

Lightweight Mats for Temporary Roads

Fiber Reinforced Polymer (FRP) material provides a great combination of light weight and high strength for temporary road mats. The mats allow heavy equipment to move over many types of ground conditions. The mats distribute the load to prevent local compression of the ground and to reduce the pressure when crossing buried pipelines.

Small construction handlers can move the mats to the front of the temporary road as the heavy equipment moves along the road. The high strength of the FRP mats means that they bend, but do not break like wood mats. The mats return to the original, flat shape and do not permanently yield like steel mats.

FRP Mat Benefits

- Corrosion Resistance to chemicals and water
- Light Weight
 - Half the weight of wood mats
 - Easy to move
 - More mats transported on each truck
- High Strength
 - Similar to steel, but does not yield
 - Much stronger than wood
- Long lasting
- Anti-Slip Wear Surface
- Portable road mats for moving heavy equipment (up to 1,500,000 lb and 1,000 psi)

Sizes

- Thickness = 1.75 inch
- Standard Size
 - 19.5 ft x 7.5 ft for ISO Container
 - 30 ft x 8 ft for non-container
 - Scalable to other sizes



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Technical Specification

Construction

- Continuous fiberglass reinforcement
- Vinyl ester polymer for corrosion resistance and fire resistance.

Anti-slip surface

- Anti-slip surface coefficient of friction met by this product:
 - COF Wet - 0.93
 - COF Dry- 0.88
- Anti-Slip Coatings pass ASTM tests including:
 - F-510, Frick-Taber long-term wear test for durability.
 - D-2794 for impact resistance from falling objects
 - D-1894 for coefficient of friction in wet and dry environments.
 - D-3450 for wash ability and easy clean-up.
- Custom colors

Operating Environment

- Temperature Range of -50 F to +130 F
- Corrosion Resistant:

Oil	Hydraulic Fluid	
Grease	Water	Salt Water
- Does not rust, rot or absorb water.

Deflection

- Designed deflection range:
- The fiberglass panel is designed with a 8 inch deflection from tip to center when lifted.

The fiberglass panel will deflect to 8 ft (Tip to Center) before failure.
As the temperature increases, there will be a marginal increase in the deflection.

High Capacity

- Capacity for Mobile Drill Rigs used to design the mats.
- 1000 psi maximum exerted by equipment.
- 750,000 lb maximum exerted by rigs per mat.

Durability

- Expect life span of 10+ years
- Expected cycles of use before capacity deterioration.
- Under design loads and adequate soil conditions, the fatigue life of the panel is tens of thousands of loading cycles.

Size

- Thickness of 1.75 inch
- Weight of 18.5 psf
- Scalable

