

### WT 624 TECHNICAL CATALOG

GENERAL INFORMATION
TECHNICAL SPECIFICATIONS OF PROFILES
REINFORCEMENT PROFILES
ASSEMBLY OF PROFILES
ACCESSORIES



### **GENERAL INFORMATION**

Exclusive specifications and benefits of UPVC doors and windows:

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

The UPVC windows are easily usable, nicely depicted and in accordance with the above mentioned information, have a high grade of thermal and low sound conduction insulation. The technical specifications of the WT624 profile series, submitted the evidence and highly efficient documents of these products to the purchasers.

- 1. High grade of thermal transfer resistance and low sound-conduction capability of UPVC profile, creates comfort inside. Temperature-exchange resistance for the UPVC frame profile is equal to 0.93m2, grade C/W (class1), for the UPVC sash profile is equal to 0.88 m2, grade C/W (class1). prevention of the infiltration of the sound of traffic flow is also 35 decibels (in class B).
- 2. The special specifications of manufacturing UPVC profiles, provide the possibility of numerous manufacturing of different types of windows with multi-mode sliding systems, not only with using the standard essentials but also with anti-theft equipments, these profiles are suitable for the double-glazed glasses up to 32mm in thickness.
- 3. Galvanized reinforcements profile is contrived in order to increase the static strength inside the frame, sash and mullion profile.
- 4. The cross-sectional shape of the width of the profiles and the thickness of the UPVC networks guarantee the strength of the welded profiles (weld 90°c or weld in shape of V).
- 5. Special canal for installing locking mechanism (13 mm) provides the possibility of installation for amplifying equipment, therefore, the security and anti-theft characteristics increases in these products
- 6. Complete removal of undesirable moisture for use in seals and rubber gasket.
- 7. Height of the part that glass is contrived to protect the edges of the object from the Ultraviolet-Ray and UVB-Ray. Moreover, it makes the possibility of darkening and cooling of the indoor space minimum.
- 8. Double seal (outdoor and indoor), prevents excessive dryness and provides maximum protection against the wind and rain and prevents freezing of the pipes in below zero temperatures, therefore, it guarantees the resistance of temperature exchange and sound protection to be extremely high.



- 9. Applying high-standard UPVC raw-materials, guarantees the physical and chemical characteristics of the products produced from these raw productions. Durability in below zero temperatures, tensional strength, considerable toughness, thermal resistance, satisfaction level of quality and long life cycle are some of these characteristics.
- 10. UPVC profiles have health certificate for a wide range of users and are completely safe for the human health.
- 11. Because of the fireproof nature of the UPVC materials, UPVC profiles are incombustible. According to the fire-fighting certificate, UPVC profiles are in accordance with the fire-fighting rules and conforms to the combustibility rate G2 (limited ignition) and burning-rate B2 (medium-ignition).
- 12. It is possible to produce profile with any color spectrum and laminate coating.
- 13. The multi-glazed glass is the main part of the raw materials of UPVC windows. Based on the technical test of life cycle of the multi-glazed glasses, the longevity of these glasses could be guaranteed upto 20 years. Application of multi-glazed glasses has many advantages, for instance: increasing the temperature-protection (B2), decreasing noisiness (reduction of audio-disturbance about 30-50 decibel), moreover, these glasses are anti-freeze and anti-steam (upto temperature 40°c).

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



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

- 1. All the moving components should be lubricated by appropriate lubricants.
- 2. Seals must be 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).
- 3. Water evacuation grooves (grooves of rain water), must be checked, and if it is necessary, they should to be cleaned.
- 4. Outer surface of the UPVC profiles should be cleaned with water, and if it is needed, with detergent. Avoid using oil, petrol and other similar materials which are oil-based.

### **Heat Protection:**

The UPVC windows guarantee a high level of thermal protection in order to ensure inside comfort. WT624 Multi-hole profiles, they provide excellent heat insulation. The rate of these profiles is 1.3 Wt. /m2.

### **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 CO2) and to create natural heat ventilation (stream outlet). The human beings are one of the main sources of moisture in the building. The moisture increases with their breathing. It is completely obvious that, breathing of this air once happened and then the moisture should get out of the room, otherwise, could lead to density of humidity in the internal surface of the windows and the edge of the walls.

Constant humidity concentration in the air could lead to growth of fungus on the furniture, walls and ceiling. UPVC profiles are suitable heat protectors and usually don 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.



### **Specification of Wintech UPVC Profiles:**

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

UPVC compound used in production: Wintech UPVC compound in compliance with EN 7748

Density: 1.46 g/cm3

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:  $>= 40 \text{ N/mm}^2$ 

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:  $1016 \Omega cm$ 

Fire behaviour: self extinguishing, flame retardant

Resistant to: acids, salts, salt solutions, bases, sea water, benzene, oil, lime,

cement, fumes of all sorts

Wall thickness: up to 3.5 mm

Possible processing techniques: boring, milling, sawing, filing, welding, grinding

Corner joints: welded

Types of openings: turn, turn and tilt, tilt, sliding, folding

Possible glass types: insulating or non-insulating glass types with all common glass

thicknesses between 4 and 32 mm.

Seals: **EPDM-TPV** and **TPE** 

Seal Color: **BLACK** 

residential houses, high-rise buildings, schools, administrative Main application areas:

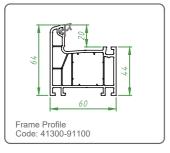
buildings, industrial buildings

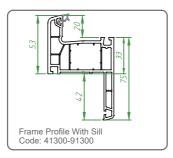
k = between 2.6 - 1.4 W/m2 K depending on the insulating glass

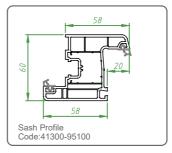
Coefficient of heat transfer: used.

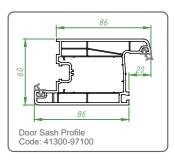


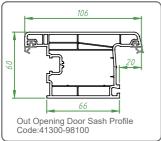
### UPVC PROFILES SYSTEM OF WT 624 (WINTECH)

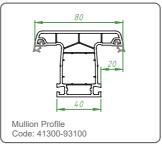


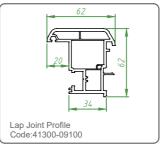




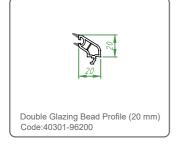










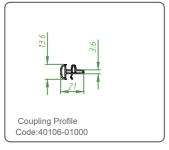


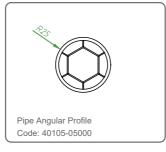


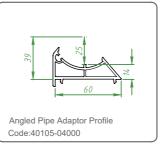


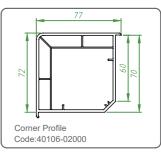
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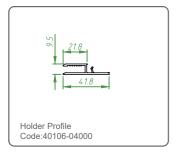


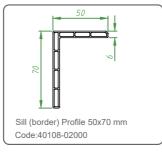


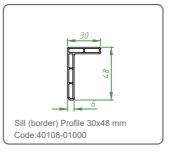


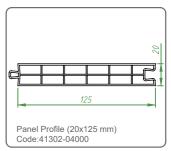


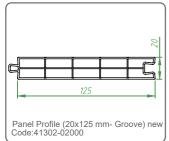


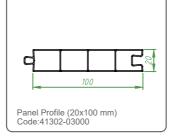


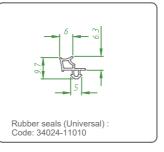


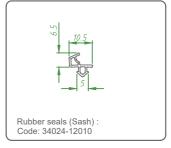






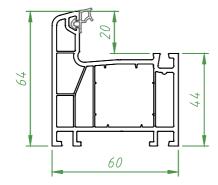






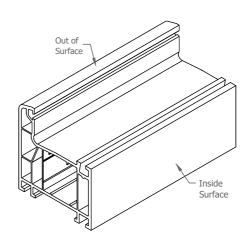


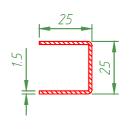
### Frame Profile



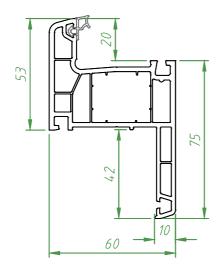


<b>a</b>	White / Without Rubber	0	41300- 01100	Inside	Outside
Sode	White / With Rubber	•	41300- 91100	Lmainate	Lmainate
	Brown Laminate / Golden Oak	0	******	******	******
l₩	Brown Laminate / Dark Oak	0	******	******	*****
Profile	Brown Laminate / Charcoal Brown	0	******	******	******
_	Gray Laminate / Wintech Gray	0	******	******	******
C 14	Falson Broken A Mark Broken		•		



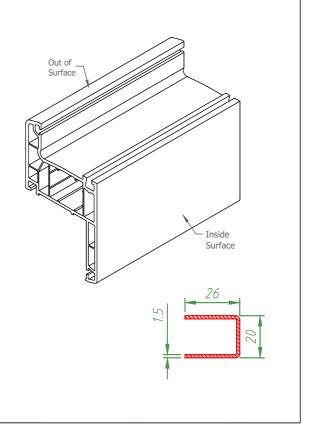


### Frame Profile With Sill



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

_ a,	White / Without Rubber	0	41300- 01300	Inside	Outside
Code	White / With Rubber	•	41300- 91300	Lmainate	Lmainate
	Brown Laminate / Golden Oak	0	******	******	*******
rofile	Brown Laminate / Dark Oak	0	******	******	******
윤	Brown Laminate / Charcoal Brown	0	******	******	******
-	Gray Laminate / Wintech Gray	0	******	******	******
0 W	fithout Rubber • With Rubber				





