# ULTRA-M1x

# Technical Information Sheet | Sept.30.22 | Pg 1/2

## PRODUCT DESCRIPTION

BRICKFORM

Brickform Ultra-M1x is a blend of iron oxide pigment and Ultra Fiber 500, packaged in a pre-measured repulpable bag. Ultra-M1x offers a premium color system combined with the added benefit of UltraFiber 500 in the mix. Ultra-M1x can be added at the ready-mix plant or at the jobsite. Brickform Ultra-M1x requires no measuring and disperses evenly throughout the concrete mix. Ultra-M1x is the perfect choice for architectural concrete on residential, commercial and municipal applications.

FEATURES

- Available in 20 premium colors
- 1lb of fiber per bag
- Reduces plastic shrinkage cracking
- UV-Resistant

### COVERAGE RATES & STORAGE

1 bag per cubic yard (six-sack mix)

#### STORAGE: Keep dry and moisture free

#### MIXING

- The drum must be cleaned. Do not use reclaimed slurry water or reclaimed aggregates.
- Add approximately two-thirds of the mix water and one-half of the aggregates to the drum, then add Ultra-M1x at full charging speed. Add the balance of the ingredients (water, aggregates, cement and admixtures) and mix at 3/4 charging speed for a minimum of 10 minutes (100 revolutions), before pouring concrete (6.13-7.36 m2/L).
- Mixer should be loaded to a minimum of 40% capacity to ensure good color dispersion.

**JOBSITE MIXING:** Slit the Ultra-M1x bag along the top dotted line, and completely remove and discard the top portion of the bag. Reverse the drum and slowly bring the concrete to the back of the drum near the chute. Add the bag(s) of color on the concrete mix and slowly draw them back into the mixer. Mix the repulpable bag(s) at 34 speed for a minimum of 12 minutes (120 revolutions) to 15 minutes (150 revolutions). This allows the proper dispersion and bag disintegration in the mix.

- When using small  $\frac{1}{4}$ " (0.6 cm) 3/8" (0.9 cm) or smooth rounded aggregates always perform a test pour to ensure the fiber breaks up properly when mixing. Use of this type of mix design could prevent the fiber from breaking up properly and thus, the fiber may create undesirable voids at the surface of the concrete. Do not add the bag to the truck, add only the color pigment and fiber by opening the bag and pouring all the contents into the truck.
- Be sure to use the same mix design and maintain a consistent water-to-cement ratio throughout the job. The use of plasticizers, water reducers and air entraining products designed for colored concrete production are acceptable.

Brickform strongly recommends the use of test slab to determine final color outcome.

After pour has begun, adding water to the load to improve workability often causes color variation.

## ADDITIVES

- DO NOT use calcium chloride. This product can cause discoloration in the form of light and dark areas in the finished product. Non-chloride accelerators, including hot water, are acceptable accelerators.
- Check the compatibility of the mix design (plasticizers, water reducers and air entraining products) with the addition of color by pouring a test slab to confirm the preferred results.



### JOB PREPARATION

- Preparing the subgrade with compacted
- aggregate, free of frost and standing water is essential to the success of using color in concrete.
- In hot conditions, dampen the subgrade before each pour to keep moisture in the concrete to allow for better hydration. Keep the subgrade moisture consis tent throughout the pouring process but do not allow any ponding or pooling of water.
- Pouring concrete over an inconsistent sub-grade or mix of dirt, plastic, wood, asphalt and existing concrete will not cure evenly. These types of sub-grades will force the majority of water to the surface to evaporate, causing efflorescence in those affected areas. In hot conditions, dampen the sub-grade before each pour to keep moisture in the concrete to allow better hydration. Keep the sub-grade moisture consistent throughout the day without allowing the water to pool.
- Jobs requiring a vapor retarder, and job sites having high heat and low humidity conditions, are exceptions to pouring over plastic. Pouring concrete directly over plastic can lead to numerous problems including excessive bleed water, uneven drying time, shrinkage, cracking, and efflorescence. Consider adding 2"-4" of sand between plastic and concrete. If pouring directly over plastic, mix design may need to be altered. Consult with your ready mix supplier. Slump and placement techniques require tighter tolerances, and finishers need to be well trained and experienced.



