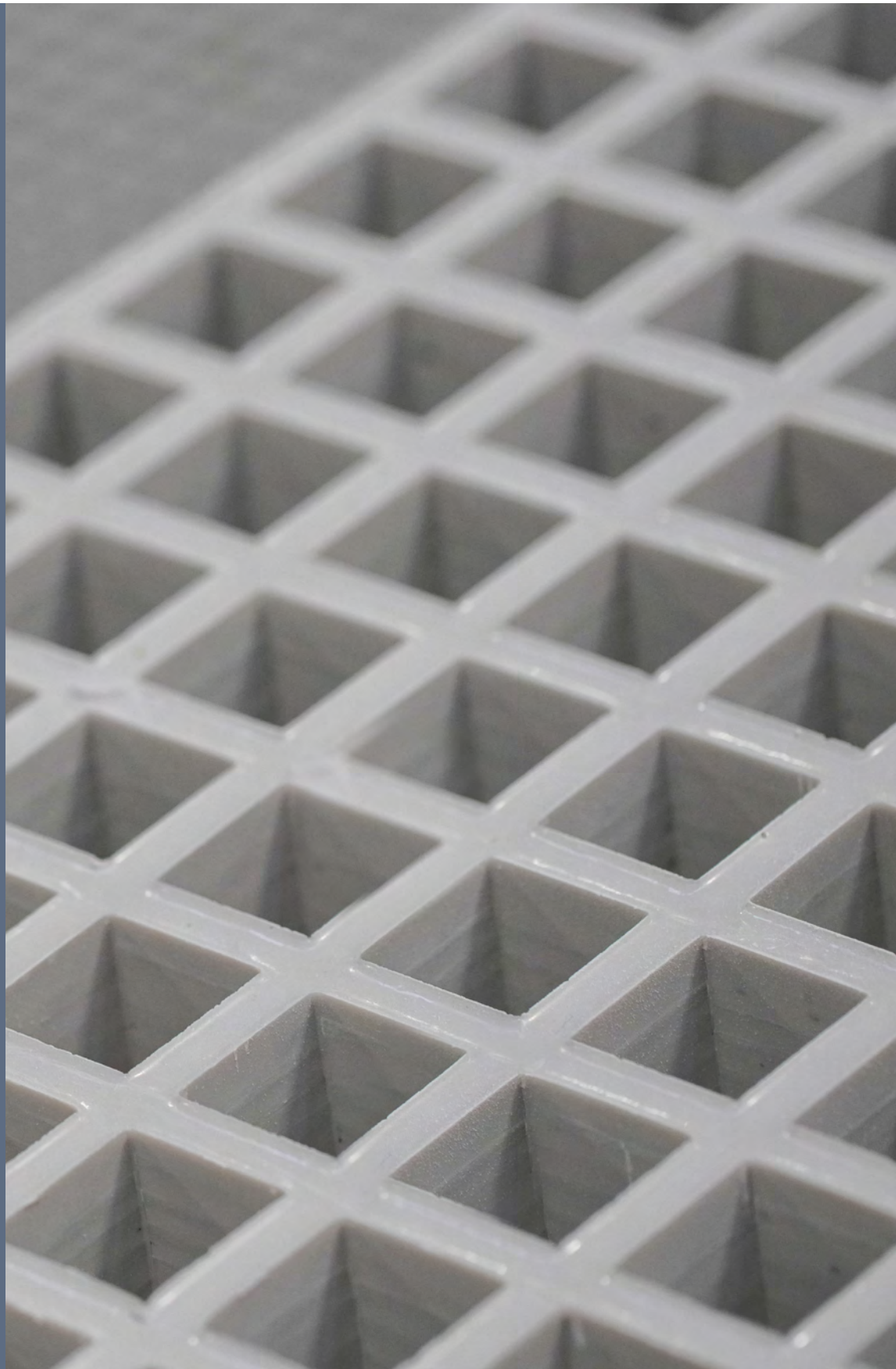
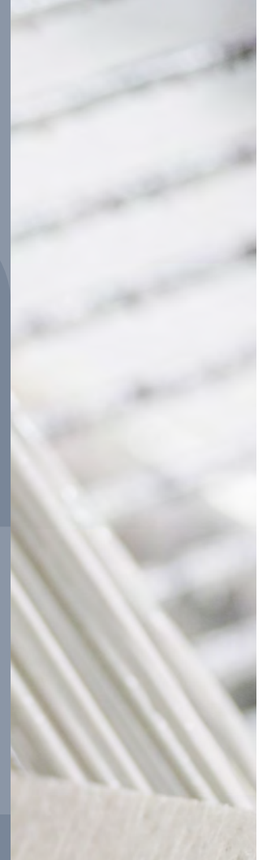
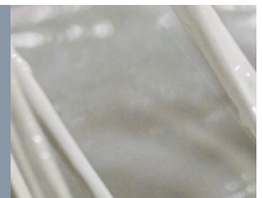
TEZKOM
Kompozit

COMPOSITE PRODUCTS CATALOGUE



*“We offer services at the highest standards with our expert team in our high-tech **R&D and quality control laboratory.**”*





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TEZKOM COMPOSİTE

Tezkom Composite Technologies Industry and Trade Inc.

In its facilities established on a total area of 25,000 m², with a closed area of 13,000 m² in Eskişehir Organized Industrial Zone, it has been continuing its production activities since 2013 and serving its customers as one of the leading companies in the composite sector.

It produces composite-based materials, one of the most important materials of the future, with Pultrusion, Open Molding, SMC and BMC technique, Hand Lay-up and Pressing technologies and offers special solutions for the needs of construction, chemical, defense industry, food, agriculture, marine, aviation and automotive industries. Our fully equipped laboratory, established on an area of 1,500 m², whose accreditation process was completed in 2017, is among the largest R&D investments in Turkey. Our TÜRKAK accredited laboratory leads the development of the sector by providing all necessary testing services from raw material analysis to final product analysis.

It makes the most innovative investments in technological equipment required by the sector. It continues to grow by reflecting the new technologies it acquires to its employees through orientation processes.

As the Tezkom family, we aim for timely, cost-effective and quality production with our dynamic and professional team. Our primary goals include customer satisfaction, production continuity and contributing to the country's economy.

*As a result of our technological investments, our company was among the 40 finalists in the **2014 SME and Entrepreneurship Awards**, Young Entrepreneurs of the Year category.*

LABORATORY

As a basic research laboratory, our policy is to provide testing services for plastic and composite materials by fully fulfilling the requirements of test methods with good professional and technical practices. With our staff whose expertise is developed through training, we aim to provide our services on time, without errors and in a reliable manner.

In our advanced laboratory, comprehensive tests are carried out within the framework of ASTM and ISO standards, from raw material input to product output controls.