Brown Laminate / Charcoal Brown O

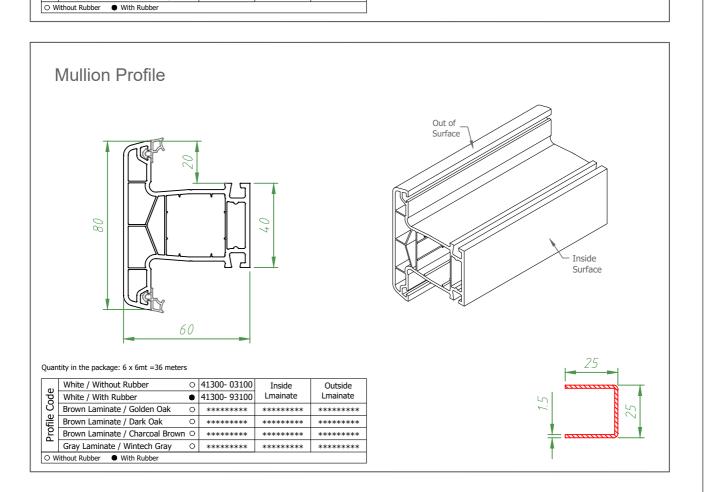
Gray Laminate / Wintech Gray

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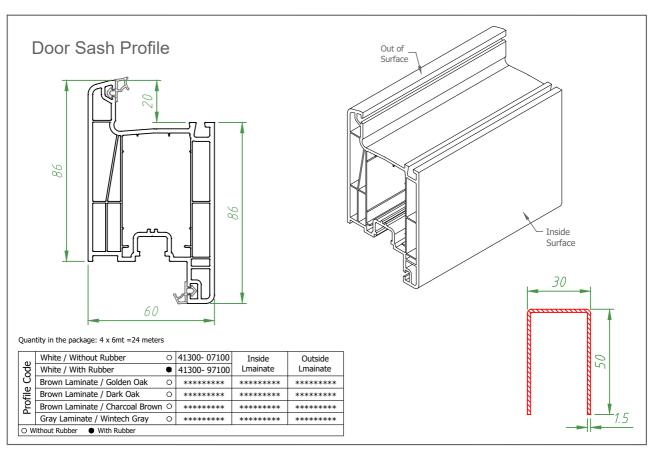
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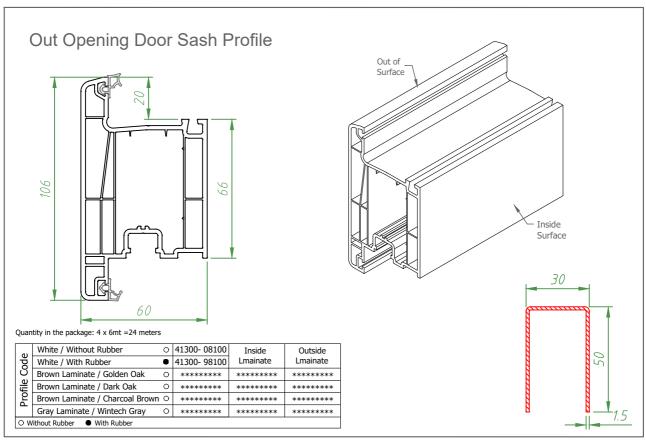
### Sash Profile Out of Surface Inside Surface 60 Quantity in the package: $6 \times 6mt = 36$ meters 0 41300- 05100 White / Without Rubber Inside Outside White / With Rubber 41300-95100 Lmainate Lmainate Brown Laminate / Golden Oak \*\*\*\*\* \*\*\*\*\*\* \*\*\*\*\* Brown Laminate / Dark Oak 0 \*\*\*\*\*\* \*\*\*\*\*\* \*\*\*\*\*\* 1.5

\*\*\*\*\*\*



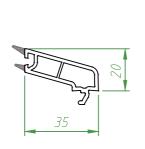


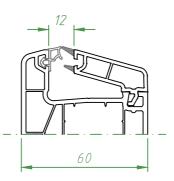


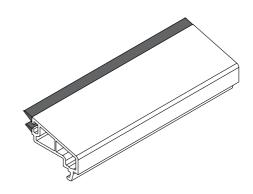




### Single Glazing Bead Profile (4 - 6 mm)





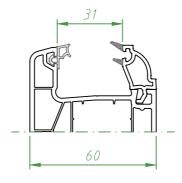


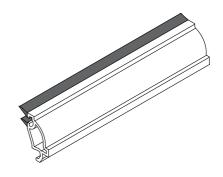
Quantity in the package: 20 x 6mt =120 meters

4)	White / Without Rubber	0	******	Inside	Outside	
Code	White / With Rubber	•	40301- 96400	Lmainate	Lmainate	
	Brown Laminate / Golden Oak	•	******	******	******	
Profile	Brown Laminate / Dark Oak	•	******	******	******	
<u>ک</u>	Brown Laminate / Charcoal Brown	•	******	******	******	
_	Gray Laminate / Wintech Gray	•	******	******	******	
O W	○ Without Rubber ● With Rubber					

### Double Glazing Bead Profile (24 mm)





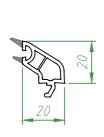


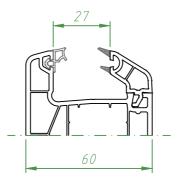
Quantity in the package:  $30 \times 6mt = 180$  meters

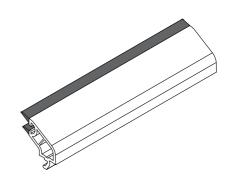
	White / Without Rubber	0	******	Inside	Outside
Ode	White / With Rubber	•	40301- 96500	Lmainate	Lmainate
		•	******	******	******
rofile	Brown Laminate / Dark Oak	•	******	******	******
Pro	Brown Laminate / Charcoal Brown	•	******	******	******
1	Gray Laminate / Wintech Gray	•	******	******	******
0	Without Rubber With Rubber				



### Double Glazing Bead Profile (20 mm)



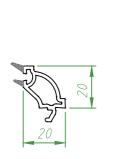


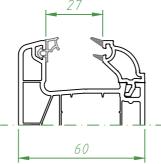


Quantity in the package: 30 x 6mt =180 meters

41	White / Without Rubber	0	******	Inside	Outside
Code	White / With Rubber	•	40301- 96200	Lmainate	Lmainate
	Brown Laminate / Golden Oak	•	******	******	******
Profile	Brown Laminate / Dark Oak	•	******	******	******
<u>ا</u> ک	Brown Laminate / Charcoal Brown	•	******	******	******
-	Gray Laminate / Wintech Gray	•	******	******	******
O W	Vithout Rubber  With Rubber				

### Double Glazing Bead Profile (20 mm)





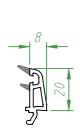


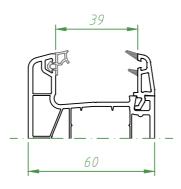
Quantity in the package:  $30 \times 6mt = 180$  meters

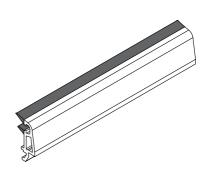
	5	White / Without Rubber	$\circ$	******	Inside	Outside Lmainate
۱ğ	ode	White / With Rubber	•	40301- 96100	Lmainate	
	$\circ$	Brown Laminate / Golden Oak	•	******	******	******
	rofile	Brown Laminate / Dark Oak	•	******	******	******
	Pro	Brown Laminate / Charcoal Brown	•	******	******	******
	4	Gray Laminate / Wintech Gray	•	******	******	******
	O W	ithout Rubber   With Rubber				



### Triple Glazing Bead Profile (32 mm)



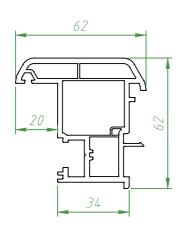


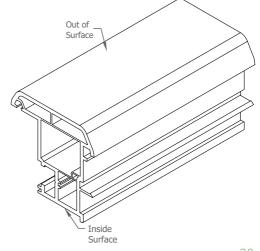


Quantity in the package: 30 x 6mt =180 meters

۵,	White / Without Rubber	0	******	Inside	Outside			
Code	White / With Rubber	•	40301- 96300	Lmainate	Lmainate			
	Brown Laminate / Golden Oak	•	******	******	******			
Profile	Brown Laminate / Dark Oak	•	******	******	******			
잂	Brown Laminate / Charcoal Brown	•	******	******	******			
1	Gray Laminate / Wintech Gray	•	******	******	******			
O W	O Without Rubber • With Rubber							

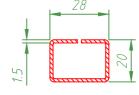
### Lap Joint Profile





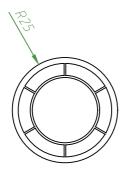
Quantity in the package: 6 x 6mt =36 meters

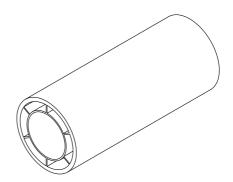
a)	White / Without Rubber	0	41300- 09100	Inside	Outside
Code	White / With Rubber	•	******	Lmainate	Lmainate
	Brown Laminate / Golden Oak	0	******	******	******
rofile	Brown Laminate / Dark Oak	0	******	******	******
Pro	Brown Laminate / Charcoal Brown	0	******	******	******
-	Gray Laminate / Wintech Gray	0	******	******	******
O W	lithout Pubber Mith Pubber				





### Pipe Angular Profile





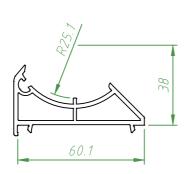
Quantity in the package:  $6 \times 6mt = 36$  meters

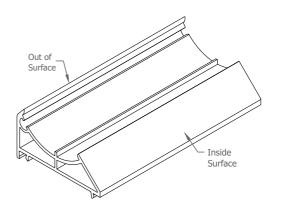
a	White / Without Rubber	0	40105- 05000	One side
Code	White / With Rubber	•	*******	Lmainate *
	Brown Laminate / Golden Oak	0	*******	******
Profile	Brown Laminate / Dark Oak	0	*******	******
인	Brown Laminate / Charcoal Brown	0	*******	******
-	Gray Laminate / Wintech Gray	0	******	******
O W	ithout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

Attention: One side of the laminate includes 50% of the profile.



