Yapı Teknik Grubu

At each moment of life...

PRODUCT CATALOG

Çukurova Yalıtım

ÇUKUROVA YALITIM ÇATI
KAPLAMA VE PLASTİK ÜRÜNLER SAN. VE TİC. A.Ş.

YAPI TEKNİK

YAPI TEKNİK İNŞAAT MAK. SAN. VE TİC. LTD. ŞTİ.

Yapı Teknik Grubu

ABOUT YAPI TEKNİK GROUP

Yapı Teknik Group was founded in 1992 in Gebze/Kocaeli for sales and application of roofing products. It developed its portfolio regarding hardware sales with the increasing demand, and became the first supplier of the neighboring industrial enterprises.

The company, exporting to 28 countries and with a country-wide dealer system, is one of the biggest producers with 3 factories and more than 300 employees.

Yapı Teknik Group offers a comprehensive range of products that are widely used across many construction and associated industry sectors. The well-known product groups and brands are: “Galvanized Steel Trapeze“, “Glassfibre Reinfoced Polyester” (GRP), “Yapıpor EPS”, “4x4 Membrane”, “4x4 Shingle”, “4x4 HDPE Dimpled Sheet” and ‘’Gypsum Board Profile”.

Yapıser A.Ş. was founded for manufacturing “Glassfibre Reinfoced Polyester” (GRP) and Sistem Çatı Ltd. Şti. was founded for manufacturing “Galvanized Steel Trapeze“. Yapıser continued local expansion via PVC and EPS manufacturing investments. Sistem Çatı strengthened its position in the metal sector by developing its product range.

The fast growing company moved its headquarters to Yapı Teknik Business Center in Şekerpınar in 2004.

Yapı Teknik continued growing. The new investment was a new plant in Adapazarı 3rd Organized Industrial Zone. Çukurova Yalıtım A.Ş. started manufacturing plastic and insulation materials under “4x4” trademark in 2007.

Yapı Teknik Group sustains its success in the domestic market, in Turkic Republics, Middle East, North Africa, Balkans and Europe. Yapı Teknik Group makes a contribution to Turkish economy with high quality and technology along with a wide range of products in the construction industry.

We keep the values developed by our employees that have guided us in the past. Still keeping the initial excitement alive, we continue manufacturing and serving our business partners and colleagues with the consciousness of our responsibilities with the 3 manufacturing plants and 2 sales stores.

Sincerely,

Abdullah Yurt
Chairman

Sustainable values…
From past to future…

We show our commitment to employees by rewarding based on performance and by sustaining a work environment that reflects our values. We continuously collaborate, looking for more efficient ways to serve our customers. We are the production company that designs the significant and more cost effective. That's why we moved to our new premises. The headquarter, with an area of 2.600 m^2 is in Şekerpınar while Gebze Branch is still operative.

We fulfill our responsibility to society by being an economic and social asset to each country and community where we do business. We earn customer respect and loyalty by consistently providing the highest quality and value.

We also are the dealer of many leading manufacturers regarding construction materials industry. We provide our customers with superior ground transportation. With our wide product range, cost efficient price and professional team, we are dedicated to providing extreme customer satisfaction.

Having started with Gebze and surroundings, we expanded our service area to Kocaeli and Marmara Region afterwards. We are now happy to announce that we have expanded our range of services in line with our clients' growing needs throughout Turkey.

We have reached today with the confidence of our business partners…

We have a vision to act with uncompromising honesty and integrity in our industry. Combining the quality and performance of our products with our ethical business and values, we become more consistent with the mission we have outlined.

Our Corporate Objectives:

- We earn customer respect and loyalty by consistently providing the highest quality and value. Bound to this objective, we will continue to supply and manufacture almost all kinds of construction materials meeting our customers' needs.
- We will invest our resources, mainly in production, where we can create competitive advantage and look at areas where we have not been able to compete effectively and thus serve our business partners in a more reliable and supportive environment.
- We apply quality, competence, experience and innovation to develop, produce and deliver our products to all of our customers - large and small, wholesale and retail, locally and abroad and our target is to become a complete solution partner.

By living our values, we move closer to realizing our vision. We continue achieving profit to our business partners, suppliers and employees with our investments. We work together to create a culture of inclusion built on trust, quality, competence, respect and dignity for all.

Yapı Teknik Grubu

CONTENT

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Çukurova Yalıtım

4x4® Shingle

Perfect Waterproofing

Yapı Teknik Grubu

Çukurova Yalıtım 4x4® Shingle

Perfect Waterproofing

Çukurova Yalıtım 4x4® Shingle Perfect Waterproofing

Product Description

- Bituminous water insulation mat with plastomeric modification, fiberglass carrier, mineral surface, sand coated underside.
- Roof water insulation mat which is used as the final coating at inclined roofs.
- Easy application, decorative appearance. Does not stick or slide during application with its sanded underside.
- Four designs as round, sapphire, square and arda.
- Color choices as green, red, grey, brown shaded ones of these colors and customized colors.
- Flexible with high resistance against hot and cold.
- Sapphire models are self-adhesive with SBS modified wide under tapes.
- Square, round and arda models provide perfect adhesion and waterproofing with SBS modified adhesion tapes.

1. Surface coating (Slate stone)
2. Bituminous layer containing modified with polymers
3. Fiberglass carrier
2. Bituminous layer containing modified with polymers
4. Silica sand coated underside
5. Self-adhesive tabs

Advantages

- Flexible up to 180 degrees down to -5ºC.
- All shingle types, including oxide ones, are completely blended with asphalt and filler material. 4x4 Shingle products are polymeric modified and asphalt polymer coated using technologies appropriate to asphalt.
- Has single phase polymeric behavior which provides high lifespan and heat resistance.
- Binding chemistry is specially adjusted.
- Gives effective results at high and low temperatures.
- Appropriate to all kinds of roofs. Can be adapted to complex roof forms, curvilinear surfaces as dome and vaults.
- Aesthetical with its fragmented texture and attractive colors. Easy and fast application.
- Resistant against hot and cold weather changes.
- Elastic structure which does not break.
- Roof appearance is completed with a single material. Different materials are not needed for details like roofing leads, inclined eaves, wall-chimney junctions.
- A light material with approximately 7-8 kg/m2 weight. Puts very low load on roof construction.
- Resistant against bad weather conditions and wind. Does not rise.
- Not affected from ultraviolet light.
- Mineral stones on the surface do not depart.
- Lightweight, easy handling. No additional load on structure.
- Has different color and model choices.
- Aesthetic appearance with long-lasting colors.

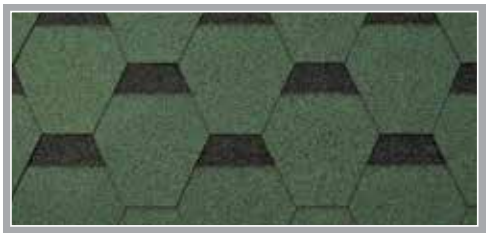
4x4 Shingle Perfect Waterproofing sapphire

Red Green Grey Allaturca Green Allaturca Red

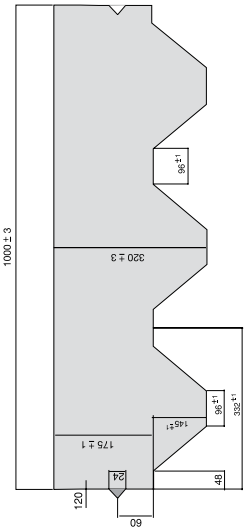
Red

Green

Red Shaded



Green Shaded



4x4 Shingle Perfect Waterproofing round

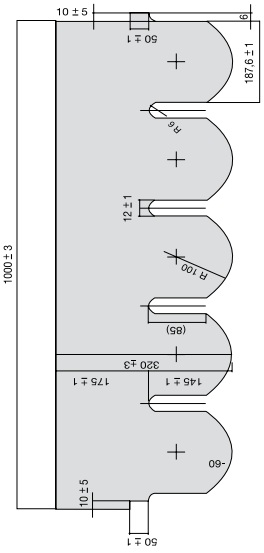
Red Green Grey Allaturca Green Allaturca Red

Red

Green

Red Shaded

Green Shaded



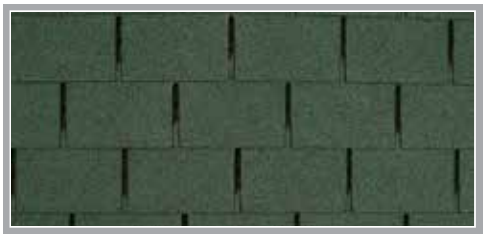
4x4 Shingle Perfect Waterproofing square

Red Green Grey Allaturca Green Allaturca Red

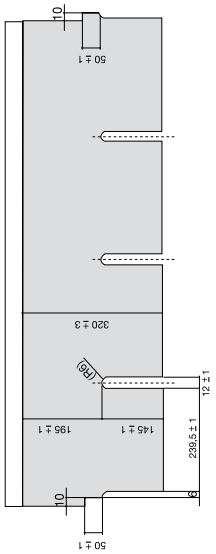
Red

Green

Red Shaded

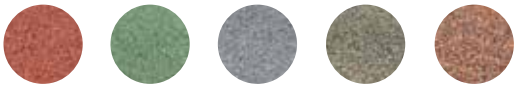


Green Shaded



Çukurova Yalıtım 4x4 Shingle arda

Perfect Waterproofing

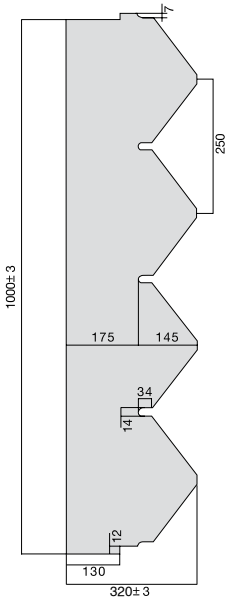


Red

Green

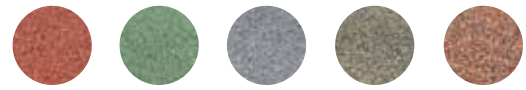
Red Shaded

Green Shaded



Çukurova Yalıtım 4x4 Shingle Ridge Tape

Perfect Waterproofing



Width: 32 cm / **Length:** 500 cm

- Provides perfect waterproofing at surfaces with shingle, and detail points like joints, edges and corners.
- Self-adhesive and produced in all shingle colors.