Among the mechanical tests:
- Bending stress
- Compressive stress
- Impact strength
- Flexibility tests

Among the chemical tests:
- Water absorption
- Gelation
- UV aging
- Resistance to chemicals
- Resistance to flame

*As Tezkom, we meet the needs of the sector by offering **quality and reliable testing solutions** at every stage.*

QUALITY

We have partnered with ESKİM Kimya to elevate our production processes to the highest level. By using ES 2620 (Lloyd's Register – Type Approval / ESKİM Kimya) in composite material production, we have achieved various successes.

Our company has recently obtained the **TS EN ISO 13501-1 "Building Materials and Components, Fire Classification Part 1: Classification Using Data from Fire Behavior Tests"** certificate and has begun producing CTP gratings for use in the construction sector. Additionally, we produce products that meet the requirements of the **ASTM E-84 "Standard Test Method for Surface Burning Characteristics of Building Materials"** standard. The ASTM E-84 test was carried out in laboratories accredited by IAS (International Accreditation Service) and ISO 17025. Our CTP gratings have achieved Class A fire rating in laboratory test results and reports, allowing them to be used in various fields.

We have started the production of CTP gratings for use in various applications, such as cargo tanks, fuel tanks, pipe tunnels, walkways, personnel walkways, and platforms, in compliance with offshore standards. In this regard, our products are certified by **Det Norske Veritas (DNV).** Our products have passed the mechanical strength, fire resistance, and environmental suitability tests defined by DNV and have earned certification.

Furthermore, our products are certified by **IFA (Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung).** This certification demonstrates that our products comply with occupational safety and health standards, are free from harmful substances, and have been approved for safe use.

As TEZKOM Kompozit, we also manufacture fiberglass-reinforced composite profiles with high mechanical properties based on isophthalic resin under **ES 2620 (Lloyd's Register – Type Approval / ESKİM Kimya).** Our company has proven its ability to produce profiles with high tensile, bending, and compressive strength values by obtaining the **TS EN 13706-2 "Reinforced Plastics Composites - Specifications for Pultruded Profiles - Part 2: Methods of Tests and General Requirements"** certificate.

FRP PROFILES

FRP Profiles

Pultrusions are constant profile parts formed by drawing continuous fiber reinforcements through a resin bath. The saturated reinforcement then enters a steel die which shapes the material into the desired profile. All of our products are licensed byTS EN13706-2-E23.

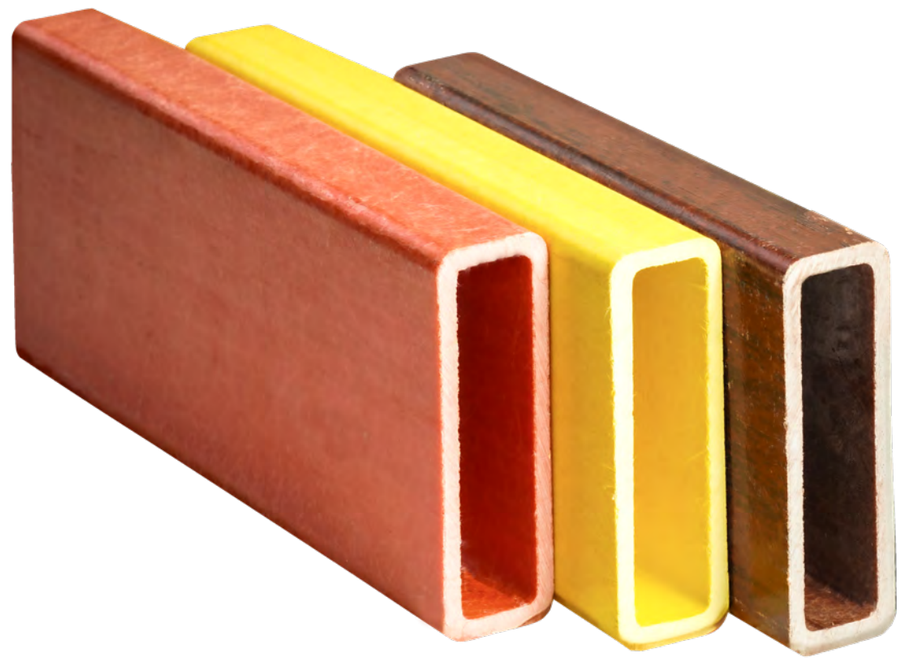
An increasing number of architects, engineers and builders are using fiberglass pultrusion for a variety of building and infrastructure projects and the trend is accelerating thanks to the many benefits delivered by the technology.

Advantages

- Fast, cost-effect ive and high-volume production of strong structural components,
- Pultrusion profiles can be up to 75% lighter than their steel counterparts without sacrificing structural strength.
- Pigments can be added to create fiberglass profiles of any color during the pultrusion process, eliminating the time and cost of painting.
- The corrosion-resistant properties of composite materials provide a durable and low-maintenance solution for weathered products.
- Fiberglass profiles can be painted, cut or drilled using conventional hardened tools and joined on construction sites using bolts, screws, rivets or adhesives.
- Less energy consumption.
- Less transportation costs thanks to its light structure.

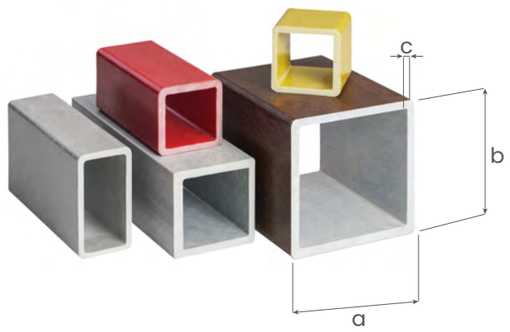
STANDART PROFILES

Standard profiles are a type of profile that is used in a wide variety of forms and can be used in almost every industry.The unidirectional fiberglasses in the length of the profiles provide strength.



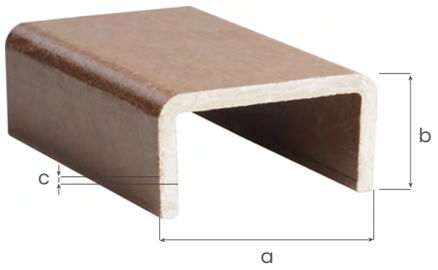
Square Profiles

Product	a (mm)	b (mm)	c (mm)	Gr/Meter
Sq Tube	30	30	2	414
Sq Tube	40	40	4	1000
Sq Tube	45	45	5	1440
Sq Tube	50	50	5	1700
Sq Tube	50	50	6	1980
Sq Tube	63	63	6	2400
Sq Tube	75	40	4	1639
Sq Tube	75	75	6	3140
Sq Tube	75	75	9	4380
Sq Tube	80	25	4	1435
Sq Tube	80	25	5	1750
Sq Tube	80	40	5	2035
Sq Tube	95	50	3	1540
Sq Tube	100	100	6	4305
Sq Tube	100	100	8	5350
Sq Tube	100	100	10	6660
Sq Tube	120	60	5	3145



