FRP GRATING

MOULDED GRATING

Dgrid



PT TEKNIK BUDI PERKASA

THE BEST PARTNER



About

PT Teknik Budi Perkasa

PT Teknik Budi Perkasa has been 15 years of shaping the future with innovative FRP (Fiberglass Reinforced Polymer) solutions. Since 2009, we've been a trusted partner, providing high-quality FRP products and exceptional customer service across various industries.

We produce any products within our scope made from FRP material. This refers to the advantages of FRP material, namely high strength, corrosion resistance, and chemical resistance. With these advantages, FRP products are suitable for use in various industries, even in environments with very high hazardous levels.

400+
Success Project

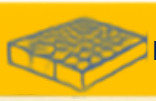
130+
Happy Customer

15+
Years of Experience

20+
Cities Served

WHY CHOOSE FRP ?

FRP (Fiberglass Reinforced Polymer) composite delivers superior performance in the most demanding environments. See how it outperforms conventional steel across key operational factors.

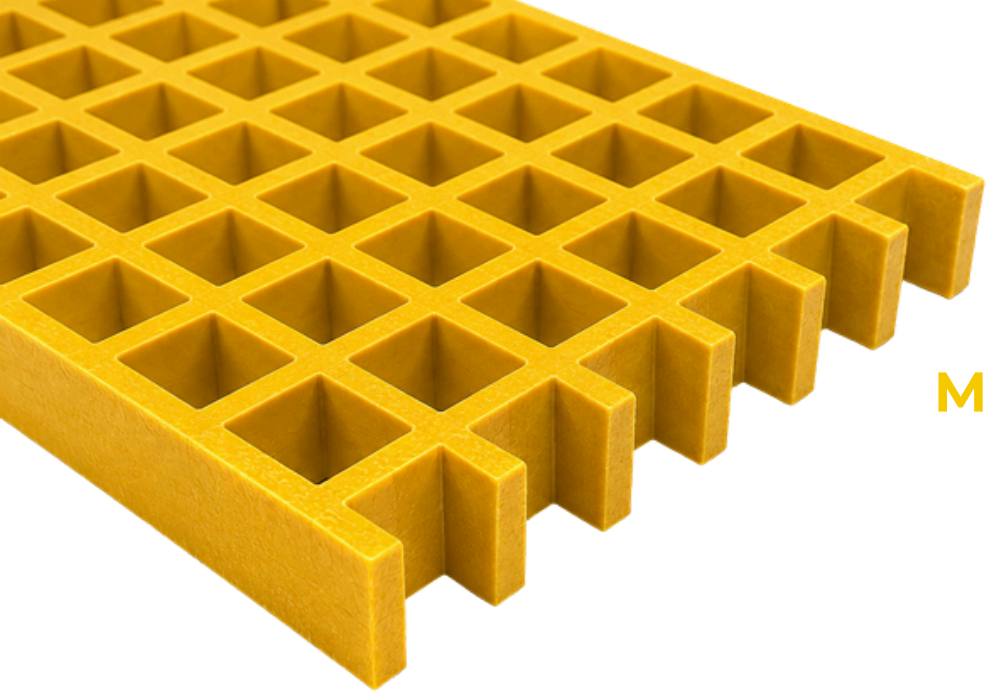
	 CONVENTIONAL STEEL	 FRP COMPOSITE
CORROSION RESISTANCE	Prone to rust and corrosion. Requires coating and protection.	Excellent corrosion resistance. Ideal for harsh environments.
WEIGHT	Heavy and difficult to handle.	Lightweight. Easy to transport and install.
MAINTENANCE	High maintenance. Requires regular inspection and repainting.	Low maintenance. No painting, minimal inspection required.
ELECTRICAL CONDUCTIVITY	Conductive. Requires insulation.	Non-conductive. Inherently electrically insulating.
CHEMICAL RESISTANCE	Susceptible to many chemicals.	High chemical resistance. Suitable for aggressive media.
SERVICE LIFE	Shorter service life. Degrades over time.	Long service life. Built to last for decades.

PT TEKNIK BUDI PERKASA
THE BEST PARTNER

01

DGRID
FRP MOULDED GRATING

- Corrosion Resistant
- High Strength
- Lightweight
- Non Conductive
- UV Resistant
- Fire Retardant
- Chemical Resistant
- Low Maintenance
- Radio Frequency Transparency



DGRID

FRP Moulded Grating

DGRID FRP Moulded Grating is a premium fiberglass reinforced polymer (FRP) grating manufactured **by PT Teknik Budi Perkasa**. Made from continuous fiberglass reinforcements and high-performance thermosetting resin in a one-piece molded construction, DGRID delivers superior corrosion resistance, lightweight strength, excellent slip resistance, and long-lasting durability.

Properties Specification

TYPE	RESIN BASE	DESCRIPTION	CORROSION RESSITANCE
Superior	Vinylester	High Corrosion Resistance, High Chemical Resistance, UV Protection, *Fire Retardant (Optional)*, Chemical Resistance HCL 32%	Excellent
Industrial & Commercial	Isophthalic Polyester	Food Grade, Chemical Resistance, Corrosion Resistance, UV Protection, *Fire Retardant (Optional)*, Chemical Resistance HCL 10%	Very Good

