

**FIBRPRO<sup>®</sup>**  
precast

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**SYNTHETIC GRATING**

**FIBRPRO<sup>®</sup>**  
precast

# About Us

Headquartered at Hong Kong, FIBRPRO® is a team of engineers in fields of material, production, mechanics, civil, structure, environment, construction, contract and management. It is with this unique background that FIBRPRO has been leading the way in design and production of Fibre Reinforced Polymer (FRP) materials in construction since its establishment in 2010. We specialise in providing design, engineering, manufacture, delivery, installation and commissioning one-stop contracting service for a comprehensive range of FRP related works. We pride ourselves on challenging projects, and welcome unique bespoke work.

With our extensive knowledge of composite materials, manufacturing techniques, engineering skill and contracting experience, we extended our service scope to the engineering precast or prefabrication products in 2015, and since then have been offering with innovative and cost-effective solutions to address complex construction challenges and the high labour cost of local construction market.

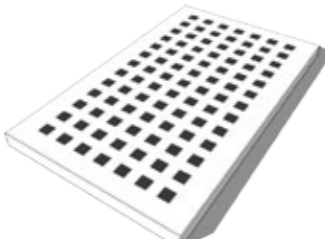
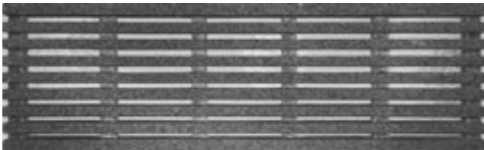
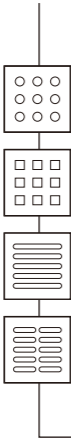
**FIBRPRO®**  
PRECAST & CONTRACTOR



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FIBRPRO<sup>®</sup> Synthetic Gratings are precast unit fabricated by using low content (approximate 15% by weight) of resin/polymer material as blinder, such as resin of polyester, epoxy methacrylates, phenolics, furans and vinyl ester etc. with quartz sand, natural or recycled crushed stone and recycled fillers, such as fine aggregate, mineral granulation or reused fibers. The mixed compound, which is an almost agglomeration of natural stone substrates & mineral oxides is filled into moulds and compacted to form panels or any shapes of features under a high-tech vacuum & compression process.



# Product Advantages



Absolutely  
Corrosion Resistant



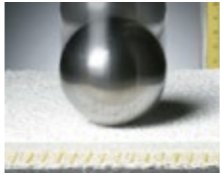
Fire Retardant



Chemical Resistance



Aging Resistance



Impact Resistance



Non-slip Surface



Loading Sustainable  
Vehicular Loading  
up to 400KN



Light-Weight



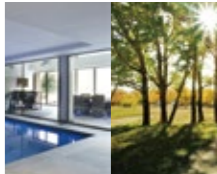
Insulation Properties



Low  
Noise Nuissance



Low  
Maintenance Cost



Indoor & Outdoor  
Suitable



Cost Effective



Low Potential  
of Stealing










Custom Made  
Colors / Patterns / Shapes /  
Holes / Finishes



















Design Free

# Technical Information

Properties	Test Method	Result
 Fire Test on Building Materials and Structures	BS 476: Part 7	Class 1
 Flexural Strength	BS 2782: Part 10	33MPa
 Shear Strength	BS 2782: Part 3	31MPa
 Tensile Strength	BS 2782: Part 10	14MPa
 Compressive Strength	BS 2782: Part 3	75MPa
 Absorption Water by Immersion	BS EN1170: Part 6	< 0.5% (in 7 days)
 Anti-Slip	DIN 51130	R11
 Abrasion Resistance	BS EN13748	< 30 cm3 / 50 cm3

# Comparision between commonly use materials for channel grating

	<div>FIBRPRO<sup>®</sup> precast Synthetic Grating</div>	Granite / Marble	Cast Iron	Stainless Steel	Fiberglass
Approximate Material Density (Kg/m³)	1,800 <small>Light-weighted</small> 	2,700	7,800	7,800	1,500 <small>Light-weighted</small> 
Aging Resistance	Good 	Good 	Poor	Good 	Good 
Conductivity	Insulator 	Insulator 	Conductor	Conductor	Insulator 
Chemical Resistance	Good 	Good 	Moderate	Good 	Good 
Anti-Slip	Good 	Poor	Poor	Poor	Moderate
Design Flexibility (Color, Shape, Hole )	Good <small>Custom Made</small> 	Poor	Poor	Poor	Moderate
Material Cost	Moderate	High	Low 	High	Moderate

