Rainstore3 has been independently field and laboratory tested to meet H-20 Bridge Loading.

Grasspave2, Gravelpave2, and Slopetame2 can withstand 15,940 psi with fill material (109,906 kPa) or 2.29 lbs/sq ft. *  
*Tested 3/2015.

Dynamic Load Sample Calculation

Wheel load = WL = 16,000 lbs (32,000 lb axle / 2)  
Dynamic Force = Fd = 1.2 (20% greater than static force)  
Spread Area = A = 1496 si (12” cover w/45 degree angle)  
Weight of base = dy = 0.97 psi (12” road base @ 140 lbs/cf)  

\[ \sigma_{va} = \frac{(WL \times Fd)}{A} + dy \]

\[ \sigma_{va} = \frac{(16,000 \text{ lbs} \times 1.2)}{1496 \text{ si}} + 0.97 \text{ psi} \]

\[ \sigma_{va} = 13.8 \text{ psi} \]

**13.8 psi (95 kPa) on Rainstore3**

Surface Pressure

32,000 for the rear axle

32,000 lbs / 2 tires per rear axle = 16000 lbs

200 square inches contact* (20” x 10”)

16000 lbs / 200 sq inches = 80 psi

**80 psi (552 kPa) static**

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* AASHTO 3.30 Tire Contact Area