



December 23, 2013

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

Subject: RainBloc® GP Certification – Type S Preblended Dry Mortar Mix
Reference: ACM # 101513-2209

Dear John,

Congratulations on successfully passing ACM Chemistries' Certification Program for manufacturing preblended dry mortar mix containing RainBloc® GP. I am pleased to certify that the Type S Preblended Dry Mortar Mix manufactured at your Denver, CO location using RainBloc® GP powdered water repellent admixture at a dosage rate of 0.23% of total batch weight fully complies with the water repellency classification requirements of ASTM C1384, *Standard Specification for Admixtures for Masonry Mortars*, as required by ASTM C1714, *Standard Specification for Preblended Dry Mortar Mix for Unit Masonry*. The test results showing compliance are attached.

As a reminder, be sure to follow the quality control procedures required by ACM Chemistries for on-going production. This will provide additional assurance to you that the preblended dry mortar mix will perform as expected.

This certification is valid from October 15, 2013 until December 31, 2014, providing that the preblended dry mortar mix is manufactured with the same design as that tested for this certification report.

If we at ACM Chemistries can be of assistance to you or your staff, please contact us toll free at 1-877-226-1766.

Certified by:

A handwritten signature in black ink, appearing to read 'Craig Walloch', is written over a large, faint yellow hexagonal background.

Craig Walloch
Vice President, Technical Development



RainBloc® GP Certification Production Trial
Type S Portland/Lime Preblended Dry Mortar Mix
US Mix - Denver, CO
Production Date: October 15, 2013
ACM # 101513-2209

| <u>Admixture</u> | <u>Blank</u> | <u>RainBloc GP</u> | <u>Requirement</u> |
|---|--------------|--------------------|------------------------------------|
| Dosage (% of Total) | | 0.230% | |
| Production Date | 10/11/13 | 10/15/13 | |
| Bag # | #3 Ave | #17 Ave | |
| Mortar Batch # | 631 & 634 | 633 & 626 | |
| Mortar Batch Date | 10/29/13 | 10/29/13 | |
| <u>Plastic Mortar Properties</u> | | | |
| % Air | 11.5 | 9.2 | <= 12% - ASTM C270 |
| Water Content (% of total day materials) | 17.1 | 17.5 | |
| <u>28-Day Water Uptake and Compressive Strength Results</u> | | | |
| <u>Water Uptake at 24 hrs</u> | | | |
| ASTM C1384 (g/100 cm ²) | 111.1 | 51.1 | |
| ASTM C1384 vs. Blank (% of Blank) | 100.0 | 46.0 | <= 50% - ASTM C1384 |
| ACM QC - Relative vs. Self (% of Saturation) | 97.4 | 51.9 | <= 55% - ACM Certification |
| <u>Compressive Strength</u> | | | |
| Average psi | 2370 | 2230 | >= 1800 psi at 28 Days - ASTM C270 |
| % of Blank | | 94% | >= 80% at 28 Days - ASTM C1384 |