

EAR PROTECTED 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 Co
Attn: Kurt Hansen
PO Box 160
Adel, IA 50003

Project: TCT005939P
Date: March 23, 2011
Report #: TCT005939P.7 rev2
Revision Date: May 4, 2011
Revision: Restored group; added designations

Report of Tests on: Plum Velour Modular
Submitted by: _____
Marked: _____
Sampled: _____
Date Received: 2/28/2011
Date Tested: 3/1/2011 to 3/21/2011 By: MJ

The specimens tested are representative of the following group:

Clear Burn Mods	Antique White 1	Aztec White 1	(CSW) Birchwood	Black Sand *	Bordeaux Burgundy	Brown*
	Brown Ironspot*	Brown Frosty	Canterbury*	Casablanca 1	Cinnamon Ironspot*	Concord Burgundy
	Copper Ridge*	Cordovan*	Cordovan Ironspot*	Cranberry*	Cranberry Ironspot*	Gold*
	Granite Red*	Granite Red Ironspot*	Granite Red Ironspot*	Hearthside	Hematite	Inca Gold 1
	(W) Inca Gold	Mesaba*	(W) Misty Creek	Mocha*	Napa Valley*	Napa Valley Ironspot*
	Pink Aztec 1	Plum*	Plum Ironspot*	Red*	Red Ironspot*	Red Desert
	Red Frosty	Red Sand	Red Rock*	Royal Burgundy	(CSW) Sand Hills Red	
	Sandy Mocha	Scarlet Sands	Sonoma Valley*	Sonoma Valley Ironspot*		(CSW) Stone Ridge
	Swiss Chalet	(W) Wexford	(W) Willow Creek	Welsford Ironspot	Winter Rose 1	

* denotes various textures 1 indicates FBS
(CSW) Charleston (HBA), Savannah (FBX), & Williamsburg (HBA) textures

The above specimen was tested in accordance with Standard Methods of Testing Brick, ASTM C67-07a, for compliance with ASTM C216-07a.

Compressive Strength

Sample No.	Width, In.	Depth, In.	Gross Area, sq in.	Gross Load, Lbs.	Compressive Strength	
					PSI	MPa
11	3.62	3.90	14.12	166,500	11790	81.29
12	3.65	3.86	14.09	131,400	9330	64.33
13	3.62	3.65	13.21	116,300	8800	60.67
14	3.63	3.74	13.58	147,300	10850	74.81
15	3.62	3.66	13.25	167,900	12670	87.36
Average	n/a	n/a	n/a	n/a	10690	73.69

Absorption

Sample No.	Cold Water Immersion 24 Hr % Absorption	% Absorption, 5 Hour Boiling	Saturation Coefficient
1	2.5	4.0	0.63
2	2.4	4.1	0.59
3	2.3	4.0	0.58
4	2.4	4.0	0.60
5	2.2	3.9	0.56
Average	2.4	4.0	0.59

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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 sq. cm)
1	4.6
2	5.2
3	4.4
4	4.5
5	3.7
Average Open Area: sq. in (sq. cm)	
6.70 (43.23)	
Percent of Gross Area:	
24.08%	

Length

Sample No.	Average Length		Deviation from Group Ave.	
	Inches	mm	Inches	mm
1	7.68	195.07	0.02	0.38
2	7.63	193.80	(0.03)	(0.89)
3	7.68	195.07	0.02	0.38
4	7.66	194.56	(0.00)	(0.13)
5	7.69	195.33	0.03	0.63
6	7.65	194.31	(0.01)	(0.38)
7	7.67	194.82	0.01	0.13
8	7.64	194.06	(0.02)	(0.64)
9	7.69	195.33	0.03	0.63
10	7.66	194.56	(0.00)	(0.13)
Group Ave	7.67	194.69	n/a	n/a

Width

Sample No.	Average Width		Deviation from Group Ave.	
	Inches	mm	Inches	mm
1	3.62	91.95	(0.00)	(0.10)
2	3.65	92.71	0.03	0.66
3	3.62	91.95	(0.00)	(0.10)
4	3.63	92.20	0.01	0.15
5	3.62	91.95	(0.00)	(0.10)
6	3.64	92.46	0.02	0.41
7	3.62	91.95	(0.00)	(0.10)
8	3.63	92.20	0.01	0.15
9	3.59	91.19	(0.03)	(0.86)
10	3.62	91.95	(0.00)	(0.10)
Group Ave	3.62	92.05	n/a	n/a

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Height

Sample No.	Average Height		Deviation from Group Ave.	
	Inches	mm	Inches	mm
1	2.28	57.91	0.01	0.23
2	2.27	57.66	(0.00)	(0.03)
3	2.27	57.66	(0.00)	(0.03)
4	2.27	57.66	(0.00)	(0.03)
5	2.26	57.40	(0.01)	(0.28)
6	2.26	57.40	(0.01)	(0.28)
7	2.28	57.91	0.01	0.23
8	2.27	57.66	(0.00)	(0.03)
9	2.28	57.91	0.01	0.23
10	2.27	57.66	(0.00)	(0.03)
Group Ave	2.27	57.68	n/a	n/a

Distortion (Warpage)

Sample No.	Maximum Distortion	
	Inches	mm
1	0.03	0.79
2	0.06	1.59
3	0.06	1.59
4	0.03	0.79
5	0.06	1.59
6	0.03	0.79
7	0.06	1.59
8	0.06	1.59
9	0.03	0.79
10	0.06	1.59

Out of Square

Sample No.	Inches	mm
1	0.09	2.38
2	0.06	1.59
3	0.06	1.59
4	0.03	0.79
5	0.06	1.59
6	0.03	0.79
7	0.09	2.38
8	0.06	1.59
9	0.03	0.79
10	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 Corporation

MJ:lam
1 pc above



Michael D. Jordt
Senior Engineering Technician