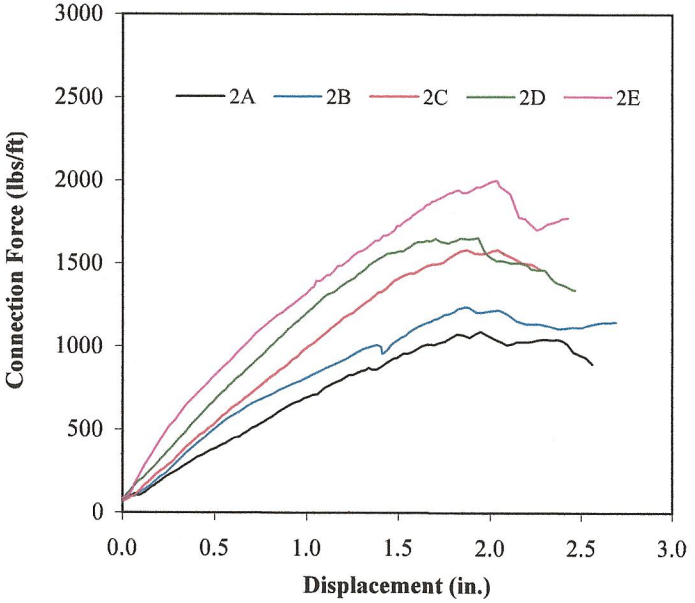
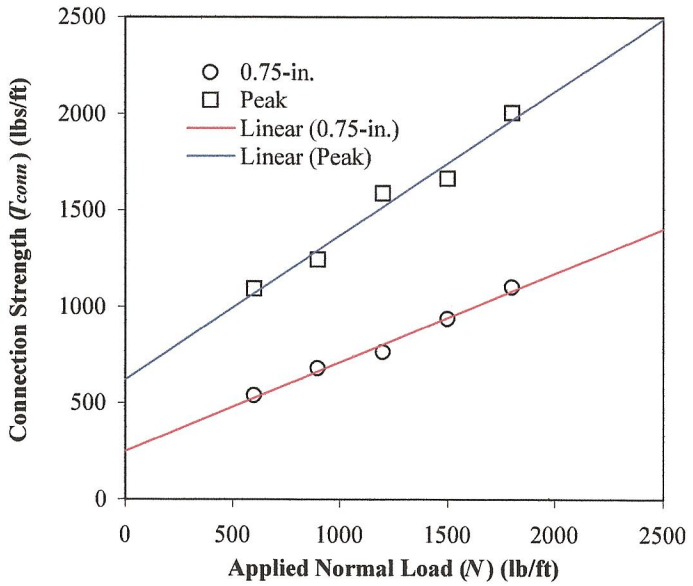
EARTH REINFORCEMENT TECHNOLOGIES, LLC
CONNECTION STRENGTH TESTING (ASTM D 6638)

HTG 35 geogrid in machine direction between two courses of Trinity blocks with channels and compacted AASHTO #57 stone within block apertures and space between blocks (no connectors in channels)





Test No.	Test Specimen Width (in.)	Test Normal Stress (psi)	Equivalent Normal Load (lb/ft)	Approx. No. of Blocks	Approx. Wall Height (ft)	0.75-in. Strength (lb/ft)	Peak Strength (lb/ft)	Connection Strength Equations (T_{conn})
2A	32.0	4.2	600	8	5.0	539	1092	
2B	32.0	6.3	900	11	7.5	682	1243	$T_{0.75\text{-in.}} = 250 + (N) \tan(25^\circ)$
2C	32.0	8.3	1200	15	10.0	764	1588	
2D	32.0	10.4	1500	19	12.5	940	1663	$T_{peak} = 620 + (N) \tan(37^\circ)$
2E	32.0	12.5	1800	23	15.0	1103	2004	

NOTES:

Dimensions of Block:	18 in. wide by 12 in. long and 8 in. high.
Weight of Full-Size Block:	75 lbs
Approximate Unit Weight of Facing (Block and Gravel):	120 pcf
Failure Mode:	Abrasion and rupture of geogrid ribs in each test.

