

# TECHNICAL CATALOG

- □ TW 630
- □ TW 250

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 TW 630 and TW 250 profiles 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 0.85m2, grade C/W, for the UPVC sash profile is equal to 0.79 m2, grade C/W, 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.

# TECHNOWN UPVC WINDOWS AND DOORS SYSTEMS

#### UPVC PROFILES SYSTEM OF TECHNOWIN

- 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 rubber and without rubber.
- 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:

All the moving components should be lubricated by appropriate lubricants.

Seals must be check on 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).

Water evacuation grooves (grooves of rain water), must be checked, and if it is necessary, they should to be cleaned.

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. Wintech Multi-hole profiles, they provide excellent heat insulation. The rate of these profiles is 1.3Wt. /m.2

#### **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) 2and 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 not 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.

Technical Department 2024-09-30

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#### **Specification of Winopen UPVC Profiles:**

TECHNOWIN UPVC Windows are produced using high-quality PVC compound in the best structural condition. In the production of Winopen 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.

UPVC compound used in production: Adopen 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: >= 40 N/mm2

Elasticity of Modulus: >= 2500 N/mm2

Coeeficient of linear thermal expansion: 0.8\*10-4 K-1

Thermal conductivity: 0.16 W/mK

Specific resistance:  $1016 \Omega \text{ cm}$ 

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: 2.2 - 2.6 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

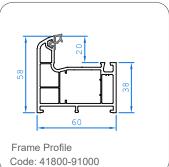
residential houses, high-rise buildings, schools, administrative

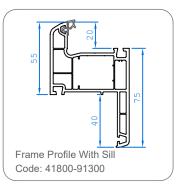
Main application areas: buildings, industrial buildings

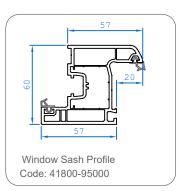
k = between 2.6 - 1.4 W/m2 K depending on the insulating glass

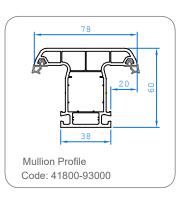
Coefficient of heat transfer: used.

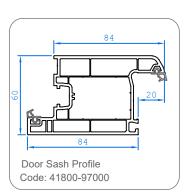






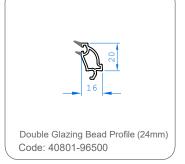




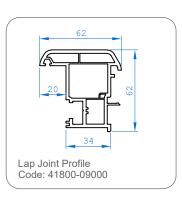


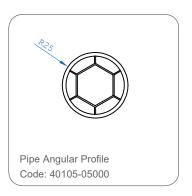


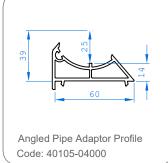


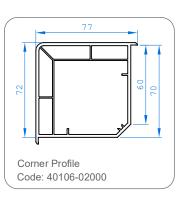


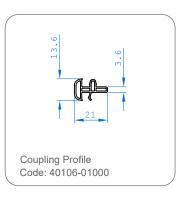


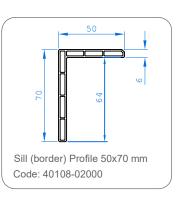


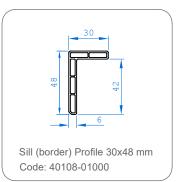


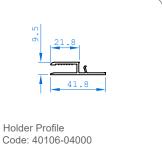


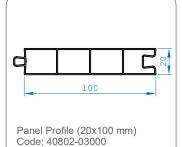


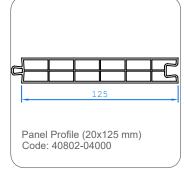


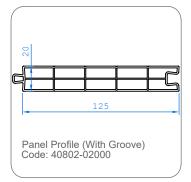






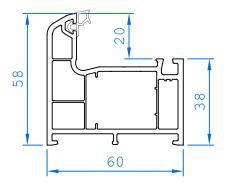


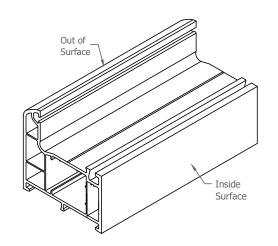






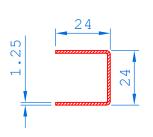
#### Frame profile



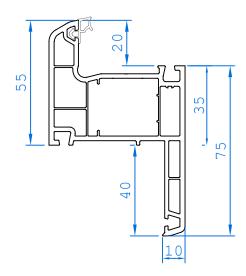


Quantity in the package:  $6 \times 6mt = 36 \text{ meters}$ 

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Code	White / With Rubber	•	41800- 91000	Lmainate	Lmainate		
	Brown Laminate / Golden Oak	0	*******	******	******		
file	Brown Laminate / Dark Oak	0	*******	******	******		
Profile	Brown Laminate / Charcoal Brown	0	******	******	******		
4	Gray Laminate / Wintech Gray	0	******	******	******		
O W	O Without Pubber With Pubber						

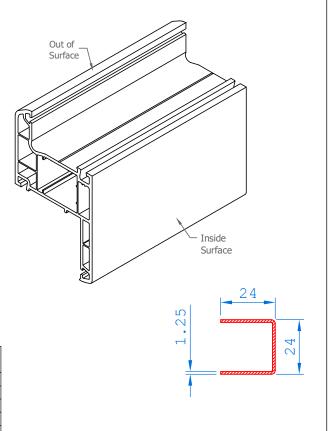


# Frame profile With Sill

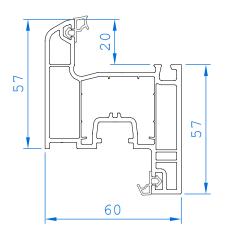


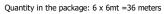
Quantity in the package:  $6 \times 6mt = 36 \text{ meters}$ 

4)	White / Without Rubber	0	41800- 01300	Inside	Outside	
Code	White / With Rubber	•	41800- 91300	Lmainate	Lmainate	
	Brown Laminate / Golden Oak	0	*******	*****	******	
ije	Brown Laminate / Dark Oak	0	*******	******	******	
Profile	Brown Laminate / Charcoal Brown	0	*******	******	******	
Ъ	Gray Laminate / Wintech Gray	0	******	******	******	
0 W	O Without Rubber   With Rubber					

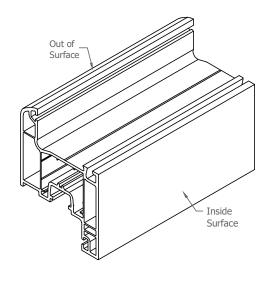


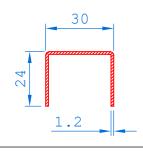
# Sash profile



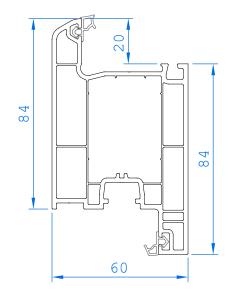


е	White / Without Rubber	0	41800- 05000	Inside Lmainate	Outside Lmainate			
ğ	White / With Rubber	•	41800- 95000	Lilialilate	Lilialilate			
$\circ$	Brown Laminate / Golden Oak	0	******	******	******			
rofile	Brown Laminate / Dark Oak	0	******	******	******			
Pro	Brown Laminate / Charcoal Brown	0	******	******	******			
_	Gray Laminate / Wintech Gray	0	******	******	******			
O W	O Without Pubbar With Pubbar							



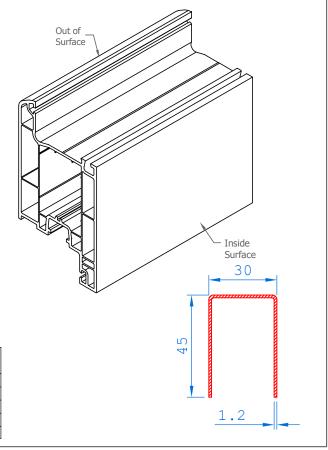


#### Door Sash profile

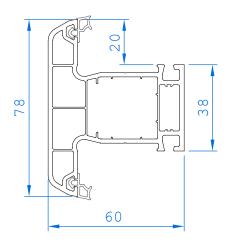


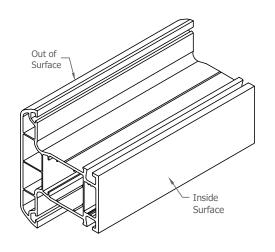
Quantity in the package:  $4 \times 6mt = 24 \text{ meters}$ 

۵,	White / Without Rubber	0	41800- 07000	Inside	Outside		
Code	White / With Rubber	•	41800- 97000	Lmainate	Lmainate		
	Brown Laminate / Golden Oak	0	******	******	******		
lije	Brown Laminate / Dark Oak	0	******	******	******		
Profile	Brown Laminate / Charcoal Brown	0	******	******	******		
-	Gray Laminate / Wintech Gray	0	******	******	******		
O W	O Without Rubber   With Rubber						



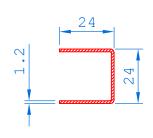
# Mullion profile



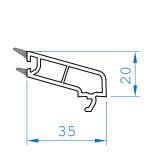


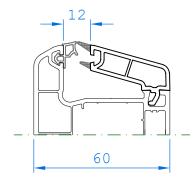
Quantity in the package:  $6 \times 6mt = 36$  meters

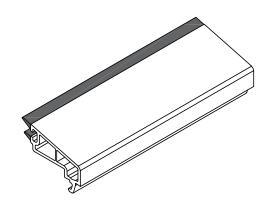
Code	White / Without Rubber	0	41800- 03000	Inside	Outside		
	White / With Rubber	•	41800- 93000	Lmainate	Lmainate		
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rofile	Brown Laminate / Dark Oak	0	*******	******	******		
Pr	Brown Laminate / Charcoal Brown	0	*******	******	******		
"	Gray Laminate / Wintech Gray	0	*******	******	******		
O W	O Without Rubber						



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





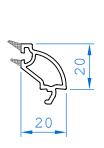


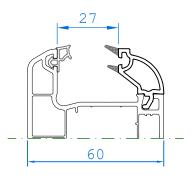
Quantity in the package: 20 x 6mt =120 meters

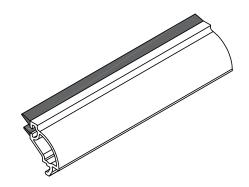
Code	White / Without Rubber	0	******	Inside	Outside Lmainate		
	White / With Rubber	•	40801- 96400	Lmainate			
	Brown Laminate / Golden Oak	•	*******	******	******		
rofile	Brown Laminate / Dark Oak	•	*******	******	******		
임	Brown Laminate / Charcoal Brown	•	*******	******	******		
"	Gray Laminate / Wintech Gray	•	******	******	******		
O W	O Without Rubber   With Rubber						



# Double Glazing Bead Profile (20 mm)



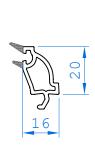


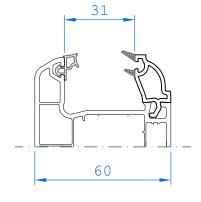


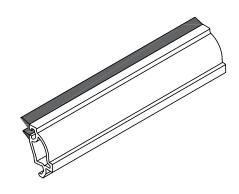
Quantity in the package:  $30 \times 6mt = 180 \text{ meters}$ 

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	White / With Rubber	•	40801- 96600	Lmainate		
	Brown Laminate / Golden Oak	•	******	******	******	
Profile	Brown Laminate / Dark Oak	•	******	******	******	
잁	Brown Laminate / Charcoal Brown	•	******	******	******	
-	Gray Laminate / Wintech Gray	•	*******	******	******	
O W	O Without Rubber   With Rubber					

#### Double Glazing Bead Profile (24 mm)





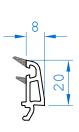


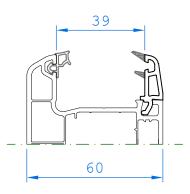
Quantity in the package: 30 x 6mt =180 meters

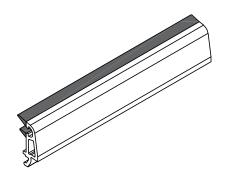
ode	White / Without Rubber	0	******	Inside	Outside Lmainate		
	White / With Rubber	•	40801- 96500	Lmainate			
10	Brown Laminate / Golden Oak	•	******	******	******		
Profile	Brown Laminate / Dark Oak	•	*******	******	******		
은	Brown Laminate / Charcoal Brown	•	*******	******	******		
1"	Gray Laminate / Wintech Gray	•	*******	******	******		
O 14	O Without Dubban						



# Triple Glazing Bead Profile (32 mm)



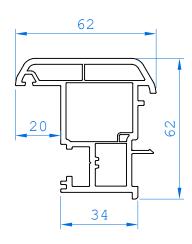




Quantity in the package:  $30 \times 6mt = 180 \text{ meters}$ 

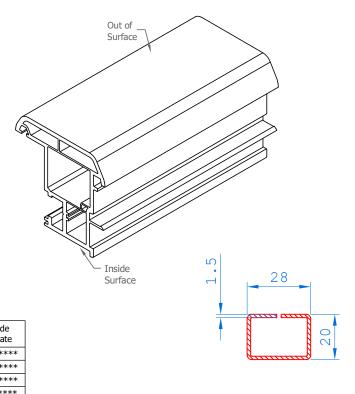
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	White / With Rubber	•	40801- 96300	Lmainate		
	Brown Laminate / Golden Oak	•	*******	******	******	
lie l	Brown Laminate / Dark Oak	•	*******	******	******	
Profile	Brown Laminate / Charcoal Brown	•	*******	******	******	
	Gray Laminate / Wintech Gray	•	******	******	******	
O W	O Without Rubber  With Rubber					

#### Lap Joint Profile

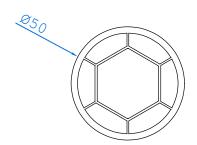


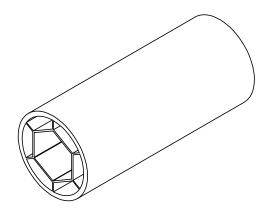
Quantity in the package:  $6 \times 6mt = 36 \text{ meters}$ 

Code	White / Without Rubber White / With Rubber	<ul><li>•</li></ul>	41800- 09000 ******	Inside Lmainate	Outside Lmainate	
	Brown Laminate / Golden Oak	0	******	******	******	
Profile	Brown Laminate / Dark Oak	0	******	******	******	
요	Brown Laminate / Charcoal Brown	0	******	******	******	
۱"	Gray Laminate / Wintech Gray	0	*******	******	******	
O W	O Without Rubber O With Rubber					