# ULTRA-M1x



# Technical Information Sheet | Sept.30.22 | Pg 2/2

# FOR VERTICAL APPLICATION

- All forms should be cleaned thorougly prior to use or reuse, and applied release agents should be non-staining.
- Vertical wood forms should be made of medium-density overlay plywood. For color uniformity, methods and material used in preparing the forms should be consistent through the completion of the job.
- Lightly and uniformly sandblasting vertical surfaces is highly recommeded to remove minor form marks and any colored residue resulting from water, cement, and coloring agents bleeding toward the forms during concrete placement.

## PLACEMENT AND FINISHING

Follow professional standards and guidelines such as those from the American Concrete Institute (ACI) and the American Society of Concrete Contractors (ASCC) for concrete applications.

#### CURING:

- DO NOT fog or spray water on the surface during the initial curing period.
- DO NOT cover the surface with plastic or use concrete blankets.
- Failure to follow these guidelines can lead to uneven curing and coloration.

#### Brickform recommends the following products and curing method:

**BRICKFORM CURE & SEAL** products meet the ASTM Standards C 309 and C 1315 for curing most new colored architectural concrete flatwork. Apply at a rate of 250-300 sq. ft. per gallon (6.13-7.36 m 2 per liter) once the slab is hard enough to be walked on without marring the surface.

Use caution when applying these products in high heat, direct sunlight, and/ or in windy conditions. Please reference the appropriate Cure & Seal Technical Information Sheet for a full description of the product use, limitations and precautions. Links to these sheets and additional coloring information are available at **brickform.com**.

Proper curing, along with maintaining a low slump and protecting the surface against water penetration, reduces the possibility of efflorescence. If efflorescence does occur, remove efflorescence using BRICKFORM E-ETCH. Follow with a light scrubbing or the use of a low r.p.m. rotary scrubbing machine.

**SEALING:** For additional protection seal using a high quality decorative concrete sealer. Brickform Gem-Seal, Poly-Seal, Gem-Guard, Gem-Cure & Seal, Gem-Cure & Seal **WB**, and Stealth Seal WB are recommended. Consult the TIS for your chosen sealer before application.

## TECHNICAL SPECIFICATION DATA

#### COMPOSITION AND MATERIALS:

Pigments are red, yellow, and black iron oxides.

Brickform has expanded the color range by formulating laboratory-controlled, high tinting strength pigment blends. Solomon Colors iron oxides are permanent, inert, stable to atmospheric condition, sunfast, limeproof, and free of deleterious fillers and extenders. All Brickform pigments comply with ASTM C979 for integrally colored concrete and are produced and tested to an established plant standard.

#### LIMITATIONS:

A level of 7% (by dry weight) color based on the weight of total cementitious material used is the color saturation point. Color added in excess of 10% (by dry weight) can reduce the overall strength of the finished product. Conversely, a level of color below 1% can cause irregular coloring and general "washed out" appearance.

#### **COLOR SELECTION:**

- The color cards supplied by Brickform approximate non-sealed color shades of integrally colored concrete based on medium tone Type 1 or 2 Portland cement with a 4" slump.
- Cement shades and the use of pozzolanic material like fly ash as well as water content have the most impact on the final color outcome. Consistency in all materials and water amounts is critical to the final color outcomes.

## COMPLEMENTARY PRODUCTS

- DAY 1 Finishing Aid -Lubricates the surface and eliminates the need to add water to the surface
- E-Etch—Cleaning and etching agent
- Neutra Clean—Cleaning and neutralizing agent
- Brickform Sealers—Protection and color enhancement

# SAFETY & PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Before use or handling, read SDS and Warranty. DO NOT TAKE INTERANLLY. Avoid contact with skin or eyes. Close container after each use. Use good hygiene when handling this product. Wash and bathe after use. Wash clothing after use.

## WARRANTY

This product is not intended for public use and is intended for use by licensed contractors and installers, experienced and trained in the use of these products. It is warranted to be of uniform quality, within manufacturing tolerances. The company has no control over the use of this product, therefore; no warranty, expressed or implied, is or can be made either as to the affects or results of such use. The exclusive remedy of the user or buyer and the limit of the liability of this company shall be the purchase price paid by the user or buyer for the quantity of the Brickform products involve

For more information go to: solomoncolors.com or brickform.com





SOLOMON BR Colors ©: