

ENGINEERS LABORATORIES, INC.

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Materials & Soils Testing

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August 23, 2012

Job No. 96-012

Columbus Brick Co.
P.O. Box 9630
Columbus, MS 39705

Re: Plant 1
Brown Body, Flashed
Modular Size

Gentlemen:

Tabulated below are results of laboratory tests performed at your request. These tests were performed in accordance with ASTM Designation: **C-67**

Uni No.	<u>Dimensions</u> <u>Inches</u>		<u>Compressive Strength Test</u>			<u>Initial Rate of Absorption</u> <u>(Suction in Grams per 1-Min.)</u>			
	<u>L</u>	<u>W</u>	<u>Total Load</u> <u>Lbs.</u>	<u>Gross Area</u> <u>Sq. Inches</u>	<u>PSI</u>	<u>Unit No.</u>	<u>Initial Rate of</u> <u>Absorption</u>	<u>% Void</u>	
1	3.75	3.35	123,000	12.56	9,790	1	13.68	1)22.9	6)22.6
2	3.85	3.40	133,500	13.09	10,200	2	14.69	2)22.6	7)22.3
3	3.80	3.35	113,500	12.73	8,920	3	13.02	3)21.9	8)22.1
4	3.75	3.40	100,500	12.75	7,880	4	13.38	4)22.9	9)23.2
5	3.80	3.38	130,000	12.84	10,120	5	15.85	5)22.0	10) 22.2
Average of 5 Units:					<u>9,380</u>		<u>14.12</u>	Average of 10 Units:	<u>22.5</u>

<u>Per Cent Water Absorption</u> <u>24 Hour Submersion in Cold Water</u>				<u>Per Cent Absorption - 5 Hours</u> <u>Boiling Method</u>			
<u>Unit No.</u>	<u>Dry Weight</u> <u>Grams</u>	<u>Wet Weight</u> <u>Grams</u>	<u>%</u> <u>Absorption</u>	<u>Dry Weight</u> <u>Grams</u>	<u>Wet Weight</u> <u>Grams</u>	<u>%</u> <u>Absorption</u>	<u>Sat.</u> <u>Coeff.</u>
1	775.9	816.5	5.2	775.9	837.8	8.0	.65
2	783.0	828.6	5.8	783.0	852.0	8.8	.66
3	787.0	825.4	4.9	787.0	847.3	7.7	.64
4	782.3	821.1	5.0	782.3	844.8	8.0	.63
5	783.8	824.9	<u>5.2</u>	783.8	847.2	<u>8.1</u>	<u>.64</u>
Average of 5 Units:			<u>5.2</u>			<u>8.1</u>	<u>.64</u>

These test results meet the requirements of ASTM Designation: **C-216, Grade SW, Type FBA**

These brick are rated "Not Effloresced".

We trust that this is the information required at this time.

Yours very truly,

ENGINEERS LABORATORIES, INC.

R. Bruce Shofner
R. Bruce Shofner

RBS/cc