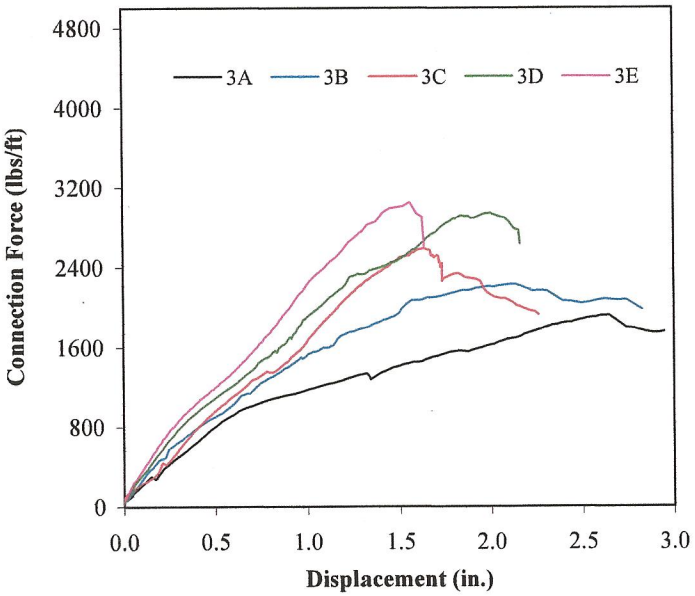
SGI TESTING SERVICES, LLC

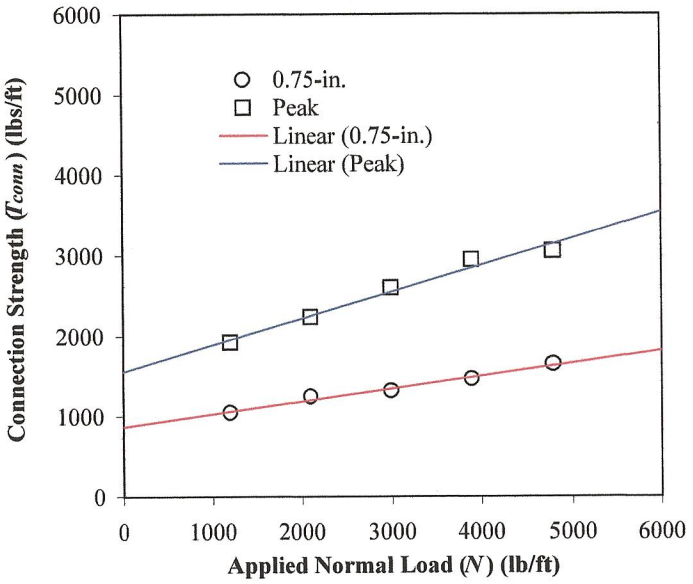
DATE REPORTED:	10/5/2010
FIGURE NO.	C-2
PROJECT NO.	SGI10008
DOCUMENT NO.	
FILE NO.	

C10008-08.CN.xls

EARTH REINFORCEMENT TECHNOLOGIES, LLC
CONNECTION STRENGTH TESTING (ASTM D 6638)

HTG 80 geogrid in machine direction between two courses of Trinity blocks with channels and compacted AASHTO #57 stone within block apertures and space between blocks (no connectors in channels)





Test No.	Test Specimen Width (in.)	Test Normal Stress (psi)	Equivalent Normal Load (lb/ft)	Approx. No. of Blocks	Approx. Wall Height (ft)	0.75-in. Strength (lb/ft)	Peak Strength (lb/ft)	Connection Strength Equations (T_{conn})
3A	32.0	8.3	1200	15	10.0	1050	1920	
3B	32.0	14.6	2100	26	17.5	1247	2236	$T_{0.75\text{-in.}} = 875 + (N) \tan(9°)$
3C	32.0	20.8	3000	38	25.0	1321	2596	
3D	32.0	27.1	3900	49	32.5	1463	2947	$T_{peak} = 1560 + (N) \tan(18°)$
3E	32.0	33.3	4800	60	40.0	1649	3053	

NOTES:

Dimensions of Block:	18 in. wide by 12 in. long and 8 in. high.
Weight of Full-Size Block:	75 lbs
Approximate Unit Weight of Facing (Block and Gravel):	120 pcf
Failure Mode:	Abrasion and rupture of geogrid ribs in each test.