Applications

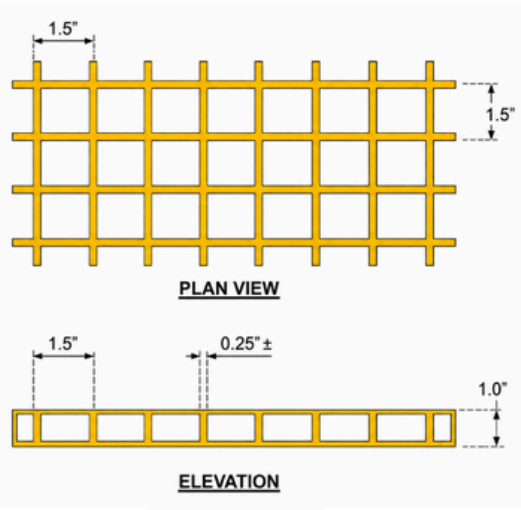
- Walkways & Platforms
- Trench Covers & Drains
- Mezzanines & Catwalks
- Marine Applications
- Chemical Proessing

STANDAR MOULDED GRATING

SIZE DETAILS

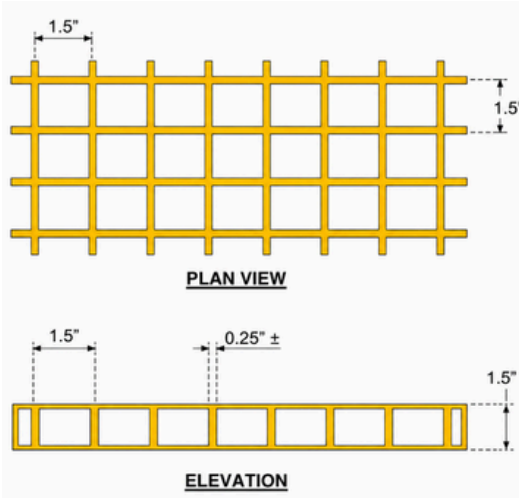
The following standard molded grating details are based on the ***ANSI/ACMA/FGMC-Grating Manual-2017 (R2025)***, an internationally recognized reference for standard mesh configurations, dimensional specifications, and engineering properties of FRP molded grating systems.

01 FRP MOULDED GRATING - MESH 38X38MM (H 25)



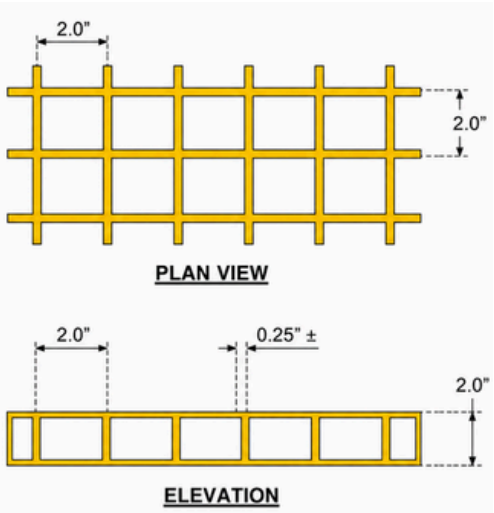
1" x 1½" SM

02 FRP MOULDED GRATING - MESH 38X38MM (H 38)



1½" x 1½" SM

03 FRP MOULDED GRATING - MESH 50X50MM (H 50)



2" x 2" SM

NOTE:
The information provided above is nominal. Please contact the fiberglass grating manufacturer for precise specifications. All dimensions are in inches.

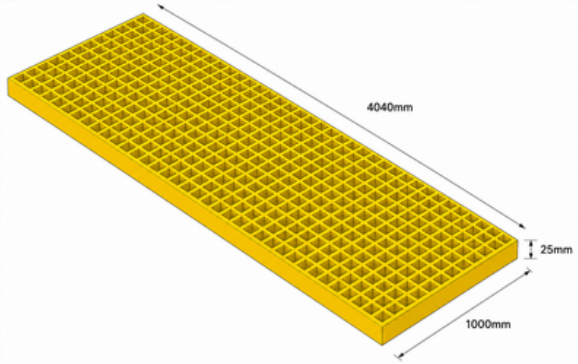
FRP MOULDED GRATING

Available Size

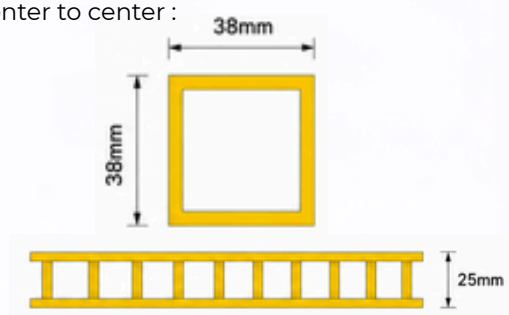
DGRID FRP Molded Grating is manufactured in accordance with internationally recognized ACMA standard configurations, ensuring consistent quality, reliable structural performance, and compatibility with industrial applications. To meet various project requirements, DGRID is available in the following standard sizes and mesh configurations.

01 FRP MOULDED GRATING - MESH 38X38MM (H 25)

W 1000 x L 4040 x H 25
W 1220 x L 4040 x H 25
W 1220 x L 3660 x H 25

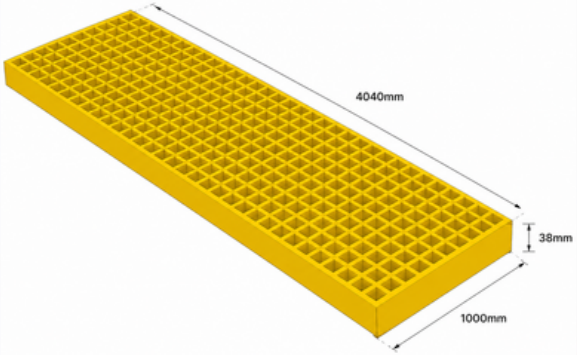


Center to center :

