p=cxQ$ <span style="border: 1px solid black; padding: 2px;">F</span>		multiplied with coefficient $c=1.2$ $p=cxQ$ <span style="border: 1px solid black; padding: 2px;">G</span>		factor of changing
	mt	m/s	kp/m <sup>2</sup>	KN/m <sup>2</sup>	kp/m <sup>2</sup>	KN/m <sup>2</sup>	kp/m <sup>2</sup>	KN/m <sup>2</sup>	
A	0-8	28.3	50	0.5	60	0.6	60	0.6	1.00
A	8-20	35.8	80	0.8	96	0.96	96	0.96	1.6
A	20-100	42	110	1.1	132	1.32	132	1.32	2.2
A	> 100	45.6	130	1.3	156	1.56	156	1.56	2.6

CALCULATION IS PERFORMED WITH THE HELP OF A SAMPLE



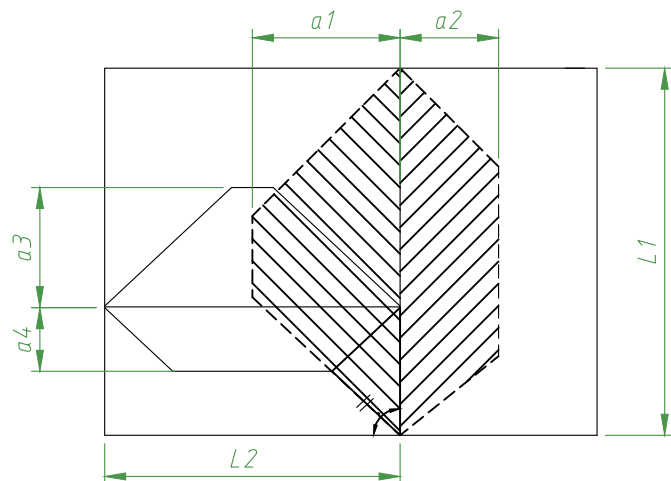
$a$  = Width of Loading

$L$  = Distance between Abutments

The distance between the supports ( $L$ ) is the length of the floating rod. Width  $A$  is calculated assuming that a cross-section of 4 triangles is located on the square at the point of intersection.

There are loads of two triangles and two ropes on the rectangle.

SKETCH OF LOAD DISTRIBUTION ON WINDOW WITH VERTICAL AND MULLION PROFILE



$a$  = Width of Loading (cm)

$L$  = Distance of Abutment (cm)

If the figure is drawn by a scale, "A" is defined as the width of the load.

The group that belongs to the load depends on the height of the building where the window will be installed.

For an example;

if the building has an altitude of 18 meters, this will include group B and all windows are accepted from the ground up to 18 meters for group B and the required computing will follow.

### STATIC CALCULATIONS:

Longevity and strength of the window against wind force against the UPVC window profile and the inertia of the reinforced ( $I_y$ ,  $I_x$ ) galvanizing profile are used in the production of the product. The main function of the reinforcing profiles used in doors and windows made of flexible PVC is used. It is a requirement to provide mechanical strength requirements that enable the corner fittings of the door and PVC windows to function properly.

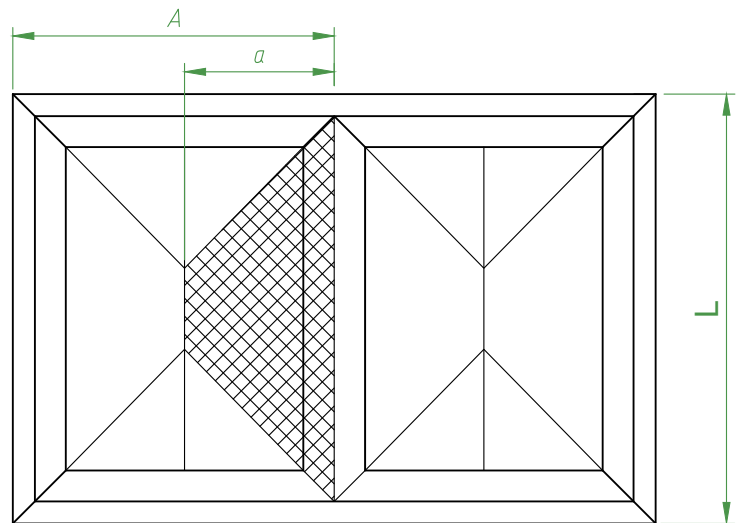
The shape and thickness of the reinforcement profiles are used to determine the maximum size of the window, in addition to the height at which the quadrilateral is installed and the wind power is also associated.

General rules:

Maximum bale Exterior Size in Figure.

The largest portion required is given as M.

The weight of the glass or panel is up to 25 kg / m, while the maximum measurements are inaccurate and inaccurate. Limitations imposed by the company providing the gallon should also be considered.



$I_x = \frac{W^4 L \cdot a}{1920 \cdot E \cdot f} \left( 25 - 40 \left( \frac{a}{L} \right)^2 + 16 \left( \frac{a}{L} \right)^4 \right)$			
$I_x$ = Required Moment of Inertia ( $cm^4$ )			
$W$ = Wind Load ( $N/mm^2$ )			
$E$ = Modulus of Elasticity ( $E = 2600 N/mm^2 / E = 210.000 N/mm^2$ )			
$f$ = Allowable Deflection ( $L / 300$ ) cm			
$a$ = Width of Loading ( cm )			
$L$ = Space of Abutment ( cm )			

0 - 8 m	60 kp/m <sup>2</sup>	600 pa	0.0006 N/mm <sup>2</sup>
8 - 20 m	96 kp/m <sup>2</sup>	960 pa	0.00096 N/mm <sup>2</sup>
20 - 100 m	132 kp/m <sup>2</sup>	1320 pa	0.00132 N/mm <sup>2</sup>
> 100 m	156 kp/m <sup>2</sup>	1560 pa	0.00156 N/mm <sup>2</sup>

Height Of Assembly = 0-8 mt  
Wind Pressure 60 kp/ m

MODULUS OF ELASTICITY  
= 210.000 N/MM<sup>2</sup>

SELECT OF CORRECT T PROFILE WITH RESPECT TO WIND PRESSURE

L = height of sash ( cm )	a = width of sash ( cm ) / a= A/2																			
	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
100	0.21	0.29	0.34																	
110	0.28	0.39	0.48	0.52	0.54					110										
120	0.37	0.52	0.64	0.72	0.74	0.75														
130	0.47	0.67	0.84	0.95	1.01	1.22														
140	0.59	0.85	1.07	1.23	1.34	1.37														
150	0.73	1.06	1.34	1.56	1.72	1.80														
160	0.89	1.30	1.65	1.94	2.16	2.30	2.34													
170	1.07	1.56	2.00	2.38	2.67	2.87	2.97	3.03												
180	1.28	1.87	2.40	2.87	3.24	3.52	3.69	3.75												
190	1.50	2.21	2.85	3.42	3.89	4.26	4.51	4.64												
200	1.76	2.58	3.35	4.03	4.61	5.09	5.43	5.64	5.71											
210	2.04	3.00	3.90	4.71	5.42	6.01	6.46	6.77	6.93											
220	2.35	3.46	4.51	5.46	6.31	7.03	7.60	8.02	8.28	8.37										
230	2.68	3.96	5.17	6.29	7.28	8.15	8.86	9.41	9.78	9.97										
240	3.05	4.51	5.90	7.19	8.35	9.38	10.25	10.94	11.44	11.75	11.85									
250	3.60	5.32	6.97	8.51	9.92	11.17	12.25	13.13	13.81	14.27	14.50									
260	4.21	6.24	8.18	10.01	11.69	13.20	14.52	15.63	16.52	17.16	17.55	17.68								
270	4.90	7.27	9.54	11.69	13.68	15.49	17.09	18.46	19.59	20.44	21.02	21.32	270							
280	5.67	8.42	11.06	13.57	15.91	18.06	19.98	21.65	23.05	24.16	24.96	25.45	25.61							
290	6.53	9.70	12.76	15.67	18.41	20.93	23.21	25.22	26.93	28.33	29.4	30.12	30.48							
300	7.48	11.12	14.64	18.01	21.18	24.12	26.80	29.19	31.27	33.00	34.37	36.36	36.69	37.16						
310	8.53	12.69	16.72	20.59	24.25	27.66	30.79	36.09	37.62	38.20	39.92	41.23	42.11	42.55						
320	9.69	14.42	19.02	23.44	27.63	31.57	35.21	38.51	41.44	43.98	46.09	47.46	48.96	49.69	49.93					
330	10.97	16.33	21.54	26.57	31.36	35.58	40.07	43.90	47.34	50.36	52.92	56.00	56.58	57.64	58.17					
340	12.36	18.41	24.31	30.01	36.45	40.60	45.41	49.83	53.84	57.39	60.45	62.99	65.00	66.45	67.32	67.61				
350	13.88	20.69	27.33	33.76	39.92	45.77	51.26	56.34	60.97	65.11	68.73	71.80	74.29	76.17	77.44	78.08				

This moment of inertia chart is for double-glazed systems.

$f=H/500 \leq 0,8$  cm (Maximum permissible deviation)

Consult glass firms to determine type and features of the glass.

Thickness of the glass alters for different distances and heights.

MODULUS OF ELASTICITY  
= 210.000 N/MM<sup>2</sup>

Height Of Assembly = 8-20 mt  
Wind Pressure 96 kp/ m

## SELECT OF CORRECT T PROFILE WITH RESPECT TO WIND PRESSURE

	a = width of sash ( cm ) / a = A/2																			
	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
100	0.33	0.46	0.54	0.57						110										
110	0.45	0.63	0.76	0.83	0.87															
120	0.59	0.84	1.02	1.14	1.18															
130	0.76	1.08	1.34	1.52	1.62	1.67														
140	0.95	1.36	1.71	1.98	2.14	2.20														
150	1.17	1.69	2.14	2.50	2.75	2.88														
160	1.43	2.07	2.64	3.11	3.46	3.67	3.74													
170	1.72	2.50	3.21	3.80	4.27	4.59	4.75													
180	2.04	2.99	3.84	4.58	5.19	5.63	5.91	6.00												
190	2.41	3.53	4.56	5.46	6.22	6.81	7.22	7.42												
200	2.81	4.13	5.36	6.45	7.38	8.14	8.69	9.03	9.14											
210	3.28	4.80	6.24	7.54	8.67	9.61	10.34	10.83	11.08											
220	3.75	5.54	7.21	8.74	10.09	11.24	12.16	12.84	13.25	13.39										
230	4.29	6.34	8.28	10.06	11.66	13.04	14.18	15.06	15.65	15.95										
240	4.88	7.22	9.44	11.50	13.37	15.01	16.39	17.50	18.30	18.79	18.99									
250	5.75	8.52	11.15	13.62	15.87	17.87	19.60	21.02	22.1	22.83	23.21									
260	6.74	9.98	13.09	16.01	18.7	21.12	23.24	25.02	26.43	27.46	28.08	28.29								
270	7.84	11.63	15.27	18.70	21.89	24.78	27.35	29.54	31.34	32.71	33.64	34.11	270							
280	9.07	13.47	17.70	21.71	25.46	28.89	31.96	34.64	36.88	38.65	39.94	40.72	40.98							
290	10.45	15.52	20.41	25.08	29.45	33.48	37.13	40.35	43.09	45.33	47.03	48.18	48.76							
300	11.97	17.79	23.43	28.81	33.88	38.59	42.88	46.71	50.03	52.80	54.99	56.58	57.54	57.88						
310	13.66	20.31	26.76	32.94	38.79	44.26	49.27	53.78	57.75	61.13	63.87	65.96	67.37	68.08						
320	15.51	23.08	30.43	37.50	44.22	50.51	56.33	61.61	66.30	70.36	73.74	76.41	78.34	79.50	79.89					
330	17.54	26.12	34.47	42.51	50.18	57.40	64.11	70.24	75.75	80.57	84.67	88.00	90.52	92.22	93.07					
340	19.87	29.46	38.9	48.01	56.72	64.96	72.65	79.74	86.14	91.82	96.7	100.7	104.0	106.3	107.7	108.1				
350	22.21	33.10	43.73	54.02	63.88	73.24	82.01	90.14	97.55	104.1	109.9	114.8	118.8	121.8	123.9	124.9				

L = height of sash ( cm )

This moment of inertia chart is for double-glazed systems.  
 $E=H/300 < 0,8$  cm (Maximum permissible deviation)  
 Consult glass firms to determine type and features of the glass.  
 Thickness of the glass alters for different distances and heights.

MODULUS OF ELASTICITY  
= 210.000 N/MM<sup>2</sup>

Height Of Assembly = 8 -20 mt  
Wind Pressure 96 kp/ m

SELECT OF CORRECT T PROFILE WITH RESPECT TO WIND PRESSURE

a = width of sash ( cm ) / a= A/2

L = height of sash ( cm )	a = width of sash ( cm ) / a= A/2																			
	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	
100	0.46	0.63	0.75	0.79						110										
110	0.62	0.87	1.05	1.14	1.21															
120	0.81	1.15	1.41	1.57	1.63															
130	1.04	1.48	1.84	2.10	2.23	2.32														
140	1.30	1.88	2.35	2.72	2.94	3.20														
150	1.61	2.33	2.95	3.44	3.78	3.96														
160	1.96	2.58	3.63	4.27	4.75	5.05	5.15													
170	2.36	3.44	4.41	5.23	5.87	6.31	6.53													
180	2.81	4.11	5.28	6.30	7.13	7.74	8.12	8.25												
190	3.31	4.85	6.27	7.51	8.56	9.37	9.92	10.20												
200	3.87	5.68	7.36	8.86	10.15	11.19	11.95	12.41	12.57											
210	4.48	6.6	8.58	10.36	11.92	13.21	14.21	14.89	15.24											
220	5.16	7.61	9.91	12.01	13.88	15.46	16.72	17.65	18.22	18.41										
230	5.90	8.72	11.38	13.83	16.03	17.93	19.50	20.70	21.52	21.94										
240	6.71	9.93	12.98	15.81	18.38	20.64	22.54	24.06	25.17	25.84	26.7									
250	7.91	11.71	15.34	18.72	21.82	24.58	26.95	28.90	30.39	31.40	31.91									
260	9.26	13.73	18.00	22.01	25.71	29.04	31.95	34.40	36.34	37.75	38.61	38.90								
270	10.70	15.99	20.99	25.71	30.10	34.08	37.60	40.62	43.09	44.98	46.25	46.90								
280	12.47	18.52	24.34	29.86	35.01	39.73	43.95	47.63	50.70	53.15	54.91	55.98	56.34							
290	14.36	21.34	28.07	34.48	40.49	46.04	51.05	55.47	59.25	62.33	64.67	66.25	67.05							
300	16.46	24.46	32.21	39.61	46.59	53.06	58.97	64.23	66.79	72.60	75.61	77.79	79.11	79.55						
310	18.77	27.92	36.79	45.30	53.34	60.85	67.75	73.95	79.41	84.05	87.83	90.70	92.63	93.60						
320	21.32	31.73	41.84	51.56	60.80	69.45	77.45	84.72	91.17	96.75	101.4	105.06	107.71	109.31	109.85					
330	24.12	35.92	47.40	58.46	69.00	78.93	88.15	96.65	104.16	110.79	116.42	120.99	124.47	126.80	127.97					
340	27.19	40.51	53.48	66.01	77.99	89.32	99.90	109.64	118.45	126.26	132.99	138.59	143.00	146.18	148.75					
350	30.54	45.62	60.13	74.28	87.83	100.7	112.77	123.94	134.13	143.24	151.21	157.96	163.43	167.58	170.37	171.77				

This moment of inertia chart is for double-glazed systems.

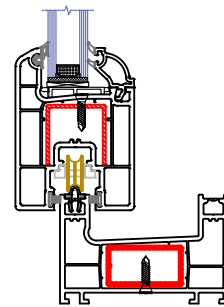
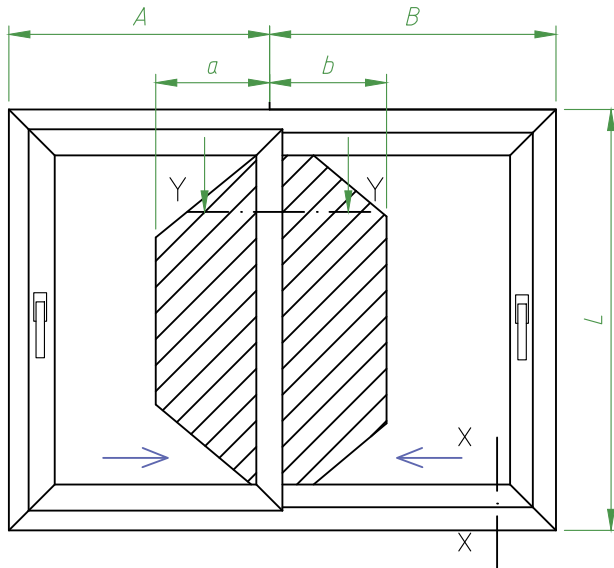
f=H/300 < 0,8 cm (Maximum permissible deviation)

Consult glass firms to determine type and features of the glass.

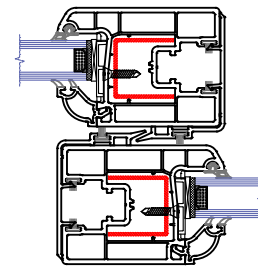
Thickness of the glass alters for different distances and heights.



### STATIC CALCULATION EXAMPLE



Section X\_X



Section Y\_Y

Height of Window  $L = 180 \text{ cm}$

Width of Area  $A = 100 \text{ cm}$

Width of Area  $B = 100 \text{ cm}$

Width of Loading  $a = 50 \text{ cm}$

Width of Loading  $b = 50 \text{ cm}$

Height of Building  $h = 8 \text{ mt}$

Wind Pressure  $q = 50 \text{ kp/m}^2$

Constant Multiply  $c = 1.2$

Wind Load  $w = q \times c = 50 \times 1.2 = 60 \text{ kp/m}$

Allowable Deflection  $L/300 \quad F = 180 / 300 = 6 \text{ mm}$

Modulus of Elasticity  $E = 2.1 \times 10^6 \text{ kp/cm}$

$$I_x = \text{Required Moment of Inertia (cm}^4) \quad I_{x_1} = \frac{W L^4 a}{1920 \cdot E \cdot F} \left( 25 - 40 \left( \frac{a}{L} \right)^2 + 16 \left( \frac{a}{L} \right)^4 \right)$$

$$I_{x_2} = \frac{W L^4 b}{1920 \cdot E \cdot f} \left( 25 - 40 \left( \frac{b}{L} \right)^2 + 16 \left( \frac{b}{L} \right)^4 \right)$$

$$I_{x_1} = \frac{0.00060 \times 180^4 \times 50}{1920 \times 21,100,000 \times 0.6} \left( 25-40 \left( \frac{50}{180} \right)^2 + 16 \left( \frac{50}{180} \right)^4 \right) = 2.87 \text{ cm}^4$$

$$I_{x_2} = \frac{0.00060 \times 180^4 \times 50}{1920 \times 21,100,000 \times 0.6} \left( 25-40 \left( \frac{50}{180} \right)^2 + 16 \left( \frac{50}{180} \right)^4 \right) = 2.87 \text{ cm}^4$$

Height of Installation 0-8 m  
Wind Pressure 60kp/m<sup>2</sup>

L = height of sash ( cm )	width of sash a ( cm )				
	20	30	40	50	60
100	0.21	0.29	0.34	0.36	
110	0.28	0.39	0.48	0.52	
120	0.37	0.52	0.64	0.72	0.74
130	0.47	0.67	0.84	0.95	1.01
140	0.59	0.85	1.07	1.23	1.34
150	0.73	1.06	1.34	1.56	1.72
160	0.89	1.30	1.65	1.94	2.16
170	1.07	1.56	2.00	2.38	2.67
180	1.28	1.87	2.40	2.87	3.24
190	1.50	2.21	2.85	3.42	3.89

Required maximum measurement at 180 cm height and 50 cm width is chosen from the chart.

$$\text{Sum of } I_x = I_{x_1} + I_{x_2} \quad 2.87 + 2.87 = 5.74 \text{ cm}$$

$$\text{Sum of } I_x \text{ on chart } I_x = I_{x_1} + I_{x_2} \quad 2.87 + 2.87 = 5.74 \text{ cm}$$

With this calculation, the accuracy of the chart is verified.

