Pennoni
PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

Project No.: **YORK-1501**

Report Date: **January 3, 2019**

Client: **Christopher Gifford**
Address: **York Building Products Co. Inc.**
5952 Lincoln Hwy West
Thomasville, PA 17364

Project Name: **York Building Products-Masonry Tests**

Date Received: **December 13, 2018**

Date of Compression Testing: **January 2, 2019**

Unit Specification: **ASTM C1372**

Unit Designation and Description: **Segmental Retaining Wall Unit**
Keystone SRW: CP-CT

Laboratory Number:**10- 167132**

Summary of Test Results

Physical Property	Specification Values	Average Test Results		Physical Property	Specification Values	Average Test Results	
Net Compressive Strength (min.)	3000	**9460**	*psi*	Min. Faceshell Thickness (FST)			*in.*
Gross Compressive Strength		**8760**	*psi*	Min. Web Thickness (WT)			*in.*
Density		**142.6**	*pcf*	Equivalent Web Thickness			*in.*
Absorption (max.)	13	**5.7**	*pcf*	Equivalent Thickness			*in.*
Percent Solid		**97.0**	*%*	Normalized Web Area			$in.^2/ft.^2$
Net Cross-Sectional Area		**7.68**	$in.^2$	Max. Var. From Spec. Dimensions			*in.*
Gross Cross-Sectional Area		**7.92**	$in.^2$	Moisture Content			*%*

Individual Unit Test Results **Tests conducted on reduced size units.**

Compression Units

Specimen No.	Received Wt, W_R	Cross-Sectional Area		Max. Load	Compressive Strength	
		Gross	Net*		Gross	Net
	lb.	$in.^2$	$in.^2$	*lb*	*psi*	*psi*
4		7.76	7.46	72853	9380	9760
5		8.12	7.35	74622	9190	10150
6		7.88	7.18	60849	7720	8470
Average		**7.92**	**7.33**	**69440**	**8760**	**9460**

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

Absorption Units

Specimen No.	Average Width	Average Height	Average Length	Average Min. FST	Average Min. WT	Normalized Web Area
	in.	*in.*	*in.*	*in.*	*in.*	$In.^2/ft^2$
1	1.23	3.08	5.94	2.08	1.87	29.8
2	1.31	2.97	6.01			
3	1.23	3.15	6.01			
Average	**1.26**	**3.06**	**5.99**			

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 absorption
	lb	*lb*	*lb*	*lb*	*pcf*	*%*	*pcf*	ft^3	in^2	*%*	
1	81.26	1.07	1.85	1.78	5.6	3.9	142.4	0.0125	7.26	96.1	
2		1.15	1.98	1.90	6.0	4.2	142.8	0.0133	7.52	98.3	
3		1.11	1.92	1.85	5.4	3.8	142.5	0.0130	7.10	96.4	
Average		**1.11**	**1.92**	**1.84**	**5.7**	**4.0**	**142.6**	**0.0129**	**7.30**	**97.0**	

**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