

## TEST REPORT

*Results of Tests on brick Conducted in accordance with ASTM C67/C67M-18 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile*  
03/15/2020

Name:	Glen-Gery Technical Services 433 South Pottsville Pike Shoemakersville, PA, 19555-0340	Plant:	Pittsburgh Plant			
Phone:	(p) (610) 562-3076	Sampled Date:	02/23/2020			
Report Number:		Fired Date:	02/21/2020			
Description:	<b>Clay/Shale Extruded Cored</b>					
<b>Absorption</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Average</b>
24 Hour Cold Water (%)	3.2	3.3	3.2	2.8	3.3	3.2
5 Hour Boiling Water (%)	3.9	3.7	4	3.5	4.1	3.8
Saturation Coefficient	0.81	0.88	0.82	0.8	0.8	0.82
<b>Compressive Strength</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Average</b>
<i>psi</i>	17,690	22,589	20,419	17,407	20,288	19,679
<i>MPa</i>	122	156	141	120	140	136
<b>IRA (Oven Dried Method)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Average</b>
<i>g/min/30 in.<sup>2</sup></i>	4	5.8	4.4	4.5	4.1	4.6
<b>Efflorescence</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	
<i>Efflorescence Detection</i>	Not Effloresced	Not Effloresced	Not Effloresced	Not Effloresced	Not Effloresced	
<b>Percent Void</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Average</b>
	22	22	22	22	22	22

**The brick represented by the test results shown here comply with the physical property requirements of the standards listed below:**

- ASTM 32 - 13 Standard Specification for Sewer and Manhole Brick (Made from Clay or Shale)  
Grades: SM - SS / MM - MS
- ASTM 62 - 17 Standard Specification for Building Brick (Solid Masonry Units Made From Clay or Shale)  
Class: SW - MW - NW
- ASTM 216 - 19 Standard Specification for Facing Brick (Solid Masonry Units Made From Clay or Shale)  
Grades: SW - MW
- CSA - A82-14 Fired Masonry brick made from clay or shale  
Class: EG - IG



Mike Krzyzanowski  
Technical Services Manager