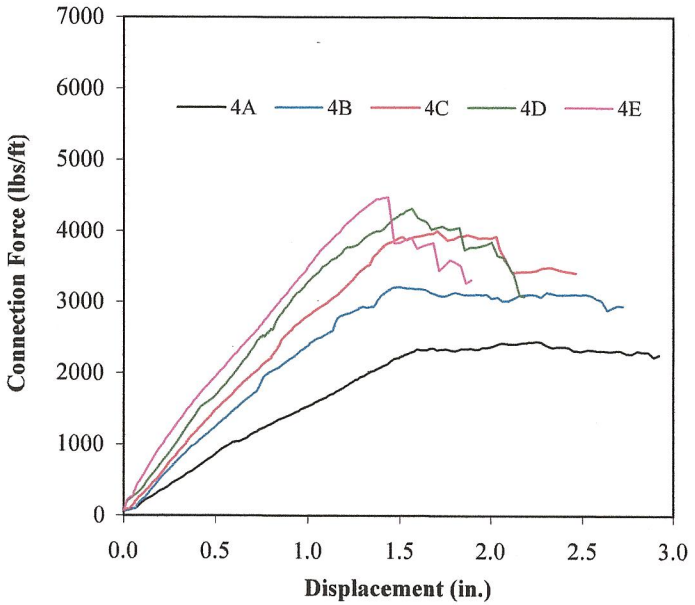
DATE REPORTED: 11/18/2010

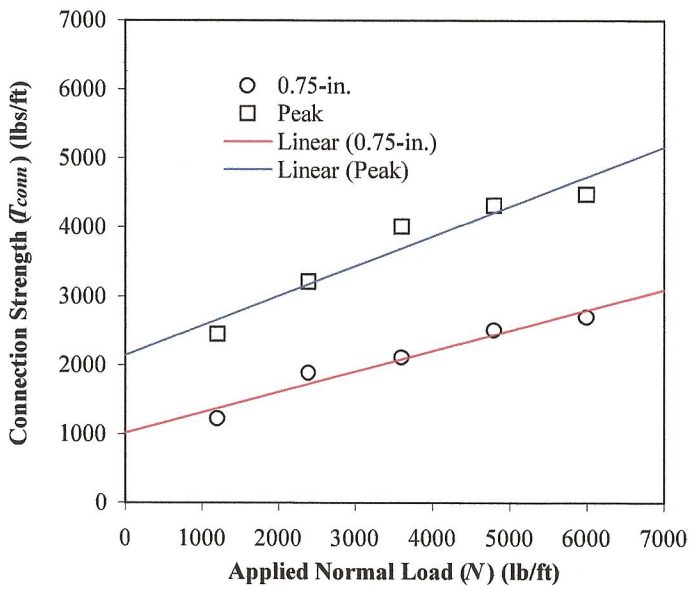
SGI TESTING SERVICES, LLC

FIGURE NO.	C-3
PROJECT NO.	SGI10008
DOCUMENT NO.	
FILE NO.	

EARTH REINFORCEMENT TECHNOLOGIES, LLC
CONNECTION STRENGTH TESTING (ASTM D 6638)

HTG 120 geogrid in machine direction between two courses of Trinity blocks with channels and compacted AASHTO #57 stone within block apertures and space between blocks (no connectors in channels)





Test No.	Test Specimen Width (in.)	Test Normal Stress (psi)	Equivalent Normal Load (lb/ft)	Approx. No. of Blocks	Approx. Wall Height (ft)	0.75-in. Strength (lb/ft)	Peak Strength (lb/ft)	Connection Strength Equations (T_{conn})
4A	32.0	8.3	1200	15	10.0	1225	2450	
4B	32.0	16.7	2400	30	20.0	1893	3214	$T_{0.75\text{-in.}} = 1020 + (N) \tan(17°)$
4C	32.0	25.0	3600	45	30.0	2112	4009	
4D	32.0	33.3	4800	60	40.0	2510	4322	$T_{peak} = 2145 + (N) \tan(23°)$
4E	32.0	41.7	6000	75	50.0	2695	4483	

NOTES:

Dimensions of Block:	18 in. wide by 12 in. long and 8 in. high.
Weight of Full-Size Block:	75 lbs
Approximate Unit Weight of Facing (Block and Gravel):	120 pcf
Failure Mode:	Abrasion and rupture of geogrid ribs in each test.

SGI TESTING SERVICES, LLC

DATE REPORTED:	11/22/2010
FIGURE NO.	C-4
PROJECT NO.	SGI10008
DOCUMENT NO.	
FILE NO.	