System is considered as Sash + Mullion Profile + Sash.

Sash Reinforcement  $I_x = 2.59 \text{ cm}$  (Thickness= 2mm)

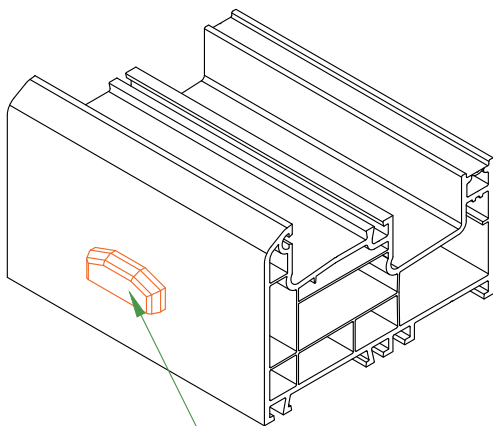
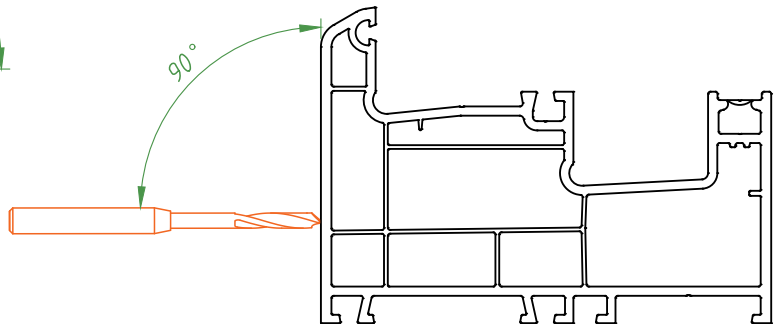
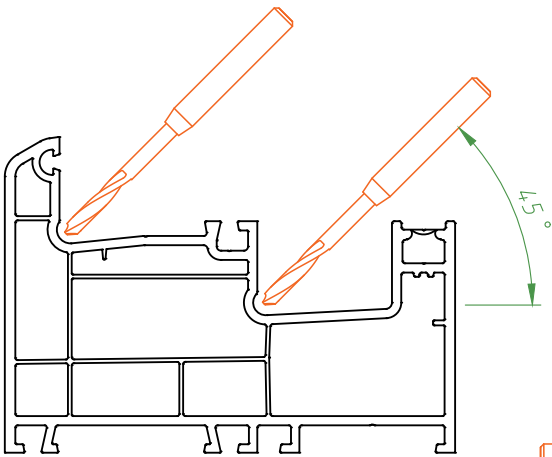
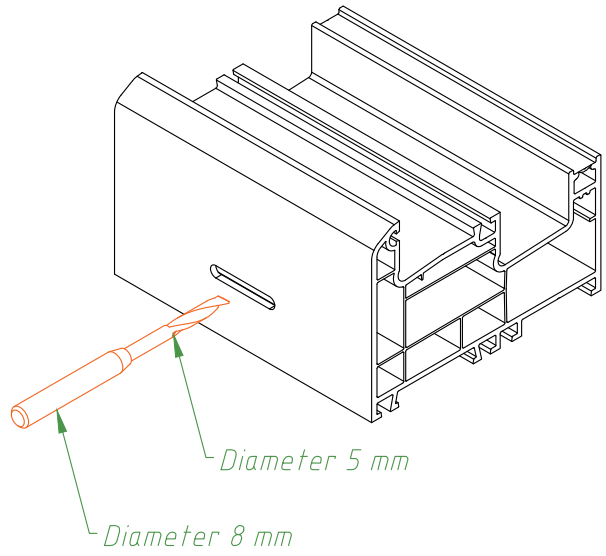
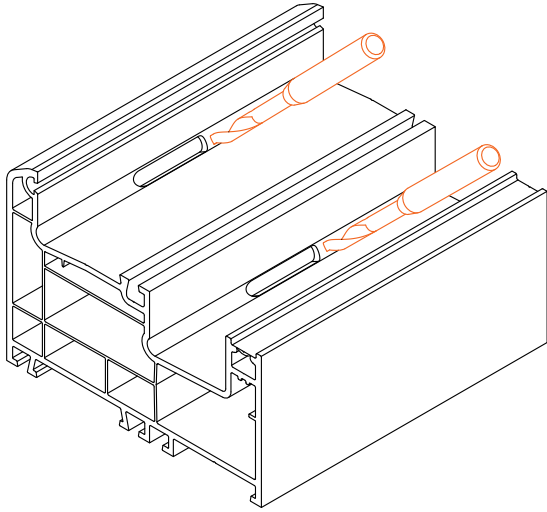
Sash Reinforcement  $I_x = 2.59 \text{ cm}$  (Thickness= 2mm)

Total  $I_x$  in the System =  $2.59 + 2.59 = 5.18 \text{ cm}$

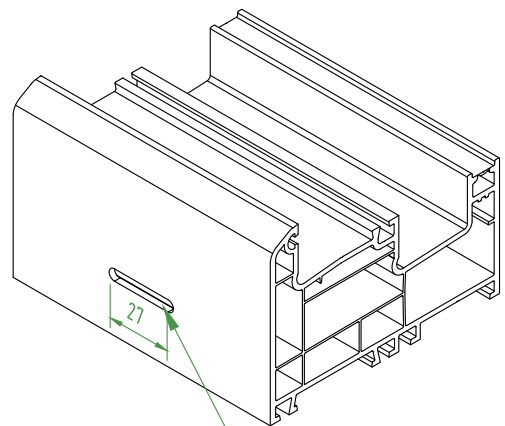
Total  $I_x$  of Reinforcement in the system < Required

$5.18 \text{ cm} < 5.74 \text{ cm}$  with the help of Reinforcement stated above ,the window with reinforcement profile is Impossible.

Drainage And Smoothing Out Pressure Holes

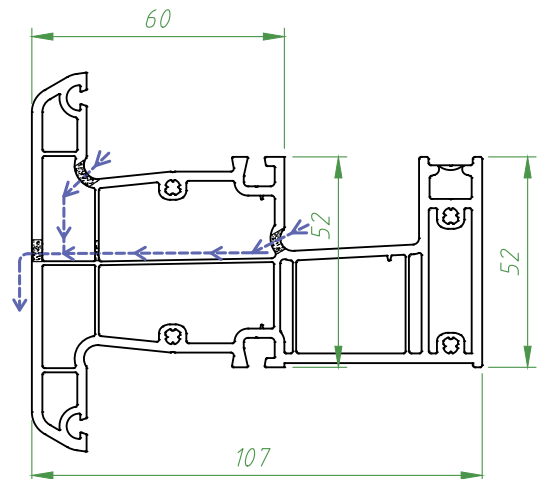
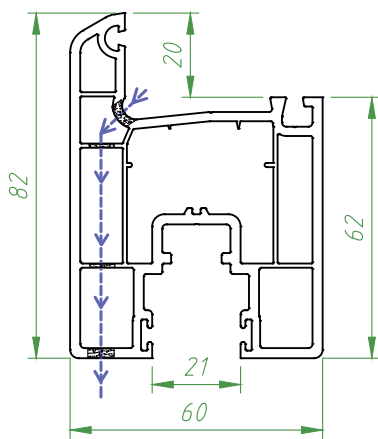
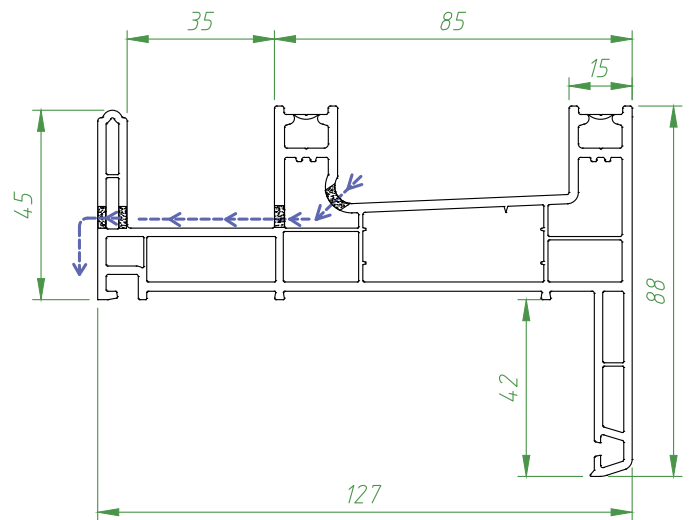
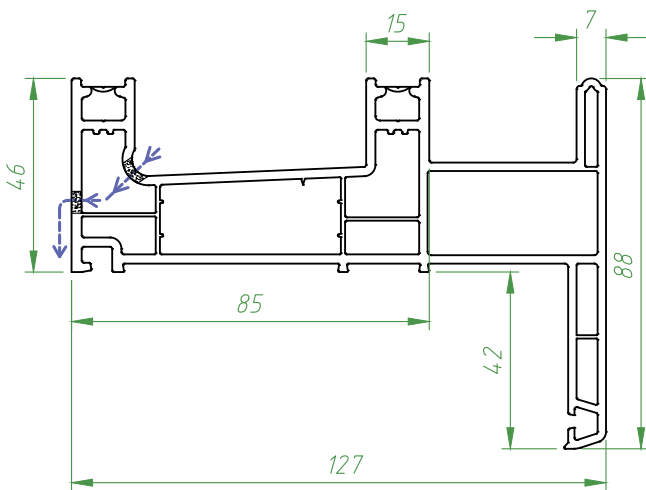
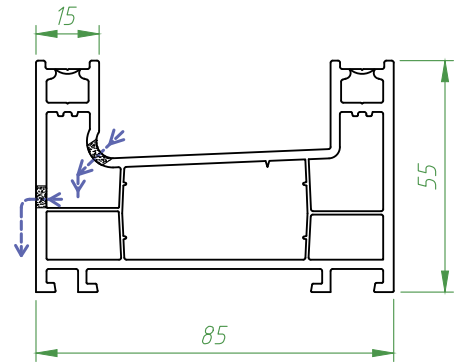
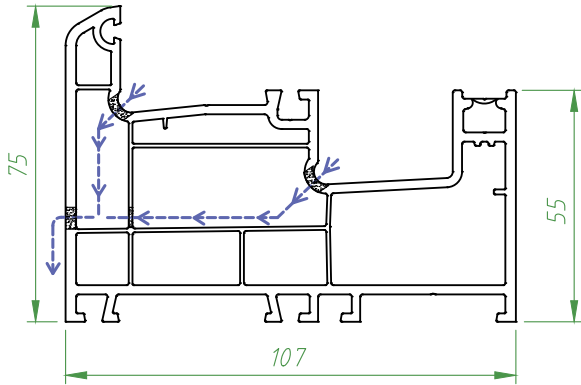


Water drainage cover (plug)

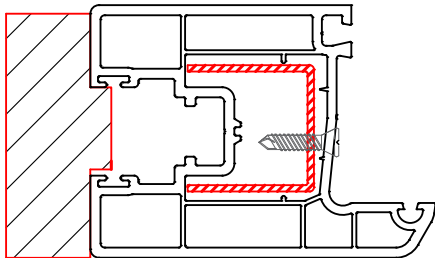
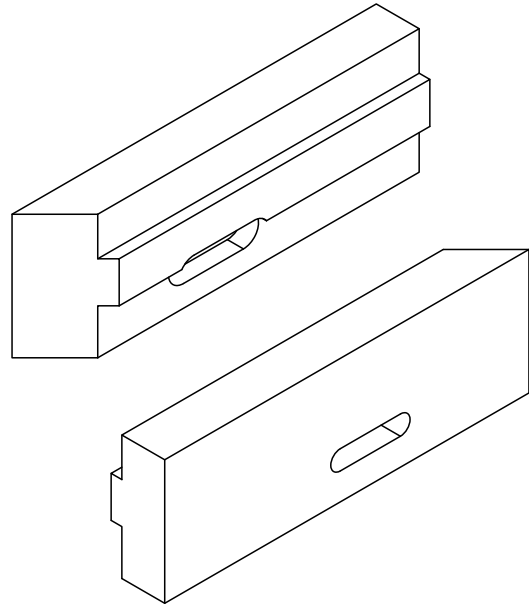
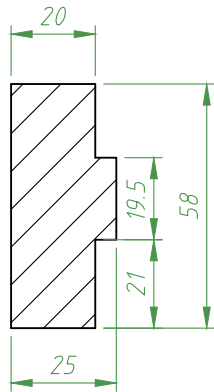


5X 27 mm

Drainage And Smoothing Out Pressure Holes

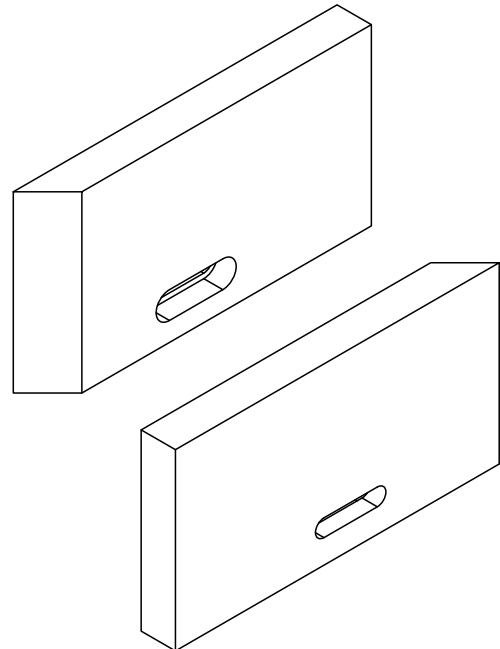
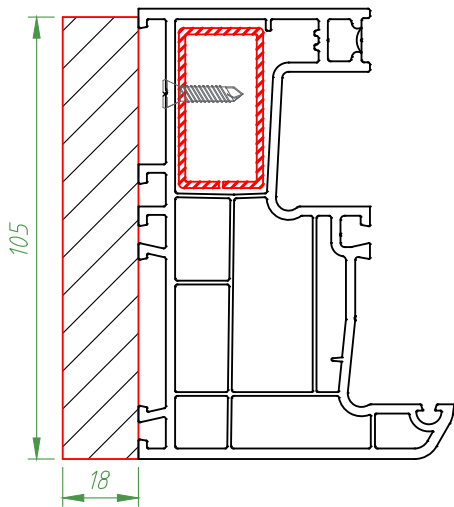


Accessories (welding mold systems)



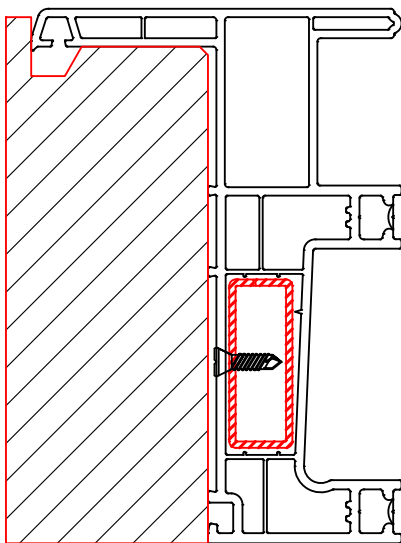
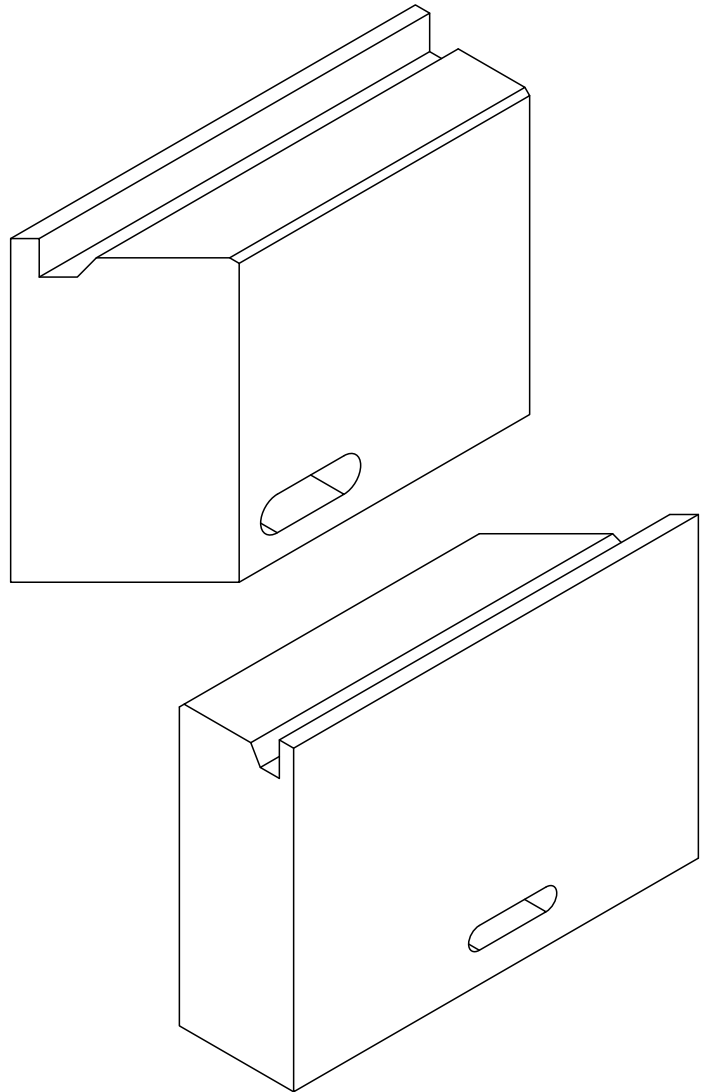
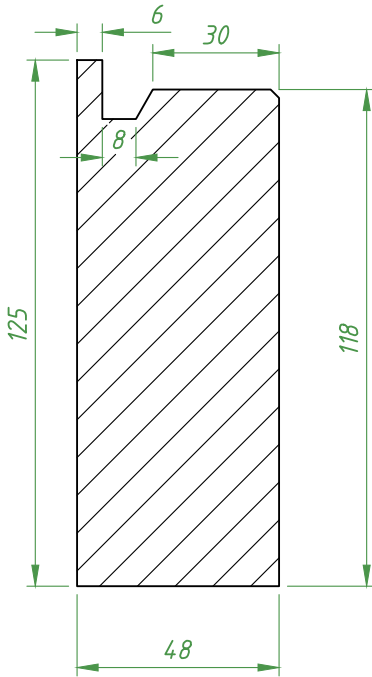
Technical Code	Machine name	Single head	Double head
	KABAN Machines	32601-21100	32601-21200
	MURAT Machines	32602-21100	32602-21200
	OZGENC Machines	32603-21100	32603-21200
	YILMAZ Machines	32604-21100	32604-21200

