

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 Compac  
Frederick

Testing Technician: MPungitore

Laboratory Number: 10- 179427

**Summary of Test Results**

Physical Property	Specification Values	Average Test Results	Physical Property	Specification Values	Average Test Results
Net Compressive Strength (min.)	3000	<b>6550</b> <i>psi</i>	Min. Faceshell Thickness (FST)		<b>1.85</b> <i>in.</i>
Gross Compressive Strength		<b>6340</b> <i>psi</i>	Min. Web Thickness (WT)		<b>1.84</b> <i>in.</i>
Density		<b>143.0</b> <i>pcf</i>	Equivalent Web Thickness		<b>11.20</b> <i>in.</i>
Absorption (max.)	13	<b>7.4</b> <i>pcf</i>	Equivalent Thickness		<i>in.</i>
Percent Solid	[test coupon]	<b>99.0</b> %	Normalized Web Area		<b>33.1</b> <i>in.<sup>2</sup>/ft.<sup>2</sup></i>
Net Cross-Sectional Area	[test coupon]	<b>9.33</b> <i>in.<sup>2</sup></i>	Max. Var. From Spec. Dimensions		<i>in.</i>
Gross Cross-Sectional Area	[test coupon]	<b>9.42</b> <i>in.<sup>2</sup></i>	Moisture Content		%

**Individual Unit Test Results**

**Tests conducted on reduced size units.**

*Compression Units*

Specimen No.	Received Wt, W <sub>R</sub> <i>lb.</i>	Cross-Sectional Area		Max. Load <i>lb</i>	Compressive Strength	
		Gross <i>in.<sup>2</sup></i>	Net* <i>in.<sup>2</sup></i>		Gross <i>psi</i>	Net <i>psi</i>
		4	84.65		9.60	9.03
5	83.86	9.44	9.08	46710	4940	5140
6	82.75	9.23	9.18	69219	7500	7530
<b>Average</b>	<b>83.75</b>	<b>9.42</b>	<b>9.10</b>	<b>59700</b>	<b>6340</b>	<b>6550</b>

\* 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.<sup>2</sup>/ft.<sup>2</sup></i>
1	1.52	2.97	5.89	1.87	1.85	33.5
2	1.49	3.03	5.96	1.88	1.82	32.7
3	1.64	3.03	5.85	1.81	1.84	33.1
<b>Average</b>	<b>1.55</b>	<b>3.01</b>	<b>5.90</b>	<b>1.85</b>	<b>1.84</b>	<b>33.1</b>

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**
	<i>lb</i>	<i>lb</i>	<i>lb</i>	<i>lb</i>	<i>pcf</i>	%	<i>pcf</i>	<i>ft.<sup>3</sup></i>	<i>in.<sup>2</sup></i>	%	% of total absorption
1	75.21	1.29	2.23	2.12	7.3	5.2	140.7	0.0151	9.15	98.4	
2	77.04	1.39	2.35	2.23	7.8	5.4	145.0	0.0154	8.96	99.2	
3	82.48	1.47	2.51	2.39	7.2	5.0	143.4	0.0167	8.96	99.4	
<b>Average</b>	<b>78.24</b>	<b>1.38</b>	<b>2.36</b>	<b>2.25</b>	<b>7.4</b>	<b>5.2</b>	<b>143.0</b>	<b>0.0157</b>	<b>9.02</b>	<b>99.0</b>	

\*\*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