1. Clean the surface

2. Size according to measurements

3. Peel off protective film under the coating

4. Adhere to the application surface and apply pressure

Technical Specifications			
	Unit	**Nominal Value**	**Test Method**
Lenght (w)	mm	1000	TS EN 544
Width (h)	mm	320	TS EN 544
Tensile Strenght (Lenght-Width)	N/50 mm	600/400	TS EN 12311-1
Nail Tearing Resistance	N	100	TS EN 12310-1
Heat Resistance	°C	≥ 120	TS EN 1427
Watertightness - Mass of Bitumen	g/m²	≥1300	TS EN 544
Adhesion of Mineral Granules; max.	g	2,5	TS EN 12039
Blistering Resistance	-	Pass	TS EN 544
Flow Resistance at High Temperature; max.	90°C	2 mm	TS EN 1110
Resistance to UV Radiation	60 cycles	Pass	TS EN 1297
Water Absorption	-	< %2	TS EN 544
Artificial Aging	-	Pass	TS EN 1926
Reinforcement	g/m²	≥ 80	TS EN 544

Flammability		
	Unit	**Test Method**
Reaction to Fire	E	TS EN 13501-1

BUNDLE SPECIFICATIONS				
Quantity		**Loading**	**Covering Area**	
Each/Bundle	Bundle/Palette	Palette/Truck	m²/Bundle	m²/Palette
18	57	12	2,61	148,77

Çukurova Yalıtım

4x4® Membran

Perfect Waterproofing

Yapı Teknik Grubu

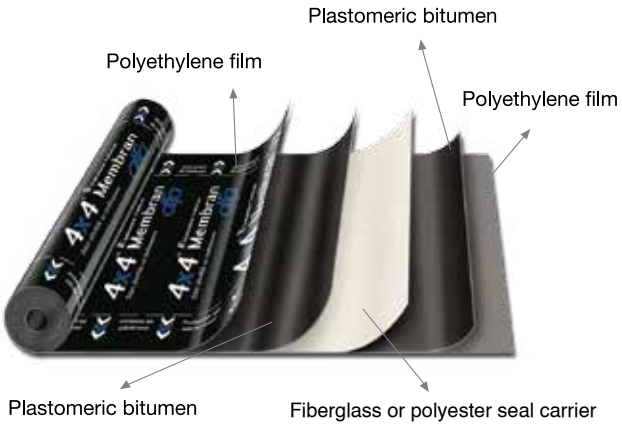
What is Membrane?

Bitumen based waterproofing membrane is produced with a mixture obtained by modifying high quality bitumen with plastomeric and elastomeric polymer additives. As the endurance of bitumen against low and high temperatures is increased by means of modification with polymeric additives, it can be conveniently applied in hot or cold ambiances. The modified bitumen is engrained in glass tissue or polyester felt and laminated on both-sides via polyethylene film, polyethylene film – aluminum folio, polyethylene film mineral stone.

Generally speaking, bitumen based waterproofing membranes are used for waterproofing of underground concrete surfaces, supporting walls, terraces, concrete roofs, wet floors, highway viaducts. Torch or hot asphalt can be utilized in the applications of the membrane.

Çukurova Yalıtım 4x4® Membran
Perfect Waterproofing
alfa

Alfa Series Membranes: The product obtained by modification of bitumen with plastomeric polymers is a waterproofing membrane suitable mainly for applications in regions located at mild and moderately cold temperate zones. The most frequent areas of applications are wet floors, concrete roofs, terraces, basement tankings and shear wall insulations. It can be implemented easily, swiftly and practically in torch-on waterproofing applications (Low temperature flexural strength of the membrane is -5°C).



ALPHA Membrane Cross-Section

Characteristic	Standard	Unit	AC 200	AC 300	AP 300	AP 400	AC 40 MNR	AP 40 MNR	AP AL 300	AC AL 300
Reinforcement type	-	-	Fiberglass	Fiberglass	Polyester	Polyester	Fiberglass	Polyester	Polyester	Fiberglass
Thickness	TS 11758-1	mm	2	3	3	4	3,2 - 3,5	3,2 - 3,5	3	3
Coatig Upper			PE-film	PE-film	PE-film	PE-film	mineral	mineral	Aluminum foil	Aluminum foil
Bottom			PE-film	PE-film	PE-film	PE-film	PE-film	PE-film	PE-film	PE-film
Tear resistance (Length)	TS EN 12310-1	N	45	80	90	170	105	125	165	80
Low temperature flexibility (max)	TS EN 1109	°C	≤ -5	≤ -5	≤ -5	≤ -5	≤ -5	≤ -5	≤ -5	≤ -5
Water impermeability	TS EN 1928		Suitable	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable
High temperature resistance	TS 11758-1	°C	≥ 110	≥ 110	≥ 110	≥ 110	≥ 110	≥ 110	≥ 110	≥ 110
Longitudinal tensile strength	TS EN 12311-1	N/5 cm	≥ 300	≥ 300	≥ 600	≥ 600	≥ 300	≥ 600	≥ 600	≥ 300
Transverse tensile strength	TS EN 12311-1	N/5 cm	≥ 200	≥ 200	≥ 400	≥ 400	≥ 200	≥ 400	≥ 400	≥ 200
Elongation at break / Longitudinal	TS EN 12311-1	%	2	2	30	30	2	30	30	2
Elongation at break / Transverse	TS EN 12311-1	%	2	2	30	30	2	30	30	2
External fire			NPD	NPD	NPD	NPD	BROOF (t2)	BROOF (t2)	BROOF (t2)	BROOF (t2)
Reaction to fire	TS EN 13501-1	CLASS	E	E	E	E	E	E	E	E

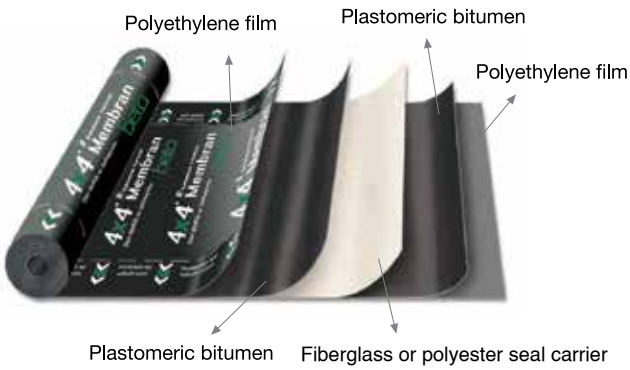
Yapı Teknik Grubu

4x4® Çukurova Yalıtım Membran

Perfect Waterproofing

beta

BETA series membranes: The product is manufactured with modification of bitumen with APP & SBS type plastomeric polymers and used for applications at cold climate places (BETA series membranes are also used for insulation of roads, bridges and viaducts. Low temperature bending strength of membranes is -10°C).



Cross Section of BETA Membrane

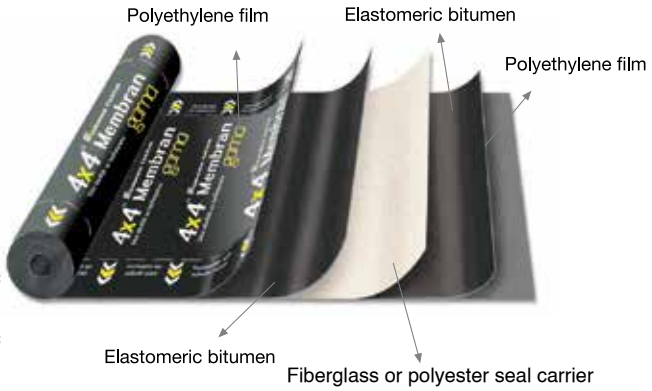
Characteristic	Standard	Unit	BC 200	BC 300	BP 300	BP 400	BC 40 MNR	BP 40 MNR	BP AL 300	BC AL 300	BP 400 VYD
Reinforcement type	-	-	Fiberglass	Fiberglass	Polyester	Polyester	Fiberglass	Polyester	Polyester	Fiberglass	Polyester
Thickness	TS 11758-1	mm	2	3	3	4	3,2 - 3,5	3,2 - 3,5	3	3	4
Coatig Upper			PE-film	PE-film	PE-film	PE-film	mineral	mineral	Aluminum foil	Aluminum foil	PE-film
Bottom			PE-film	PE-film	PE-film	PE-film	PE-film	PE-film	PE-film	PE-film	PE-film
Tear resistance (Length)	TS EN 12310-1	N	120	140	175	180	105	150	185	185	200
Low temperature flexibility (max)	TS EN 1109	°C	≤ -10	≤ -10	≤ -10	≤ -10	≤ -10	≤ -10	≤ -10	≤ -10	≤ -10
Water impermeability	TS EN 1928		Suitable	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable
High temperature resistance	TS 1110	°C	≥ 120	≥ 120	≥ 120	≥ 120	≥ 120	≥ 120	≥ 120	≥ 120	≥ 120
Longitudinal tensile strength	TS EN 12311-1	N/5 cm	≥ 300	≥ 300	≥ 800	≥ 800	≥ 300	≥ 800	≥ 800	≥ 300	≥ 1000
Transverse tensile strength	TS EN 12311-1	N/5 cm	≥ 200	≥ 200	≥ 600	≥ 600	≥ 200	≥ 600	≥ 600	≥ 200	≥ 800
Elongation at break / Longitudinal	TS EN 12311-1	%	2	2	35	35	2	35	35	2	40
Elongation at break / Transverse	TS EN 12311-1	%	2	2	35	35	2	35	35	2	40
External fire			NPD	NPD	NPD	NPD	BROOF (t2)	BROOF (t2)	BROOF (t2)	BROOF (t2)	NPD
Reaction to fire	TS EN 13501-1	CLASS	E	E	E	E	E	E	E	E	E

4x4® Çukurova Yalıtım Membran

Perfect Waterproofing

gama

GAMA series membranes: The product is manufactured with modification of bitumen with APP & SBS type elastomeric polymers and used for water insulation for applications at cold climate zones (where temperature goes below freezing point of water at winter conditions) or at metal roofs with expansion and bending characteristic (it adopts to expansion and bending of metal easily). Low temperature bending strength of membranes is -20°C).

