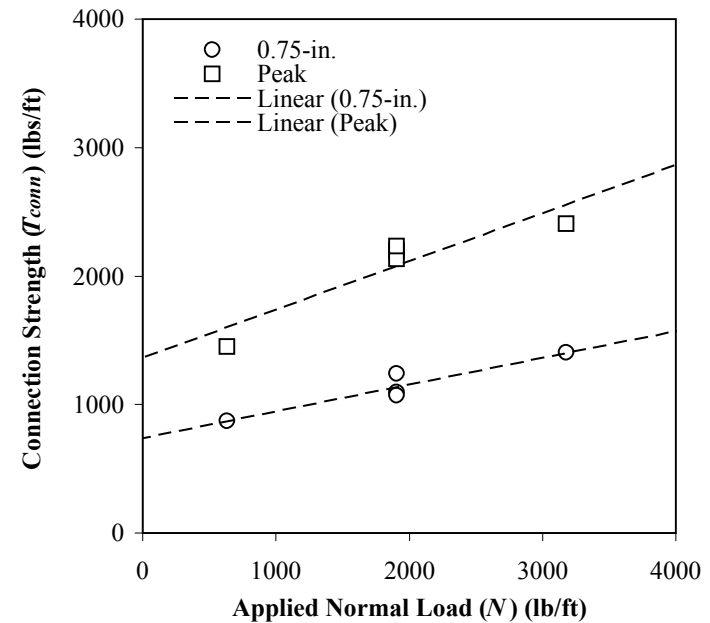
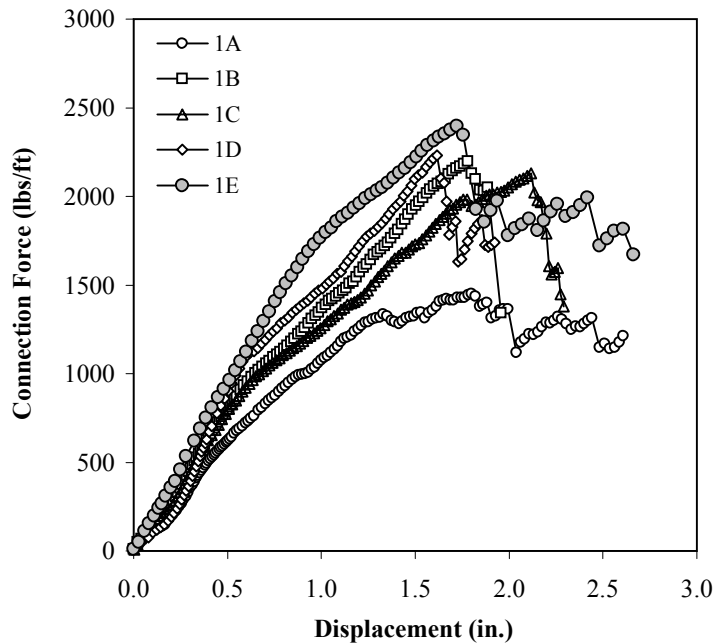


**GEOSTONE RETAINING WALL SYSTEMS, INC.
CONNECTION STRENGTH TESTING (ASTM D 6638)**

TEST SERIES NO. 1: Synten SF55 Geogrid in machine direction within Geostone 4" thick block units with compacted AASHTO #57 stone



Test No.	Test Specimen Width (in.)	Test Normal Stress (psi)	Equivalent Normal Load (lb/ft)	Approx. No. of Blocks	Approx. Height (ft)	0.75-in. Strength (lb/ft)	Peak Strength (lb/ft)	Connection Strength Equations (T_{conn})
1A	35.3	4.4	636	15	5.0	874	1450	$T_{0.75-in.} = 740 + (N) \tan (12^\circ)$ $T_{peak} = 1365 + (N) \tan (21^\circ)$
1B	35.3	13.3	1908	45	15.0	1098	2198	
1C	35.3	13.3	1908	45	15.0	1069	2131	
1D	35.3	13.3	1908	45	15.0	1243	2230	
1E	35.3	22.1	3180	75	25.0	1403	2404	

NOTES:

Dimensions of Geostone Block Unit: 17.75 in. wide by 12 in. long and 4 in. high.

Weight of a full-size Geostone Block: 37.5 lbs.

Average Unit Weight of Facing (Block and Gravel): 127.2 pcf

Failure Mode: pullout of the geogrid in Test 1A. Abrasion and rupture of the geogrid ribs in 1B through 1E.

DATE TESTED: 17 to 18 February 2004



SGI TESTING SERVICES, LLC

FIGURE NO.	C-1
PROJECT NO.	SGI1053
DOCUMENT NO.	SGI1053.07
FILE NO.	