

ASTM C140/C140M-18a Test Report
Sampling and Testing Concrete Masonry Units and Related Units

Job No.: 20-313A
Report Date: 8/5/2020

Client: Texas Building Products
Address: 3261 Highway 108
Srawn, TX 76475

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

Standard Specification: ASTM C90-16a

Sampling Party: Texas Building Products

Unit Description:
6x8x16 in. CMU
Mark: '0620'

Date Samples Received: 6/17/2020
Project Identification: 0620

Summary of Test Results

	ASTM C90-16a Specified Values	Average Test Results		ASTM C90-16a Specified Values	Average Test Results	
<u>Physical Property</u>			<u>Physical Property</u>			
Net Compressive Strength	2000 min	2330	psi	Min. Faceshell Thickness (t_f)	1.00 min	1.14 in.
Gross Compressive Strength	****	1350	psi	Min. Web Thickness (t_w)	0.75 min	1.17 in.
Density	****	120.4	pcf	Equivalent Web Thickness	****	2.71 in.
Absorption	15 max	12.3	pcf	Normalized Web Area (A_{wn})	6.5 min	29.9 in. ² /ft ²
Percent Solid	****	57.7	%	Equivalent Thickness	****	3.26 in.
Net Cross-Sectional Area	****	50.62	in. ²	Max. Var. from Spec. Dimensions	.125 max	0.105 in.
Gross Cross-Sectional Area	****	87.74	in. ²			

Individual Unit Test Results

Compression Units	Specimen No.	Received Weight lb	Cross-Sectional Area *		Max. Load lb	Compressive Strength	
			Gross in ²	Net in ²		Gross psi	Net psi
			#1	27.10		87.74	50.62
#2	27.18	87.74	50.62	117280	1340	2320	
#3	27.05	87.74	50.62	116140	1320	2290	
Average	27.11	87.74	50.62	118180	1350	2330	

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

Absorption Units	Specimen No.	Avg Width in.	Avg Height in.	Avg Length in.	Minimum Web Height in.	Avg./Min. Face Shell Thickness in.	Min. Web Thickness in.	Minimum Web Area in. ²	Normalized Web Area in. ² /ft ²									
										#4	5.65	7.59	15.52	7.59	1.13	1.17	26.64	30.0
										#5	5.65	7.54	15.56	7.54	1.14	1.17	26.56	29.9
#6	5.65	7.60	15.53	7.60	1.13	1.16	26.52	29.8										
Average	5.65	7.58	15.53	7.58	1.14	1.17	26.57	29.9										

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

Date Tested: 6/30/2020 to 7/2/2020	Specimen No.	Received Weight lb	Immersed Weight lb	Saturated Weight lb	Oven-Dry Weight lb	Absorption pcf	Density pcf	Net Volume ft ³	Percent Solid %									
										#4	27.07	15.64	29.50	26.74	12.4	120.4	0.2221	57.7
										#5	27.09	15.61	29.48	26.74	12.3	120.3	0.2223	58.0
#6	27.00	15.56	29.38	26.66	12.3	120.4	0.2215	57.4										
Average	27.05	15.60	29.45	26.71	12.3	120.4	0.2220	57.7										



Timothy Jones
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