

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

Client: Cambridge Pavers, Inc.

Address: PO Box 157

Lyndhurst, NJ 07071

Project Name:

Report Date: August 17, 2016

Project No.: LNBC-1601

Cambridge Wallstone Concrete Lab Tests

Date Received: August 3, 2016

Date of Compression Testing: August 16, 2016

Laboratory Number:10- 142183

Unit Designation and

Description: Segmental Retaining Wall Unit

Unit Specification: ASTM C1372

Ledgestone

Summary of Test Results

Physical Property	Specification Values	Average Test Results		Physical Property	Specification Values	Average Test Results
Net Compressive Strength (min.)	3000	3840	psi	Min. Faceshell Thickness (FST)		in.
Gross Compressive Strength		3740	psi	Min. Web Thickness (WT)		in.
Density		125.5	pcf	Equivalent Web Thickness		in.
Absorption (max.)	13	8.6	pcf	Equivalent Thickness		in.
Percent Solid		98.1	%	Normalized Web Area		in. ² /ft. ²
Net Cross-Sectional Area		15.70	in. ²	Max. Var. From Spec. Dimensions		in.
Gross Cross-Sectional Area		16.12	in. ²	Moisture Content		%

Individual Unit Test Results

Tests conducted on reduced size units.

Compression Units

Specimen No.	Received Wt, W _p	Cross-Se	ectional Area	May Load	Compressive Strength		
	Received Wt, W _R	Gross	Net [*]	Max. Load	Gross	Net	
	lb.	in. ²	in. ²	lb	psi	psi	
4		16.09	15.71	60525	3760	3850	
5		16.11	15.69	63355	3930	4030	
6		16.16	15.69	57370	3550	3650	
Average		16.12	15.70	60420	3740	3840	

 $[\]ensuremath{^{*}}$ Net area determined from absorption specimens unless solid units are used.

Absorption Units

Cancinan		Average	Average Length	Average Min.	Average	Normalized Web Area In. ² /ft ²	
Specimen	Average Width	Height	Average Length	FST	Min. WT		
No.	in.	in.	in.	in.	in.		
1	2.01	4.03	7.99				
2	2.01	4.04	7.97				
3	2.02	4.03	7.94				
Average	2.01	4.03	7.96				

Specimen No.	Received Wt, W _R **	Immersed Wt,W _I	Saturated Wt, W _s	Oven-Dry Wt, W _D	Absorption		Density	Net Volume	Net Area	Percent Solid	Moisture Content** % of total
	lb	lb	lb	lb	pcf	%	pcf	ft ³	in ²	%	absorption
1	28.71	2.68	4.97	4.66	8.4	6.7	127.0	0.0367	15.71	97.9	
2	28.29	2.60	4.88	4.56	8.8	7.0	124.8	0.0365	15.67	97.8	
3	29.05	2.61	4.90	4.58	8.7	7.0	124.8	0.0367	15.73	98.5	
Average	28.68	2.63	4.92	4.60	8.6	6.9	125.5	0.0366	15.71	98.1	

^{**}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 C1372

Chas M. Snyder, PE Laboratory Manager

