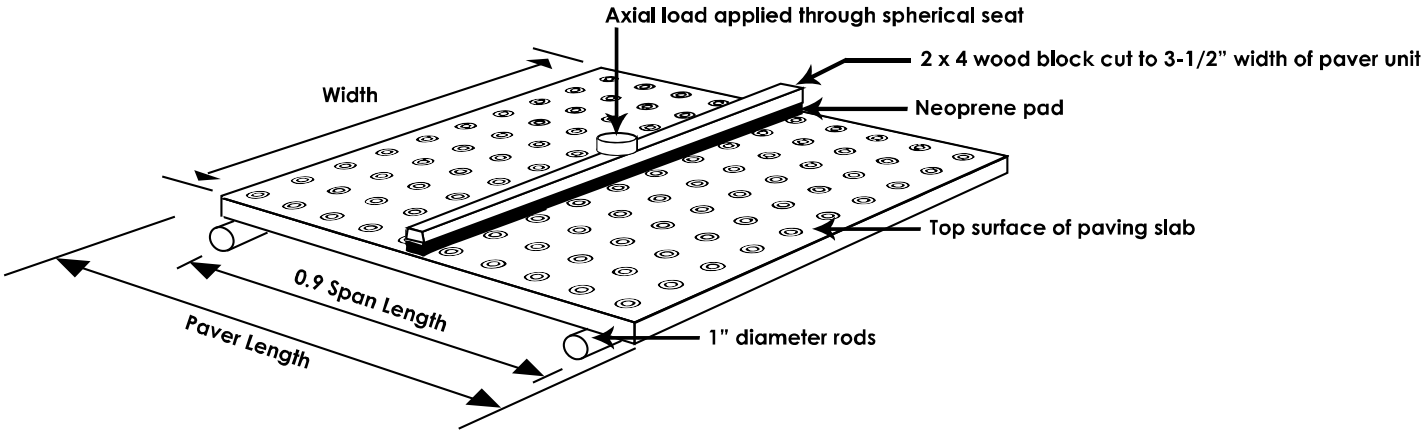
MASCO
MASONS SUPPLY

CASTinTACT®

Concrete Tactile Warning Panels

Flexural Strength Test

ASTM C-140 Flexural Strength Test & C-293 Modulus of Rupture Test



Flexural Strength Test

Larger paving slabs react differently under wheel loads to normal concrete pavers. Having a larger surface area, aspect ratio and thinner, the slabs bend easily under wheel loads – much like a beam.

Therefore flexural strength testing is as important to test rather as compressive strength. Flexural strength is sometimes called modulus of rupture.

The test method requires loading the upper bearing block of the testing machine, applying the load through the centroid of the concrete panel by the bearing assembly illustrated. The flexural length of the panel units is taken as the end to end plan dimension of the units. Loading shall be applied at a uniform rate such that the total load is applied in not less than one min and not more than 3 min.

CASTinTACT® recommends a minimum load of 750 lbs.

C-140 Flexural Strength	
Specimen	**Ultimate Load (lbs.)**
7 days	727
28 days	767

C-293 Modulus of Rupture	
Specimen	**Modulus of Rupture, psi**
7 days	1,112.8
28 days	1,211.4