



American Granite Curb Producers

Chester Gray Granite

Client:	Williams Stone Company, Inc.	Project:	Chester Gray Granite
Item:	Chester Gray Granite	Project Number:	120597
Source:	Williams Stone Company, Inc.	Lab Number:	12-0797A
Date Sampled:	Sept. 2012	Sampled By:	Client
Date Tested:	Sept. 2012	Tested By:	Kevin Parrish

Report of Compressive Strength of Dimension Stone							
Test Method: ASTM C170							
Stone Type: Fine-Grained Granite w/ Faintly Discernable Fabric Orientation							
Specimen	Fabric Dip	Height	Width 1	Width 2	Area in ²	Load, lbs	Compressive Strength, psi
A	90	3.048	2.964	2.987	8.85	273760	30900
B	90	3.010	2.970	2.968	8.81	281690	32000
C	90	3.038	2.970	2.982	8.86	264460	29900
D	90	2.979	2.987	2.980	8.90	238570	26800
E	90	2.986	2.973	2.973	8.83	267150	30200
Avg							30000

- All dimensions in inches. Height to width ratio was approximately 1:1.
- Specimens were tested in an air-dry condition.
- The dip of the rock fabric (layering and/or mineral elongation) is the angle between horizontal and the fabric, as tested. Load was applied in a vertical direction.

Report of Flexural Strength of Dimension Stone Testing						
Test Method: ASTM C 880						
Stone Type: Granite		Preconditioning Procedure: Oven Dried at 140 F for 48 Hours				
Sample#	Dry Weight (g)	Span (in.)	Width (in.)	Depth (in.)	Load lbs.	Flexural Strength
1	3319.0	12.50	4.00	1.25	1324	1986
2	3168.5	12.50	4.00	1.25	1135	1702
3	3202.0	12.50	4.00	1.25	1268	1902
4	3246.0	12.50	4.00	1.25	1235	1852
5	3405.2	12.50	4.00	1.25	1380	2070
Avg						1902

- Standard Deviation 139.4
- Specimens were saw-cut for testing by the client
- The rift direction of the stone as tested was perpendicular to the load and parallel to the length of the specimens.

Absorption and Bulk Specific Gravity of Dimension Stone						
Test Method: ASTM C97						
Sample Number	Dry Weight	SSD Weight	Weight in Water	Absorption, % of Dry Weight	Bulk Specific Gravity	Units Weight lbs/cu ft
1	1186.48	1188.58	743.92	0.18	2.668	166.58
2	1178.48	1180.68	738.95	0.19	2.668	166.56
3	1179.19	1181.22	739.40	0.17	2.669	166.62
4	1168.97	1171.09	732.91	0.18	2.668	166.55
5	1168.48	1170.57	732.74	0.18	2.669	166.61
Avg				0.18	2.668	166.58

*Saturated surface-dry. All weights are in grams.



800.253.8168
fletchergranite@granitesofamerica.com
www.fletchergranite.com



336.786.5141
sales@ncgranite.com
www.ncgranite.com



603.225.2783
info@swensongranite.com
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413.269.4544
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Modulus of Rupture of Dimension Stone				
Test Method: ASTM C99				
Stone Type: Granite		Preconditioning Procedure: Dry		
Sample#	Width (in.)	Thickness, (in.)	Breaking Load, lbs.	Modulus of Rupture, psi
1	4.00	2.25	6550	3396
2	4.00	2.25	4400	2281
3	4.00	2.25	6280	3256
4	4.00	2.25	6150	3189
5	4.00	2.25	5880	3049
Avg				3034

- Rift perpendicular to load and parallel to length.
- Test span length 7.0 inches



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Chester Gray Granite

Client:	Williams Stone Company, Inc.	Project:	Chester Gray Granite
Item:	Chester Gray Granite	Project Number:	120597
Source:	Williams Stone Company, Inc.	Lab Number:	12-0797B
Date Sampled:	Sept. 2012	Sampled By:	Client
Date Tested:	Sept. 2012	Tested By:	Kevin Parrish

Report of Compressive Strength of Dimension Stone							
Test Method: ASTM C170							
Stone Type: Fine-Grained Granite with Faintly Discernable Fabric Orientation							
Specimen	Fabric Dip	Height	Width 1	Width 2	Area in ²	Load, lbs	Compressive Strength, psi
A	90	3.032	2.975	2.963	8.81	237960	27000
B	90	3.004	2.975	2.969	8.83	211600	24000
C	90	2.992	2.967	2.966	8.80	233440	26500
D	90	3.017	2.972	2.966	8.81	199900	22700
E	90	3.011	2.994	2.972	8.90	223490	25100
Avg							25100

- All dimensions in inches. Height to width ratio was approximately 1:1.
- Specimens were tested in a saturated condition.
- The dip of the rock fabric (layering and/or mineral elongation) is the angle between horizontal and the fabric, as tested. Load was applied in a vertical direction.

Report of Flexural Strength of Dimension Stone Testing						
Test Method: ASTM C 880						
Stone Type: Granite		Preconditioning Procedure: Soaked for 48 Hours				
Sample#	SSD Weight (g)	Span (in.)	Width (in.)	Depth (in.)	Load lbs.	Flexural Strength
1	3312.2	12.50	4.00	1.25	927	1390
2	3185.0	12.50	4.00	1.25	815	1223
3	3257.0	12.50	4.00	1.25	880	1321
4	3314.0	12.50	4.00	1.25	927	1390
5	3197.0	12.50	4.00	1.25	853	1279
Avg						1321

- Standard Deviation 72.4
- Specimens were saw-cut for testing by the client
- The rift direction of the stone as tested was perpendicular to the load and parallel to the length of the specimens.

Modulus of Rupture of Dimension Stone				
Test Method: ASTM C99				
Stone Type: Granite		Preconditioning Procedure: Wet		
Sample#	Width (in.)	Thickness, (in.)	Breaking Load, lbs.	Modulus of Rupture, psi
1	4.00	2.25	3800	1970
2	4.00	2.25	3640	1887
3	4.00	2.25	3440	1784
4	4.00	2.25	5150	2670
5	4.00	2.25	3450	1789
Avg				2020

- Rift perpendicular to load and parallel to length.
- Test span length 7.0 inches



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