

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.: 3896802.6 rev2  
Revised: July 7, 2008, July 14, 2008

**Revision: Addition to "Marked" Section, Correction to Color Name  
Correction to Open Area Calculation, Correction to Color List**

REPORT OF TESTS ON: 2008 General Testing  
SUBMITTED BY: \_\_\_\_\_  
MARKED: Charcoal Grey Velour 12" Utility RDB – Clean Burn Utility Group  
SAMPLED: \_\_\_\_\_  
DATE RECEIVED: 06/02/2008  
DATE TESTED: 06/04/2008 BY: MJ

The following brick have been selected for testing:

Clear Burn Utility Group:	Beige Gray*	Butternut*	Castile Gray*	Charcoal Gray*
	Chateau Gray*	Chestnut*	Clear Buff*	Cocoa*
	Coral Pink*	Dakota Pink*	Dakota Prairie	Deer Valley*
	Desert Blend* (1 w/western texture)		Dunes Gray*	Elk Creek 1
	Glacier Grey 1	Kodiak*	Marblestone Gray 1	Mission Pink*
	Misty Dawn 1	Mojave*	Monterey Ironspot	Morning Mist 1
	Regency Blend	Santa Fe 1	Sedona Ironspot	Silverstone 1
	Sterling Gray	White Plains	Winter Park 1	

\* 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	3.59	11.59	41.61	425500	10230	70.51
12	3.58	11.61	41.56	411100	9890	68.19
13	3.58	11.61	41.56	325500	7830	54.00
14	3.58	11.59	41.49	349100	8410	58.01
15	3.57	11.61	41.45	352400	8500	58.62
Average	---	---	---	---	8970	61.87

**Absorption:**

Sample No.	Cold Water Immersion 24 Hr. % Absorption	% Absorption, 5 Hr. Boiling	Saturation Coefficient
1	3.7	4.0	0.92
2	3.3	3.7	0.89
3	3.3	3.8	0.87
4	3.5	3.8	0.90
5	3.9	4.2	0.92
Average	3.5	3.9	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 <sup>2</sup> )
1	6.4
2	3.6
3	5.0
4	5.8
5	7.4
Average Open Area: 10.19 In. <sup>2</sup> / (65.73 CM <sup>2</sup> ) – 24.6% of Gross Area	

**Length:**

Sample No.	Average Length		Deviation From Group Average	
	Inches	MM	Inches	MM
1	11.58	294.20	-0.02	-0.47
2	11.59	294.38	-0.01	-0.30
3	11.63	295.43	0.03	0.75
4	11.61	294.88	0.01	0.20
5	11.59	294.40	-0.01	-0.27
11	11.59	294.40	-0.01	-0.27
12	11.61	294.90	0.01	0.23
13	11.61	294.98	0.01	0.30
14	11.59	294.28	-0.02	-0.40
15	11.61	294.90	0.01	0.23
Group Average	11.60	294.67	---	---

**Width:**

Sample No.	Average Width		Deviation From Group Average	
	Inches	MM	Inches	MM
1	3.58	90.95	0.00	0.06
2	3.58	90.85	0.00	-0.04
3	3.56	90.40	-0.02	-0.49
4	3.58	90.95	0.00	0.06
5	3.58	91.05	0.01	0.16
11	3.59	91.10	0.01	0.21
12	3.58	91.05	0.01	0.16
13	3.58	90.95	0.00	0.06
14	3.58	90.88	0.00	-0.02
15	3.57	90.75	-0.01	-0.14
Group Average	3.58	90.89	---	---

**Height:**

Sample No.	Average Height		Deviation From Group Average	
	Inches	MM	Inches	MM
1	3.63	92.13	0.00	-0.11
2	3.62	92.03	-0.01	-0.21
3	3.64	92.58	0.01	0.34
4	3.64	92.35	0.00	0.12
5	3.63	92.08	-0.01	-0.16
11	3.64	92.38	0.01	0.14
12	3.65	92.65	0.02	0.42
13	3.63	92.13	0.00	-0.11
14	3.60	91.50	-0.03	-0.73
15	3.64	92.53	0.01	0.29
Group Average	3.63	92.23	---	---

**Distortion (Warpage):**

Sample No.	Maximum Distortion	
	Inches	MM
1	0.06	1.59
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	0.06	1.59
15	0.06	1.59

**Out of Square:**

Sample No.	Inches	MM
1	0.06	1.59
2	0.09	2.38
3	0.06	1.59
4	0.06	1.59
5	0.06	1.59
11	0.09	2.38
12	0.06	1.59
13	0.09	2.38
14	0.09	2.38
15	0.06	1.59

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

Respectfully submitted,  
STORK Twin City Testing,

MJ:lam  
1 pc above



Michael D. Jordt  
Senior Engineering Technician