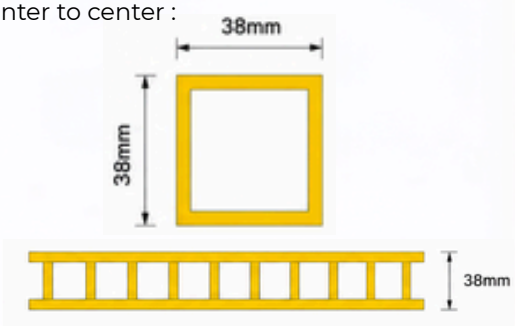


02 FRP MOULDED GRATING - MESH 38X38MM (H 38)

W 1000 x L 4040 x H 38
W 1220 x L 4040 x H 38
W 1220 x L 3660 x H 38



Center to center :



SPECIFICATION	
DIMENSION (W x L x H)	1000 x 4040 x 25 mm
MESH SIZE	38 x 38 mm
OPEN AREA	68%
WEIGHT (KG)/ SHEET	54
THICKNESS (TOP/ BOTTOM)	7 / 5 mm

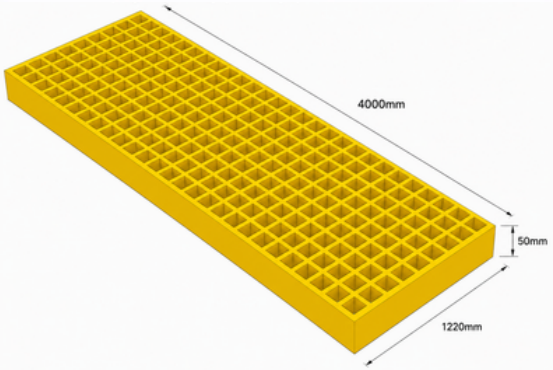
SPECIFICATION	
DIMENSION (W x L x H)	1000 x 4040 x 38 mm
MESH SIZE	38 x 38 mm
OPEN AREA	68%
WEIGHT (KG)/ SHEET	80
THICKNESS (TOP/ BOTTOM)	7 / 5 mm

FRP MOULDED GRATING

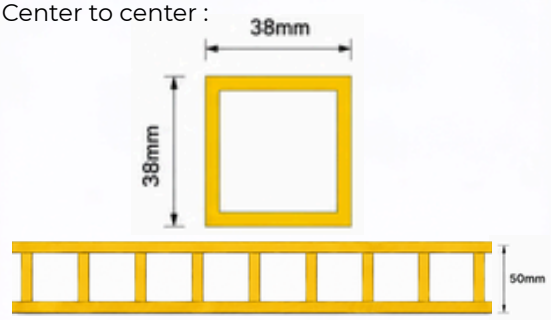
Available Size

04 FRP MOLDED GRATING - MESH 38X38MM (H 50)

W 1220 x L 4000 x H 50
W 1220 x L 3660 x H 50

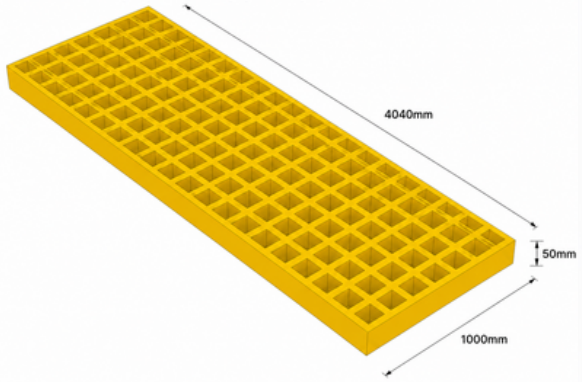


Center to center :

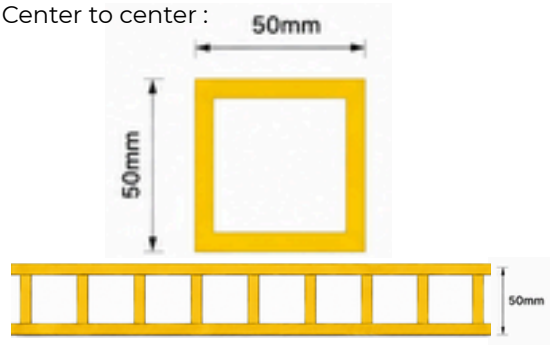


05 FRP MOLDED GRATING - MESH 50X50MM (H 50)

W 1000 x L 4040 x H 50



Center to center :



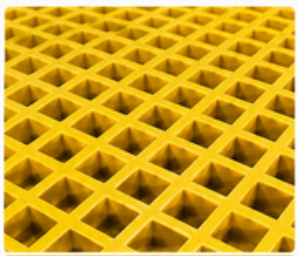
SPECIFICATION	
DIMENTION (W x L x H)	1220 x 4000 x 50 mm
MESH SIZE	38 x 38 mm
OPEN AREA	58%
WEIGHT (KG)/ SHEET	165
THICKNESS (TOP/ BOTTOM)	9 / 7 mm

SPECIFICATION	
DIMENTION (W x L x H)	1000 x 4040 x 50 mm
MESH SIZE	50 x 50 mm
OPEN AREA	56%
WEIGHT (KG)/ SHEET	84
THICKNESS (TOP/ BOTTOM)	7 / 5 mm