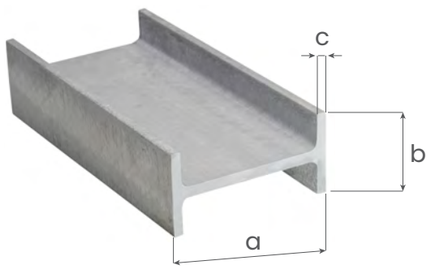
C Channel

Product	a (mm)	b (mm)	c (mm)	Gr/Meter
C Channel	75	32	5	1235
C Channel	100	30	6	1720
C Channel	140	50	7	2927
C Channel	150	38	6	2440
C Channel	150	43	9	3580
C Channel	200	55	9	4800
C Channel	200	60	10	5535
C Channel	300	75	12	8720
C Channel	300	33	3	1998



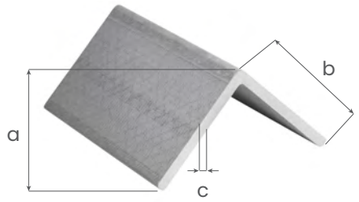
I/H Beams Profiles

Product	a (mm)	b (mm)	c (mm)	Gr/Meter
I Beam	30	15	4	376
I Beam	40	15	4	550
I Beam	100	50	6	2393
I Beam	150	75	6	3300
I Beam	150	75	8	4203
I Beam	200	100	10	7030
I Beam	200	200	10	10773



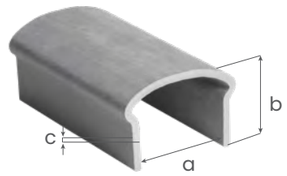
L Profile

Product	a (mm)	b (mm)	c (mm)	Gr/Meter
L Profile	50	50	6	1060
L Profile	50	25	5	650
L Profile	65	65	8	1700
L Profile	75	75	6	1640
L Profile	100	100	8	2920
L Profile	123	32	11	1687



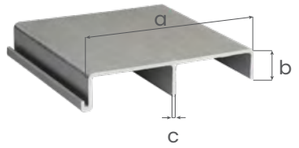
Handrail

Product	a (mm)	b (mm)	c (mm)	Gr/Meter
Handrail	50	50	4	960
Handrail	63	63	3	1000
Handrail	75	75	3	1078



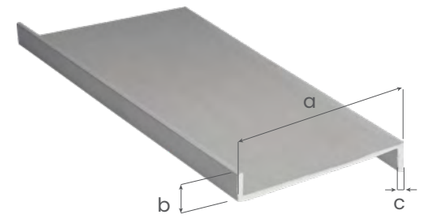
Deck Profiles

Product	a (mm)	b (mm)	c (mm)	Gr/Meter
Deck Profiles	200	38	4	2252
Deck Profiles	500	40	4	5552
Deck Profiles	500	40	4	6140



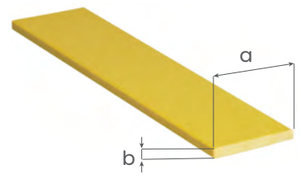
Louvre

Product	a (mm)	b (mm)	c (mm)	Gr/Meter
Louvre	100	10	3	798



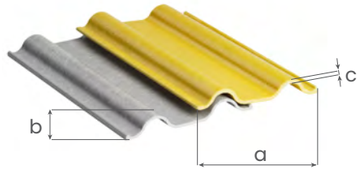
Plate

Product	a (mm)	b (mm)	Gr/Meter
Plate	25	4	230
Plate	50	6	580
Plate	75	10	1380
Plate	80	8	1184
Plate	100	10	1800
Plate	100	12	2200
Plate	500	10	9125



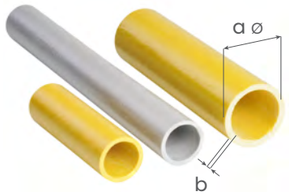
Kickplate

Product	a (mm)	b (mm)	c (mm)	Gr/Meter
Kickplate	100	12	2	450
Kickplate	100	10	3	450
Kickplate	150	15	3	980



Pipe

Product	a (ø)	b (mm)	Gr/Meter
Pipe	34	3	540
Pipe	50	4	1114
Pipe (Knurled)	36	3	580
Pipe	50	5	1300
Pipe	50	6,5	1640



Rod

Product	a (ø)	Gr/Meter
Rod	10	155
Rod	12	215
Rod	16	390
Rod	18	500
Rod	22	702

FRP Marker Post

Product	a (mm)	b (mm)	Gr/Meter
Road Marker	100	3	558

GRP Palisade

Product	a (mm)	b (mm)	c (mm)	Gr/Meter
Palisade	88	26	4	1000

SMC Connector Parts

3T Connector

Short Tee

Long Tee

30° Tee

4T Connector

30° Cross

Cross

Corner

Top Corner

Mid Corner

Elbow

90° Elbow

Wide Elbow

Swivel

Double Swivel

External Swivel

Plate

Side Fix Plate

Tube Base Plate

Square Base Plate

Cap

Plastic Cap
50x50

Plastic Cap
75x75

Assembled Handrail

Caged Ladder

GRATINGS

CTP Gratings

CTP refers to plastic reinforced with continuous fibers. It is typically produced using long, continuous fibers like glass fibers. These fibers provide the material with higher durability and flexibility. CTP is commonly used in automotive, construction, and electrical equipment applications.

CTP gratings is a type of grating made from continuous fibers, such as glass fibers, that are embedded in a plastic resin matrix. This type of grating is known for its high strength, durability, and resistance to environmental factors.

Advantages

- **High Strength-to-Weight Ratio:** CTP grating is very strong while being lightweight, making it easy to handle and install without sacrificing structural integrity. The continuous fiber reinforcement provides superior tensile strength compared to other materials.
- **Corrosion Resistance:** One of the most significant advantages of CTP grating is its resistance to corrosion. The plastic resin and fiber composition are highly resistant to chemicals, moisture, and harsh environmental conditions, making it ideal for use in chemical plants, marine environments, and other corrosive areas.
- **Non-Conductive:** CTP grating is non-conductive, which makes it a safe option for applications where electrical conductivity needs to be avoided, such as in electrical substations or areas with high voltage equipment.
- **Lightweight:** Due to its lightweight nature, CTP grating is easier to transport, install, and maintain. This reduces the overall cost and time required for installation compared to heavier metal alternatives.
- **Non-Slip Surface:** The surface of CTP grating is designed to be slip-resistant, providing safety in wet or hazardous environments, such as in industrial or offshore facilities.
- **Durability and Long Lifespan:** CTP grating is highly durable and can withstand heavy loads, impact, and wear over time. It offers a long service life, reducing the need for frequent replacements and maintenance.
- **Customization:** CTP grating can be manufactured in various sizes, shapes, and configurations to meet specific application requirements, making it versatile and adaptable for a wide range of industries.
- **Easy to Maintain:** Unlike metal grating, CTP grating does not require regular painting or special coatings to maintain its appearance or performance, as it is resistant to rust and corrosion.

