

THE COMPOSITE GRATING FOR HEAVY INDUSTRY - THE FRP ALTERNATIVE TO METAL!**GridEX® FRP Heavy Duty Grating – The Safe Alternative to Metal Grating for Heavy Industry.**

Introducing **GridEX® HD**, Treadwell's new generation of heavy-duty FRP grating, engineered with our premium EX-Series® resin system. GridEX® HD is designed to offer a robust and safe alternative to traditional metallic grating, specifically delivering compliant structural performance, excellent corrosion resistance, and long-term service life.

**Compliant. High Strength. Superior Performance. Low Maintenance.**

This advanced grating system has been carefully developed to meet the stringent requirements of AS 1657, particularly for industrial walkways, platforms, and access systems. GridEX® HD delivers high strength-to-weight ratios, low maintenance requirements, and superior resistance to chemicals, moisture, and UV exposure. Its non-conductive properties and grit-top surface also enhance safety for personnel in high-risk environments such as mining, wastewater, and processing facilities.

With a sleek profile, long span capacity, and lightweight installation benefits, GridEX® HD represents the future of engineered grating solutions — combining cutting-edge composite materials technology with the proven reliability Treadwell is known for.

**Downsides of Metal Grating**

- Easily rusts & corrodes.
- Requires constant maintenance.
- Bends on impact.
- Slippery when wet.

**Benefits of FRP Grating**

- Rust & corrosion resistant.
- Virtually maintenance free.
- Extremely durable under impact (does not yield).
- Integrated anti-slip surface.

Why Choose GridEX® Heavy Duty Grating



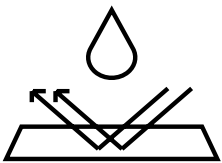
SAFETY

Eliminates risk of trip hazards.
Impregnated anti-slip surface for
user safety.



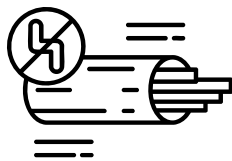
WEATHER PROOF

Built to withstand extreme
weather conditions.



CORROSION RESISTANT

Naturally corrosion resistant, outlasting
traditional materials. Reducing maintenance,
replacement and downtime costs.



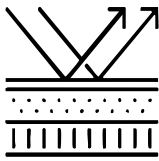
NON-CONDUCTIVE

Removes need for earthing and
bonding.



NO HOT WORKS

Cutting / grinding on site do not
require hot works permits.



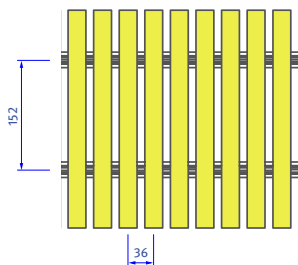
NO DISSIMILAR METALS

Can be used with galvanised, mild, stainless
steel and other metallic structures.

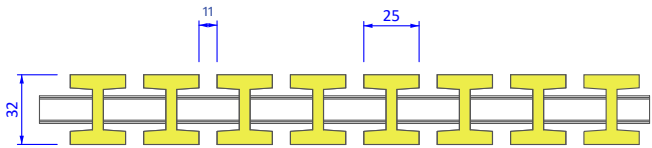
COMPLIANT WITH AS4586 (SLIP RESISTANCE) AND AS1657 (WALKWAYS & PLATFORMS)

GridEX® Heavy Duty FRP Grating - GDX322511B

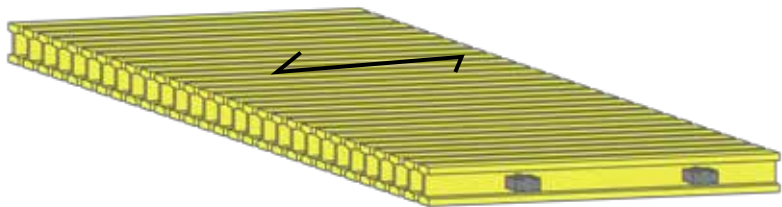
Top View



Elevation view



Isometric View



Full panel size is 1044 x 5800mm load bar

Load Performance Summary (AS 1657 Compliant)