Accessories (welding mold systems)



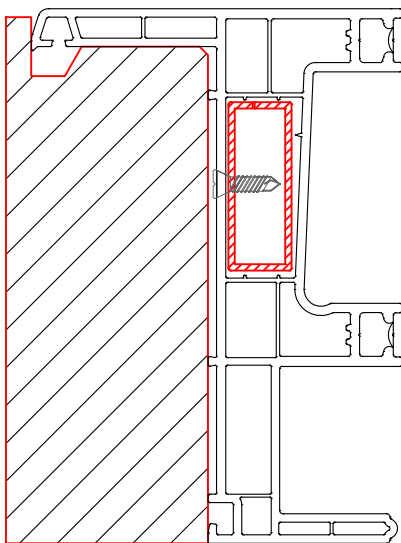
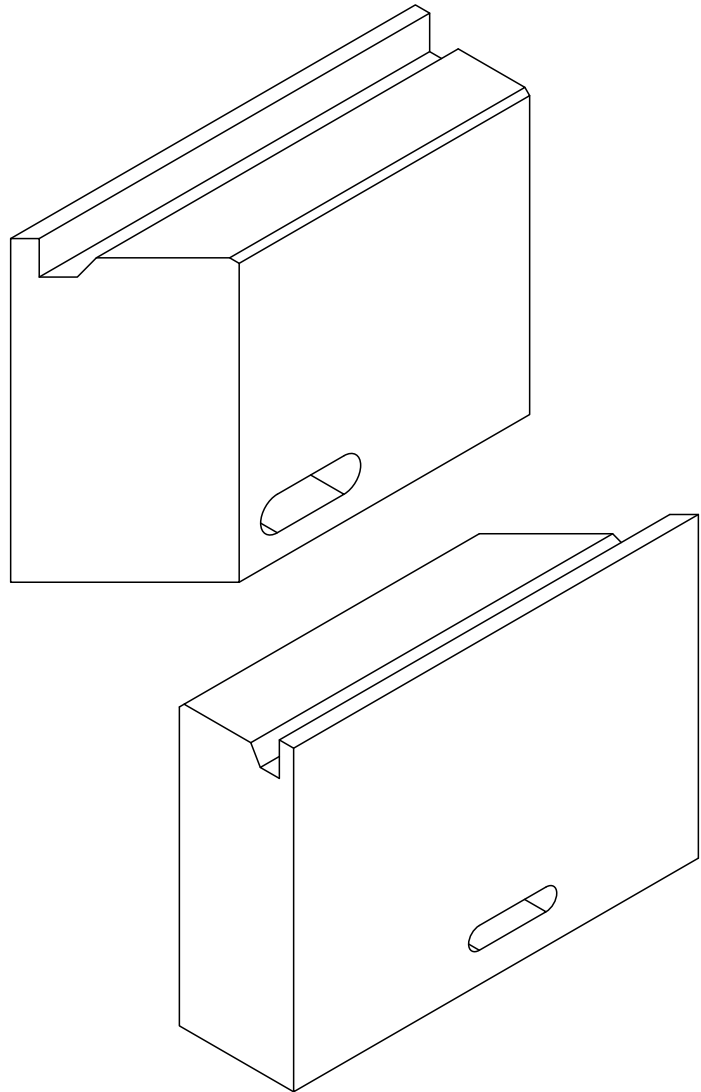
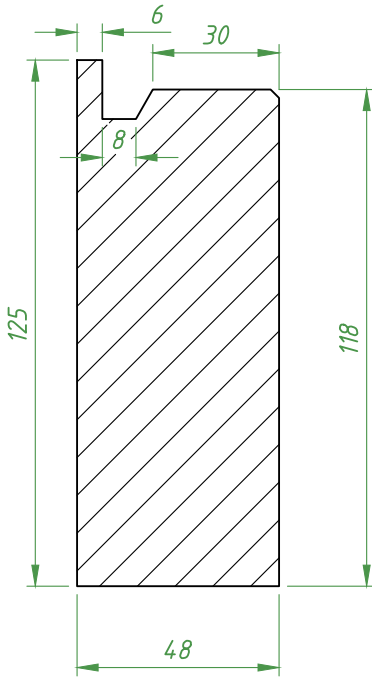
Technical Code	Machine name	Single head	Double head
	KABAN Machines	32601-19100	32601-19200
	MURAT Machines	32602-19100	32602-19200
	OZGENC Machines	32603-19100	32603-19200
	YILMAZ Machines	32604-19100	32604-19200

Accessories (welding mold systems)



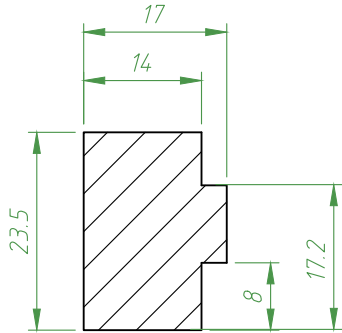
Technical Code	Machine name	Single head	Double head
	KABAN Machines	32601-18100	32601-18200
	MURAT Machines	32602-18100	32602-18200
	OZGENC Machines	32603-18100	32603-18200
	YILMAZ Machines	32604-18100	32604-18200

Accessories (welding mold systems)

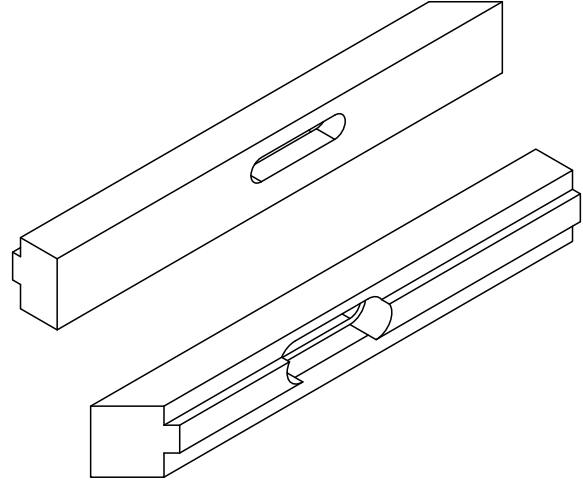
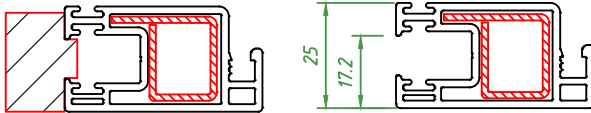


Technical Code	Machine name	Single head	Double head
	KABAN Machines	32601-18100	32601-18200
	MURAT Machines	32602-18100	32602-18200
	OZGENC Machines	32603-18100	32603-18200
	YILMAZ Machines	32604-18100	32604-18200

Accessories (welding mold systems)

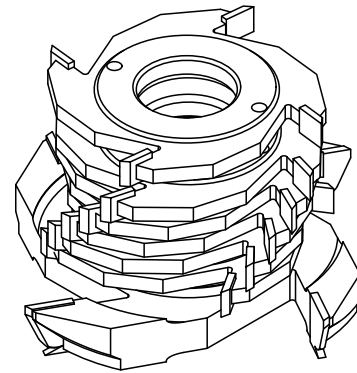
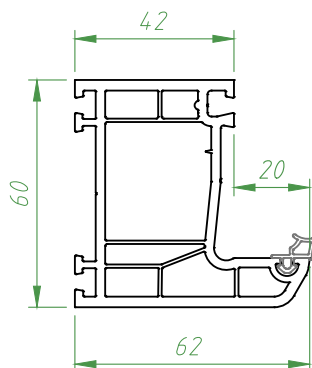
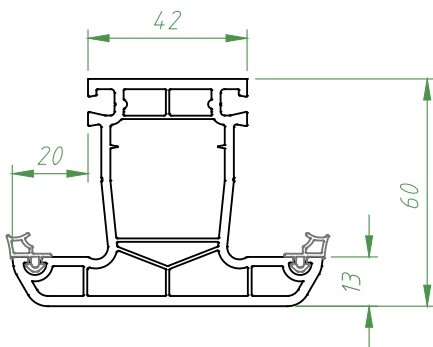


Scale = 2:1



Technical Code	Machine name	Single head	Double head
	KABAN Machines	32401-11100	32401-11200
	MURAT Machines	32402-11100	32402-11200
	OZGENC Machines	32403-11100	32403-11200
	YILMAZ Machines	32404-11100	32404-11200

Accessories (Milling Blade - Mullion Profile)

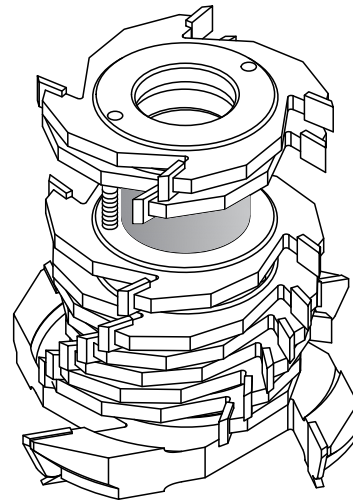
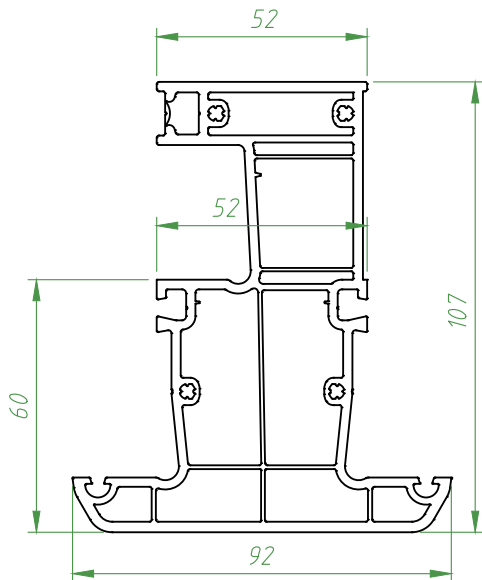


Code (Normal): 31001-64003

Code (elumatec Machines): 31001-64006



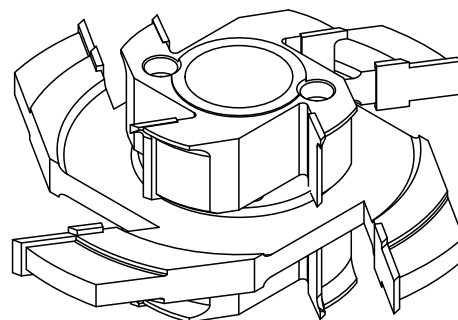
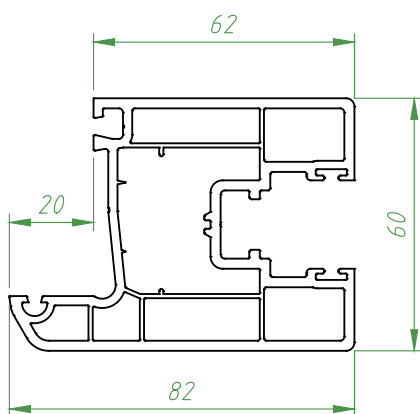
### Accessories (Milling Blade - Mullion Profile)



Code (Normal): 31001-26003

Code (elumatec Machines): 31001-26006

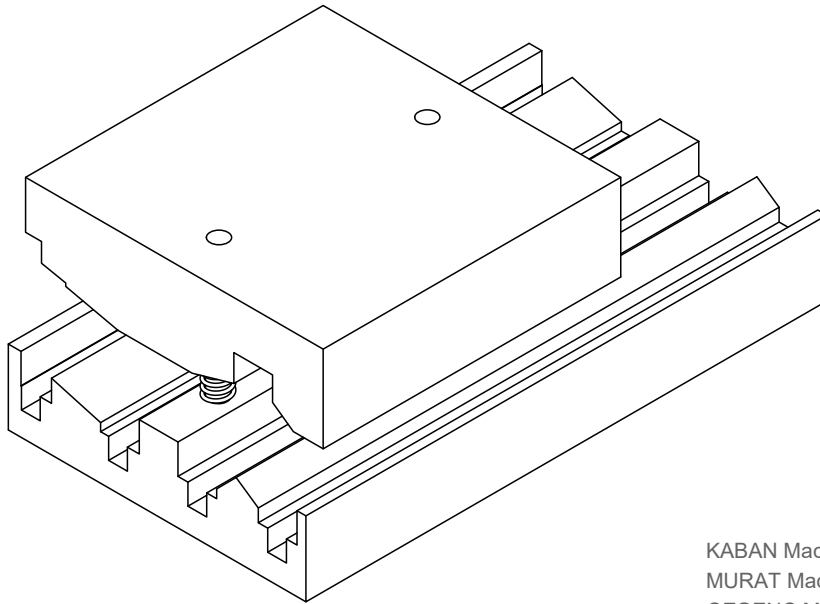
### Accessories (Blade Cleaner- Sash Profile)



Code (Normal): 31001-26005

Code (elumatech Machines): 31001-26006

Accessories (Cutting Fixture)

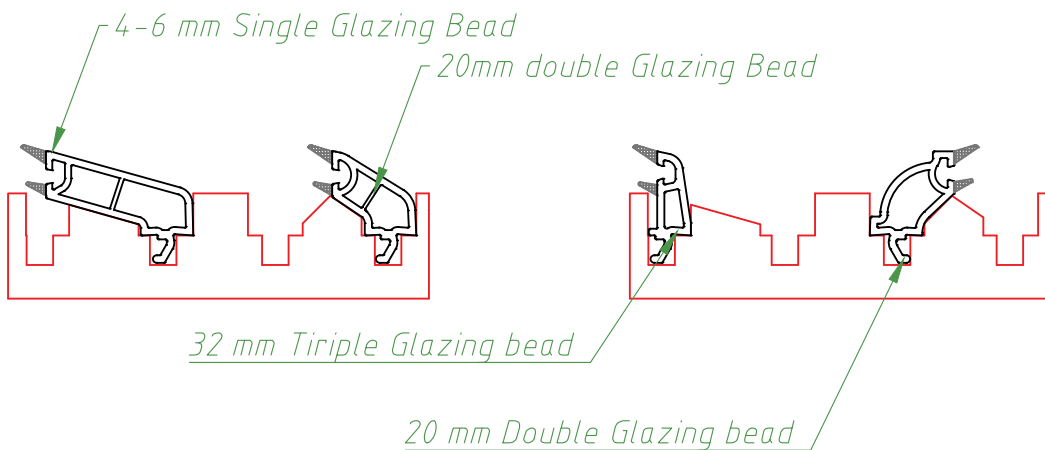
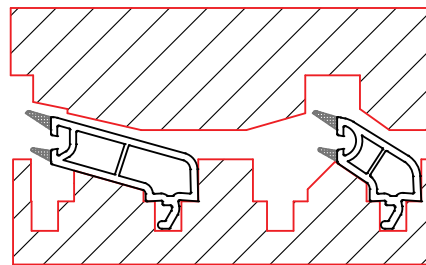
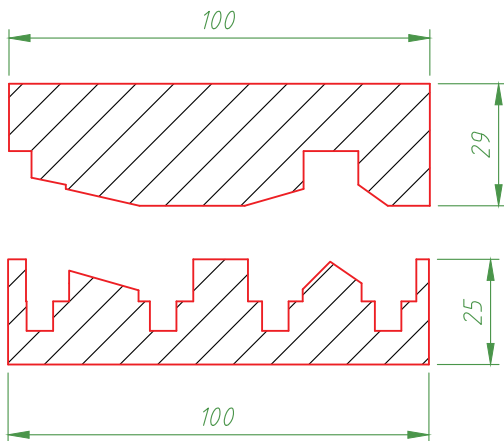


KABAN Machines Code: 31002- 70002

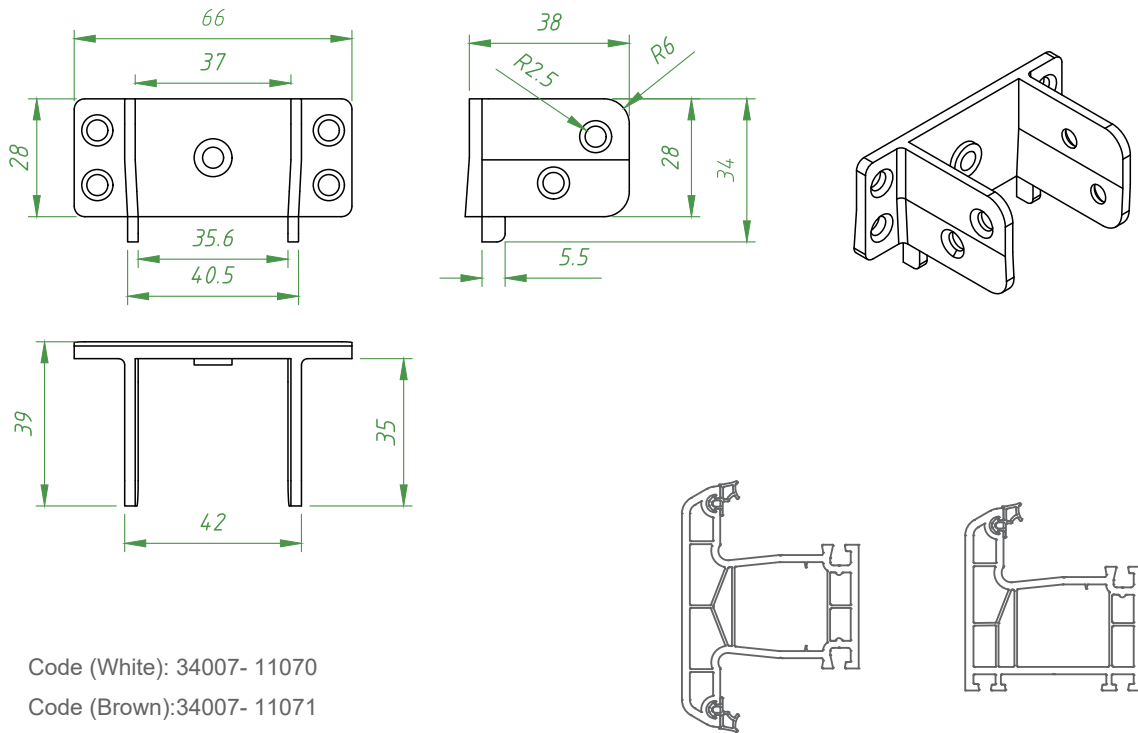
MURAT Machines Code: 31002- 70001

OZGENC Machines Code: 31002- 70003

YILMAZ Machines Code: 31002- 70004



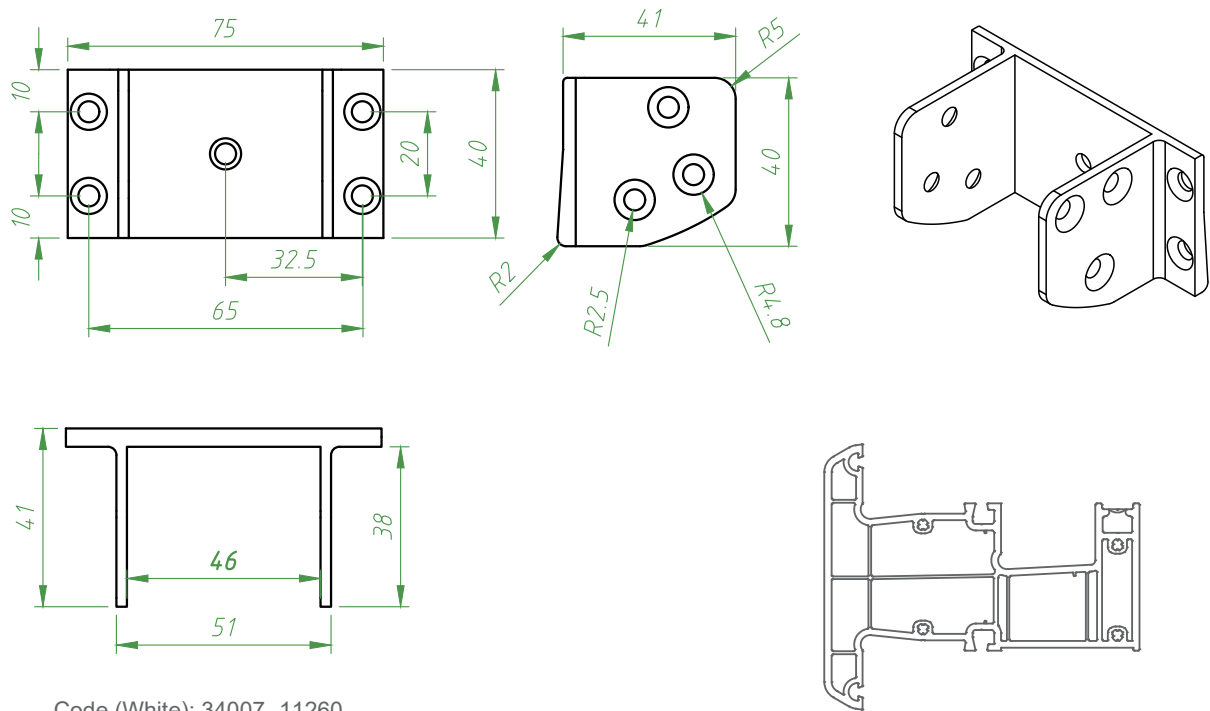
Accessories (Mullion Profile Connectors)