### Angled Pipe Adaptor Profile





Quantity in the package:  $12 \times 6mt = 72$  meters

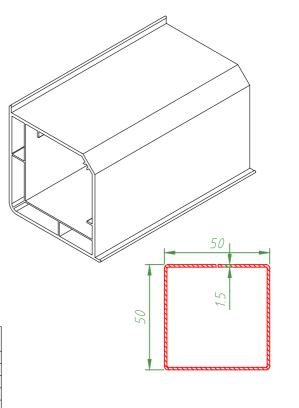
Code	White / Without Rubber White / With Rubber		40105- 04000	Inside Lmainate	Outside Lmainate		
ပ္ပ	Brown Laminate / Golden Oak	0	******	******	******		
Profile	Brown Laminate / Dark Oak	0	******	******	******		
2	Brown Laminate / Charcoal Brown	0	*******	******	******		
-	Gray Laminate / Wintech Gray	0	*******	******	******		
O 14	O Without Pubbor Mith Pubbor						



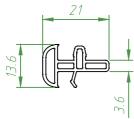
## Corner Profile 60 72 77



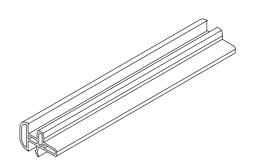
Code	White /	0	40106- 02000	Inside Lmainate	Outside Lmainate	
찟	White / With Rubber	•	******	Lillalliate	Lilialilate	
	Brown Laminate / Golden Oak	0	******	******	*******	
Profile	Brown Laminate / Dark Oak	0	******	******	******	
٦٢	Brown Laminate / Charcoal Brown	0	******	******	******	
-	Gray Laminate / Wintech Gray	0	*******	******	*******	
O W	O Without Rubber   With Rubber					



### Coupling Profile



Scale= 1:1.5

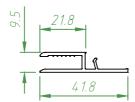


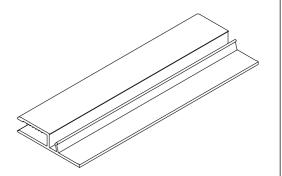
Quantity in the package: 30 x 6mt =180 meters

4)	White / Without Rubber	0	40106- 01000					
Code	White / With Rubber	•	******					
	Brown / Without Laminate	0	40106- 21000					
Profile	Gray / Without Laminate	0	40106- 61000					
욘	******	0	******					
_	*****	0	******					
O W	O Without Rubber  With Rubber							



### Holder Profile

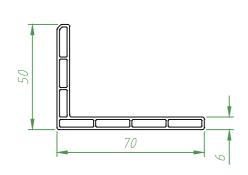


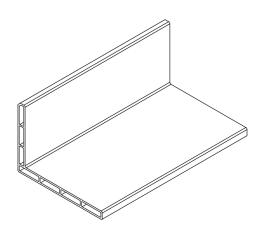


Quantity in the package: 20 x 6mt =120 meters

	White / Without Rubber	0	40106- 04000		
Code	White / With Rubber	•	*******		
	Brown / Without Laminate	0	40106- 24000		
Profile	Gray / Without Laminate	0	40106- 64000		
잁	*****	0	*******		
-	*****	0	******		
O Without Rubber • With Rubber					

### Sill (border) Profile - 50x70 mm



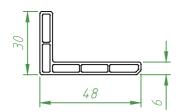


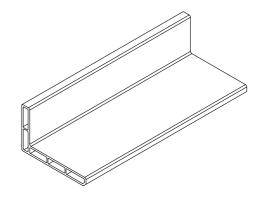
Quantity in the package: 12 x 6mt =72 meters

је	White / Without Rubber White / With Rubber	0	40108- 02000	Inside Lmainate	Outside Lmainate	
Code	Brown Laminate / Golden Oak	0	******	******	******	
	Brown Laminate / Dark Oak	<del>~</del>	******	******	******	
Profile	Brown Laminate / Charcoal Brown	0	******	******	******	
"	Gray Laminate / Wintech Gray	0	*******	******	******	
O W	O Without Rubber   With Rubber					



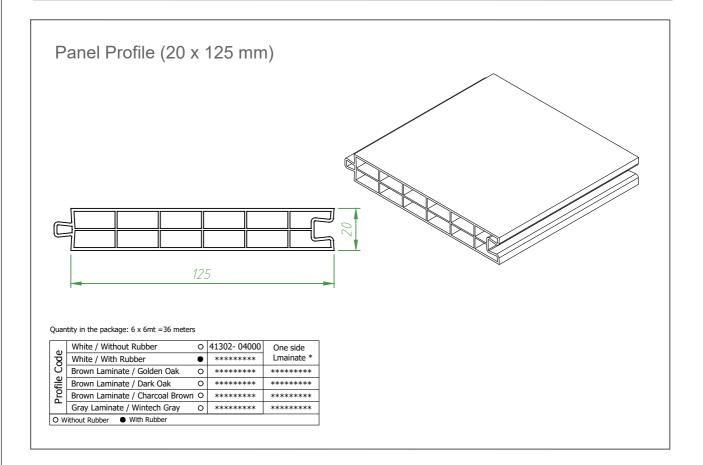
### Sill (border) Profile - 30x48 mm



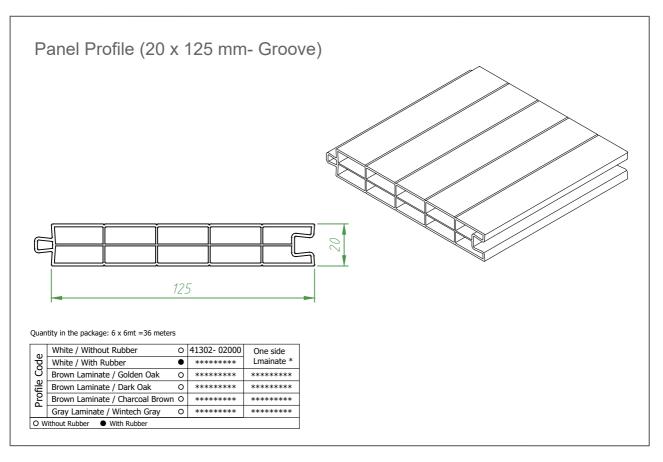


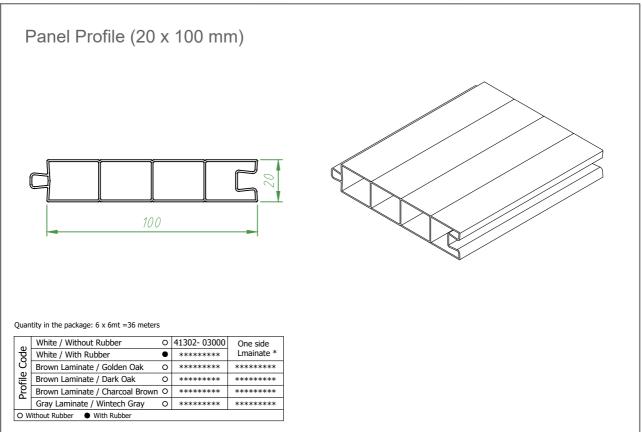
Quantity in the package: 12 x 6mt =72 meters

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

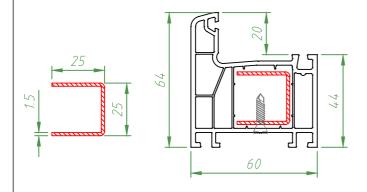


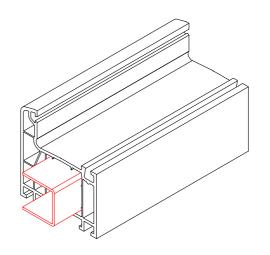








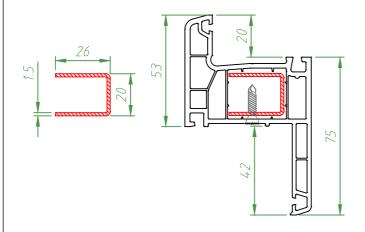


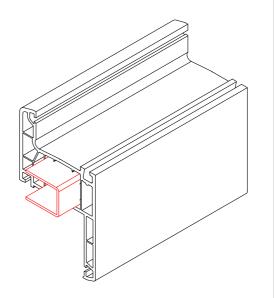


Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.97	0.58	89.1	700 gr /mt
1.5 mm	1.14	0.69	106.3	834 gr /mt
2 mm	1.45	0.9	140.4	1100 gr /mt

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

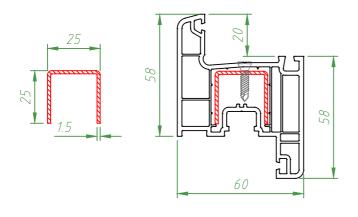
### Galvanized Reinforcing Profile Systems

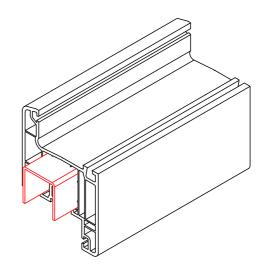




Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.61	0.60	85.4	670 gr /mt
1.5 mm	0.71	0.71	101	793 gr /mt
2 mm	0.89	0.92	134.1	1052 gr /mt



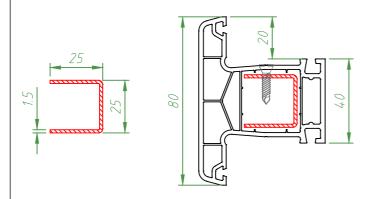


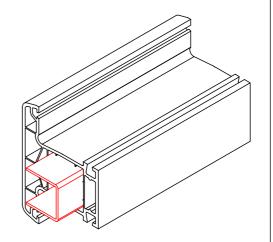


Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.97	0.58	89.1	700 gr /mt
1.5 mm	1.14	0.69	106.3	834 gr /mt
2 mm	1.45	0.9	140.4	1100 gr /mt