Common Applications of CTP Grating

- Chemical plants and refineries
- Marine ad offshore platforms
- Power generation facilities
- Water treatment plants
- Food processing facilities
- Pharmaceutical industries

GRP Grating

38x38x25 Grating

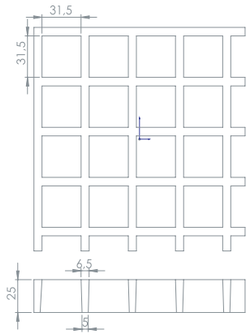


Plate Dimensions:
1000x4038mm, 12,5kg/m²
1038x4038mm, 12,5kg/m²
1220x3660mm, 12,5kg/m²

38x38x30 Grating

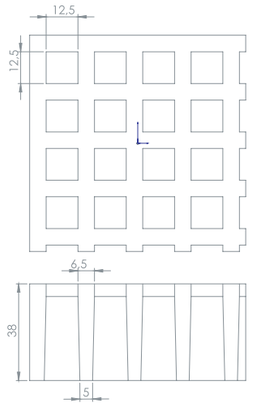


Plate Dimensions:
1000x4038mm, 12,5kg/m²
1038x4038mm, 12,5kg/m²
1220x3660mm, 12,5kg/m²

38x38x38 Grating

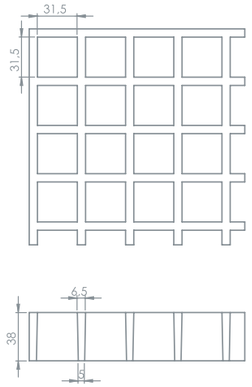


Plate Dimensions:
1000x4038mm, 18,5kg/m²
1038x4038mm, 18,5kg/m²
1220x3660mm, 18,5kg/m²

19x19x30 Grating

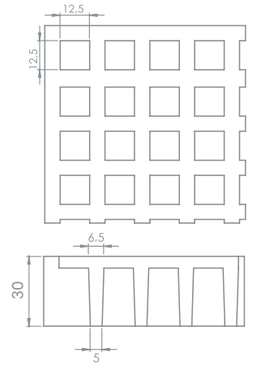
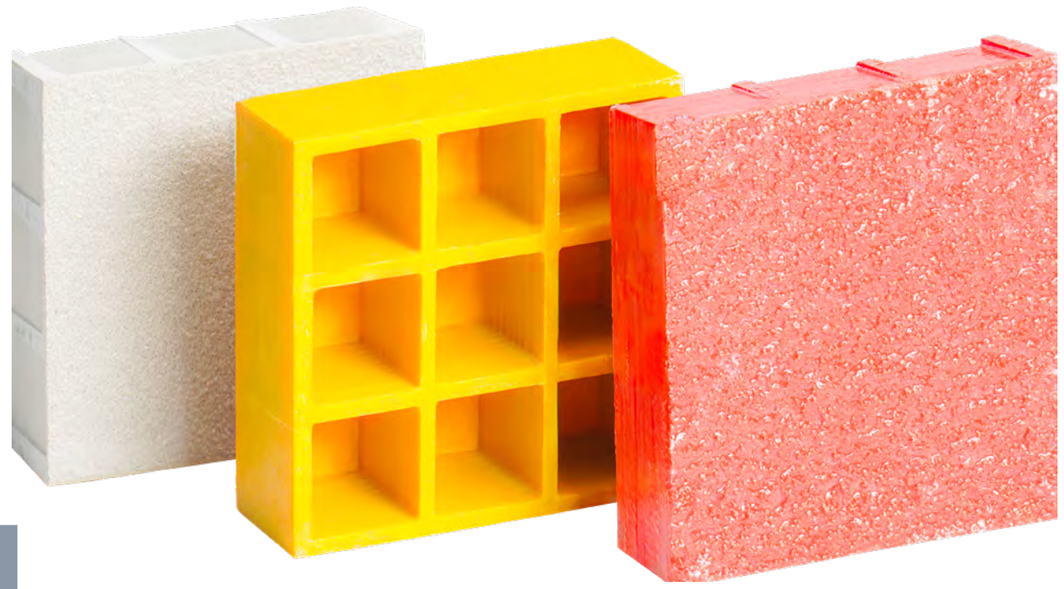


Plate Dimensions:
1000X4038 mm, 22kg/m²



GRP Grating

19x19x38 Grating

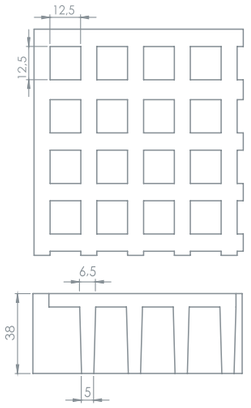


Plate Dimensions:
1000X4038 mm, 22kg/m²

38x38x50 Grating

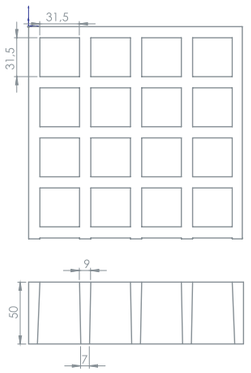


Plate Dimensions:
1038X2038 mm, 25kg/m²
1038X4038 mm, 25kg/m²

50x50x13 Grating

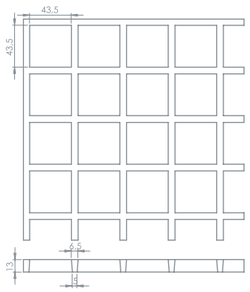


Plate Dimensions:
1025X4028 mm, 5kg/m²

50x25x50 Grating

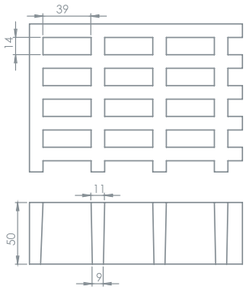


Plate Dimensions:
1220X2030 mm, 44kg/m²

100x25x38 Grating

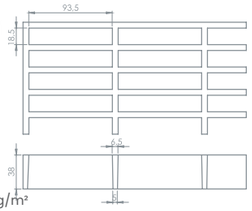


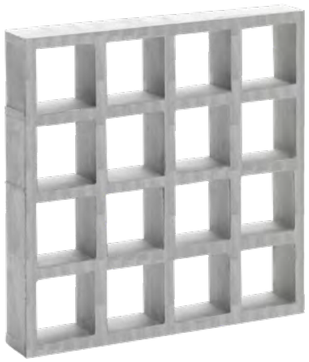
Plate Dimensions: 1000X4038 mm, 20kg/m²

GRP Grating

Surface Types

Surface types vary depending on the application area and specific needs. There are four different surface options: concave, flat, gritted, and chequered plate. These surface types are available for all grating sizes and models. By selecting the most suitable surface type based on factors such as slip resistance, aesthetics, and durability, safe and long-lasting use is ensured.

