

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

Project Name: York Building Products

Date Received: December 8, 2021

Unit Specification: ASTM C1372

Date of Compression Testing: February 3, 2022

Unit Designation and Description: Segmental Retaining Wall Unit  
Mesa SRW  
Frederick Plant

Date of Absorption Testing: January 26, 2022

Testing Technician: A S Konte

Laboratory Number: 10- 196315

**Summary of Test Results**

Physical Property	Specification Values	Average Test Results	Physical Property	Specification Values	Average Test Results
Net Compressive Strength (min.)	3000	<b>6450</b> <i>psi</i>	Min. Faceshell Thickness (FST)		<i>in.</i>
Gross Compressive Strength		<b>6360</b> <i>psi</i>	Min. Web Thickness (WT)		<i>in.</i>
Density		<b>138.3</b> <i>pcf</i>	Equivalent Web Thickness		<i>in.</i>
Absorption (max.)	13	<b>5.9</b> <i>pcf</i>	Equivalent Thickness		<i>in.</i>
Percent Solid		<b>98.5</b> %	Normalized Web Area		<i>in.<sup>2</sup>/ft.<sup>2</sup></i>
Net Cross-Sectional Area		<b>9.77</b> <i>in.<sup>2</sup></i>	Max. Var. From Spec. Dimensions		<i>in.</i>
Gross Cross-Sectional Area		<b>9.92</b> <i>in.<sup>2</sup></i>	Moisture Content		%

**Individual Unit Test Results**

**Tests conducted on reduced size units.**

Specimen No.	Received Wt, $W_R$ <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		9.89	9.62	61015	6160	6330
5		9.86	9.73	55925	5670	5740
6		10.00	9.94	72585	7250	7300
<b>Average</b>		<b>9.92</b>	<b>9.77</b>	<b>63180</b>	<b>6360</b>	<b>6450</b>

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

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	1.59	3.17	6.17			
2	1.68	3.02	5.98			
3	1.74	2.99	5.92			
<b>Average</b>	<b>1.67</b>	<b>3.06</b>	<b>6.02</b>			

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.<sup>3</sup></i>	Net Area <i>in.<sup>2</sup></i>	Percent Solid %	Moisture Content** % of total absorption
					<i>pcf</i>	%					
1		1.42	2.53	2.42	6.2	4.5	136.0	0.0178	9.58		
2		1.43	2.51	2.41	5.8	4.1	139.2	0.0173	10.06		
3		1.46	2.56	2.46	5.7	4.1	139.5	0.0176	10.16		
<b>Average</b>		<b>1.44</b>	<b>2.53</b>	<b>2.43</b>	<b>5.9</b>	<b>4.3</b>	<b>138.3</b>	<b>0.0176</b>	<b>9.93</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

This report shall not be reproduced, except in full, without prior written approval from Pennoni. The above results relate only to the items tested.  
Samples were obtained and delivered to the lab by the client.



Chas M. Snyder, PE  
Laboratory Manager