# Pipe Profile



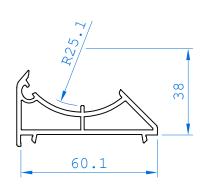


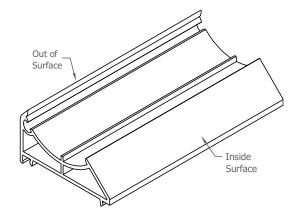
Quantity in the package:  $6 \times 6mt = 36 \text{ meters}$ 

	, , ,					
۵,	White / Without Rubber	0	40105- 05000	One side		
Profile Code	White / With Rubber	•	******	Lmainate *		
	Brown Laminate / Golden Oak	0	*******	******		
	Brown Laminate / Dark Oak	0	*******	******		
잁	Brown Laminate / Charcoal Brown	0	*******	******		
-	Gray Laminate / Wintech Gray	0	*******	******		
O W	O Without Rubber   With Rubber					



# Angled Pipe Adaptor Profile



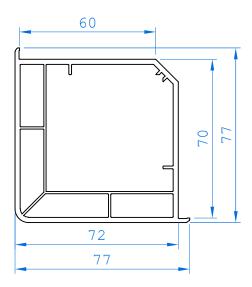


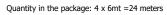
Quantity in the package: 12 x 6mt =72 meters

	White / Without Rubber	0	40105- 04000	Inside	Outside				
Code	White / With Rubber	•	******	Lmainate	Lmainate				
	Brown Laminate / Golden Oak	0	******	******	******				
lie Lie	Brown Laminate / Dark Oak	0	******	******	******				
Profile	Brown Laminate / Charcoal Brown	0	******	******	******				
"	Gray Laminate / Wintech Gray	0	******	******	******				
_ w	lithaut Dubbar Mith Dubbar		O Without Bubbar						

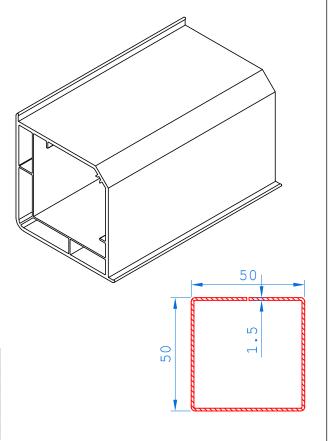


#### Corner Profile

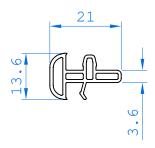




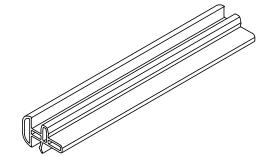
a)	White /	0	40106- 02000	Inside	Outside		
Code	White / With Rubber	•	******	Lmainate	Lmainate		
	Brown Laminate / Golden Oak	0	******	******	******		
Profile	Brown Laminate / Dark Oak	0	******	******	******		
۲o	Brown Laminate / Charcoal Brown	0	******	******	******		
_	Gray Laminate / Wintech Gray	0	******	******	******		
O W	O Without Pubber						



# Coupling Profile



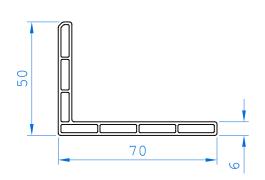
Scale= 1:1.5

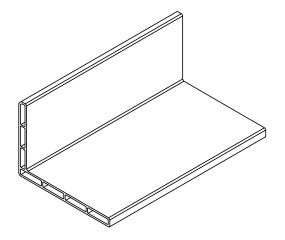


Quantity in the package:  $30 \times 6mt = 180 \text{ meters}$ 

4)	White / Without Rubber	0	40106- 01000	
Code	White / With Rubber	•	******	
	Brown / Without Laminate	0	******	
Profile	Gray / Without Laminate	0	******	
읻	*****		******	
_	*****	0	******	
O Without Rubber   With Rubber				

# Sill (border) Profile - 50x70 mm

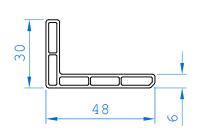


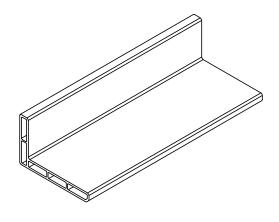


Quantity in the package: 12 x 6mt =72 meters

Code	White / Without Rubber White / With Rubber	<ul><li>•</li></ul>	40108- 02000 ******	Inside Lmainate	Outside Lmainate	
	Brown Laminate / Golden Oak	0	******	******	******	
Profile	Brown Laminate / Dark Oak	0	******	******	******	
인	Brown Laminate / Charcoal Brown	0	******	******	******	
-	Gray Laminate / Wintech Gray	0	******	******	******	
O W	O Without Rubber   With Rubber					

# Sill (border) Profile - 30x48 mm



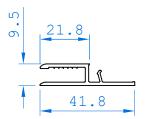


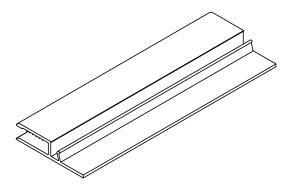
Quantity in the package: 12 x 6mt =72 meters

	۵,	White / Without Rubber	0	40108- 01000	Inside	Outside	
	Code	White / With Rubber	•	******	Lmainate	Lmainate	
		Brown Laminate / Golden Oak	0	******	******	******	
	file	Brown Laminate / Dark Oak	0	******	******	******	
	Profile	Brown Laminate / Charcoal Brown	0	******	******	******	
		Gray Laminate / Wintech Gray	0	******	******	******	
Ī	O Without Rubber  With Rubber						



#### Holder Profile

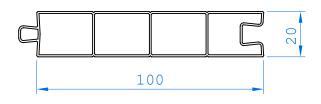


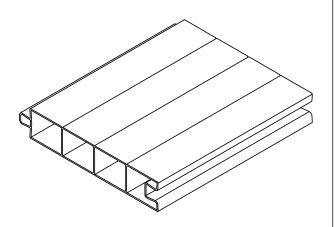


Quantity in the package: 20 x 6mt =120 meters

	White / Without Rubber	_	40106- 04000	
<u>o</u>	· · · · · · · · · · · · · · · · · · ·			
Code	White / With Rubber	•	******	
	Brown / Without Laminate	0	*******	
lie l	Gray / Without Laminate	0	******	
Profile	******		******	
	******		******	
O Without Rubber   With Rubber				

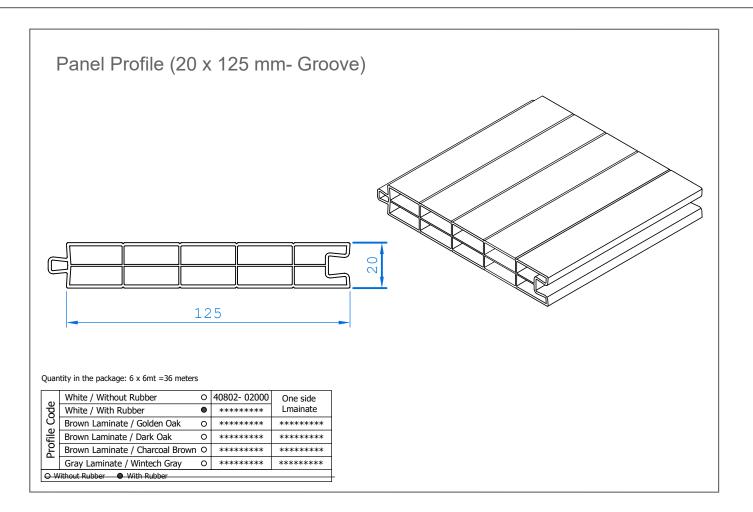
# Panel Profile (20 x 100 mm)

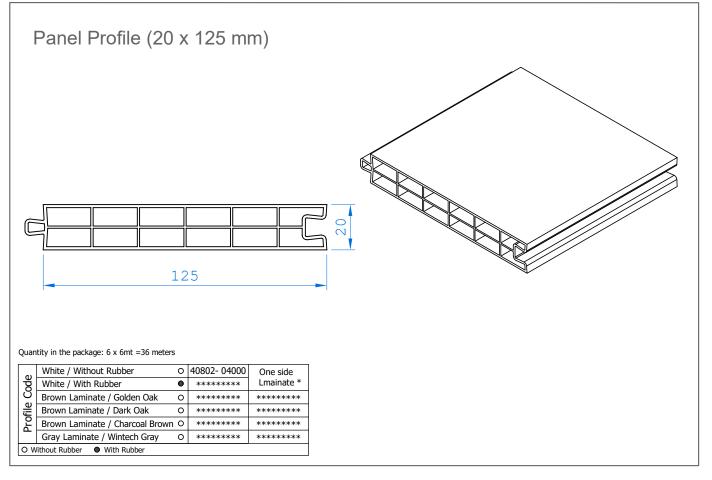




Quantity in the package: 6 x 6mt =36 meters

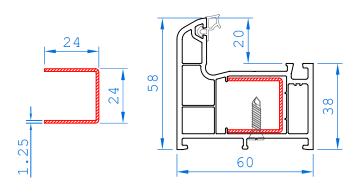
4)	White / Without Rubber	0	40802- 03000	One side		
Code	White / With Rubber	•	******	Lmainate *		
	Brown Laminate / Golden Oak	0	******	******		
rofile	Brown Laminate / Dark Oak	0	******	******		
Pro	Brown Laminate / Charcoal Brown	0	******	******		
_	Gray Laminate / Wintech Gray		******	******		
O W	O Without Rubber   With Rubber					

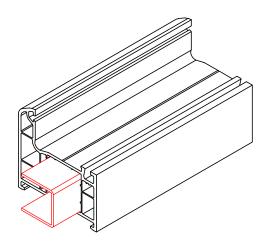






# Galvanized Reinforcing Profile Systems

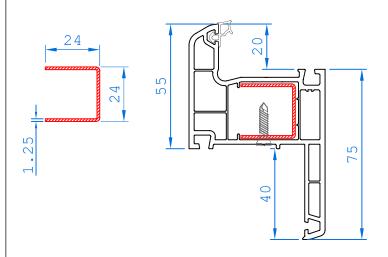


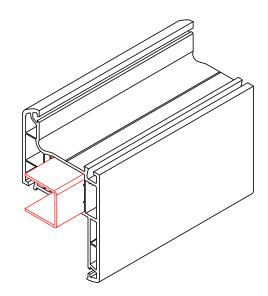


Thickness	Ix (cm) <sup>4</sup>	Iy (cm) 4	Area	Weight
1.25 mm	0.86	0.52	85	670 gr /mt
				<b>J</b> ,
1.5 mm	1.01	0.61	102	803 gr /mt
2 mm	1.28	0.79	135	1063 gr /mt

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

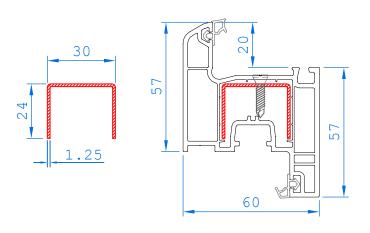
#### Galvanized Reinforcing Profile Systems

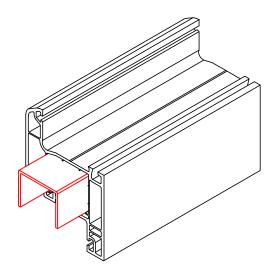




Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.86	0.52	85	670 gr /mt
1.5 mm	1.01	0.61	102	803 gr /mt
2 mm	1.28	0.79	135	1063 gr /mt

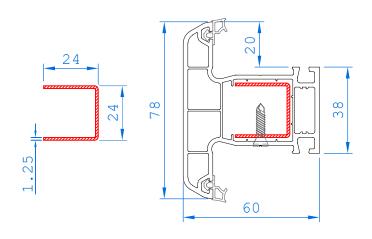
# Galvanized Reinforcing Profile Systems

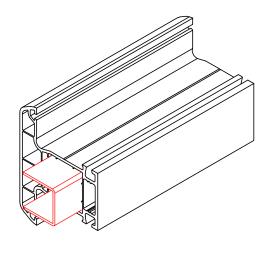




Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.56	1.43	93.4	736 gr /mt
1.5 mm	0.66	1.69	111.6	880 gr /mt
2 mm	0.86	2.15	147.2	1160 gr /mt

#### Galvanized Reinforcing Profile Systems



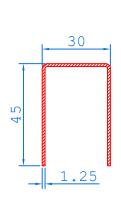


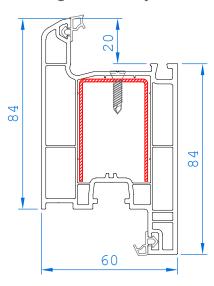
Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.86	0.52	85	670 gr /mt
1.5 mm	1.01	0.61	102	803 gr /mt
2 mm	1.28	0.79	135	1063 gr /mt

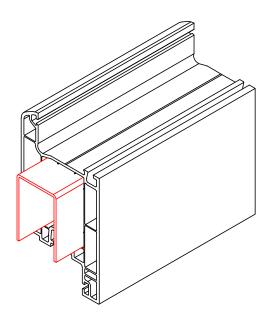
Reinforced profiles with a thickness of less than 1.25 mm are not approved.



