



# METALLURGICAL, INC.

Testing & Consulting Services

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Date July 25

Job No. 7EM-477

P.O. No. Verbal

Company StoneHardscapes

## TEST RESULTS

Espresso- Tumbled

### Compressive Strength to ASTM-C 170

	Item #	Load - Lbs	Stress - Lbs/in.2
WET TRANSVERSE	1	5000	5,752
	2	5300	6,199
	3	5300	6,773
	4	5600	6,985
	5	5600	6,953
<b>Stress Average</b>			<b>6,533</b>

	Item #	Load - Lbs	Stress - Lbs/in.2
WET LONG	6	7700	9,171
	7	9000	9,993
	8	8200	9,188
	9	7500	8,072
	10	8000	9,568
<b>Stress Average</b>			<b>9,199</b>

	Item #	Load - Lbs	Stress - Lbs/in.2
DRY TRANSVERSE	11	5300	5,605
	12	9300	9,816
	13	6100	6,316
	14	5700	6,028
	15	11600	15,596
<b>Stress Average</b>			<b>8,672</b>

	Item #	Load - Lbs	Stress - Lbs/in.2
DRY LONG	16	8700	9,402
	17	8600	9,434
	18	7700	8,373
	19	13500	16,516
	20	8100	10,460
<b>Stress Average</b>			<b>10,837</b>

### Water Absorption & Density to ASTM-C 97

Water Absorption, % 1.215

Bulk Density 2.50

### Co-Efficient of Friction to ASTM-C 1028

Wet 0.68

Dry 0.66

PASS

### Freeze & Thaw to ASTM-C 666

Notes No cracks or deformation noted.

Results PASS

By \_\_\_\_\_

Frank Grate