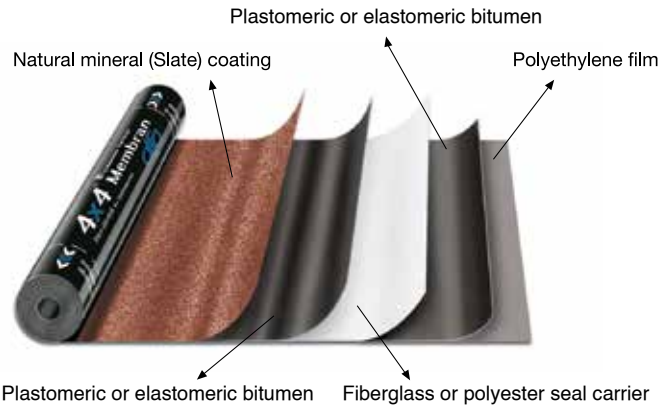


Cross-Section of GAMA Membrane

Characteristic	Standard	Unit	GC 200	GC 300	GP 300	GP 400	GC 40 MNR	GP 40 MNR	GP AL 300	GC AL 300
Reinforcement type	-	-	Fiberglass	Fiberglass	Polyester	Polyester	Fiberglass	Polyester	Polyester	Fiberglass
Thickness	TS 11758-1	mm	2	3	3	4	3,2 - 3,5	3,2 - 3,5	3	3
Coatig Upper			PE-film	PE-film	PE-film	PE-film	mineral	mineral	Aluminum foil	Aluminum foil
Bottom			PE-film	PE-film	PE-film	PE-film	PE-film	PE-film	PE-film	PE-film
Tear resistance (Length)	TS EN 12310-1	N	100	105	150	160	100	150	150	100
Low temperature flexibility (max)	TS EN 1109	°C	≤ -20	≤ -20	≤ -20	≤ -20	≤ -20	≤ -20	≤ -20	≤ -20
Water impermeability	TS EN 1928		Suitable	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable
High temperature resistance	TS 1110	°C	≥ 100	≥ 100	≥ 100	≥ 100	≥ 100	≥ 100	≥ 100	≥ 100
Longitudinal tensile strength	TS EN 12311-1	N/5 cm	≥ 300	≥ 300	≥ 800	≥ 800	≥ 300	≥ 800	≥ 800	≥ 300
Transverse tensile strength	TS EN 12311-1	N/5 cm	≥ 200	≥ 200	≥ 600	≥ 600	≥ 200	≥ 600	≥ 600	≥ 200
Elongation at break / Longitudinal	TS EN 12311-1	%	2	2	35	35	2	35	35	2
Elongation at break / Transverse	TS EN 12311-1	%	2	2	35	35	2	35	35	2
External fire			NPD	NPD	NPD	NPD	BROOF (t2)	BROOF (t2)	BROOF (t2)	BROOF (t2)
Reaction to fire	TS EN 13501-1	CLASS	E	E	E	E	E	E	E	E

4x4® Slated Membranes (Alfa, Beta & Gama)

- Slate stones protect membrane against ultraviolet light,
- Slate stones protect bitumen against high temperature (melting) and low temperature (breaking),
- Slate stones prolong lifespan of membrane,
- Provides decorative and aesthetical insulation solutions,



Cross Section of Alpha, Beta, Gama Slated membrane

Usage Areas

- Final layer coating material,
- Does not need additional protection concrete,
- Economic,
- Flexible, resistant against expansion differences and structural movements,
- Does not harm living creatures and environment,
- Provides exact water insulation with its waterproofing,
- Gives a good adherence on applied surface,
- Practical, applied very easy and fast with blow torch flame,
- Can be cut to fit any dimension and form,
- Has red, green, grey color choices and special color production on certain quantities as well.

4x4® Membrane LINING Perfect solution

4x4 Lining, which is produced appropriate to TS 113 standard, is a bituminous emulsion. It is applied by brush or roller on concrete in order to have a better adhesion of membrane for applications with ALPHA, BETA and GAMA series membranes.

Usage Areas

Applied as lining layer before application of water insulation membranes with polymer bitumen. Used as lining and binder for water insulations with fiberglass, bitumen felt and canvas. Used for insulation of foundation, basement, terrace and inclined roofs with water insulation coatings.

Application Recommendations

Make sure that the surface is dry and free from chemical materials like oil, diesel oil, petrol etc.

Keep the can closed after usage.

Clean brushes with hot water after application.

Thin with appropriate amount of water according to usage purpose and apply with brush.

Consuming Amount

400 g for 1 m^2 area.

Storage and Protection

Can be stored for 1 year with closed cover in +5°C - +30°C temperature interval.

Test Name	Standard No	Unit	Result
Density	TS 132	g/cm³	0,98 – 1,05
Evaporation Residue	TS 132	%	45 - 55
Ash Percentage of Residue	TS 132	%	5 – 20
Water Amount	TS 132	%	45 - 55
Flameproof	TS 132	-	Nonflammable
Heating Test (100°C)	TS 132	-	Viscous
Flexibility (0°C)	TS 132	-	Non-cracking
Resistance Against Water	TS 132	-	Incorruptable
Open Flame Affect	TS 132	-	Not carbonized

Yapı Teknik Grubu

4x4® DRAIN

Perfect protection

4x4® DRAIN
Perfect protection

It is a diagonal blistered protection plate produced from high density polyethylene which protects applied water insulation against damages during filling.

4x4 DRAIN is placed with its blistered face looking to wall to provide a safe separation of foundation wall from moisture soil. Plate works as a shield during filling to protect against mechanical affects. Loads on insulation materials are partially absorbed with the shield function of blisters.

Usage Purpose:

- Protects building against moisture and pressurized ground waters. It is a multi purpose material.
- Works as a shield to protect water insulations under soil.
- Creates an airbag around structure, absorbs all shock impacts with its embossed flexible texture.
- Provides drainage of ground waters.
- Distributes pressure on surface evenly.
- Can be used as cleaning layer instead of lean concrete.

Material

Produced from HDPE (High Density Polyethylene) material which is not corrupted under soil.

Chemical Characteristics

Resistant against chemicals and plant roots, protects membrane against negative impacts of underground waters. It is not damaged by underground waters and it does not pollute environment.

Application

Vertical application:

Hanged on wall with insulation pressure profiles at sub-basement level.

Pressure profiles must be used at plate joints.

Horizontal application:

Laid on a smooth surface with blistered surface looking down. Joints are bonded with butyl tape with at least 30 cm overlap. Can be bended easily at corners and joints due to its diagonal shape.

TSEK

	4x4® DRAIN 400	4x4® DRAIN 500	4x4® DRAIN 600	
Measures				**Tolerance**
Width (m)	2	2	2	± 0,02 m
Length (m)	20	20	20	± %1
Roll Size (m²)	40	40	40	-
Weight (g/m²)	400	500	600	± %6
Thickness (mm)	0,4	0,5	0,6	± 0,1 mm
Dimple Height (mm)	7,5	7,5	7,5	-
Number of Dimples (number/m²)	~1900	~1900	~1900	-
Mechanical Properties				**Standard**
Compressive Strength (kN/m²)	≥110	≥140	≥ 180	TS EN 604
Tear Resistance (N/5 cm)	≥ 180	≥200	≥ 220	EN ISO 12310-2
Elongation at Break (%) Width	≥ 50	≥30	≥ 20	TS EN 12311-2
Elongation at Break (%) Length	≥ 50	≥30	≥ 20	TS EN 12311-2
Heat Resistance (°C)	(-30) - (+80)	(-30) - (+80)	(-30) - (+80)	TS 6894 EN 1876-1

Yapı Teknik Grubu






yapıpor®

Yapı Teknik Grubu

yapıpor® Block

Yapıpor Block products are produced in
100x125x400 cm,
50x100x400 cm,
50x100x200 cm

dimensions, in demanded densities as blocks, in B1 (flame retardant)...

DENSITY	FEATURES	
10	EPS White	-
12	EPS White	-
14	EPS White	-
16	EPS White	Carbon Reinforced EPS
18	EPS White	Carbon Reinforced EPS
20	EPS White	Carbon Reinforced EPS
22	EPS White	Carbon Reinforced EPS
24	EPS White	Carbon Reinforced EPS
26	EPS White	Carbon Reinforced EPS
28	EPS White	Carbon Reinforced EPS
30	EPS White	Carbon Reinforced EPS

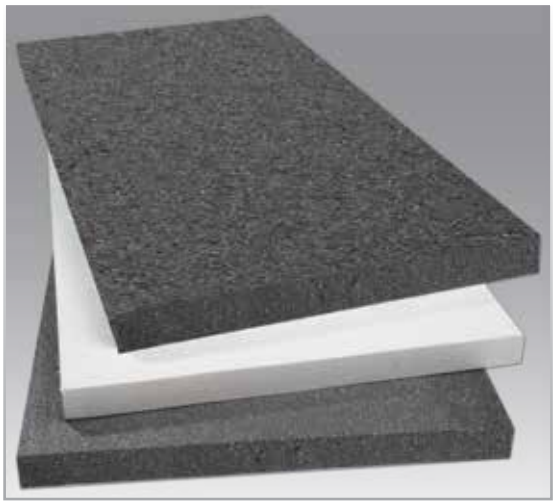
yapıpor® Filler Block (Hollow)

Usage Areas and Features

It is a ceiling and flooring element with high heat and sound insulation made from polystyrene. It lightens static load of buildings with its material structure. Hollow is the lightest material with the highest level of heat insulation and it reduces building costs by decreasing load in 1:3 ratio on girder, column and bridge floors of building. It takes destructive affect of shocks during earthquake to the minimum.