# Galvanized Reinforcing Profile Systems



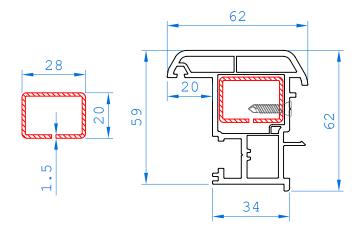


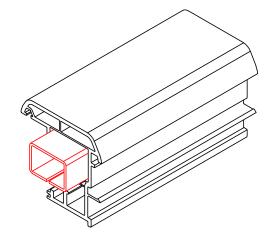


Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	3.11	2.51	145	1142 gr /mt
1.5 mm	3.70	2.95	173	1363 gr /mt
2 mm	4.85	3.79	230	1812 gr /mt

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

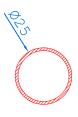
#### Galvanized Reinforcing Profile Systems

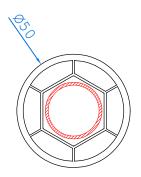


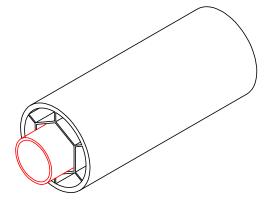


Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.72	1.26	116.5	914 gr /mt
1.5 mm	1.78	1.38	128.7	1010 gr /mt
2 mm	0.96	1.72	166.8	1310 gr /mt

# Galvanized Reinforcing Profile Systems



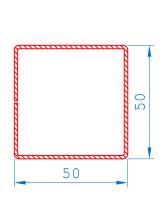


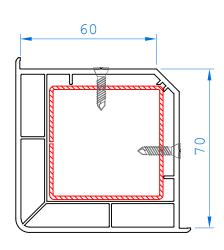


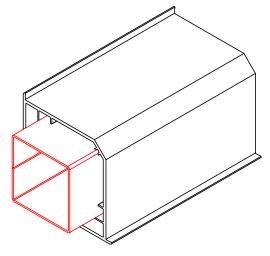
Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.94	0.94	105	824 gr /mt
1.5 mm	1.09	1.09	124.8	979 gr /mt
2 mm	1.38	1.38	163.2	1281 gr /mt

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

#### Galvanized Reinforcing Profile Systems





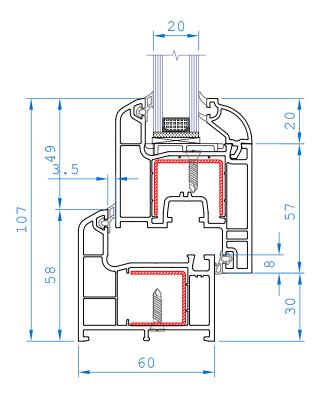


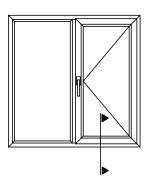
Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	9.51	9.43	240	1884 gr /mt
1.5 mm	11.22	11.13	286.2	2246 gr /mt
2 mm	14.46	14.34	376	2951 gr /mt

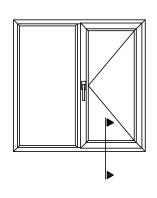
Reinforced profiles with a thickness of less than 1.25 mm are not approved.

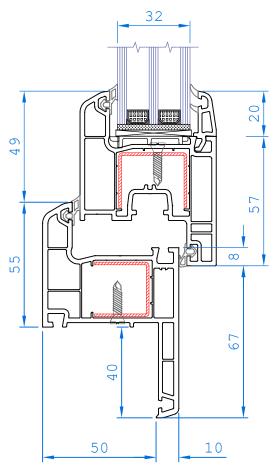






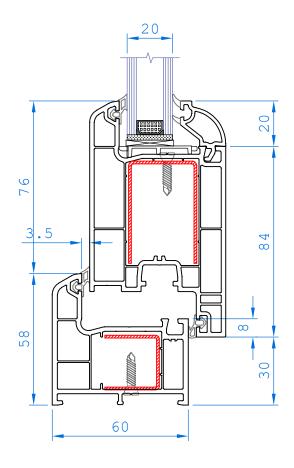




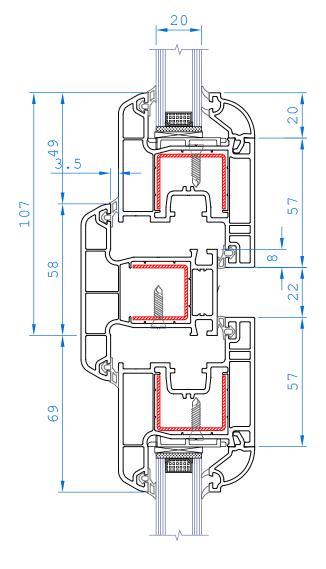


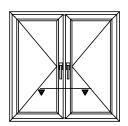






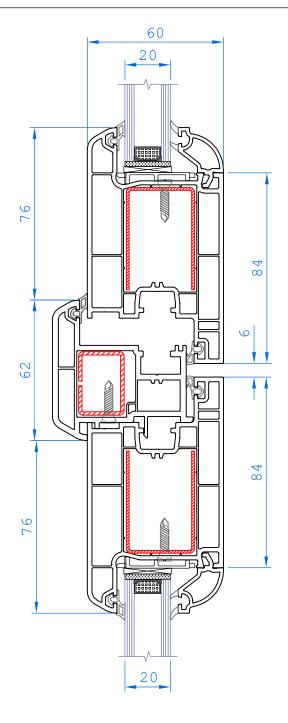


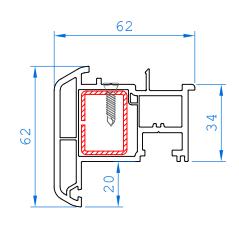


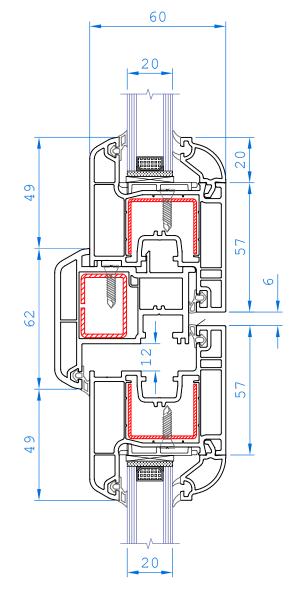


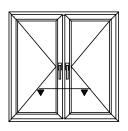




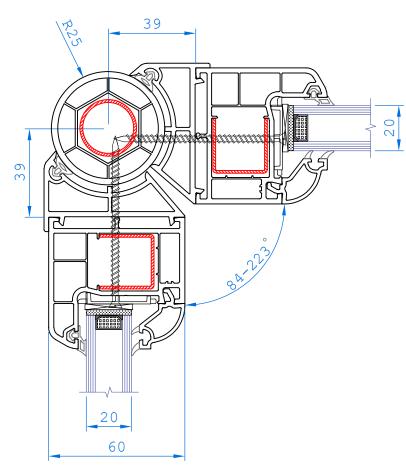


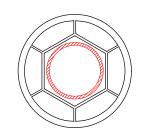


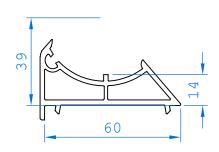


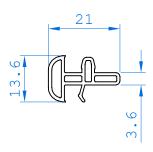




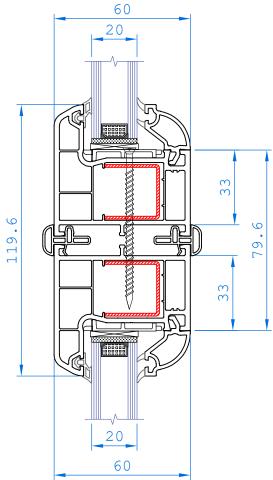




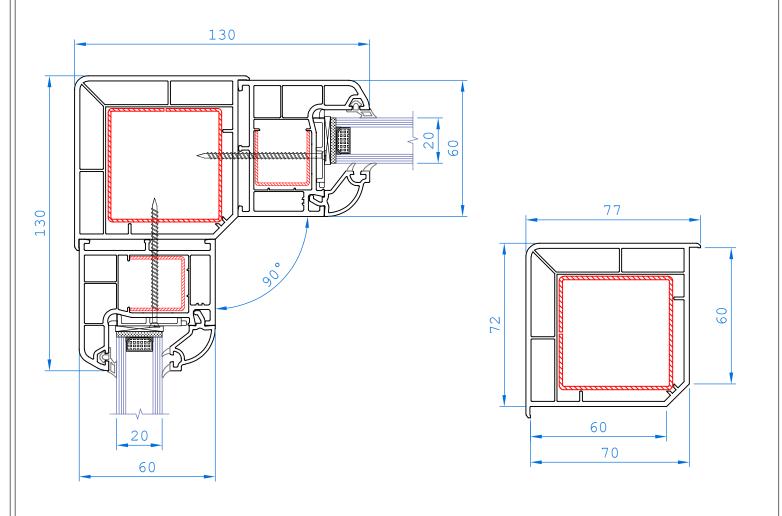


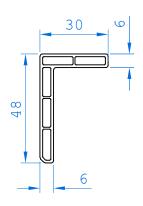


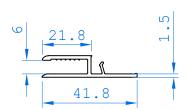
Scale= 1:1.5

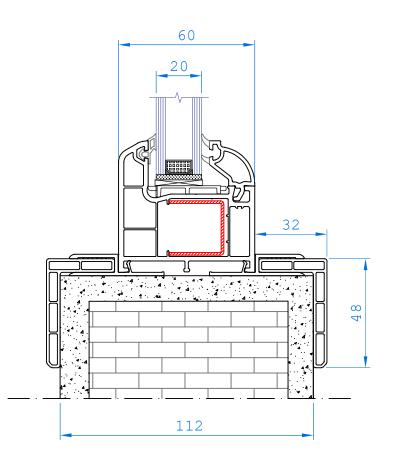






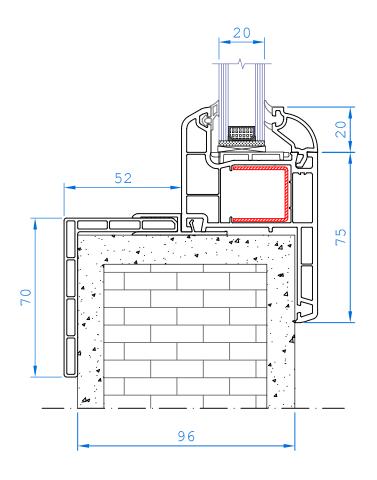


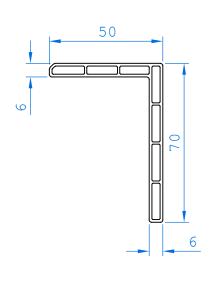


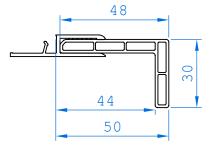


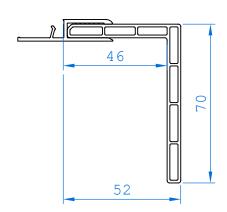


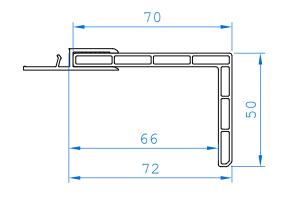


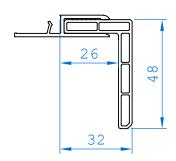




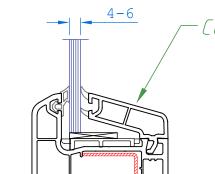






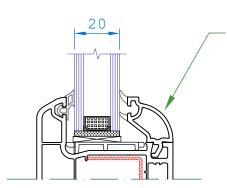






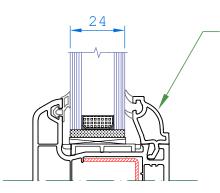
Code: 40801-96400

Single Glazed Bead 4 - 6 mm



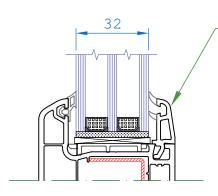
Code: 40801-96600

Double Glazed Bead 20 mm



Code: 40801-96500

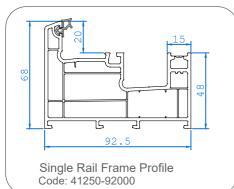
Double Glazed Bead 24 mm

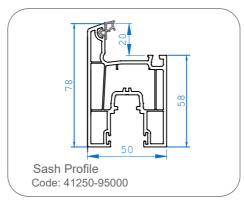


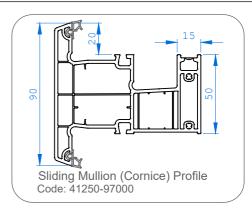
Code: 40801-96300

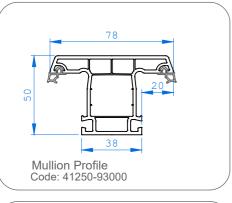
Triple Glazed Bead 32 mm

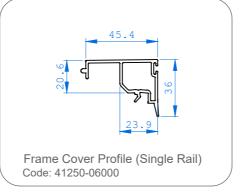


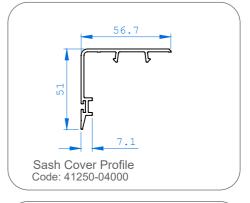


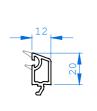




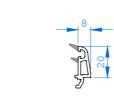




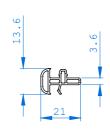




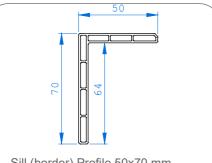




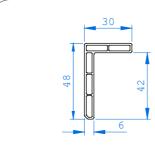
Double Glazing Bead Profile (24mm) Code: 40801-96300



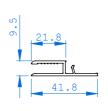
Coupling Profile Code: 40106-01000



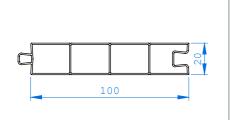
Sill (border) Profile 50x70 mm Code: 40108-02000



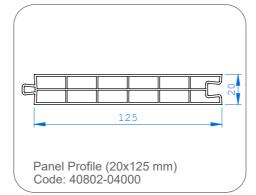
Sill (border) Profile 30x48 mm Code: 40108-01000

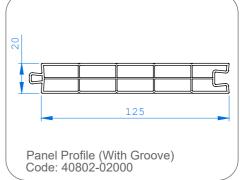


Holder Profile Code: 40106-04000

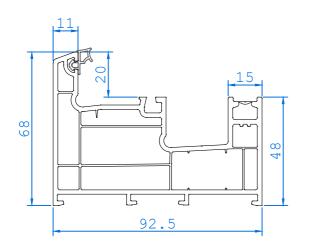


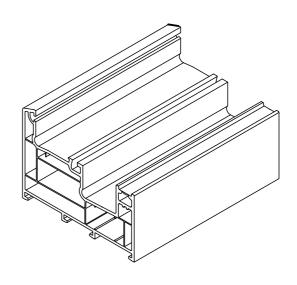
Panel Profile (20x100 mm) Code: 40802-03000





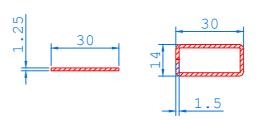
# Single Rail Frame Profile



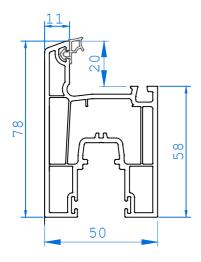


Quantity in the package:  $4 \times 6mt = 24$  meters

a	White / Without Rubber	0	******	Inside	Outside				
Code	White / With Rubber	•	41250-92000	Lmainate	Lmainate				
	Brown Laminate / Golden Oak	0	*******	******	******				
Profile	Brown Laminate / Dark Oak	0	*******	******	******				
٦٢٥	Brown Laminate / Charcoal Brown	0	******	******	******				
_	Gray Laminate / Wintech Gray	0	*******	******	******				
O W	O Without Rubber   With Rubber								

