

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.: 3896802.2 rev  
Revised: July 7, 2008

**Revision: Addition to "Marked" Section, Correction of Color name**

REPORT OF TESTS ON: 2008 General Testing  
SUBMITTED BY: \_\_\_\_\_  
MARKED: Red 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:	Antique White 1	Aztec White 1	(CSW) Birchwood	Black Sand
	Bordeaux Burgundy	Brown*	Brown Frosty	Canterbury*
	Casablanca 1	Cinnamon Ironspot	Concord Burgundy	Copper Ridge*
	Cordovan*	Cranberry*	Gold*	Granite Red*
	Hearthside	Hematite	Inca Gold 1	(W) Inca Gold
	Mesaba*	(W) Misty Creek	Mocha*	Napa Valley*
	Pink Aztec 1	Plum*	Red*	Red Desert
	Red Frosty	Red Sand	Red Rock*	Royal Burgundy
	(CSW) Sand Hills Red	Sonoma Valley*	Swiss Chalet	(W) Wexford
	(W) Willow Creek	Welsford Ironspot	Winter Rose 1	

\* denotes various textures 1 indicates HBS  
(CSW) – Charleston (HBA), Savannah (HBS), & Williamsburg (HBA) Textures

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	3.63	7.60	27.59	320200	11610	80.02
12	3.63	7.62	27.66	365700	13220	91.16
13	3.59	7.62	27.36	260100	9510	65.56
14	3.65	7.61	27.78	165600	5960	41.11
15	3.66	7.61	27.85	133400	4790	33.02
Average	---	---	---	---	9020	62.17

**Absorption:**

Sample No.	Cold Water Immersion 24 Hr. % Absorption	% Absorption, 5 Hr. Boiling	Saturation Coefficient
1	2.7	4.7	0.58
2	3.2	5.4	0.59
3	3.2	5.3	0.60
4	2.8	5.2	0.54
5	3.1	5.0	0.61
Average	3.0	5.1	0.58

**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	5.9
2	5.8
3	5.8
4	6.0
5	5.8
Average Open Area: 6.79 In. <sup>2</sup> / (43.78 CM <sup>2</sup> ) – 24.6% of Gross Area	

**Length:**

Sample No.	Average Length		Deviation From Group Average	
	Inches	MM	Inches	MM
1	7.56	191.93	-0.06	-1.41
2	7.65	194.20	0.03	0.87
3	7.64	194.08	0.03	0.74
4	7.63	193.75	0.02	0.42
5	7.59	192.68	-0.03	-0.66
11	7.60	192.93	-0.02	-0.41
12	7.62	193.48	0.01	0.14
13	7.62	193.58	0.01	0.24
14	7.61	193.35	0.00	0.02
15	7.61	193.38	0.00	0.04
Group Average	7.61	193.33	---	---

**Width:**

Sample No.	Average Width		Deviation From Group Average	
	Inches	MM	Inches	MM
1	3.55	90.18	-0.08	-2.03
2	3.65	92.78	0.02	0.57
3	3.64	92.43	0.01	0.22
4	3.69	93.70	0.06	1.50
5	3.60	91.38	-0.03	-0.83
11	3.63	92.30	0.00	0.10
12	3.63	92.30	0.00	0.10
13	3.59	91.23	-0.04	-0.97
14	3.65	92.78	0.02	0.58
15	3.66	92.95	0.03	0.75
Group Average	3.63	92.20	---	---

**Height:**

Sample No.	Average Height		Deviation From Group Average	
	Inches	MM	Inches	MM
1	2.29	58.08	0.01	0.29
2	2.27	57.65	-0.01	-0.13
3	2.27	57.70	0.00	-0.08
4	2.26	57.45	-0.01	-0.33
5	2.27	57.68	0.00	-0.11
11	2.28	57.95	0.01	0.17
12	2.28	57.90	0.00	0.12
13	2.28	57.98	0.01	0.19
14	2.28	57.80	0.00	0.02
15	2.27	57.65	-0.01	-0.13
Group Average	2.27	57.78	---	---

**Distortion (Warpage):**

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

**Out of Square:**

Sample No.	Inches	MM
1	0.03	0.79
2	0.03	0.79
3	0.03	0.79
4	0.02	0.40
5	0.03	0.79
11	0.03	0.79
12	0.03	0.79
13	0.03	0.79
14	0.02	0.40
15	0.03	0.79

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