

Project No.: WECB-1401

Report Date: February 26, 2016

CONSULTING ENGINEERS

Unit Specification: ASTM C90

Client: Mr. John P. Orsina Address: Westbrook Concrete Block Co., Inc. PO Box 700 Westbrook CT 06498 Westbrook Concrete Block Lab Tests

Date Received: February 3, 2016

Date of Compression Testing: February 24, 2016

Laboratory Number:10- 137761

Unit Designation and Description: Concrete Masonry Unit 8x8x16" Regular Light Weight with Pozzotive

Summary of Test Results

Physical Property	Specification Values	Average Test Results		Physical Property	Specification Values	Average Test Results	
Net Compressive Strength (min.)	2000	3800	psi	Min. Faceshell Thickness (FST)	1.25	1.30	in.
Gross Compressive Strength		2020	psi	Min. Web Thickness (WT)	0.750	1.15	in.
Density		101.9	pcf	Equivalent Web Thickness		2.65	in.
Absorption (max.)	18	12.0	pcf	Equivalent Thickness		4.06	in.
Percent Solid		53.1	%	Normalized Web Area	6.5	31.8	in. <sup>2</sup> /ft. <sup>2</sup>
Net Cross-Sectional Area		63.27	in. <sup>2</sup>	Max. Var. From Spec. Dimensions			in.
Gross Cross-Sectional Area		118.98	in. <sup>2</sup>	Moisture Content			%

Project Name:

Individual Unit Test Results

	с ·	Received Wt, W	Cross-Se	ectional Area		<b>Compressive Strength</b>		
Compression Units	Specimen No.	Received WL, WR	Gross	Net <sup>*</sup>	Max. Load	Gross	Net	
		lb.	in. <sup>2</sup>	in. <sup>2</sup>	lb	psi	psi	
	4	29.48	119.03	63.32	271185	2270	4280	
	5	30.11	119.11	63.15	247925	2080	3920	
	6	29.52	118.80	63.32	203950	1710	3220	
	Average	29.70	118.98	63.27	241020	2020	3800	

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

Absorption Units	Specimen	Average Width	Average Height	Average Length	Average Min. FST	Average Min. WT	Normalized Web Area
	No.	in.	in.	in.	in.	in.	In. <sup>2</sup> /ft <sup>2</sup>
	1	7.65	7.61	15.58	1.30	1.15	31.8
	2	7.65	7.60	15.59	1.31	1.15	31.8
	3	7.63	7.60	15.57	1.30	1.15	31.9
	Average	7.64	7.60	15.58	1.30	1.15	31.8

Specimen No.	Received Wt, W <sub>R</sub> **	Immersed Wt,W <sub>I</sub>	Saturated Wt, W <sub>s</sub>	Oven-Dry Wt, W <sub>D</sub>	Absorption		Density	Net Volume	Net Area	Percent Solid	Moisture Content** % of total
	lb	lb	lb	lb	pcf	%	pcf	ft <sup>3</sup>	in <sup>2</sup>	%	absorption
1	29.72	14.32	31.67	28.33	12.0	11.8	101.9	0.2779	63.15	53.0	
2	30.07	14.47	31.91	28.60	11.8	11.6	102.3	0.2794	63.28	53.3	
3	29.42	14.17	31.45	28.09	12.1	12.0	101.4	0.2768	63.24	53.0	
Average	29.74	14.32	31.68	28.34	12.0	11.8	101.9	0.2781	63.22	53.1	

\*\*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 in sealed containers for moisture content determination.

Remarks: The units were tested according to ASTM C140. This set meets the absorption and compressive strength requirements of ASTM C90

syder

Chas M. Snyder, PE Laboratory Manager

