



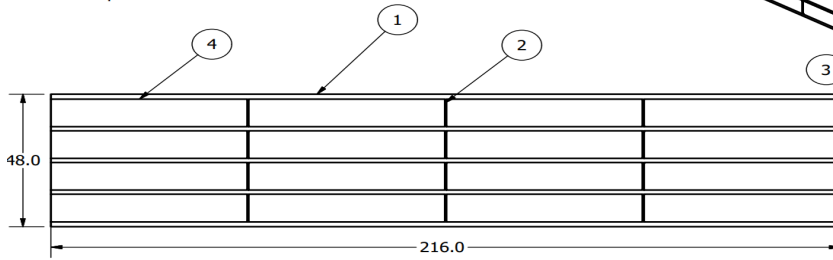
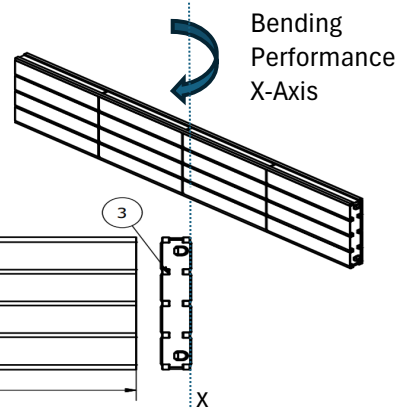
Infinity Mat Specification Sheet

8" x 4' x 18' Foam Filled Steel Mat

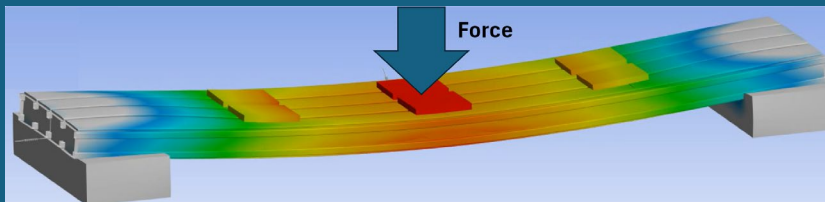


Design Performance: Mat designed for high strength and durability applications for the longest life

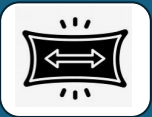
Matt consists of a 2 x 2 x 1/8 frame with five 7 ga cross supports. 7 ga cover plates are welded creating an outer surface. Each cavity is then filled with 1.8 lb/sqft closed cell foam which adds to the rigidity and bouyancy of the matt. The matt is finished with a 2-part epoxy finish and a polyurathane finish for corrosion protection and traction.



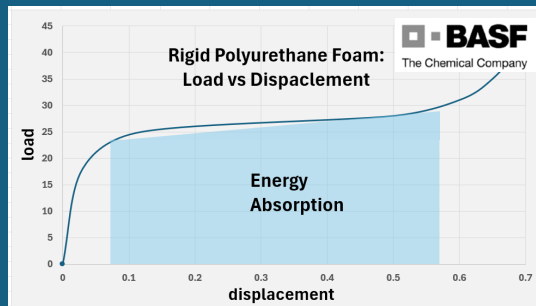
Structural Efficiency: 8" Mat steel and foam construction with the bending performance of 12" hardwood timber



8" steel mat with 99.4% of bending stiffness of 12" hardwood mat



Toughness: the most forgiving materials (A36 steel and BASF Autofroth rigid foam) for the best energy absorption



steel: ~ 20% elongation
foam: ~ 60% elongation



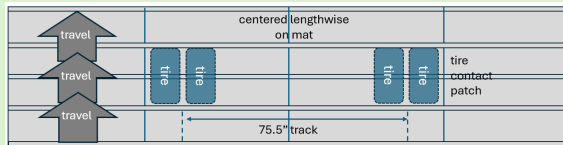
Design Validation: robust designs thru the investigation of aggressive use cases with virtual and physical testing

Use Case: Access Mat ▲

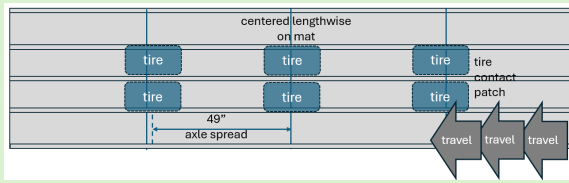
Mat Design Validation

Use Case: Bridge Bending ▲

▲ 1 Axle Load Test



▲ 3 Axle Load Test



Test	▲ 1 Axle	▲ 3 Axle
	(lbf / axle)	(lbf / axle)
Virtual	25,000	25,000
Physical	25,000	25,000
	125% of Load Limit	148% of Load Limit

validation strength load cases base on over-driving max load limits for heavy duty truck/trailer configurations

Limitations

Have a question or idea about applications? Contact Infinity Mattz.

Infinity Mattz Specifications Sheet

Sheet 1 / 1

Rev.

Mat - Structural Bending Performance

E I_{xx} Effective Bending Stiffness 8, 248 x10⁹ lbs in²

F_b Allowable Bending Stress 18,000 psi

Please consult Infinity Mattz about any further information or applications.

Mat - Material Specification

Steel Material: A36

E: 30x10⁶ psi

Yield Strength: 36,000 psi

Ult Tensile Strength: 58 - 80,000 psi

Elongation at UTS: 20%

Test	1 Axle	3 Axle
	(lbf / axle)	(lbf / axle)
Virtual	25,000	25,000
Physical	25,000	25,000
	125% of Load Limit	148% of Load Limit