Code (White): 34007- 11070

Code (Brown):34007- 11071

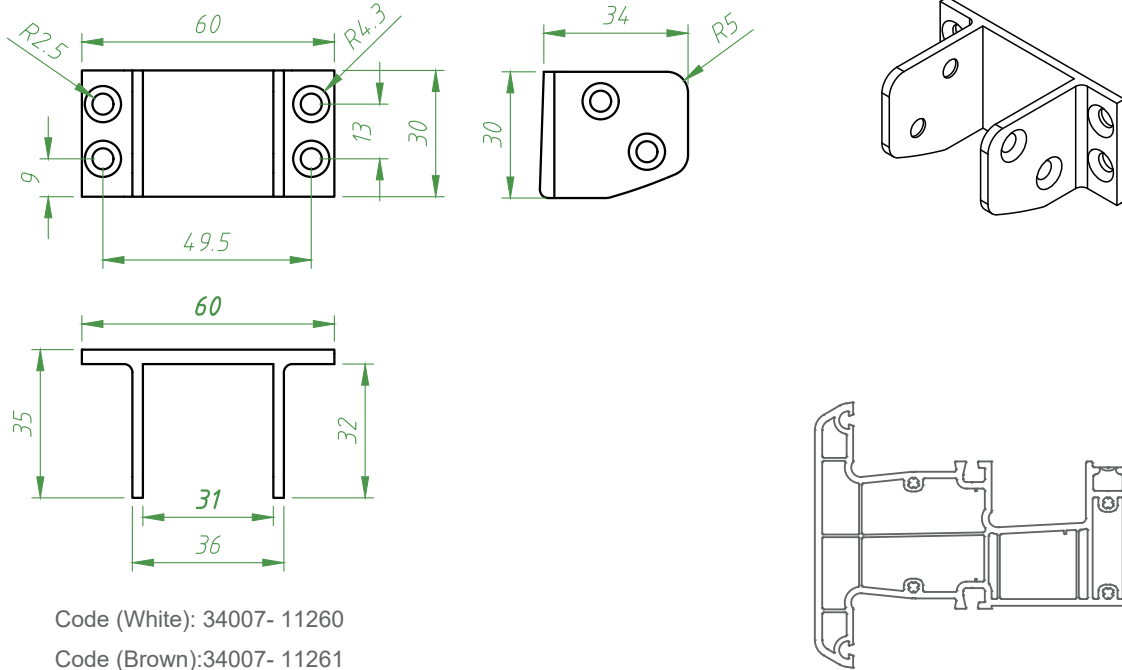
Accessories (Cornice Profile Connectors)



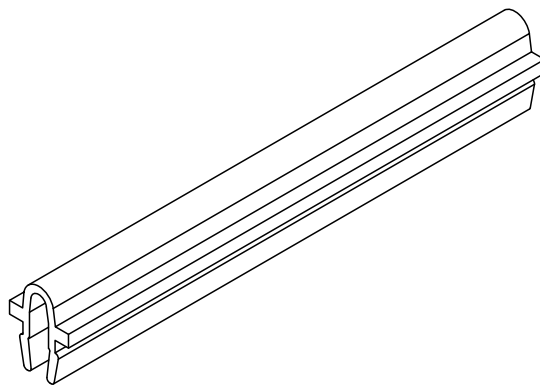
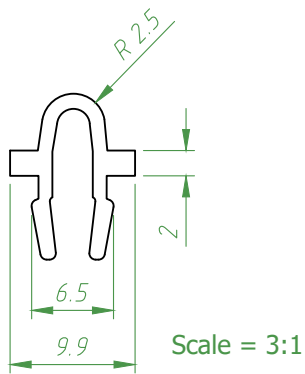
Code (White): 34007- 11260

Code (Brown):34007- 11261

Accessories (Cornice Profile Connectors)

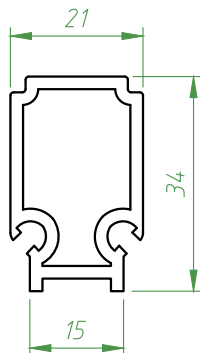


Accessories (Aluminum Rail Profile)

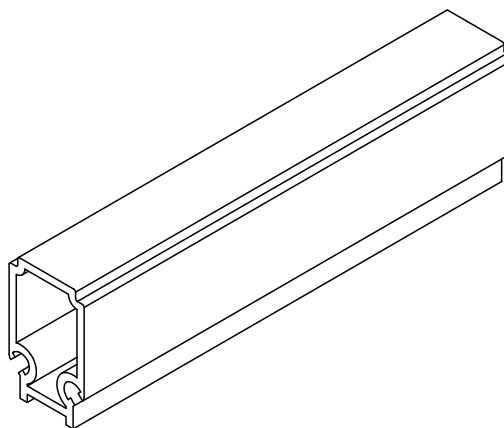


Code : 34025- 11020  
Profile length = 6 meters

### Accessories (Aluminum Adaptor Profile)



Scale = 1.5 :1

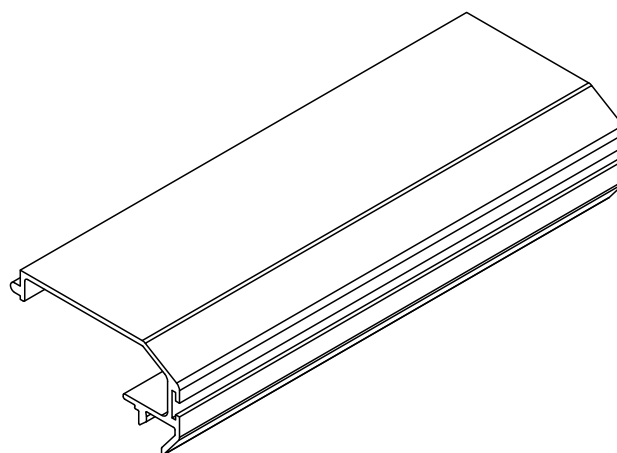
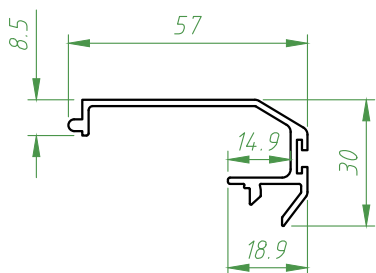


Code (White): 34025- 12010

Code (Brown):34025- 12011

Profile length = 6 meters

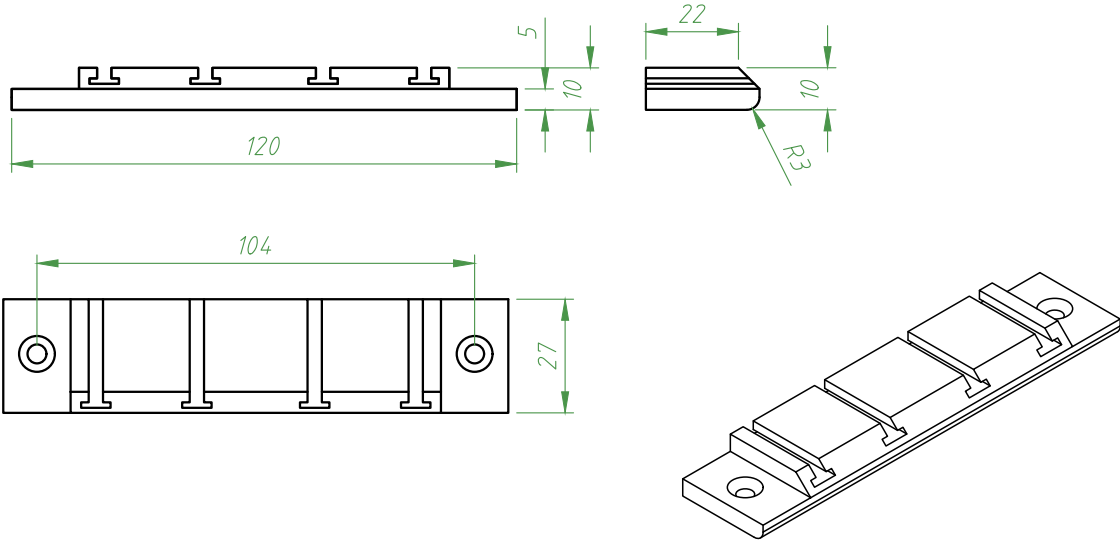
### Accessories (Aluminum Frame Cover Profile)



Code : 34025- 13020

Profile length = 6 meters

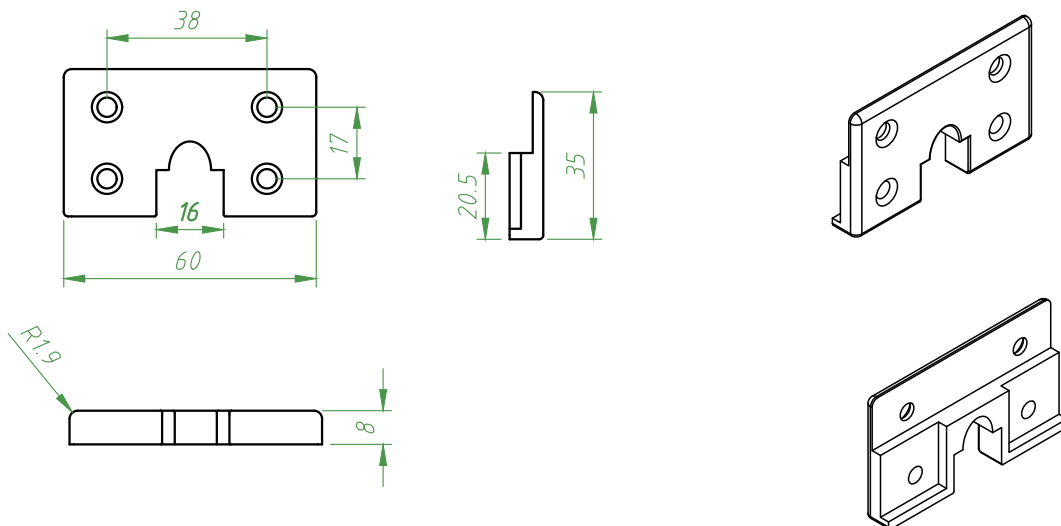
### Accessories (Insulated Single Rail Profile)



Code (White): 34009- 26020

Code (Brown):34009- 26021

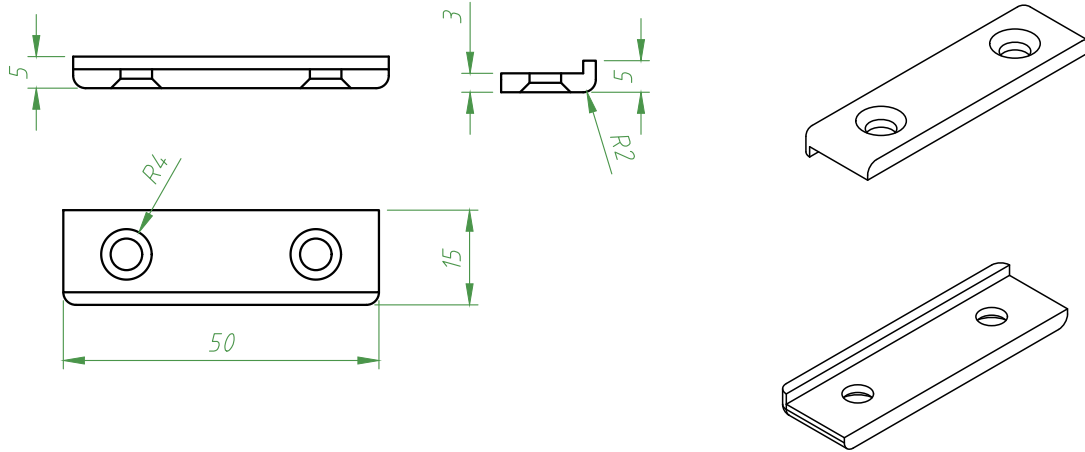
### Accessories (Cover Sash Profile)



Code (White): 34009- 40260

Code (Brown):34009- 40261

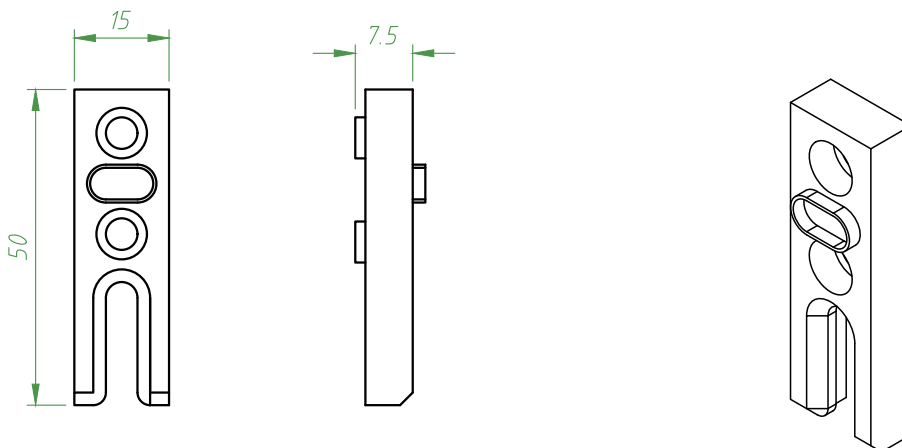
### Accessories (Sash Profile Guides)



Code (White): 34009- 36010

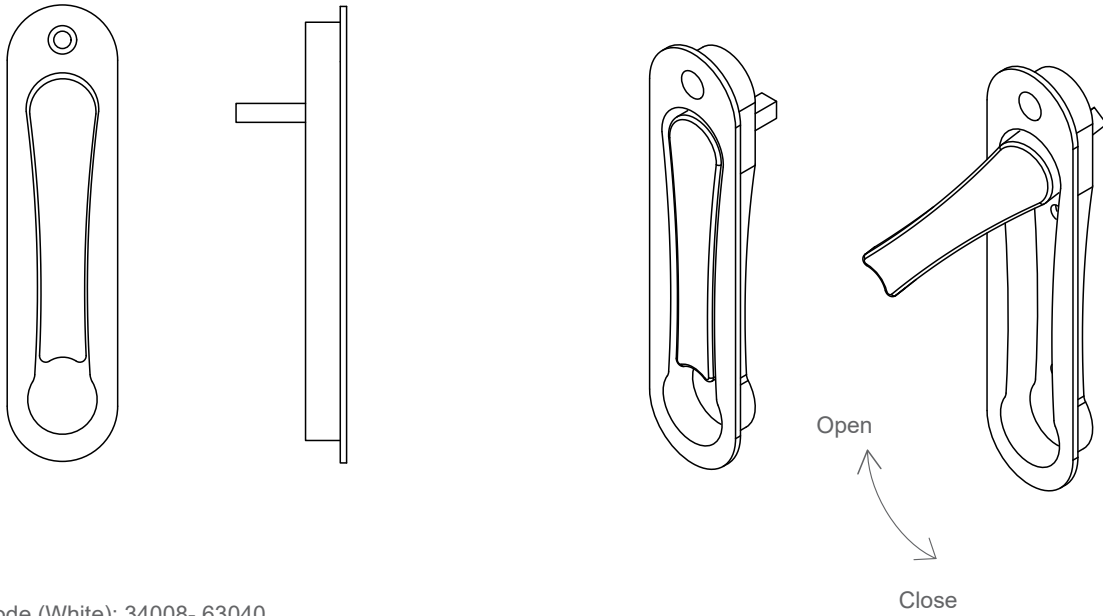
Code (Brown):34009- 36011

### Accessories (Locker)



Code : 34005- 14050

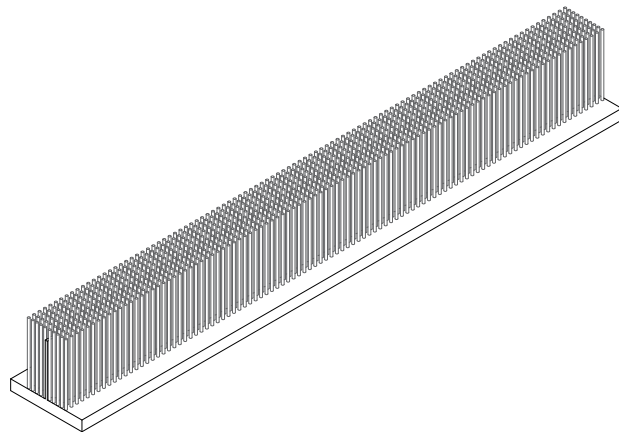
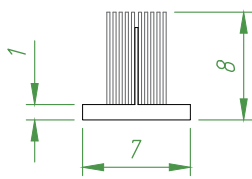
### Accessories (Window Handle / Hidden Type)



