

To: United Brick & Tile
Division of Sioux City Brick & Tile Company
Attn: Kurt Hanson
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Date: June 16, 2008
Project: 3896802
Report No.: 3896802.7 rev2
Revised: July 7, 2008, July 14, 2008

**Revision: Addition to "Marked" Section, Addition of Compliance Standard
Correction to Open Area Calculation, Correction to Colors**

REPORT OF TESTS ON: 2008 General Testing
SUBMITTED BY: _____
MARKED: Dunes Grey Velour Modular – Clear Burn Modular Group
SAMPLED: _____
DATE RECEIVED: 06/02/2008
DATE TESTED: 06/04/2008 BY: MJ

The following brick have been selected for testing:

Clear Burn Modular Group:	Beige Gray*	Butternut*	Castile Gray*	Charcoal Gray*
	Chateau Gray*	Chestnut*	Clear Buff*	Cocoa*
	Coral Pink*	Dakota Pink*	Dakota Prairie	Deer Valley*
	Desert Blend*^	Dunes Gray*	Elk Creek^	Gas Burn Shades*
	Glacier Gray^	Kodiak*	Marblestone Gray^	Mission Pink*
	Misty Dawn^	Mojave*	Monterey Ironspot	Morning Mist^
	Palomino^	Regency Blend	Santa Fe^	Sedona Ironspot
	Silverstone Gray^	Sterling Gray	White Plains	Winter Park^

* denotes various textures

^ denotes a product which will be manufactured as Hollow Masonry Units (>25% cores)

The above specimen was tested in accordance with Standard Methods of Testing Brick, ASTM C67-07a, for compliance with ASTM C-216-07a and ASTM C652-07.

Compressive Strength:

Sample No.	Width, In.	Depth, In.	Gross Area, sq.in.	Gross Load, Lbs.	Compressive Strength	
					PSI	Mpa
11	3.64	7.76	28.25	324200	11480	79.14
12	3.65	7.71	28.14	331400	11780	81.19
13	3.66	7.71	28.22	328800	11650	80.34
14	3.62	7.66	27.73	363400	13110	90.36
15	3.64	7.67	27.92	340300	12190	84.04
Average	---	---	---	---	12040	83.01

Absorption:

Sample No.	Cold Water Immersion 24 Hr. % Absorption	% Absorption, 5 Hr. Boiling	Saturation Coefficient
1	5.1	5.6	0.91
2	4.6	5.1	0.90
3	4.0	4.4	0.92
4	4.6	5.0	0.92
5	4.2	4.4	0.94
Average	4.5	4.9	0.92

ASTM Efflorescence Test:

Sample No.	Sample Rating
6	Not Effloresced
7	Not Effloresced
8	Not Effloresced
9	Not Effloresced
10	Not Effloresced
Average	Not Effloresced

Initial Rate of Absorption (Suction):

Sample No.	Initial Rate of Absorption (Suction) Gain in Weight (gms) Corrected to Basis of 30 Sq. In. Flatwise Area (193.55 CM ²)
1	8.6
2	5.8
3	5.7
4	6.3
5	5.7
Average Open Area: 6.67 In. ² / (43.06 CM ²) – 24.0% of Gross Area	

Length:

Sample No.	Average Length		Deviation From Group Average	
	Inches	MM	Inches	MM
1	7.62	193.58	-0.05	-1.33
2	7.69	195.20	0.01	0.30
3	7.64	193.98	-0.04	-0.93
4	7.64	194.08	-0.03	-0.83
5	7.64	193.95	-0.04	-0.96
11	7.76	197.23	0.09	2.32
12	7.71	195.80	0.04	0.90
13	7.71	195.93	0.04	1.02
14	7.66	194.55	-0.01	-0.35
15	7.67	194.78	-0.01	-0.13
Group Average	7.67	194.91	---	---

Width:

Sample No.	Average Width		Deviation From Group Average	
	Inches	MM	Inches	MM
1	3.65	92.83	0.02	0.39
2	3.64	92.48	0.00	0.04
3	3.63	92.23	-0.01	-0.21
4	3.62	92.05	-0.02	-0.38
5	3.63	92.15	-0.01	-0.28
11	3.64	92.45	0.00	0.02
12	3.65	92.80	0.01	0.37
13	3.66	92.98	0.02	0.54
14	3.62	91.93	-0.02	-0.51
15	3.64	92.45	0.00	0.02
Group Average	3.64	92.43	---	---

Height:

Sample No.	Average Height		Deviation From Group Average	
	Inches	MM	Inches	MM
1	2.29	58.15	0.00	0.02
2	2.28	57.83	-0.01	-0.31
3	2.28	57.85	-0.01	-0.28
4	2.27	57.75	-0.02	-0.38
5	2.28	57.98	-0.01	-0.16
11	2.32	58.93	0.03	0.79
12	2.31	58.58	0.02	0.44
13	2.29	58.18	0.00	0.04
14	2.29	58.20	0.00	0.07
15	2.28	57.93	-0.01	-0.21
Group Average	2.29	58.14	---	---

Distortion (Warpage):

Sample No.	Maximum Distortion	
	Inches	MM
1	0.03	0.79
2	0.06	1.59
3	0.06	1.59
4	0.06	1.59
5	0.06	1.59
11	0.03	0.79
12	0.06	1.59
13	0.03	0.79
14	0.03	0.79
15	0.03	0.79


Out of Square:

Sample No.	Inches	MM
1	0.03	0.79
2	0.06	1.59
3	0.06	1.59
4	0.06	1.59
5	0.06	1.59
11	0.06	1.59
12	0.03	0.79
13	0.06	1.59
14	0.03	0.79
15	0.06	1.59

The above brick **comply** with the physical test requirements of ASTM C216-07a, Type FBX / Grade SW, and ASTM C652-07, Type HBX / Grade SW.

Respectfully submitted,
STORK Twin City Testing,

MJ:lam
1 pc above



Michael D. Jordt
Senior Engineering Technician