



مؤسسة فيصل علي القحطاني المقاولات
Faisal Ali Alqathani Cont, Est.,

All Kinds of Stainless Steel, Iron, Aluminium, FRP, GRP & Steel Gratings

COMPANY PROFILE

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Introduction

Faisal Ali AlQahtani Contracting Est (Silvertech Saudi) Grating manufacturer Saudi Arabia custom-made Stainless-Steel Solutions using best quality Grade 304, 316, 316L as we specialize in the complete line. **M/S. Faisal Al Qahtani Cont. EST implementing** our business with the brand name **Silvertech Saudi** which is over 20 years of experience in the Industrial sector of Stainless-Steel fabrications and manufacturing that has become one of the strongest producers of high-quality **Stainless Steel / Metal Products** in Riyadh, Saudi Arabia.

Stainless Steel Drainage Products Fabricator in Saudi Arabia

Further, in the Commercial Construction & Industrial sector, above all its actual recovery rate is 100%. Including energy more importantly in Commercial building, Industries, Water plant, Housing Projects, Pharmaceutical, Transportation. To sum up research, food sector, Industrial sector and logistics. In addition, the proper 304 or 316 stainless steel grades. Meanwhile, types for environments with specific uses. After that our Saudi steel & Stainless-Steel company products parts of long-lasting results most importantly with optimizing costs and

improve quality. Similarly, stainless steel is used for various applications in and around the house. In other words, our products with an exceptional life cycle cost. During the manufacturing process, that is to say, are used for garden furniture, kitchen surfaces, and even fireplaces.

After that stainless steel tech products similarly SS gratings, Floor Drains, stainless steel recessed drain covers, steel pipe bollards, water tank ladders are generally selected. For example, corrosion resistance durability, aesthetic appearance, and hygiene. In addition, safety properties render kitchen equipment suppliers in Saudi that is environmentally safe. In the same vein, we are a privately-owned stainless-steel fabrication work and on the other hand, operated Saudi Arabian Silvertch (Faisal Ali AlQahtani Cont. Est) stainless steel production workshop with friendly service. Similarly, Silver tech Saudi offers you a full-fledged quality regime with complete drainage products. In addition, our products are affordable and make them convenient to use. For instance, we know what you need and above all, we are ready to deliver within days.

Since we established our business in 2001. Moreover, we have had experience & still a growing day by day, As a result, Silvertch Saudi (Faisal Ali AlQahtani Cont. Est) is known for its Quality Standard sheet metal fabrication and we stand for most competitive stainless steel manufacturing in the Market.

Scope of Specification

Silvertech Saudi have certainly got for all your stainless steel needs with an expert team of over **20 years** of experience in this field and stainless steel suppliers in Saudi Arabia. Stainless steel products have a long life cycle. It is not as expensive as other stainless steel materials with long life cycles. Our High- Quality stainless steel fabrication and custom designs ensure that our stainless steel products prove effective for many applications.

- ✚ Food & Beverages Drainage Products
- ✚ Commercial Kitchen Products
- ✚ Industrial Gratings
- ✚ Hospital Cabinets & Modular Handrails
- ✚ Laser Cutting Designed Products
- ✚ Trench Gratings (Stainless steel & Steel)
- ✚ Linear Drains (Stainless Steel)
- ✚ Floor Drains (Stainless Steel)
- ✚ Handrails, Balustrades & Stairs
- ✚ Column Cladding and General sheet metal work.
- ✚ Press Locked Gratings
- ✚ Safety Ladders & Cage Ladders
- ✚ Recessed Manhole Cover

- ✚ Grease Oil Interceptor
- ✚ Roof Strainer
- ✚ Kitchen Hood, Cabinets and Tables.
- ✚ Showroom Frames

Our Products meet the Saudi standards, and provide superior protection of anti- bacterial, anti- Contamination and Anti- corrosion protection. Our High-Quality fabrication and custom design ensure that our products will prove effective for many application to Food Beverages, Commercial Kitchen Products, Industrial Drains, Hospital Cabinets, Laser Cutting Designed Products, Trench Gratings, Linear Drains, Floor Drains, Handrails, Balustrades, Column Cladding and General sheet metal work. We pride ourselves in manufacturing to your specifications through strategic planning and implementation to suit your strategic needs. We have in-house highly trained team for design and manufacture to your expectations, all the materials that are used are in accordance with all the standards in regards to steel strength, Health and Safety regulations. We have certainly got you covered for all your stainless steel needs.

Equipment List

SL#	MACHINERY NAME	MODEL#	QUANTITY	STATUS	REMARKS
1	HGTECH SMH 6/3200 NC Shearing Machine STD	SMH 6/ 3200 NC	1	ACTIVE	
2	ADH Press Brake Machine	WC67E-125T / 3200	1	ACTIVE	
3	HGTECH SMART HW 1500 Laser Welding Machine	SMARTHW1.5KW	1	ACTIVE	
4	Fiber Iron Cutting Machine Volt 380/220, Phase 3	14 Model	1	ACTIVE	
5	Cold Form Cutting Machine 380V 3PH	14"	1	ACTIVE	
6	Table Heavy Duty Motorized 7.5 HP 380/220V Cut off SAW	14"	1	ACTIVE	
7	Portable Electrical Straight Drill Machine 750W	16mm Shank	2	ACTIVE	
8	Portable Electrical Fier Cutting Machine	2200W/14"	1	ACTIVE	
9	Portable Electrical Fier Cutting & Machine	1400W/7"	1	ACTIVE	
10	Double Polishing Machine	DP 9200006039	1	ACTIVE	
11	Portable Electrical AH9" 1.9mm Grinding Machine	2400W/9"	1	ACTIVE	
12	Welding Machine WSME315 3PH 380V SWORDFISH	WSME315 3PH 380V SWORDFISH	1	ACTIVE	
13	TIG Welding Machine		5	ACTIVE	
14	MIG Welding Machine		1	ACTIVE	
15	ARC Welding Machine		5	ACTIVE	
16	Manual Sheet Rolling Machine		1	ACTIVE	
17	Laser Cutting Machine	2X6M Double Bed 4kva	1	ACTIVE	

Quality Policy

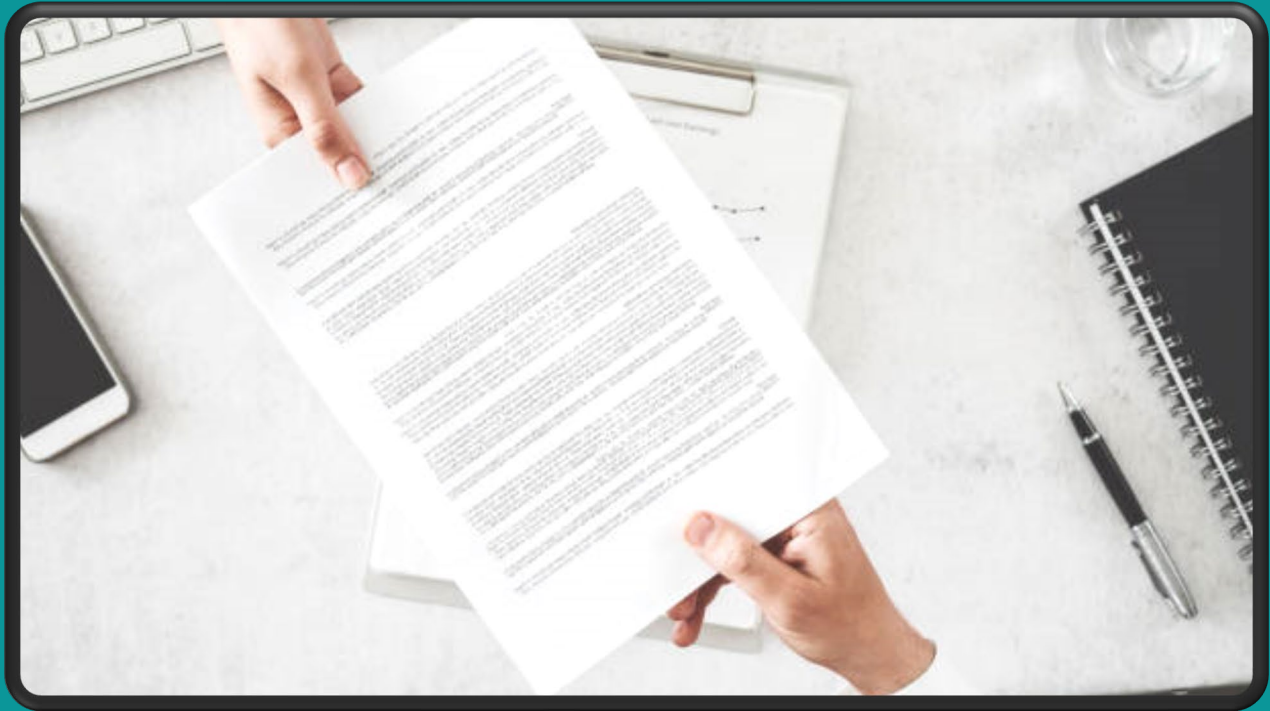
SILVERTECH SAUDI will consistently provide products and services that meet or exceed the requirements and expectations of our customers. We will actively pursue ever-improving quality through programs that enable each employee to do their job right the first time and every time.

SILVERTECH SAUDI is committed to manufacturing extremely high-quality, cutting-edge products in an accurate and timely manner for our existing and growing customer base. We satisfy our customer requirements and continually improve our processes to enhance customer loyalty and satisfaction.”

HSE Policy

Our health and safety policy is to:

- ✚ Prevent accidents and cases of work related ill health.
- ✚ Manage health and safety risk in our work place.
- ✚ Provide clear instruction and information, and adequate training, to ensure employees are competent to do their work.
- ✚ Provide personal protective equipment.
- ✚ Consult with our employees on matters affecting their health and safety.
- ✚ Provide and maintain safe plant and equipment.
- ✚ Ensure safe handling and use of substances.
- ✚ Maintain safe and healthy work conditions.
- ✚ Implement emergency procedures, including evacuation in case of fire or other significant incident.
- ✚ Review and revise this policy regular.



Legal Documents

الرقم الموحد: ٧٠٣٧٨٢٢٤١٣
رقم المنشأة: ١٠١٠٩٧١٠٦٤
التاريخ: ١٤٤٥/٠٦/٢٧ هـ

شهادة تسجيل فرع مؤسسة فردية Branch Of Individual Establishment Registration Certificate



إسم الفاعل: فيصل علي ابن فالح القطاني

رقم السجل المدني/ بطاقة الاحوال: ١٠٧٨٦٠٧٠٧٤

مركزها الرئيسي: الرياض

هاتف: ١٢٨٧١

رقم سجل المركز الرئيسي: ١٠١١٧٢٣١٨

الرسم التجاري للفرع: مؤسسة فيصل علي ابن فالح القطاني للتقويات عامة

العنوان: ٢٣٢٧، عصر المختار، ٦٥١١٦

هاتف: ١٢٨٤٣

النشاط: للاطلاع على بيانات الأنشطة الرجاء مسح الرمز التجاري

راس المال: ٥٠٠٠ خمسة آلاف ريال فقط لا غير

إسم المدير أو الوكيل الموض: فيصل علي ابن فالح القطاني

الجنسية: سعودي

رقم السجل المدني - الإقامة: ١٠٢٨٦٠٧٠٢٤

سلطات المدير:

يشهد مكتب السجل التجاري بمدينة: الرياض

وتبينه صلاحية الشهادات هي: ١٤٤٦/٠٧/٠٩ هـ

بموجب الريمسال رقم: ٢٤٠١٢١٥٩٩٤٦٩

وتاريخ: ١٤٤٥/٠٦/٢٧ هـ



To Verify The Information Of This Certificate Visit <http://mc.gov.sa>
الرياض 11162 | Riyadh 11162 | المملكة العربية السعودية | Kingdom of Saudi Arabia | ٩566 11 294 4444





