Summary of Lab Test Results on Slopetame2

The attached summary of laboratory tests on bare and sand filled rings presents compression resistance data relate to the load bearing capacity of our rings for various applications. Test Data from A.G.Wassenaar, Inc., Geotechnical Consultants, Denver, Colorado, 30 April 1991.

This test used Forney Compression Testing Machine, 400,000 lb capacity, at rates of 200 lb/sec (unfilled rings) and 2000 lb/sec (filled rings).

Physical Ring Data:
2.31" O.D. x 1" high (2.15" I.D.)
0.778 sq. in. of plastic surface contact area per ring
7.01 sq. in. surface contact area per 9 ring test section

Physical Molded Unit Data (injection molded HDPE):
• 20" x 20" x 1" high (400 sq. in. per unit),12.9 rings per sq. foot (avg. 11.1 sq.in. per ring) 17.8 oz per unit, 69.93 sq. in. surface contact area per 9 ring test section.
• 40” x 40” x 1” high (1600 sq. in. per unit, 12.9 rings/sf (avg. 11.1 sqin/ring), 4.5 lbs per unit, 69.93 sqin surface contact area per 9 ring test section.

Lab Test Data: Bare Rings, with deflection stopped at 0.032" -
14,720 lbs load to test section (9 rings)
2,100 psi plastic resin strength (14,720/7.01)
1,635 lbs per ring (14720/9)
210 psi over test section area (14,720/69.93)
30,240 lbs per square foot load capacity (210x144)

Lab Test Data: Sand Filled Rings, with zero deflection -
400,000 lbs per test section area (max. machine load)
44,444 lbs per filled ring (400,000/9))
5,720 psi load over test section area (400,000/69.93)
823,680 lbs per square foot load capacity (5720x144)

Note:
Actual load bearing capacities of pavements using these products must provide for a rigid base to receive and accommodate the design loads planned - which are transferred from the surface to the base course by the rings.
All load figures provided above for Slopetame2 are based upon
lab tests conducted by A.G.Wassenaar, Inc., Denver, Colorado, 30 April 1991.