Code (White): 34008- 63040

Code (Brown):34008- 63041

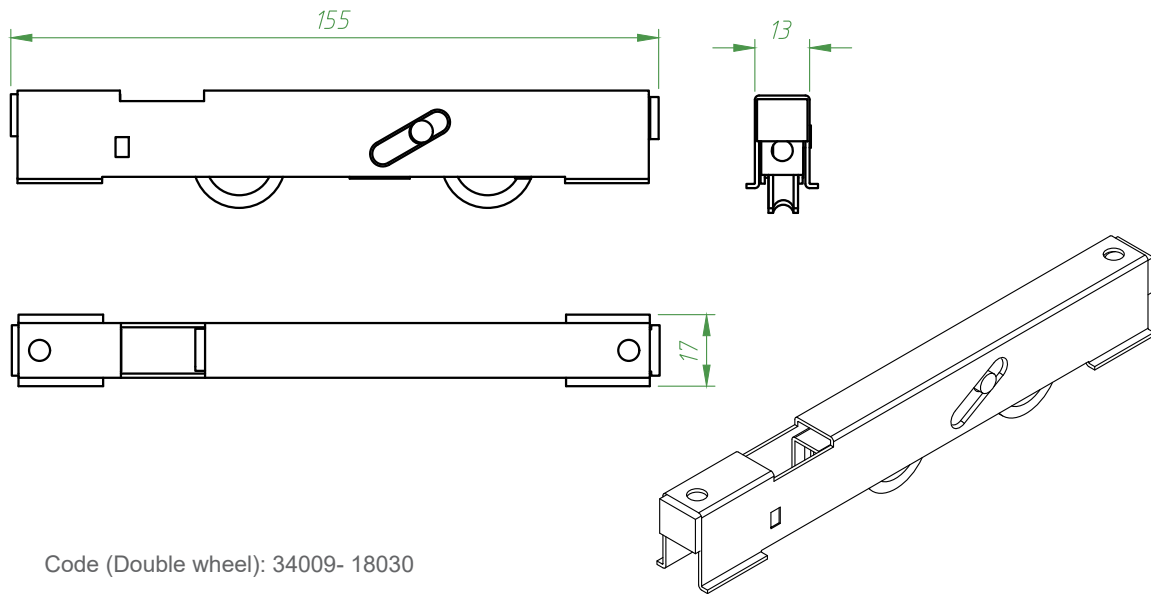
### Accessories (Pile Weather Strip)



Code : 34023- 46780

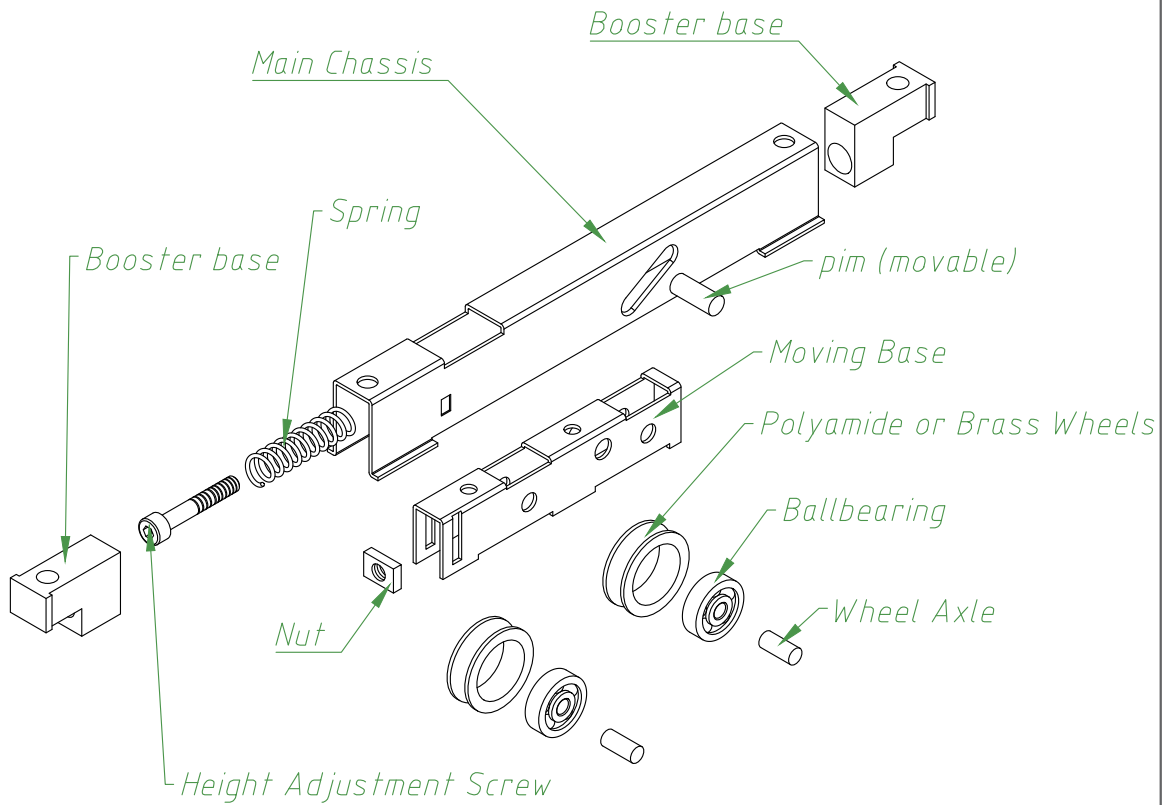


Accessories (Sliding Roller- Double Wheel)

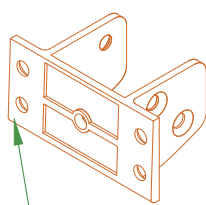
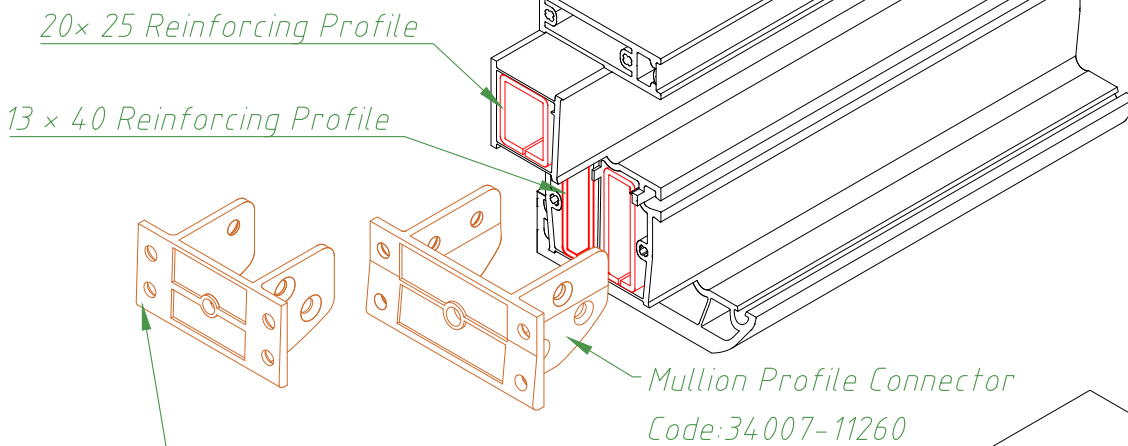
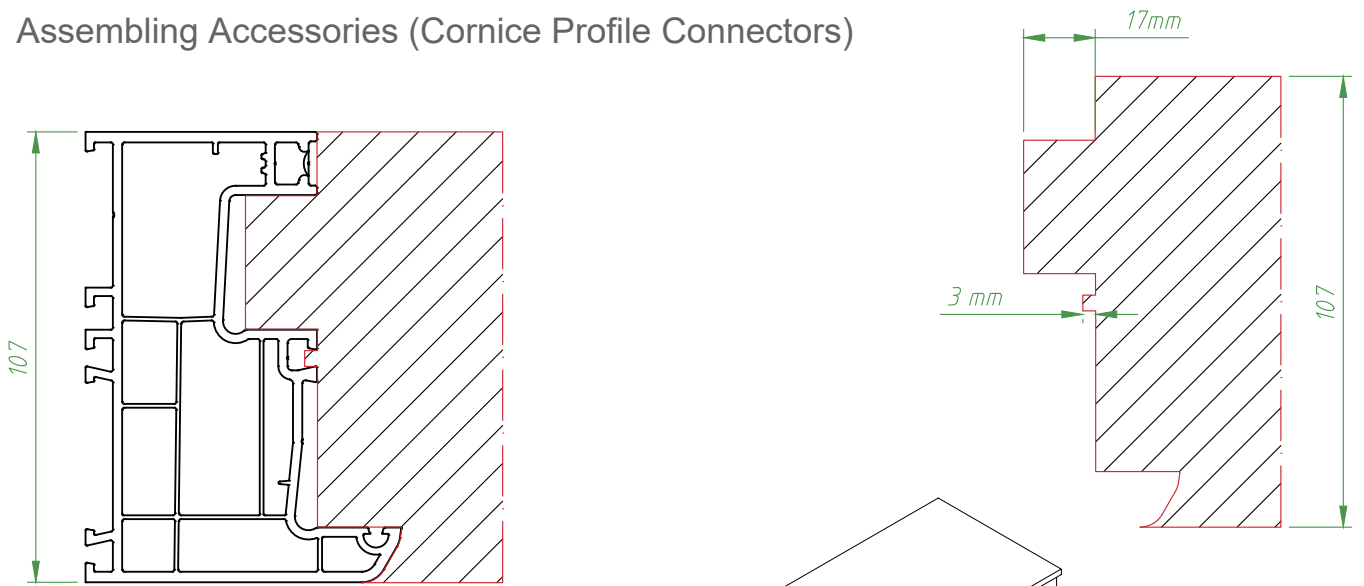


Code (Double wheel): 34009- 18030

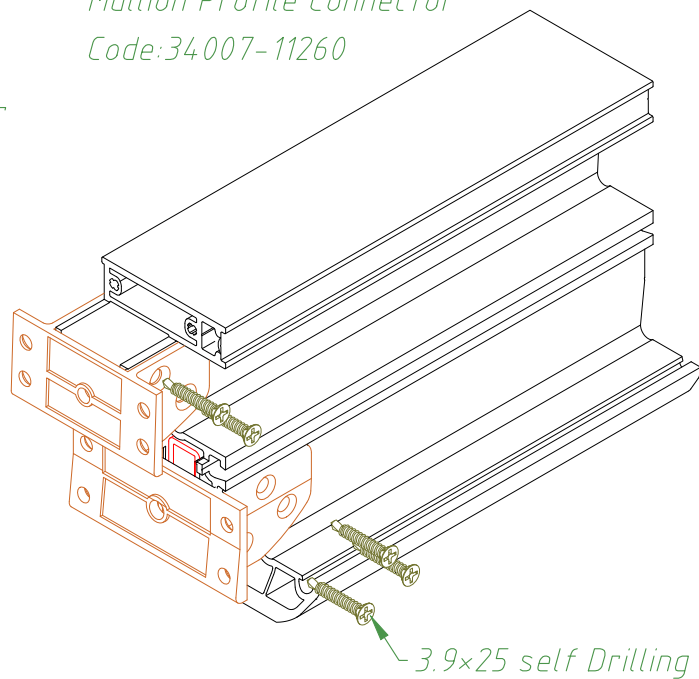
Code (Single wheel): 34009- 17030



Assembling Accessories (Cornice Profile Connectors)

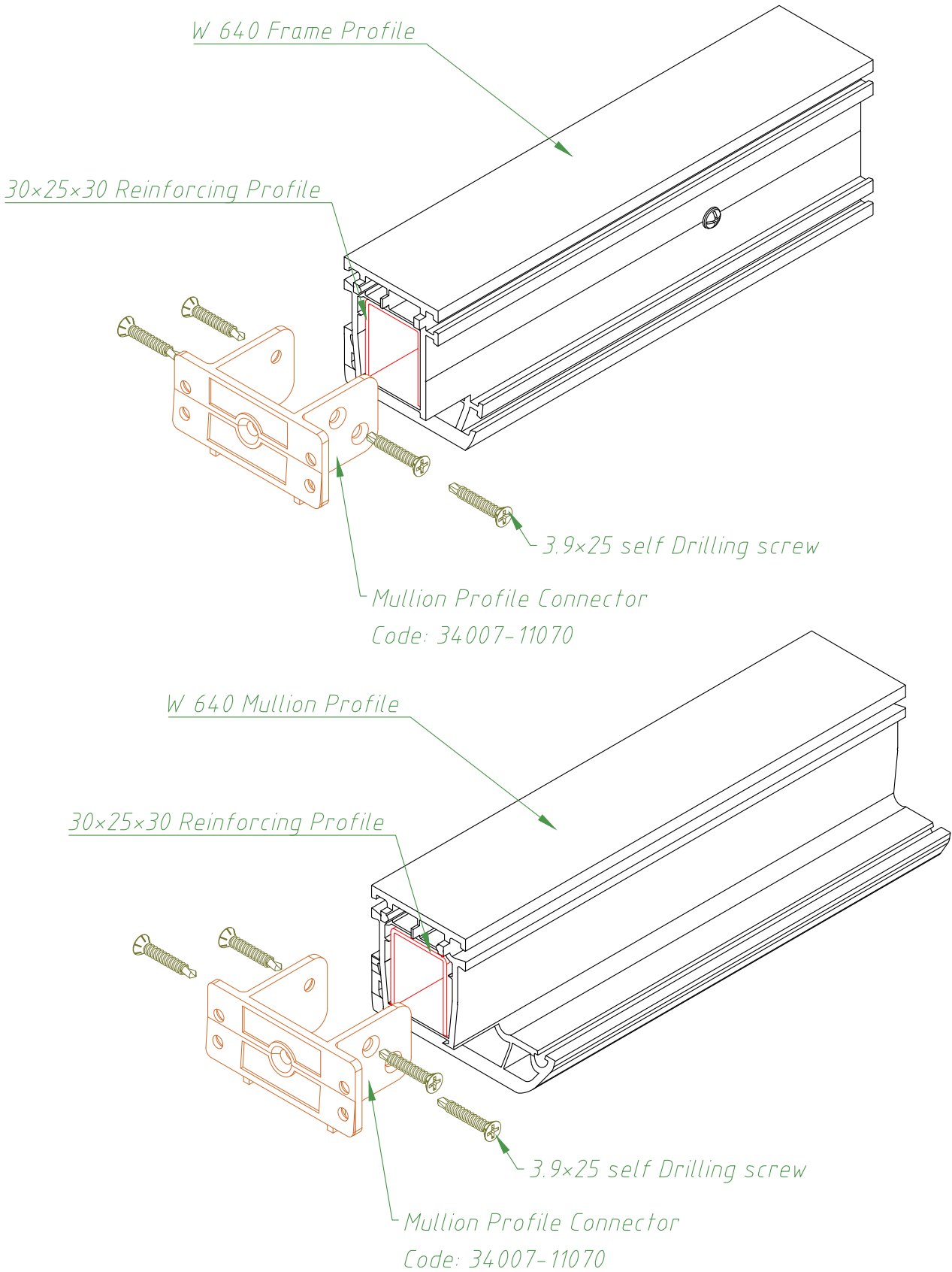


Mullion Profile Connector  
Code: 34 007-11260

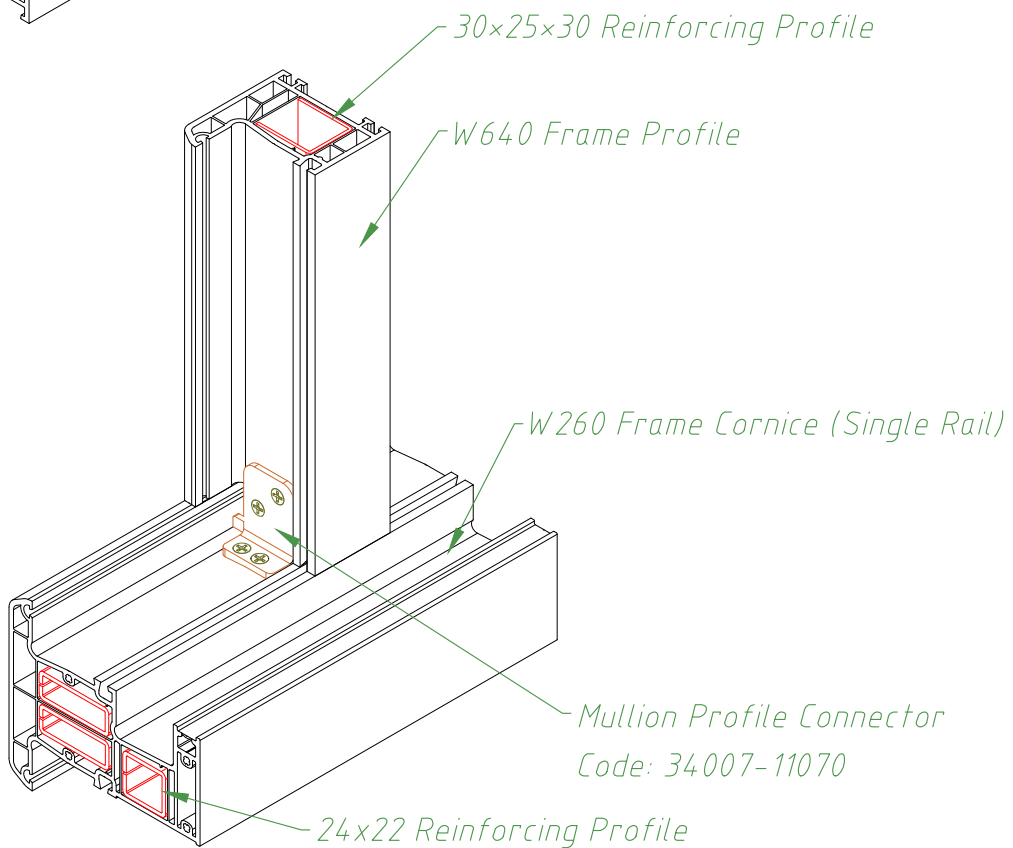
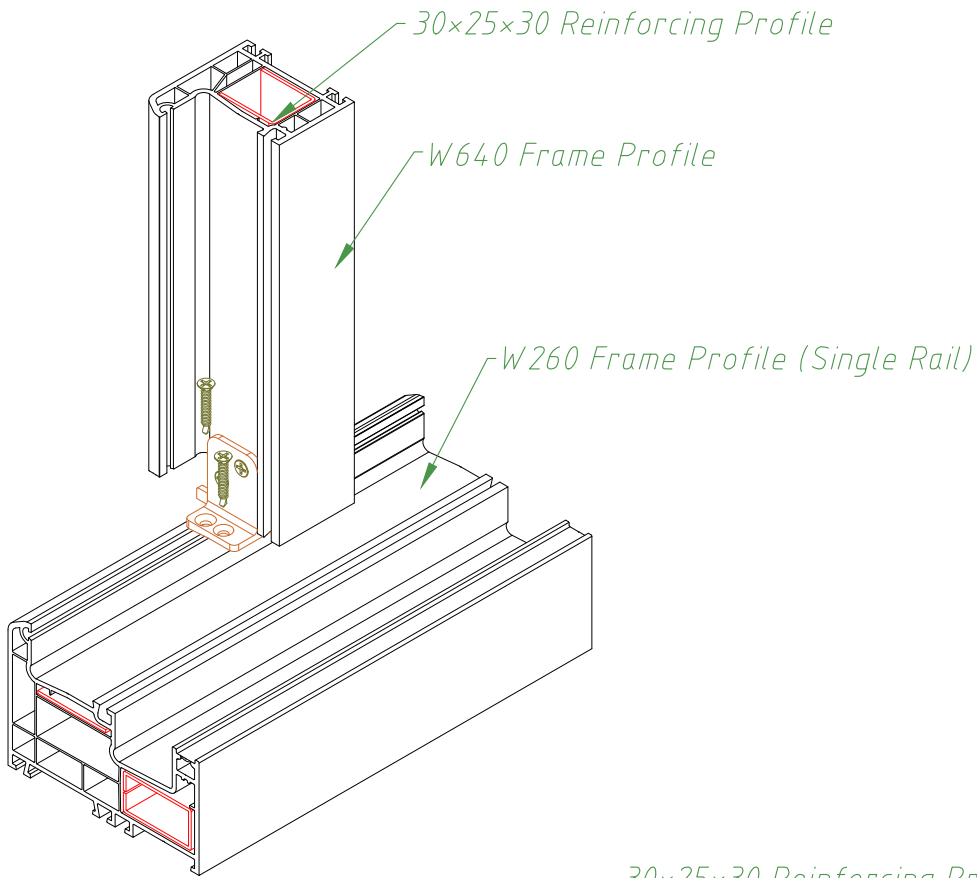