تاريخ الإصدار: 2020/11/24
الرقم المميز: 3050000389



الهيئة العامة للزكاة والدخل
General Authority of Zakat & Tax



شهادة تسجيل في ضريبة القيمة المضافة VAT Registration Certificate

تشهد الهيئة العامة للزكاة والدخل بأن المكلف أدناه مسجل في ضريبة القيمة المضافة
بتاريخ 2020/11/24

Hereby, The General Authority of Zakat & Tax (GAZT) certifies that the taxpayer below is
VAT registered on 24/11/2020

Taxpayer Name:	مؤسسة فيصل علي فالخ القحطاني للمقاولات	اسم المكلف:
VAT Registration Number:	305000038900003	رقم التسجيل الضريبي:
Effective Registration Date:	2020/12/01	تاريخ نفاذ التسجيل:
Taxpayer Address:		عنوان المكلف:



كمكلف مسجل في ضريبة القيمة المضافة، لا يجوز لك تحصيل ضريبة القيمة المضافة من عملائك قبل تاريخ
نفاذ التسجيل بالضريبة. في حال تبين غير ذلك، ستقوم الهيئة العامة للزكاة والدخل بتنفيذ الغرامات المستحقة

هذه الوثيقة مرسلة من النظام الآلي ولا تحتاج إلى توقيع
- الهيئة العامة للزكاة والدخل -

Certificate of Registration



This is to certify that Quality Management System of

FAISAL ALI FALEH ALQAHTHANI CONTRACTING ESTABLISHMENT

Exit - 18, Istanbul Street, Al Masha'el, Riyadh 14327, KSA

is in accordance with the requirements of the following standard

ISO 9001:2015

(Quality Management System)

SCOPE

DESIGN PROCURE FABRICATION SUPPLY AND INSTALLATION OF MILD STEEL, STAINLESS STEEL AND ALUMINIUM (LIGHT & MEDIUM STRUCTURES) PRODUCTS-SUCH AS; CHANNEL DRAINS GRATING LADDER HANDRAILS CANOPY STAINLESS STEEL DECORATIVE PRODUCTS HOT DIP GALVANIZED PRODUCTS & LADDER & HANDRAIL

(IAF Code - 17,29,28)

Certificate Number : SCK/01/FAF/24/96/1595

Initial Registration Date : 19-Dec-2024

1st Surveillance Date : 19-Nov-2025

2nd Surveillance Date : 19-Nov-2026

Certificate Expiry Date : 18-Dec-2027

To verify certificate, visit at :

www.sckcerts.com

www.iafcertsearch.org

www.uafaccreditation.org

Issued by SCK Certifications Pvt. Ltd.

Dr. Shaivya Mishra
Director



Accreditation Board : 400, North Center Dr, STE 202, Norfolk, VA 23502, United States of America

This certificate remains the property of SCK and must be returned to SCK on Cancellation or Suspension of the certificate. Validity of the certificate is subject to successful completion of surveillance audits. Further clarification regarding the scope of this certificate and the applicability of standard may be obtained by consulting the Organisation on info@sckcerts.com

Certificate of Registration



This is to certify that Environmental Management System of

FAISAL ALI FALEH ALQAHTHANI CONTRACTING ESTABLISHMENT

Exit - 18, Istanbul Street, Al Masha'el, Riyadh 14327, KSA

is in accordance with the requirements of the following standard

ISO 14001:2015

(Environmental Management System)

SCOPE

DESIGN PROCURE FABRICATION SUPPLY AND INSTALLATION OF MILD STEEL,
STAINLESS STEEL AND ALUMINIUM (LIGHT & MEDIUM STRUCTURES)
PRODUCTS-SUCH AS; CHANNEL DRAINS GRATING LADDER HANDRAILS
CANOPY STAINLESS STEEL DECORATIVE PRODUCTS HOT DIP GALVANIZED
PRODUCTS & LADDER & HANDRAIL

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Sl.No	LIST OF PROJECTS
1	RED SEA PROJECT -SS ROPE HANDRAILS WITH POWDER COATED(GBH)
2	RED SEA PROJECT - ACCESS HATCH - AL MUTLAQ TRADING
3	RED SEA PROJECT - FRP LADDER - SHANDONG TIEJUN
4	RED SEA PROJECT - H10 - HATCH PIER SECURITY GATE (GBH)
5	RED SEA PROJECT - RS SCREEN (GBH)
6	RED SEA PROJECT - CANOPY 9
7	CHICKEN INCEPTOR FACTORY - AL HASSA
8	PANDA RENEVATION (EXIT 2) - KITCHEN HOOD & DRAINAGE PRODUCTS - RIYADH
9	WAG WATER FACTORY - JEDDAH
10	CARREFOUR - RIYADH
11	ISMAEL ABUDAWOOD PROCTOR & GAMBLE - DAMMAM
12	WAW WATER FACTORY - AL KHARJ
13	AL SOURAIYA FLOORING & FURNITURE - RIYADH
14	HEALTH FOOD COMPANY - RIYADH
15	BAJA FOOD SUPPLIES - RIYADH
16	FLOWARD - RIYADH



