

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

Project Name: York Building Products

Date Received: September 24, 2020

Date of Compression Testing: November 12, 2020

Date of Absorption Testing: November 4, 2020

Unit Specification: ASTM C1372
Unit Designation and Description: Segmental Retaining Wall Unit
Cornerstone Segmental Wall
Frederick Plant

Testing Technician: T Rex

Laboratory Number: 10- 185637

Summary of Test Results

Physical Property	Specification Values	Average Test Results	Physical Property	Specification Values	Average Test Results
Net Compressive Strength (min.)	3000	9100 <i>psi</i>	Min. Faceshell Thickness (FST)		2.08 <i>in.</i>
Gross Compressive Strength		8650 <i>psi</i>	Min. Web Thickness (WT)		2.13 <i>in.</i>
Density		148.0 <i>pcf</i>	Equivalent Web Thickness		12.80 <i>in.</i>
Absorption (max.)	13	6.3 <i>pcf</i>	Equivalent Thickness		<i>in.</i>
Percent Solid	[of coupons]	95.1 %	Normalized Web Area		36.0 <i>in.²/ft.²</i>
Net Cross-Sectional Area	[of coupons]	8.69 <i>in.²</i>	Max. Var. From Spec. Dimensions		<i>in.</i>
Gross Cross-Sectional Area	[of coupons]	9.14 <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	85.86		9.11	8.68
5	85.64	9.17	8.68	70398	7670	8100
6	86.01	9.13	8.70	85780	9390	9860
Average	85.84	9.14	8.69	79100	8650	9100

* 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	1.50	3.03	5.98	2.09	2.15	36.3
2	1.49	3.05	6.00	2.09	2.13	35.9
3	1.49	3.03	5.99	2.07	2.12	35.7
Average	1.49	3.04	5.99	2.08	2.13	36.0

Specimen No.	Received Wt, W_R ** <i>lb</i>	Immersed Wt, W_I <i>lb</i>	Saturated Wt, W_S <i>lb</i>	Oven-Dry Wt, W_D <i>lb</i>	Absorption		Density <i>pcf</i>	Net Volume <i>ft.³</i>	Net Area <i>in.²</i>	Percent Solid %	Moisture Content** % of total absorption
	<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>	%	
1	86.13	1.44	2.43	2.33	6.3	4.3	146.9	0.0159	8.71		
2	85.36	1.44	2.37	2.27	6.7	4.4	152.3	0.0149	8.67		
3	86.04	1.33	2.27	2.18	6.0	4.1	144.7	0.0151	8.71		
Average	85.84	1.40	2.36	2.26	6.3	4.3	148.0	0.0153	8.70		

**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