

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.: 3896802.4 rev2
Revised: July 7, 2008, July 14, 2008

**Revision: Addition to "Marked" Section, Addition to Color list, Correction to Compliance Standard
Further Additions to Color list**

REPORT OF TESTS ON: 2008 General Testing
SUBMITTED BY: _____
MARKED: Stratford Builders Special – Builders Special Group
SAMPLED: _____
DATE RECEIVED: 06/02/2008
DATE TESTED: 06/04/2008 BY: MJ

The following brick have been selected for testing:

Builders Special Group:	Amherst* 1	Antique White 1	Aztec White 1	(CSW) Birchwood
	Brookfield	(CSW) Bradford	Brown* 1	Brownstone Antique 1
	Burgundy Tudor 1	Cabernet Burgundy 1	Cambridge* 1	(CSW) Cambridge
	Canterbury*	Casablanca 1	Chelsea Ironspot 1	Cinnamon Ironspot 1
	(CSW) Hampton	Hearthside* 1	Hematite 1	(W) Inca Gold 1
	Lexington	Mesaba* 1	(W) Misty Creek	Mocha* 1
	(CSW) Old Heritage	(W) Old Plantation	Parkridge 1	Pink Aztec 1
	Red* 1	Red Desert 1	Red Rock*	Red Sand 1
	Redstone Antique 1	Royal Burgundy 1	(CSW) Sand Hills Red	Smoked Tudor 1
	(W) Smoky Mountain	(CSW) Stratford	(CSW) Tudor	(CSW) Wellington
	Welsford Ironspot 1	(W) Westport	(W) Wexford	(W) Willow Creek
	Winter Rose 1	Yellowstone 1		

* denotes various textures 1 indicates FBS
(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-652-07.

Compressive Strength:

Sample No.	Width, In.	Depth, In.	Gross Area, sq.in.	Gross Load, Lbs.	Compressive Strength	
					PSI	Mpa
11	3.19	8.54	27.24	344300	12640	87.14
12	3.19	8.63	27.53	178100	6470	44.60
13	3.19	8.58	27.37	148600	5430	37.43
14	3.21	8.62	27.67	187600	6780	46.75
15	3.20	8.62	27.58	370200	13420	92.53
Average	---	---	---	---	8950	61.69

Absorption:

Sample No.	Cold Water Immersion 24 Hr. % Absorption	% Absorption, 5 Hr. Boiling	Saturation Coefficient
1	3.7	5.6	0.66
2	3.8	5.9	0.64
3	3.9	5.8	0.67
4	4.0	6.0	0.67
5	3.9	6.0	0.65
Average	3.9	5.9	0.66

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	7.8
2	8.5
3	7.2
4	8.4
5	9.0
Average Open Area: 7.97 In. ² / (51.40 CM ²) – 28.9% of Gross Area	

Length:

Sample No.	Average Length		Deviation From Group Average	
	Inches	MM	Inches	MM
1	8.59	218.23	-0.01	-0.36
2	8.65	219.73	0.05	1.15
3	8.60	218.38	-0.01	-0.21
4	8.60	218.40	-0.01	-0.18
5	8.63	219.28	0.03	0.69
11	8.54	216.83	-0.07	-1.76
12	8.63	219.13	0.02	0.54
13	8.58	217.95	-0.02	-0.63
14	8.62	218.95	0.01	0.37
15	8.62	218.95	0.01	0.37
Group Average	8.61	218.58	---	---

Width:

Sample No.	Average Width		Deviation From Group Average	
	Inches	MM	Inches	MM
1	3.21	81.63	0.01	0.36
2	3.19	81.15	0.00	-0.11
3	3.20	81.33	0.00	0.06
4	3.21	81.58	0.01	0.31
5	3.19	81.05	-0.01	-0.21
11	3.19	81.03	-0.01	-0.24
12	3.19	81.03	-0.01	-0.24
13	3.19	80.98	-0.01	-0.29
14	3.21	81.60	0.01	0.34
15	3.20	81.28	0.00	0.01
Group Average	3.20	81.26	---	---

Height:

Sample No.	Average Height		Deviation From Group Average	
	Inches	MM	Inches	MM
1	2.82	71.55	0.00	0.03
2	2.81	71.48	0.00	-0.05
3	2.82	71.55	0.00	0.03
4	2.81	71.28	-0.01	-0.25
5	2.81	71.40	0.00	-0.12
11	2.84	72.15	0.02	0.63
12	2.81	71.38	-0.01	-0.15
13	2.81	71.30	-0.01	-0.22
14	2.82	71.55	0.00	0.03
15	2.82	71.60	0.00	0.08
Group Average	2.82	71.52	---	---

Distortion (Warpage):

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

Out of Square:

Sample No.	Inches	MM
1	0.09	2.38
2	0.13	3.18
3	0.09	2.38
4	0.06	1.59
5	0.06	1.59
11	0.09	2.38
12	0.09	2.38
13	0.13	3.18
14	0.09	2.38
15	0.06	1.59

The above brick **comply** with the physical test requirements of ASTM C652-07, Type HBA / Grade SW.

Respectfully submitted,
STORK Twin City Testing,

MJ:lam
1 pc above



Michael D. Jordt
Senior Engineering Technician