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

### Galvanized Reinforcing Profile Systems

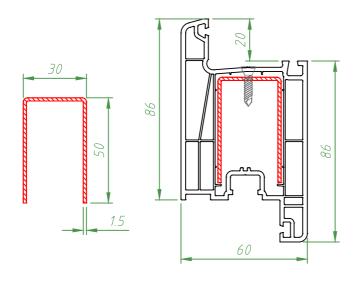




Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.97	0.58	89.1	700 gr /mt
1.5 mm	1.14	0.69	106.3	834 gr /mt
2 mm	1.45	0.9	140.4	1100 gr /mt

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

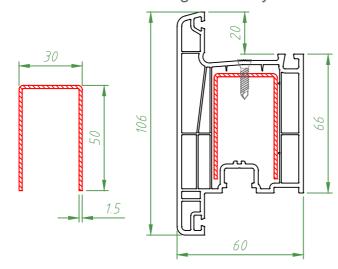


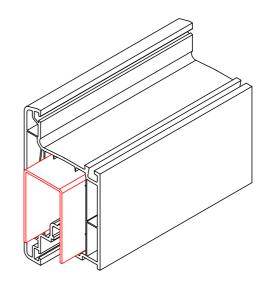


Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	4.15	2.76	157.9	1240 gr /mt
1.5 mm	4.93	3.26	188.9	1483 gr /mt
2 mm	6.44	4.16	249.4	1958 gr /mt

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

### Galvanized Reinforcing Profile Systems

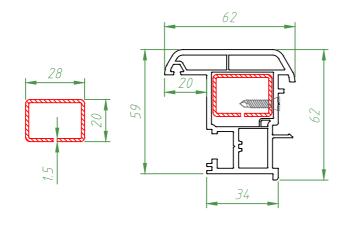


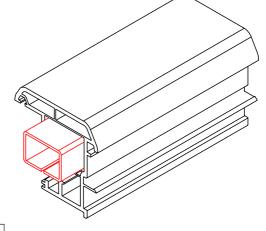


Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	4.15	2.76	157.9	1240 gr /mt
1.5 mm	4.93	3.26	188.9	1483 gr /mt
2 mm	6.44	4.16	249.4	1958 gr /mt

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

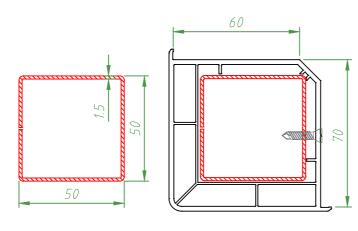


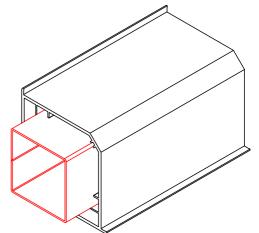




Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	0.72	1.26	116.5	914 gr /mt
1.5 mm	1.78	1.38	128.7	1010 gr /mt
2 mm	0.96	1.72	166.8	1310 gr /mt

### Galvanized Reinforcing Profile Systems

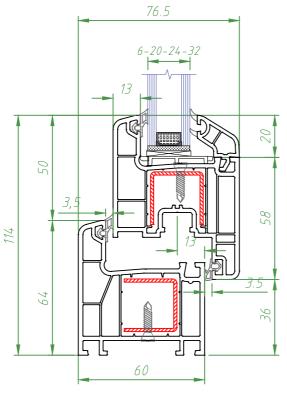


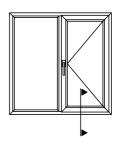


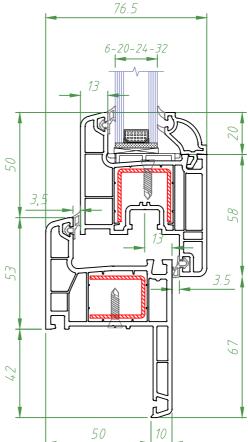
Thickness	Ix (cm) <sup>4</sup>	Iy (cm) <sup>4</sup>	Area	Weight
1.25 mm	9.51	9.43	240	1884 gr /mt
1.5 mm	11.22	11.13	286.2	2246 gr /mt
2 mm	14.46	14.34	376	2951 gr /mt