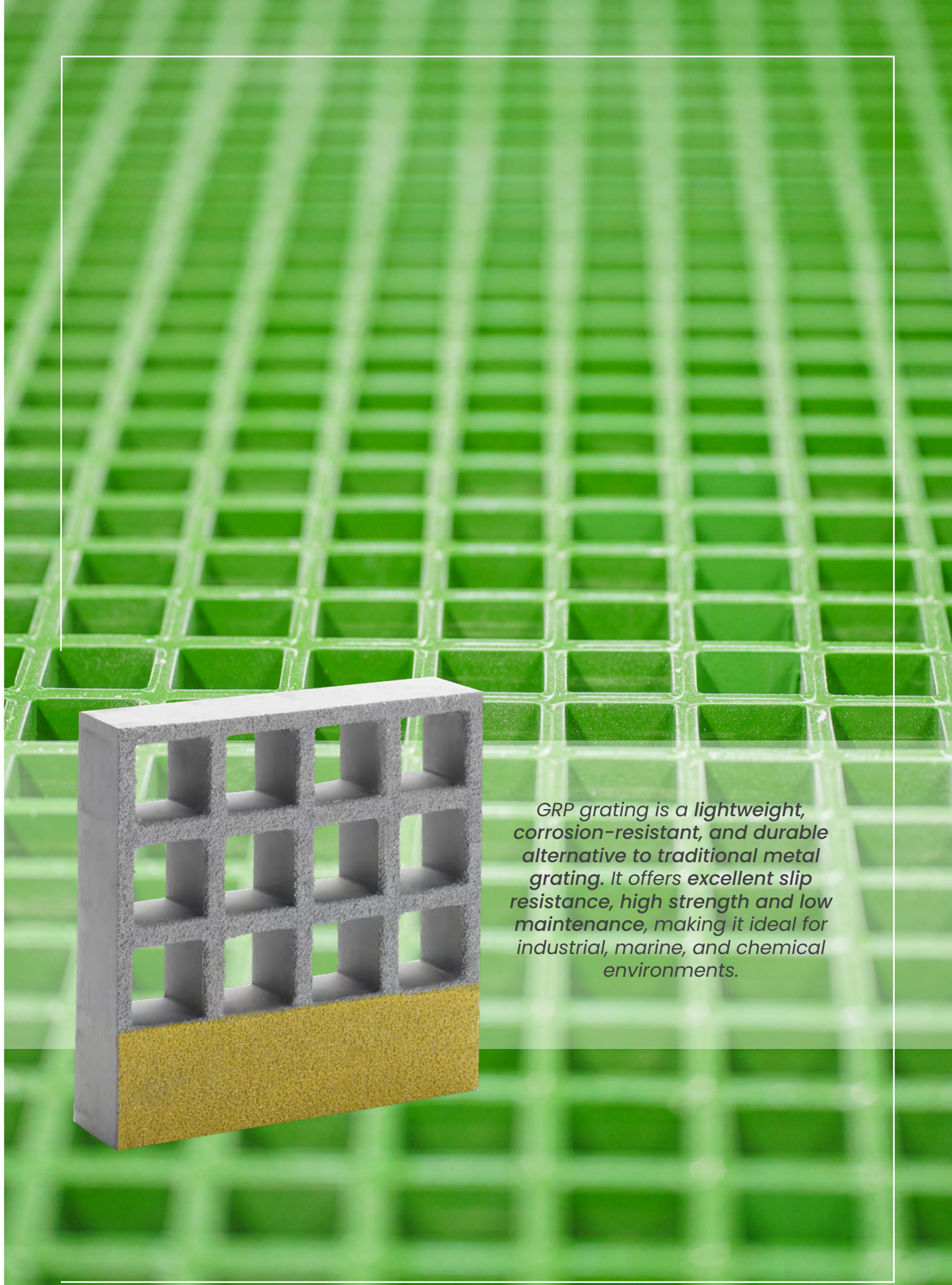
Gritted
A non-slip gritted surface is obtained by applying sand to the concave-surfaced grating using a binding resin.



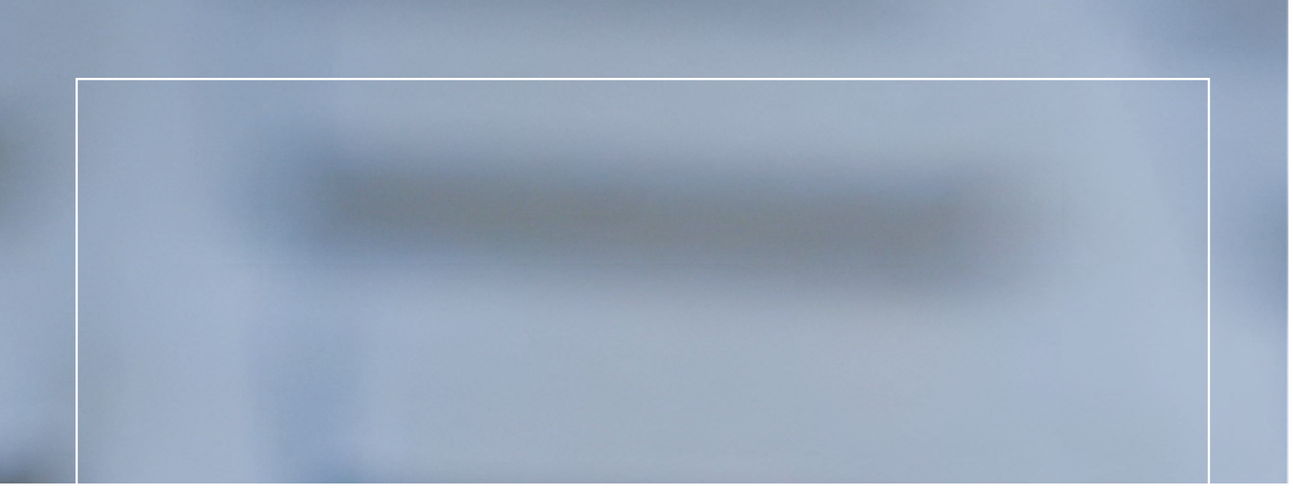
Flat
The concave-surfaced grating is sanded to become flat and smooth.

Concave
The grating surface has a concave shape. It is suitable for use in various environments to prevent slipping.

Chequered Plate
It is obtained by combining the grating surface with a non-slip closed-form plate.