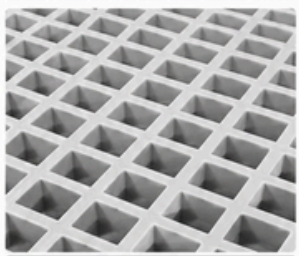
FRP MOULDED GRATING

Available Size

Available Colors



YELLOW



LIGHT GREY

Available Surface

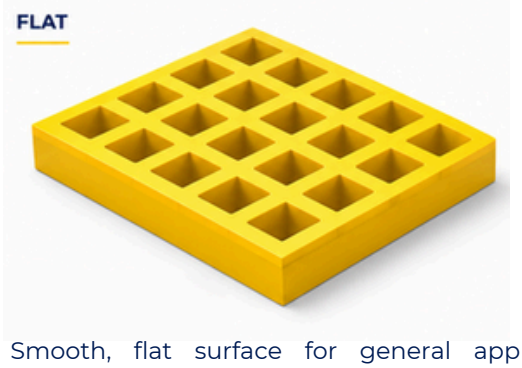
According to the **ANSI/ACMA/FGMC Grating Manual (2017, R2025) :**
"The standard part would have a meniscus (concave) top surface for slip resistance."
A concave surface provides slip resistance through its curved profile, while an anti-skid grit surface incorporates abrasive particles to provide additional surface texture and traction.



Textured, anti-skid surface provides excellent slip ressitance for safer footing in wet and oily area.



Concave surcace enhance slip resistance and is ideal for environments with high moisture and contaminants.



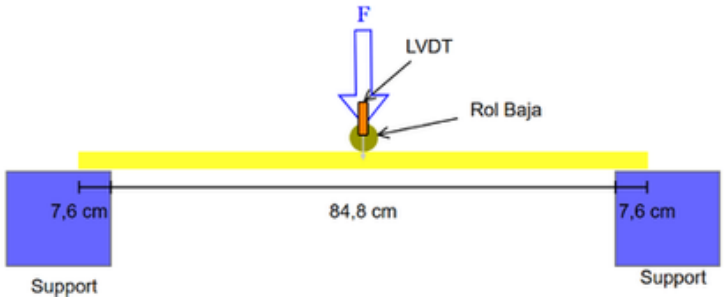
Smooth, flat surface for general applications where slip resistance is not a primary requirement.

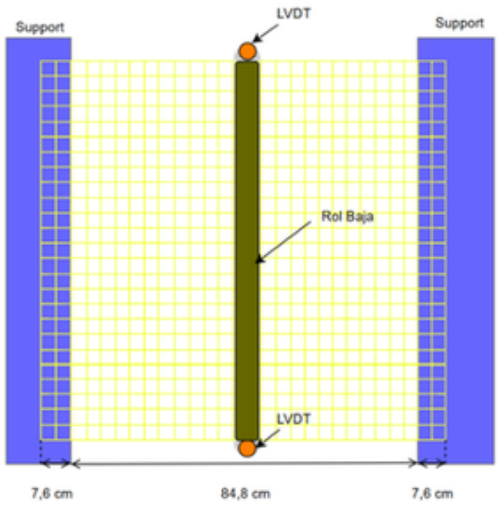
MECHANICAL TEST REPORT

Mechanical Concentrated Line Load

This test follows the standard:

- **ANSI/ACMA/FGMC-Grating Manual-2017 (R2025)**
- **ACMA** : FRP Composites Grating Manual for Pultruded and Molded Grating and Stair Treads.
- **ISO 24681:2023** – Ships and Marine Technology – Fibre-Reinforced Plastic Gratings.





Test Results

TYPE	SPAN (mm)	CONCENTRATED LINE LOAD (kg)																Break Point Load (kg)
		100	175	240	300	400	550	650	700	800	900	1000	1300	1400	1500	1800	2100	
		DEFLECTION (mm)																
M 38 x 38 H25	800	5	6															3359
M 38 x 38 H38	800	1.5	2	2.4	3	3.5	4	5	5.5	6								6017
M 50 x 50 H50	800	1	1.5	1.75	2	2.5	3	4	4.5	5	6							5042
M 38 x 38 H50	800	0.5	0.75	0.85	1	1.5	1.75	2	2.2	2.5	2.7	3	4	4.3	4.5	5	6	8289

Based on BRIN test report number: KS-LUI/E.208975/2025

Note :
• 1 kN = 100 kg

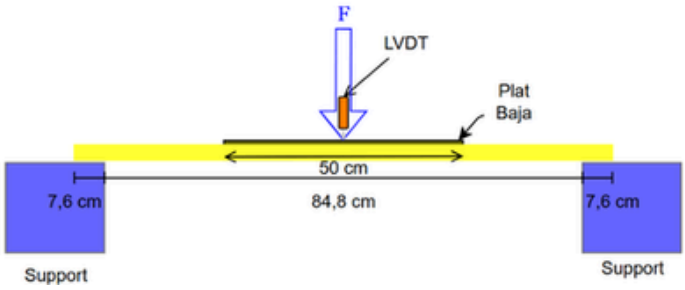
NOTE :
For stair treads, the maximum allowable deflection is 6 mm, in accordance with ISO 24681:2023.

