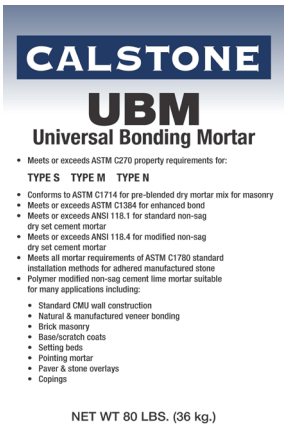
CALSTONE

Universal Bonding Mortar (UBM)

UNIVERSAL MORTAR FOR BLOCK, BRICK AND STONE



PRODUCT

Masonry Mortar - Universal Bonding Mortar

MANUFACTURER

CALSTONE
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DESCRIPTION

Calstone Universal Bonding Mortar (UBM) is a polymer modified cement/lime/sand masonry mortar designed to suit the broadest range of masonry construction and veneer applications possible. UBM is a true “Universal” masonry mortar.

COLORS

UBM can be ordered in 40+ standard Calstone colors and customer specified custom colors. Moisture content, tooling technique, weather, absorption of masonry, and other factors will affect final color. Preconstruction mock-ups recommended. Consistency in all aspects of preparation and installation is key to color consistency.

EFFLORESCENCE

UBM is available with integral water repellent (IWR) for improved efflorescence resistance and colorfastness. IWR is recommended in all color sensitive applications.

USES

Universal Bonding Mortar is suitable for use with brick, block, natural stone, manufactured stone, and other masonry of all densities and absorption rates. UBM is suitable wherever masonry mortar complying with ASTM C270 Types N/S/M, or ANSI 118.1/118.4 are required.

PACKAGING

UBM is available in 80 lb. weather resistant paper bags. Shelf life is 6 months when stored in a dry area in unopened bags.

COVERAGE

One 80lb bag will install approximately 17-20 concrete block or 25 square feet of mortar bed at ½” thick. Approximate yield is .61 cu. ft. /bag.

LIMITATIONS

- Do not use when temperatures are below 40° F.
- Do not add any admixtures without prior consent.
- Compliance with ASTM and ANSI requires laboratory preparation of samples for testing – NO FIELD SAMPLING of jobsite mixed mortar
- For use in accordance with established and published industry standards for masonry construction

TECHNICAL SERVICES

Contact Calstone for technical advice.

INSTALLATION

Mortar shall be mixed between 3 and 5 min after the final water is added in a mechanical batch mixer. Add the maximum amount of water to produce a workable consistency. Achieving a “Cake Frosting” consistency is a good starting point. High absorbency masonry, and hot dry or windy weather, will require more water in the mix.

COMPLIANCE STANDARDS

Calstone Universal Bonding Mortar meets or exceeds the broadest range of specifications for masonry mortar including;

- ASTM C270 Masonry Mortar Properties- Type S, Type M, & Type N
- ASTM C1714 Pre-blended Dry Mortar Mix for Masonry
- ASTM C1780 4.5 Mortar for Adhered Manufactured Stone Masonry Veneer
- ANSI 118.1 for Non-Sagging Standard Dry-Set Cement Mortar
- ANSI 118.4 for Non-Sagging Modified Dry-Set Cement Mortar

Calstone Universal Bonding Mortar is a mixture of the following raw materials:

- ASTM C150 Portland cement Type I, Type II, and Type V
- ASTM C207 Hydrated Lime
- ASTM C144 Mortar sand
- ASTM C1384 Bond and workability enhancing admixtures
- ASTM C1384Integral water repellants (When ordered with IWR)
- ASTM C979 Synthetic iron oxide pigments (All colors except plain gray or plain white)

*99% of the materials used to manufacture Calstone mortar are sourced locally

TEMPERING MORTARS

Mortars that have stiffened may be re-tempered by mechanical agitation & adding water as needed to restore the original consistency. Although compressive strength of the mortar is reduced slightly by re-tempering, bond strength is usually increased. For this reason, re-tempering should be required to replace water lostby evaporation. No mortars shall be used beyond 2.5 hrs. after mixing.

WORKMANSHIP

Workmanship has a substantial effect on bond strength. The time lapse between spreading mortar and placing masonry units should be kept to a minimum. This time lapse should normally not exceed one minute. Reduce this time lapse for hot, dry and windy conditions, or with use of highly absorptive masonry units. If excessive time elapses before a unit is placed on the mortar, bond will be reduced. Once the mortar between adjacent units has begun to stiffen, tapping or otherwise attempting to move masonry units is highly detrimental to bond and should be prohibited.

Tooling of the mortar joint should be done when its surface is thumb-print hard utilizing a jointer having a diameter slightly larger than the mortar joint width. Joint configurations other than concave can result in increased water permeance of the masonry assemblage. Striking joints with the same degree of hardness produces uniform joint

WARRANTY

The technical information and usage statements are based on our best knowledge. The contents of this specification sheet are presented for informational purposes only and do not constitute responsibility for their use. The manufacturer will replace only that material which is proven defective due to quality of the components or the manufacturing process

HEALTH & SAFETY

Prolonged exposure to dust may cause delayed lung disease. Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Freshly mixed materials may cause skin irritation. Avoid direct contact where possible and wash exposed skin areas promptly. If any cementitious materials gets into the eyes, rinse immediately and repeatedly with water and get prompt medical attention.

WARNING: Cancer and Reproductive Harm - www.P65Warning.ca.gov.

Refer to Safety Data Sheet (SDS) for further information. Available at Calstone.com.