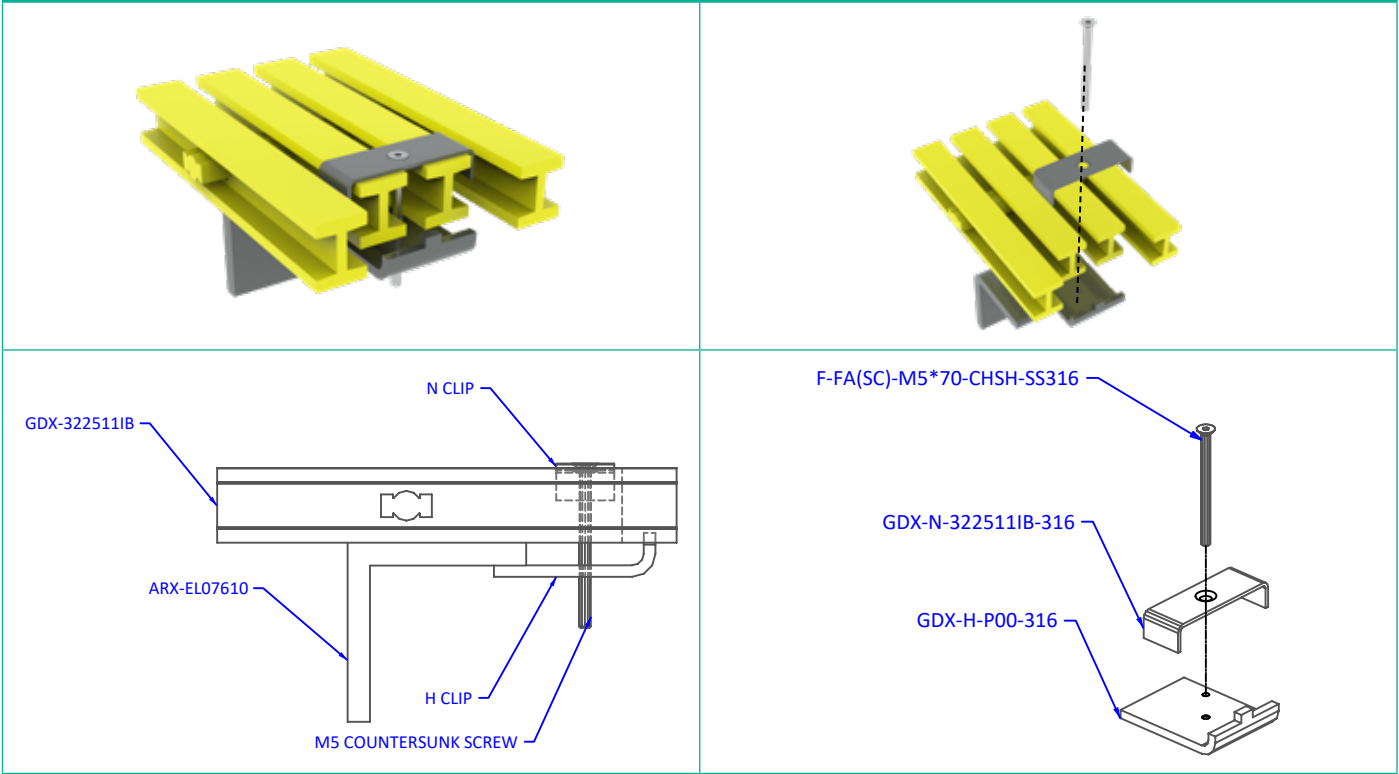
Deflection Performance

Span (mm)	Deflection (mm) 2.5kPa	Deflection (mm) 4kPa	Deflection (mm) 5kPa
1000	0.1	0.8	1.3
1200	0.5	2.6	3.1
1400	2.2	4.5	6.1
1500	3.5	6.64	8.3
1700	6.5	10.07	12.6

