February 19, 2014

Whitacre Greer Company
1400 South Mahoning Avenue
Alliance, Ohio
44601

Attn.: Mr. Colby Dehoff
CDehoff@wgpaver.com

Dear Sirs;

Clay Paver Testing

Further to receipt of eight (8) clay paving stones in our laboratory on December 11, 2013, Davroc Testing Laboratories Inc. is pleased to report the results of our testing.

The samples were identified as 4 x 8 x 2 ¾ Shade 36 using Davroc Sample No. 2935.

As requested, eight (8) paver samples were tested for dimension checks. Five (5) samples were randomly selected for compressive strength testing, and the remaining three (3) samples are were tested for freeze-thaw durability. All testing was conducted in accordance with CSA Standard A231.2-06 “Precast Concrete Pavers”. The paver samples were tested in the as received condition with no conditioning or curing.

The results of our tests are given on the attached tables.

Comments

The test specimens meet the CSA A231.2-06 requirements for dimensions, compressive strength and freeze-thaw durability.
Should you have any questions, please do not hesitate to contact the undersigned.

Yours very truly,
Davroc Testing Laboratories Inc.

Fabio Fregonese, C.E.T.
Manager Materials Testing Services

Sal Fasullo, C.E.T.
Vice President
# LABORATORY TESTING OF PRECAST CONCRETE PAVERS

**Project No.**: L13-0606PT  
**Manufacturer**: Whitacre Greer Company  
**Date Manufactured**: Not Given  
**Lab No.**: 29354  
**Pavers Type**: 4 x 8 x 2 ½ Clay  
**Pavers Colour**: Shade 36  
**Date Tested**: December 18, 2013

<table>
<thead>
<tr>
<th>DAVROC/CLIENT SAMPLE No.</th>
<th>WEIGHT AS REC=d (GRAMS)</th>
<th>DIMENSIONS</th>
<th>COMPRESSIVE STRENGTH ON SAWN SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LENGTH (mm)</td>
<td>WIDTH (mm)</td>
</tr>
<tr>
<td>2935-1</td>
<td>3115.6</td>
<td>198.7</td>
<td>99.0</td>
</tr>
<tr>
<td>2935-2</td>
<td>3079.6</td>
<td>199.3</td>
<td>98.1</td>
</tr>
<tr>
<td>2935-3</td>
<td>2990.0</td>
<td>199.0</td>
<td>98.6</td>
</tr>
<tr>
<td>2935-4</td>
<td>3041.3</td>
<td>200.0</td>
<td>99.4</td>
</tr>
<tr>
<td>2935-5</td>
<td>3036.0</td>
<td>199.4</td>
<td>99.0</td>
</tr>
<tr>
<td>2935-6</td>
<td>3025.9</td>
<td>200.0</td>
<td>99.0</td>
</tr>
<tr>
<td>2935-7</td>
<td>2970.5</td>
<td>200.0</td>
<td>98.5</td>
</tr>
<tr>
<td>2935-8</td>
<td>3060.1</td>
<td>199.0</td>
<td>98.5</td>
</tr>
</tbody>
</table>

**Mean**  
- 3039.9  
- 199.4  
- 98.8  
- 68.7  
- 70.4  
- **81.7**  
-  

| Specifications | CSA A231.2-06  
|----------------|----------------|
|                | +2.0  
|                | -2.0  
|                | +3.0  
|                | -3.0  

Specified Minimum Average: 50.0 MPa  
Specified Minimum Individual: 45.0 MPa  

**REMARKS**: **- Samples were tested in air dry condition.**  
Sample No’s. 2935-6, 2935-7 and 2935-8 are being tested for freeze-thaw durability.

**NOTE**: Unless otherwise noted testing was conducted in accordance with CSA Standard A231.2-06 “Precast Concrete Pavers”.  
*Testing was performed in general accordance with ASTM C140.

**Distribution**:  
Sal Fasullo, C.E.T  
Vice-President  

December 18, 2013
LABORATORY TESTING OF PRECAST CONCRETE PAVERS
FREEZE - THAW DURABILITY TESTS

**Project:** L13-0606PT  
**Manufacturer:** Whitacre Greer Company  
**Date of Manufacture:** Not Given  
**Paver Type:** 4x8x2 ¾ Clay  
**Paver Colour:** Shade 36  
**Date Test Started:** December 16, 2013

<table>
<thead>
<tr>
<th>Specimen No.</th>
<th>Specimen Weight Before Testing (grams)</th>
<th>Accumulative Loss in Mass (grams/square metre)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>7 Cycles</td>
</tr>
<tr>
<td>2935-6</td>
<td>3025.9</td>
<td>7.5</td>
</tr>
<tr>
<td>2935-7</td>
<td>2970.5</td>
<td>7.5</td>
</tr>
<tr>
<td>2935-8</td>
<td>3060.1</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>3018.8</strong></td>
<td><strong>8.3</strong></td>
</tr>
</tbody>
</table>

**Comments**

* The specimens tested have meet the CSA requirement after 28 cycles of freezing and thawing noted below, and therefore testing has been discontinued.

**Notes**

1. Unless otherwise noted, testing was conducted in accordance with CSA Standard A231.2-06 “Precast Concrete Pavers”.

2. CSA requires a maximum allowable average loss of mass of three (3) full-size pavers shall not be greater than 225 g/m² after 28 cycles of freezing and thawing. If this requirement is not met the test should be continued up to 49 cycles where the maximum allowable average loss should not exceed 500 g/m².