

TEST REPORT
THE BISHOP MATERIALS LABORATORY

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Results of Tests on Brick conducted in accordance with ASTM C67-13 Standard Method for Sampling and

Testing Brick and Structural Clay Tile

10/10/2013

Name:	The Belden Brick Company 700 West Tuscarawas Street Canton, OH 44702	Plant:	The Belden Brick Company
Phone:	330-456-0031	Report Number:	BBC-0266
Fax:	330-456-2694	Received Date:	08/15/2013
		Sampled Date:	
		Lot:	
		Product Code:	702007020

Sample Description: **Plt 2, All Shale Spectrum Series Reduced Fire (Face Brick)**

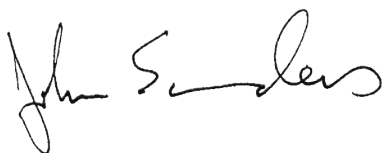
							Test Date
Absorption	1	2	3	4	5	Average	
24 Hour Submersion in Cold Water (%)	0.38	0.42	0.42	0.40	0.40	0.40	09/11/2013
5 Hour Submersion in Boiling Water (%)	0.57	0.52	0.47	0.48	0.51	0.51	
Saturation Coefficient (Ratio of 24H to 5H)	0.66	0.82	0.88	0.83	0.78	0.79	
*Measurement Uncertainty $\pm 0.55\%$							
Compressive Strength	1	2	3	4	5	Average	
<i>psi</i>	19,400	17,581	20,062	18,277	18,556	18,775	09/11/2013
<i>MPa</i>	133.8	121.2	138.3	126.0	127.9	129.5	
*Measurement Uncertainty ± 231 psi							
Efflorescence	11	12	13	14	15		
	Not Effloresced	Not Effloresced	Not Effloresced	Not Effloresced	Not Effloresced		09/16/2013
IRA (Oven-Dried Method)	6	7	8	9	10	Average	
<i>g/min/30 in.²</i>	1.3	0.9	1.4	1.7	1.6	1.4	09/06/2013
*Measurement Uncertainty ± 1.5 g/min/30 in. ²							
Average % Void	22.0						09/06/2013
*Measurement Uncertainty $\pm 0.5\%$							
Abrasion Resistance	1	2	3	4	5	Average	
	0.00	0.00	0.00	0.00	0.00	0.00	09/06/2013

The brick represented by the test results shown here comply with the standards listed below:

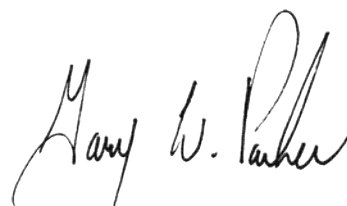
ASTM C 216 - 12 Standard Specification for Facing Brick (Solid Masonry Units Made From Clay or Shale)
Grade: SW, MW, with absorption alternate in section 6.1.2

ASTM C 902 - 12 Standard Specification for Pedestrian and Light Traffic Paving Brick
Class: SX, MX, NX, with absorption alternate in section 4.1.1.1

Type: I, II, III



John Sanders, Ph.D., PE, Director



Gary W. Parker, Laboratory Supervisor

**This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$
The results shown above apply only to the samples tested, which were provided by the customer.
This test report shall not be reproduced except in full, without written approval of the laboratory.*