Project Images



Red Sea – SS316/316L Spa Screen



SS Rope Handrails for Floating villas



Access Hatch



Red Sea – H10 Hatch pier security gate



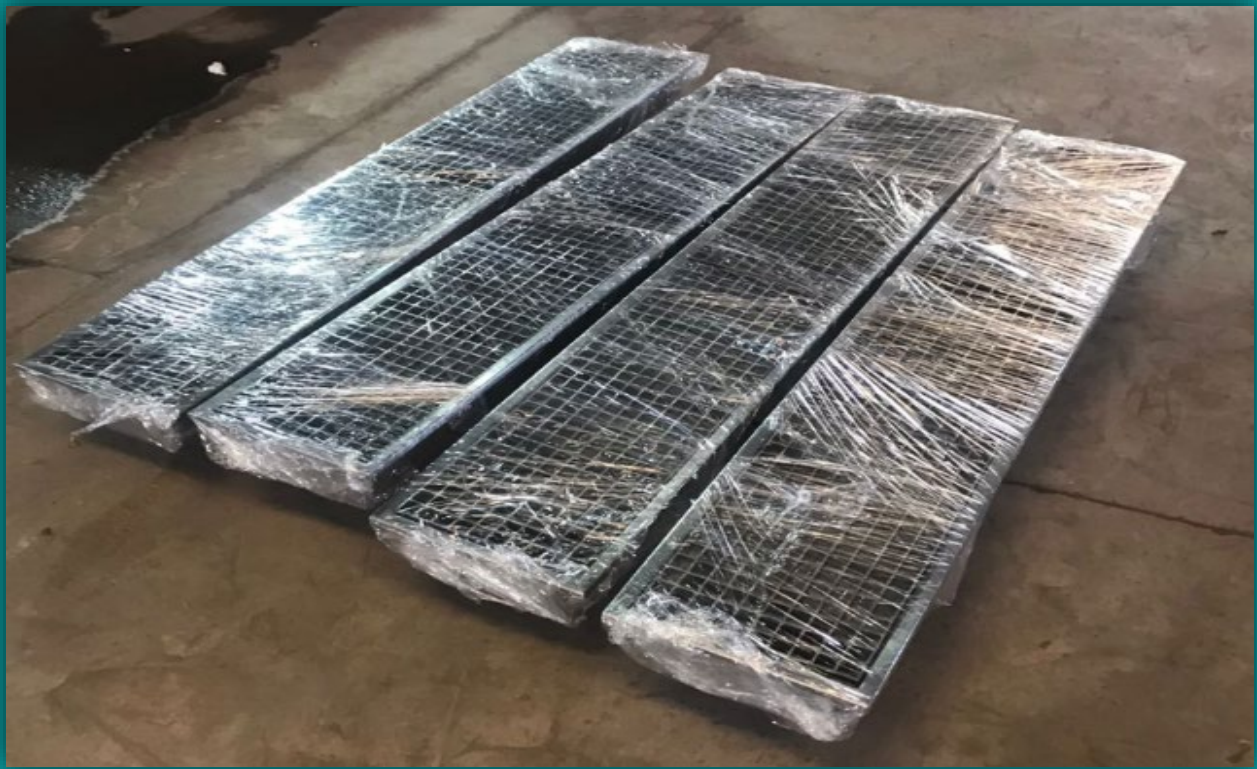
Red Sea – Access Hatch



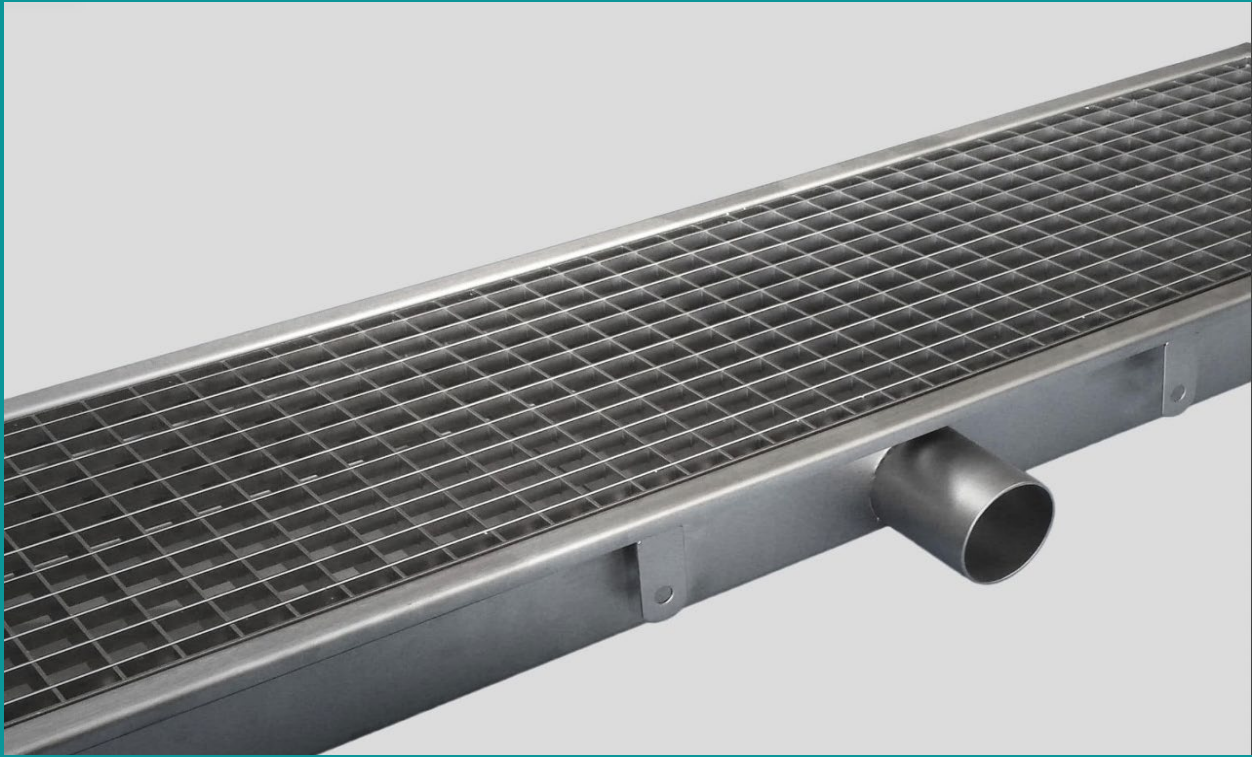
SS 316/316L – Drain Outlets

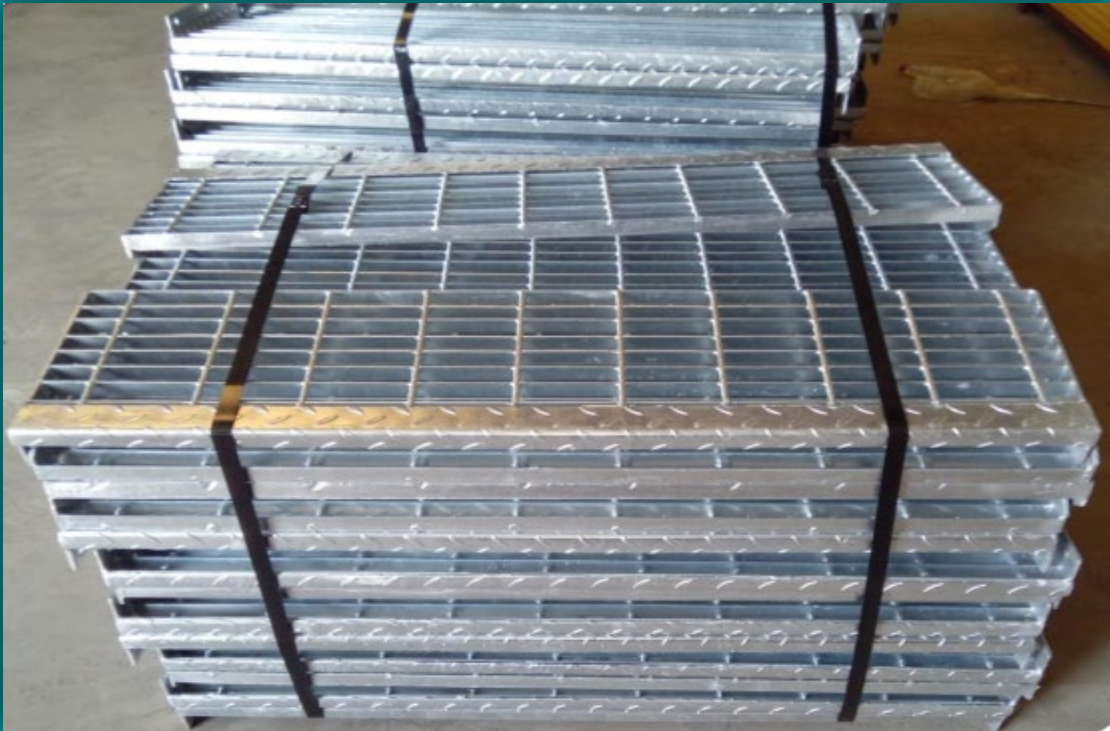




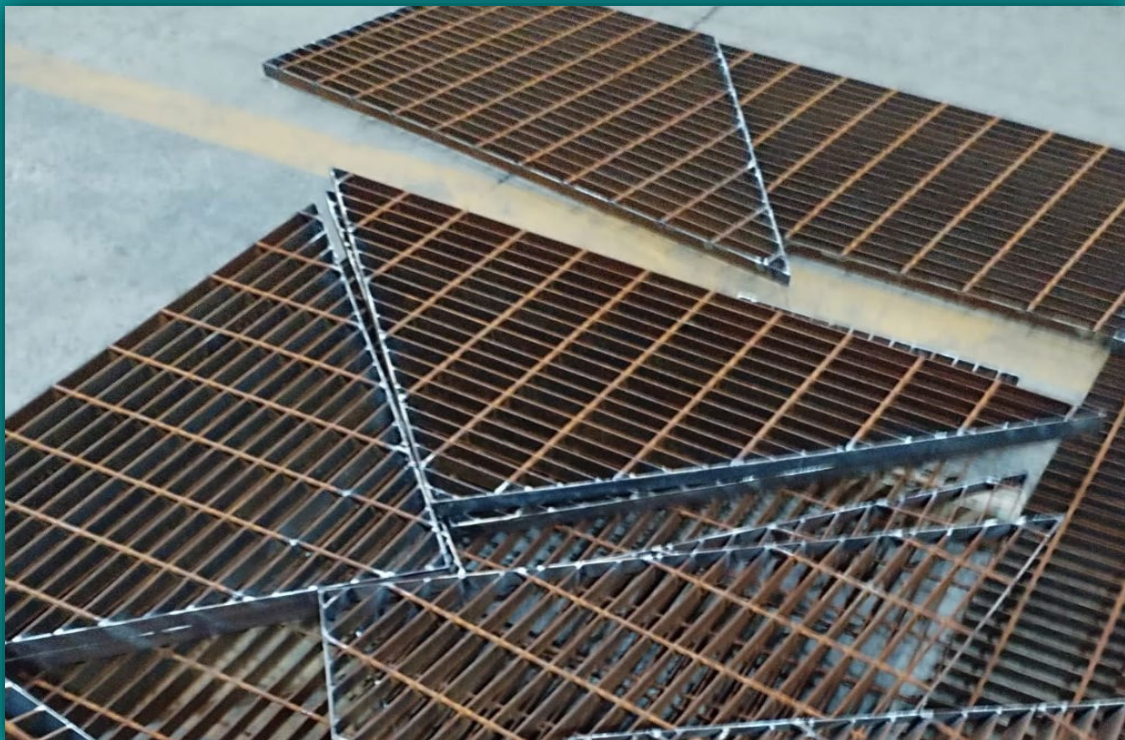
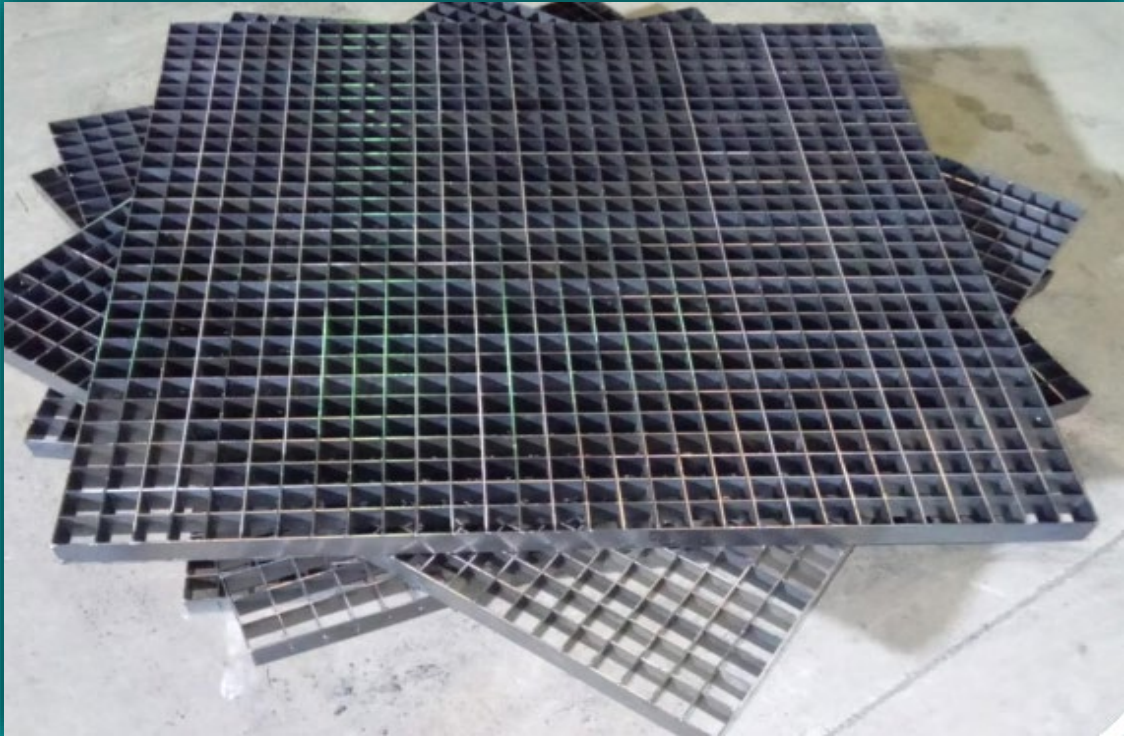


Kitchen Hood & Drainage projects





SS 316/316L Grating



MS steel Grating



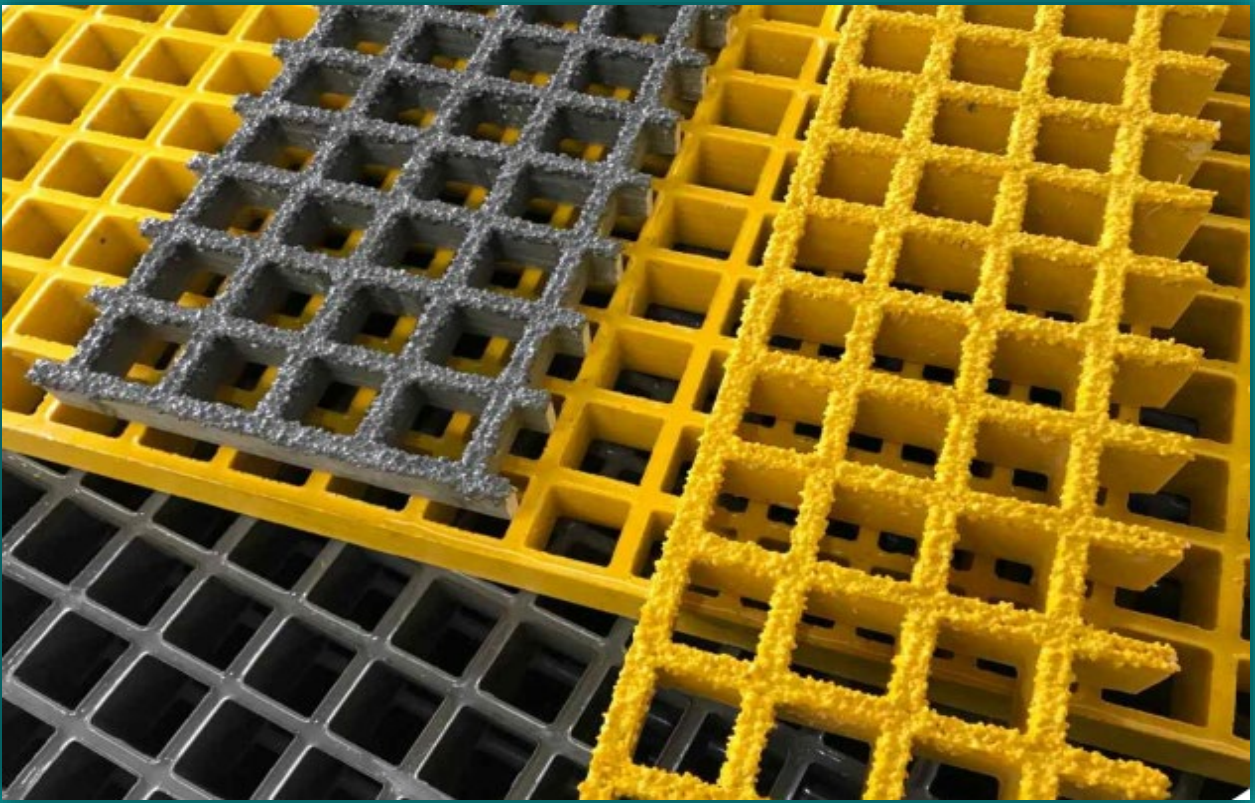
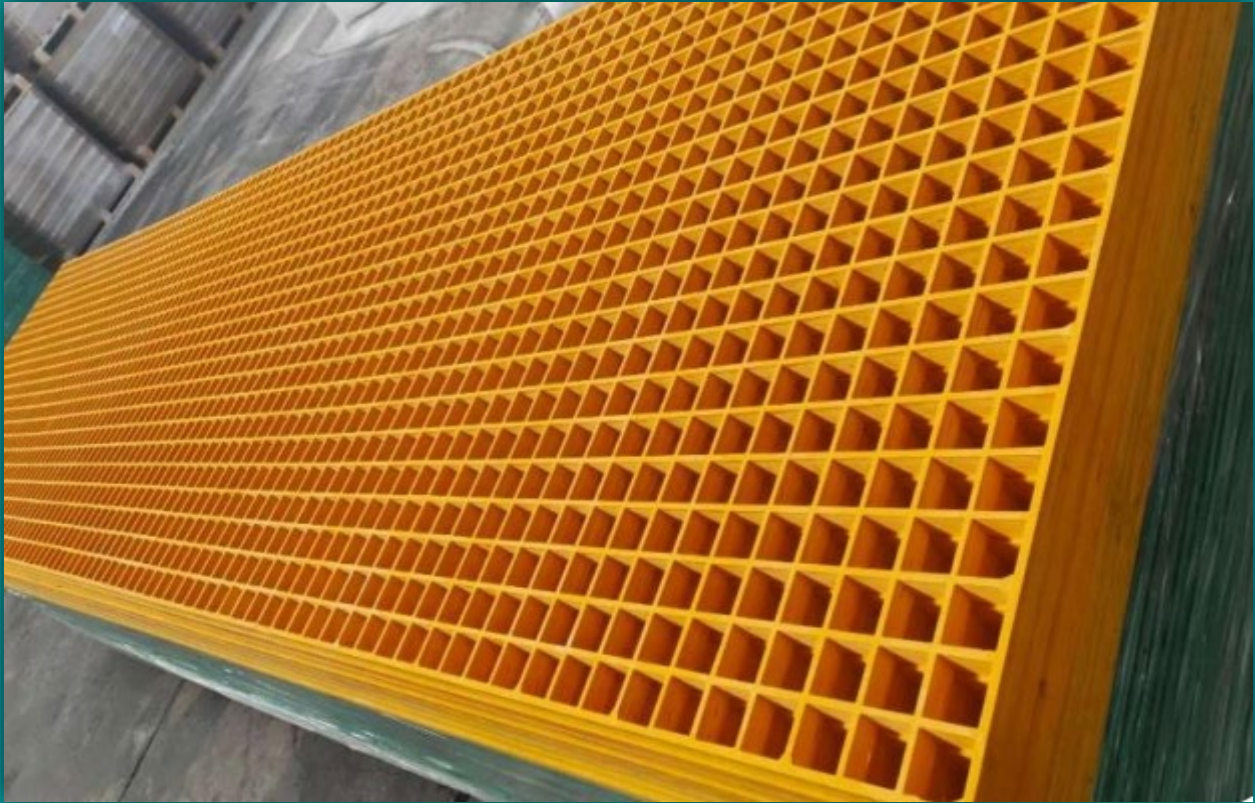
FRP - Ladder

