

Client: York Building Products Company
Address: Sam Cooke
950 Smile Way
York, PA 17404

Project Name: York Building Products Company

Date Received: February 6, 2020

Date of Compression Testing: February 18, 2020

Date of Absorption Testing: February 19, 2020

Unit Specification: ASTM C1372
Unit Designation and Description: Segmental Retaining Wall Unit
8" Keystone Standard III
Frederick

Testing Technician: TRex

Laboratory Number: 10- 179429

Summary of Test Results

Physical Property	Specification Values	Average Test Results	Physical Property	Specification Values	Average Test Results
Net Compressive Strength (min.)	3000	5790 <i>psi</i>	Min. Faceshell Thickness (FST)		1.70 <i>in.</i>
Gross Compressive Strength		5620 <i>psi</i>	Min. Web Thickness (WT)		1.82 <i>in.</i>
Density		138.9 <i>pcf</i>	Equivalent Web Thickness		11.10 <i>in.</i>
Absorption (max.)	13	6.5 <i>pcf</i>	Equivalent Thickness		<i>in.</i>
Percent Solid	[test coupon]	97.4 %	Normalized Web Area		43.7 <i>in.²/ft.²</i>
Net Cross-Sectional Area	[test coupon]	8.94 <i>in.²</i>	Max. Var. From Spec. Dimensions		<i>in.</i>
Gross Cross-Sectional Area	[test coupon]	9.18 <i>in.²</i>	Moisture Content		%

Individual Unit Test Results

Tests conducted on reduced size units.

Compression Units

Specimen No.	Received Wt, W _R <i>lb.</i>	Cross-Sectional Area		Max. Load <i>lb</i>	Compressive Strength	
		Gross <i>in.²</i>	Net* <i>in.²</i>		Gross <i>psi</i>	Net <i>psi</i>
		4	90.06		9.23	8.82
5	90.28	9.01	8.92	51896	5760	5810
6	89.63	9.29	8.95	51634	5550	5760
Average	89.99	9.18	8.89	51600	5620	5790

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

Absorption Units

Specimen No.	Average Width <i>in.</i>	Average Height <i>in.</i>	Average Length <i>in.</i>	Average Min. FST <i>in.</i>	Average Min. WT <i>in.</i>	Normalized Web Area <i>In.²/ft.²</i>
1	1.52	2.99	5.94	1.68	1.77	42.5
2	1.54	3.01	5.92	1.70	1.86	44.5
3	1.55	2.99	5.89	1.71	1.84	44.1
Average	1.54	3.00	5.92	1.70	1.82	43.7

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**
	<i>lb</i>	<i>lb</i>	<i>lb</i>	<i>lb</i>	<i>pcf</i>	%	<i>pcf</i>	<i>ft.³</i>	<i>in.²</i>	%	% of total absorption
1	90.57	1.19	2.12	2.02	6.7	5.0	135.5	0.0149	8.87	95.6	
2	96.13	1.31	2.28	2.18	6.4	4.6	140.2	0.0155	8.80	98.2	
3	97.35	1.32	2.29	2.19	6.4	4.6	140.9	0.0155	8.86	98.4	
Average	94.68	1.27	2.23	2.13	6.5	4.7	138.9	0.0153	8.84	97.4	

**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

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Samples were obtained and delivered to the lab by the client.



Chas M. Snyder, PE
Laboratory Manager