DIMENSION	MEASURE (cm)	m^2	~ m^3
20 cm	40x100	0,4	0,08
23 cm	40x100	0,4	0,09
25 cm	40x100	0,4	0,10
27 cm	40x100	0,4	0,11
28 cm	40x100	0,4	0,11
30 cm	40x100	0,4	0,12
33 cm	40x100	0,4	0,13

yapıpor® Board



Yapıpor plates are standard plates produced in blocks and cut with resistance wires by heat in demanded thickness. Plates are produced in both EPS and carbon reinforced EPS forms. Heat insulation value of carbon reinforced products is %20 percent bigger than standard products. This product is preferred especially when thickness is functional. For example EPS plate which is used as 4 cm in standard product can be used as 3 cm with the same heat insulation value for the same area with carbon reinforced product. They can be produced in different densities. Thermal conductivity gets better when densitly increasaes.

It is light, durable and easily workable.

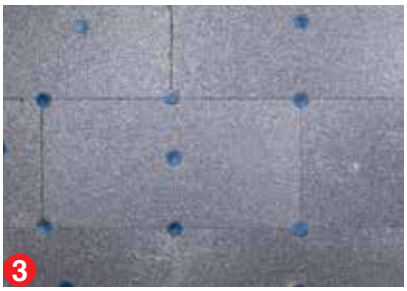
It is an easily recyclable product. It is also environmentally friendly, as it does not damage atmosphere and ozone layer.

Usage Areas

- Exterior walls
- Cold stores
- Commercial fridges
- Vehicles with cooling systems
- Decoration works

Important issues:

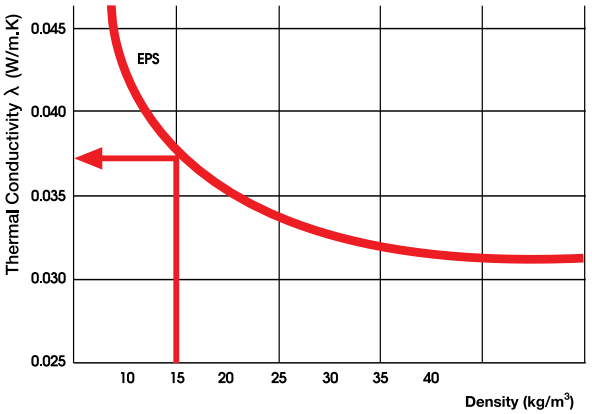
- Do not subject to direct sunlight during application and storage.
- Do not contact with materials including solvent.
- Keep away from flammable and explosive materials.
- Keep away from all kinds of heat sources.



yapıpor® White Plate

Yapıpor white plates provide high heat insulation. Performance of product is constant during all usage life. Its thickness does not decrease, its thermal conductivity does not increase, its mechanic features does not change and other features does not decay by time.

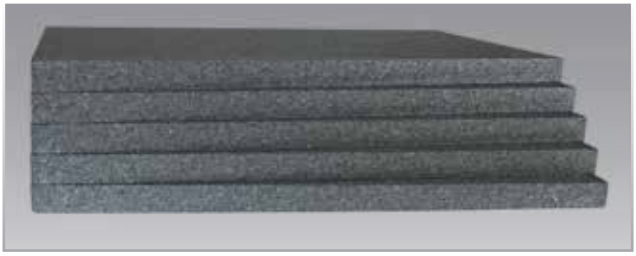
Thermal conductivity and heat resistance of EPS heat insulation plates stay constant during their lifespan. They can be produced in different densities. Thermal conductivity gets better when density increases.

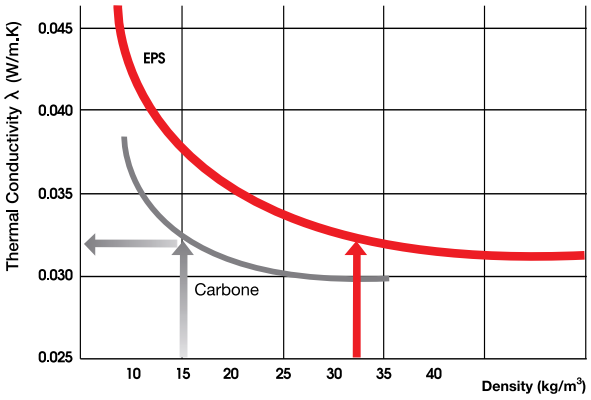


EPS TYPE	TS EN 13163	UNIT	EPS 70	EPS 100
Thermal Conductivity	EN 12667 EN 12939	W/m.K	0,039	0,035
%10 Compression Strength	EN 826	kPa	70	120
Bending Strength	EN 12089	kPa	100	170
Dimensional Stability	EN 1603	DS(N) 2	± 0,2	± 0,2
Density	EN 1602	kg/m³	16	20

yapıpor® Carboniferous Plate

EPS with graphite additive is produced in appropriate to DIN EN 13163 European Standard conditions and according to DIN EN 13501, its fire class is classified under E. It provides a 20% better heat insulation than EPS plates and it will be possible to reach an insulation performance equal to thinner insulation plates. Performance of product stays constant during the lifespan of product. Its thickness does not decrease, its thermal conductivity does not increase, its mechanic features does not change and other features does not decay by time.





EPS TYPE	TS EN 13163	UNIT	EPS 60	EPS 90
Thermal Conductivity	EN 12667 EN 12939	W/m.K	0,032	0,031
%10 Compression Strength	EN 826	kPa	60	90
Bending Strength	EN 12089	kPa	90	125
Dimensional Stability	EN 1603	DS(N) 2	± 0,2	± 0,2
Density	EN 1602	kg/m³	16	20

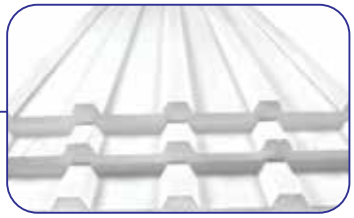
Density (kg/m³)	Width x Length (cm)	Thickness (cm)	Number (Package)	m³ (Package)	Area (m²)	White Plate λ (W/m.K)	Carboniferous Plate λ (W/m.K)	μ
16	50 x 100	2	25	0,25	12,5	0,039	0,032	20-40
		3	16	0,24	8			
		4	12	0,24	6			
		5	10	0,25	5			
20		6	8	0,24	4	0,035	0,031	30-71
		7	7	0,245	3,5			
		8	6	0,24	3			
		9	5	0,225	2,5			
		10	5	0,25	2,5			

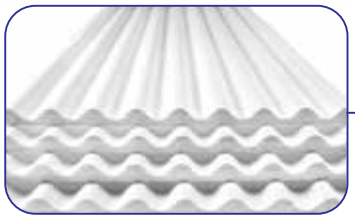
λ =Thermal conductivity coefficient μ =Water vapor diffusion resistance factor

E class according to TS-EN 13501-1

yapıpor® Line

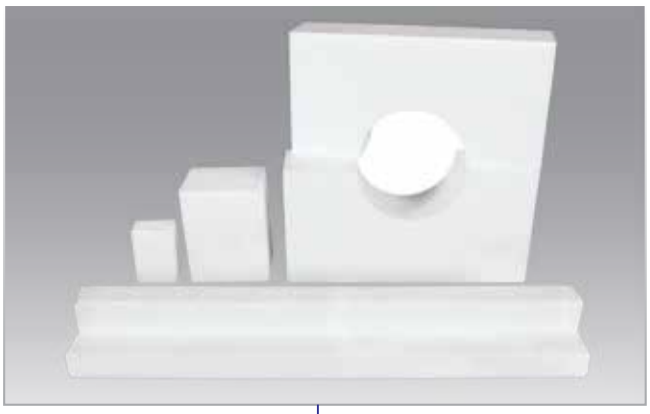
They are specially cut materials produced for sound and heat insulation as appropriate to all kinds of roof coating material form. As it adds flexibility characteristic to roof coating material it is applied with, it prolongs roofs lifespan and makes them breathe.
They are produced in various densities in B1 class according to customer's demand.





yapıpor® Special Cut

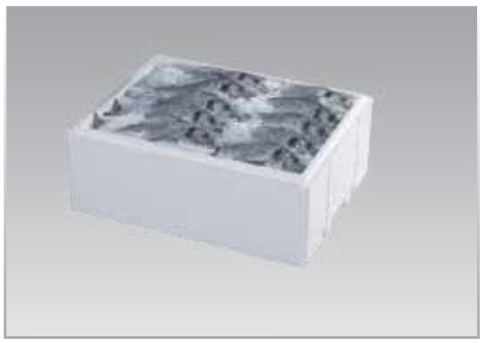
All dimensions and forms of production are possible from produced blocks according to customer's demand.



yapıpor® Packaging

Yapıser plant gives service to packaging sector with special injection machines and it has daily 3,000 kg production capacity. Faultless production is done with moulds, which are prepared for all kinds of injections.



Advantages of Mould Injection

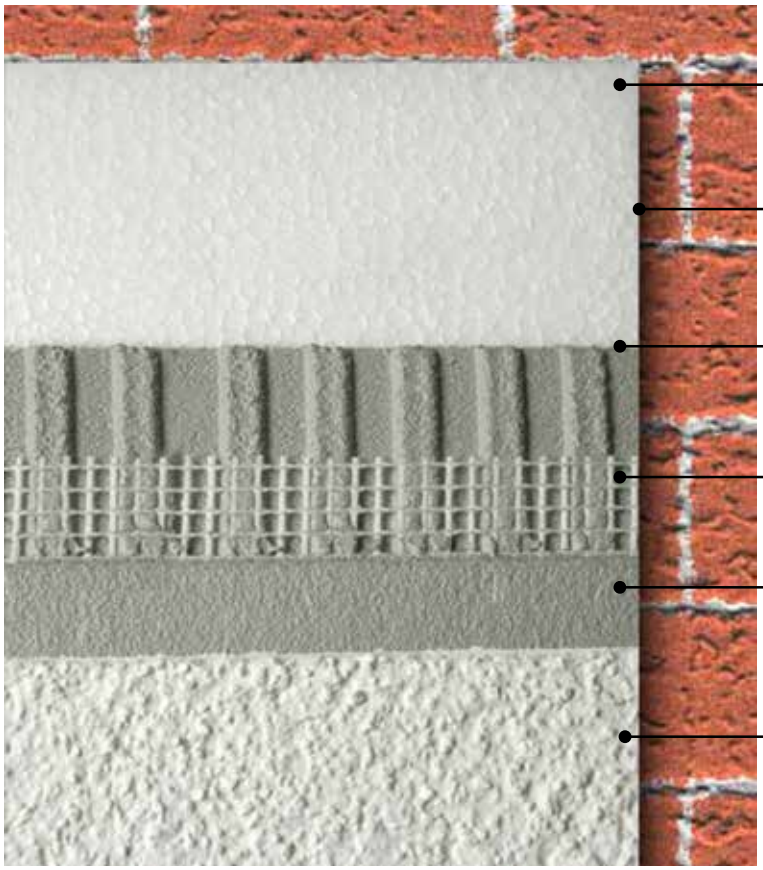
- Resistant against pressure and shocks,
- Not affected from water and moisture,
- Not affected from vibration,
- Does not leak dust and vapor,
- Conserves heat,
- Light, easy loading,
- Comfortable workmanship, easily classified,
- Attractive sales appearance,
- Not harmful for health, does not damage the product inside,
- Recyclable,
- Environmentally friendly,
- Can be shaped with printing and writing,
- Can be specially designed according to product,
- Resistant against moisture, it does not loose resistance even in humid conditions, ideal for cold chain.