*GRP grating is a **lightweight, corrosion-resistant, and durable alternative to traditional metal grating.** It offers **excellent slip resistance, high strength and low maintenance**, making it ideal for industrial, marine, and chemical environments.*



SMC & BMC

Manholes

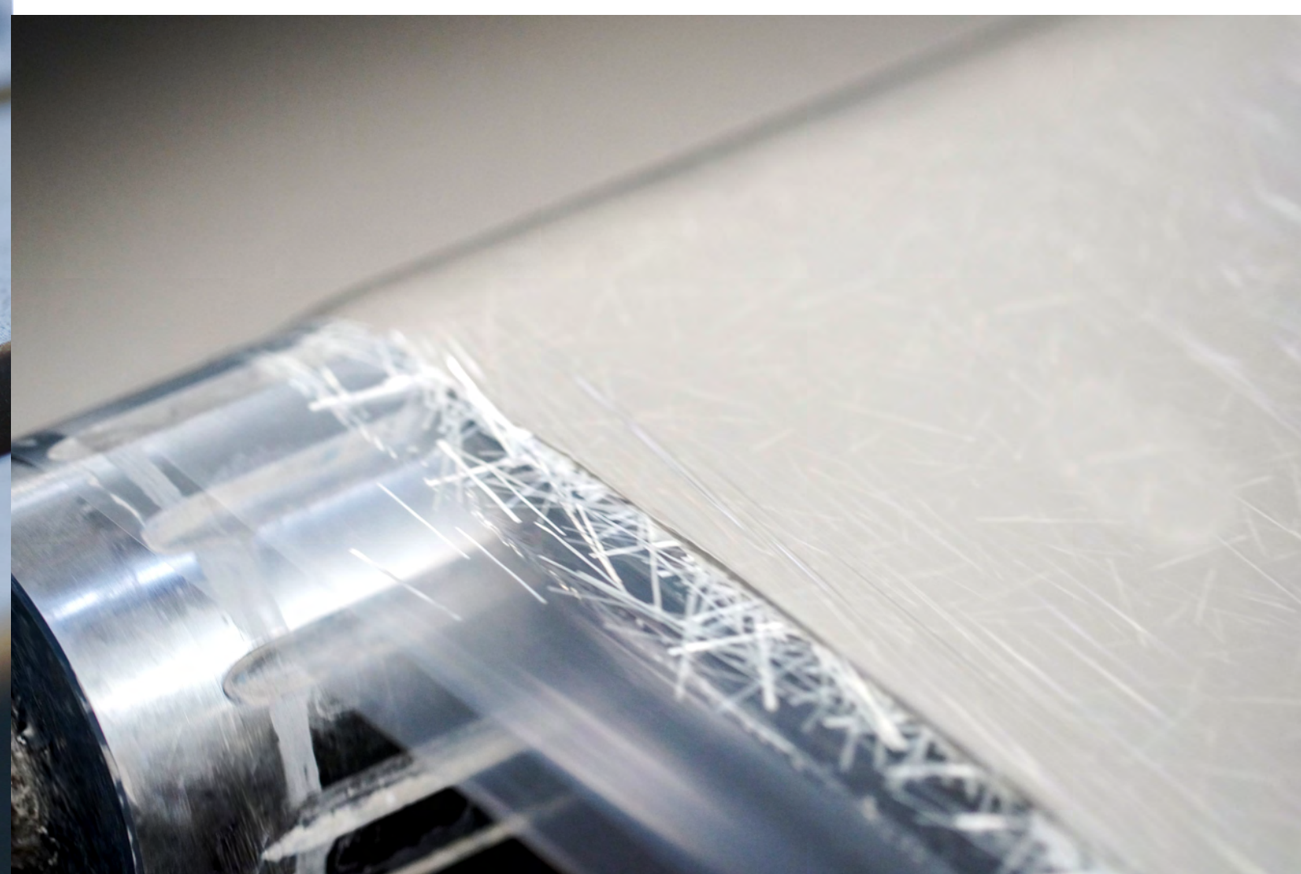
SMC and BMC are both thermoset composite materials made from a mixture of resin, reinforcement fibers (usually glass fiber), fillers, and additives. They are used in various industries, including automotive, electrical, and construction, due to their strength, durability, and design flexibility.

SMC (Sheet Molding Compound): A sheet-like material made by impregnating glass fibers (25-65% content) with resin, fillers, and additives. It is used in compression or injection molding processes to produce lightweight yet strong parts.

BMC (Bulk Molding Compound): A putty-like material with shorter fiber reinforcements (10-30% content), designed for injection or compression molding. It is more suitable for complex and high-precision parts.

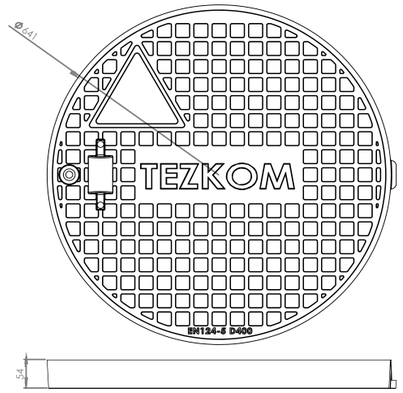
Advantages

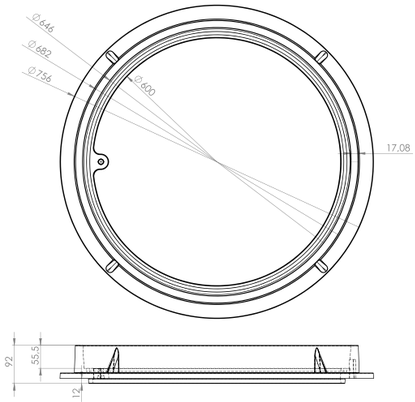
- **High Strength-to-Weight Ratio:** Excellent mechanical properties, including impact and tensile strength. Resistant to wear, corrosion, and harsh environmental conditions.
- **Corrosion & Chemical Resistance:** On Highly resistant to chemicals, moisture, and extreme weather conditions. Ideal for outdoor and industrial applications.
- **Lightweight:** Lower density than metals, making them ideal for automotive and aerospace applications.
- **Design Flexibility:** Can be molded into complex shapes with high dimensional accuracy. Supports high integration of parts, reducing the need for assembly.
- **Electrical Insulation:** Excellent dielectric properties, making them suitable for electrical enclosures, switchgear, and insulators.
- **Fire Resistance:** Formulated with fire-retardant additives to meet stringent safety standards.
- **Cost-Effective & High Productivity:** Fast cycle times in production. Reduced waste compared to traditional materials.



