



**NATIONAL  
CONCRETE MASONRY  
ASSOCIATION**

Sustainable Concrete Products for Structures and Hardscapes

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**ASTM C 140 Test Report**

Job No.: 07-270-2  
Report Date: 4/9/2007

Client: Allied Concrete  
Address: 1000 Harris St Box 1647  
Charlottesville, VA 22902

Testing Agency: National Concrete Masonry Association  
Address: Research and Development Laboratory  
13750 Sunrise Valley Drive  
Herndon, VA 20171-4662

Unit Specification: ASTM C90-06

Sampling Party: Allied Concrete

Unit Designation/Description:  
12" Double Corner  
Concrete Masonry Unit

**Summary of Test Results**

Physical Property	Specified Values	Average Test Results		Physical Property	Specified Values	Average Test Results	
		Results	Units			Results	Units
Net Compressive Strength	1900 min	2590	psi	Min. Faceshell Thickness ( $t_{fs}$ )	1.25 min	1.60	in.
Gross Compressive Strength	****	1260	psi	Min. Web Thickness ( $t_w$ )	1.13 min	1.5	in.
Density	****	98.8	pcf	Equivalent Web Thickness	2.5 min	3.5	in.
Absorption	18 max	13.8	pcf	Equivalent Thickness	****	5.7	in.
Percent Solid	****	48.6	%	Max. Var. from Spec. Dimensions	.125 max	0.06	in.
				Net Cross-Sectional Area	****	88.5	in <sup>2</sup>
				Gross Cross-Sectional Area	****	181.9	in <sup>2</sup>

**Individual Unit Test Results**

Specimen No.	Received Wt, $W_R$ lb	Cross-Sectional Area *		Max. Load lb	Compressive Strength	
		Gross in <sup>2</sup>	Net in <sup>2</sup>		Gross psi	Net psi
		#1	41.25		181.91	88.47
#2	39.77	181.91	88.47	222260	1220	2510
#3	39.74	181.91	88.47	230010	1260	2600
Average	40.25	181.91	88.47	229530	1260	2590

\* Unit areas determined as the average of the three absorption units and are assumed to be the same as those units tested in compression.

Specimen No.	Avg Width	Avg Height	Avg Length	Avg./Min. $t_{fs}$ **	Min. $t_w$
	in.	in.	in.	in.	in.
	#4	11.66	7.66	15.62	1.60
#5	11.65	7.56	15.62	1.59	1.50
#6	11.64	7.61	15.62	1.60	1.50
Average	11.65	7.61	15.62	1.60	1.50

\*\*Where the thinnest point of opposite face shells differ in thickness by less than 0.125 inches, their measurements are averaged.

Specimen No.	Received Wt, $W_R$	Immersion Wt, $W_I$	Saturated Wt, $W_S$	Oven-Dry Wt, $W_D$	Absorp pcf	Density pcf	Net Volume ft <sup>3</sup>	Percent Solid %
	lb	lb	lb	lb				
#4	39.89	19.60	43.94	38.54	13.8	98.8	0.3901	48.4
#5	39.82	19.52	43.83	38.47	13.8	98.7	0.3896	48.9
#6	39.69	19.49	43.76	38.44	13.7	98.8	0.3889	48.6
Average	39.80	19.54	43.84	38.48	13.8	98.8	0.3895	48.6

Comments: These tested properties meet the compressive strength, absorption and dimensional requirements of ASTM C 90-06.

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