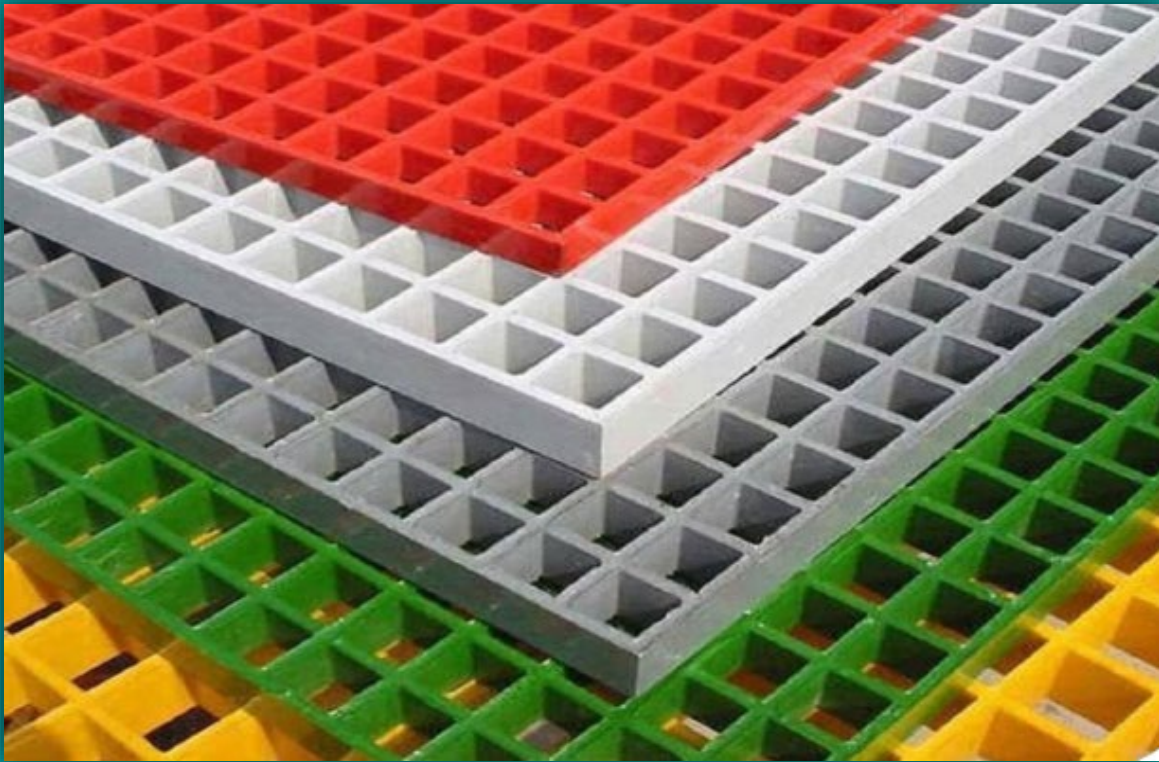
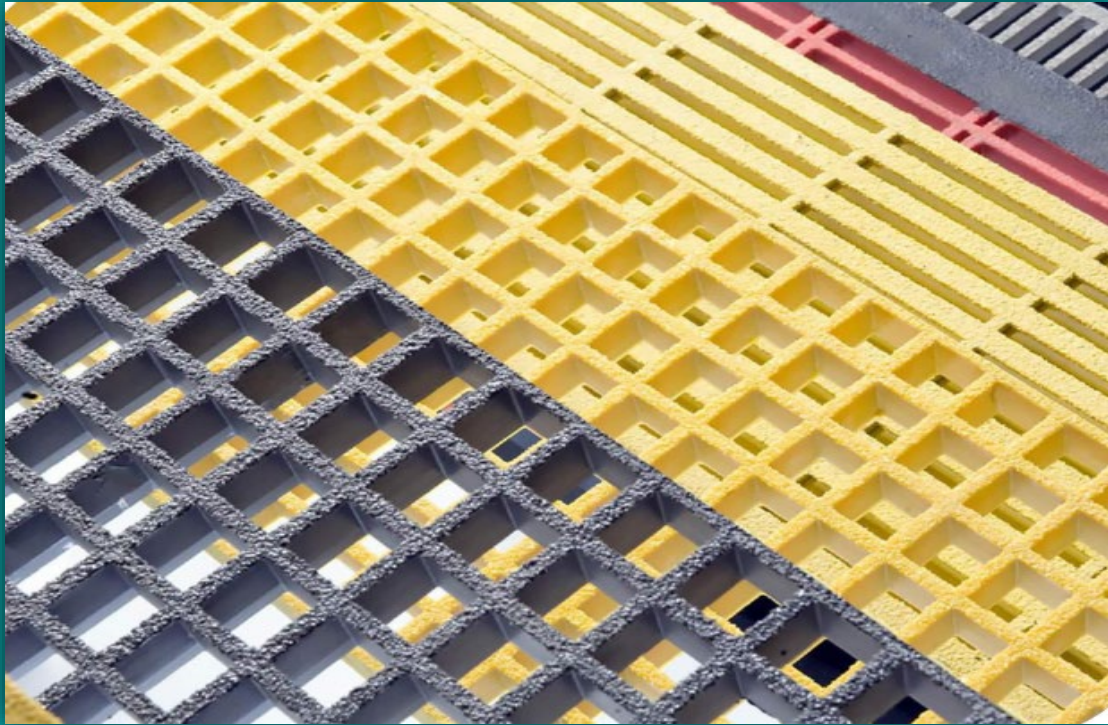


FRP – Ladder with Safety Gauge



Fiberglass Handrail system



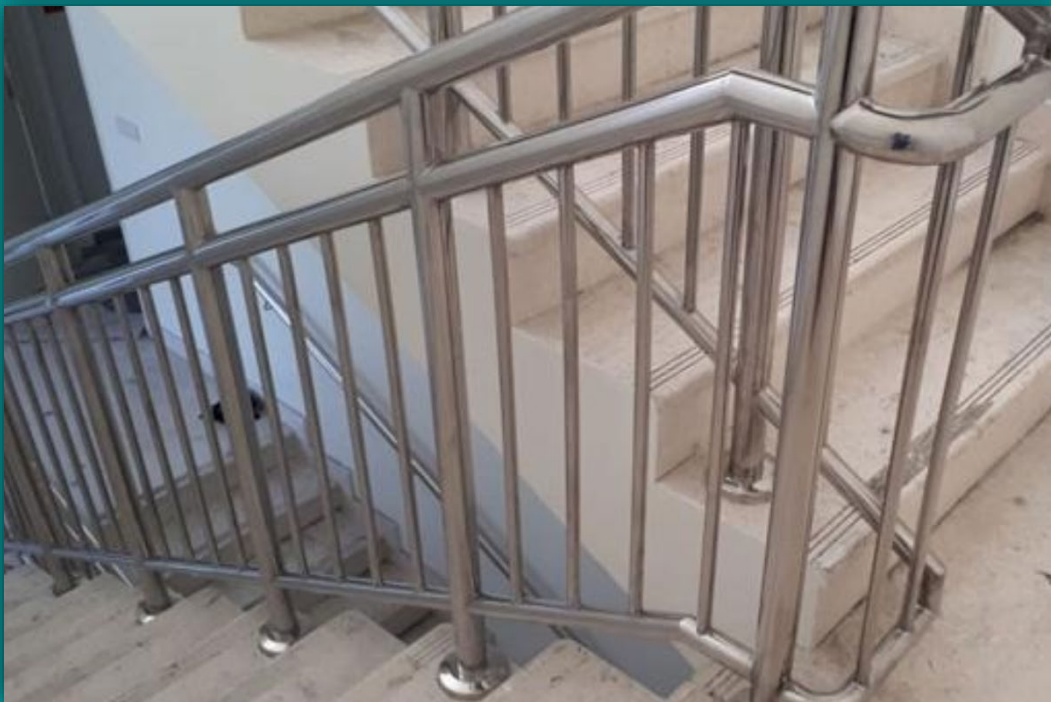


FRP – Grating Panels









SS316/316L - Handrails



Stainless Steel - Downspouts



SS316/316L – Ladder with Safety Gauge



Red sea Project – Canopy 9

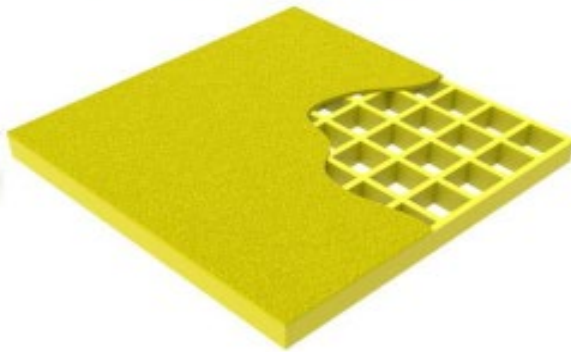
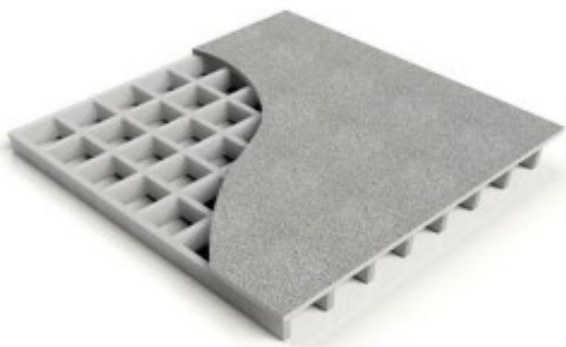
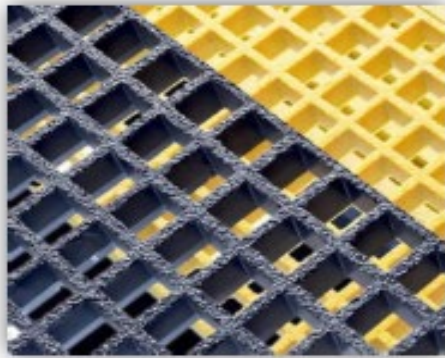
FRP GRATING