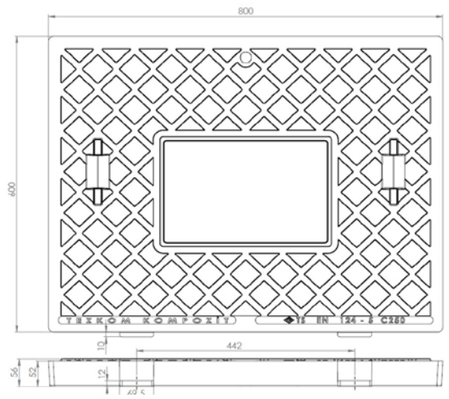
Manholes

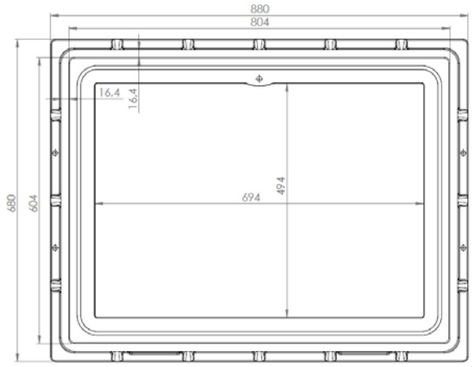
Ø 643 mm Manhole



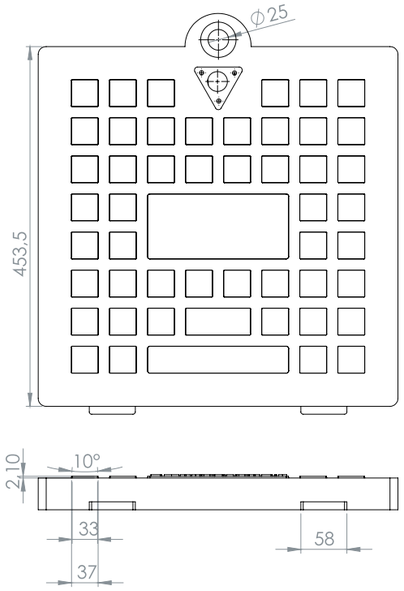


600x800 mm Manhole

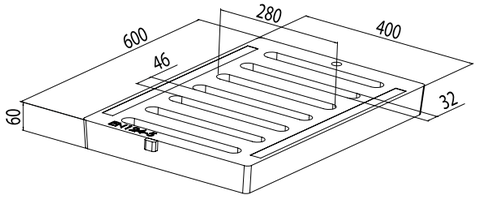


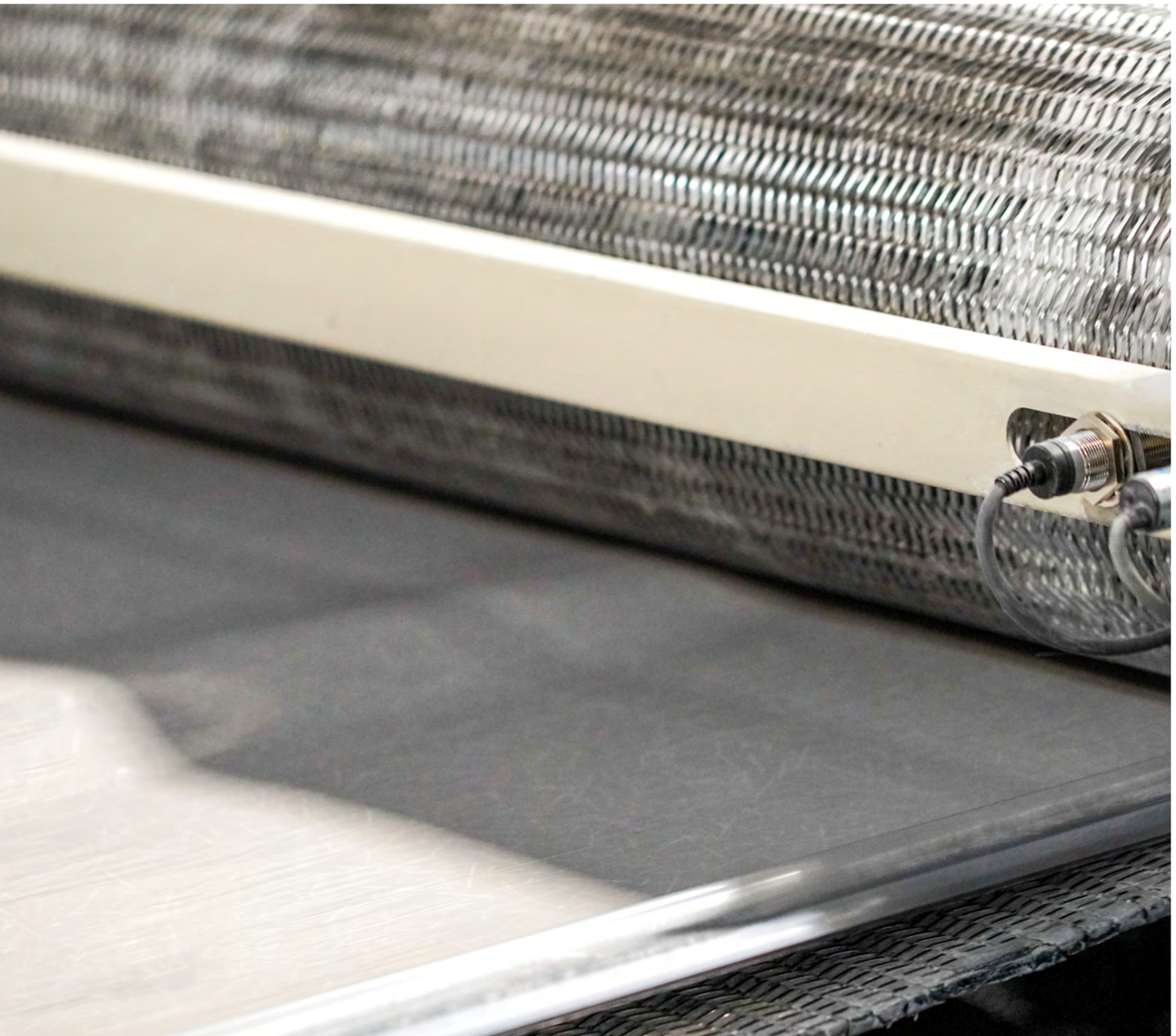


450x450 mm Manhole



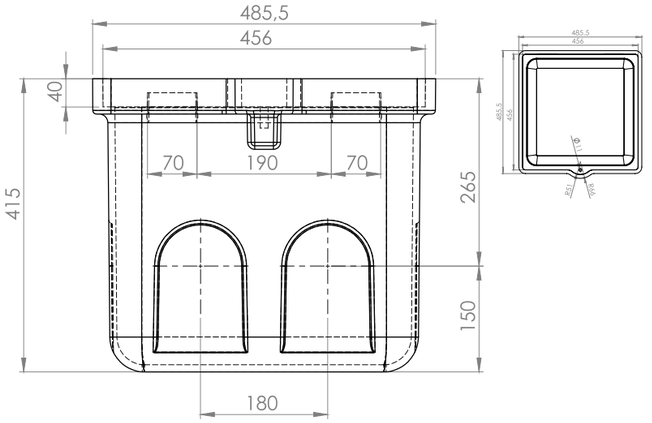
400x600 mm Grating



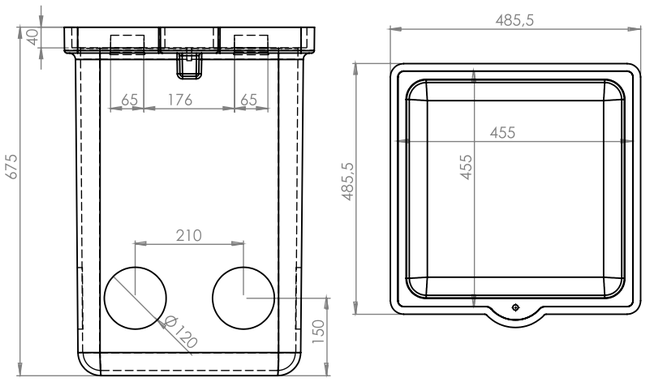


Chambers

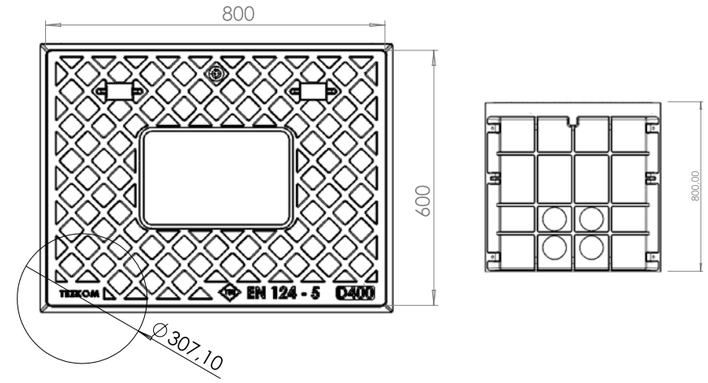
H41



H60

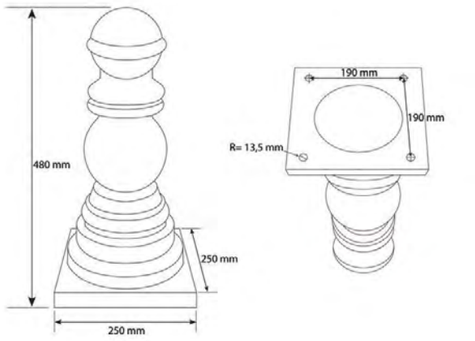


H75

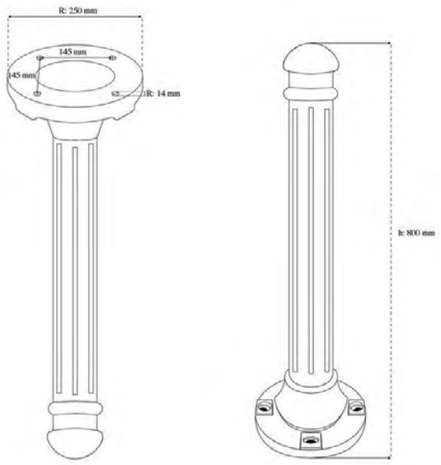


Bollards

470 mm FRP Boundary Element



650 mm FRP Boundary Element



BMC-SMC (Bulk Molding Compound - Sheet Molding Compound) materials offer ***high strength, corrosion resistance, and long-lasting performance*** *as composite solutions. When used in road boundary elements,* ***they provide exceptional durability against wear, weather conditions, and impacts.*** *Their lightweight structure allows for easy installation, while their maintenance-free nature ensures long-term cost savings.*

INDUSTRIAL SOLUTIONS

EXPLORE THE FRP ADVANTAGES IN YOUR INDUSTRY

Fibreglass composites combine a number of unique advantages such as high strength, low weight and corrosions resistance, which provide a cost-efficient alternative to concrete, steel, aluminium and wood. Our GRP & SMC products are particularly suitable for aggressive environments within the water technology industry as well as infrastructure constructions.

SOLUTIONS FOR INDUSTRIES

Composite Solutions for Water Treatment Systems

Water treatment facilities operate under harsh conditions involving aggressive chemicals, high humidity, and corrosive environments. To ensure long-lasting performance with minimal maintenance, fiberglass-reinforced plastic (FRP) composite materials offer a superior alternative to traditional materials.

At TEZKOM KOMPOZIT, our high-performance composite solutions for the water treatment sector enhance operational efficiency while reducing maintenance costs. For project-specific products and technical consultation, feel free to contact us.

Composite Solutions for Water Treatment Systems

Advantages of Composite Materials
High Corrosion Resistance: Provides excellent resistance to acidic and alkaline environments, preventing issues such as rust, decay, and metal fatigue. This makes composites ideal for treatment tanks, chemical pipelines, and ventilation systems.

Lightweight with High Strength: Despite their low specific weight, composite materials deliver outstanding mechanical strength. This results in easier handling, faster installation, and reduced transportation and assembly costs.

Long Service Life and Low Maintenance: FRP components can operate in demanding environments for many years without performance degradation. Compared to traditional materials, they require less frequent maintenance, minimizing system downtime.

