



INDIANA GEOLOGICAL SURVEY

611 N. Walnut Grove Ave., Bloomington, IN 47405-2208 · (812) 855-7636
http://igs.indiana.edu · IGSinfo@indiana.edu

The Indiana Geological Survey performed ASTM tests C97 Absorption and Bulk Specific Gravity, C99 Modulus of Rupture, C170 Compressive Strength, C880 Flexural Strength of Dimension Stone, and C241 Standard Test for Abrasion Resistance of Stone on specimens of Salem limestone known as Independent Buff. Originating from Bybee Stone Co. Analysis was completed on September 8, 2010.

Tests C99, C170, and C880 were completed with a model 60 BTE Baldwin-Satec hydraulic press using the required fixtures and procedures for these tests. ASTM standard E-4 is used to calibrate the press yearly. The resulting values for these tests are included below.

Sincerely,

Drew M. Packman

Materials Testing Coordinator

Indiana Geological Survey

Independent Buff

Table with 7 columns: C-97, Mean Values, Absorption (%), Bulk Specific Gravity, Dry Wt. (g), Soaked Wt. in Air (g), Soaked Wt. in Water (g). Rows include individual samples (001-006), AVG, LOW, and HIGH.



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C-241 *Mean Values*

Perpendicular	Abrasion Resistance	Weight Lost (g)	Avg Samp Weight
001	6.8	3.46	141.78
002	7.4	3.19	134.65
003	7.2	3.29	135.89

Parallel	Abrasion Resistance	Weight Lost (g)	Avg Samp Weight
004	4.7	5.02	125.38
005	6.2	3.77	124.76
006	6.1	3.85	126.07

C-99 *Mean Values*

Wet Perpendicular (psi)

001	1493
002	1195
003	1424
004	1501
005	1109
AVG	1345

Wet Parallel (psi)

006	1175
007	1194
008	1080
009	1160
010	1125
AVG	1147

Dry Perpendicular (psi)

011	1226
012	1313
013	1121
014	1076
015	1295
AVG	1206



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Dry Parallel (psi)

016	1112
017	1227
018	1004
019	1188
020	1214
AVG	1149

C170

Mean Values

Dry parallel (psi)

001	4800	Low 4800
002	6500	High 6900
003	6900	Avg. 5740
004	5400	
005	5100	

Dry Perpendicular (psi)

006	5600	Low 5300
007	5300	High 6800
008	6800	Avg. 5800
009	5800	
010	5500	

Wet parallel (psi)

011	5400	Low 4700
012	5300	High 5400
013	4800	Avg. 5120
014	5400	
015	4700	



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Wet Perpendicular (psi)

016	5900	Low 4900
017	4900	High 5900
018	5400	Avg. 5280
019	5100	
020	5100	

C880

Wet Perpendicular (psi)

001	928
002	863
003	867
004	937
005	958
AVG	911

Wet Parallel (psi)

006	877
007	909
008	936
009	976
010	913
AVG	922

Dry Perpendicular (psi)

011	940
012	1053
013	924
014	835
015	938
AVG	938



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Dry Parallel (psi)

016	967
017	1009
018	1034
019	977
020	960
AVG	989



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