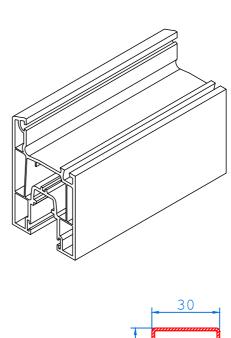


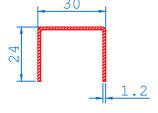
#### Sash Profile



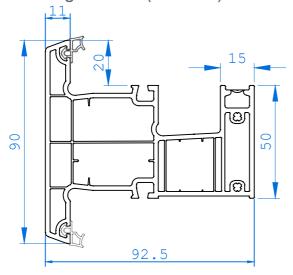
Quantity in the package: 6 x 6mt =36 meters

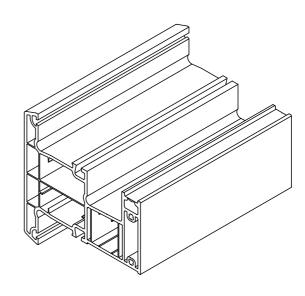
۵۱	White / Without Rubber	0	******	Inside	Outside
Code	White / With Rubber	•	41250-95000	Lmainate	Lmainate
	Brown Laminate / Golden Oak	0	******	******	******
Profile	Brown Laminate / Dark Oak	0	******	******	******
<u>و</u>	Brown Laminate / Charcoal Brown	0	******	******	******
	Gray Laminate / Wintech Gray	0	******	******	******
O W	ithout Rubber   With Rubber				





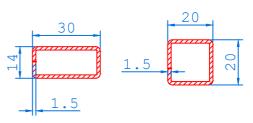
# Sliding Mullion (Cornice) Profile



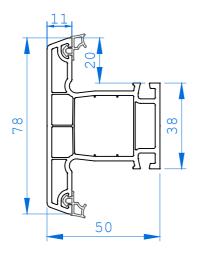


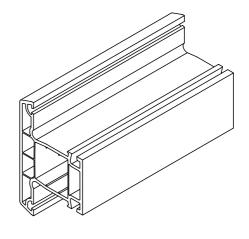
Quantity in the package:4 x 6mt =24 meters

4)	White / Without Rubber	0	******	Inside	Outside				
Code	White / With Rubber	•	41250-97000	Lmainate	Lmainate				
	Brown Laminate / Golden Oak	0	******	******	******				
lie	Brown Laminate / Dark Oak	0	******	******	******				
Profile	Brown Laminate / Charcoal Brown	0	******	******	******				
_	Gray Laminate / Wintech Gray	0	******	******	******				
O W	O Without Rubber  With Rubber								



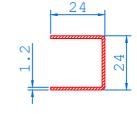
#### Mullion Profile





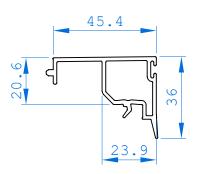
Quantity in the package: 6 x 6mt =36 meters

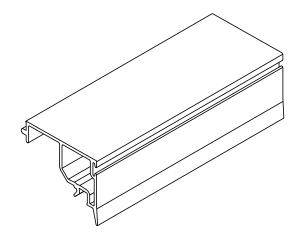
a)	White / Without Rubber	0	******	Inside	Outside				
Code	White / With Rubber	•	41250- 93000	Lmainate	Lmainate				
	Brown Laminate / Golden Oak	0	*******	******	******				
Profile	Brown Laminate / Dark Oak	0	*******	******	******				
욘	Brown Laminate / Charcoal Brown	0	*******	******	******				
_	Gray Laminate / Wintech Gray	0	*******	******	******				
O W	○ Without Pubber ■ With Pubber								





#### Frame Cover Profile

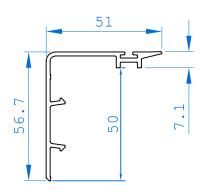


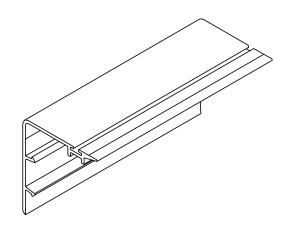


Quantity in the package:  $20 \times 6mt = 120$  meters

١.,	White / Without Rubber	0	41250- 06000	Inside	Outside
اماص	White / With Rubber	hite / With Rubber • *******		Lmainate	Lmainate
		0	*******	******	******
1 19	Brown Laminate / Dark Oak	0	*******	******	******
Profile	Brown Laminate / Charcoal Brown	0	******	******	******
"	Gray Laminate / Wintech Gray	0	******	******	******
	Without Rubber				

#### Sash Cover Profile





Quantity in the package:  $30 \times 6mt = 180 \text{ meters}$ 

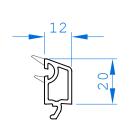
4)	White / Without Rubber	0	41250- 04000	Inside	Outside
Sode	White / With Rubber		******	Lmainate	Lmainate
_	Brown Laminate / Golden Oak	0	******	******	******
≝	Brown Laminate / Dark Oak	0	******	******	******
Profile	Brown Laminate / Charcoal Brown	0	******	******	******
1-	Gray Laminate / Wintech Gray	0	******	******	******
0.1	Vithout Rubber  With Rubber				

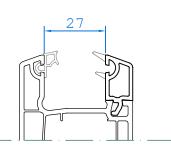
O Without Rubber 

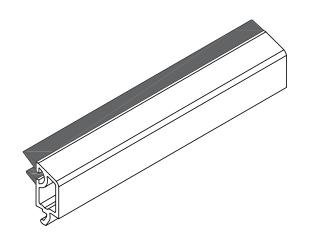
With Rubber



# 20mm Double Glazing Bead Profile



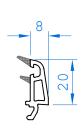


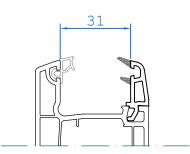


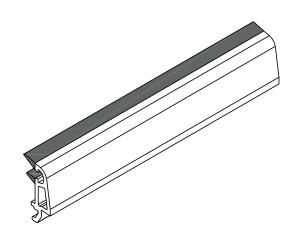
Quantity in the package:  $30 \times 6mt = 180 \text{ meters}$ 

4)	White / Without Rubber	0	******	Inside	Outside
Code	White / With Rubber		40801- 96700	Lmainate	Lmainate
	Brown Laminate / Golden Oak	0	******	******	******
Profile	Brown Laminate / Dark Oak	0	*******	******	******
은	Brown Laminate / Charcoal Brown	0	*******	******	******
"	Gray Laminate / Wintech Gray	0	******	******	******
O W	/ithout Rubber   With Rubber				

# 24mm Double Glazing Bead Profile





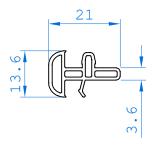


Quantity in the package:  $30 \times 6mt = 180 \text{ meters}$ 

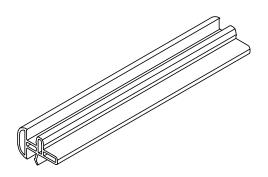
Code	White / Without Rubber	0	******	Inside	Outside
	White / With Rubber		40801-96300	Lmainate	Lmainate
1 1	Diowii Laiiiiiate / Goideii Gak	0	******	******	******
1	Brown Laminate / Dark Oak	0	*******	******	******
Drofilo	Brown Laminate / Charcoal Brown	0	*******	******	******
-	Gray Laminate / Wintech Gray	0	******	******	******
	Without Pubber   With Pubber				



# Coupling Profile



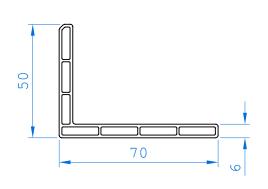
Scale= 1:1.5

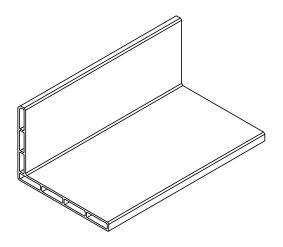


Quantity in the package:  $30 \times 6mt = 180$  meters

	White / Without Rubber	0	40106- 01000				
Code	White / With Rubber	•	******				
	Brown / Without Laminate	0	******				
Profile	Gray / Without Laminate	0	******				
인	*****	0	******				
-	*****	0	******				
O Without Rubber   With Rubber							

# Sill (border) Profile - 50x70 mm



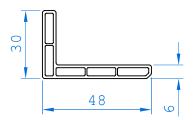


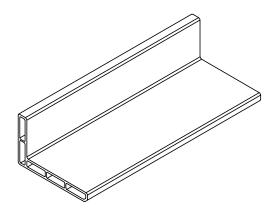
Quantity in the package: 12 x 6mt =72 meters

ge	4)	White / Without Rubber	0	40108- 02000	Inside	Outside
	g	White / With Rubber		******	Lmainate	Lmainate
	$\circ$	Brown Laminate / Golden Oak	0	******	******	******
	rofile	Brown Laminate / Dark Oak	0	******	******	******
	Pro	Brown Laminate / Charcoal Brown	0	******	******	******
'	_	Gray Laminate / Wintech Gray		******	******	******
Ī	O W	ithout Rubber   With Rubber				•

33

# Sill (border) Profile - 30x48 mm

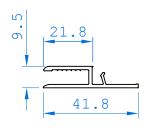


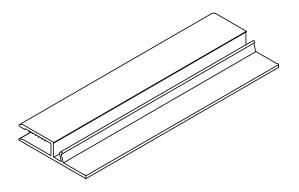


Quantity in the package: 12 x 6mt =72 meters

Profile Code	White / Without Rubber White / With Rubber	<ul><li>•</li></ul>	40108- 01000 ******	Inside Lmainate	Outside Lmainate	
	Brown Laminate / Golden Oak	0	******	******	******	
	Brown Laminate / Dark Oak	0	******	******	******	
	Brown Laminate / Charcoal Brown	0	******	******	******	
-	Gray Laminate / Wintech Gray	0	******	******	******	
O Without Rubber   With Rubber						

#### Holder Profile



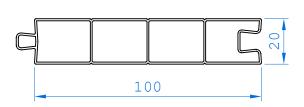


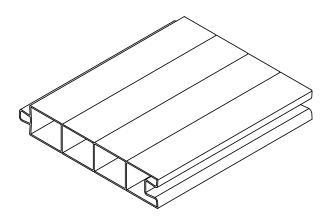
Quantity in the package: 20 x 6mt =120 meters

4)	White / Without Rubber		40106- 04000	
Code	White / With Rubber		******	
	Brown / Without Laminate		******	
Profile	Gray / Without Laminate		******	
읻	*****	0	******	
_	*****	0	*******	
O Without Rubber   With Rubber				



# Panel Profile (20 x 100 mm)

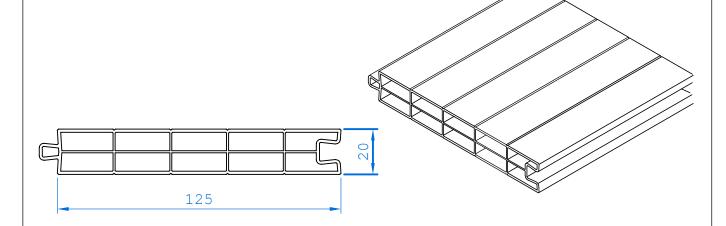




Quantity in the package:  $6 \times 6mt = 36$  meters

Code	White / Without Rubber	0	40802- 03000	One side
	White / With Rubber	•	******	Lmainate *
	Brown Laminate / Golden Oak	0	******	******
Profile	Brown Laminate / Dark Oak	0	******	******
	Brown Laminate / Charcoal Brown	0	******	******
	Gray Laminate / Wintech Gray	0	******	******
O Without Rubber   With Rubber				

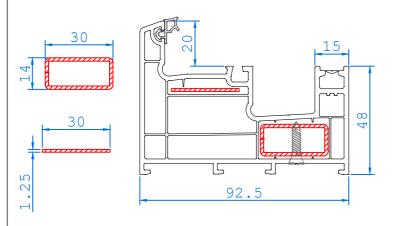
#### Panel Profile (20 x 125 mm- Groove)

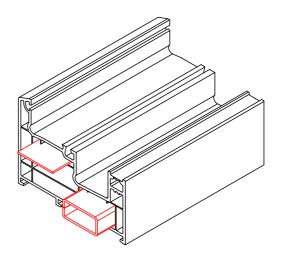


Quantity in the package:  $6 \times 6mt = 36$  meters

Profile Code	White / Without Rubber	0	40802- 02000	One side	
	White / With Rubber	•	******	Lmainate	
	Brown Laminate / Golden Oak	0	******	******	
	Brown Laminate / Dark Oak	0	******	******	
	Brown Laminate / Charcoal Brown	0	******	******	
	Gray Laminate / Wintech Gray	0	******	******	
O Without Rubber					

# Galvanized Reinforcing Profile Systems

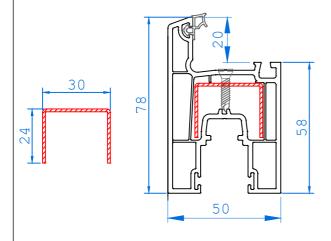


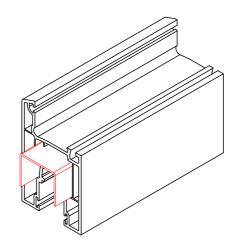


Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.32	1.09	100.7	793 gr /mt
1.5 mm	0.37	1.26	119.2	940 gr /mt
2 mm	0.45	1.60	156.2	1230 gr /mt

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

## Galvanized Reinforcing Profile Systems

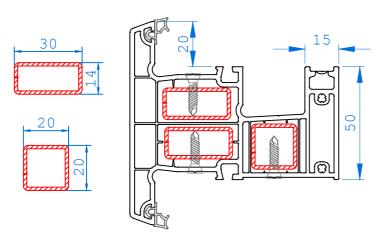


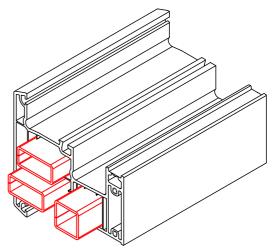


Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.56	1.43	93.4	736 gr /mt
1.5 mm	0.66	1.69	111.6	880 gr /mt
2 mm	0.86	2.15	147.2	1160 gr /mt

