

To: United Brick & Tile
Division of Sioux City Brick & Tile Company
Attn: Kurt Hanson
PO Box 160
Adel, IA 50003

Date: June 16, 2008
Project: 3896802
Report No.: 3896802.8 rev2
Revised: July 7, 2008, July 14, 2008

**Revision: Addition to "Marked" Section, Addition of Compliance Standard,
Correction to Note after Color List**

REPORT OF TESTS ON: 2008 General Testing
SUBMITTED BY: _____
MARKED: Toasted Fine Art Velour Modular – Flashed Modular Group
SAMPLED: _____
DATE RECEIVED: 06/02/2008
DATE TESTED: 06/04/2008 BY: MJ

The following brick have been selected for testing:

Flashed Modular Group:	Badlands*	Black Hills*	Black Walnut*	Bronco Classic^
	Coppertone*	Doeskin*	Ebonite*	Fine Art*
	Grand Canyon*	Gunsmoke^	Mountain Shadow*	Pioneer Blend^
	Ponderosa^	Russet^	Sienna*	Toasted Fine Art*
	Toasted Grand Teton*		Vintage Brown*	

* 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 C-652.

Compressive Strength:

Sample No.	Width, In.	Depth, In.	Gross Area, sq.in.	Gross Load, Lbs.	Compressive Strength	
					PSI	Mpa
11	3.66	7.63	27.93	395800	14170	97.72
12	3.63	7.65	27.77	368200	13260	91.42
13	3.66	7.63	27.93	328800	11770	81.18
14	3.65	7.65	27.92	378400	13550	93.44
15	3.63	7.67	27.84	329200	11820	81.52
Average	---	---	---	---	12920	89.06

Absorption:

Sample No.	Cold Water Immersion 24 Hr. % Absorption	% Absorption, 5 Hr. Boiling	Saturation Coefficient
1	3.7	4.4	0.86
2	4.6	5.6	0.83
3	3.8	4.6	0.82
4	3.9	4.5	0.87
5	3.8	4.1	0.94
Average	4.0	4.6	0.86

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	5.5
2	5.8
3	4.7
4	4.0
5	4.6
Average Open Area: 6.67 In. ² / (43.03 CM ²) – 23.9% of Gross Area	

Length:

Sample No.	Average Length		Deviation From Group Average	
	Inches	MM	Inches	MM
1	7.63	193.93	-0.01	-0.34
2	7.68	195.10	0.03	0.83
3	7.64	194.00	-0.01	-0.27
4	7.66	194.68	0.02	0.41
5	7.64	194.00	-0.01	-0.27
11	7.63	193.93	-0.01	-0.34
12	7.65	194.30	0.00	0.03
13	7.63	193.83	-0.02	-0.44
14	7.65	194.23	0.00	-0.04
15	7.67	194.73	0.02	0.46
Group Average	7.65	194.27	---	---

Width:

Sample No.	Average Width		Deviation From Group Average	
	Inches	MM	Inches	MM
1	3.63	92.18	-0.01	-0.35
2	3.65	92.73	0.01	0.20
3	3.65	92.70	0.01	0.17
4	3.64	92.48	0.00	-0.05
5	3.63	92.23	-0.01	-0.30
11	3.66	92.95	0.02	0.42
12	3.63	92.25	-0.01	-0.27
13	3.66	92.85	0.01	0.32
14	3.65	92.78	0.01	0.25
15	3.63	92.13	-0.02	-0.40
Group Average	3.64	92.53	---	---

Height:

Sample No.	Average Height		Deviation From Group Average	
	Inches	MM	Inches	MM
1	2.29	58.28	0.01	0.37
2	2.30	58.35	0.02	0.45
3	2.27	57.60	-0.01	-0.30
4	2.28	57.95	0.00	0.05
5	2.26	57.33	-0.02	-0.58
11	2.28	57.93	0.00	0.02
12	2.28	57.88	0.00	-0.03
13	2.29	58.10	0.01	0.20
14	2.27	57.65	-0.01	-0.25
15	2.28	57.98	0.00	0.07
Group Average	2.28	57.90	---	---

Distortion (Warpage):

Sample No.	Maximum Distortion	
	Inches	MM
1	0.06	1.59
2	0.03	0.79
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	0.06	1.59
14	0.06	1.59
15	0.06	1.59

Out of Square:

Sample No.	Inches	MM
1	0.06	1.59
2	0.06	1.59
3	0.06	1.59
4	0.06	1.59
5	0.03	0.79
11	0.02	0.40
12	0.03	0.79
13	0.03	0.79
14	0.06	1.59
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,



Michael D. Jordt
Senior Engineering Technician

MJ:lam
1 pc above