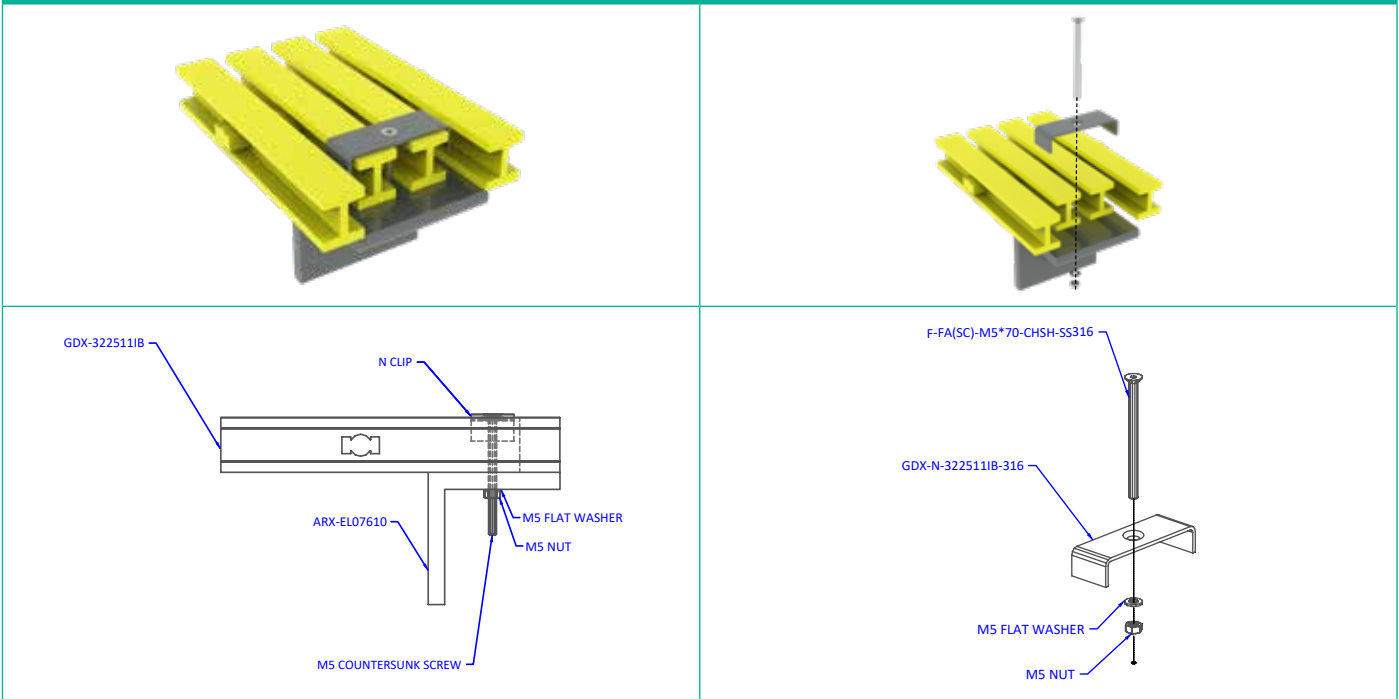
Note: Test results consider V-Series® resin.

Specially designed and engineered for heavy industry applications, GridEX® FRP Heavy Duty Grating provides reliable structural performance and extended span capacity while remaining compliant with industry standards. GridEX® HD is ideal for industrial walkways, platforms and access systems, meeting compliance codes and delivers structural longevity.

N-CLIP ASSEMBLY



N-CLIP NUT WASHER ASSEMBLY



Material Comparison		
Criteria	GridEX® HD (FRP)	Serrated Steel Grating (32mm)
Material Type	Vinyl Ester Fiberglass Reinforced Plastic (FRP)	Mild Steel (Hot-Dip Galvanised)
Span Capacity @ 4kPa	1700mm max span (10.07mm deflection)	1600–1700
Max Span at 5mm Deflection 5kPa	At 1320mm spans	Approx. 1500mm–1600mm
Weight per m²	~27 kg/m²	~45–50 kg/m² incl. light gauge mesh welded for dropped objects and edge banding
Corrosion Resistance	Excellent – does not rust	Moderate – needs galvanising and maintenance
Slip Resistance	Grit surface (P5, R13 rating)	Serrated bar
Electrical Conductivity	Non-conductive	Conductive
Maintenance	Minimal – no painting or welding	High – prone to rust, coating, welding required
Design Life	50+ years	10–25 years (coating-dependent)
Fire Rating	Low flame spread	Good
Environmental Impact	Low embodied energy, no toxic coatings	Higher embodied energy and maintenance pollution

Clip and Securing Details

Ideal Clip set for a walkway will be a N Clip with a H Clip with a M5 Bolt.

Ideal Clip set for a Stair tread will be a N Clip with a M5 Bolt connecting directly to the stair framing.

Environmental Impact & Longevity

Lower Carbon Footprint: GridEX® HD requires significantly less energy to manufacture, and transport compared to steel.

Sustainable Durability: With a design life of over 50 years, GridEX® HD reduces the frequency of replacement and material waste.

No Paints or Solvents: Eliminates the need for toxic coatings and maintenance chemicals that can leach into the environment.

Applications	
Access Platforms & Walkways	Mining and Processing Facilities
Maintenance Pits	Food and Beverage
Rooftop Access	Rail Industry
Electrical Rooms	Chemical Plants
Water and Wastewater Treatment Plants	Oil and Gas