

## Las Vegas Rock Technical Data for Landscape Materials

**Scratch Hardness Based on MOHS Scale: H = 5 1/2 - 6**

Specific Gravity and Absorption of Coarse Aggregate (AASFTO: T-85/ASTM C-127)		
Bulk Specific Gravity	=	2.31
Bulk Specific Gravity (SSD)	=	2.39
Apparent Specific Gravity	=	2.50
Absorption (%)	=	3.25

### REPORT OF DETERMINATION

COMPREHENSIVE STRENGTH OF NATURAL BUILDING STONE  
ASTM DESIGNATION: C170-90

Precut Cubes (Approximately 2 x 2 x 2)

SAMPLE NO.	PRETEST CONDITIONING	DIRECTION OF LOADING	AREA SQ. IN.	CORRECTED TOTAL LOAD IN LBS.	COMPRESSIVE STRENGTH PSI
1A	Saturated	1	3.97	20859	5250
1B	Saturated	1	4.00	30569	7640
1C	Saturated	1	3.74	42117	11260
1D	Saturated	1	4.04	43581	10790
1E	Saturated	1	2.45	32269	13170
<b>AVERAGE:</b>					<b>9620</b>
2A	Saturated	2	3.92	46211	11790
2B	Saturated	2	3.98	35631	8950
2C	Saturated	2	4.04	25209	6240
2D	Saturated	2	2.48	26258	10590
2E	Saturated	2	2.44	23944	9810
<b>AVERAGE:</b>					<b>9480</b>
1A	Dry	1	3.72	29362	11790
1B	Dry	1	4.05	39191	8950
1C	Dry	1	3.74	56178	6240
1D	Dry	1	3.75	34187	10590
1E	Dry	1	4.00	32309	9810
<b>AVERAGE:</b>					<b>9480</b>
2A	Dry	2	4.02	30707	7640
2B	Dry	2	3.96	35888	9060
2C	Dry	2	3.76	30806	8190
2D	Dry	2	3.99	46980	11770
2E	Dry	2	3.97	42948	10820
<b>AVERAGE:</b>					<b>9500</b>

\* (1) Load Perpendicular to bedding or rift

\* (2) Load parallel to bedding or rift



**MODULUS OF RUPTURE OF DIMENSION STONE**  
ASTM DESIGNATION: C99-87

Precut Prisms

SAMPLE NO.	PRETEST CONDITIONING	DIRECTION OF LOADING	SPAN in. L	WIDTH in. b	THICKNESS in. d	BREAKING LOAD, LBS.	MODULUS OF RUPTURE psi
1A	Saturated	1	7	3.97	1.70	2053	1879
1B	Saturated	1	7	3.85	1.85	2250	1793
1C	Saturated	1	7	4.02	1.95	1919	1318
1D	Saturated	1	7	3.86	1.77	2369	2057
1E	Saturated	1	7	4.80	2.12	2182	1062
<b>AVERAGE:</b>							<b>1625</b>
2A	Saturated	2	7	3.69	1.71	1974	1921
2B	Saturated	2	7	3.70	1.68	2033	2044
2C	Saturated	2	7	3.63	1.85	2350	1986
2D	Saturated	2	7	3.96	2.02	2903	1886
2E	Saturated	2	7	4.02	1.80	2330	1878
<b>AVERAGE:</b>							<b>1945</b>
1A	Dry	1	7	3.09	1.95	1400	1251
1B	Dry	1	7	3.38	1.93	1578	1316
1C	Dry	1	7	3.35	1.28	1460	2793
1D	Dry	1	7	3.62	2.15	1440	904
1E	Dry	1	7	3.18	1.98	1657	1396
<b>AVERAGE:</b>							<b>1525</b>
2A	Dry	2	7	3.70	2.20	2804	1694
2B	Dry	2	7	3.80	1.67	2172	2152
2C	Dry	2	7	3.69	1.86	2310	1900
2D	Dry	2	7	3.87	1.92	2310	1700
2E	Dry	2	7	3.65	1.71	1934	1902
<b>AVERAGE:</b>							<b>1860</b>

\* (1) Load perpendicular to bedding or rift

\* (2) Load parallel to bedding or rift

**WATER ABSORPTION AND DENSITY (ASTM C-97)**

Samples were dried in a well ventilated oven for 24 hours at 221° F, then cooled and weighed. The samples were then immersed in distilled water for 48 hours. Samples were removed from the water, wiped dry and immediately reweighed.

SAMPLE ID.	DRY WEIGHT grams	WET WEIGHT grams	SUSPENDED IN WATER WT. grams	PERCENT WATER ABSORPTION	SPECIFIC GRAVITY	DENSITY lbs./cu. ft.
A	326.3	335.2	194.9	2.73%	2.326	145.13
B	286.6	294.1	167.5	2.62%	2.264	141.26
C	295.8	303	176.3	2.43%	2.335	145.68
F	310.6	320	185.5	3.03%	2.309	144.10
H	347.9	350.8	214.4	0.83%	2.551	159.16
K	304	313.3	178.9	3.06%	2.262	141.14
I	311.7	323.4	184.2	3.75%	2.239	139.73
J	393.6	408.9	230.4	3.89%	2.205	137.59

ASTM C 616  
Requirements:  
ASTM C 616  
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ASTM C 616  
Requirements:

Absorption by weight, max, 20-Type I Sandstone  
%:

Absorption by weight, max, 3-Type II Quartzitic  
%: Sandstone

Absorption by weight, max, 1-Type III Quartzite  
%:

Density, min., (lb / cu.ft.): 135-Type I Sandstone

Density, min., (lb / cu.ft.): 150-Type II Quartzitic  
Sandstone

Density, min. (lb /cu.ft.): 160-Type III Quartzite

