

# CONCRETE MASONRY UNIT TEST REPORT

Report Number: 90111113.0005  
 Service Date: 9/21/2011  
 Report Date: 9/26/2011

**Terracon**  
 Consulting Engineers & Scientists  
 6911 Blanco Rd  
 San Antonio, TX 78216-6164  
 210-641-2112 Reg No: F-3272

## Client

Capitol Products  
 Attn: Steve Muniz  
 7531 N. IH 35  
 Jarrell, Texas 76537

## Project

Concrete Masonry Unit Testing  
 7531 N. IH 35  
 Jarrell, Texas

Project Number: 90111113

## PROJECT INFORMATION AND TEST RESULTS

Sample Identification: 4" x 8" x 16" Medium Weight CMU Units

Terracon Representative: Steve Kosub

### Summary of Tests Results

Physical Property	Specified Values	Average Test		Physical Property	Specified Values	Average Test Results
		Results	Results			
Net Compressive Strength	1900 min	2,450 psi	Min. Faceshell Thickness (FST)	0.75	1.02 in.	
Gross Compressive Strength		1,670 psi	Min. Web Thickness (WT)	0.75	1.01 in.	
Density	105 to 125 pcf	116.02 pcf	Equivalent Web Thickness	1.62	2.34 in.	
Absorption	15 max	12.50 pcf	Equivalent Thickness	--	2.45 in.	
Percent Solid		68.13 psi	Net Cross-Sectional Area	--	38.02 in. <sup>2</sup>	
			Gross Cross-Sectional Area	--	55.80 in. <sup>2</sup>	

### Individual Unit Test Results

	Specimen No.	Received Wt, WR (lb)	Cross-Sectional Area		Max. Load (lb)	Compressive Strength	
			Gross (in. <sup>2</sup> )	Net* (in. <sup>2</sup> )		Gross (psi)	Net (psi)
Compression Units	#1	0.00	55.80	38.02	92,820	1,660	2,440
	#2	0.00	55.80	38.02	91,520	1,640	2,410
	#3	0.00	55.80	38.02	94,990	1,700	2,500
	<b>Average</b>	<b>0.00</b>	<b>55.80</b>	<b>38.02</b>	<b>93,110</b>	<b>1,670</b>	<b>2,450</b>

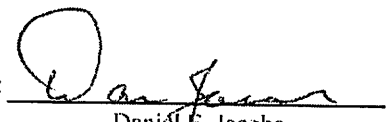
\* Net area determined from absorption specimens unless solid units are used.

	Specimen No.	Avg. Width (in)	Avg. Height (in)	Avg. Length (in)	Avg. min FST (in)	Avg. min WT (in)
Absorption Units	#4	3.600	7.600	15.500	1.01	1.00
	#5	3.600	7.600	15.500	1.03	1.01
	#6	3.600	7.600	15.500	1.02	1.01
	<b>Average</b>	<b>3.600</b>	<b>7.600</b>	<b>15.500</b>	<b>1.02</b>	<b>1.01</b>

Specimen No.	Received Wt, WR** (lb)	Immersed Wt, WI (lb)	Saturated Wt, Ws (lb)	Oven-Dry Wt, Wd (lb)	Absorp. (pcf)	Density (pcf)	Net Volume (ft <sup>3</sup> )	Net Area (in <sup>2</sup> )	Percent Solid (%)	Moisture Content** % of total absorption
#4	19.20	10.84	21.24	19.09	12.90	114.54	0.1667	37.89	67.91	--
#5	20.11	11.37	21.94	19.90	12.04	117.48	0.1694	38.51	69.02	--
#6	19.41	10.96	21.29	19.21	12.56	116.04	0.1655	37.64	67.45	--
<b>Average</b>	<b>19.57</b>	<b>11.06</b>	<b>21.49</b>	<b>19.40</b>	<b>12.50</b>	<b>116.02</b>	<b>0.1672</b>	<b>38.02</b>	<b>68.13</b>	<b>--</b>

\*\* Received weight determined at the time of unit delivery to the job site or from units sampled at that time and delivered to the laboratory. These tested properties meet or exceed the applicable requirements of ASTM C90-11 unless indicated with \*.

Reviewed By:

  
 Daniel E. Jacobs

Senior Project Manager

Our reports are for the exclusive use of the client and distribution noted for this particular project. Our reports represent only the samples taken and locations tested or observed by our personnel. They may not be representative or indicative of apparently identical or similar materials that may be in the close proximity of the test or sample locations. This report shall not be reproduced without written approval of our firm.