Concrete Masonry Units Report

Report Number: 95171280.0009
Service Date: 10/06/20
Report Date: 10/19/20 Revision 1 -

Client
Bilco Brick
Attn: Randy Colen
2116 N Lancaster-Hutchins Rd
Dallas, TX 75134

Project
Bilco Brick Testing
2501 E Loop 820 North
Fort Worth, TX

Project Number: 95171280

Services: Perform compressive strength, absorption and fire rating in accordance with ASTM 140, for compliance to ASTM C90, NCMA TEK and IBC specifications on concrete masonry units submitted to this facility.

Sample ID: Medium weight 12” X 8” X 16” CMU (as identified by weight)

Absorption:

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Received Weight (lbs)</th>
<th>Immersed Weight (lbs)</th>
<th>SSD Weight (lbs)</th>
<th>Percent Absorption</th>
<th>Absorption (lbs./cu ft.)</th>
<th>Oven Dry Weight (lbs)</th>
<th>Oven Dry Wt. (lbs./cu. ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>48.95</td>
<td>25.50</td>
<td>51.45</td>
<td>9.00</td>
<td>10.22</td>
<td>47.20</td>
<td>113.50</td>
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<tr>
<td>2</td>
<td>48.75</td>
<td>25.40</td>
<td>51.30</td>
<td>9.15</td>
<td>10.36</td>
<td>47.00</td>
<td>113.24</td>
</tr>
<tr>
<td>3</td>
<td>48.40</td>
<td>25.25</td>
<td>51.15</td>
<td>9.41</td>
<td>10.60</td>
<td>46.75</td>
<td>112.63</td>
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<tr>
<td>Average</td>
<td>48.70</td>
<td>25.38</td>
<td>51.30</td>
<td>9.19</td>
<td>10.39</td>
<td>46.98</td>
<td>113.12</td>
</tr>
</tbody>
</table>

Compressive Strength:

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Gross Area (in.²)</th>
<th>Net Area (in.²)</th>
<th>Maximum Load (lbs.)</th>
<th>Gross PSI</th>
<th>Net PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>97.88</td>
<td>54.12</td>
<td>161910</td>
<td>1650</td>
<td>2990</td>
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<tr>
<td>5</td>
<td>97.76</td>
<td>53.89</td>
<td>166700</td>
<td>1710</td>
<td>3090</td>
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<td>6</td>
<td>97.52</td>
<td>53.67</td>
<td>154700</td>
<td>1590</td>
<td>2880</td>
</tr>
<tr>
<td>Average</td>
<td>97.72</td>
<td>53.85</td>
<td>161100</td>
<td>1650</td>
<td>2990</td>
</tr>
</tbody>
</table>

Average Length: 15.65 in.  Face Shell Thickness: 1.58 in.
Average Width: 11.60 in.  Webb Thickness: 1.32 in.
Average Depth: 7.63 in.  Equivalent Thickness: 6.00 in.
Normalized Web Area: 12.14 sq. in./sq. ft.

ASTM C90 specifications:
- Absorption (lb./cu. ft.): 17 pcf individual / 15 pcf average Maximum
- Oven Dry Weight (lbs./cu. ft.): 105 to less than 125
- Net PSI: 1800 individual/2000 average Minimum
- Face Shell (inches): 1.25 Minimum
- Web Thickness (inches): 0.75 Minimum
- Normalized Web Area (sq. in./sq. ft.): 6.5 Minimum

The above blocks comply with ASTM C90 specifications for medium weight block.

The above blocks comply with NCMA TEK 7-C and IBC (2018) fire resistance rating for up to 4.00 hours.

Reviewed By: Kregg Albritton
Laboratory Manager

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.