&

HANDRAILS CATALOGUES



SILVERTECH SAUDI
STAINLESS STEEL FABRICATION



FRP MOLDED GRATINGS Technical Data Sheet

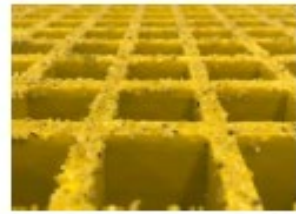


FRP MOLDED GRATINGS

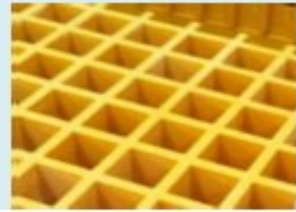
Grating with Concave Surface



Grating with Sanded Surface



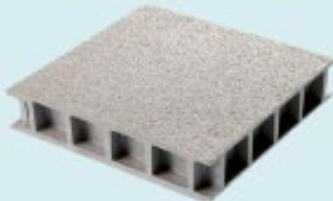
Grating with Smooth Surface



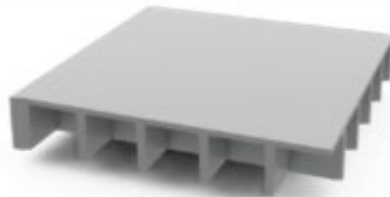
Covered Grating with Chequered Plate Effect Surface



Covered Grating with Sanded Surface



Covered Grating with Smooth Surface



FRP Molded Gratings can be produced in desired colors due to the pigments used.

FRP MOLDED GRATINGS

PRODUCT DESCRIPTION

FRP is a composite material that is reinforced with glass fiber and consists of a polyester or vinyl ester matrix resin with high physical and chemical resistance values. FRP Molded Gratings are produced with open, heated mold system and wet lamination technique with continuous glass fiber, resin chemical additives and pigment. Molded gratings are removed from the mold after the heating and cooling processes. Due to content, FRP Molded Gratings are light, anti-corrosive, dielectric materials with high chemical and mechanical strength. FRP Molded Gratings are produced in various resin systems, colors and different surface types to meet specific project requirements.

CONTENT

Main components of FRP Molded Gratings are glass fiber, resin, chemical additives and pigment. By changing one or more of these components, grating production can be made in accordance with the ambient conditions.

- **Resin:** The resin used in FRP molded gratings gives the material high properties such as high chemical resistance, flexibility and UV resistance. Different resin types can be used in accordance with the ambient conditions in which the material will be used.
- **Glass fiberr:** Multi-layered and continuous glass fiber is used in FRP molded gratings. With the glass fibers used, the grids have high physical strength.
- **Chemical Additives:** In addition to the chemicals used for the reaction, chemical additives such as UV stabilizer, flame retardant and smoke density reducer are used to improve the physical and chemical properties of FRP Molded Gratings.
- **Pigment:** FRP Molded Gratings can be produced in desired colors thanks to the pigments used in the resin. By this means, it can be easily used in architectural projects by producing the desired colors.

PRODUCTION PROCESS

FRP Molded Grating is produced in an open, heated mold system. Continuous E-glasses are placed in the mold in alternating layers and completely wetted with resin. This continuous process provides excellent corrosion resistance. FRP Molded Gratings provide high bidirectional strength in both transverse and longitudinal use of the panels thanks to fiber layers and fiber placement in alternating layers. FRP Molded Gratings are produced using different resins for use in different chemical environments (See FRP Molded Grating Chemical Resistance Guide). By this means, it provides usage area in different sectors. It is much lighter and easily processable than similar metal cast gratings. Due to the high resin content, it requires optimum chemical resistance and minimum maintenance.(See FRP Molded - Hot Dip Galvanized - Stainless Steel Grating Comparison Table).We have a variety of molds available, resulting in a wide range of panel sizes, thickness, and mesh patterns.

COMPARISON TABLE OF STANDARD RESIN SYSTEMS

	Chemical Resistance	Flame Retardancy	Low Smoke	Free Halogen	Temperature Performance	Flame Spread Rating ASTM E84
O-Series Orthophthalic Polyester	★★★	★★★★	—	—	★★★	Class 1, FSI525
I-Series Isophthalic Polyester	★★★★★	★★★★★	—	—	★★★★	Class 1, FSI525
V-Series Vinylester Polyester	★★★★★	★★★★★	—	—	★★★★★	Class 1, FSI525

FRP MOLDED GRATINGS

FRP MOLDED GRATING CHEMICAL RESISTANCE GUIDE

Chemical Environment	% Conc.	Orthophthalic Polyester (ORTHO)	Isophthalic Polyester (ISO)	Vinylester Polyester (VINYL)
		Max. Service Temperatures (°C)		
<i>Acetic Acid</i>	0-25	25	35	95
<i>Acetic Acid</i>	25-50	*	25	80
<i>Acetone</i>	10	20	*	*
<i>Aluminium Chloride</i>	Saturated	45	50	100
<i>Ammonium Chloride</i>	>0,5	45	50	100
<i>Ammonium Citrate</i>	>0,5	40	45	65
<i>Ammonium Hydroxide</i>	0,5-5	*	25	80
<i>Ammonium Nitrate</i>	Saturated	40	45	90
<i>Ammonium Sulfate</i>	Saturated	45	50	100
<i>Barium Chloride</i>	>0,5	50	45	100
<i>Beer</i>	>0,5	*	55	50
<i>Benzene</i>	100	*	*	*
<i>Benzene</i>	(Vapor)	*	*	*
<i>Benzoic Acid</i>	Saturated	50	50	100
<i>Benzyl Alcohol</i>	100	25	25	*
<i>Boric Acid</i>	>0,5	50	50	90
<i>Cadmium Cyanide</i>	All	*	*	80
<i>Cadmium Cyanide</i>	All	*	*	80
<i>Calcium Bisulfite</i>	>0,5	40	45	90
<i>Calcium Hydroxide</i>	100	20	35	80
<i>Calcium Nitrate</i>	>0,5	50	50	100
<i>Calcium Oxide</i>	All	*	*	80
<i>Calcium Sulphate</i>	All	50	50	95
<i>Carbon Tetrachloride</i>	100	20	25	*
<i>Carbon dioxide (Gas)</i>	All	50	50	65
<i>Carbonic Acid</i>	Saturated	50	50	80
<i>Carbon monoxide (Gas)</i>	All	75	70	80
<i>Castor Oil</i>	100	75	70	70
<i>Chloride Water</i>	Saturated	*	25	100
<i>Detergents (Organic)</i>	All	-	-	70
<i>Deterjan (Sulfonated)</i>		45	45	90
<i>Diezel Fuel</i>	100	35	30	80
<i>Dipropylene Glycol</i>	100	50	55	80
<i>Ethyl Alcohol</i>	10	30	30	50
<i>Ethyl Alcohol</i>	50	20	25	40
<i>Ethyl Alcohol</i>	100	20	25	*
<i>Ethylene Glycol</i>	100	20	35	90
<i>Ferrous Chloride</i>	>0,5	40	45	95
<i>Ferrous Nitrate</i>	>0,5	40	45	95
<i>Ferrous Sulfate</i>	>0,5	40	45	95
<i>Flue Gas (Wet)</i>	All	*	45	90

(*) Not Recommended

FRP MOLDED GRATINGS

FRP MOLDED GRATING CHEMICAL RESISTANCE GUIDE

Chemical Environment	% Conc.	Orthophthalic Polyester (ORTHO)	Isophthalic Polyester (ISO)	Vinylester Polyester (VINYL)
		Max. Service Temperatures (°C)		
<i>Fluosilicic Acid</i>	11-20	*	*	50
<i>Formaldehyde</i>		-	-	50
<i>Formic Acid</i>	10	25	35	80
<i>Gasoline</i>	100	*	*	45
<i>Glucose</i>	100	-	60	100
<i>Heptane</i>	100	30	25	80
<i>Hydrogen Peroxide</i>	5	-	-	65
<i>Hydrogen Peroxide</i>	30	-	-	40
<i>Hydrogen Sulfide</i>	5	55	60	100
<i>Jet Fuel</i>	100	*	*	*
<i>Kerosene</i>	100	40	30	80
<i>Lactic Acid</i>	All	50	55	100
<i>Magnesium Bicarbonate</i>	All	30	40	80
<i>Magnezyum Sülfat</i>	>0,5	45	50	95
<i>Maleic Asid</i>	Saturated	45	45	90
<i>Mercury</i>	100	55	60	100
<i>Methyl Alcohol</i>	40-100	30	25	*
<i>Milk and Milk Products</i>	All	25	28	70
<i>Naphta, Aromatic</i>	100	30	25	*
<i>Naphthalene</i>	100	45	40	80
<i>Nickel Chloride</i>	>0,5	50	50	90
<i>Nickel Nitrate</i>	>0,5	50	50	90
<i>Nickel Plating Solution</i>		45	45	80
<i>Nickel Sulfate</i>	>0,5	50	0	90
<i>Nitric Asid</i>	0-5	45	45	65
<i>Nitric Asid</i>	6-10	-	-	-
<i>Nitric Asid</i>	11-20	40	25	50
<i>Nitric Asid</i>	21-29	-	-	-
<i>Nitric Asid</i>	30-35	*	*	40
<i>Nitric Asid</i>	36-40	*	*	*
<i>Oleic Asid</i>	100	50	50	100
<i>Perchloric Asid</i>	10	*	20	65
<i>Perchloric Asid</i>	30	*	*	40
<i>Phosphoric Acid</i>	0,5-85	50	50	90
<i>Phthalic Acid</i>	All	45	45	100
<i>Potassium Carbonate</i>	0-50	*	*	65
<i>Potassium Chloride</i>	>0,5	50	45	90
<i>Potassium Ferricyanide</i>	>0,5	50	45	90
<i>Potassium Hydroxide</i>	0-45	*	*	45
<i>Potassium Permanganate</i>	>0,5	*	*	90
<i>Potassium Sulfate</i>	>0,5	50	45	90

(*) Not Recommended

FRP MOLDED GRATINGS

FRP MOLDED GRATING CHEMICAL RESISTANCE GUIDE

Chemical Environment	% Concn.	Orthophthalic Polyester (ORTHO)	Isophthalic Polyester (ISO)	Vinylester Polyester (VINYL)
		Max. Service Temperatures (°C)		
<i>See Water</i>		45	50	100
<i>Sodium Hypochlorite</i>	0,5-5,25	*	*	50
<i>Sodium Acetate</i>	>0,5	50	50	100
<i>Sodium Bicarbonate</i>	All	50	50	100
<i>Sodium Bisulfate</i>	>0,5	50	50	100
<i>Sodium Carbonate</i>	All	*	*	70
<i>Sodium Chloride</i>	>0,5	50	50	100
<i>Sodium Chlorite</i>	>0,5	50	50	100
<i>Sodium Ferricyanide</i>	>0,5	50	45	100
<i>Sodium Hydroxide</i>	All	*	*	60
<i>Sodium Hydroxide</i>	All	*	*	60
<i>Sodium Sulfate</i>	>0,5	50	45	100
<i>Sodium Sulfide</i>	>0,5	50	50	100
<i>Sodium Tiyosülfat</i>	All	45	50	80
<i>Stannous Chloride</i>	>0,5	50	50	100
<i>Stiren</i>	100	*	*	*
<i>Sulphuric Acid</i>	0,5-25	50	60	90
<i>Sulphuric Acid</i>	26-50	60	60	80
<i>Sulphuric Acid</i>	51-70	*	*	80
<i>Sulphuric Acid</i>	>0,5	50	50	*
<i>Tannic Acid</i>	>0,5	50	50	100
<i>Toluene</i>	100	*	*	*
<i>Urea</i>	All	-	-	65
<i>Vegetable Oils</i>	100	40	50	95
<i>Water (Demineralized)</i>	100	45	45	80
<i>Water (Distilled)</i>	100	45	45	80
<i>Water (Deionized)</i>	100	45	45	80
<i>Xylene</i>	100	30	*	25
<i>Zinc Chloride</i>	Saturated	50	50	100
<i>Zinc Sulfate</i>	All	50	50	100

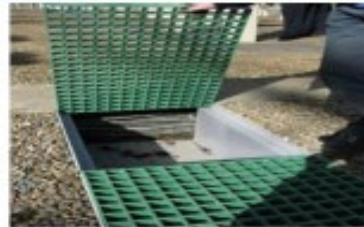
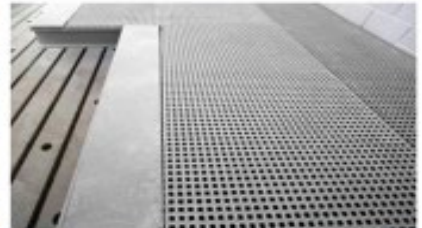
(*) Not Recommended

FRP MOLDED GRATINGS

SAMPLE APPLICATIONS

FRP MouldedGrating systems are designed to accommodate a wide variety of applications. Such as;

- General Industry
- Chemical Plants
- Food and Beverage Operations
- Water/Wastewater Treatment Facilities
- Industrial walkways, work platforms and stair treads
- Shipbuilding Industry and the Marine Industry
- Power Plants
- Pulp and Paper Plants
- Transportation (Railroad etc.)
- Architectural Applications
- Drainage Channel Applications
- Agriculture & Animal Husbandry Applications



FRP MOLDED GRATINGS

ADVANTAGES



There is no scrap value. Since it is made of non-recyclable material, there is no risk of stealing.



FRP Gratings have high chemical resistance. It is suitable for areas that will be exposed to chemical corrosion.



It is much lighter compared to metal gratings. It also provides ease of transportation and assembly due to its lightness.



The combustion characteristics of FRP gratings can be changed with special type resin and chemical additives. In this way, flame retardant characteristics can be gained.



It is used for many years with zero maintenance costs. It can be easily cleaned with pressurized water. Since the color is given during the production phase, the paint does not create maintenance costs.



One of the most important features of FRP Gratings is corrosion resistance. Thanks to its superior resin systems, it has a wide range of use in many areas subject to corrosion.



It is UV resistant, so its color does not fade in the face of sunlight.



One of the properties of composite materials is flexibility. Therefore, it does not cause noise pollution during passage of vehicles compared to metal gratings.



FRP gratings have high impact resistance thanks to the high ratio of glass fiber it contains. It has one of the highest strength / weight ratios compared to its alternatives.



Concave and sandy surface gratings feature anti-slip feature. It is preferred in applications with oily and wet floors and in places where work safety is important.



Composite materials have low thermal conductivity coefficients. Therefore, FRP Gratings are thermal insulators.



FRP gratings do not conduct electricity. It is primarily preferred in environments requiring electrical insulation and in areas requiring high work safety.



FRP gratings are flexible materials. It provides high strength thanks to its flexibility against heavy loads and machines. Unlike steel, when it is forced to change shape, it returns to its original shape.



It is not affected by temperature differences, it is resistant to temperature changes. There will be no change in its dimensions depending on time and temperature.



FRP Gratings are more durable compared to their alternatives thanks to their superior physical and chemical properties.



Since the resin is colored during the production phase, it is self-colored. It can be produced in desired colors.

FRP MOLDED GRATINGS

RAW MATERIALS DATA

Material Properties	Glassfiber Rovings	Resin
Hardness (Barcol)	45	70-80
Tensile Strength (Mpa)	1950-2200	60-70
Modulus of Elasticity (Gpa)	60-75	4-5
Flexural Strength (Mpa)	190	130-150
Density (g/cm ³)	2.6	1.12
Max Operating Temperatures (°C)	200	140
Water Absorbtion (%)	-	0.1

PRODUCT DATA

Description:	High performance composite grating system
Top finish:	Standard, grit top, concave top, plain top, embedded grit and covered top
Thicknesses:	25mm, 30mm, 38mm, 50 mm
Panel Sizes:	See enclosed list
Mesh Patterns:	See enclosed list
Chemical Resistance:	See enclosed list
UV Info:	All grating panels have a UV inhibitor added to the polyester resin mix
Panel Tolerances:	+/- 2mm width, length and diagonal
Cut Panel Tolerances:	+/- 4mm width, length and diagonal (if dimension falls on a load bar, cut will either be before or after the load bar, so tolerance could be larger)
Mesh Pattern Tolerance:	+/- 1.5mm (outside load bars are approx. 1mm larger)
Service Temperatures:	50 to 105°C
Breakdown Voltage :	18 kV
Surface Resistance:	10 ¹² ohm
Load Capabilities:	See enclosed list
Design Life:	25+ years (subject to traffic analysis). However GRP materials have been in the construction industry for 50+ years with no discernable degradation in performance
General Usage:	Standard pedestrian traffic, vehicular traffic, static items
Other Info:	Made via heated hydraulic mould system

FRP MOLDED GRATINGS

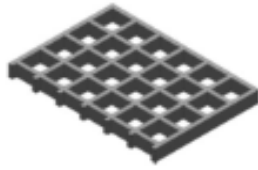
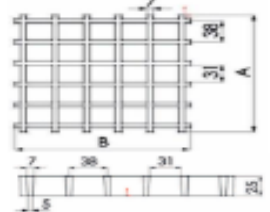
FRP GRATING TYPES

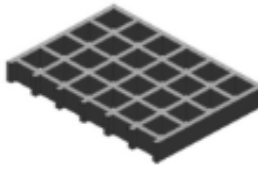
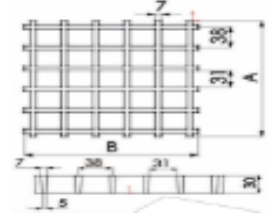
1) Standart Mesh FRP Molded Gratings

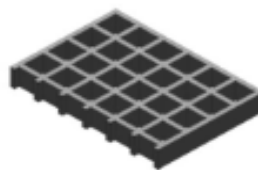
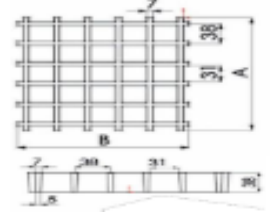
Our FRP Molded Grating Standard Mesh gratings are manufactured in 25 mm, 30 mm, 38 mm and 50 mm thicknesses as concave, sandy and flat surface in accordance with customer demand. FRP Molded Gratings are lightweight, durable and non-corrosive and can be supplied with a wide variety of stainless steel clips, clamps and holding fixtures to suit any situation.

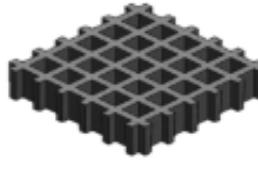
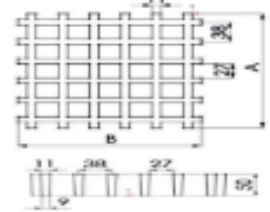
FRP Molded Grating shows maximum working performance by showing high slip resistance in wet areas and continuously working with water. FRP gratings compared to other alternative products such as metal gratings, it provides the advantage of long-term use thanks to its outstanding slip resistance and corrosion resistance.

GRATING SPECIFICATIONS/TYPES

Grating Size:	38x38		
Panel Depth:	25		
Load Bar Thickness:	7		
Open Area:	68%		
Approx. Weight:	12.5 kg/sq.m		
Panel Sizes:	1000 x 4040		

Grating Size:	38x38		
Panel Depth:	30		
Load Bar Thickness:	7		
Open Area:	68%		
Approx. Weight:	15.6 kg/sq.m		
Panel Sizes:	1000 x 4040		

Grating Size:	38x38		
Panel Depth:	38		
Load Bar Thickness:	7		
Open Area:	68%		
Approx. Weight:	19.5 kg/sq.m		
Panel Sizes:	1000 x 4040 1220 x 3660		

Grating Size:	38x38		
Panel Depth:	50		
Load Bar Thickness:	11		
Open Area:	56%		
Approx. Weight:	31 kg/sq.m		
Panel Sizes:	1000 x 4040		

FRP MOLDED GRATINGS

FRP GRATING TYPES

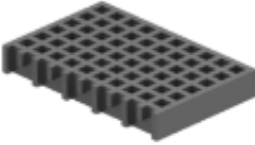
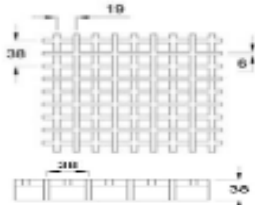
2) Mini Mesh FRP Molded Gratings

Our FRP Molded Mini Mesh Gratings have all the features of our Standard Mesh Gratings. Mini Mesh gratings have a smaller opening area and thanks to this feature, they prevent small objects such as screws, nuts and bolts from falling during operation. It also complies with the max 20 mm width rule for pedestrian walkways, wheelchairs, prams and other wheelbarrows. It is suitable for use in municipal parks, various walkways, bridges, piers and poolside. Mini Mesh FRP Our Mini Mesh GRP Gratings comply with ADA (Americans with Disabilities Act) standards. As with all our gratings, they can be supplied with a wide variety of galvanized steel clips, clamps and holding fixtures to suit any situation.



ADA: Americans with Disabilities Act. ADA is a civil rights law designed to prevent the restriction of the freedom of persons with disabilities in all common areas of public life, including workplaces, schools, transportation and all open public and private places. It has determined the necessary rules and conditions to keep the comfort of going up and down with walking sticks / crutches, wheelchairs, etc.

GRATING SPECIFICATIONS/TYPES

Grating Size:	38x38		
Panel Depth:	25		
Load Bar Thickness:	7		
Open Area:	42%		
Approx. Weight:	12.5 kg/sq.m		
Panel Sizes:	1000 x 4040		




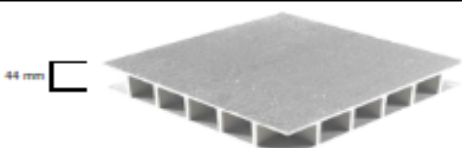
FRP MOLDED GRATINGS

FRP GRATING TYPES

3) Covered Type FRP Molded Gratings

Covered type FRP Molded Gratings are produced by combining one side or both sides smooth, sanded or patterned composite panel with smooth surface gratings. The combined standard composite plate thickness is at least 3 mm. Due to the nature of the manufacturing process, covered gratings are often slightly warped. As a result of this, covered gratings may rock and pose a trip hazard if they are not secured with the appropriate hold down clips. We recommend hold down clips for all covered grating applications.

Covered gratings are preferred in environments where open cells are not desired in gratings. For example gratings are suitable for use in cable channel covers and walkways because they are completely closed. In addition, they are used in walking paths and platforms at construction sites, lakesides, factory areas and sandy, muddy, slippery places to create a safe working area. Due to the closed upper surfaces, their strength is also increased compared to open grating types.

Depth:	28	
Grating Size:	38x38	
Approx. Weight:	16.5 kg/sq.m	
Depth:	41	
Grating Size:	38x38	
Approx. Weight:	22 kg/sq.m	
Depth:	53	
Grating Size:	38x38	
Approx. Weight:	34 kg/sq.m	
Depth:	44	
Grating Size:	38x38	
Approx. Weight:	25 kg/sq.m	

FRP MOLDED GRATINGS

FRP Molded Grating Surface Types

FRP molded gratings are produced as part of the production process in the concave surface type. It can be manufactured in various sizes and colors as coarse / fine sand, smooth surface and closed according to surface characteristics, customer demand or application point requirement.