3.9x25 self Drilling screw

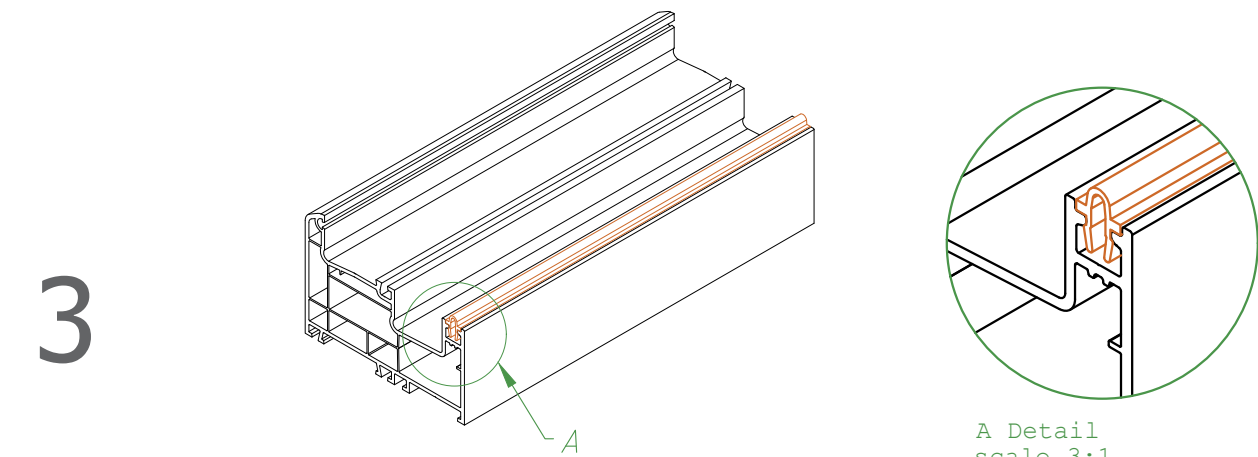
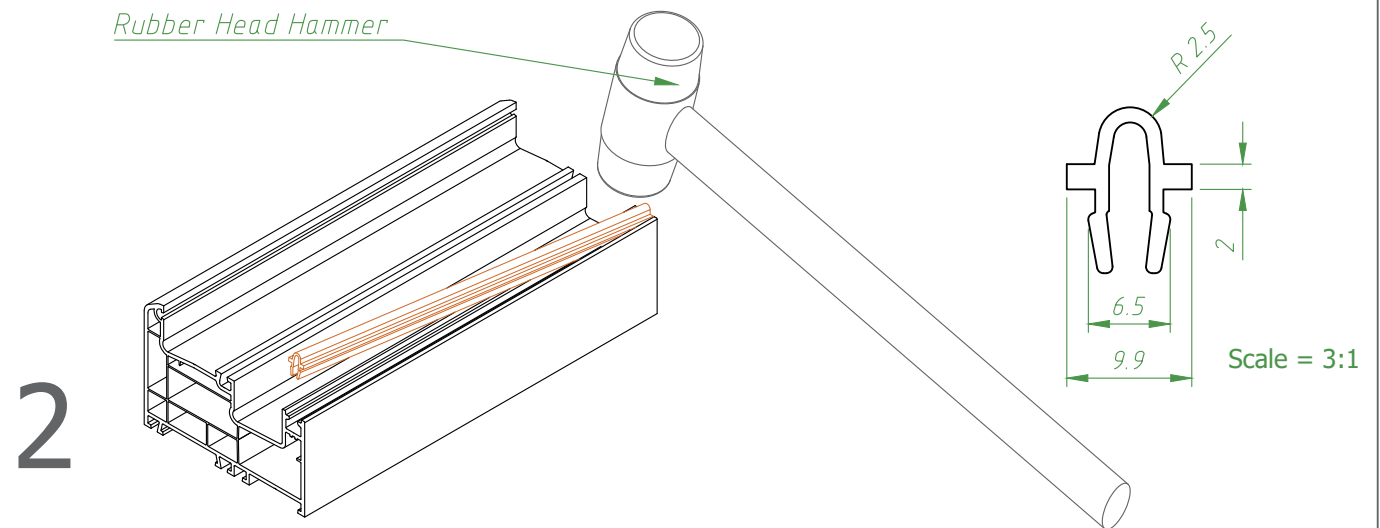
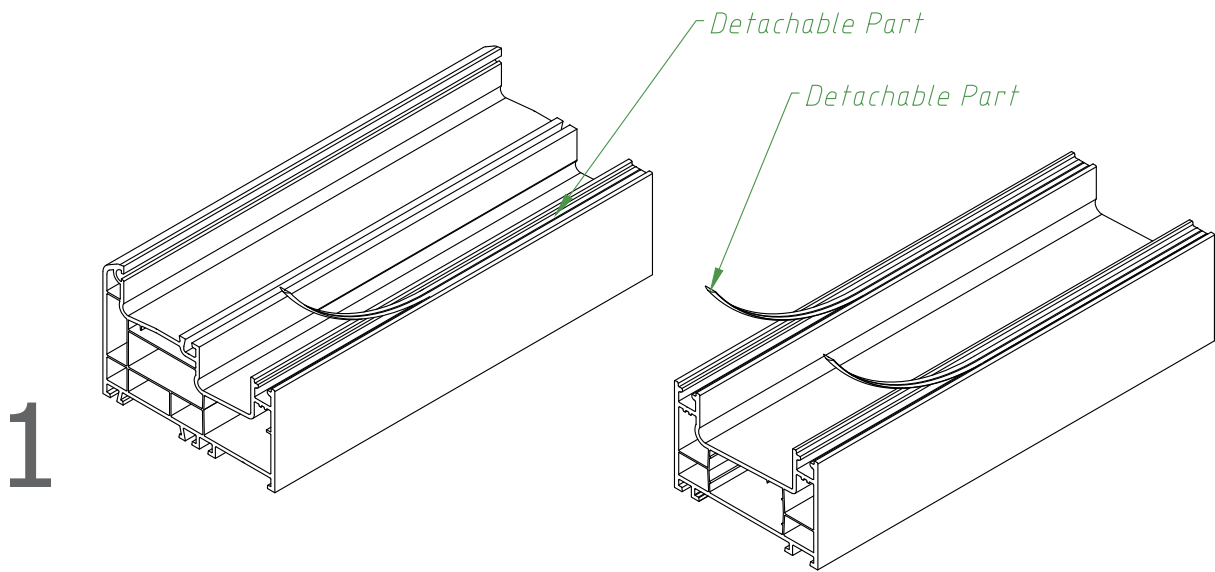
Assembling Accessories (Mullion Profile Connectors)



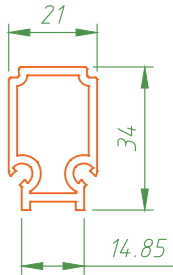
### Assembling Accessories ( Profile Connectors)



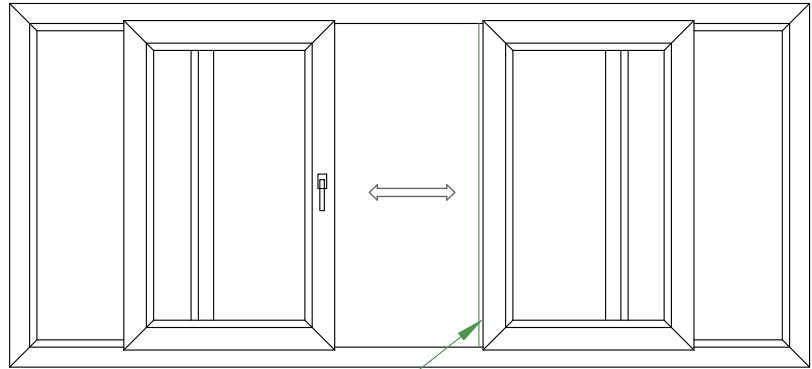
Assembling Accessories (Installing Sliding Aluminum Rail)



Assembling Accessories (Aluminum Adaptor)



Alm Adaptor profile  
 Code : 34025-12010 (White)  
 Code : 34025-12011 (Brown)



*Aluminum Adaptor Profile*

*Aluminum Adaptor Profile*  
 Code : 34025-12010

*Rubber Gasket*

*3.9x25 Self Drilling Screw*

*Locker*

*3.9x25 Self Drilling Screw*

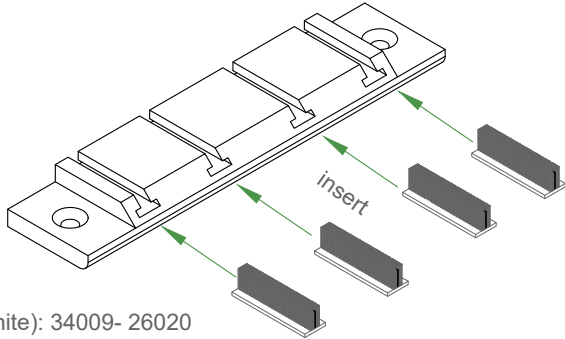
*30x30x30 Reinforcing Profile*

*4.8 x 60 Self Drilling Screw*

*4.8 x 60 Self Drilling Screw*

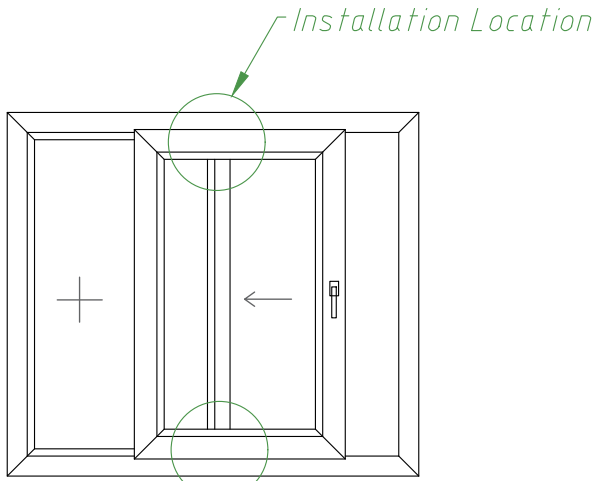
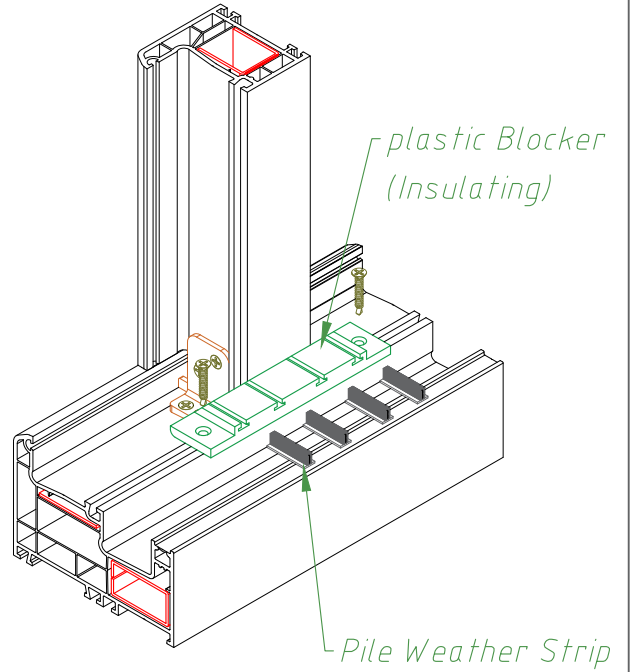
*Rubber Gasket*

Assembling Accessories ( Insulated Single Rail Profile)

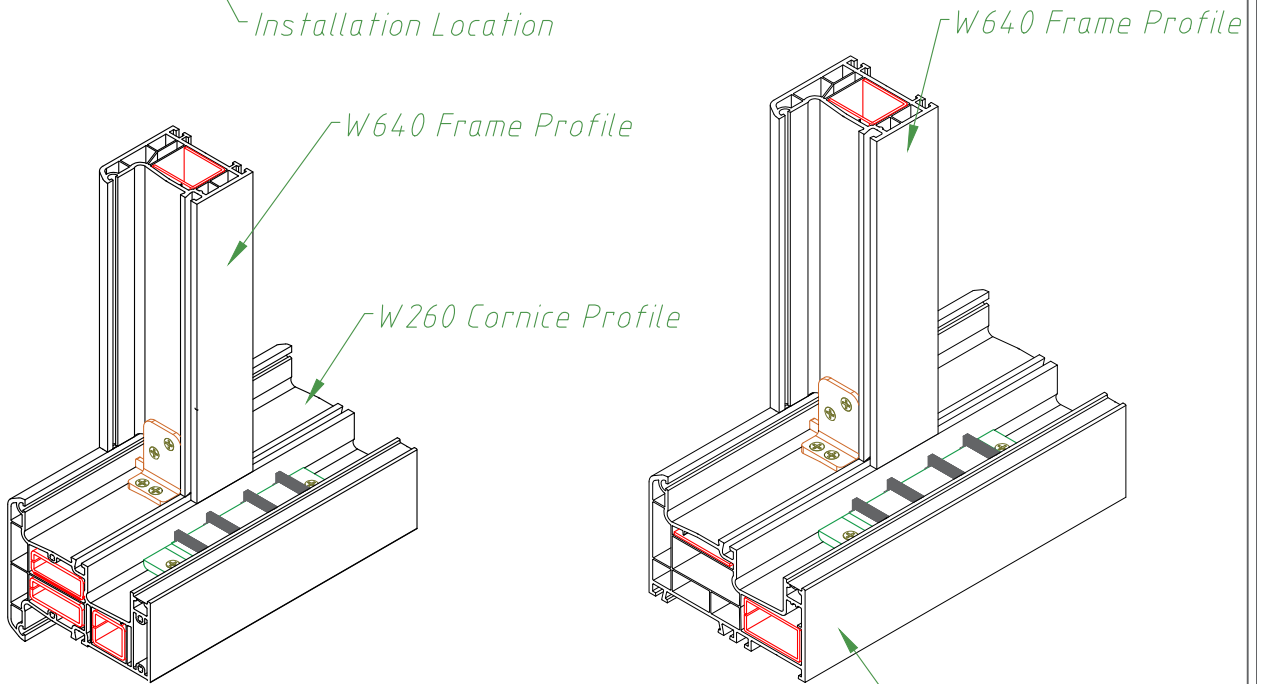


Code (White): 34009- 26020

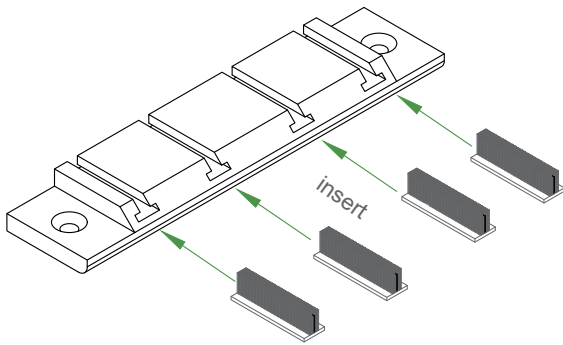
Code (Brown):34009- 26021



Installation Location



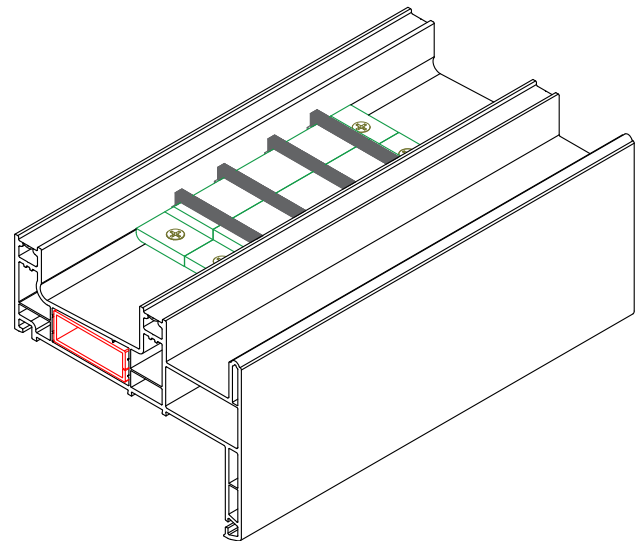
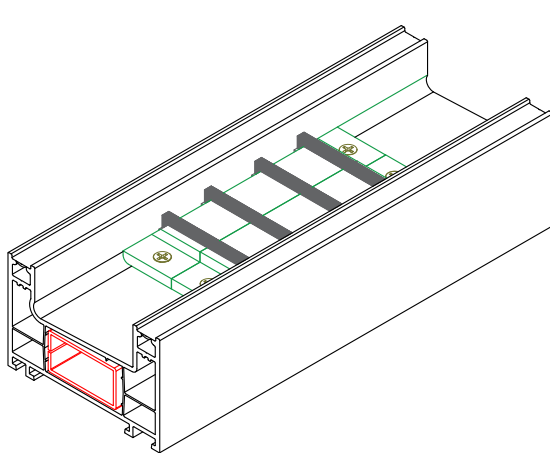
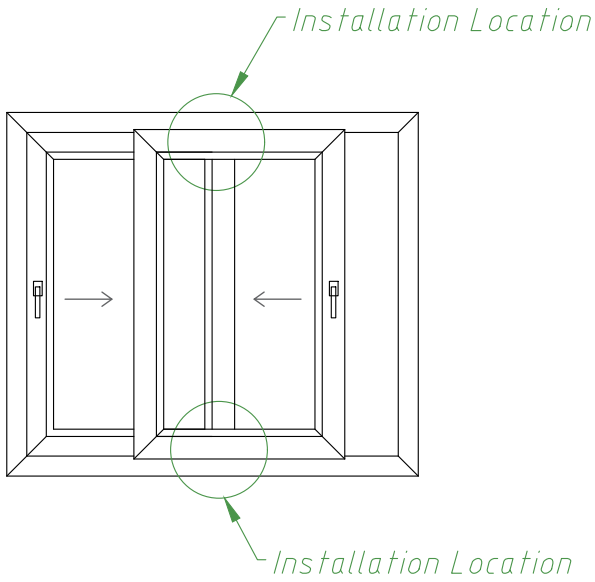
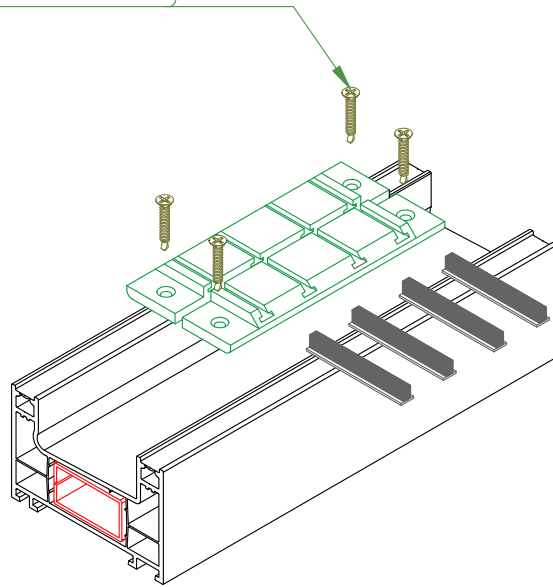
Assembling Accessories ( Insulated Double Rail Profile)



