

Client: Cambridge Pavers, Inc.

Address: PO Box 157

Lyndhurst, NJ 07071

Project No.: LNBC-1601

Report Date: August 17, 2016

Project Name: Cambridge Wallstone Concrete Lab Tests

Date Received: August 3, 2016

Date of Compression Testing: August 16, 2016

Unit Specification: ASTM C1372

Unit Designation and

Description: Segmental Retaining Wall Unit

6" Sigma

Laboratory Number: 10- 142178

## **Summary of Test Results**

Physical Property	Specification Values	Average Test Results		Physical Property	Specification Values	Average Test Results
Net Compressive Strength (min.)	3000	3410	psi	Min. Faceshell Thickness (FST)		in.
Gross Compressive Strength		3240	psi	Min. Web Thickness (WT)		in.
Density		127.2	pcf	Equivalent Web Thickness		in.
Absorption (max.)	13	9.8	pcf	Equivalent Thickness		in.
Percent Solid		95.4	%	Normalized Web Area		in. <sup>2</sup> /ft. <sup>2</sup>
Net Cross-Sectional Area		15.24	in. <sup>2</sup>	Max. Var. From Spec. Dimensions		in.
Gross Cross-Sectional Area		15.97	in. <sup>2</sup>	Moisture Content		%

## **Individual Unit Test Results**

## Tests conducted on reduced size units.

Compression Units

Specimen No.	Received Wt, W	Cross-Se	ectional Area	May Load	Compressive Strength		
	Received Wt, W <sub>R</sub>	Gross	Net <sup>*</sup>	Max. Load	Gross	Net	
	lb.	in. <sup>2</sup>	in. <sup>2</sup>	lb	psi	psi	
4		16.01	15.31	51235	3200	3340	
5		15.87	15.70	48185	3030	3060	
6		16.02	14.71	56380	3510	3830	
Average		15.97	15.24	51930	3240	3410	

 $<sup>\</sup>ensuremath{^{*}}$  Net area determined from absorption specimens unless solid units are used.

Absorption Units

C :		Average	Average Length	Average Min.	Average	Normalized	
Specimen	Average Width	Height	Average Length	FST	Min. WT	Web Area	
No.	in.	in.	in.	in.	in.	In. <sup>2</sup> /ft <sup>2</sup>	
1	2.43	4.13	8.01				
2	2.32	4.17	8.03				
3	2.51	4.15	8.03				
Average	2.42	4.15	8.02				

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	48.11	3.32	6.07	5.60	10.7	8.4	127.1	0.0441	18.55	95.1	
2	48.83	3.22	5.95	5.56	8.9	7.0	127.1	0.0437	18.37	97.7	
3	48.90	3.37	6.18	5.74	9.8	7.7	127.5	0.0450	18.46	93.4	
Average	48.61	3.30	6.07	5.63	9.8	7.7	127.2	0.0443	18.46	95.4	

<sup>\*\*</sup>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 C1372

Chas M. Snyder, PE Laboratory Manager