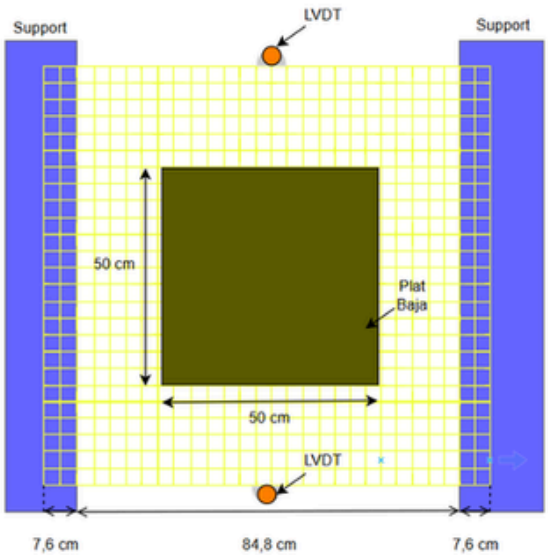
MECHANICAL TEST REPORT

Mechanical Uniform Load

This test follows the standard:

- **ANSI/ACMA/FGMC-Grating Manual-2017 (R2025)**
- **ACMA** : FRP Composites Grating Manual for Pultruded and Molded Grating and Stair Treads.
- **ISO 24681:2023** – Ships and Marine Technology – Fibre-Reinforced Plastic Gratings.





Test Results

TYPE	SPAN (mm)	UNIFORM LOAD (kg/m²)												Break Point Load
		200	250	500	800	1000	1350	1750	2150	2600	3000	3400	3600	4000
		DEFLECTION (mm)												
M 38 x 38 H25	800	7	9											2950
M 38 x 38 H38	800	2	2.5	4	5.5	6.5	9							4000
M 50 x 50 H50	800	1.5	2.2	3	4	5	6	7	9					4000
M 38 x 38 H50	800	1	1.2	2	3	3.5	4	5	6	7	7.5	8	8.5	9	4000

Based on BRIN test report number: KS-LUI/E.208975/2025

Note :
• 1 kN = 100 kg

NOTE :
For walkways, the maximum allowable deflection is 9 mm, in accordance with ISO 24681:2023.

PT TEKNIK BUDI PERKASA
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02

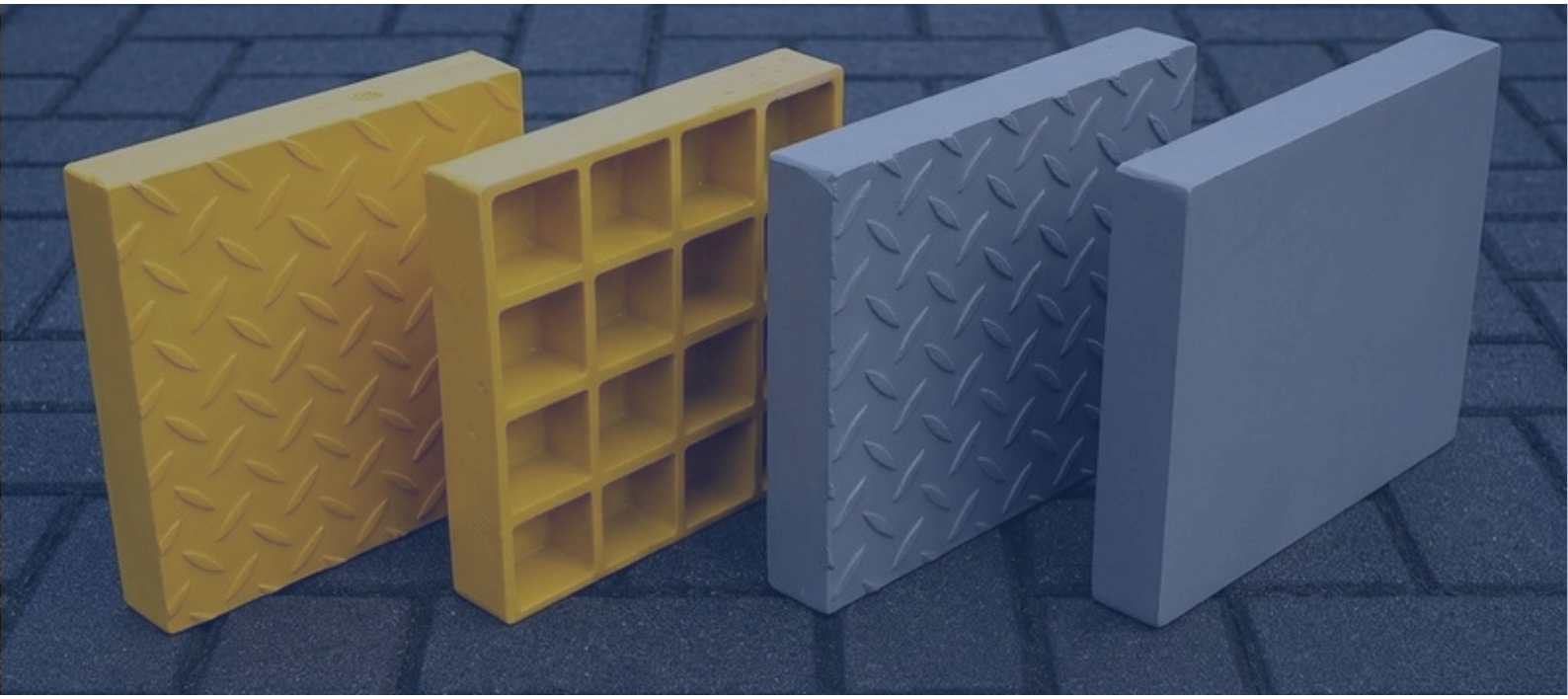
DGRID FRP GRATING CHECKER PLATE

Corrosion Resistant
High Strength
Lightweight
Non Conductive
UV Resistant
Fire Retardant
Chemical Resistant
Low Maintenance
Radio Frequency Transparency

DGRID

FRP Grating Checker Plate

DGRID FRP Grating Checker Plate is a high-performance fiberglass reinforced polymer (FRP) grating manufactured **by PT Teknik Budi Perkasa**. Produced using continuous fiberglass reinforcement and high-quality thermosetting resin through a one-piece molded process, DGRID offers excellent corrosion resistance, high strength with a lightweight design, superior slip resistance, and exceptional long-term durability.



