

EAR CONTROLLED DATA

3922 Delaware Avenue, Des Moines, IA 50313-2542
(515) 266-5101, Fax (515) 262-1910

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

Date: March 23, 2011
Project: TCT005939P
Report No.: TCT005939P.1

REPORT OF TESTS ON: Clay Brick – Charcoal Gray Velour 12” Utility RBD
SUBMITTED BY: _____
MARKED: _____
SAMPLED: _____
DATE RECEIVED: 02/28/2011
DATE TESTED: 03/01/2011 to 03/21/2011 BY: MJ

The specimens tested are representative of the following group:

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
	Oxford Grey*	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	3.62	5.67	20.53	156,500	7620	52.54
12	3.63	5.77	20.95	170,800	8150	56.19
13	3.63	5.73	20.80	180,200	8660	59.71
14	3.66	5.71	20.90	225,900	10810	74.53
15	3.65	5.73	20.91	160,900	7690	53.02
Average	---	---	---	---	8590	59.20

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Absorption:

Sample No.	Cold Water Immersion 24 Hr. % Absorption	% Absorption, 5 Hr. Boiling	Saturation Coefficient
1	4.6	6.1	0.76
2	4.6	5.7	0.81
3	4.0	5.3	0.76
4	4.4	5.8	0.76
5	4.5	5.8	0.78
Average	4.4	5.7	0.77

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	4.7
2	4.2
3	3.4
4	4.1
5	4.3
Average Open Area: 9.86 In. ² / (63.61 CM ²) – 76.6% of Gross Area	

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Length:

Sample No.	Average Length		Deviation From Group Average	
	Inches	MM	Inches	MM
1	11.59	294.39	0.02	0.56
2	11.58	294.13	0.01	0.30
3	11.56	293.62	-0.01	-0.21
4	11.57	293.88	0.00	0.05
5	11.60	294.64	0.03	0.81
6	11.59	294.39	0.02	0.56
7	11.54	293.12	-0.03	-0.71
8	11.54	293.12	-0.03	-0.71
9	11.58	294.13	0.01	0.30
10	11.53	292.86	-0.04	-0.97
Group Average	11.57	293.83	---	---

Width:

Sample No.	Average Width		Deviation From Group Average	
	Inches	MM	Inches	MM
1	3.62	91.95	-0.03	-0.81
2	3.63	92.20	-0.02	-0.56
3	3.63	92.20	-0.02	-0.56
4	3.66	92.96	0.01	0.20
5	3.65	92.71	0.00	-0.05
6	3.68	93.47	0.03	0.71
7	3.64	92.46	-0.01	-0.30
8	3.68	93.47	0.03	0.71
9	3.65	92.71	0.00	-0.05
10	3.68	93.47	0.03	0.71
Group Average	3.65	92.76	---	---

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Height:

Sample No.	Average Height		Deviation From Group Average	
	Inches	MM	Inches	MM
1	3.63	92.20	-0.01	-0.16
2	3.63	92.20	-0.01	-0.16
3	3.63	92.20	-0.01	-0.16
4	3.63	92.20	-0.01	-0.16
5	3.64	92.46	0.00	0.10
6	3.65	92.71	0.01	0.35
7	3.64	92.46	0.00	0.10
8	3.63	92.20	-0.01	-0.16
9	3.64	92.46	0.00	0.10
10	3.64	92.46	0.00	0.10
Group Average	3.64	92.36	---	---

Distortion (Warpage):

Sample No.	Maximum Distortion	
	Inches	MM
1	0.09	2.38
2	0.09	2.38
3	0.06	1.59
4	0.06	1.59
5	0.06	1.59
6	0.06	1.59
7	0.09	2.38
8	0.06	1.59
9	0.06	1.59
10	0.09	2.38

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Out of Square:

Sample No.	Inches	MM
1	0.06	1.59
2	0.06	1.59
3	0.09	2.38
4	0.06	1.59
5	0.09	2.38
6	0.06	1.59
7	0.06	1.59
8	0.06	1.59
9	0.09	2.38
10	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