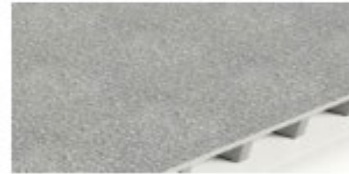
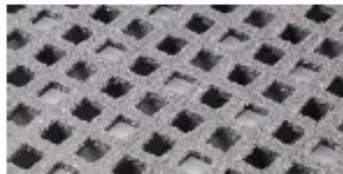
Grating with Concave Surface

It is the most common and standard surface type among FRP molded gratings. The grating cross section is concave. It is suitable for use in many environments, including wet and oily conditions.



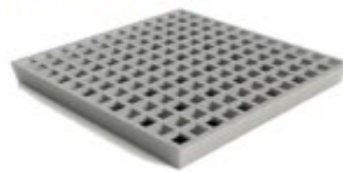
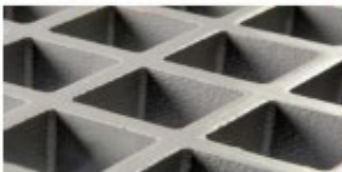
Grating with Sanded Surface

Grating with Sanded Surface are more preferred in cases where extra anti-slip is required. Grating with Concave Surface and Grating with Smooth Surface are obtained by coating with binder resin with sand. These types of gratings have higher shear resistance. The cleanability of the grating is limited in environments where oily substances are used.



Grating with Smooth Surface

Flat Surface Gratings are obtained by processing the Concave Grating surfaces and making them flat and smooth, while Covered Type Flat Surface Gratings are obtained by combining the flat surface gratings with the flat surface composite plate. They are generally used for decoration. For example, flat surface gratings can be applied in facade railings, cover panels and architectural decorative applications.



Covered Grating with Chequered Plate Effect Surface

It is obtained by combining the upper part of the Flat Surface Standard Mesh or Mini Mesh GRP Molded Grid with a Chequered Plate Effect Surface.



FRP MOLDED GRATINGS

FRP Molded - Hot Dip Galvanized - Stainless Steel Grating Comparison Table

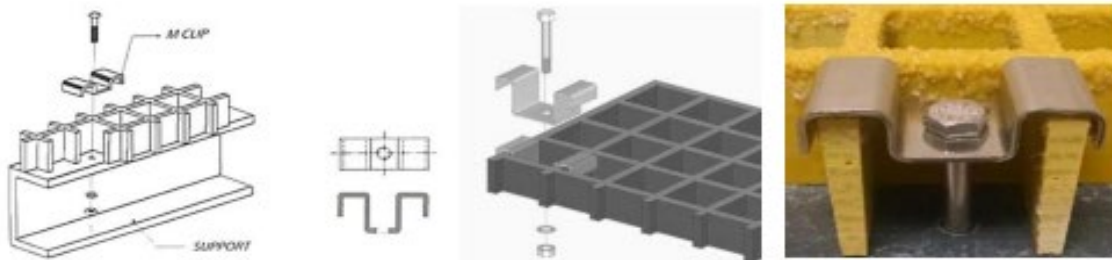
Characteristics	FRP Molded Grating	Hot Dip Galvanized Grating	Stainless Steel Grating
<i>Strength/Weight Ratio</i>	Excellent	Moderate	Moderate
<i>Lifetime</i>	Excellent	Good	Great
<i>Life Cycle Cost Effectiveness</i>	Excellent	Good	Good
<i>Chemical Resistance</i>	Excellent	Good	Excellent
<i>Electrically Non-Conductive</i>	Excellent	Poor	Poor
<i>Corrosion Resistance</i>	Excellent	Moderate	Excellent
<i>Processability</i>	Kolay	Hard	Hard
<i>Setup Cost</i>	Low	High	High
<i>Slip Resistance</i>	Excellent	Not Suitable	Not Suitable
<i>Colorfulness</i>	Colored with Pigment	Paint or Coating	Paint or Coating

FRP MOLDED GRATINGS

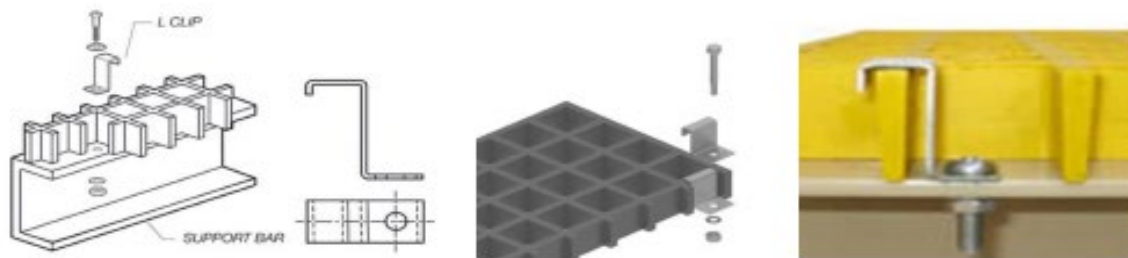
Fasteners

Fasteners are necessary auxiliary equipment for FRP Grating Platform assemblies. They are used to combine FRP gratings and to be fixed to the carrier construction on or inside the gratings. It is specially designed for gratings used in areas where pedestrians can walk. In areas where there is a risk of falling, gratings should be fixed at least on four corners. All fasteners require maintenance and their effectiveness should be checked regularly. Galvanized fittings are preferred in order to increase the resistance in terms of corrosion, weather conditions and other factors. M Type fastener is more preferred. However, upon request, our FRP Gratings can also be supplied with L Type and C Type fasteners.

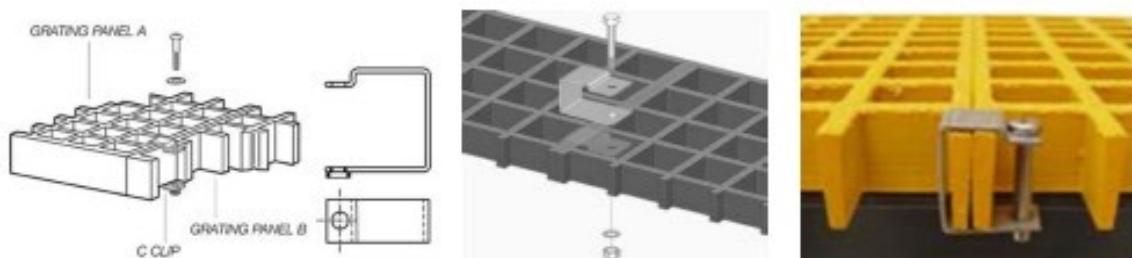
M Type Metal Clips



L Type Metal Clips



C Type Metal Clips





TECHNICAL DATA SHEET



FRP Handrails TDS






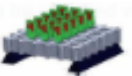

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FRP MOLDED GRATINGS

LOAD CAPACITY TABLE

Grating Type	 Openings <i>mm</i>	 Point Load <i>F (kg)</i>	 Ultimate Load <i>x F</i>	 Distributed Load <i>q (kg/m²)</i>	 Ultimate Load <i>x q</i>
38x38 H25 mm	300	1000	2 x F	5190	3 x q
38x38 H30 mm		1700		9250	
38x38 H38 mm		3510		18500	
38x38 H50 mm		13400		71850	
19x19 / 38x38 H38 mm		3570		19040	
38x38 H25 mm	450	450	3 x F	1550	4 x q
38x38 H30 mm		750		2700	
38x38 H38 mm		1500		5450	
38x38 H50 mm		5950		21150	
19x19 / 38x38 H38 mm		1570		5600	
38x38 H25 mm	600	255	4 x F	655	5 x q
38x38 H30 mm		425		1160	
38x38 H38 mm		875		2325	
38x38 H50 mm		3325		8800	
19x19 / 38x38 H38 mm		880		2350	
38x38 H25 mm	750	150	5 x F	345	7 x q
38x38 H30 mm		270		580	
38x38 H38 mm		550		1180	
38x38 H50 mm		2100		4500	
19x19 / 38x38 H38 mm		564		1200	
38x38 H25 mm	900	105	6 x F	197	8 x q
38x38 H30 mm		190		341	
38x38 H38 mm		380		680	
38x38 H50 mm		1475		2630	
19x19 / 38x38 H38 mm		391		695	
38x38 H25 mm	1000	85	7x F	140	9 x q
38x38 H30 mm		150		240	
38x38 H38 mm		305		500	
38x38 H50 mm		1190		1915	
19x19 / 38x38 H38 mm		316		505	
38x38 H25 mm	1200	60	8 x F	80	10 x q
38x38 H30 mm		101		140	
38x38 H38 mm		219		295	
38x38 H50 mm		829		1100	
19x19 / 38x38 H38 mm		219		290	

FRP Handrails

Profile Technical Details&Test Results

RAW MATERIALS DATA

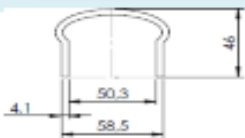
Material Properties	Glassfiber Rovings	Resin
Hardness (Barcol)	45	70-80
Tensile Strength (Mpa)	1950-2200	60-70
Modulus of Elasticity (Gpa)	60-75	4-5
Flexural Strength (Mpa)	190	130-150
Density (g/cm ³)	2.6	1.12
Max Operating Temperatures (°C)	200	140
Water Absorbion (%)	-	0.1

PRODUCT	FRP PROFILES			
STANDARD SPECIFICATION	CTI STD 137			
TESTS	STANDARD	UNIT	SPECIFICATION	TEST RESULTS
Tensile Stress (LW)	ASTM D638	MPa	≥206.8	436.2
Tensile Modulus (LW)	ASTM D638	GPa	≥17.2	28
Tensile Stress (CW)	ASTM D638	MPa	>48.2	55
Tensile Modulus (CW)	ASTM D638	GPa	>5.5	8.5
Flexural Stress (LW)	ASTM D790	MPa	≥206.8	380
Modulus of Elasticity (LW)	ASTM D790	GPa	≥13.8	24
Flexural Stress (CW)	ASTM D790	MPa	≥68.9	105
Modulus of Elasticity(CW)	ASTM D790	GPa	≥5.5	9
Compressive Stress (LW)	ASTM D695	MPa	≥206.8	380
Compressive Modulus (LW)	ASTM D695	GPa	≥17.2	26.8
Compressive Stress (CW)	ASTM D695	MPa	≥103.4	120
Compressive Modulus (CW)	ASTM D695	GPa	≥6.9	7.5
Bearing Stress (LW)	ASTM D953	MPa	≥206.8	220
Bearing Stress (CW)	ASTM D953	MPa	≥206.8	210
Notched Izod Impact (LW)	ASTMD256	M.Kg/cm	≥1.28	1.48
Notched Izod Impact (CW)	ASTMD256	M.Kg/cm	≥0.2	0.43
Shear Modulus	TS EN ISO 13706-2/Annex G	GPa	>2.9	3.1
Poisson's Ratio	ASTM D3039	-	>0.31	0.33
Short Beam Shear (LW)	ASTMD2344	MPa	>31	45
24HR Water Absorption	ASTM D570	%	<0.6	0.37
Density	ASTM D792	g/cm ³	1.716-1.938	1.85