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

# Galvanized Reinforcing Profile Systems



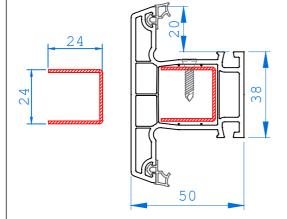


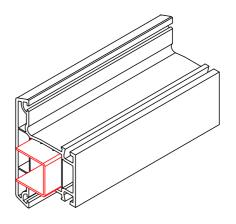
Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.32	1.09	100.7	793 gr /mt
1.5 mm	0.37	1.26	119.2	940 gr /mt
2 mm	0.45	1.60	156.2	1230 gr /mt

Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.52	0.52	90.5	713 gr /mt
1.5 mm	0.6	0.6	107	843 gr /mt
2 mm	0.75	0.75	140	1103 gr /mt

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

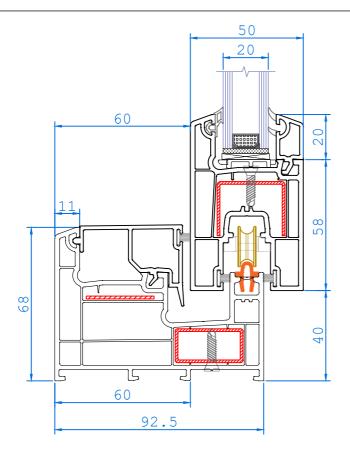
# Galvanized Reinforcing Profile Systems

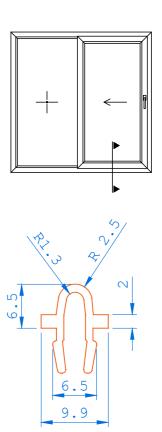




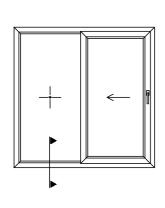
Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.86	0.52	85	670 gr /mt
1.5 mm	1.01	0.61	102	803 gr /mt
2 mm	1.28	0.79	135	1063 gr /mt

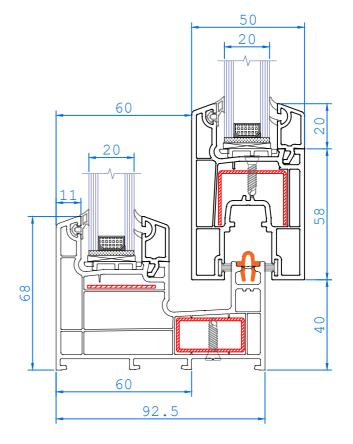




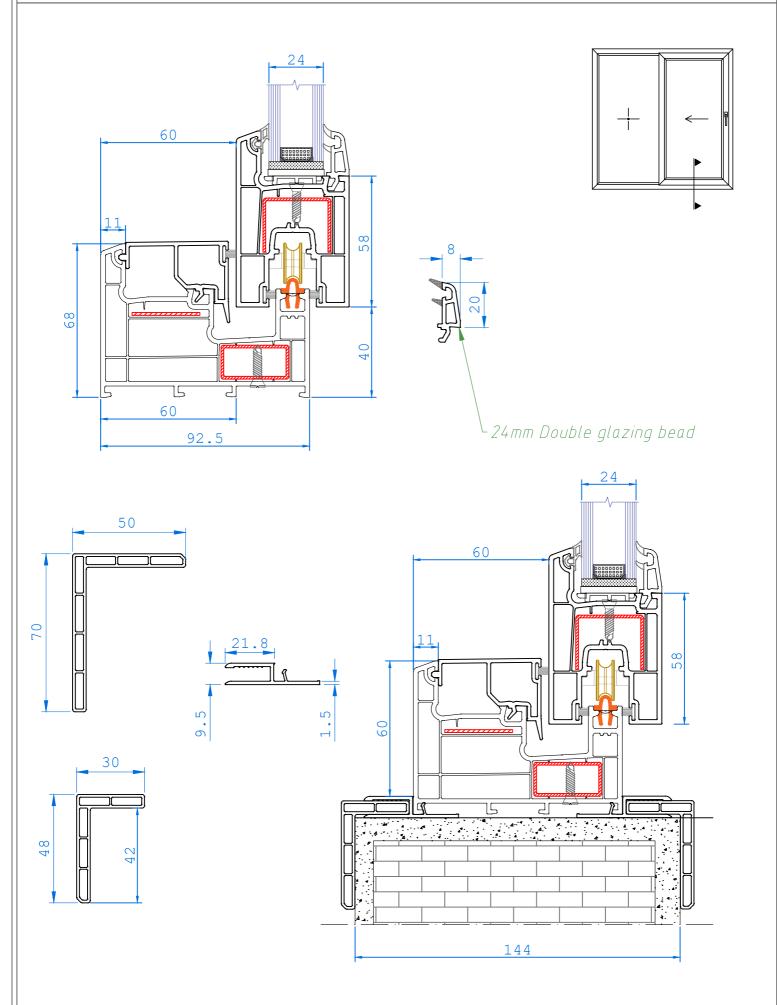


Scale = 3:1



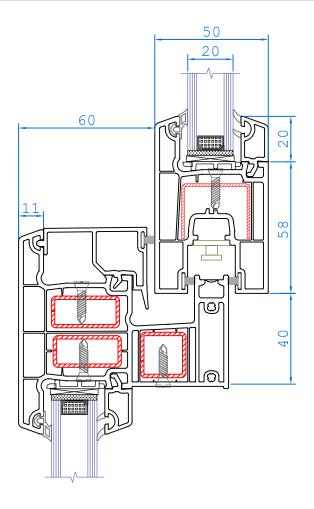


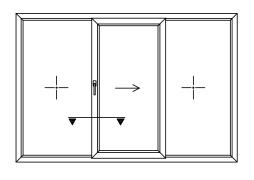


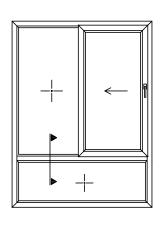


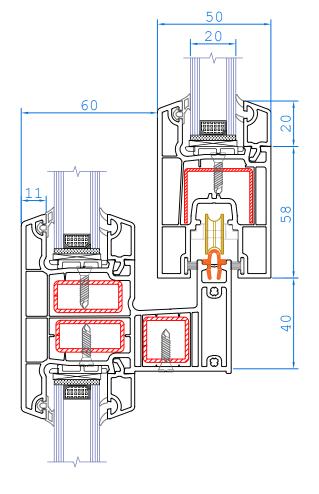




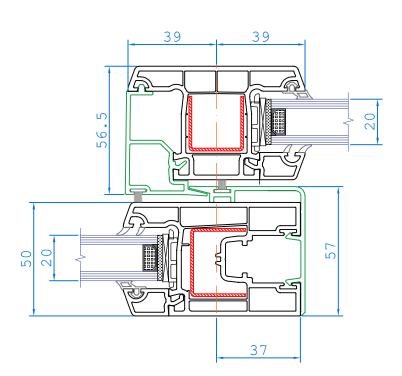


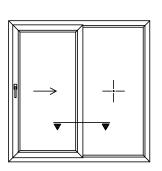


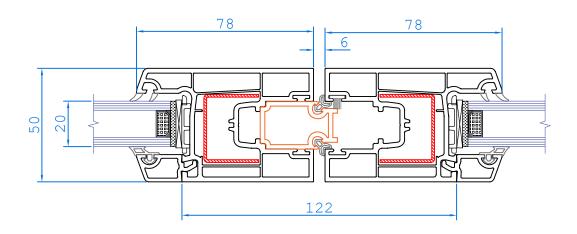


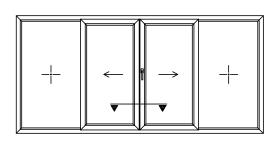




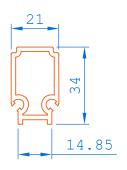




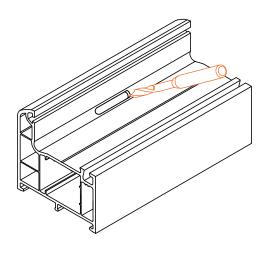


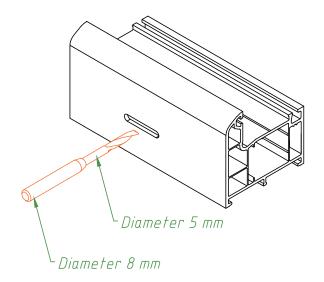


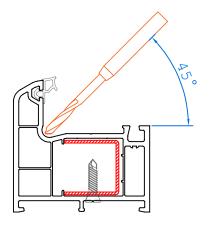
Alm Adaptor profile Code: 34025-12010 (White) Code: 34025-12011 (Brown)

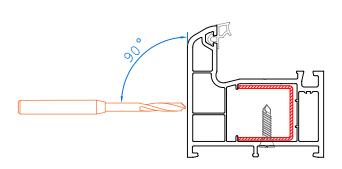


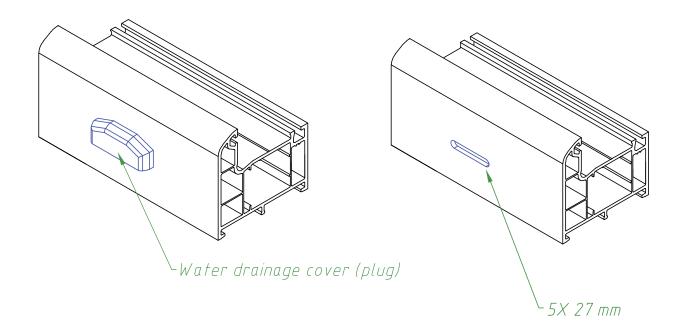
# Drainage And Smoothing Out Pressure Holes





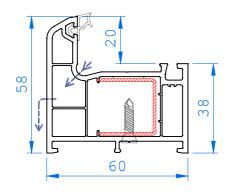


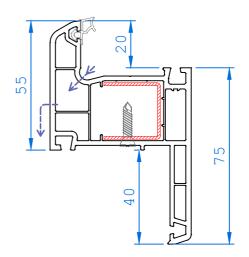


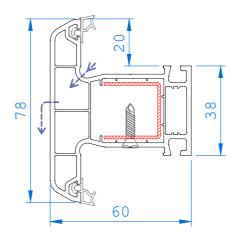


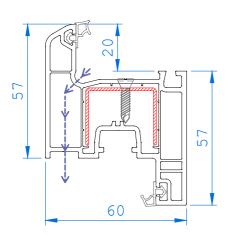


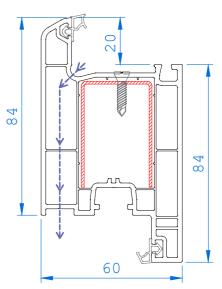
#### Drainage And Smoothing Out Pressure Holes







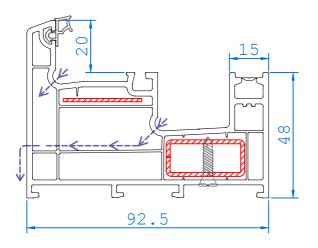


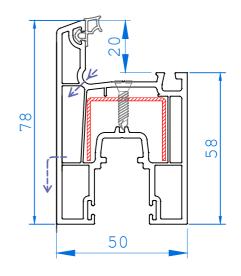


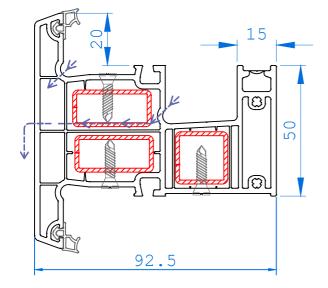
Profile Section Length - X<500 mm1- Hole 500mm<x-profile section's lenght<1000mm - 2 holes 1000mm<x-profile section's lenght<2000mm - 3 holes 2000mm<x-profile section's lenght<3000mm - 3 holes

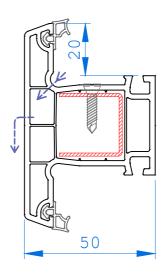


#### Drainage And Smoothing Out Pressure Holes





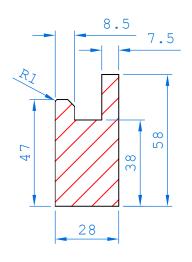


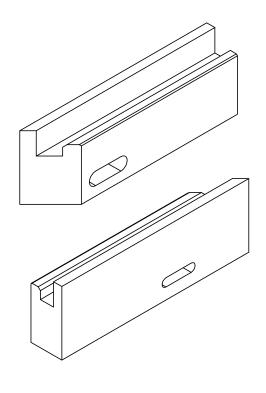


Profile Section Length - X<500 mm1- Hole
500mm<x-profile section's lenght<1000mm - 2 holes
1000mm<x-profile section's lenght<2000mm - 3 holes
2000mm<x-profile section's lenght<3000mm - 3 holes



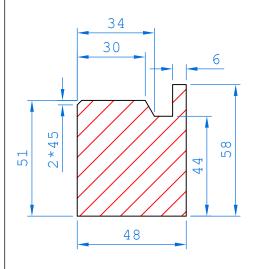
## Accessories (welding mold systems)



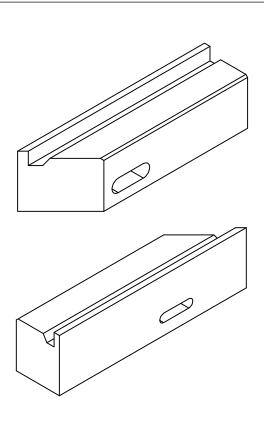


e	Machine name	Single head	Double head
Code	KABAN Machines	36401-12100	36401-12200
ig	MURAT Machines	36402-12100	36402-12200
echnical	OZGENC Machines	36403-12100	36403-12200
Ľ	YILMAZ Machines	36404-12100	36404-12200

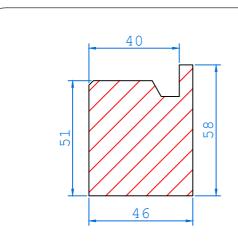
## Accessories (welding mold systems)