# Current Problems & Solution

1. Rusting



2. Cracking



3. Damaging



4. Non-matching color



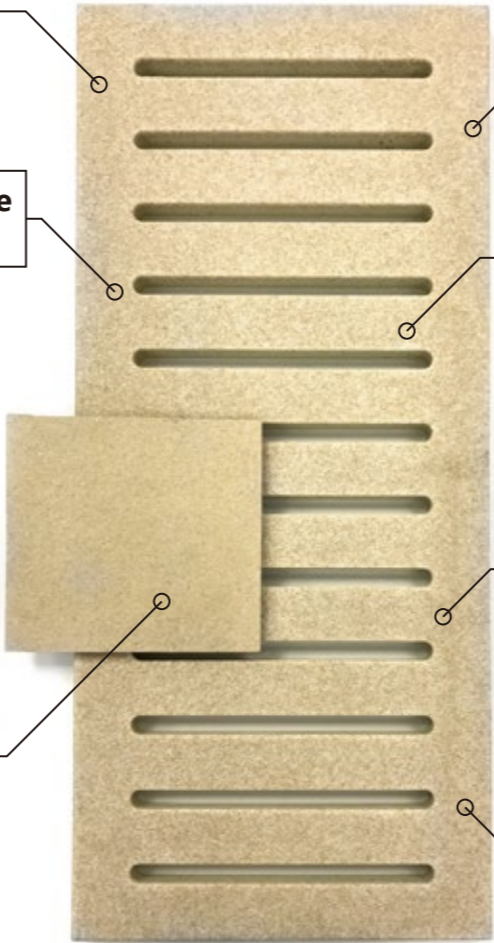
1. Non rusting material integrated

2&3. High strength and durable composite integrated

4. Color matching integrated

FIBRPRO<sup>®</sup>  
precast

One Integrated Solution



5. Pattern & textile integrated

6. Anti-slip surface integrated

7. Non-metallic material integrated

8. Color integrated

5. Seperation of granite / marble / tile



6. Non durable anti-slip treatment



7. Material spalling off due to internal rusting



8. Wearing paint color



# Approved for Children Playground

## Available for barefoot stepping

The temperature rises slightly under direct sunlight

**FIBRPRO Synthetic Grating:** max. up to 40 - 50°C

Traditional cast iron channel grating: max. up to 70 - 80°C



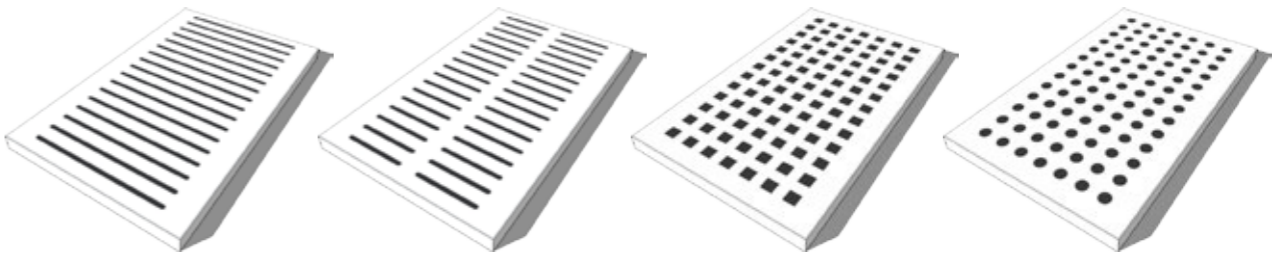
# Loading Test

## Available for several load bearing requirements

Complied with BS EN 124



# Standard Product



Single Slot      Double Slot      Square Hole      Round Hole

## Standard Size:

Model no.	Length	Width	Thickness	Span
FPG-001	500 / 600	150	25	100
FPG-002	500 / 600	225	25	150
FPG-003	500 / 600	300	25	225
FPG-004	500 / 600	400	25	300
FPG-005	500 / 600	500	25	400

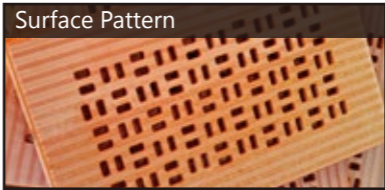
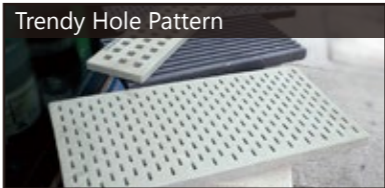
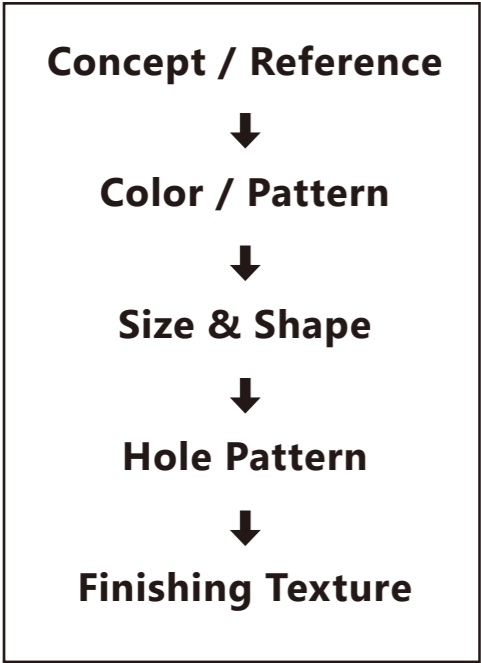
## Surface Finishing:



Smooth      Anti-Slip      Metal-like      Wood-like      Gravel-like

# Custom Made Service

FIBRPRO® Synthetic Gratings today covers a nearly limitless array of colors, and is known for being custom made to fit even the most complex design for shapes and patterns, durable, sustainable, and versatile. From the indoor bathroom, washroom and kitchen to the outdoor garden, children playground, schools, hospitals, and any public plaza, synthetic grating serves as the essential part of flooring canvas with infinite possibilities.

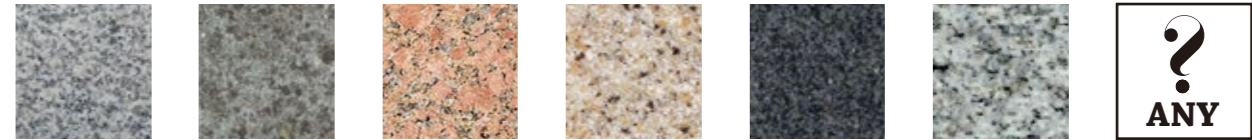


ONE STOP SOLUTION TO CONVERT YOUR IDEA INTO REALITY

ACT NOW FOR YOUR NEW GRATING DESIGN!

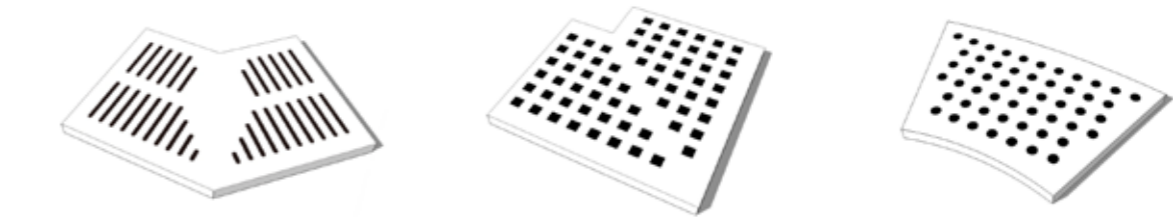
## Color / Pattern

Design your flavour color / pattern by our color / pattern matching consultation service.



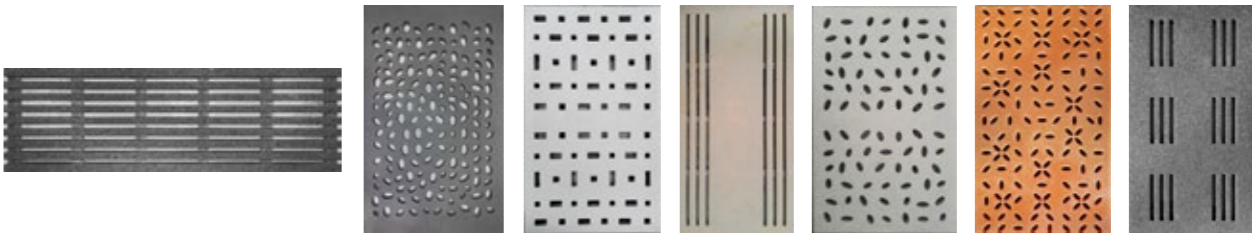
## Size & Shape

Design your flavour size and shape to fit your actual situation



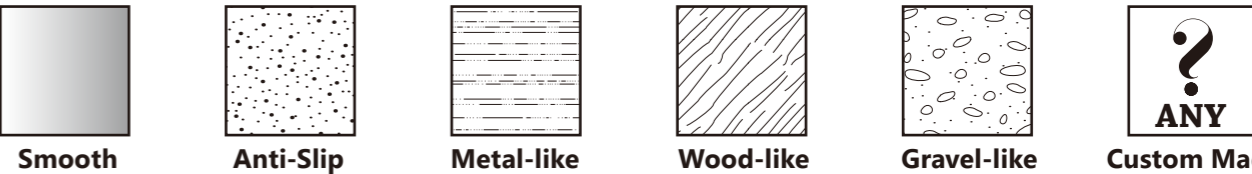
## Hole Pattern

Design your flavour hole pattern to enrich the style





## Finishing Texture:


You could choose several types of finishing according to the grating usage.



# Applications – Indoor

Toilet / Kitchen








Market







Shopping Mall







Swimming Pool








# Applications – Outdoor


Garden







Park





Pedestrian





Driveway / Carpark