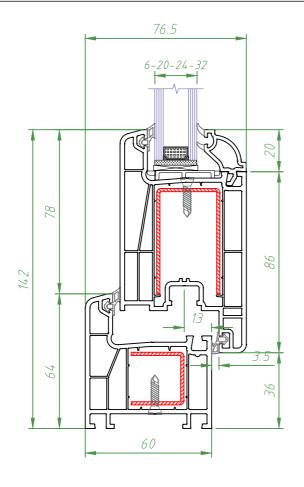




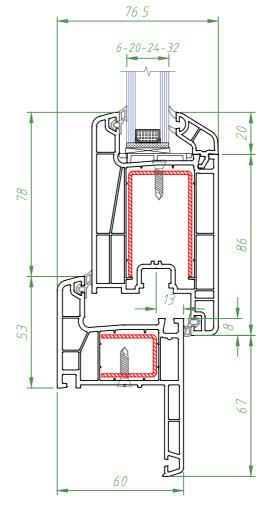








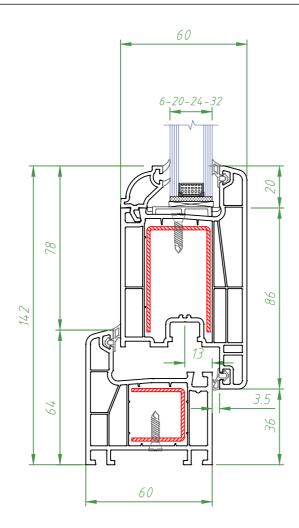


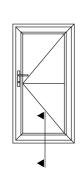




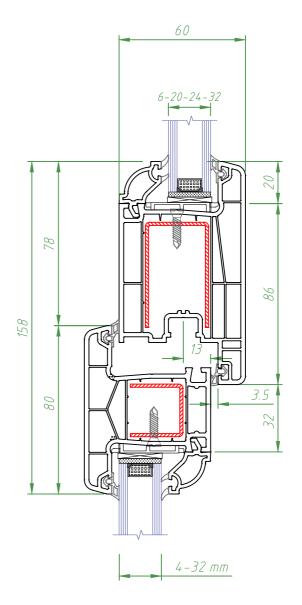


### UPVC PROFILES SYSTEM OF WT 624 (WINTECH)

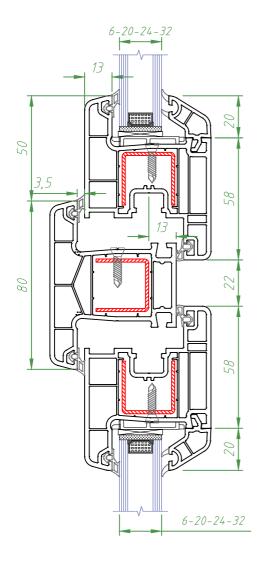




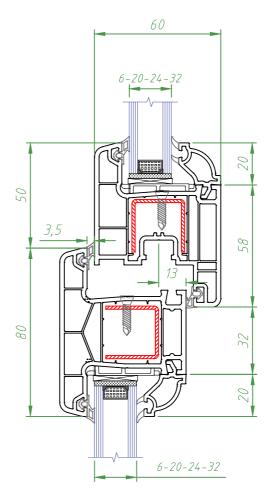






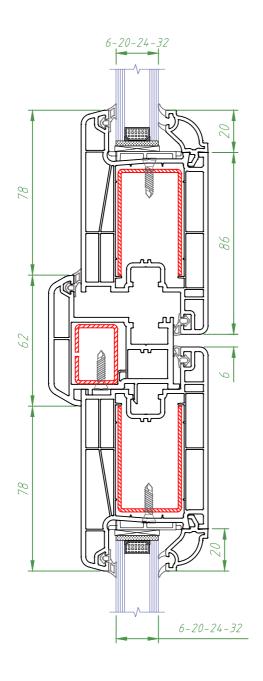


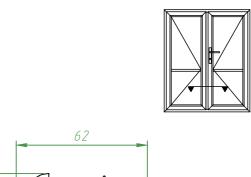


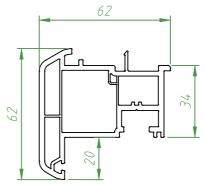


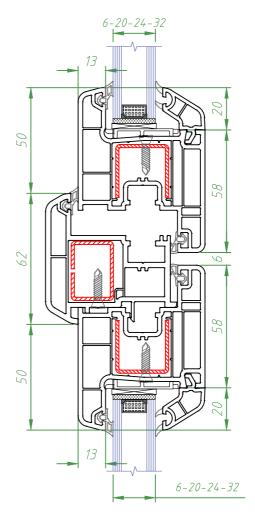


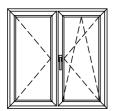






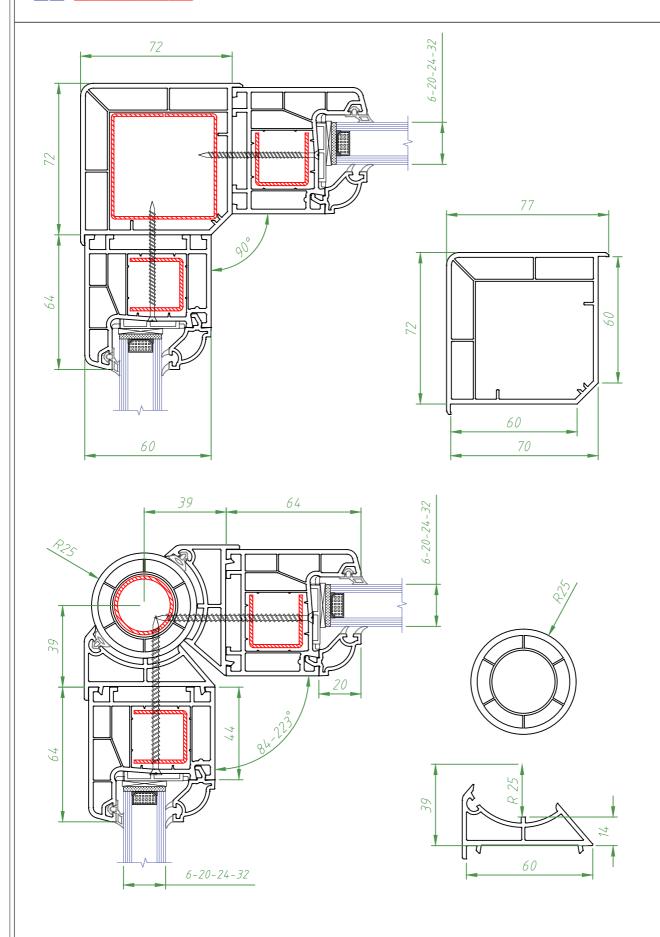


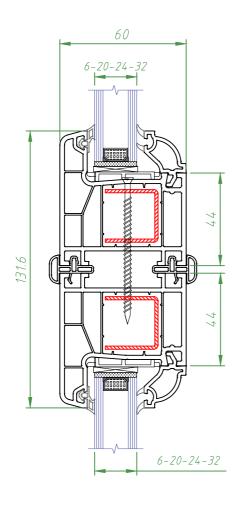


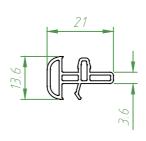




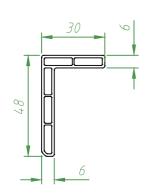
### UPVC PROFILES SYSTEM OF WT 624 (WINTECH)

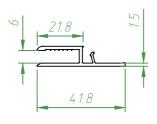


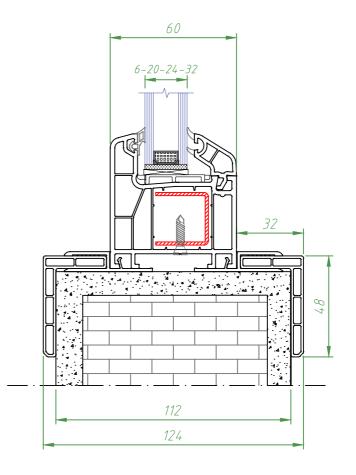




Scale= 1:1.5

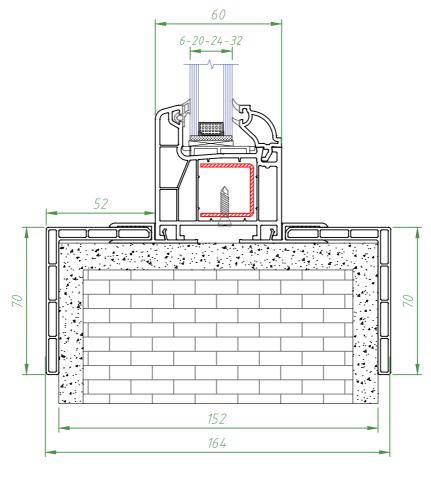


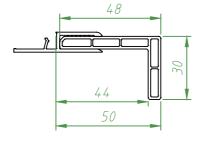


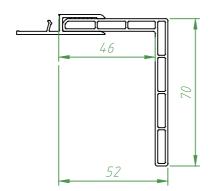


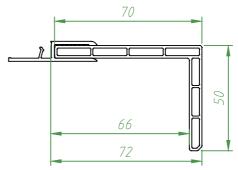
28

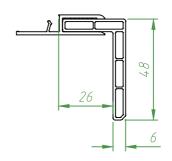






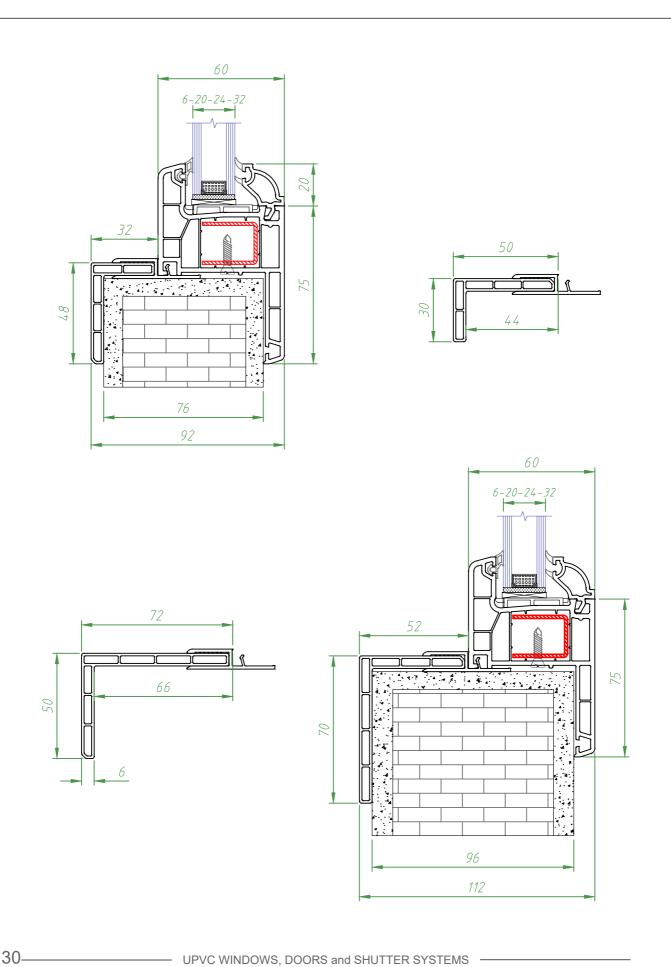




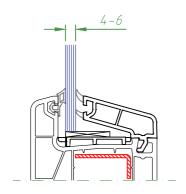




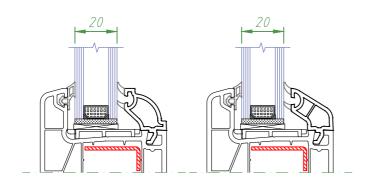
### UPVC PROFILES SYSTEM OF WT 624 (WINTECH)



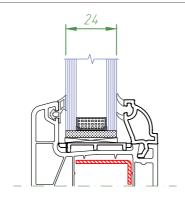




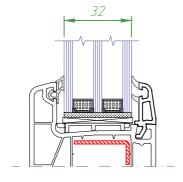
Single Glazing Bead 4 - 6 mm



Double Glazing Bead 20 mm



Double Glazing Bead 24 mm



Triple Glazing Bead 32 mm



### STATIC CALCULATION General Information:

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

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

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

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

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

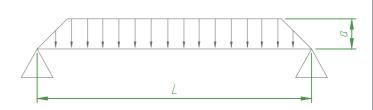
### CALCULATION OF WINDOW:

a= Height of Loading cm

L= Distances Between Abutments cm

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

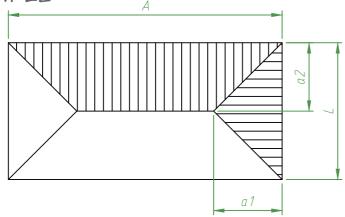
J = Moment of Inertia

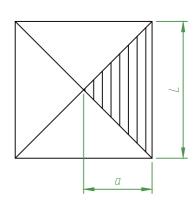


of	height of buliding	wind speed	dynan (Q)	nic pressure	multiplie coefficien p=cxQ		multiplied coefficient p=cxQ	factor of changing	
forcing	mt	m/s	kp/m2	KN/m2	kp/m2	KN/m2	kp/m2	KN/m2	
A	0-8	28.3	50	0.5	60	0.6	60	0.6	1.00
Α	8-20	3 <i>5</i> .8	80	0.8	96	0.96	96	0.96	1.6
A	20-100	42	110	1.1	132	1.32	132	1.32	2.2
А	> 100	45.6	130	1.3	156	1.56	156	1.56	2.6



### CALCULATION IS PERFORMED WITH THE HELP OF A SAMPLE





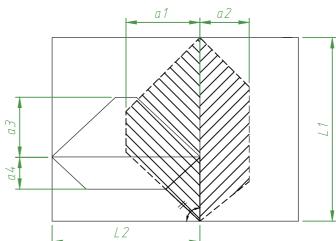
a = Width of Loading

L = Distance between Abutments

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

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

SKETCH OF LOAD DISTRIBUTION ON WINDOW WITH VERTICAL AND MULLION PROFILE



a = Width of Loading (cm)

L = Distance of Abutment (cm)

If the graphic is drawn with scale, "a" is defined as width of loading.

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

For an example;

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



### STATIC CALCULATION

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

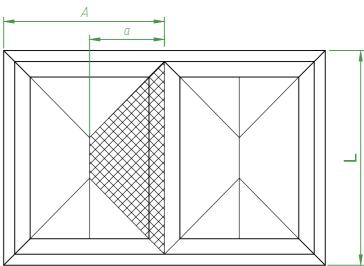
The shape and thickness of the reinforcement profiles are used to determine the maximum size of the window, in addition to the height at which the quadrilateral is installed and the wind power is also associated.

### General rules:

Maximum bale Exterior Size in Figure.

The largest portion required is given as M.