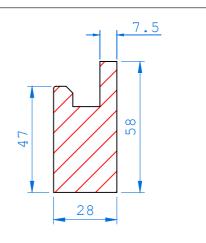


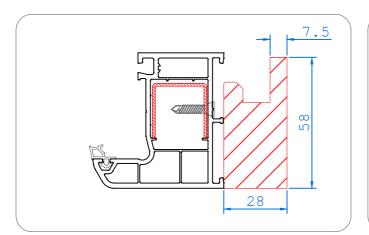


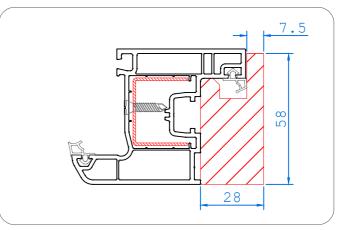


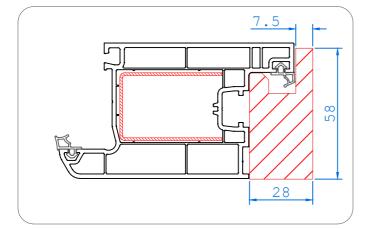


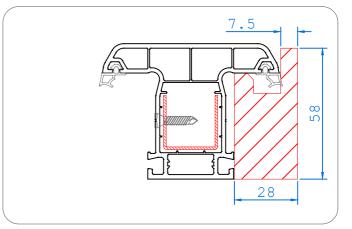


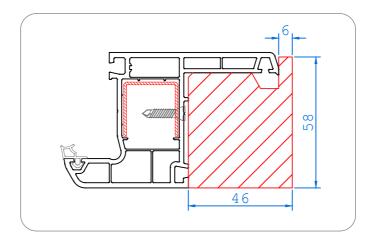




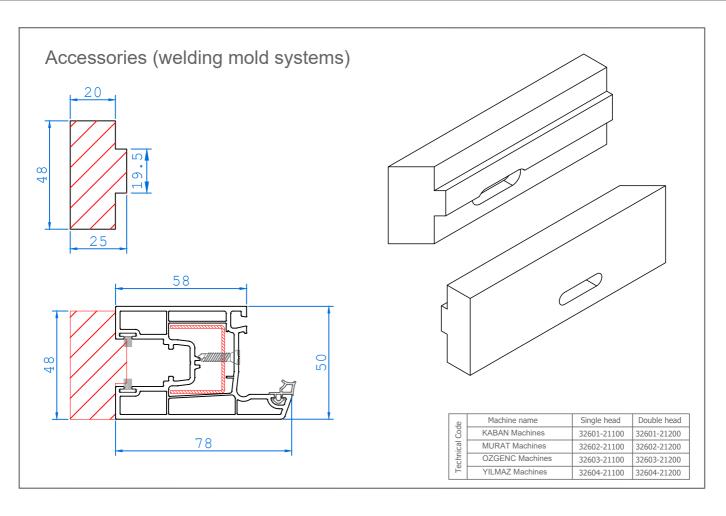


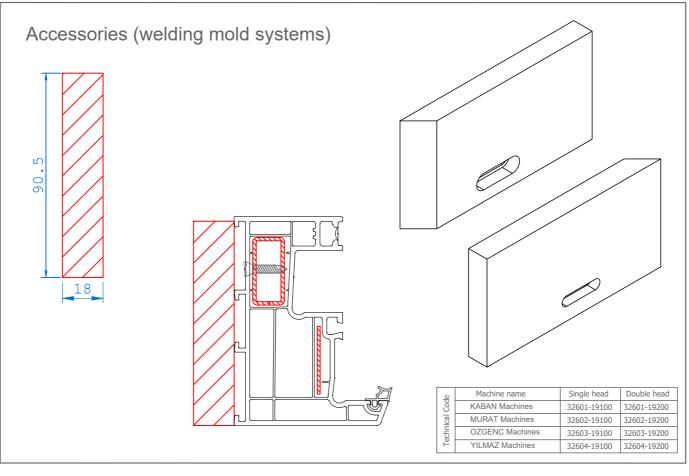






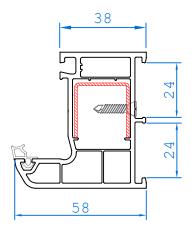


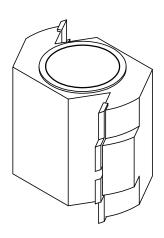






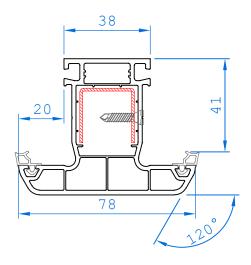
## Accessories (Blade Cleaner - Frame Profile)

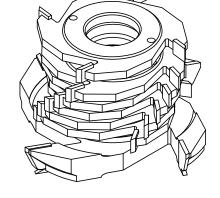




Code (Normal): 31001-64001

# Accessories (Milling Blade - Mullion Profile)

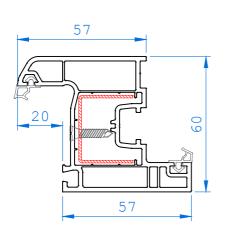


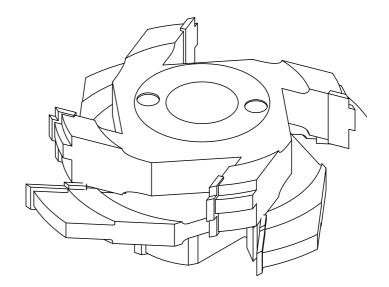


Code (Normal): 31001-64003

Code (elumatec Machines): 31001-64006

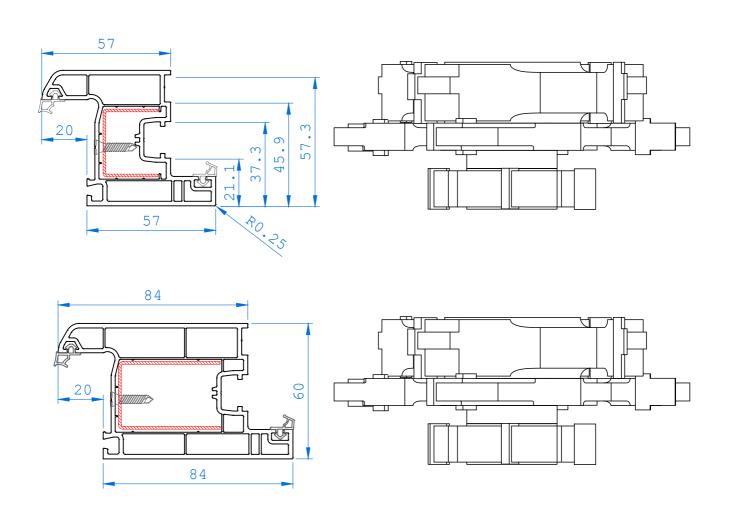
# Accessories (Blade Cleaner- Sash and Door Sash Profile)





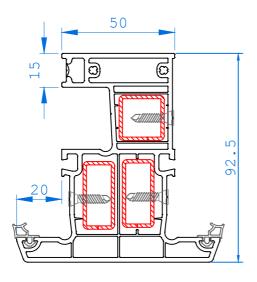
Code (Normal): 31001-64005

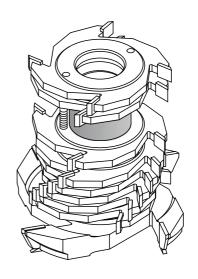
Code (elumatec Machines): 31001-64008





## Accessories (Milling Blade - Mullion Profile)

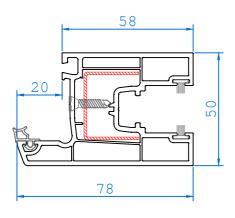


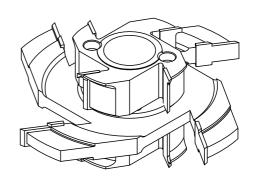


Code (Normal): 31001-26003

Code (elumatec Machines): 31001-26006

### Accessories (Blade Cleaner- Sash Profile)

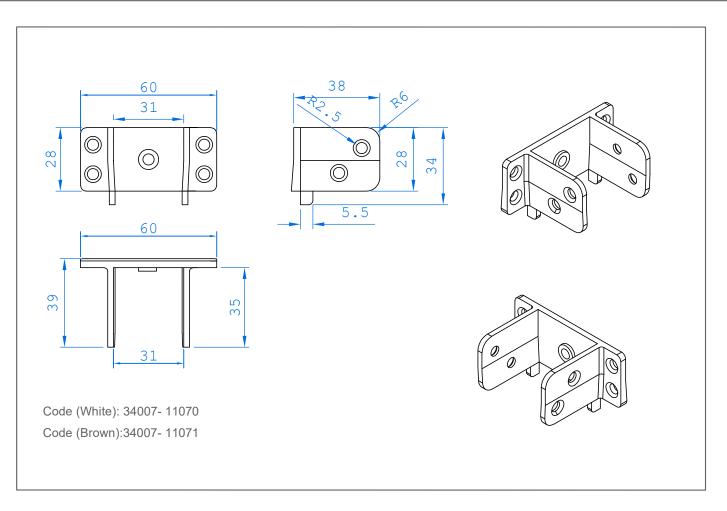


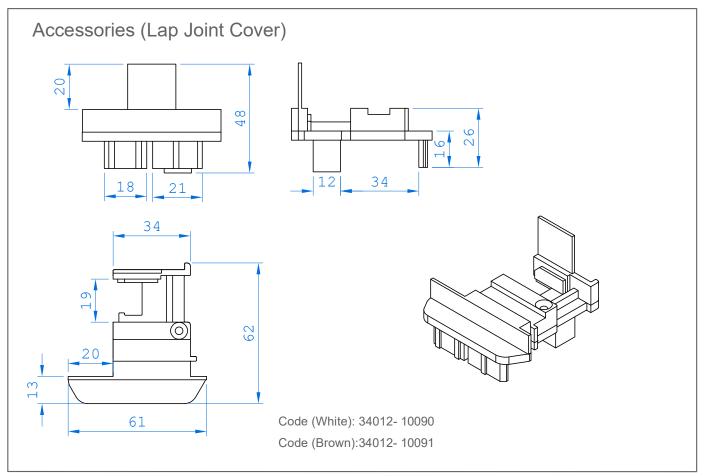


Code (Normal): 31001-26005

Code (elumatech Machines): 31001-26006

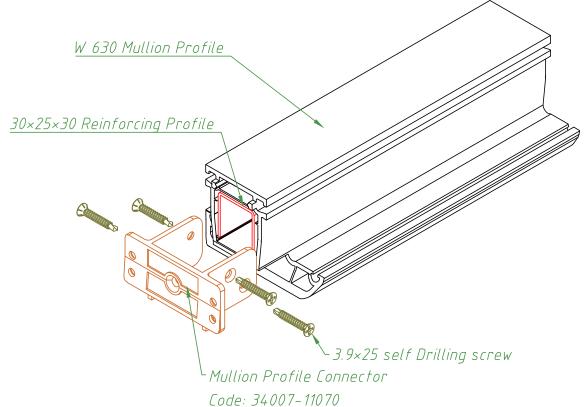




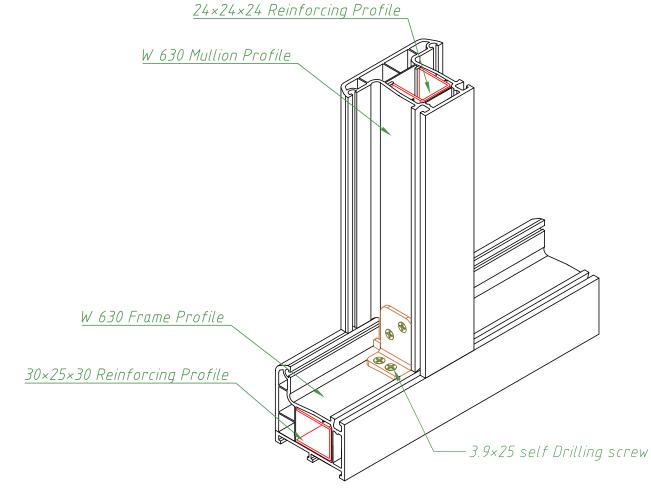




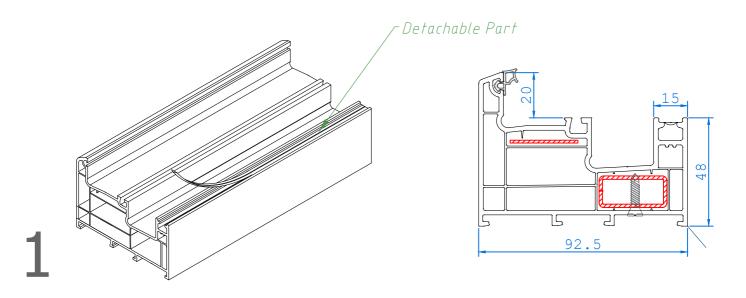
#### Assembling Accessories (Mullion Profile Connectors)

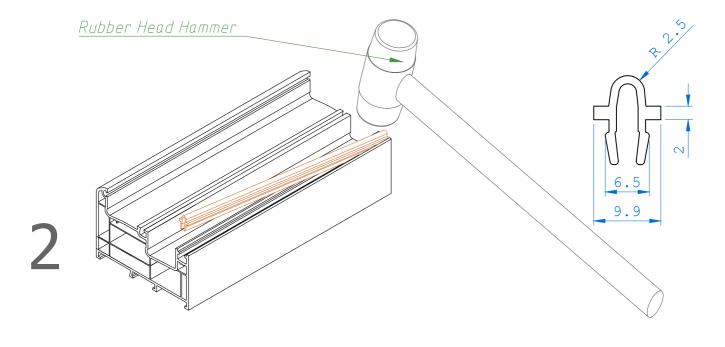


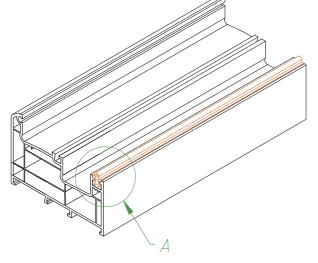
2002. 34001 11010

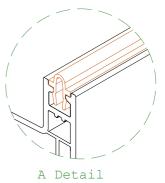


# Assembling Accessories (Installing Sliding Aluminum Rail)





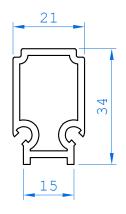




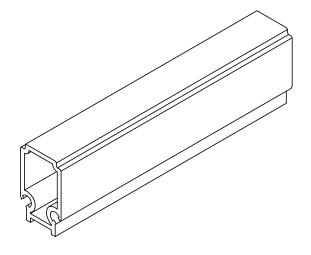
A Detail scale 3:1

UPVC WINDOWS and DOORS SYSTEMS

# Accessories (Aluminum Adaptor Profile)

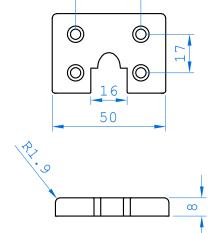


Scale = 1.5:1



Code (White): 34025- 12010 Code (Brown):34025- 12011 Profile length = 6 meters

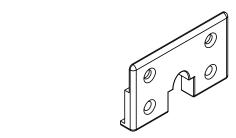
# Accessories (Cover Sash Profile)