Usage Areas of Mould Injection

- Consumer durables (Fridge, washing machine etc.)
- Electronic appliances (TV, stereo, computer etc.)
- Fruit – vegetable sector (Fruit – vegetable boxes)
- Fish and sea products (Fish box, calamari, shrimp boxes etc.)
- Meat and meat products (Meat, chicken, sausage, minced meat boxes etc.)
- Dairy products (Milk, yoghurt, cheese boxes etc.)
- Sanitary products (Faucet, armature, shower hose, closet cover etc.)
- Floristry sector (Flower pot, flowerpot base, container, plant growing boxes etc.)
- Health sector (Vaccination, serum boxes etc.)
- Tourism sector (Thermos, cold-box, ice box etc.)
- Ship sector (Life jacket, life buoy, small craft, swimming board etc.)
- Toy sector
- Porcelain and glass sector (Glass, vase box etc.)

UltraTherm® EPS System

Exterior Façade Thermal Insulation Systems



Yapıpor EPS
Heat Insulation plate

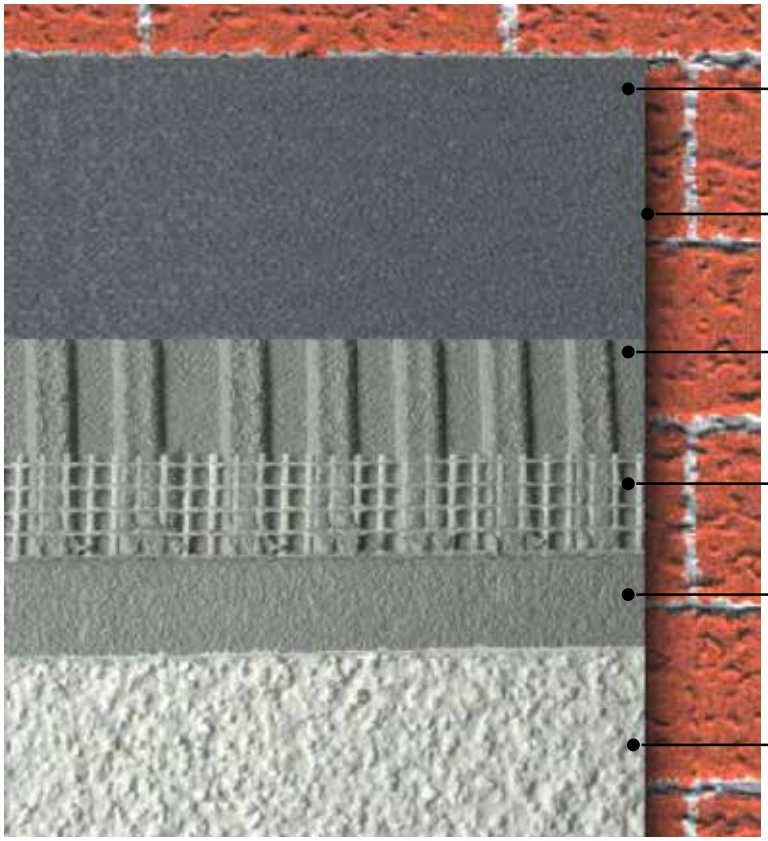
UltraThermThermoFix
Cement based waterproof heat insulation plate adhesion mortar with fiber addition

UltraThermThermoFlex
Cement based, flexible, high performance heat insulation plate plaster mortar with fiber addition

Accessory Net
Alkali resistant accessory net with fiberglass in 160 g/m^2 weight

UltraThermThermoFlex
Cement based, flexible, high performance heat insulation plate plaster mortar with fiber addition

UltraThermThermoCoat
Cement based, white colored, water and exterior climate conditions resistant heat insulation system decorative coating mortar



Yapıpor Carbon EPS
Heat Insulation plate

UltraThermThermoFix
Cement based waterproof heat insulation plate adhesion mortar with fiber addition

UltraThermThermoFlex
Cement based, flexible, high performance heat insulation plate plaster mortar with fiber addition

Accessory Net
Alkali resistant accessory net with fiberglass in 160 g/m^2 weight

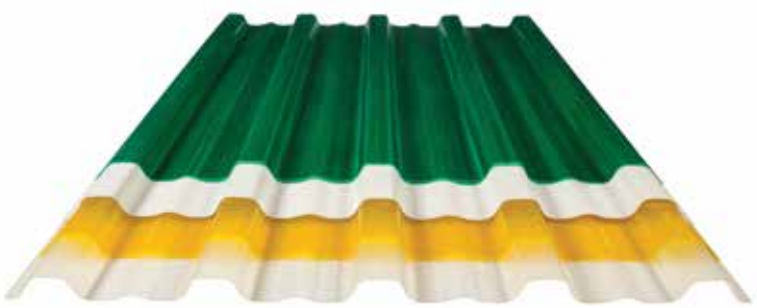
UltraThermThermoFlex
Cement based, flexible, high performance heat insulation plate plaster mortar with fiber addition

UltraThermThermoCoat
Cement based, white colored, water and exterior climate conditions resistant heat insulation system decorative coating mortar

yapıser® GRP

yapıser® GRP

Yapı Teknik Grubu



Advantages of GRP

- Flexible, light, resistant against shocks,
- GRP transparent sinus and trapeze corrugated plates are decorative,
- Provides natural illumination,
- Provides homogenous light distribution,
- Can be used alone,
- Can be used together with all roof materials,
- Is not affected from chemical materials,
- Can be produced with film coating for resistance against UV lights.

Thermal Resistance:
It has thermal resistance between -40 °C and 120 °C. It does not change shape with temperature as it is in Thermoset plastic group. Polyethylene sponges used in panels do not create thermal bridge.

Insulation:
Prevents high voltage arc with its insulation feature.

Incombustibility:
It has inflammability feature with various performances appropriate to demand and needs.

Resistance and Weight Relationship:
With its property of light weight and high mechanic resistance, it is resistant against all air conditions (wind, hail etc.) and shocks.

Easy Installation and Transportation:
As appropriate to many known application technique, it has advantages of easy installation and easy transportation because of its light weight.

Resistance Against Corrosion and Chemicals:
Resistant against chemicals and high temperature. It has long lifespan due to its anticorrosive feature.

Wide Profile Choices:
Provides possibility of production in all profiles and design flexibility due to its rich profile variety.

Resistance Against Water:
It has very long life with its property of low water absorption and perfect water resistance.

Day Light:
Provides natural light with daylight and energy saving with its 75-80% light transmittance.

Resistance Against UV Lights and Surface Aging:
It can be produced from special polyester with UV stabilization, it has UV and high surface resistance features with protective film, gelcoat applications.

General Features of Product

Appearance:
There are no surface defects on plates like notch, hole, breaking, indent, foreign material, air bubbles, regions with low polyester level and film problems which can affect resistance and usage of products.

Color:
Colored plates have homogenous appearance and does not show color difference.

Thickness:
Plate thickness are formed according to TSI norms regarding 15% tolerance at corrugated plates, 5% tolerance at flat plates.

Weight:
Plate production is done as appropriate to 5% tolerance in plate weight.

Length:
Plates are produced with +2,5/-2 cm tolerance for 0-5 meter, +5/-3 cm tolerance for 5-10 meters and +5/-3 cm tolerance for more than 10 meters according to customer demand. Regarding transportation conditions, corrugated plates can be produced up to 15 meters. Flat plates can be produced in demanded lengths as far as they are appropriate to form roller.

Packing:
Plates can be presented to market by packing or in bulk form. For packing customer's demand is regarded and number of stacked plates is determined according to transportation conditions.

Width:
Final width of plates according to used profile is appropriate to the values determined in profile leafs unless a different demand comes from customer. Width tolerance is ±0,001 meter.

Pitch Interval:
Pitch intervals of plates are ± 2 mm as appropriate to used profiles and values in standards.

Pitch Height:
Pitch heights of plates are values appropriate to used profiles.

Pitch height tolerance:
±2 mm for <30 mm and ±3 mm for >30mm.
An increase in pitch heights + deviation values is normal when plate thickness increases (at thicknesses bigger from 3 mm).

Beneficial Area:
Beneficial areas of plates are values determined in their leaf. Tolerance is ±10 mm.

Label:
Labeling is done with inkjet system in order to follow after sales traceability.