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



$Ix = \frac{W^4 L.a}{1920.E.f} (25-40 \left(\frac{a}{L}\right)^2 + 16 \left(\frac{a}{L}\right)^4)$
Ix = Required Moment of Inertia (cm <sup>4</sup> )
W = Wind Load( N/mm ) <sup>2</sup>
E = Modulus of Elasticity ( E = 2600 N/mm2 / E = 210.000N/mm $^2$ )
f = Allowable Deflection ( L / 300 ) cm
a = Width of Loading ( cm )
L = Space of Abutment ( cm )

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



# UPVC PROFILES SYSTEM OF WT 624 (WINTECH)

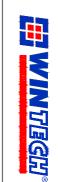
### MODULUS OF ELASTICITY = 210.000 N/MM2

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

	200																									
	190																									
	180																									
	170																									67.61
	160																							49.93	58.17	67.32
	150																					37.16	42.55	49.69	57.64	66.45
	140																		270	25.61	30.48	36.69	42.11	48.96	56.58	65.00
	130																	17.68	21.32	25.45	30.12	36.36	41.23	47.46	26.00	65.99
	120															11.85	14.50	17.55	21.02	24.96	29.4	34.37	39.92	46.09	52.92	60.45
A/2		110												8.37	76.6	11.75	14.27	17.16	20.44	24.16	28.33	33.00	38.20	43.98	50.36	57.39
/ a=	100											5.71	6.93	8.28	9.78	11.44	13.81	16.52	19.59	23.05	26.93	31.27	37.62	41.44	47.34	53.84
h of sash (cm)	06								3.03	3.75	4.64	5.64	6.77	8.02	9.41	10.94	13.13	15.63	18.46	21.65	25.22	29.19	36.09	38.51	43.90	49.83
= width of	80							2.34	2.97	3.69	4.51	5.43	6.46	7.60	8.86	10.25	12.25	14.52	17.09	19.98	23.21	26.80	30.79	35.21	40.07	45.41
a = v	70			0.75	1.22	1.37	1.80	2.30	2.87	3.52	4.26	5.09	6.01	7.03	8.15	9.38	11.17	13.20	15.49	18.06	20.93	24.12	27.66	31.57	35.58	40.60
	09		0.54	0.74	1.01	1.34	1.72	2.16	2.67	3.24	3.89	4.61	5.42	6.31	7.28	8.35	9.92	11.69	13.68	15.91	18.41	21.18	24.25	27.63	31.36	36.45
	50		0.52	0.72	0.95	1.23	1.56	1.94	2.38	2.87	3.42	4.03	4.71	5.46	6.29	7.19	8.51	10.01	11.69	13.57	15.67	18.01	20.59	23.44	26.57	30.01
	40	0.34	0.48	0.64	0.84	1.07	1.34	1.65	2.00	2.40	2.85	3.35	3.90	4.51	5.17	5.90	26.9	8.18	9.54	11.06	12.76	14.64	16.72	19.02	21.54	24.31
	30	0.29	0.39	0.52	0.67	0.85	1.06	1.30	1.56	1.87	2.21	2.58	3.00	3.46	3.96	4.51	5.32	6.24	7.27	8.42	9.70	11.12	12.69	14.42	16.33	18.41
	20	0.21	0.28	0.37	0.47	0.59	0.73	0.89	1.07	1.28	1.50	1.76	2.04	2.35	2.68	3.05	3.60	4.21	4.90	5.67	6.53	7.48	8.53	69.6	10.97	12.36
	1	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340

This moment of inertia chart is for double-glazed systems. f=H/300 <0,8 cm (Maximum permissible deviation)

Consult glass firms to determine type and features of the glass. Thickness of the glass alters for different distances and heights.



# UPVC PROFILES SYSTEM OF WT 624 (WINTECH)

# MODULUS OF ELASTICITY = 210.000 N/MM2

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

									L=	= h	eig	ght	of	sa	sh	( c	m )	)										
000	340	330	320	310	300	290	280	270	260	250	240	230	220	210	200	190	180	170	160	150	140	130	120	110	100			
22.21	19.8/	17.54	15.51	13.66	11.97	10.45	9.07	7.84	6.74	5.75	4.88	4.29	3.75	3.28	2.81	2.41	2.04	1.72	1.43	1.17	0.95	0.76	0.59	0.45	0.33	20		
33.10	29.46	26.12	23.08	20.31	17.79	15.52	13.47	11.63	9.98	8.52	7.22	6.34	5.54	4.80	4.13	3.53	2.99	2.50	2.07	1.69	1.36	1.08	0.84	0.63	0.46	30		
43./3	38.			26.76	23.43	20.41	17.70	15.27	13.09	11.15	9.44	8.28	7.21	6.24	5.36	4.56	3.84	3.21	2.64	2.14	1.71	1.34	1.02	0.76	0.54	40		
34.02	48.01	42.51	37.50	32.94	28.81	25.08	21.71	18.70	16.01	13.62	11.50	10.06	8.74	7.54	6.45	5.46	4.58	3.80	3.11	2.50	1.98	1.52	1.14	0.83	0.57	50		SELE
00.00		50.18	44.22	38.79	33.88	29.45	25.46	21.89	18.7	15.87	13.37	11.66	10.09	8.67	7.38	6.22	5.19	4.27	3.46	2.75	2.14	1.62	1.18	0.87		60		SELECT OF CORRECT T PROFILE WITH RESPECT TO WIND PRESSURE
/3.24	202		1	44.26	38.59	33.48	28.89	24.78	21.12	17.87	15.01	13.04	11.24	9.61	8.14	6.81	5.63	4.59	3.67	2.88	2.20	1.67				70	а	CORREC
02.01	72.65	64.11	56.33	49.27	42.88	37.13	31.96	27.35	23.24	19.60	16.39	14.18	12.16	10.34	8.69	7.22	5.91	4.75	3.74							80	= width	T T PRO
90.14	<u> </u>		61.61	53.78	46.71	40.35	34.64	29.54	25.02	21.02	17.50	15.06	12.84	10.83	9.03	7.42	6.00									90	width of sash (	DFILE W
71.00	86.14		66.30	57.75	50.03	43.09	36.88	31.34	26.43	22.1	18.30	15.65	13.25	11.08	9.14											100	cm)/ e	TH RE
104.1	91.82	80.57	70.36	61.13	52.80	45.33	38.65	32.71	27.46	22.83	18.79	15.95	13.39												110		a=A/2	SPECT
109.9	96./	84.67	73.74	63.87	54.99	47.03	39.94	33.64	28.08	23.21	18.99															120		TO WIN
114.0	100.7	88.00	76.41	65.96		48.18		34.11	28.29																	130		D PRES
110.0	104.0	90.52	78.34	67.37	57.54	48.76	40.98	270																		140		SURE
121.0	106.3	92.22	79.50	68.08	57.88																					150		
123.9	10/./	93.07	79.89																							160		
124.9	108.1																									170		
																										180		
																										190		
																										200		

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

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

Consult glass firms to determine type and features of the glass. Thickness of the glass alters for different distances and heights.



# UPVC PROFILES SYSTEM OF WT 624 (WINTECH)

# MODULUS OF ELASTICITY = 210.000 N/MM2

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

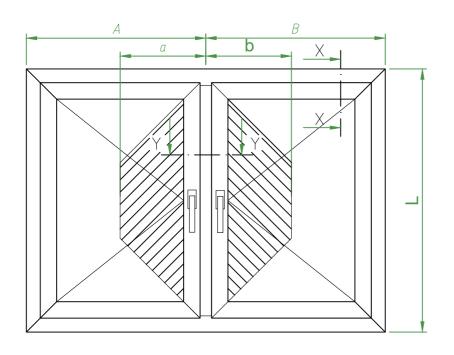
	200																										
	190																										
	180																										
	170																									148.75	111
	160																							109.85	127.97	148.1	170 01
	150																					79.55	93.60	109.31	126.80	146.18	167 50
	140																			56.34	67.05	79.11	92.63	107.71	124.47	143.00	162 17
	130																	38.90	46.90	55.98	66.25	77.79	90.70	105.06		138.59	157 06 163 13 167 50
	120															26.7	31.91	38.61	46.25	54.91	64.67	75.61	87.83	101.4	116.42	132.99	147 74 151 71
a=A/2		110												18.41	21.94	25.84	31.40	37.75	44.98	53.15	62.33	72.60	84.05	96.75	110.79	126.26	11001
(cm)/	100											12.57	15.24	18.22	21.52	25.17	30.39	36.34	43.09	50.70	59.25	62.99	79.41	91.17	104.16	118.45	12/12
width of sash (	06									8.25	10.20	12.41	14.89	17.65	20.70	24.06	28.90	34.40	40.62	47.63	55.47	64.23	73.95	84.72	96.65	109.64	102 04
a = widt	80							5.15	6.53	8.12	9.92	11.95	14.21	16.72	19.50	22.54	26.95	31.95	37.60	43.95	51.05	58.97	67.75	77.45	88.15	06.66	110 77
	70				2.32	3.20	3.96	5.05	6.31	7.74	9.37	11.19	13.21	15.46	17.93	20.64	24.58	29.04	34.08	39.73	46.04	53.06	60.85	69.45	78.93	89.32	1007
	09		1.21	1.63	2.23	2.94	3.78	4.75	5.87	7.13	8.56	10.15	11.92	13.88	16.03	18.38	21.82	25.71	30.10	35.01	40.49	46.59	53.34	08.09	00.69	77.99	87.83
	50	0.79	1.14	1.57	2.10	2.72	3.44	4.27	5.23	6.30	7.51	8.86	10.36	12.01	13.83	15.81	18.72	22.01	25.71	29.86	34.48	39.61	45.30	51.56	58.46	66.01	77.00
	40	0.75	1.05	1.41	1.84	2.35	2.95	3.63	4.41	5.28	6.27	7.36	8.58	9.91	11.38	12.98	15.34	18.00	20.99	24.34	28.07	32.21	36.79	41.84	47.40	53.48	60.13
	30	0.63	0.87	1.15	1.48	1.88	2.33	2.58	3.44	4.11	4.85	5.68	9.9	7.61	8.72	9.93	11.71	13.73	15.99	18.52	21.34	24.46	27.92	31.73	35.92	40.51	75 62
	20	0.46	0.62	0.81	1.04	1.30	1.61	1.96	2.36	2.81	3.31	3.87	4.48	5.16	5.90	6.71	7.91	9.26	10.70	12.47	14.36	16.46	18.77	21.32	24.12	27.19	20 51
		100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	250
									(	( w	( cı	ųs	ses	Ĵο	1 <b>4</b> 5	giə	Ч =	- Γ									

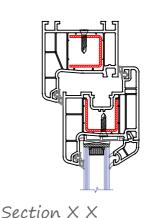
This moment of inertia chart is for double-glazed systems. f=H/300 <0,8 cm (Maximum permissible deviation)

Consult glass firms to determine type and features of the glass. Thickness of the glass alters for different distances and heights.