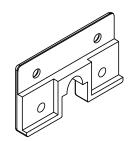


29

Code (White): 34009- 46010

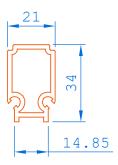
Code (Brown):34009-46011





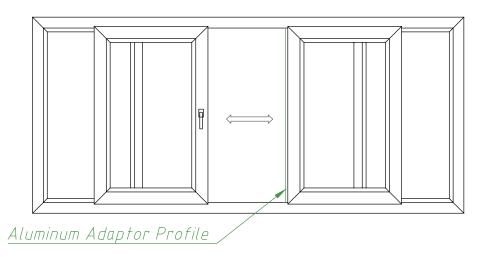


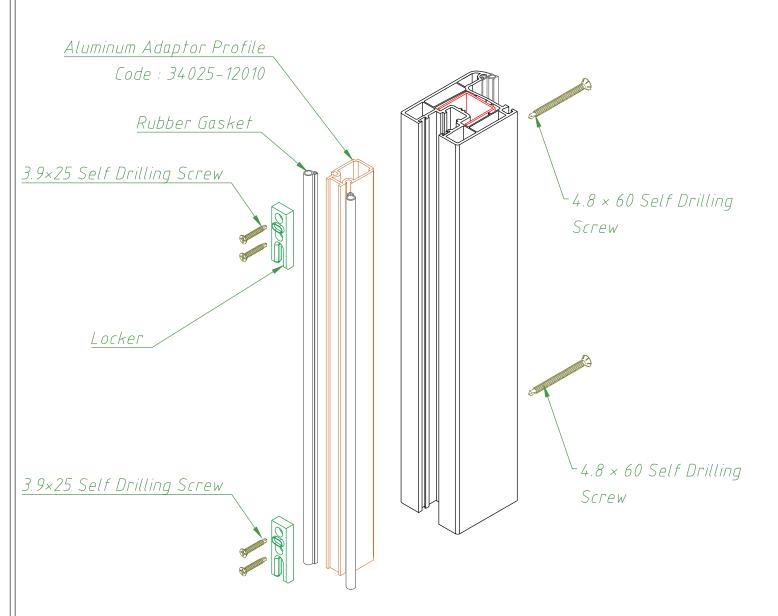
#### Assembling Accessories (Aluminum Adaptor)



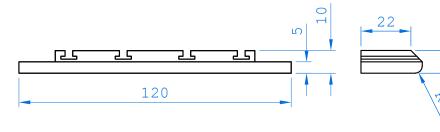
Alm Adaptor profile

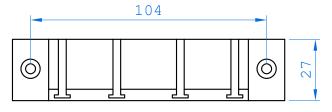
Code: 34025-12010 (White) Code: 34025-12011 (Brown)

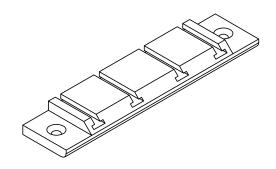




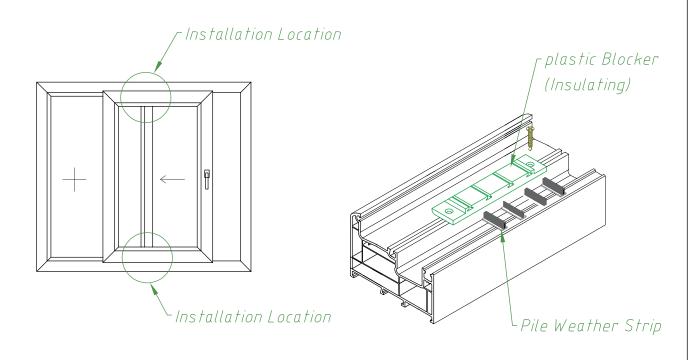
# Accessories (Insulated Single Rail Profile)





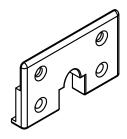


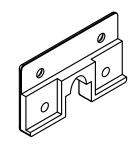
Code (White): 34009- 26020 Code (Brown):34009- 26021



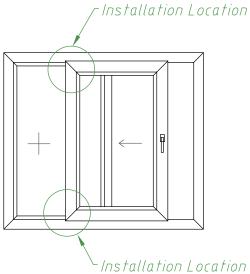


# Assembling Accessories (Cover Sash Profile)

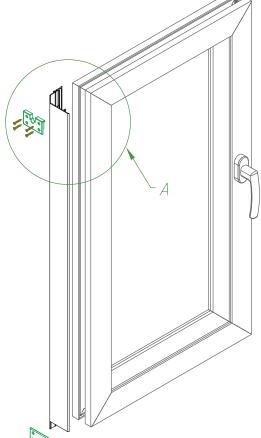


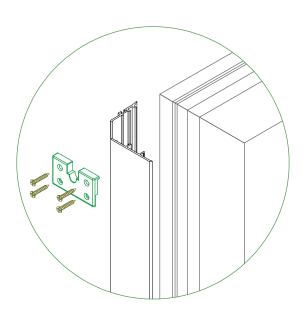


Code (White): 34009-40260 Code (Brown):34009-40261

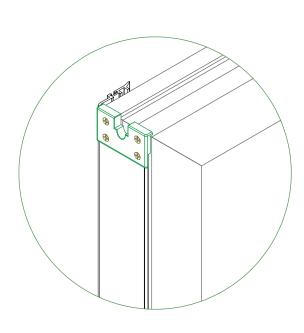




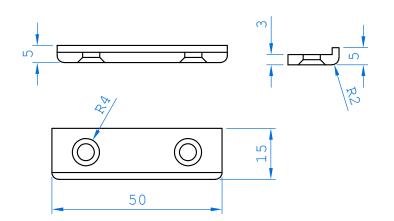


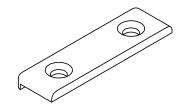


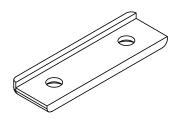
A Detail scale 3:1



## Accessories (Sash Profile Guides)

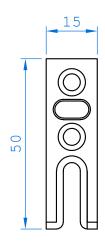


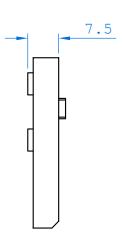


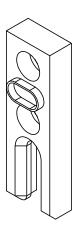


Code (White): 34009- 36010 Code (Brown):34009- 36011

# Accessories (Locker)



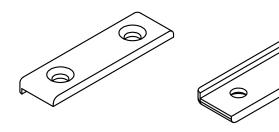




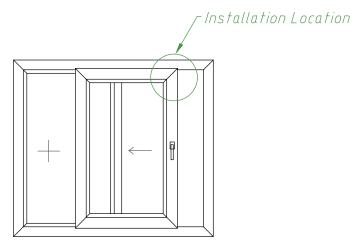
Code: 34005-14050

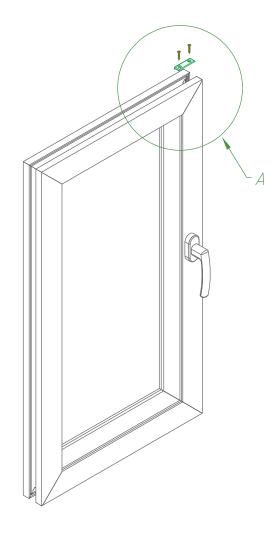


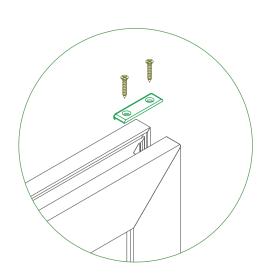
# Assembling Accessories (Sash Profile Guides)



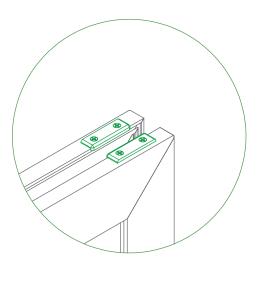
Code (White): 34009- 36010 Code (Brown):34009- 36011





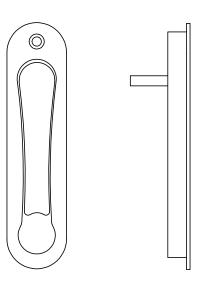


A Detail scale 3:1

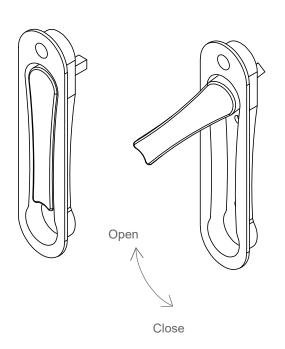


A Detail scale 3:1

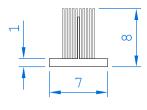
### Accessories (Window Handle / Hidden Type)



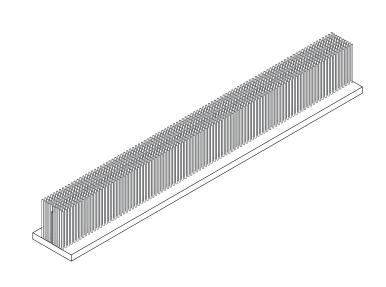
Code (White): 34008- 63040 Code (Brown):34008- 63041

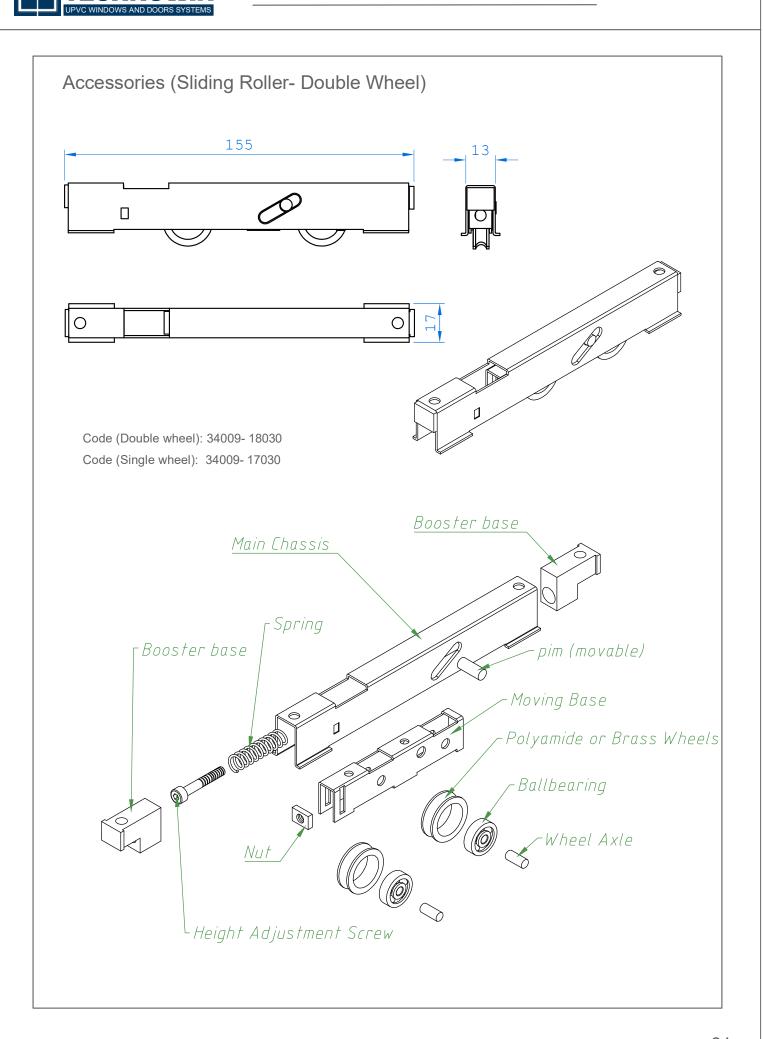


#### Accessories (Pile Weather Strip)

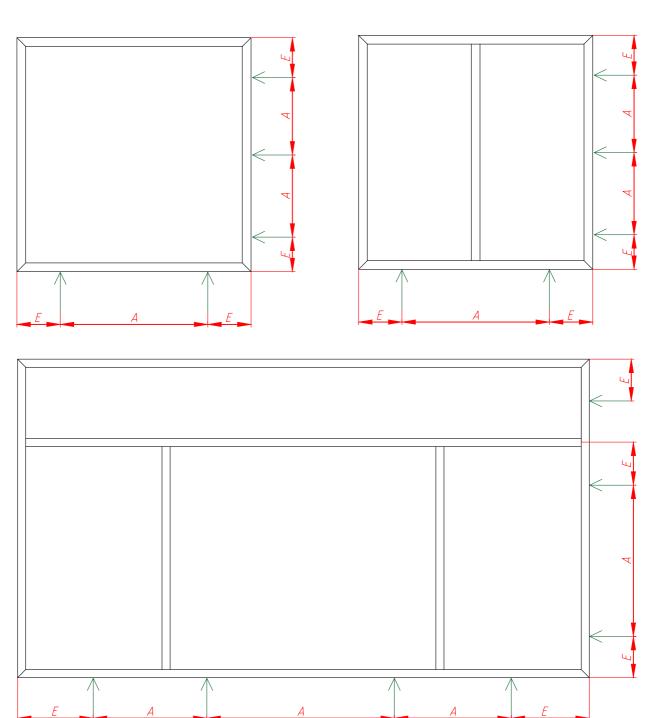


Code: 34023-46780





#### **GENERAL INSATLLATION**

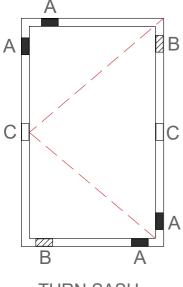


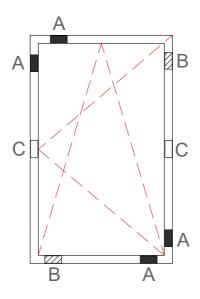
#### Assembly and installation of UPVC double-glazed doors and windows

In UPVC double-glazed doors and windows products, assembly is done using drill-tip screws with dimensions of 3.9\*60 mm. The distance between the screws from each other is very important in the long-term strength of the window. In the defined standards, the distance between the screws from the corner of the window should be between 100 and 150mm and the distance between the screws from each other should be between 600 and 700mm.



