Data Sheet RMA 2-06

PRODUCT NAME: R-MORTAR AID™

DESCRIPTION: R-Crete Mortar AidTM is a powder admixture designed to replace lime in masonry and plaster mortars. It is a blend of minerals and chemicals which enhance workability and improve bond strengths. R-Mortar Aid is added with Portland Cement and washed sand. R-Mortar Aid has been thoroughly tested and meets the criteria of a lime replacement - even in seismic zones 3 and 4. (See ICC Report ER 5403). Mortar Aid reduce the potential for efflorescence. Plaster mortars have less shrinkage-cracking. It is safer and more economical to handle than lime. R-Mortar Aid is available in different formulations to best meet individual job requirements.

R-Mortar Aid - Lime Alternate-Standard Formula:

- M-2: Well balanced properties, economical shipping and handling. Add @ 2 lbs. per 94 lbs. cement. (2 lb. unit). ICC Listed.
- M-4: Added pozzalan for better workability and strength. Add @ 4 lbs. per 94 lbs. cement. (4 lbs. replaces 1/2 cu. ft. of lime).(4 lb. unit). ICC Listed.
- M-4+: Includes an integral water repellant for added efflorescence protection and freeze thaw durability. Add @ 4 lbs. per 94 lbs. cement. (4 lbs. replaces 1/2 cu. ft of lime).(4 lb. unit). ICC Listed.
- M-5: Contains added pozzalan and chemicals for better workability and strength. M-5 is the best choice for thin coatings ie-stucco texture coats. Add @ 5 lbs. per 94 lbs. cement. (5 lbs. replaces 1/2 cu.. ft of lime). (5 lb. unit). ICC Listed.

R-Mortar Aid - VBM TM(Veneer Bonding Mortars)

R-Mortar Aid-VBM additives produce mortars with high bond strengths, extra tack and sag resistance needed for installing masonry veneers. VBM Poly has produced water repellant mortars with shear bond strengths over 400 psi. They are recommended for installation of manufactured stone veneers, natural stone and precast concrete veneers and pavers. See R-Mortar Aid-VBM data sheet for more detailed description and use recommendations. (Not ICC Listed)

R-Mortar Aid-PZ (Pozzalan Fortified) (Special Order): Are standard formula Mortar Aid with pozzalan for added strength and workability. (Not ICC Listed).

R-Mortar Aid - MPC (Mortar/Plaster Cement Formulas): Contain higher air contents with slightly lower water retention than standard lime alternate formulas. Mortar-plaster cement formulas provide an economical mortar with good properties. (Not ICC Listed). Special order.

R-MORTAR AIDTM LIME ALTERNATE



USES: R-Mortar Aid is added to Portland cement and sand to produce masonry mortars, plaster mortars and specialty bonding mortars.

ADVANTAGES: R-Mortar Aid provides excellent workability combined with superior physical properties.

- Reduces efflorescence
- High bond strengths
- Lower shrinkage-less cracking
- Safer to handle ship
- Better board life
- Better sulfate resistance
- No special mixing requirements
- Economical
- Broad product selection

TECHNICAL DATA: See ICC Report ER-5403 for allowable values and/or conditions of use concerning R-Mortar Aid. Mortar made with R-Mortar Aid will meet the property specifications of A.S.T.M. C-270 Mortar for Unit Masonry when mixed and proportioned as recommended. Cement shall be Type I,II conforming to A.S.T.M. C-150 and sand to A.S.T.M. C-144. It is compatible with colors and most commonly used additives, however, trial batches should be performed. R-Mortar Aid is suitable for jobsite mixing or dry pre-blended mortars.

ADDITION: Mortars and plasters shall be proportioned according to table No. 1. Mixing time for the mortar should be 3-10 minutes. Water shall be clean and free of deleterious amounts of acids, alkalies or organic materials. Sufficient water is added to achieve a workable, plastic consistency. Masonry construction shall be in accordance with U.B.C. except as noted in this report. Mortars shall be applied and cured in accordance with the Uniform Building Code. Sound application and curing methods must be followed in extreme heat, wind and cold.

Table 1

| MORTAR TYPE | PORTLAND* CEMENT 94 LB. BAG | WASH Vol. | ED SAND Lbs. | MORTAR AID UNITS EA.** |
|---------------------|-----------------------------------|---------------|-----------------|------------------------------|
| M | 1 | (3-3 1/2) | 240-280 | 1 |
| S | 1 | (3 1/2-4 1/2) | 280-360 | 1 |
| N | 1 | (4 1/2-6) | 360-480 | 1 |
| PLASTER 1ST COAT | 1 | (3 1/2-4 1/2) | 280-360 | 1 |
| PLASTER 2ND COAT | 1 | (4 1/2-5 1/2) | 360-440 | 1 |

^{**} The quantity of R-Mortar Aid is expressed in units. (See weights per unit for the correct weight).

PACKAGING AND HANDLING: R-Mortar Aid is packaged in paper bags and bulk bags with weights as indicated. Protect from weather and water. Shelf life is 3 years when stored in a cool dry area in original package. R-Mortar Aid is non-hazardous, however, proper respirator and safety glasses are recommended. See MSDS before handling.

- Single Package contains 1 unit.
- Double Package contains 2 units. One double package typically replaces 1-50 lb. bag of lime.

LIMITATIONS:

- Do not use with gypsum gauging plaster or Keene's Cement.
- Protect mortar from freezing prior to set.
- Proper curing and protection required in extreme heat, wind and cold.

The information and recommendations made herein are based on our own research and/or the research of others and are believed to be accurate. However, nothing herein is to be taken as a warranty, expressed or implied regarding the accuracy of the information or the use of our products: Purchasers should make their own tests to determine the suitability of such products for their particular purposes. Nothing contained herein shall be construed to be a recommendation to use or as a license to operate under or to infringe any existing patents.

R-CRETE INC.

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^{*} No more than 2 units of R-Mortar Aid shall be used per cubic ft. of cement.