

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.: 3896802.5 rev
Revised: July 7, 2008

Revision: Addition to "Marked" Section

REPORT OF TESTS ON: 2008 General Testing
SUBMITTED BY: _____
MARKED: Mountain Shadow Velour 12" Utility RDB – Flashed Utility Group
SAMPLED: _____
DATE RECEIVED: 06/02/2008
DATE TESTED: 06/04/2008 BY: MJ

The following brick have been selected for testing:

Flashed Utility Group:	Badlands*	Black Hills*	Black Walnut*	Coppertone*
	Doeskin*	Ebonite*	Fine Art*	Grand Canyon*
	Gunsmoke 1	Mountain Shadow*	Ponderosa 1	Russet 1
	Sienna*	Toasted Fine Art*	Toasted Grand Teton*	
	Vintage Brown*			

* denotes various textures

1 indicates FBS

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

Compressive Strength:

Sample No.	Width, In.	Depth, In.	Gross Area, sq.in.	Gross Load, Lbs.	Compressive Strength	
					PSI	Mpa
11	3.56	11.61	41.33	323100	7820	53.90
12	3.69	11.65	42.99	446400	10380	71.60
13	3.58	11.57	41.42	400400	9670	66.65
14	3.57	11.66	41.63	395100	9490	65.44
15	3.61	11.65	42.06	412700	9810	67.66
Average	---	---	---	---	9440	65.05

Absorption:

Sample No.	Cold Water Immersion 24 Hr. % Absorption	% Absorption, 5 Hr. Boiling	Saturation Coefficient
1	3.2	3.6	0.88
2	4.0	4.5	0.88
3	3.1	3.3	0.96
4	2.9	3.2	0.93
5	2.7	3.2	0.85
Average	3.2	3.6	0.90

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	2.2
2	4.8
3	3.3
4	3.7
5	3.3
Average Open Area: 10.26 In. ² / (66.18 CM ²) – 24.5% of Gross Area	

Length:

Sample No.	Average Length		Deviation From Group Average	
	Inches	MM	Inches	MM
1	11.63	295.38	0.00	0.04
2	11.64	295.63	0.01	0.29
3	11.66	296.15	0.03	0.82
4	11.57	293.88	-0.06	-1.46
5	11.64	295.55	0.01	0.22
11	11.61	294.78	-0.02	-0.56
12	11.65	295.88	0.02	0.54
13	11.57	293.90	-0.06	-1.43
14	11.66	296.20	0.03	0.87
15	11.65	295.98	0.03	0.64
Group Average	11.63	295.33	---	---

Width:

Sample No.	Average Width		Deviation From Group Average	
	Inches	MM	Inches	MM
1	3.61	91.65	-0.01	-0.16
2	3.56	90.40	-0.06	-1.41
3	3.68	93.50	0.07	1.69
4	3.61	91.68	-0.01	-0.13
5	3.68	93.40	0.06	1.59
11	3.56	90.43	-0.05	-1.38
12	3.69	93.75	0.08	1.94
13	3.58	90.88	-0.04	-0.93
14	3.57	90.78	-0.04	-1.03
15	3.61	91.63	-0.01	-0.18
Group Average	3.61	91.81	---	---

Height:

Sample No.	Average Height		Deviation From Group Average	
	Inches	MM	Inches	MM
1	3.63	92.18	0.00	0.04
2	3.65	92.73	0.02	0.59
3	3.64	92.43	0.01	0.29
4	3.63	92.08	0.00	-0.06
5	3.60	91.50	-0.03	-0.64
11	3.64	92.40	0.01	0.26
12	3.61	91.70	-0.02	-0.44
13	3.65	92.80	0.03	0.66
14	3.62	92.03	0.00	-0.11
15	3.60	91.53	-0.02	-0.61
Group Average	3.63	92.14	---	---

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	0.06	1.59
12	0.06	1.59
13	0.03	0.79
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	0.09	2.38
11	0.06	1.59
12	0.06	1.59
13	0.03	0.79
14	0.06	1.59
15	0.09	2.38

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

Respectfully submitted,
STORK Twin City Testing,

Michael D. Jordt
Senior Engineering Technician

MJ:lam
1 pc above