Applications

- Walkways & Platforms
- Trench Covers & Drains
- Mezzanines & Catwalks
- Marine Applications
- Chemical Proessing

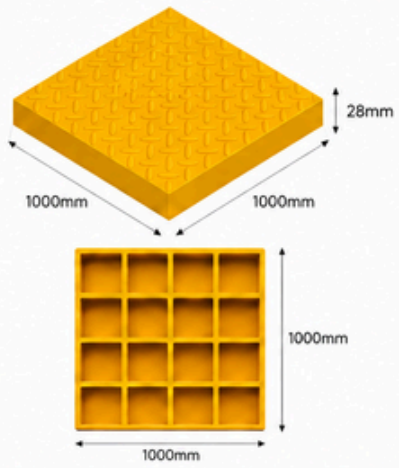
FRP GRATING CHECKER PLATE

Open Back

DGRID FRP Grating Checker Plate is made from high-quality fiberglass reinforcement and thermosetting resin, providing a strong, lightweight, and durable solution for industrial flooring and platforms. Its checkered surface offers excellent slip resistance, while the open-back design allows the grating structure to remain visible from the underside. Available in various standard thicknesses and dimensions.

01 FRP MOULDED GRATING - MESH 38X38MM (H 25)

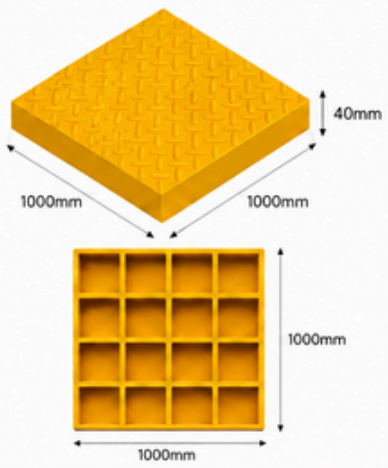
W 1000 x L 4040 x H 28



SPECIFICATION	
DIMENTION (W x L x H)	1000 x 4040 x 28 mm
MESH SIZE	38 x 38 mm
OPEN AREA	68%
WEIGHT (KG/ SHEET)	± 70

02 FRP MOULDED GRATING - MESH 38X38MM (H 38)

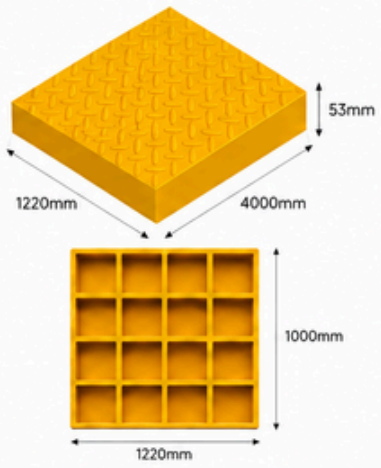
W 1000 x L 4040 x H 40



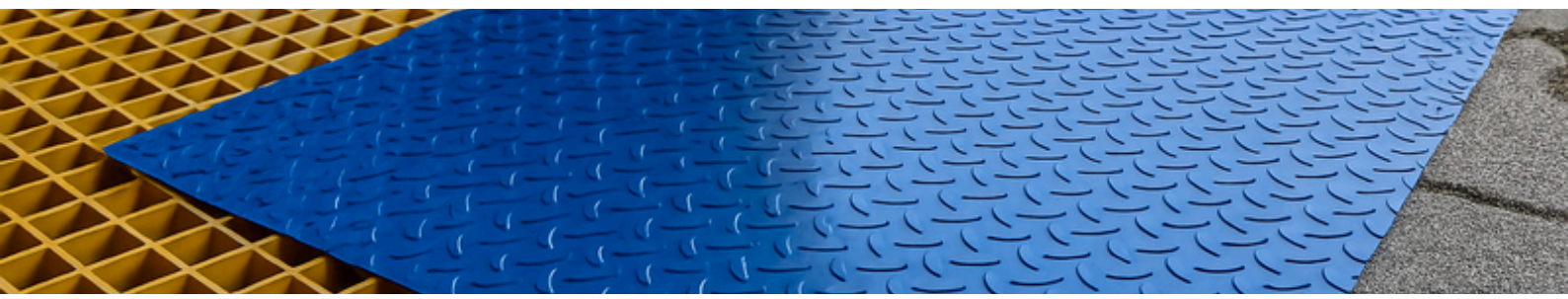
SPECIFICATION	
DIMENTION (W x L x H)	1000 x 4040 x 40 mm
MESH SIZE	38 x 38 mm
OPEN AREA	68%
WEIGHT (KG/ SHEET)	± 96

03 FRP MOULDED GRATING - MESH 38X38MM (H 50)

W 1220 x L 4000 x H 53



SPECIFICATION	
DIMENTION (W x L x H)	1220 x 4000 x 53 mm
MESH SIZE	38 x 38 mm
OPEN AREA	58%
WEIGHT (KG/ SHEET)	± 183



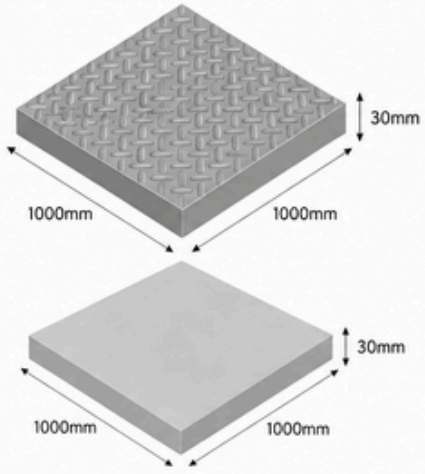
FRP GRATING CHECKER PLATE

Close Back

DGRID FRP Grating Checker Plate is engineered with high-quality fiberglass and thermosetting resin for superior strength, durability, and corrosion resistance. The checkered surface enhances slip resistance, while the close-back design features a fully enclosed underside, concealing the grating structure for a clean and solid appearance. Ideal for industrial platforms and flooring applications.

