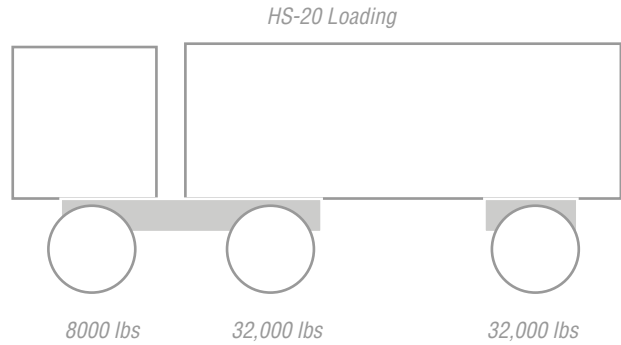
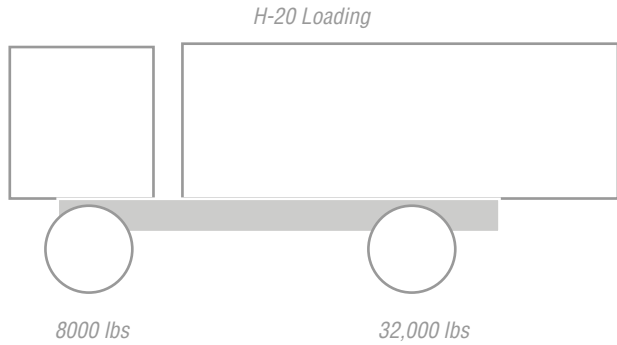


H-20 and HS-20 loading



Dynamic Load Sample Calculation

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

$$\sigma_{va} = (W_L \times F_d / A) + d_y$$

$$\sigma_{va} = (16,000 \text{ lbs} \times 1.2 / 1496 \text{ si}) + 0.97 \text{ lbs}$$

$$\sigma_{va} = 13.8 \text{ psi}$$

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

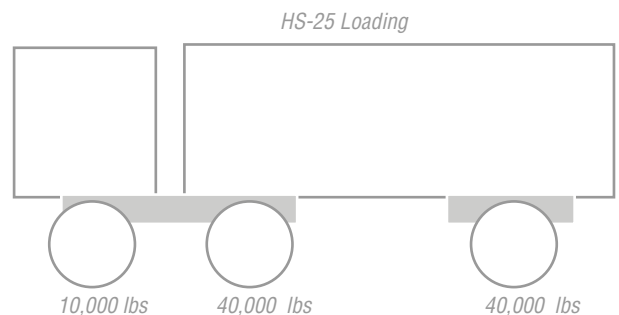
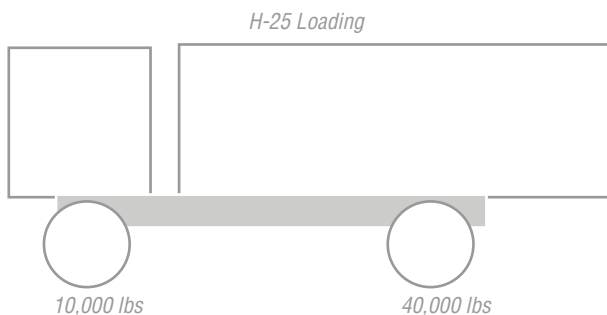
Rainstore3 has been independently field and laboratory tested to meet H-20 Bridge Loading.

Grasspave2, Gravelpave2, Slopetame2, and Draincore2 can withstand 2,100 psi empty (14,470 kPa).

Grasspave2, Gravelpave2, and Slopetame2 can withstand 5,721 psi with fill material (39,273 kPa).



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*AASHTO 3.30 Tire Contact Area