Code (White): 34009- 26020

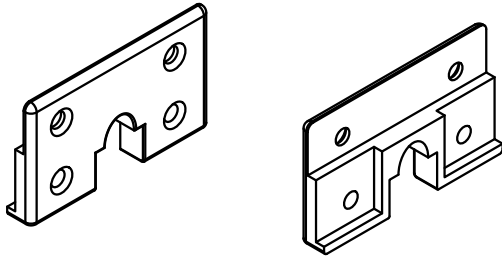
Code (Brown):34009- 26021

*3.9x25 Self Drilling Screw*



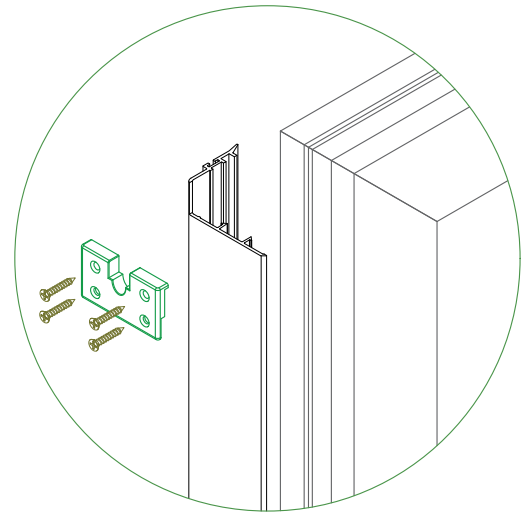
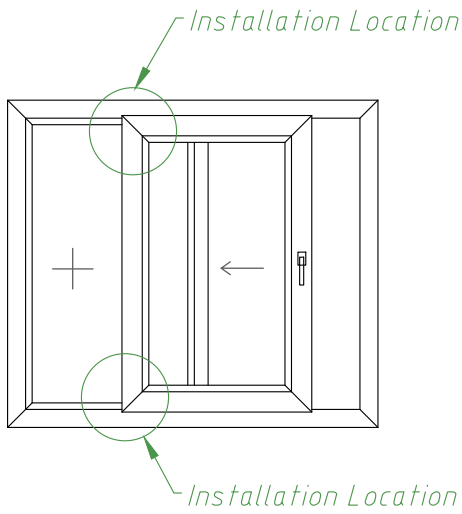


Assembling Accessories (Cover Sash Profile)

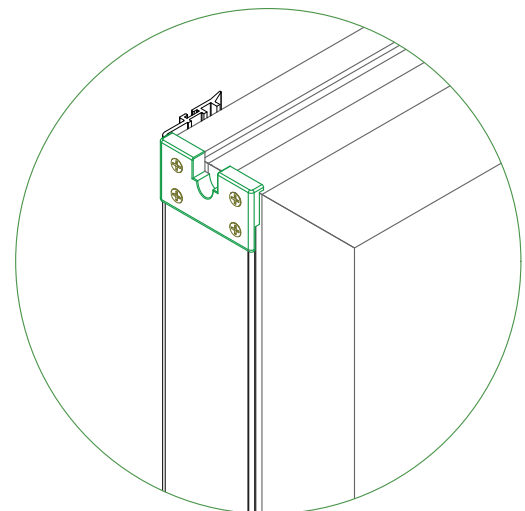
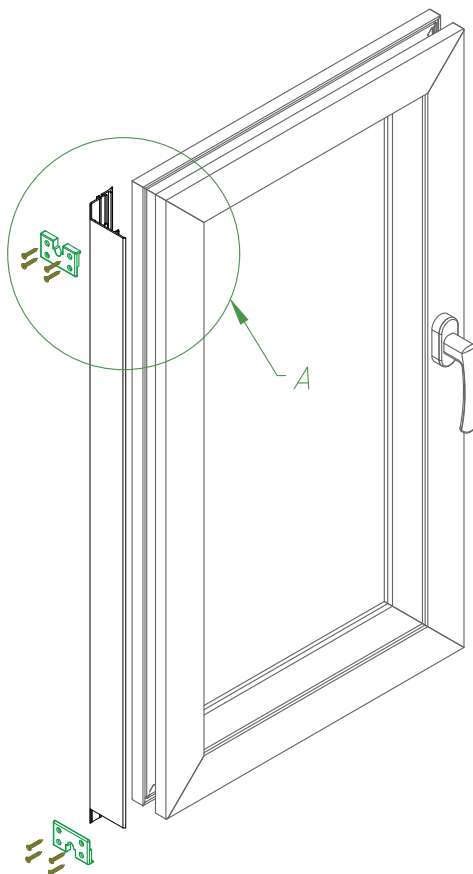


Code (White): 34009- 40260

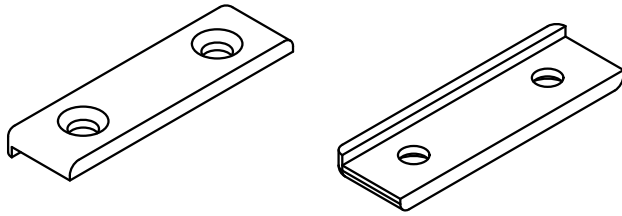
Code (Brown):34009- 40261



A Detail  
scale 3:1



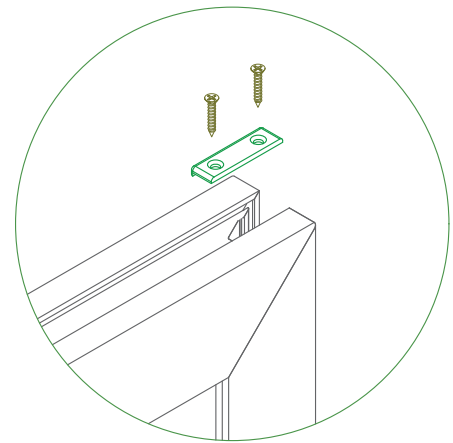
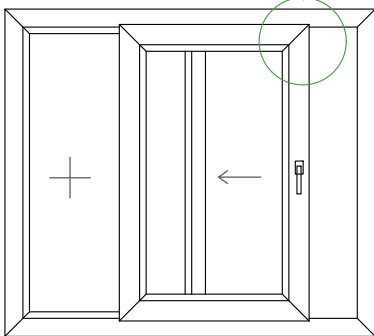
Assembling Accessories (Sash Profile Guides)



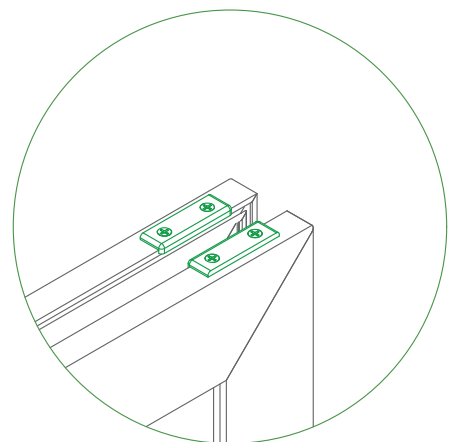
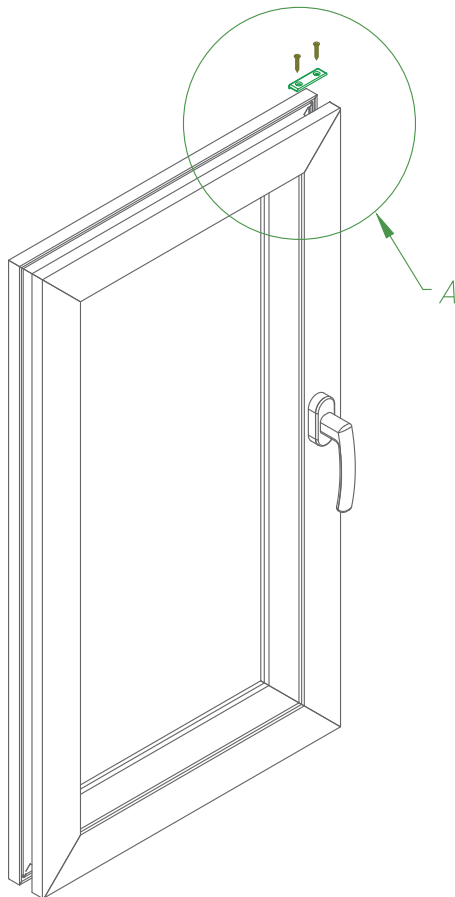
Code (White): 34009- 36010

Code (Brown):34009- 36011

*Installation Location*

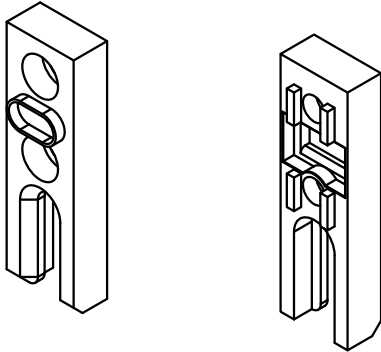


A Detail  
scale 3:1

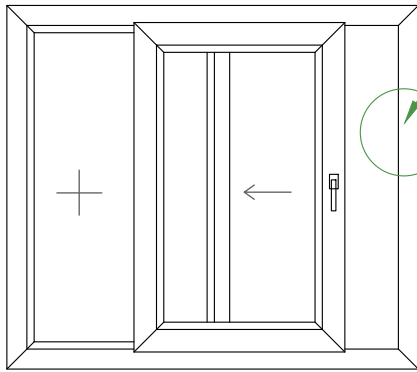


A Detail  
scale 3:1

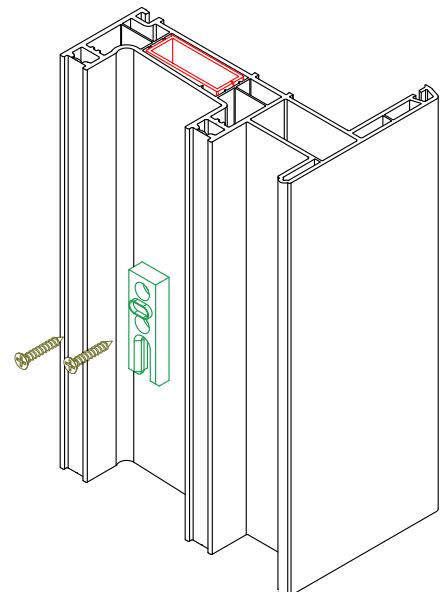
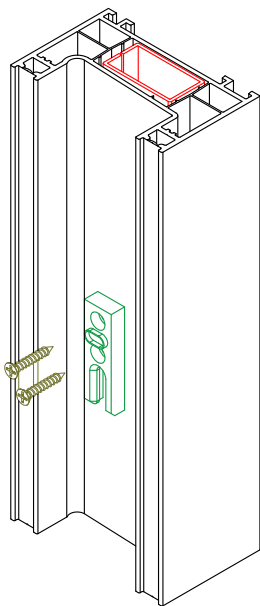
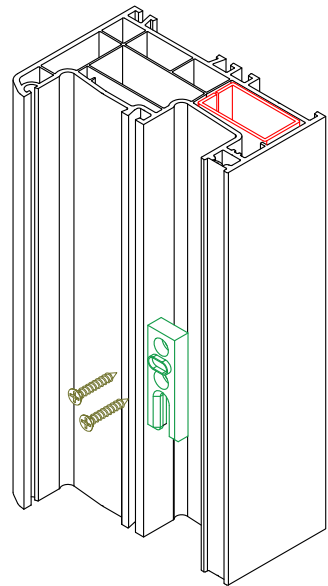
Assembling Accessories ( Locker)



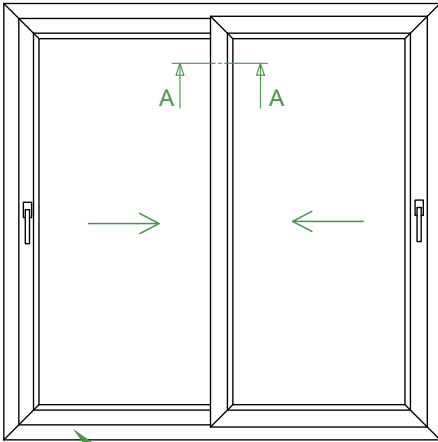
Code (Zinc): 34005- 14050



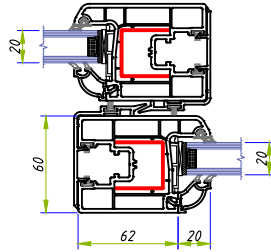
*Installation Location*



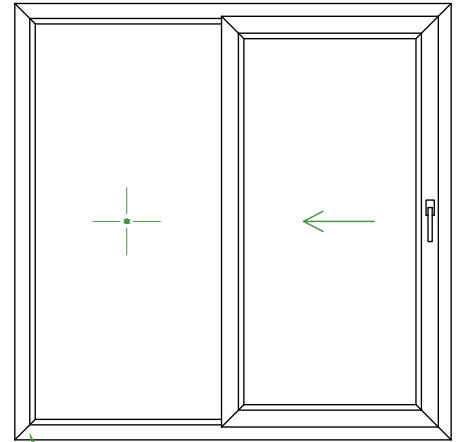
Sliding Window Designs



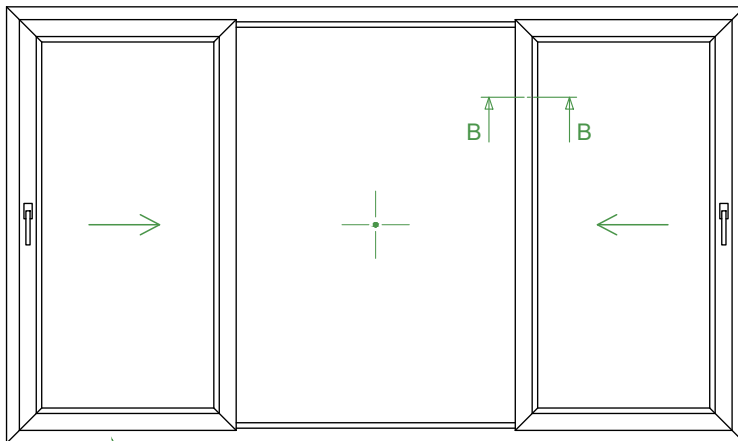
W 260 Sliding Frame (Double Rail)



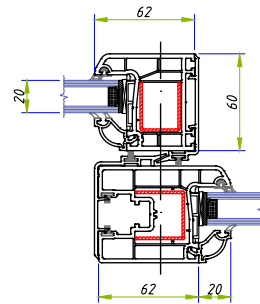
Section A-A



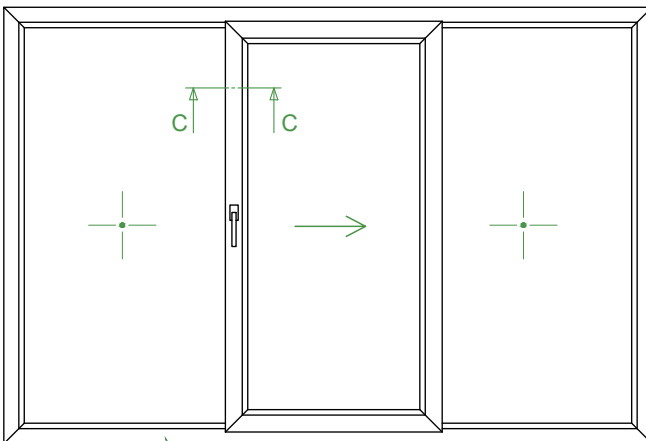
W260 Frame (Single Rail)



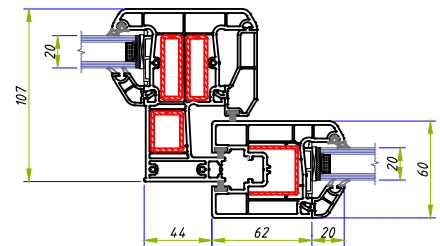
W260 Frame (Single Rail)



Section B-B

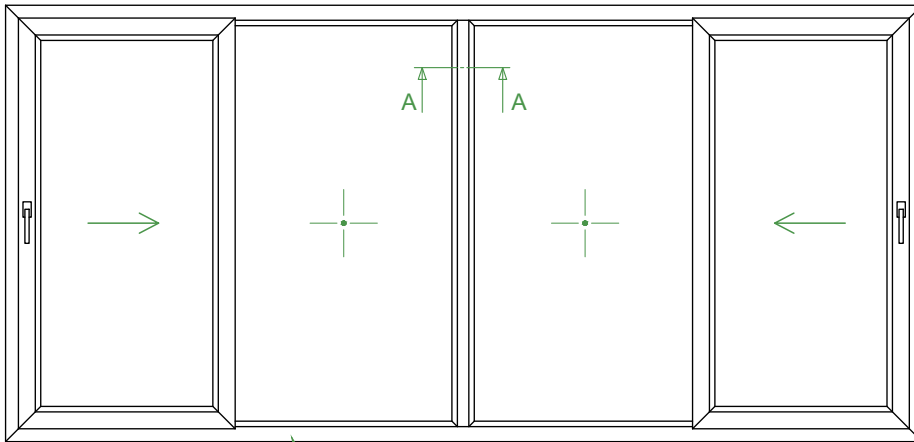


W260 Frame (Single Rail)

