Important Notice

In August 1, 2013, PABCO® Gypsum, a division of PABCO® building products, LLC acquired the QuietRock® business and operations from Serious Energy, Inc. Serious Energy, Inc. corporate structure and legal name changed through the years from Quiet Solution, Inc. to Serious Materials, Inc to Serious Energy, Inc. The acquisition of the QuietRock® business by PABCO® Gypsum includes the products, technical data, test reports and other intellectual property. For the avoidance of confusion, references to “Quiet Solution”, “Serious Materials”, or “Serious Energy” used within test reports, in general, should be understood as references to PABCO® Gypsum as of August 1, 2013.
CLIENT:
Serious Materials
1250 Elko Drive
Sunnyvale, CA 94089

Test Report No: RJ0421-add1
Date: February 26, 2010

SAMPLE ID: The test samples are identified as 4-foot by 8-foot QuietRock ES.

SAMPLING DETAIL: Test samples were submitted to the laboratory directly by the client. No special sampling conditions or sample preparation were observed by QAI.

DATE OF RECEIPT: Samples were received at QAI on October 22, 2009 and assigned Sample Tracking number RJ0414.

TESTING PERIOD: October 11 – November 18, 2009

AUTHORIZATION: Work order authorized under PO009407

TEST PROCEDURE: Testing in accordance with ASTM C 473 including: Humidified Deflection and Surface Burning Characteristics.

TEST RESULTS: Detailed test results are presented in the subsequent pages of this report.

Prepared By
Jason Friedrich, EIT
Project Engineer

Signed for and on behalf of
QAI Laboratories, Inc.

Andrew Tan, P.E.
Lab Manager
HUMIDIFIED DEFLECTION TEST PER ASTM C 473-03

Test Procedure: Testing was performed in accordance with ASTM C 473-03. Two, 12-inch by 24-inch (305mm by 610mm) specimens were cut from three sample boards. The specimens were cut with the 12-inch dimension parallel to the board's length dimension. The specimens were conditioned at 73°F and 50% relative humidity until a constant weight was reached.

Each specimen was placed face down on parallel and level bearing edges 12 inches (305mm) long and 23 inches (584mm) apart. Testing was performed in environmental chamber maintained at 90 ± 3°F and 90 ± 3% relative humidity for a period of 48 hours.

The humidity deflection was then measured at the center of each specimen to within 1/16 of an inch using a straightedge placed across the top surface of the board along its length dimension.

Results:

<table>
<thead>
<tr>
<th>Board No.</th>
<th>Specimen No.</th>
<th>Humidified Deflection, (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0.1620</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.1995</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0.1575</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.1720</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>0.1565</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.1555</td>
</tr>
<tr>
<td>Average:</td>
<td></td>
<td>0.1672</td>
</tr>
</tbody>
</table>
SURFACE BURNING CHARACTERISTICS

PREPARATION AND CONDITIONING: The sample material was cut down to three pieces, 22" wide by 96" long, conforming to test chamber dimensions.

E 84 TEST DATA SHEET:

CLIENT: Serious Materials, DATE: 11/23/09
SAMPLE: 5/8" QuietRock ES board
FLAME SPREAD:
IGNITION: 1 minute, 56 seconds
FLAME FRONT: 1 foot maximum
TIME TO MAXIMUM SPREAD: 2 minutes, 20 seconds
TEST DURATION: 10 minutes
CALCULATION: $7.88 \times 0.515 = 4.05$

SUMMARY: FLAME SPREAD: 5 SMOKE DEVELOPED: 5

SUMMARY OF ANSI/NFPA 255 RESULTS: Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5. Smoke Density values over 200 are rounded to the nearest figure divisible by 50.

In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

<table>
<thead>
<tr>
<th>NFPA CLASS</th>
<th>IBC CLASS</th>
<th>FLAME SPREAD</th>
<th>SMOKE DEVELOPED</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A</td>
<td>0 through 25</td>
<td>Less than or equal to 450</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
<td>26 through 75</td>
<td>Less than or equal to 450</td>
</tr>
<tr>
<td>C</td>
<td>C</td>
<td>76 through 200</td>
<td>Less than or equal to 450</td>
</tr>
</tbody>
</table>

BUILDING CODES CITED:

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End of Report