CLEMSON UNIVERSITY
THE BISHOP MATERIALS LABORATORY

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AASHTO R18 ACCREDITED LABORATORY

***Results of Tests on Brick conducted in accordance with ASTM C67-11 Standard Method for Sampling and Testing Brick and Structural Clay Tile***

02/21/2012

| | | | |
|---|---|---|---|
| Name: | Palmetto Brick Company<br>P. O. Box 430<br>Cheraw, SC 29520-0430 | Plant: | Palmetto Brick Company |
| | | Report Number: | PALB-0047 |
| Phone: | 843-320-1137 | Sampled Date: | 01/23/2012 |
| Fax: | 843-537-4802 | Lot: | |
| | | Product Code: | |
| Sample Description: | **Dark Red Body** | | |

| | | | | | | | Test Date |
|---|---|---|---|---|---|---|---|
| **Absorption** | **1** | **2** | **3** | **4** | **5** | **Average** | |
| *24 Hour Submersion in Cold Water (%)* | 7.01 | 7.14 | 7.01 | 6.82 | 6.89 | 6.97 | 02/01/2012 |
| *5 Hour Submersion in Boiling Water (%)* | 9.85 | 9.90 | 9.62 | 9.58 | 9.59 | 9.71 | |
| *Saturation Coefficient (Ratio of 24H to 5H)* | 0.71 | 0.72 | 0.73 | 0.71 | 0.72 | 0.72 | |
| **Compressive Strength** | **1** | **2** | **3** | **4** | **5** | **Average** | |
| ***psi*** | 12,841 | 12,436 | 12,945 | 12,363 | 12,027 | 12,522 | 02/02/2012 |
| ***MPa*** | 88.5 | 85.7 | 89.3 | 85.2 | 82.9 | 86.3 | |
| **Efflorescence** | **11** | **12** | **13** | **14** | **15** | | |
| | Not Effloresced | Not Effloresced | Not Effloresced | Not Effloresced | Not Effloresced | | 02/17/2012 |
| **IRA** | **6** | **7** | **8** | **9** | **10** | **Average** | |
| ***g/min/30 in.²*** | 14.0 | 13.0 | 15.8 | 15.2 | 15.1 | 14.6 | 02/02/2012 |
| **Average % Void** | 23.6 | | | | | | 02/01/2012 |

***The brick represented by the test results shown here comply with the standards listed below:***

ASTM C 216 - 11 Standard Specification for Facing Brick (Solid Masonry Units Made From Clay or Shale)
Grade: SW, MW

John Sanders, Ph.D., PE, Associate Director for Operations

Gary W. Parker, Laboratory Supervisor