Design and Application Flexibility: With manufacturing techniques such as pultrusion, hand lay-up, and pressing, custom dimensions and geometries can be produced to meet project-specific needs.

Application Areas:
Walkways and grating systems in treatment plants
Chemical transport and process pipelines
Tank and basin covers
Structural support profiles
Cable management systems
Ventilation ducts

Composite Solutions for Industrial Applications

Composite materials have become indispensable in various industrial applications due to their exceptional strength-to-weight ratio, corrosion resistance, and design flexibility. In sectors such as construction, chemical processing, energy, marine, and infrastructure, composites are used to manufacture structural components, support systems, gratings, tanks, pipes, and enclosures. Their ability to withstand harsh environments, including chemical exposure and extreme temperatures, makes them ideal for long-term, low-maintenance use. Additionally, advanced manufacturing techniques like pultrusion and molding allow for tailored solutions that meet specific performance and dimensional requirements, driving innovation and efficiency across industrial operations.

Composite Solutions for Oil & Gas Industry

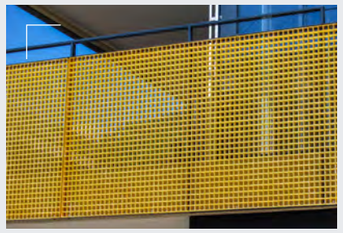
Fiberglass-reinforced composites offer lightweight, corrosion-resistant, and durable alternatives to traditional materials in the oil and gas sector. Ideal for harsh environments, they are used in platforms, walkways, cable trays, and pipe supports—providing long service life, reduced maintenance, and improved safety.

Composite Solutions for Marine

Composite materials are widely used in the marine industry due to their excellent resistance to corrosion, saltwater, and harsh environmental conditions. Their lightweight structure reduces fuel consumption, while their durability ensures long-term performance with minimal maintenance. Common applications include decks, handrails, ladders, gratings, and structural components on ships, docks, and offshore platforms—offering safety, efficiency, and extended service life.

Composite Solutions for Fencing

Composite materials are an excellent choice for fencing due to their durability, low maintenance, and resistance to weather, rot, and corrosion. These fences offer the aesthetic look of wood combined with the strength and longevity of composites, making them ideal for both residential and commercial applications. They provide a cost-effective, long-lasting solution for privacy, security, and decorative purposes.



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Kompozit

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