

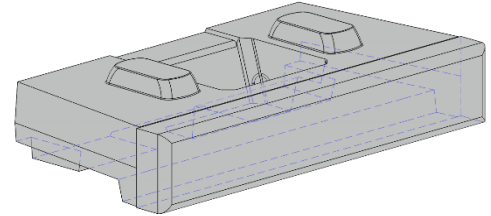
Test Method: ASTM D6916 & NCMA SRWU-2

Tested by: Aster Brands | 10/27-11/14, 2023

INTERFACE SHEAR DATA^(a)

Test No.	Normal Load		Peak Shear		Observed Failure
	lb/ft	kN/m	lb/ft	kN/m	
1	125	1.8	1,790	26.1	Crushed Groove
2	571	8.3	3,401	49.6	Broken Knob
3	272	4.0	3,565	52.0	Broken Knobs
4	1,277	18.6	5,079	74.1	Broken Knobs
5	2,464	36.0	4,775	69.7	Broken Blocks
6	3,829	55.9	5,433	79.3	Broken Blocks
7	125	1.8	3,533	51.6	Broken Knobs
8	248	3.6	3,606	52.6	Broken Knobs
9	367	5.4	3,546	51.7	Broken Knob
10	854	12.5	3,681	53.7	Crushed Groove
11	1,253	18.3	5,650	82.5	Broken Knobs
12	127	1.9	2,499	36.5	Broken Knob
13	252	3.7	2,239	32.7	Broken Knobs
14	378	5.5	3,911	57.1	Broken Knob
15	500	7.3	3,947	57.6	Broken Knob
16	1,060	15.5	4,861	70.9	Broken Block
17	3,137	45.8	6,076	88.7	Broken Block
18	2,172	31.7	4,186	61.1	Broken Block
19	1,252	18.3	4,934	72.0	Broken Block
20	1,877	27.4	5,008	73.1	Broken Blocks

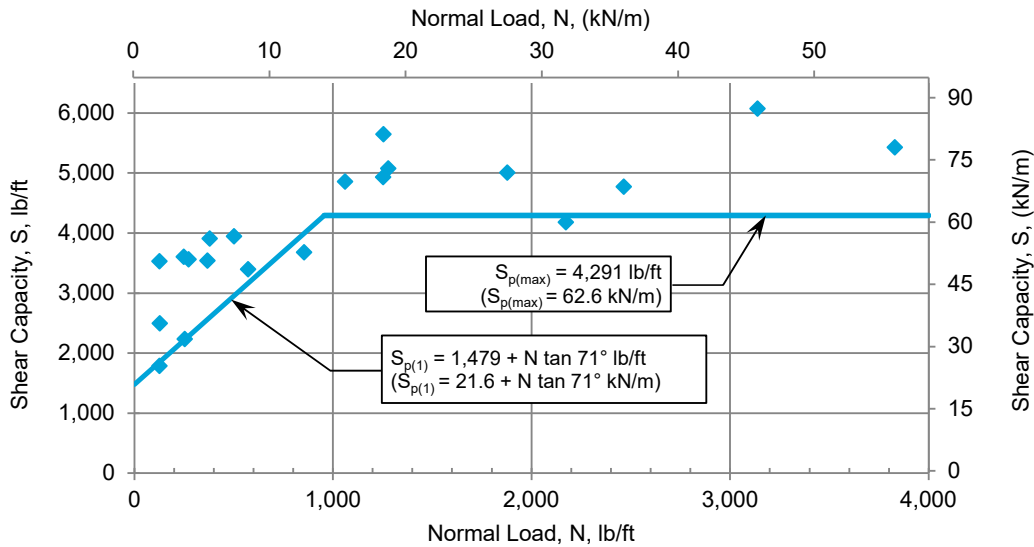
NW-R NOVUM WALL RETAINING BLOCK 5.2° FACE BATTER



The information contained in this report has been compiled by Aster Brands as a recommendation of peak interface shear capacity. It is accurate to the best of our knowledge as of the date of its issue. However, final determination of the suitability of any design information and the appropriateness of this data for a given design purpose is the sole responsibility of the user. No warranty of performance is expressed or implied by the publishing of the foregoing laboratory test results.

Issue date: 25-JAN-2024

INTERFACE SHEAR CAPACITY



Peak Shear Envelope:^(b)

$$S_p = 1,479 \text{ lb/ft} + N \tan 71^\circ \leq 4,291 \text{ lb/ft}$$

$$(S_p = 21.6 \text{ kN/m} + N \tan 71^\circ \leq 62.6 \text{ kN/m})$$

Inflection Point:

$$N = 956 \text{ lb/ft (14.0 kN/m)}$$

$$S = 4,291 \text{ lb/ft (62.6 kN/m)}$$

(a) The average 28-day compressive strength of concrete test blocks ranged from 4,130 psi (28.5 MPa) to 4,600 psi (31.7 MPa), with an average of 4,220 psi (29.1 MPa). The average compressive strength at testing date ranged from 4,680 psi (32.3 MPa) to 5,330 psi (36.8 MPa), with an average of 5,020 psi (34.6 MPa). The data reported represents the actual laboratory test results.

(b) The equations for peak shear envelope represent the slope of the trend line of the raw data. Because all 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), lower bound values were used for the recommended shear capacity envelope and the peak shear capacity was normalized proportionally by the compressive strength of the concrete. No further adjustments have been made. Appropriate factors of safety for design should be added.