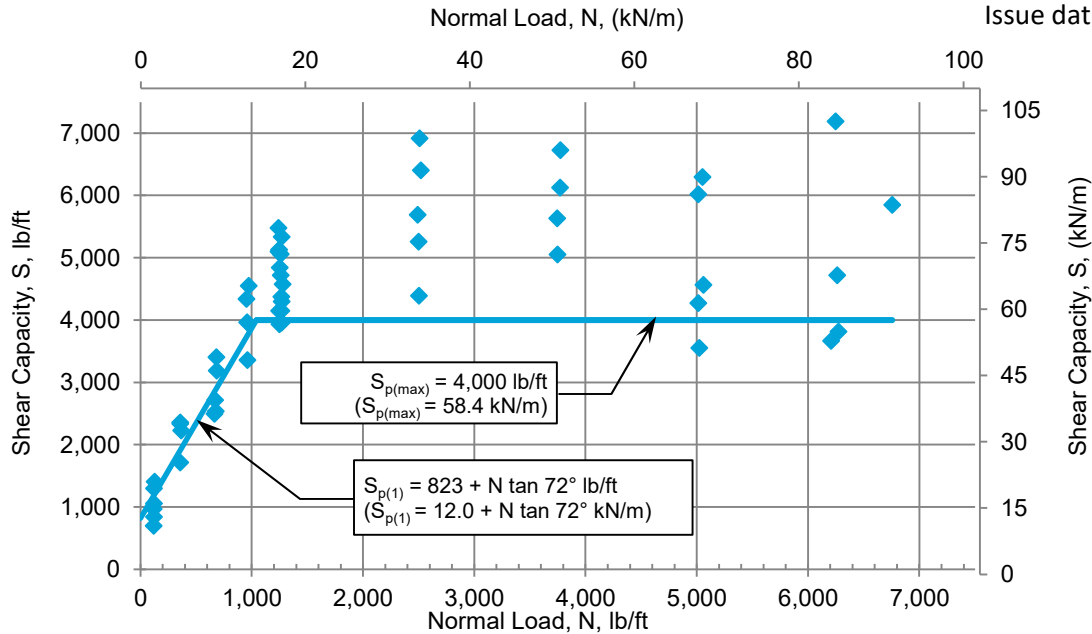


INTERFACE SHEAR CAPACITY



Peak Shear Envelope:^(a)

$$S_p = 823 \text{ lb/ft} + N \tan 72^\circ \leq 4,000 \text{ lb/ft}$$

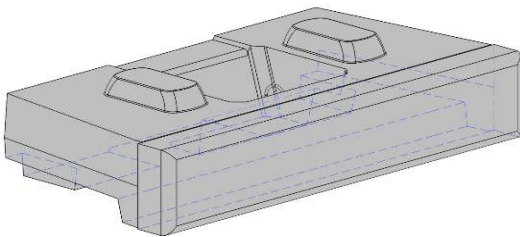
$$(S_p = 12.0 \text{ kN/m} + N \tan 72^\circ \leq 58.4 \text{ kN/m})$$

Inflection Point:

$$N = 1040 \text{ lb/ft (15.2 kN/m)}$$

$$S = 4,000 \text{ lb/ft (58.4 kN/m)}$$

NW-R NOVUM WALL RETAINING BLOCK WITH GEOGRID INCLUSION



(a) The equations for peak shear envelope represent the slope of the trend line of the raw data. Because most test blocks had compressive strengths values at the time of testing above the minimum specified 28-day value for Novum Wall™ blocks of 4,000 psi (27.6 MPa) and the data points at larger normal loads are quite variable, a maximum shear capacity of 4,000 lb/ft (58.4 kN/m) was selected. No further adjustments have been made. Appropriate factors of safety for design should be added.

(b) The average 28-day compressive strength of concrete test blocks ranged from 2,840 psi (19.6 MPa) to 4,520 psi (31.2 MPa), with an average of 3,971 psi (27.4 MPa). The average compressive strength at testing date ranged from 3,510 psi (24.2 MPa) to 5,980 psi (41.2 MPa), with an average of 5,017 psi (34.6 MPa). The data reported represents the actual laboratory test results.

INTERFACE SHEAR DATA^(b)

Test No.	Normal Load		Peak Shear		Observed Failure	Test No.	Normal Load		Peak Shear		Observed Failure
	lb/ft	kN/m	lb/ft	kN/m			lb/ft	kN/m	lb/ft	kN/m	
Mirafi 3XT											
1	122	1.8	1,063	15.5	Crushed Groove	9	684	10.0	3,191	46.6	Broken Knobs
2	357	5.2	2,341	34.2	Crushed Groove	10	1,261	18.4	5,060	73.8	Broken Knob
3	1,259	18.4	4,724	68.9	Broken Knob	11	2,509	36.6	6,920	101.0	Broken Blocks
4	118	1.7	973	14.2	Crushed Groove	12	3,748	54.7	5,059	73.8	Broken Blocks
5	681	9.9	3,410	49.8	Broken Knobs	13	5,014	73.2	6,023	87.9	Broken Blocks
6	1,241	18.1	5,485	80.0	Broken Knobs	14	6,208	90.6	3,669	53.5	Broken Blocks
7	126	1.8	1,413	20.6	Crushed Groove	15	6,274	91.6	3,817	55.7	Broken Blocks
8	973	14.2	4,554	66.5	Broken Knobs						