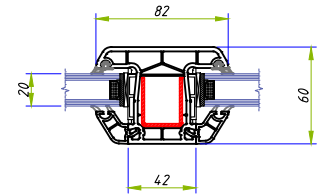


Section C-C

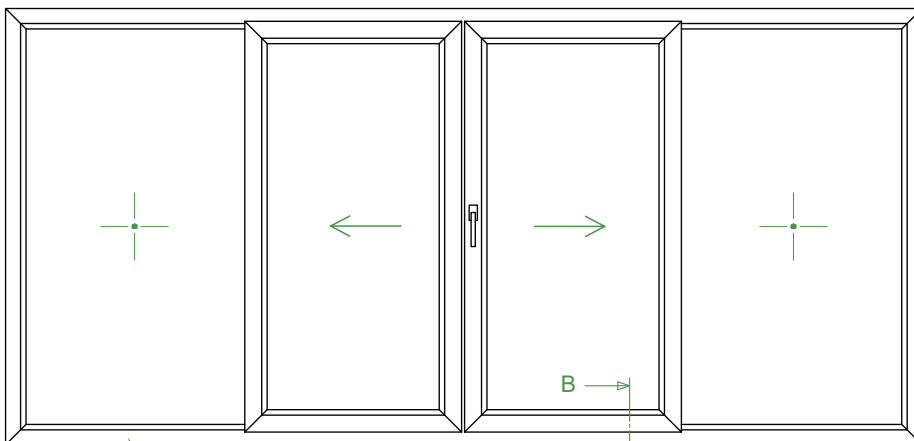
Sliding Window Designs



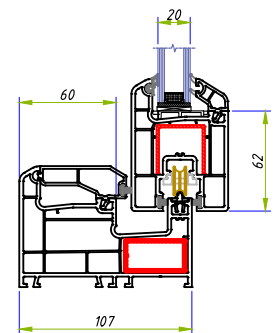
W260 Frame (Single Rail)



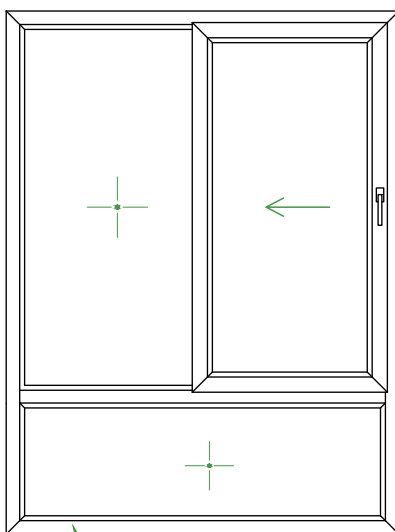
Section A-A



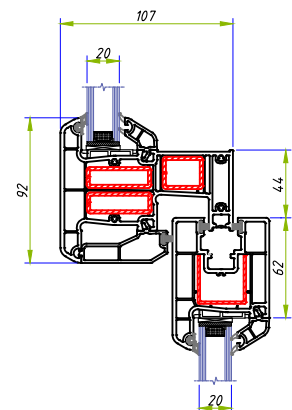
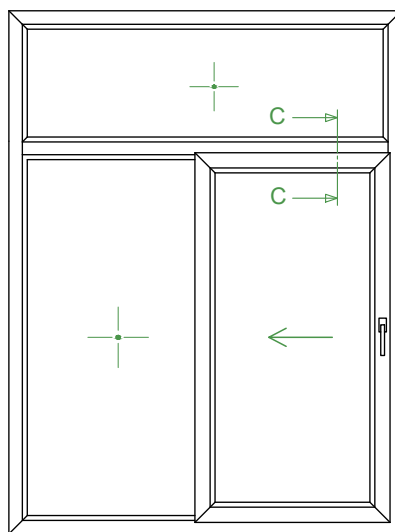
W260 Frame (Single Rail)



Section B-B

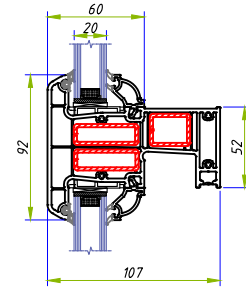
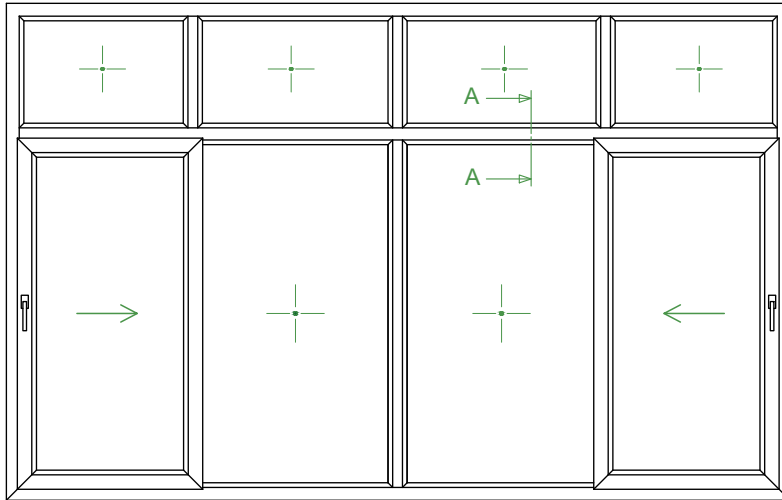


W260 Frame (Single Rail)

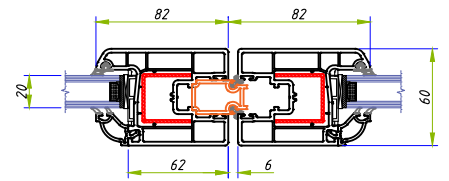
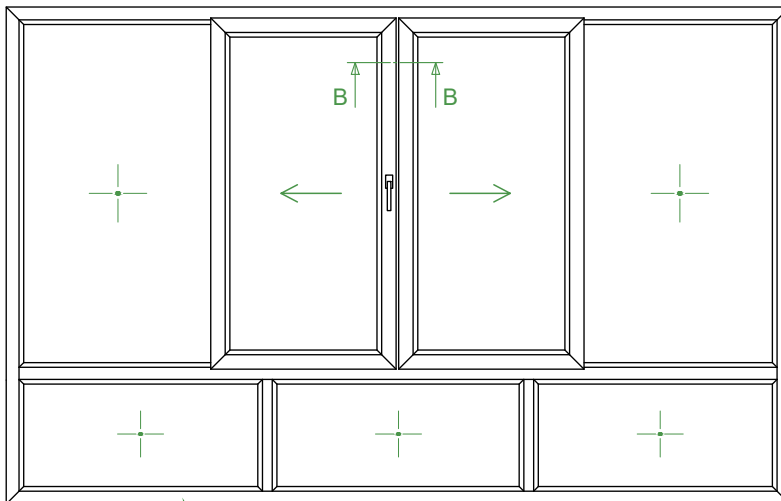


Section C-C

Sliding Window Designs

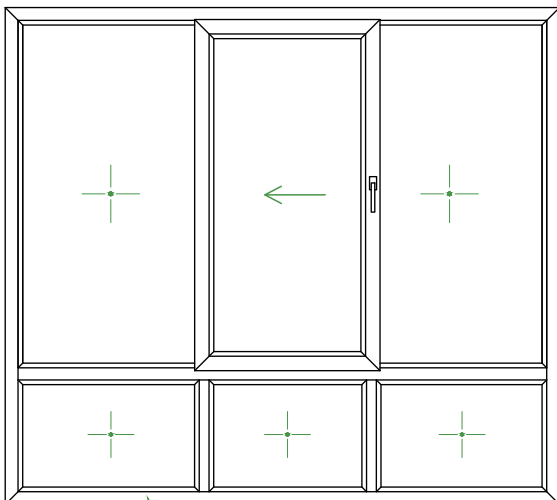


Section A-A

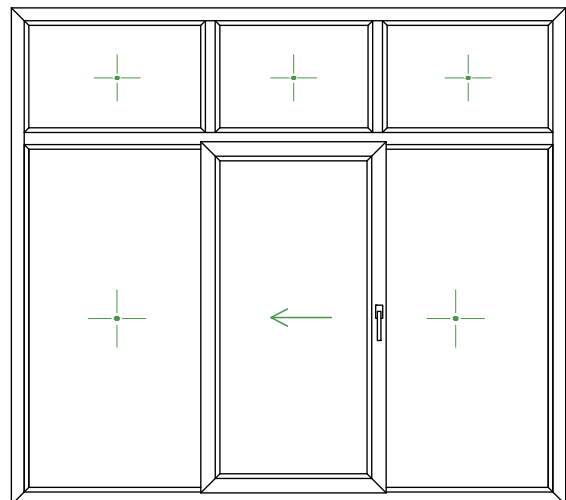


Section B-B

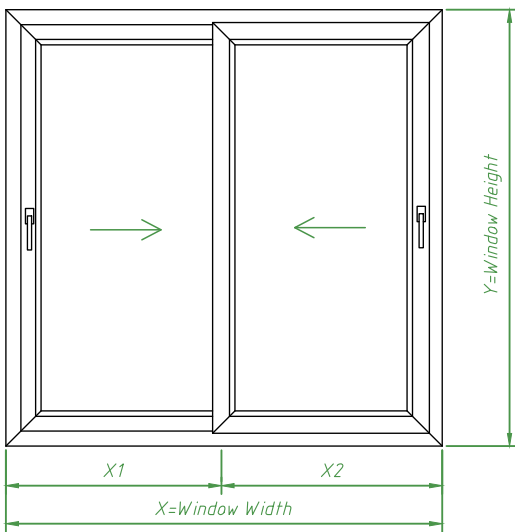
W260 Frame (Single Rail)



W260 Frame (Single Rail)



Technical Calculation

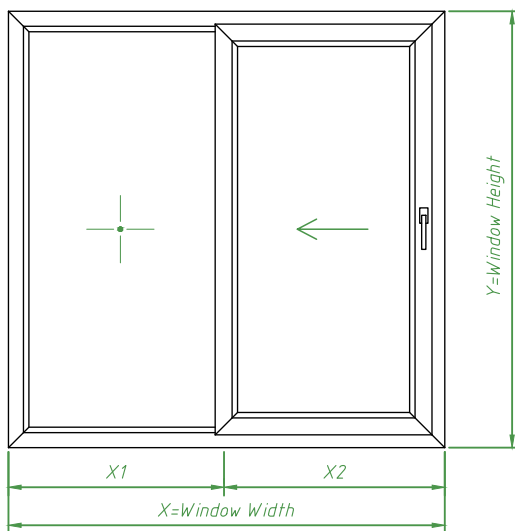


Calculations:

Frame Measure (Vertical) :  $Y + 6$   
 Frame Measure (Horizontal) :  $X + 6$

Sash Measure (Vertical) :  $Y - 88$   
 Sash Measure (Horizontal) :  $X1 - 1$   
 Sash Measure (Horizontal) :  $X2 - 1$

Cover Sash Measure (Vertical) :  $Y - 94$



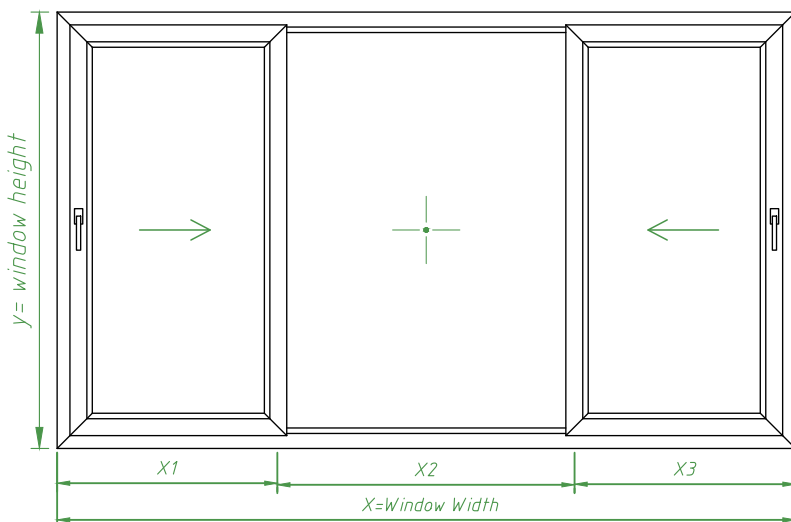
Calculations:

Frame Measure (Vertical) :  $Y + 6$   
 Frame Measure (Horizontal) :  $X + 6$

Sash Measure (Vertical) :  $Y - 88$   
 Sash Measure (Horizontal) :  $X2 - 3$

Mullion Measure (Vertical) :  $Y - 104$

Cover Sash Measure (Vertical) :  $Y - 94$   
 Cover Frame Measure (Vertical) :  $Y - 110$



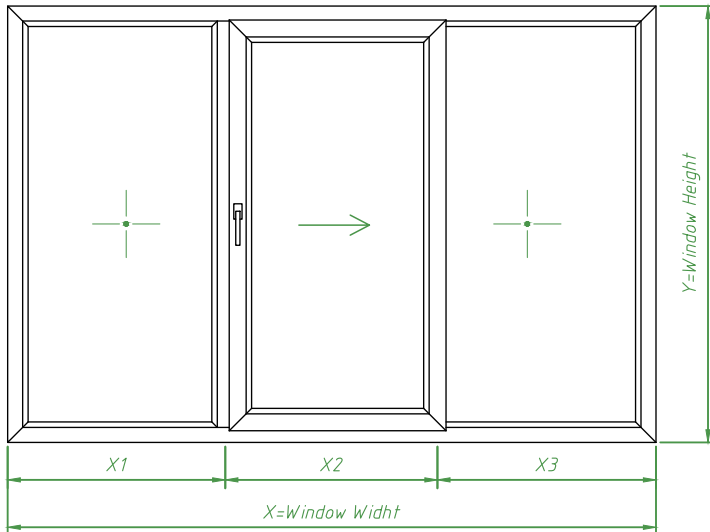
Calculations:

Frame Measure (Vertical) :  $Y + 6$   
 Frame Measure (Horizontal) :  $X + 6$

Sash Measure (Vertical) :  $Y - 88$   
 Sash Measure (Horizontal) :  $X1 - 3$   
 Sash Measure (Horizontal) :  $X3 - 3$

Mullion Measure (Vertical) :  $Y - 104$

### Technical Calculation



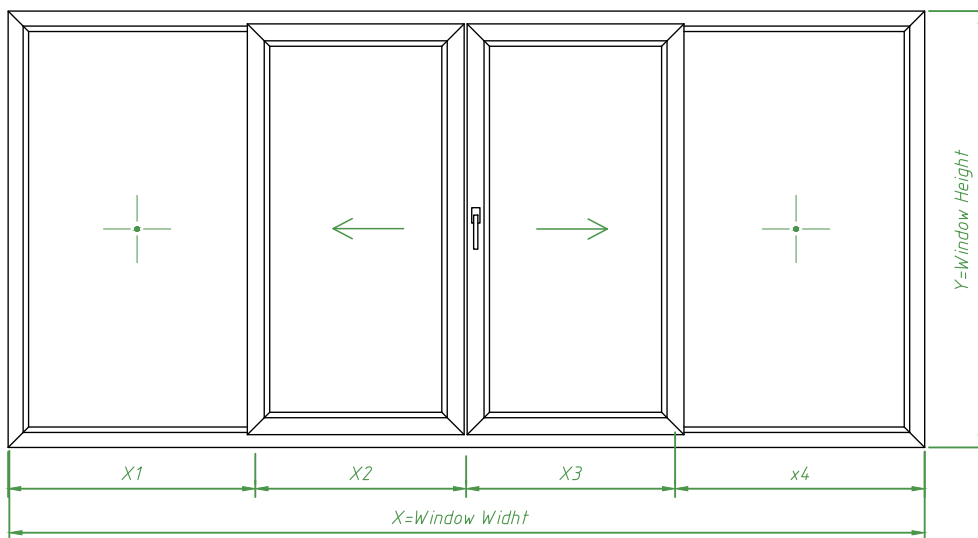
Calculations:

Frame Measure (Vertical) :  $Y + 6$   
 Frame Measure (Horizontal) :  $X + 6$

Sash Measure (Vertical) :  $Y - 88$   
 Sash Measure (Horizontal) :  $X2 + 26$

Mullion Measure (Vertical) :  $Y - 104$   
 (W640 Frame Profile)

Mullion Measure (Vertical) :  $Y - 76$   
 (W260 Cornice Profile)



Calculations:

Frame Measure (Vertical) :  $Y + 6$   
 Frame Measure (Horizontal) :  $X + 6$

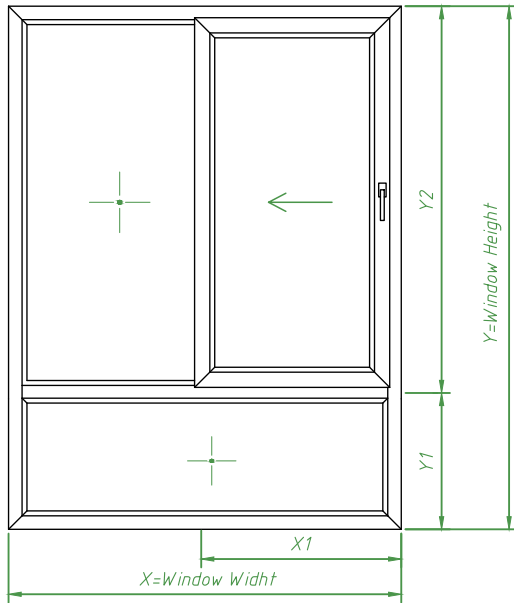
Sash Measure (Vertical) :  $Y - 88$   
 Sash Measure (Horizontal) :  $X2 + 41$

Mullion Measure (Vertical) :  $Y - 104$   
 (W640 Frame Profile)

ALM Adaptor Measure (Vertical) :  $Y - 117$



Technical Calculation



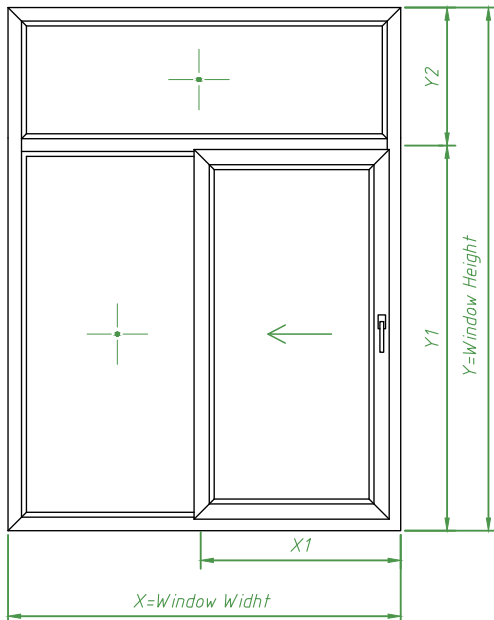
Calculations:

Frame Measure (Vertical) :  $Y + 6$   
 Frame Measure (Horizontal) :  $X + 6$

Sash Measure (Vertical) :  $Y2 - 59$   
 Sash Measure (Horizontal) :  $X1 - 3$

Mullion Measure (Vertical) :  $Y2 - 75$

Mullion Measure (Horizontal) :  $X - 76$



Calculations:

Frame Measure (Vertical) :  $Y + 6$   
 Frame Measure (Horizontal) :  $X + 6$

Sash Measure (Vertical) :  $Y1 - 59$   
 Sash Measure (Horizontal) :  $X1 - 3$

Mullion Measure (Vertical) :  $Y2 - 75$

Mullion Measure (Horizontal) :  $X - 76$