ASTM C270/ASTM C1714
Masonry Mortar Evaluation

for

US MIX Co.

Amerimix Masonry Mortar with RainBloc

US MIX Co.
112 South Santa Fe Drive
Denver, CO  80223

February 22, 2019
REPORT OF TESTS

SUBJECT: Physical Analysis of Masonry Mortar

PROJECT: Amerimix Masonry Mortar with RainBloc

SPECIFICATIONS:
ASTM C91-18, “Specification for Masonry Cement”
ASTM C270-14a, “Specification for Masonry Mortar”
ASTM C1714-16, “Standard Specification for Preblended Dry Mortar Mix for Unit Masonry”

TEST METHODS:

NTL PROJECT #: 19-1008(D)

MATERIAL: Shipped to NTL in January 2019

PAGE: 1 of 3

TEST DATA

Test Material: Amerimix Masonry Mortar with RainBloc

Batch Date: January 2019
February 22, 2019
U.S. MIX – Amerimix Masonry Mortar with RainBloc
NTL Project #19-1008(D)
Page 2 of 3

TEST RESULTS

ASTM C270 – Masonry Mortar Analysis

Batch Date: January 2019
Water Added: 18.0%

<table>
<thead>
<tr>
<th>Amerimix Masonry Mortar with RainBloc</th>
<th>ASTM C 270-14a Cement-Lime – Type S</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C91 - Air Entrainment</td>
<td>5.3%</td>
</tr>
<tr>
<td></td>
<td>12%, max.</td>
</tr>
<tr>
<td>ASTM C1506 - Water Retention</td>
<td>82.1%</td>
</tr>
<tr>
<td>Initial Flow</td>
<td>75%, min.</td>
</tr>
<tr>
<td>Final Flow</td>
<td></td>
</tr>
<tr>
<td>Initial Flow</td>
<td>112%</td>
</tr>
<tr>
<td>Final Flow</td>
<td>92%</td>
</tr>
</tbody>
</table>

ASTM C109 - Compressive Strength

Average of three 2-in cubes

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>7 days</td>
<td>2,940 psi</td>
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<tr>
<td>28 days</td>
<td>3,400 psi</td>
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ASTM C1403 (Annex A) – Rate of Absorption

Batch Date: January 2019
Specimens: Average of three 2-in cubes
Curing: 28 days until testing

<table>
<thead>
<tr>
<th>Amerimix Masonry Mortar with RainBloc</th>
<th>ASTM C1714-16 (9.4.1.1) Water Repellent Mortar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Absorption (A_r)</td>
<td>59.3 g/100 cm² @ 24.0 hours</td>
</tr>
<tr>
<td>Total Saturation (A_s)</td>
<td>106.0 g/100 cm² @ 24.0 hours</td>
</tr>
<tr>
<td>Relative Water Absorption (%A_r)</td>
<td>56.0%</td>
</tr>
<tr>
<td></td>
<td>60%, max.</td>
</tr>
</tbody>
</table>
February 22, 2019  
U.S. Mix – Amermix Masonry Mortar with RainBloc  
NTL Project #19-1008(D)  
Page 3 of 3

SUMMARY

The test results listed in this report have met or exceeded the requirements as set forth in ASTM C270-14a, Table 2 – Property Specification Requirements and also met or exceeded the requirements for a water-repellent mortar under ASTM C1741-16, 9.4.1.1

Respectfully submitted,

NELSON TESTING LABORATORIES

Mark R. Nelson  
President

Notes: The results listed within this report relate only to the materials submitted for testing. This report shall not be reproduced, except in full, without written approval of this laboratory. The test materials not consumed in this testing will be discarded 14 days from the date of this report unless we receive written notification requesting otherwise.