## STATIC CALCULATION EXAMPLE





Height of Window L = 180 cm

Width of Area A = 100 cm

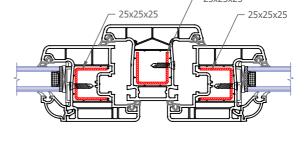
Width of Area B = 100 cm

Width of Loading a = 50 cm

Width of Loading b = 50 cmHeight of Building h = 8 mt

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

Constant Multiply c = 1.2



Section Y\_Y

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

Allowable Deflection L/300 F = 180 / 300 = 6 mm

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

Ix = Required Moment of Inertia (cm<sup>4</sup>) Ix<sub>1</sub>=
$$\frac{W L_{.}^{4}a}{1920.E.F}$$
 (25-40  $(\frac{a}{L})^{2}$  + 16  $(\frac{a}{L})^{4}$ )

$$Ix_2 = \frac{W L^4 b}{1920.E.f} (25-40(\frac{b}{L})^2 + 16(\frac{b}{L})^4)$$



$$Ix_1 = \frac{0.00060 \times 180^4 \times 50}{1920 \times 21,100,000 \times 0.6} (25-40 \left(\frac{50}{180}\right)^2 + 16 \left(\frac{50}{180}\right)^4) = 2.87 \text{ cm}^4$$

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

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

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

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

Sum of 
$$1x = 1x_1 + 1x_2$$

Sum of Ix on chart 
$$Ix = Ix_1 + Ix_2$$
 2,87+2,87 = 5,74cm

$$2.87 + 2.87 = 5.74$$
cm

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

System is considered as Sash + Mullion Profile + Sash.

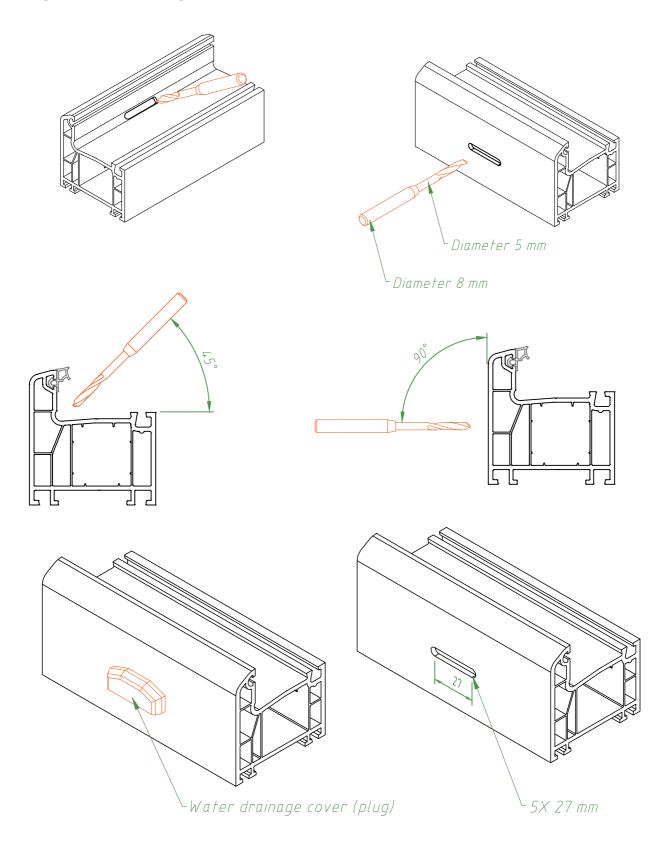
Sash Reinforcement Ix = 1.14 cm Mullion Reinforcement Ix = 0.69 cm Sash Reinforcement Ix = 1.14 cm

Total Ix in the System = 1.14 + 0.69 + 1.14 = 2.97 cm

Total Ix of Reinforcement in the system < Required

2.97 cm < 5.74 cm with the help of Reinforcement stated above ,the window with reinforcement profile is not possible.

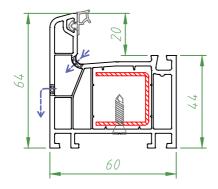
# Drainage And Smoothing Out Pressure Holes

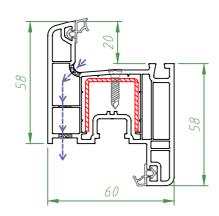


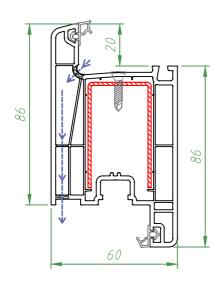
40

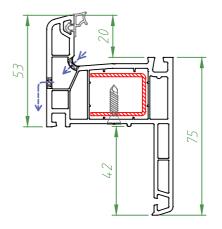


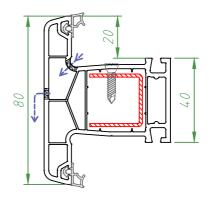
# Drainage And Smoothing Out Pressure Holes

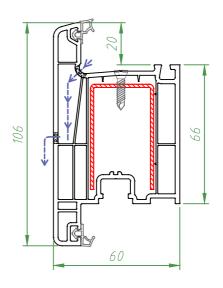






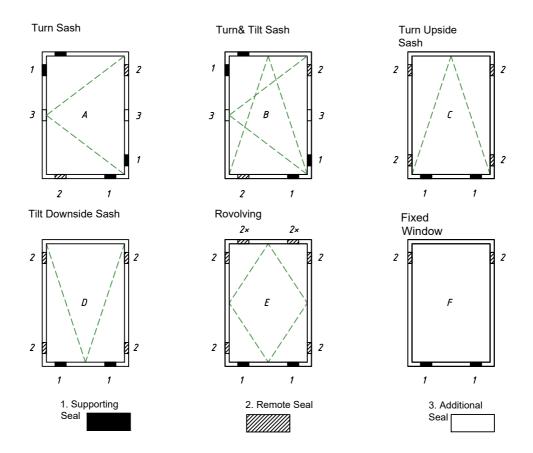






Profile Section Length - X<500 mm1 - Hole
500mm<x-profile section's lenght<1000mm - 2 holes
1000mm<x-profile section's lenght<2000mm - 3 holes
2000mm<x-profile section's lenght<3000mm - 3 holes





Supporting Seal-in Case Of Revolving Sash

To transport the final product, use special cork or plastic or foam corners to prevent curling or damage to products. All window components should be tight. The protective label on the profile is only after the window is installed.

To adjust the window in place, use an anchor or bolts. Without an amplified profile, the hinged screw spacing is greater than 600 mm, or the reinforcement profile is 700 mm. The distance between the anchorage and the inner corner

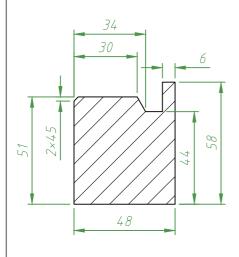
should not be less than 100 mm and between the support and the outer corner of 200 mm.

The fasteners are used to consider increasing the structural size of the windows during installation. The clamps stacked up and down the wall. Systems with no moving parts for better placement in a closed group. It is not advisable to fix the frame in the middle of the cross section of the profile or in the corners to the frame.

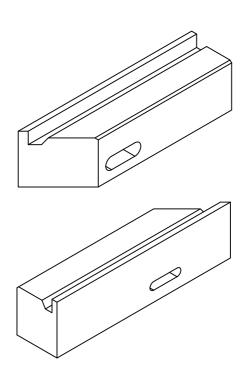
On the contrary, the windows with the above-mentioned specifications should be cleaned up. The bottom side of the window must be completely resistant to water penetration. The windows are installed in the frames and fitted. Wall holes should be filled with well-insulated materials. Exterior rubbers prevent rain from entering the inside. Internal rubber seals prevent condensation. The rubber seals should be flat and integrated.



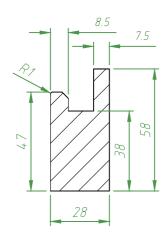
# Accessories (welding mold systems)



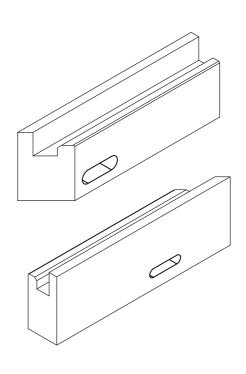
Technical Code	Machine name	Single head	Double head
	KABAN Machines	36241-16100	36241-16200
	MURAT Machines	36242-16100	36242-16200
	OZGENC Machines	36243-16100	36243-16200
	YILMAZ Machines	36244-16100	36244-16200



# Accessories (welding mold systems)

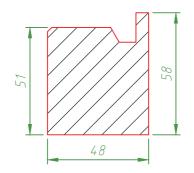


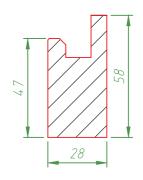
Technical Code	Machine name	Single head	Double head
	KABAN Machines	36401-12100	36401-12200
	MURAT Machines	36402-12100	36402-12200
	OZGENC Machines	36403-12100	36403-12200
	YILMAZ Machines	36404-12100	36404-12200

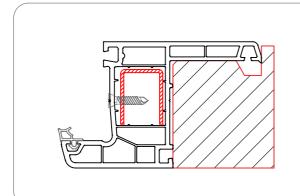


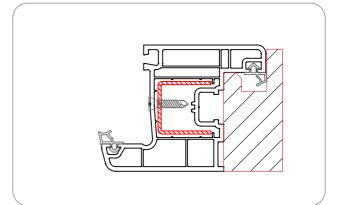


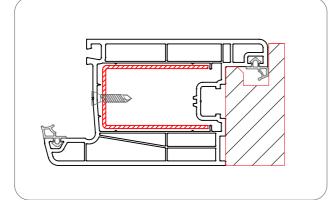
# Accessories (welding mold systems)

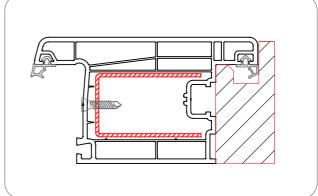


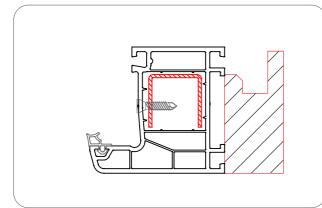


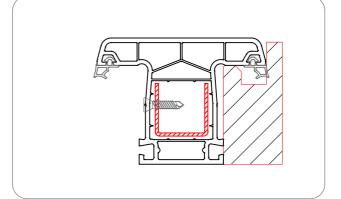






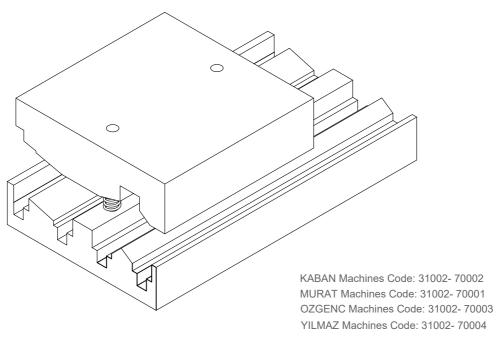


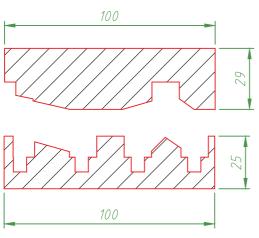


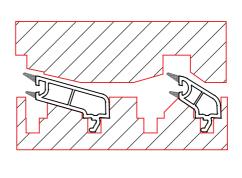


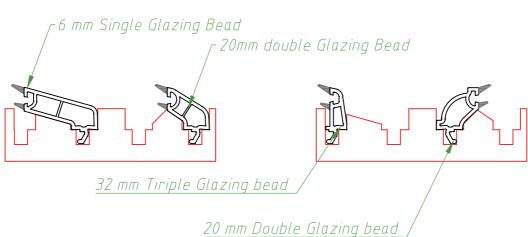


# Accessories (Cutting Fixture)



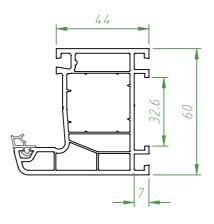


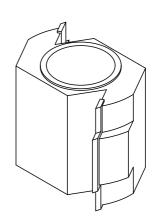






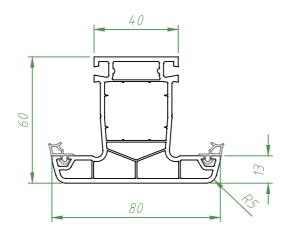
# Accessories (Blade Cleaner - Frame Profile)

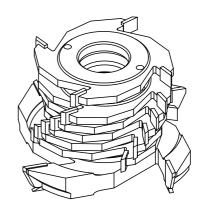




Code (Normal): 31001-62401

# Accessories (Milling Blade - Mullion Profile)



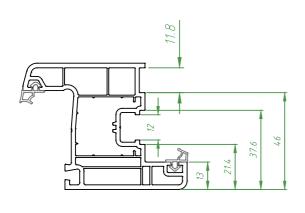


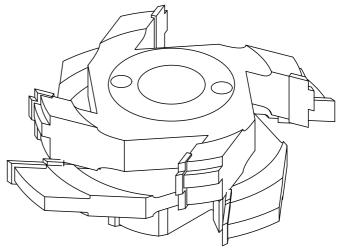
Code (Normal): 31001-62403

Code (elumatech Machines): 31001-62406

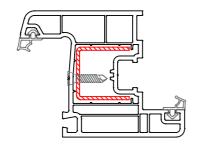


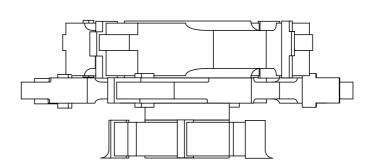
# Accessories (Blade Cleaner- Sash Profile)

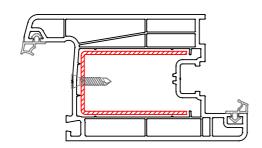


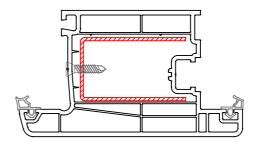


Code (Normal): 31001-62405





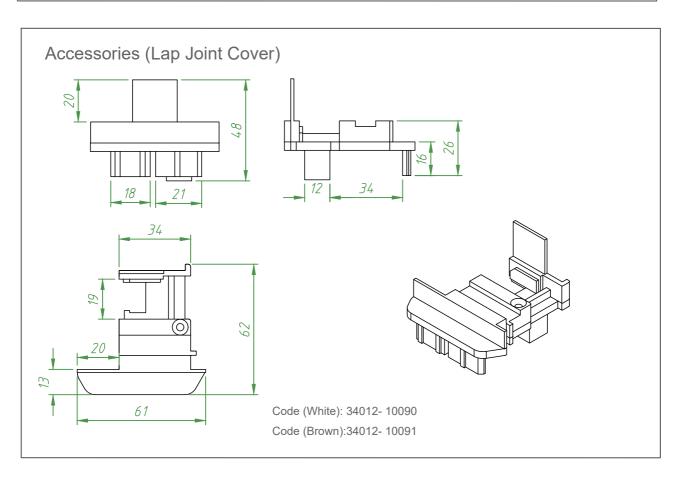






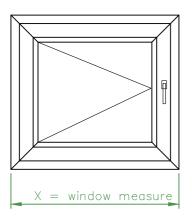
Code (Brown):34007- 11071

# Accessories (Mullion Profile Connectors) 38 38 35.6 40.5 Code (White): 34007- 11070



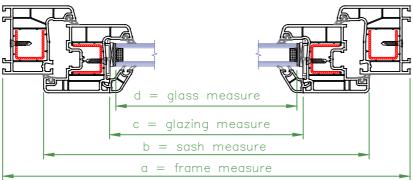


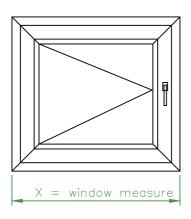
### **Technical Calculation**



### Calculations:

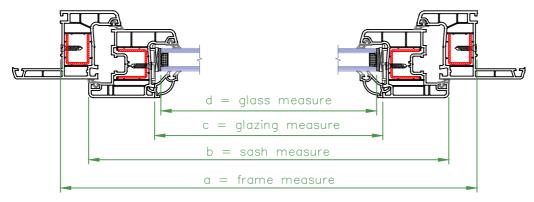
Frame Measure (a): X + 6Sash Measure (b): X - 66Glazing Measure (c): X - 188Glass Measure (d): X - 198





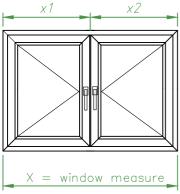
### Calculations:

Frame Measure (a): X + 90Sash Measure (b): X - 44Glazing Measure (c): X - 166Glass Measure (d): X - 176





### **Technical Calculation**



### Calculations:

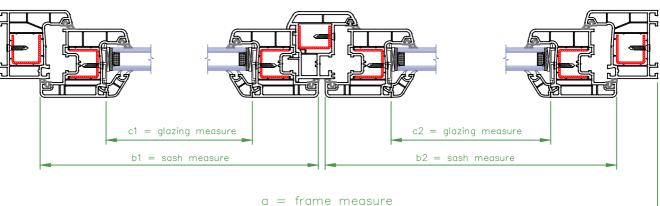
Frame Measure (a): X + 6

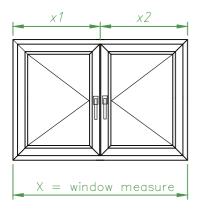
Sash Measure (b1): X1 - 33

Sash Measure (b1): X2 - 33

Glazing Measure (c1): X1 - 155

Glazing Measure (c2): X2 - 155





### Calculations:

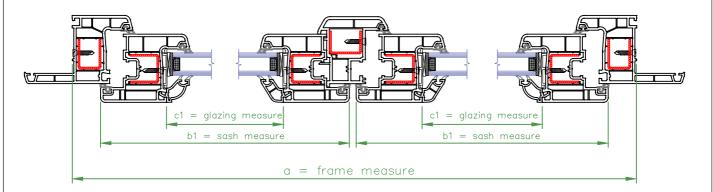
Frame Measure (a): X + 90

Sash Measure (b1): X1 - 22

Sash Measure (b1): X2 - 22

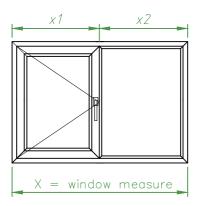
Glazing Measure (c1): X1 - 144

Glazing Measure (c1): X2 - 144



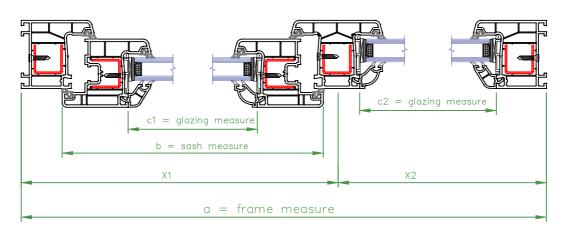


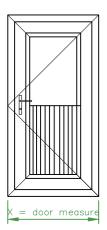
### **Technical Calculation**



### Calculations:

Frame Measure (a): X + 6Sash Measure (b): X1 - 42Glazing Measure (c1): X1 - 164Glazing Measure (c2): X2 - 64





### Calculations:

Frame Measure (a): X + 6Sash Measure (b): X - 66Glazing Measure (c): X - 244Glass Measure (d): X - 254