FRP Handrails

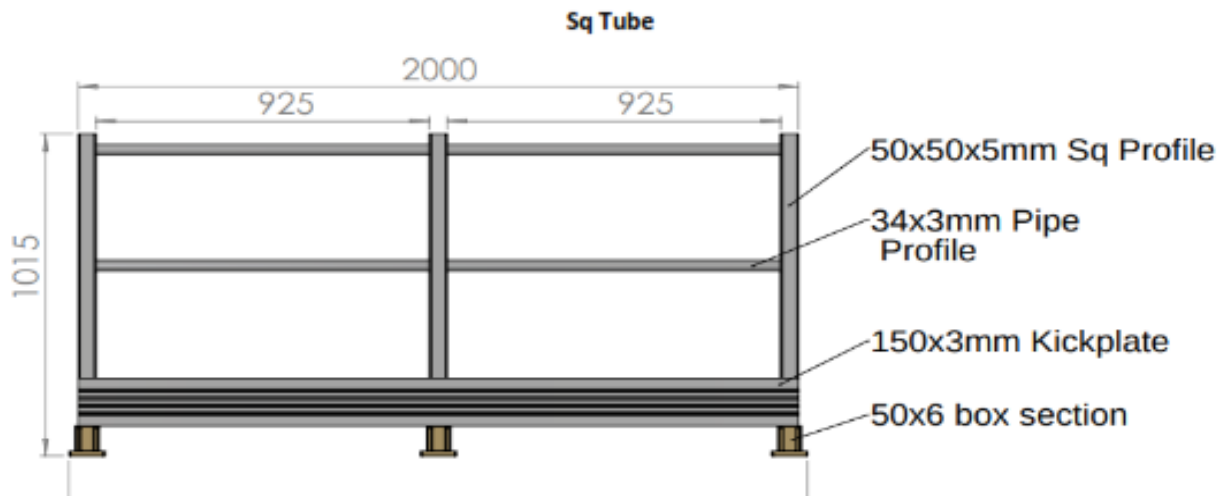
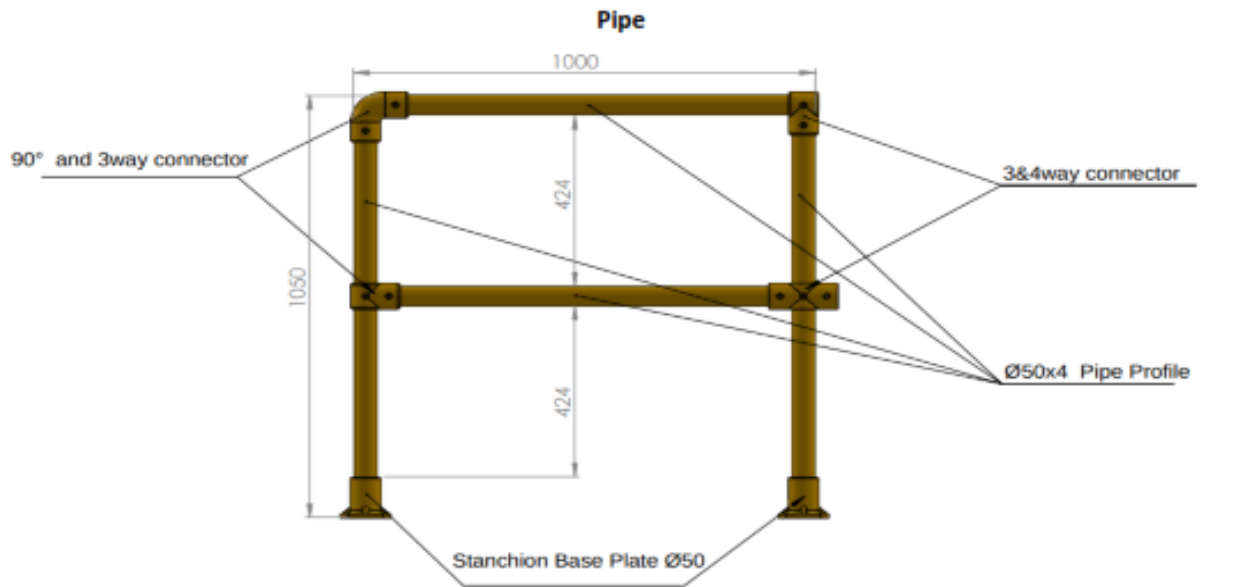
Handrail Parts

Visual	Description	Gr / Unit or Meter
	Round Section Ø50x7	1750
	*90 Bend	200
	4 WAY CONNECTOR	173
	3 WAY CONNECTOR	115
	Universal Joint	175
	Box Section 50X6mm	770
	Stanchion Base Plate 50mm	476
	Kickplate 100x3	630
	Kickplate 150x3	1010
	Handrail for 50 Sq Tube	1000



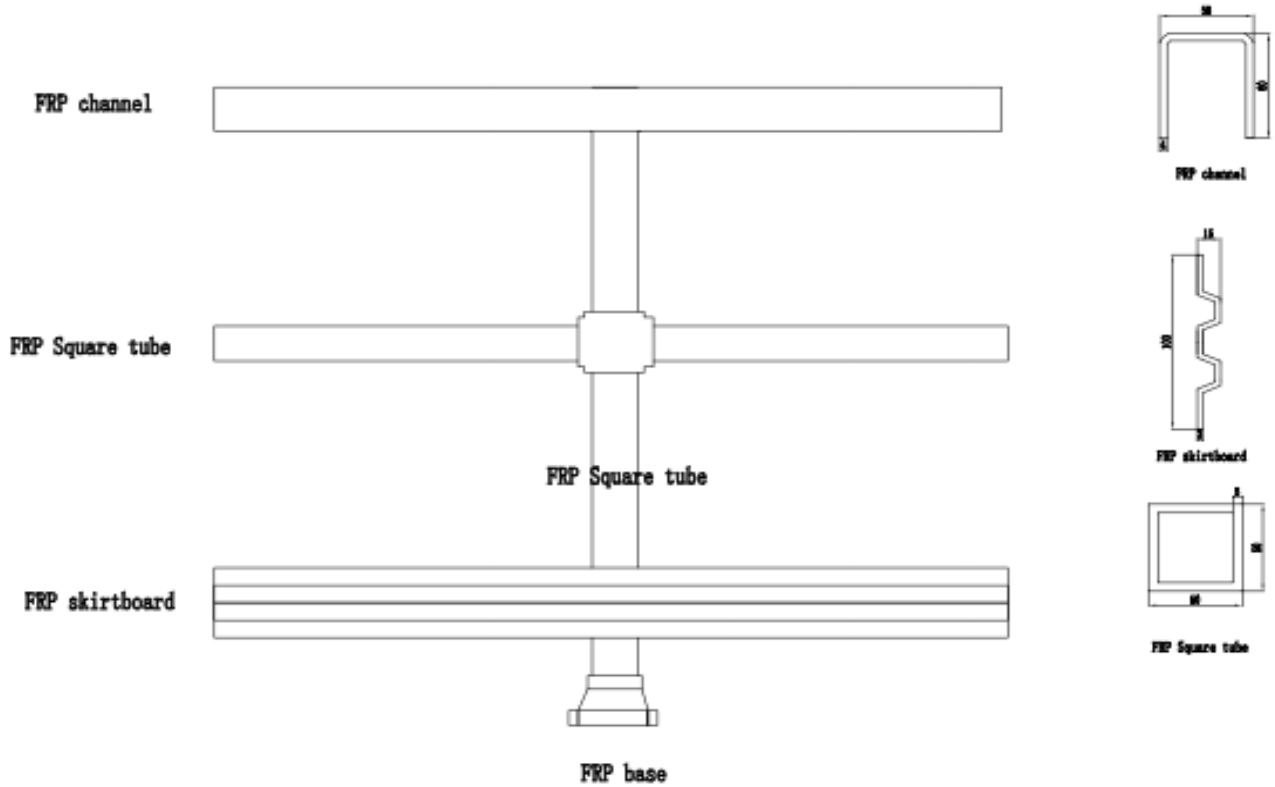
FRP Handrails

Handrail Options

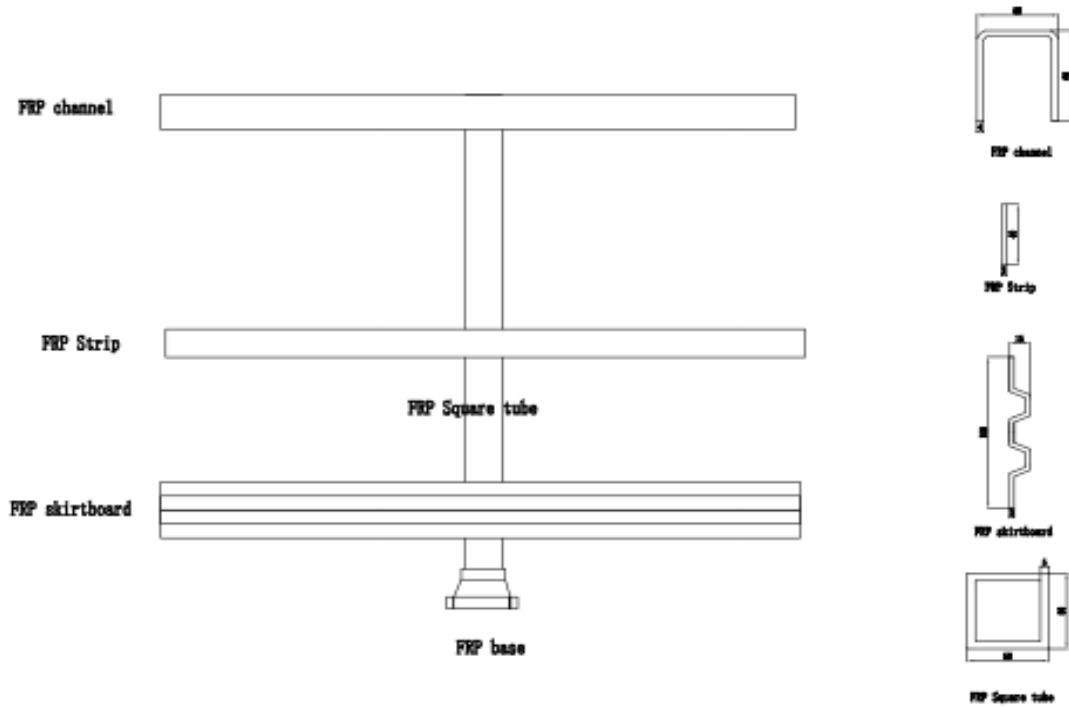


FRP Handrails

Handrail Channel with Square Tube



Handrail Strip with Square Tube



FRP Handrails

Applications



FRP FLAT SHEET

ADVANTAGES



FRP Profiles have no scrap value. Since it is made of non-recyclable material, there is no risk of stealing.



FRP Profiles have high chemical resistance. It is suitable for areas that will be exposed to chemical corrosion.



FRP Profiles is much lighter compared to metal sheets so reduce structural cost. It also provides ease of transportation and assembly due to its lightness.



The combustion characteristics of FRP Profiles can be changed with special type resin and chemical additives. In this way, flame retardant characteristics can be gained.



FRP Profiles is used for many years with zero maintenance costs. It can be easily cleaned with pressurized water. Since the color is given during the production phase, the paint does not create maintenance costs.



Thanks to its anti-corrosion feature, it does not cause extra costs for replacement and maintenance. It has a wide range of use in many areas subject to corrosion.



It is UV resistant, so its color does not fade in the face of sunlight.



One of the properties of composite materials is flexibility. Therefore, it does not cause noise pollution compared to metal sheets.



FRP Profiles can be easily assembled without special skills, machinery, apparatus, and equipment specifically manufactured or installed to perform them.



FRP Profiles are more durable compared to their alternatives thanks to their superior physical and chemical properties.



FRP Sheets has low thermal conductivity coefficients. Therefore, FRP Sheets are thermal insulators.



FRP Profiles do not conduct electricity. It is primarily preferred in environments requiring electrical insulation and in areas requiring high work safety.



FRP Profiles are flexible materials. It provides high strength thanks to its flexibility against heavy loads. Unlike steel, when it is forced to change shape, it returns to its original shape.



FRP Profiles are not affected by temperature differences, it is resistant to temperature changes. There will be no change in its dimensions depending on time and temperature.



FRP profiles has many colors that stay and don't fade away at many years.



Since the resin is colored during the production phase, it is self-colored. It can be produced in desired colors.

We Welcome you to join hands with
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