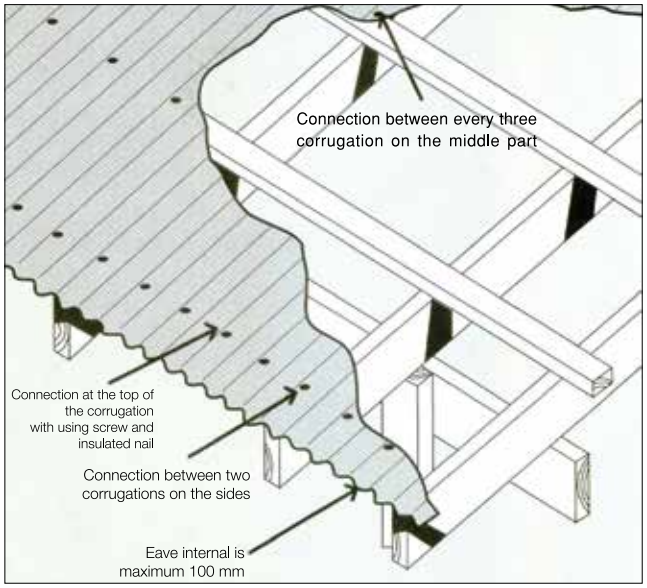
Usage Areas

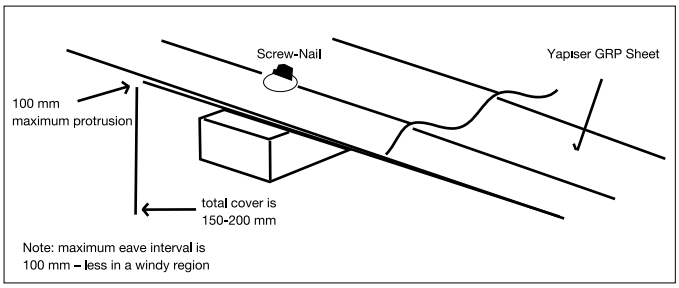
- Industrial structures
- Houses
- Chemical production plants
- Nourishment plants
- Manure drying plants
- Sports centers
- Thermal swimming pools
- Touristic plants
- Greenhouses
- Agriculture and stock-breeding sector
- Market places
- Fair areas
- Arbors
- Storage and car parks

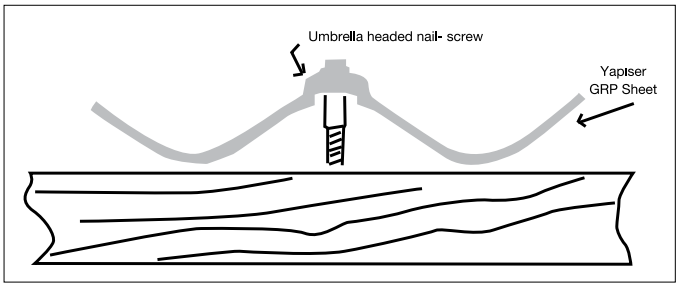
Application Methods

Yapıser GRP plates can be applied to roofs as metal panels. Ordinary tools used for metal panels can be used for them too. They can be cut by electrical saw without any damage, they can be drilled, screwed and nailed by carpenter tools.

Connection Detail





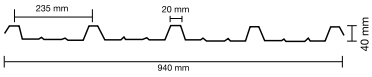
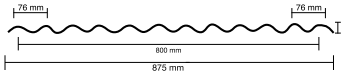
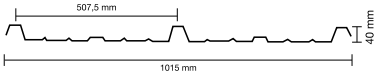
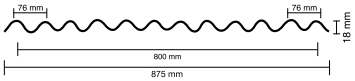
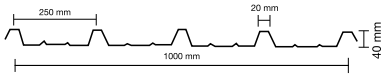
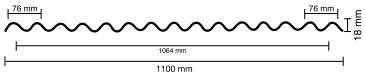
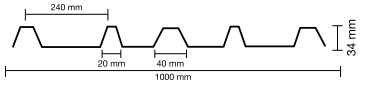
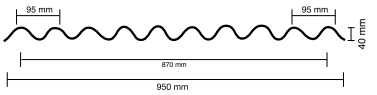
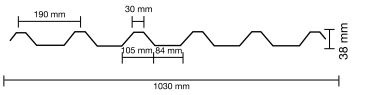
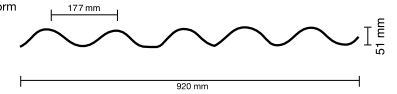
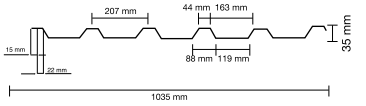
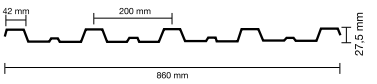
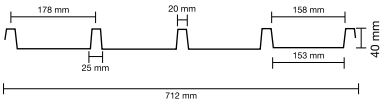
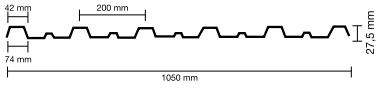
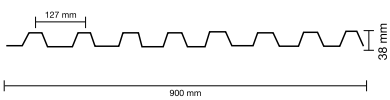
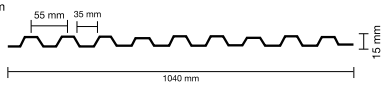
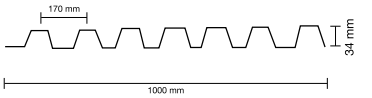
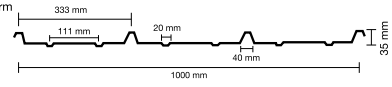
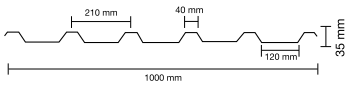
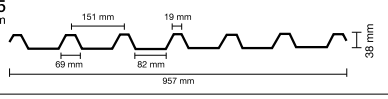
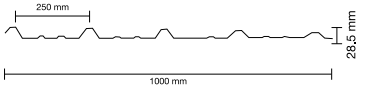
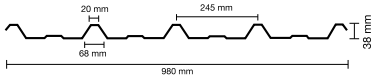
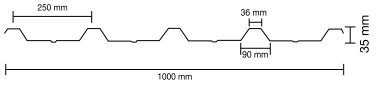
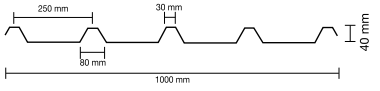
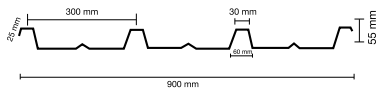
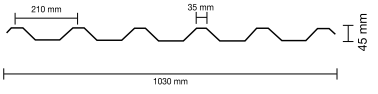


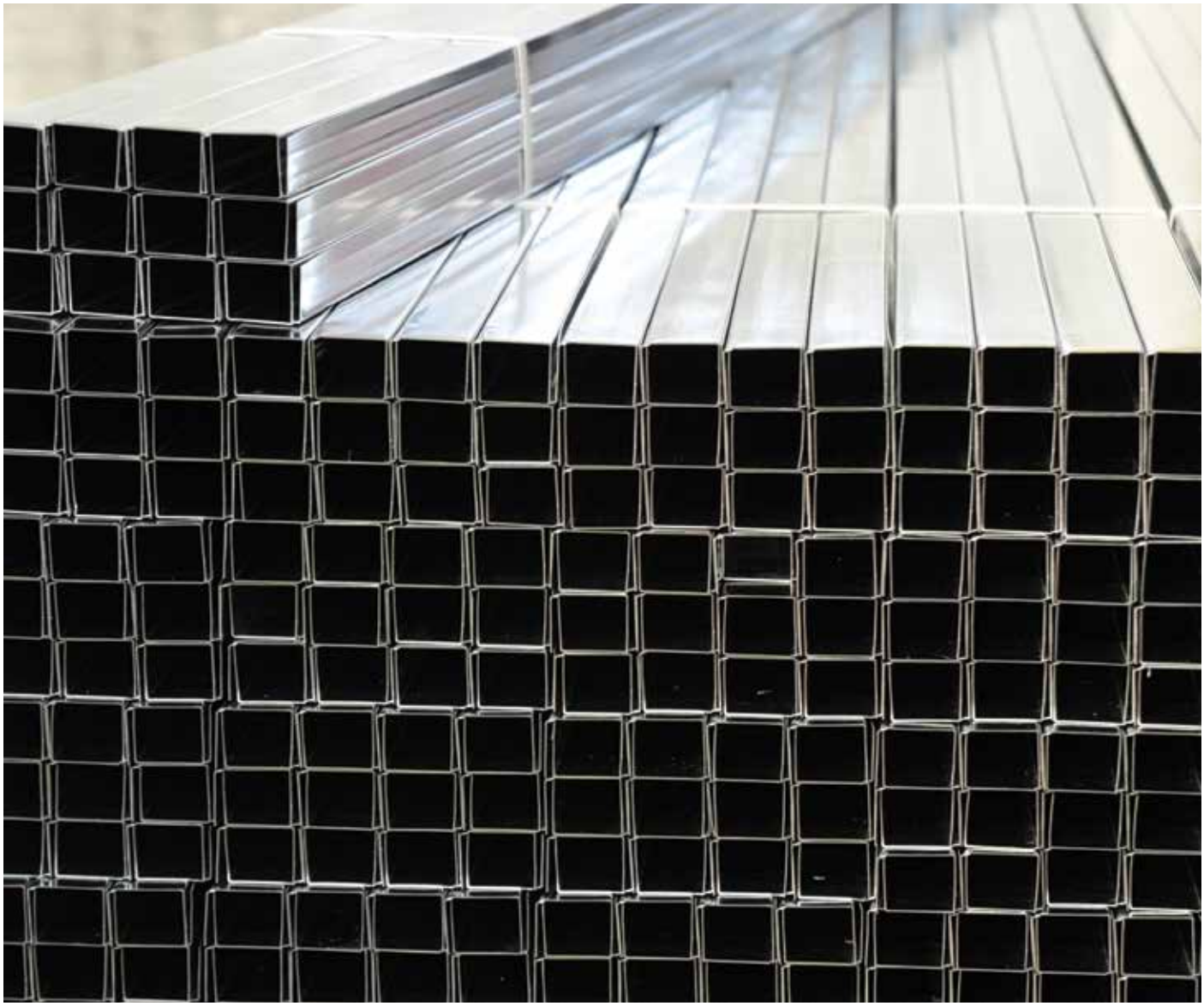
Chemical Features	
Acid vapors	Not affected
Sea water	Not affected
Environmental pollution	Not affected
Natural conditions	Not affected