#### **GENERAL INSATLLATION**

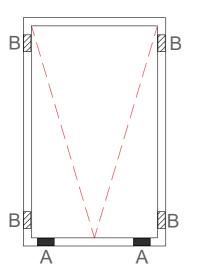




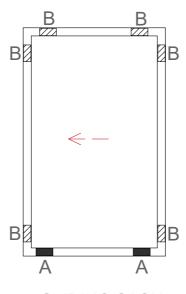
**TURN SASH** 

TILT AND TURN SASH

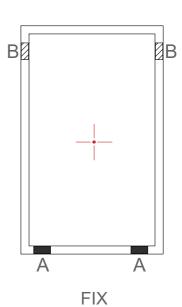
TURN (DOWN SIDE) SASH



TURN (UP SIDE) SASH



SLIDING SASH



#### Filler system in double-glazed windows

It is necessary to perform a filler system to adjust the fittings and adjust the double-glazed windows in the proper position.

Fillers are rectangular pieces of varying thickness. Fillers are placed in the gaps between the glass and in designated locations.

Fillers are placed in the specified locations according to the type of opening. Fillers A are considered essential fillers, filler B are considered stabilizing fillers. Fillers C are also final fillers.



#### **GENERAL INFORMATION**

#### Sound isolation

a performed quality of sound isolation is bounded with the quality of the window profile, the sound isolation of the glass and a qualified montage of the window. the measurmenat of the sound isolation is called dB.

than higher the value of 40 to 50 dB, than better the sound isolation. in the following table are some dB values for considred situations.

Source	Categorie
silence Breath Sound of laefs Garden Sitting room Conversation High voice - hoover Type writter- loud conversation Trafic Horn Electrical saw Weaving manufactory jetcraft Explosion- rocket	0 dB 10 dB 20 dB 30 dB 40 dB 50 dB 60 dB 70 dB 80 dB 90 dB 100 dB 110 dB 120 dB 150 dB

the adviced value of DIN standard is 50 dB is determined than 50 dB should be the limit value for isolated windows.

this value is determined twith the addition of the glass, window and montage factor all together. all the series of ADOPEN PLASTIC PERSIAN are determined higher than 50 dB.

for exterme noice isolation it is to prefer special glasses (triple glazing glass) with high sound isolation.

#### Heat isolation and heat values

the heat which flows between two surface in 1 hour, across a surface of 1 m2, whereas 1 K temperature difference exist, is called the UF value of this element.

it is espacially important for the selection of the window profile to prefer low UF value. the number of the chamber in the profile advantages a higher sounf and heat isolation. for a stable room temperature in winter and summer it is prefered to choose a low value. in acceptance for high-technology productions is the Uf value lower than 1.8 m2K/W. higher the Uf value higher the heat lost.

it is adviced to select a Uf value lower than 1.5 m2k/w in colder regions.

TW 630 Series	R	Uf (m2.K/W
with sill frame profile	0.68	1.47
frame profile	0.68	1.47
sash profile	0.68	1.47
Mullion profile	0.66	1.50
door sash profile	0.78	1.28

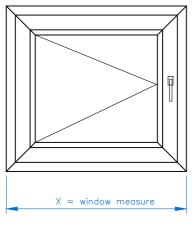
TM 620 Application	В	1.1f /m 2.1////
TW 630 Application	K	Uf (m2.K/W
Frame Sash	0.71	1.409

TW 250 Series	R	Uf (m2.K/W
Sliding frame profile	0.80	1.25
Sliding Sash profile	0.62	1.62
Mullion profile	0.62	1.62
Sliding mullion profile	0.78	1.28

TW 250 Application	R	Uf (m2.K/W
Frame Sash	0.671	1.49

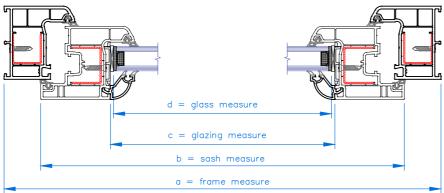


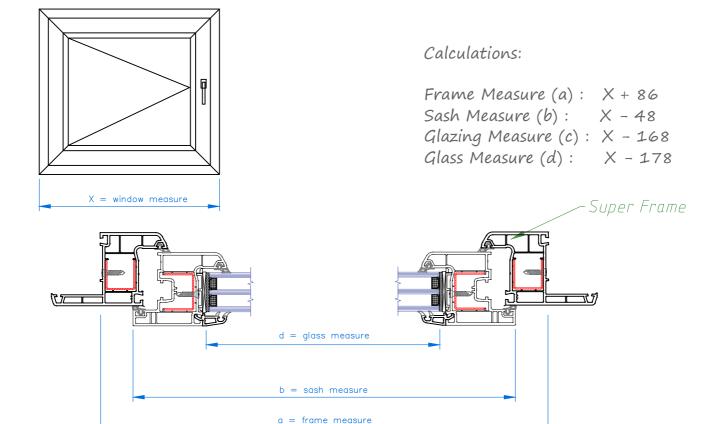
#### **Technical Calculation**



#### Calculations:

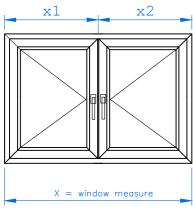
Frame Measure (a): X + 6Sash Measure (b): X - 54Glazing Measure (c): X - 174Glass Measure (d): X - 184





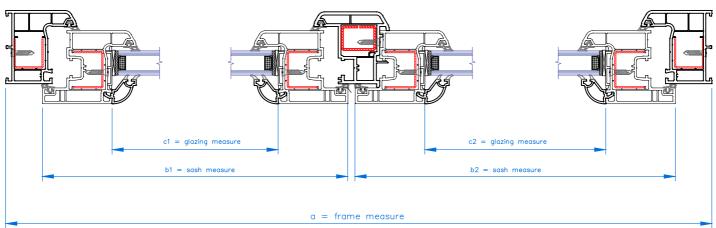


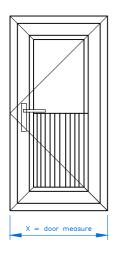
#### **Technical Calculation**



#### Calculations:

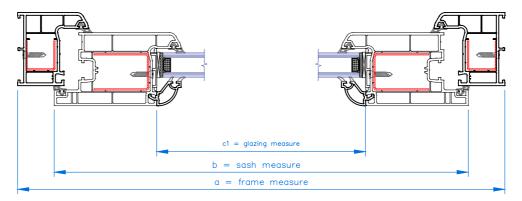
Frame Measure (a): X + 6Sash Measure (b1): X1 - 27Sash Measure (b1): X2 - 27Glazing Measure (c1): X1 - 147Glazing Measure (c2): X2 - 147





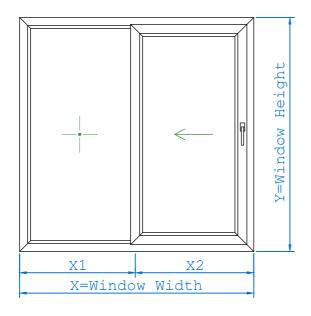
#### Calculations:

Frame Measure (a): X + 6Sash Measure (b): X - 54Glazing Measure (c): X - 228Glass Measure (d): X - 238





#### **Technical Calculation**

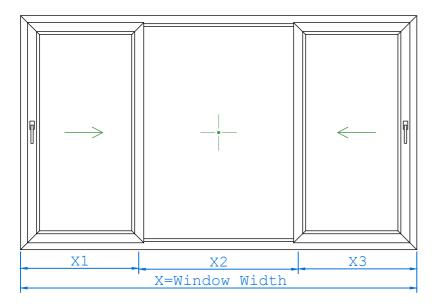


#### Calculations:

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

Sash Measure (Vertical): Y - 74 Sash Measure (Horizontal): X2 +3

Mullion Measure (Vertical): Y - 90

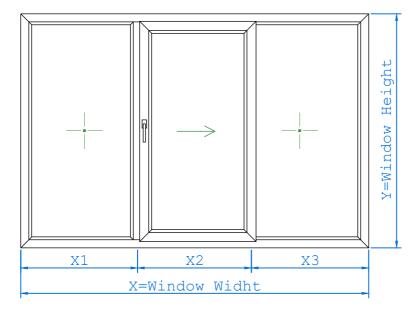


#### Calculations:

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

Sash Measure (Vertical): Y - 74 Sash Measure (Horizontal): X1 + 3 Sash Measure (Horizontal): X3 + 3

Mullion Measure (Vertical): Y - 90



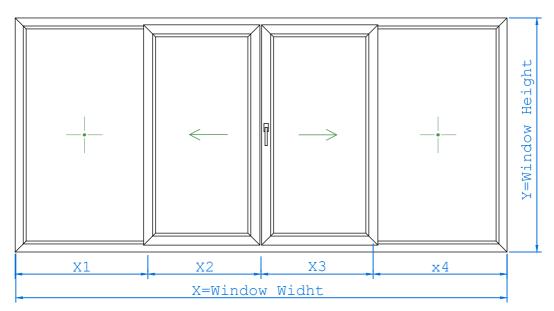
#### Calculations:

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

Sash Measure (Vertical): Y - 74
Sash Measure (Horizontal): X2 + 26
Mullion Measure (Vertical): Y - 90

Mullion Measure (Vertical): Y - 60

(W250 Cornice Profile)

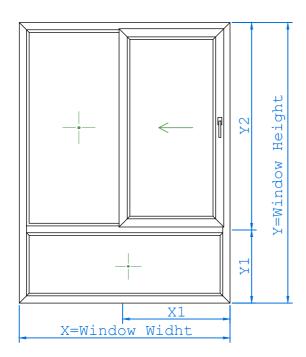


#### Calculations:

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

Sash Measure (Vertical): Y - 74
Sash Measure (Horizontal): X2 + 41
Mullion Measure (Vertical): Y - 90

ALM Adaptor Measure (Vertical): Y - 100



#### Calculations:

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

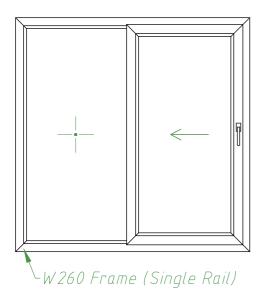
Sash Measure (Vertical): Y2 - 59 Sash Measure (Horizontal): X1 + 3

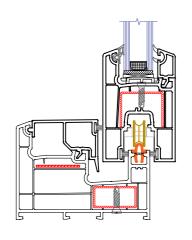
Mullion Measure (Vertical): Y2 - 67

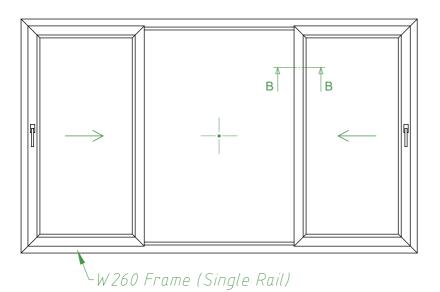
Mullion Measure (Horizontal): X - 60

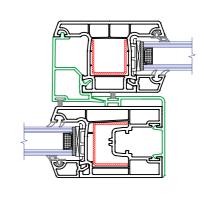


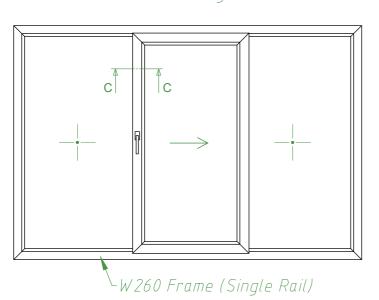
# Sliding Window Designs

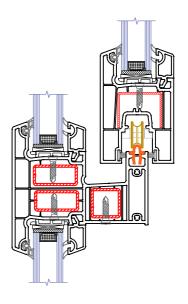




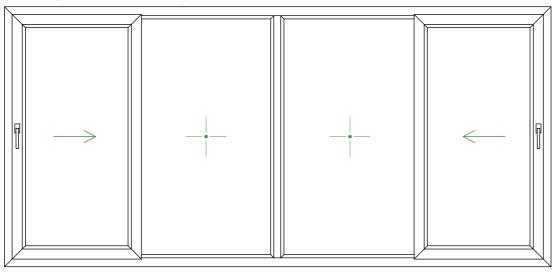


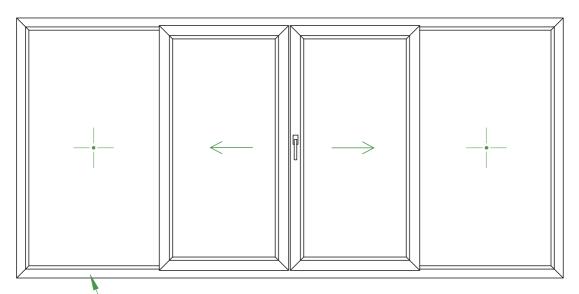




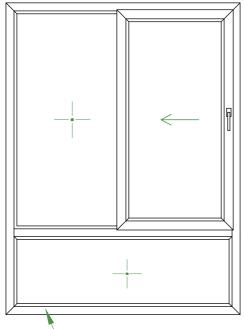


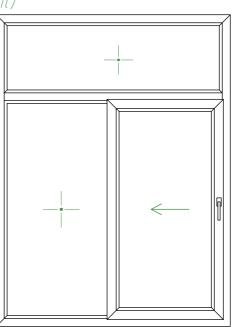
# Sliding Window Designs





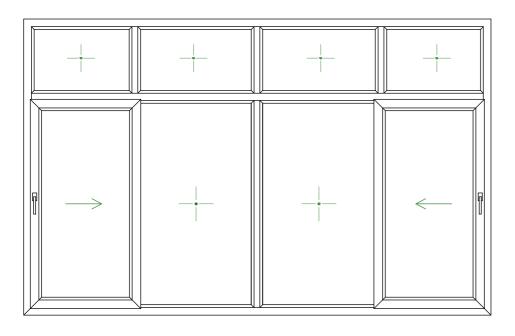
-W 260 Frame (Single Rail)

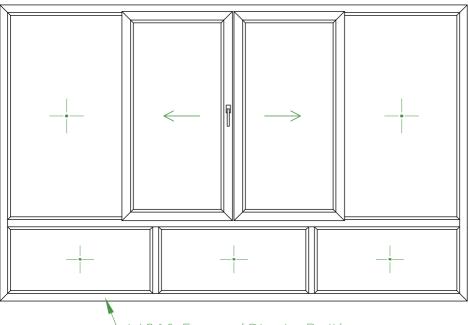




-W260 Frame (Single Rail)

# Sliding Window Designs





-W260 Frame (Single Rail)