01 FRP MOULDED GRATING - MESH 38x38MM (H 25)

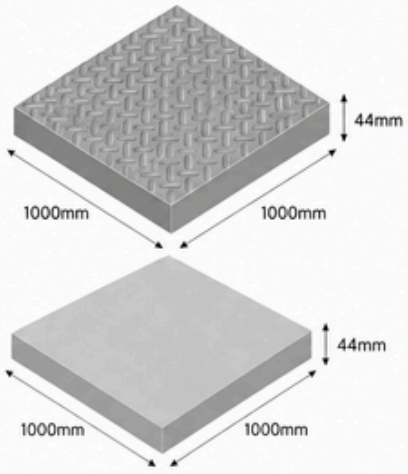
W 1000 x L 4040 x H 30



SPECIFICATION	
DIMENTION (W x L x H)	1000 x 4040 x 30 mm
MESH SIZE	38 x 38 mm
OPEN AREA	68%
WEIGHT (KG/ SHEET)	± 86

02 FRP MOULDED GRATING - MESH 38x38MM (H 38)

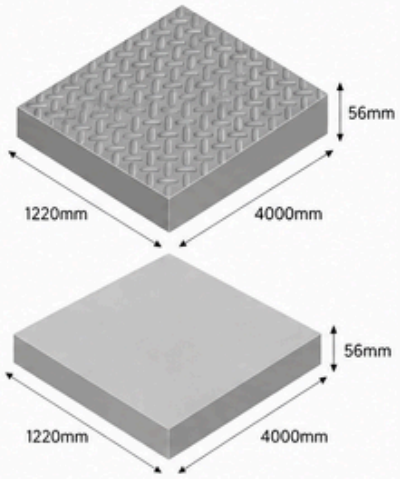
W 1000 x L 4040 x H 44



SPECIFICATION	
DIMENTION (W x L x H)	1000 x 4040 x 44 mm
MESH SIZE	38 x 38 mm
OPEN AREA	68%
WEIGHT (KG/ SHEET)	± 112

03 FRP MOULDED GRATING - MESH 38X38MM (H 50)

W 1220 x L 4000 x H 56



SPECIFICATION	
DIMENTION (W x L x H)	1220 x 4000 x 56 mm
MESH SIZE	38 x 38 mm
OPEN AREA	58%
WEIGHT (KG/ SHEET)	± 199

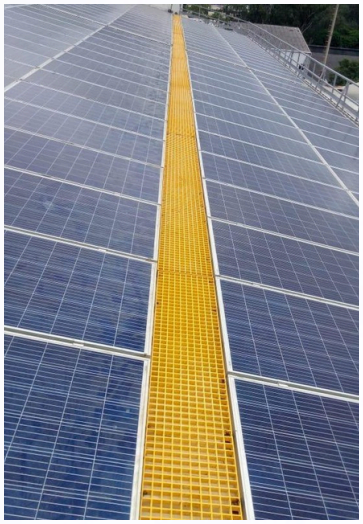


FRP MOULDED GRATING

Installation Application

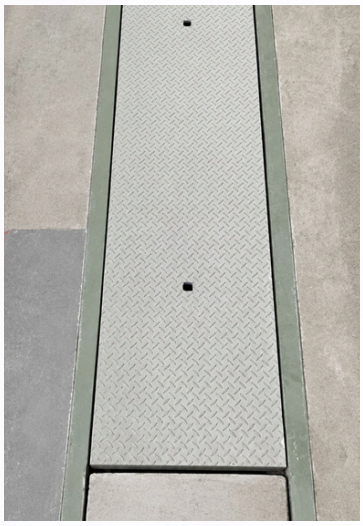
Used for flooring, platforms, stairs, ramps, walkways, and trench covers in industrial environments requiring a slip-resistant, corrosion-resistant, and durable surface. Ideal for applications in chemical plants, water treatment facilities, marine areas, docks, and offshore installations. Their lightweight construction, non-conductive properties, resistance to chemicals and moisture, and reliable performance make them suitable for high-traffic areas used by both personnel and equipment.

01 WALKWAY FOR SOLAR PANEL



FRP grating is suitable for access paths in solar panel installations because it is non-conductive, weather-resistant, and provides a safe surface for technicians during inspection and maintenance.

02 DRAINAGE COVER



FRP Grating is used as a drainage cover that provides smooth water flow and reliable structural support. Its corrosion resistance and high load capacity make it ideal for public walkways and industrial environments.

03 WALKWAY FOR WATER TREATMENT



In water treatment facilities, FRP grating is used for inspection walkways thanks to its chemical resistance, high moisture tolerance, and stable load-bearing capacity. Its anti-slip surface ensures worker safety in wet environments.