Production Limits	
Profile	Max. 10 days for all kinds of profiles
Length	Max. 10 m (can be longer according to order)
Thickness	Min. 0.9 mm Max. 3 mm
Weight	Special production is possible by determining plate thickness
Color	Transparent, white, green, blue, yellow, red, orange
Light transmittance	Transparent 85%, transparent green 76%, white 57%

Technical Specifications	
Density	1,4 g/cm^3
Hardness	40 Barcol
Water absorption rate	(0,3-0,8) % by weight
Light transmittance	75-85 %
Tensile strength	720 kg/cm^2
Bending strength	1200 kg/cm^2
Pressure strength	1000 kg/cm^2
Flash point	404.4˚C
Thermal conductivity coefficient	0,15 – 0,20 W/mK
Head resistance	-40˚C - + 120˚C
Expansion	9-25 mm x 10-6 mm/˚C
Surface	With or without film

Yapıser GRP Profile Type

	Thickness	Width/Length (mm)		Thickness	Width/Length (mm)
KOD 100 Board KOD 109 KOD 110 KOD 112 KOD 115 KOD 118 KOD 120	0,9 mm 1,0 mm 1,2 mm 1,5 mm 1,8 mm 2,0 mm 3,0 mm	Width/Free Length 1000 / 10.000 1250 / 10.000 1350 / 10.000	**KOD 317** 40/235 Form 	1,2 mm	940 x Free Length
KOD 200 18/76 Form 	1,2 mm	875 x 1600 875 x 2000 875 x 2500 875 x 3000	**KOD 318** 40/507,5 Form 	1,2 mm	1015 x Free Length
KOD 201 18/76 Form 	0,9 mm	875 x 1600 875 x 2000 875 x 2500 875 x 3000	**KOD 319** 40/250 Form 	0,9 mm	1000 x Free Length
KOD 202 18/76 Form 	0,9 mm	1100 x 1600 1100 x 2000 1100 x 2500 1100 x 3000	**KOD 321** 34/240 Form 	0,9 mm	1000 x Free Length
KOD 203 40/95 Form 	0,9 mm	950 x 2000	**KOD 322** 38/190 Form 	0,9 mm	1030 x Free Length
KOD 210 51/177 Form 	0,9 mm	920 x 1600 920 x 2000 920 x 2500 920 x 3000 920 x 3100 920 x 3300	**KOD 323** 35/207 Form 	0,9 mm	1035 x Free Length
KOD 301 27/200 Form 	0,9 mm	860 x Free Length	**KOD 324** 40/178 Form 	0,9 mm	712 x Free Length
KOD 302 27/200 Form 	0,9 mm	1050 x Free Length	**KOD 326** 38/127 Form 	0,9 mm	900 x Free Length
KOD 303 15/55 Form 	0,9 mm	1040 x Free Length	**KOD 327** 34/170 Form 	1,1 mm	1000 x Free Length
KOD 304 35/333 Form 	1,2 mm	1000 x Free Length	**KOD 330** 35/210 Form 	0,9 mm	1000 x Free Length
KOD 305 38/151 Form 	0,9 mm	957 x Free Length	**KOD 331** 28/250 Form 	1,2 mm	1000 x Free Length
KOD 310 38/245 Form 	0,9 mm	980 x Free Length	**KOD 332** 35/250 Form 	1,2 mm	1000 x Free Length
KOD 312 40/457 Form 	1,2 mm	915 x Free Length	**KOD 333** 40/250 Form 	1,2 mm	1000 x Free Length
KOD 316 55/300 Form 	0,9 mm	900 x Free Length	**KOD 337** 45/210 Form 	1,2 mm	1030 x Free Length



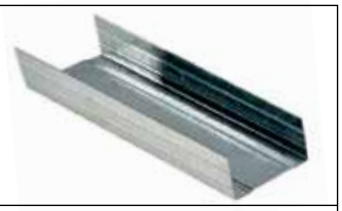
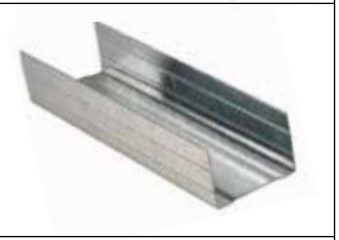
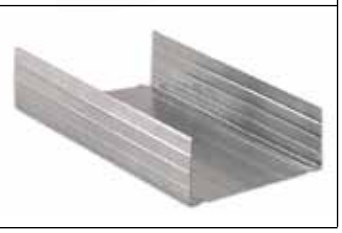
SYSTEM PROFILE

SYSTEM PROFILE PLASTERBOARD PROFILES

System profile products are manufactured from hot dip galvanize according to TS EN 14195:2007 standards. Plasterboard profiles are produced in standard and economic series as component of plasterboard separation wall, clad wall and false ceiling and it is a trademark preferred by applicators with its corrosion resistant feature.

Wall Profiles

• Wall U-Profiles

PRODUCT NAME	THICKNESS	DIMENSIONS	LENGTH	PACKING	
DU50 PROFILE	0,35 - 0,60 mm	28x50x28 mm	3-5 m	12 item/pac.	
DU75 PROFILE	0,35 - 0,60 mm	28x75x28 mm	3-5 m	12 item/pac.	
DU100 PROFILE	0,35 - 0,60 mm	28x100x28 mm	3-5 m	12 item/pac.	

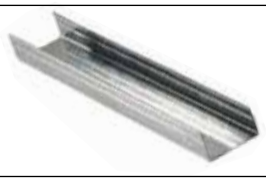
• Wall C-Profiles

PRODUCT NAME	THICKNESS	DIMENSIONS	LENGTH	PACKING	
DC50 PROFILE	0,35 - 0,60 mm	35x50x35 mm	3-5 m	12 item/pac.	
DC75 PROFILE	0,35 - 0,60 mm	35x75x35 mm	3-5 m	12 item/pac.	
DC100 PROFILE	0,35 - 0,60 mm	35x100x35 mm	3-5 m	12 item/pac.	

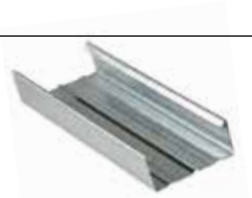
- Plasterboard separation wall is resistant against dynamic affects due to its flexibility.
- As it is 9 times lighter than brick walls, buildings become more flexible during earthquakes.
- Plasterboard separation wall provides perfect sound, heat and fire insulation. It saves workmanship and time as it can be applied fast and practically. Plasterboard separation wall does not cause loss of place in structures.

Ceiling Profiles

• Ceiling U-Profiles

PRODUCT NAME	THICKNESS	DIMENSIONS	LENGTH	PACKING	
TU PROFILE	0,35-0,60 mm	22,5x28x22,5 mm	3-5 m	24 item/pac.	

• Ceiling C-Profiles

PRODUCT NAME	THICKNESS	DIMENSIONS	LENGTH	PACKING	
TC PROFILE	0,35-0,60 mm	27,5x60x27,5 mm	3-5 m	12 item/pac.	

- Profiles can be produced in demanded dimensions according to project details. They can be used in all kinds of interior environments.
- Electrical and sanitary installations can be done easily.
- It is aesthetical as it hides installations. It is resistant against earthquakes.

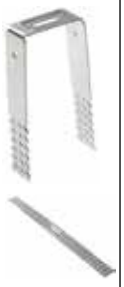
FALSE CEILING MATERIAL ANALYSIS	
MATERIAL DESCRIPTION	UNIT AMOUNT
PLASTERBOARD	1,00 m²
TC PROFILE	3,30 m
TU PROFILE	1 m
HANGING PIN	Number: 1, 3
HANGING BAR 60 cm	Number: 1, 3
CLIPS	Number: 4
JOINT PART	Number: 1
JOINT TAPE	1, 3 m
JOINT PLASTER	0,50 kg
DRYWALL SCREW (25 mm)	Number: 20
STEEL WALL PLUG	Number: 1, 3
WALL PLUG, WASHER, SCREW	Number: 3
In false ceiling application, each m² has 20 kg/m² load.	

SEPARATION WALL MATERIAL ANALYSIS		
MATERIAL DEFINITION	SINGLE BOARD WALL 50/75 mm	DOUBLE BOARD WALL 75/100 mm
	2 m²	4m²
PLASTERBOARD	2,20m	
WALL C 75 PROFILE	1,00 m	
CORNER PROFILE WITH HOLE	According to detail	
JOINT TAPE	2,60 m	
JOINT PLASTER	1,00 kg	
DRYWALL SCREW (25 mm)	Number: 20	
DRYWALL SCREW (35 mm)	Number: 20	
WALL PLUG, WASHER, SCREW	Number: 4	
In separation wall application each m² has 35 kg/m² load.		

Accessory

HANGING WIRE	LENGTH	PACKING
	20 cm	100 item/pac.
	30 cm	100 item/pac.
	40 cm	100 item/pac.
	50 cm	100 item/pac.
	60 cm	100 item/pac.
	80 cm	100 item/pac.
	100 cm	100 item/pac.
	120 cm	100 item/pac.
	150 cm	100 item/pac.
	200 cm	100 item/pac.

PRODUCT NAME	PACKING	
CLIPS	1000 item/box	
HANGING PIN	500 item/box	
JOINT PART	500 item/box	

HOOK	LENGTH	PACKING	
7	7 cm	100 item/pac.	
12	12 cm	100 item/pac.	
15	15 cm	100 item/pac.	
20	20 cm	100 item/pac.	
30	30 cm	100 item/pac.	
40	40 cm	100 item/pac.	

SYSTEMGALVANIZE

Roll Sheet

Flat steels in roll form which are produced by zinc coating of cold rolled flat steels with dipping method. Their thickness can change according to demand (between 0.30-2.00 mm). Painted steel roll is produced by painting these rolls with plaster paint in 5-20 micron thickness.

