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

March 20, 2020
REPORT OF TESTS

SUBJECT: Physical Analysis of Masonry Mortar

PROJECT: Amerimix Masonry Mortar with RainBloc

SPECIFICATIONS:
- ASTM C1714-19, “Standard Specification for Preblended Dry Mortar Mix for Unit Masonry”

TEST METHODS:

NTL PROJECT #: 20-1028(D)

MATERIAL: Shipped to NTL in January 2020

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TEST DATA

Test Material: Amerimix Masonry Mortar with RainBloc

Batch Date: February 2020
TEST RESULTS

ASTM C270 – Masonry Mortar Analysis

Batch Date: February 2020
Water Added: 18.3%

<table>
<thead>
<tr>
<th>Material</th>
<th>7 days</th>
<th>28 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amerimix Masonry Mortar</td>
<td>2,540 psi</td>
<td>3,450 psi</td>
</tr>
<tr>
<td>with RainBloc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASTM C91 - Air Entrainment</td>
<td>5.7%</td>
<td>12%, max.</td>
</tr>
<tr>
<td>ASTM C1506 - Water Retention</td>
<td>90.1%</td>
<td>75%, min.</td>
</tr>
<tr>
<td>Initial Flow</td>
<td>111%</td>
<td></td>
</tr>
<tr>
<td>Final Flow</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

ASTM C109 - Compressive Strength

Average of three 2-in cubes

<table>
<thead>
<tr>
<th>Age</th>
<th>Strength (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 days</td>
<td>2,540</td>
</tr>
<tr>
<td>28 days</td>
<td>3,450</td>
</tr>
</tbody>
</table>

ASTM C1403 (Annex A) – Rate of Absorption

Batch Date: February 2020
Specimens: Average of three 2-in cubes
Curing: 28 days until testing

<table>
<thead>
<tr>
<th>Material</th>
<th>Water Absorption (A_r) @ 24.0 hours</th>
<th>Total Saturation (A_s) @ 24.0 hours</th>
<th>Relative Water Absorption (%A_r) @ 24.0 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amerimix Masonry Mortar</td>
<td>52.0 g/100 cm²</td>
<td>99.7 g/100 cm²</td>
<td>52.2%</td>
</tr>
<tr>
<td>with RainBloc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASTM C1714-19 (9.4.1.1) Water Repellent Mortar</td>
<td>---</td>
<td>---</td>
<td>60%, max.</td>
</tr>
</tbody>
</table>
March 20, 2020
U.S. Mix – Amerimix Masonry Mortar with RainBloc
NTL Project #20-1028(D)
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SUMMARY

The test results listed in this report have met or exceeded the requirements as set forth in ASTM C270-19, Table 2 – Property Specification Requirements and also met or exceeded the requirements for a water-repellent mortar under ASTM C1741-19, 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.