04 STAIRS



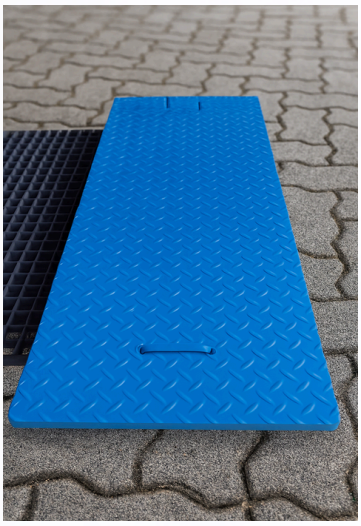
FRP grating is used for stair treads due to its lightweight structure, anti-slip surface, and corrosion resistance. It provides safe footing in industrial environments with moisture, chemicals, or dynamic loads.

05 WALKWAY FOR MEZZANINE



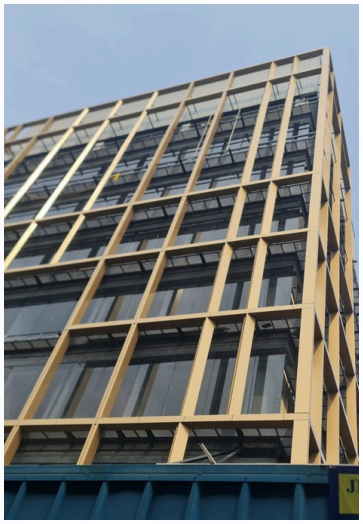
FRP grating is used for elevated walkways due to its anti-slip surface, lightweight design, and corrosion resistance. It ensures safe access in multi-level industrial areas while allowing ventilation and light penetration from below

06 PLATFORM DECK (CHECKER PLATE)



FRP Grating is used as a platform deck with an anti-slip surface, lightweight structure, and corrosion resistance, providing safe and durable footing in industrial environments.

07 BUILDING MAINTENANCE WALKWAY



FRP Grating is used for elevated maintenance walkways, providing safe and durable access with its anti-slip surface, lightweight structure, and corrosion resistance in industrial environments.

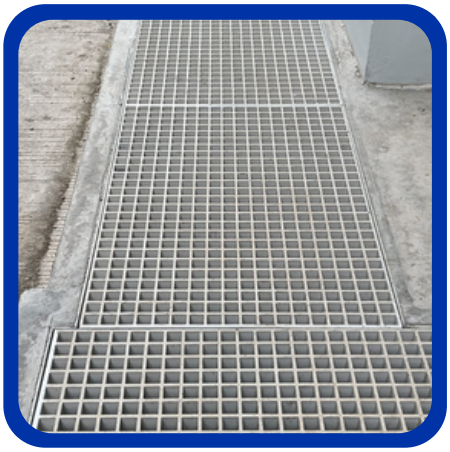
08 VENTILATED ROOM



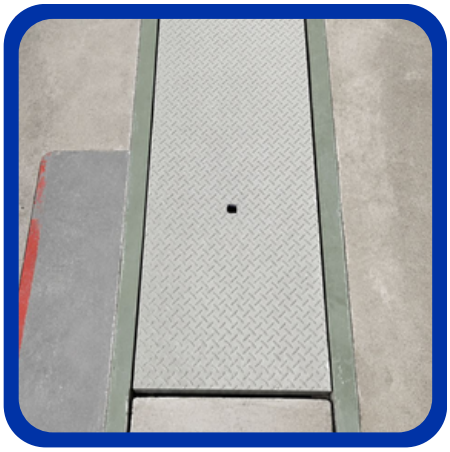
FRP Grating is used as a ventilation panel to support airflow while providing durable physical protection, ideal for equipment areas, generator rooms, and high-humidity environments.

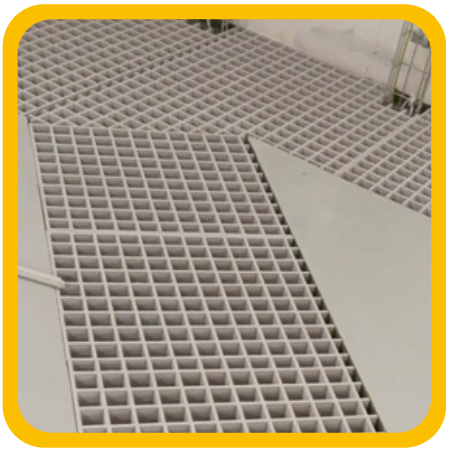
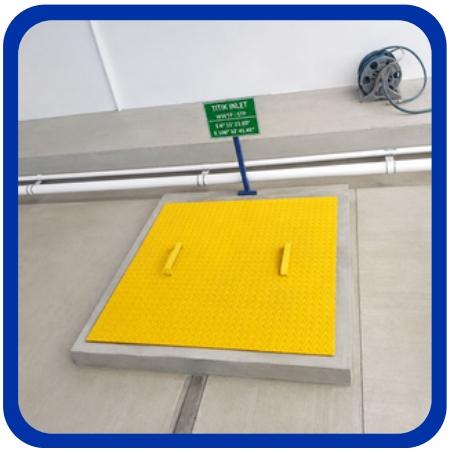
FRP MOULDED GRATING & GRATING CHECKER PLATE

Product in Application







Certified Credentials

and Quality Standards



















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Kementerian Perindustrian REPUBLIK INDONESIA
BRIN BADAN RISET DAN INOVASI NASIONAL
ACMA AMERICAN COMPOSITES MANUFACTURERS ASSOCIATION
ASTM INTERNATIONAL
International Organization for Standardization ISO 9001
UL

Lasting Performance

PT Teknik Budi Perkasa is committed to delivering high-quality FRP Roof and Cladding that ensure safety, durability, and efficiency for every industrial application.

Let's Build Together

Partner with us for reliable products, trusted service, and long-term success.

Contact Us

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