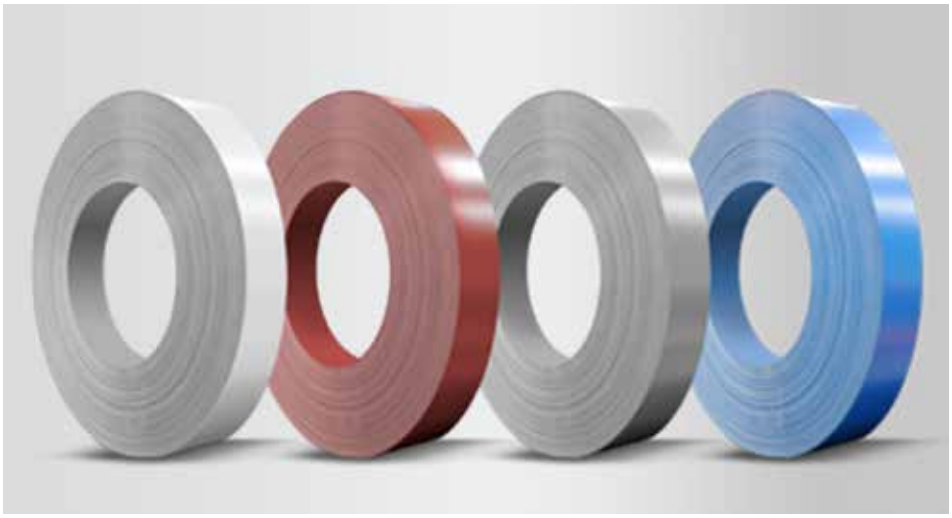
Galvanized and painted sheets have a long life span. They are resistant against all kinds of exterior effects, they are practical and economic.

They are densely used for construction of steel construction applications, roof girders, columns, floor girders, storages, hangars, prefabricated structures, gyms and fair areas.

Production is according to RAL catalogue.

Slitted Sheet

It is slitted form of sheets which are produced as galvanized or painted roll according to customer demand. Sistem roof plants can be slitted up to 75 mm. Besides, packing can be done vertically or horizontally according to demand.



Flat Sheet

Usage Areas:

- Whiteware sector,
- Automotive sector,
- All kinds of air condition plants,
- Construction of cable channels,
- Construction of all kinds of storages,
- Construction of bucket, boiler, basin,
- Stove and pipe manufacture,
- Dockyards,
- Profile construction,
- Construction of solar collector.

Technical Specifications:

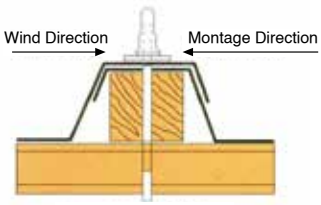
- Plate thickness: 0.30 mm. – max. 3.00 mm.
- Plate width: min. 600 mm. – max. 1250 mm.
- Plate length: min. 1000 mm. – max. 4000 mm.
- Zinc coating amount is done as per Turkish and world standards.

Trapezoidal Sheet

27/200 Form

Usage Areas of Galvanized Trapeze Plates

- Construction of prefabricated structures,
- Roof and facade coatings,
- Hutch, silo and storage construction,
- For decoration purpose as wall and ceiling coating.



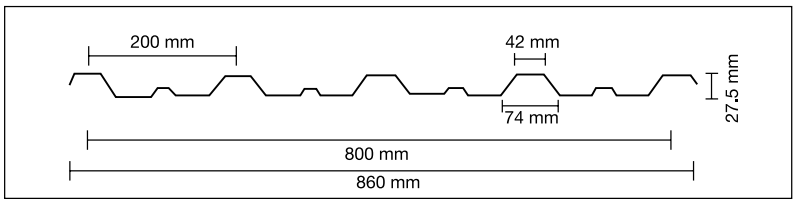
Trapeze Sheet Fixing Detail

Distributed Loads that can be carried by 27/200 Form Trapeze Plates (kg/m²)

Purline Interval (m)	Galvanized Sheet Thickness (mm)									
	0.30	0.35	0.40	0.45	0.50	0.60	0.70	0.80	0.90	1.00
1.00	355	415	473	533	593	770	889	1009	1127	1187
1.10	294	343	391	440	490	637	734	833	931	981
1.20	246	288	329	370	411	536	617	701	782	824
1.40	181	211	241	272	302	393	453	515	575	605
1.50	158	185	211	237	264	343	396	449	501	528
1.80	110	128	146	165	183	238	275	312	348	367
2.00	89	104	119	134	149	193	223	252	282	297
2.20	73	86	98	110	123	160	184	209	233	245
2.40	62	72	82	93	103	134	155	175	196	206
2.50	57	67	76	86	95	124	142	162	181	190
2.80	45	53	61	68	76	98	114	129	144	152
3.00	39	46	53	59	66	86	99	112	125	132
Moment of Inertia (I:cm⁴)	4.03	4.70	5.37	6.04	6.71	8.73	10.07	11.41	12.75	13.43
Moment of Resistance (W:cm³)	2.32	2.71	3.09	3.48	3.87	5.03	5.80	6.58	7.35	7.74

Allowable Stress: 1200 kg/cm². Calculations are always according to girder shape. Several loads must come on a single point.

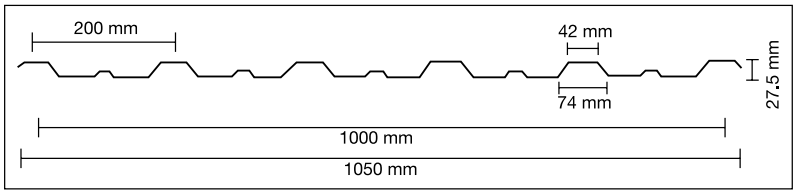
27/200 Form Trapeze



Galvanized sheet of 1000 mm is used for this form.

Technical Specifications:

- Plate thickness: 0.30 mm. – max. 1.00 mm.
- Plate length: min. 1000 mm. – max. 13500 mm.
- Plate beneficial area width: 800 mm. (Tolerance: +15 mm)



Galvanized sheet with 1219 – 1250 mm width is used for this form.

Technical Specifications:

- Plate thickness: 0.30 mm. – max. 1.00 mm.
- Plate length: min. 1000 mm. – max. 13500 mm.
- Plate beneficial area width: 1000 mm. (Tolerance: +15 mm)

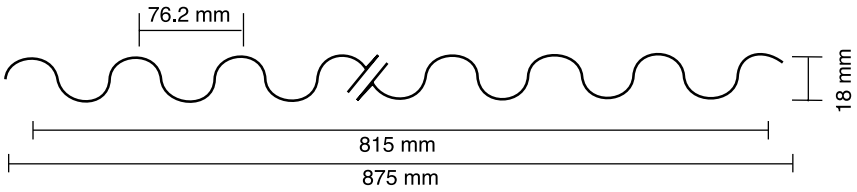
38/151 Form

Technical Specifications:

- Plate thickness: 0.50 mm. – max. 1.00 mm.
- Painted and natural galvanized sheet
- 0.70 mm. - 1.00 mm. aluminum
- Plate length: min. 1000 mm. – max. 12000 mm.
- Plate beneficial area width: 906 mm.

Purlin Pitch (m)	Galvanized Sheet Thickness (mm)			
	0.50	0.60	0.70	0.80
200	140	89	62	...
250	175	111	70	...
300	209	134	93	66
325	244	156	109	80

Corrugated Sheet

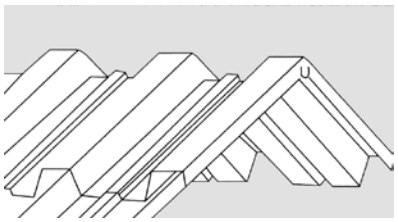


Technical Specifications:
- Plate thickness: 0.30 mm. – max. 0.80 mm.
- Plate length: min. 1000 mm. – max. 12000 mm.
- Plate beneficial area width: 815 mm.
- Zinc coating amount is done as per Turkish and world standards.

Usage Areas:
- Prefabricated construction production
- Roof and facede coatings
- Hutch construction, silo and storage constructions.

Trapeze Ridge (Flat, Corrugated, Trapeze)

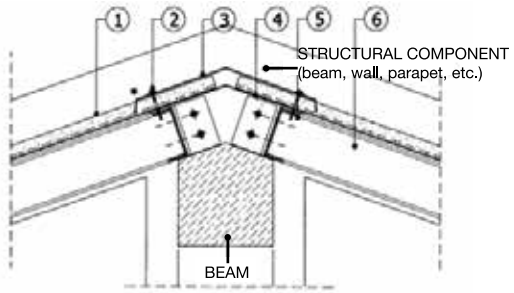
Technical Specifications:
- Ridge thickness: 0.30 mm. – 1.00 mm.
- Ridge bending angle: 135 °
- Length before bending: min. 1000 mm. – max. 1200 mm.



Roof and Facede Coating Joint Details

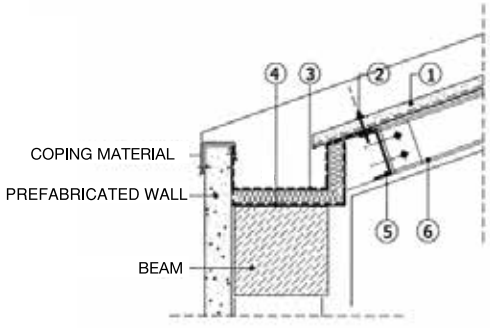
Ridge Detail

- Trapeze panel roof coating
- Fixture element (screw)
- Upper ridge element
- Lower ridge element
- Purline
- Carrier construction



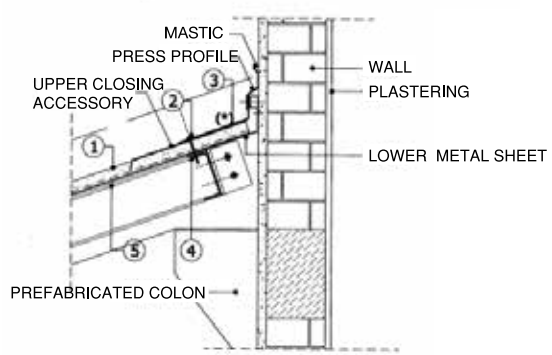
Eave Detail

- Trapeze panel roof coating
- Fixture element (screw)
- Stream element
- Lower stream sheet
- Purline
- Carrier construction



Baseboard Element

- Trapeze panel roof coating
- Fixture element (screw)
- Baseboard element
- Purline
- Carrier construction



Yapı Teknik Grubu

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At each moment of life...

Çukurova Yalıtım

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