

TEST REPORT

Results of Tests on brick Conducted in accordance with ASTM C 67-18 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile ASTM C 1405 - 16 Standard Specification for Glazed Brick (Single Fired, Solid Brick Units)

Name:Glen-Gery Technical ServicesPlant:Hanley Plant433 South Pottsville PikeSampled Date:03/19/2021Shoemakersville, PA, 19555-0340Fired Date:03/19/2021Phone:(p) (610) 562-3076Report Number:GGHNP57Description:Clay Glazed Extruded CoredImperviousness:For bricks 6 through 10, no stain could be seen from a distance of 5 feet on or beneath the surface.Opacity:For bricks 1 through 3, no discoloration of the body was visible through the glaze.Autoclave Crazing:For bricks 1 through 3, the glaze did not craze, spall, or crack.Chemical Resistance:For bricks 4 and 5, the color of the glaze did not change.MOHS:Specimens tested having an average MOHS Hardness of 6.Absorption12324 Hour Cold Water (%)2.12.22.22.32.22.4 dour Coefficient0.970.970.970.960.980.97Compressive Strength1212345Averagepsi34,59827,682MPa239191214174168197IRA (Oven Dried Method)12345Averageprovide (Poil pictor)12345Averageprovide (Poil pictor)12345Averageprovide (Poil pictor)1019	12/02/2021								
Phone: Report Number: Opscription:(p) (610) 562-3076 GGHNP57 Clay Glazed Extruded CoredImperviousness: Opacity: Autoclave Crazing: Chemical Resistance: MOHS:For bricks 6 through 10, no stain could be seen from a distance of 5 feet on or beneath the surface. For bricks 1 through 3, no discoloration of the body was visible through the glaze. For bricks 1 through 3, the glaze did not craze, spall, or crack. For bricks 4 and 5, the color of the glaze did not change. Specimens tested having an average MOHS Hardness of 6.Absorption12345Average24 Hour Cold Water (%) Saturation Coefficient2.12.22.22.32.62.35 Hour Boiling Water (%) Saturation Coefficient2.22.32.22.42.72.4May Saturation Coefficient12345AverageMPa239191214174168197IRA (Oven Dried Method)12345Average	Name:	433 South Pott	sville Pike	:	Sampled Date:	03/19/2021			
Opacity: Autoclave Crazing: Chemical Resistance: MOHS:For bricks 1 through 3, no discoloration of the body was visible through the glaze. For bricks 1 through 3, the glaze did not craze, spall, or crack. For bricks 4 and 5, the color of the glaze did not change. Specimens tested having an average MOHS Hardness of 6.Absorption12345Average24 Hour Cold Water (%) Saturation Coefficient2.12.22.22.32.62.35 Hour Boiling Water (%) Saturation Coefficient2.22.32.22.42.72.4Description12345AveragePsi34,59827,68231,09425,21424,34228,586MPa239191214174168197IRA (Oven Dried Method)12345Average	Report Number:	(p) (610) 562-3 GGHNP57	076		-Ired Date:	11/20/2019			
24 Hour Cold Water (%) 2.1 2.2 2.2 2.3 2.6 2.3 5 Hour Boiling Water (%) 2.2 2.3 2.2 2.4 2.7 2.4 Saturation Coefficient 0.97 0.97 0.97 0.96 0.98 0.97 Compressive Strength 1 2 3 4 5 Average psi 34,598 27,682 31,094 25,214 24,342 28,586 MPa 239 191 214 174 168 197 IRA (Oven Dried Method) 1 2 3 4 5 Average	Opacity: Autoclave Crazing: Chemical Resistan	For bricks For bricks ce: For bricks	1 through 3, no d 1 through 3, the g 4 and 5, the color	iscoloration of the glaze did not craze [.] of the glaze did r	body was visible t e, spall, or crack. not change.		eath the surface.		
5 Hour Boiling Water (%) Saturation Coefficient 2.2 2.3 2.2 2.4 2.7 2.4 Saturation Coefficient 0.97 0.97 0.97 0.96 0.98 0.97 Compressive Strength 1 2 3 4 5 Average psi MPa 34,598 239 27,682 191 31,094 214 25,214 174 24,342 24,342 28,586 197 IRA (Oven Dried Method) 1 2 3 4 5 Average	Absorption		1	2	3	4	5	Average	
psi 34,598 27,682 31,094 25,214 24,342 28,586 MPa 239 191 214 174 168 197 IRA (Oven Dried Method) 1 2 3 4 5 Average	5 Hour Boiling Water	(%)	2.2	2.3	2.2	2.4	2.7	2.4	
MPa 239 191 214 174 168 197 IRA (Oven Dried Method) 1 2 3 4 5 Average	Compressive Strength		1	2	3	4	5	Average	
	·	psi			,		,	,	
	IRA (Oven Dried Method)		1	2	3	4	5	Average	
<u> </u>		g/min/30 in.²	1.9	1.8	2	2.2	1.4	1.9	
Efflorescence 1 2 3 4 5	Efflorescence		1	2	3	4	5		
Efflorescence Detection Not Not Not Not Not Effloresced Effloresced Effloresced Effloresced Effloresced Effloresced	Efflorescence Detecti	on							

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

C1405 - 16 Standard Specification for Glazed Brick (Single Fired, Solid Brick Units)

Type: I

Class: Exterior

Mike Krzyzanowski Technical Services Manager



Cushwa в в I с к



BRICKWUKI