

ULTRA AM1 - TDS

#### **Product Name:**

**ULTRA AM1** 

#### **Product description:**

ULTRA AM1 is a polymer emulsion for use with Cement/sand Mortar, cement - based adhesives. The tile setting Cement / sand mortar, adhesives fortified with Ultra Admix AM1 increase flexibility, strong bond and high compressive strength when compared with conventional cement mortars. Unlike other admixture this highly increases the strength of cement sand mortar/ concrete, they bind all the loose particles and provide a water resistant crack free, dust free substrate; they also help in self curing or the hydrating process so even in improper curing they provide high bond strength which is not possible with local admixture. It can also be used as an admixture in plaster to provide a water resistant plaster, non shrink and non cracking plaster.

ULTRA AM1 can be used for waterproofing wet areas such as bathrooms it can be mixed with adhesives or cement sand mortar with a brush able consistency and when coated on wall and floor before tiling it provides excellent water resistance.

## **Advantages:**

- Suitable for Interior and exterior use
- Acrylic co polymer additive for cement & adhesives
- ➤ Water Resistance
- Increases physical & chemical properties of adhesives
- Good bonding agent for concrete and cement applications
- ➤ In order to obtain the optimum benefits from the use of Ultra AM1 in cement: sand mortar and gypsum plastering applications, it is recommended that a combination of admixture and slurry bonding coat is used.
- ➤ Can be used as a slurry coat when mixed with hydraulic cement or gypsum plaster; as a multi-purpose admixture for cement: sand mortars, concrete and gypsum plaster; as a dust proofer.

#### Area of usage:

- Slurry coat Admixture
- Direct Cement: sand
- Screeds
- > Toppings or rendering
- Plastering
- Waterproofing
- Bonding Agent

- Concrete repair
- Priming and sealing

#### Site work Instructions:

- ➤ Cut out the area to be repaired, minimising the need to featheredge the repair mortar.
- > Wire brush any exposed steel reinforcement.
- ➤ Prime the exposed steel with a Ultra AM1 slurry coat and allow to dry overnight. See Ultra AM1 slurry bonding coat in the section on cement: sand screeds, toppings and renderings.
- ➤ Dampen the exposed concrete surface and apply a second slurry coat over the whole area to be repaired.
- ➤ Apply the repair mortar whilst the slurry coat is still wet. Where the extent of the repair requires more than one mortar layer, scratch the first layer and leave to set before applying a second layer of similar thickness.
- > Leave finish coat with a smooth surface.

#### APPLICATIONS:

# **Slurry bonding coat:**

Ultra AM1 with Cement slurry greatly improves the adhesion of cement: sand mortars to a wide range of backgrounds / bases including dense concrete and autoclaved block work and impervious backgrounds / bases such as steel and existing ceramic tiles.

# Admixture:

When Ultra AM1 is used as an admixture in cement: sand mortars, the resulting polymer modified screed, topping or rendering possesses the following advantages over an unmodified mortar.

- ➤ Greater toughness, flexibility and tensile strength, allowing mortars to be applied in thinner sections, thus reducing the weight of the construction.
- Improved adhesion to background/bases.
- ➤ Greater resistance to water and water vapour.
- Greatly increased impermeability to water and salts.
- ➤ Greater resistance to water soluble chemicals.
- > Greater abrasion and impact resistance.
- Reduced water demand for equivalent workability.
- Reduced surface dusting.
- ➤ Improved working characteristics particularly valuable in hot, humid climates. .

## Applying waterproof rendering:

Apply to wet waterproof bonding coat:





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- ➤ If 2 coats are required, comb the surface of first coat immediately after initial set to form a key and allow hardening and drying out before applying the second coat.
- ➤ Apply each coat in one continuous operation wherever possible to avoid joints.
- ➤ Check each coat for continuity. Patch pinholes, other breaks and thin areas before applying next coat.
- Do not cross hatch coatings to form a key.
- > Finish with a wood float.

In the case of potable water tanks, allow the screed / rendering to air dry for at least two weeks before flushing with water until the water is free from taint, opalescence and froth. If the slurry coats alone are being used to resist the permeability of standing water, then three slurry coats will be required. Allow each coat to harden between applications. Each coat should be approximately 1 mm thick. Allow further 24 hours to dry before exposure to water.

## Waterproofing:

Waterproof finishes for swimming pools, concrete water tanks, pool surrounds, external decks and cladding, fountains and water features can be provided through the combination of correctly applied

Ultra AM1: cement slurry coats and renderings modified with Ultra AM1. Also suitable for use with potable water. The use of Ultra AM1: cement slurry coats alone will significantly reduce water transmission and provide a membrane impervious to standing water (without hydrostatic pressure).

Any water retaining concrete structure should be designed and constructed in accordance with BS 8007:1987 (Code of practice for the design of concrete structures for retaining aqueous liquids). The water tightness should not rely on the Waterproof screed/rendering alone; moreover the concrete shell should have been proved to be watertight.

## **Waterproof bonding coat:**

- ➤ For mortar using Portland cement: Mix by weight 2 parts Portland cement to 1 part Ultra AM1.
- ➤ Ultra AM1 pre-diluted 1:1with clean water.
- ➤ Brush on to background/base immediately and allow dry overnight.
- Apply with Brush for second coat at right angles to the first immediately before applying the waterproofing screed/rendering.

## **Laying Waterproof Screed:**

- ➤ Thickness of screed: Minimum at any point 12 mm and maximum at any point 60 mm.
- ➤ Unless specified otherwise cast screed continuously. As far as possible without defined joints, using either ' wet screeds' between strips/ bays or, battens accurately levelled to achieve the required thickness.
- ➤ Lay screed onto the wet waterproof bonding coat to ensure a good bond. Compact screed thoroughly by heavy tamping or by mechanical means. Strike off any excess material using a rule / straightedge
- ➤ Form vertical joints immediately before laying screed.
- Finish with a wood float.

### Concrete Repair:

When used in conjunction with the correct mortars and as slurry with cement, Ultra AM1 provides an ideal system for patch repairing concrete. Large areas should be considered individually by specialist concrete repair contractors.

#### Plastering:

Ultra AM 1 used with cement/gypsum plaster:

- 1. Greatly improves adhesion to the back ground.
- 2. Provides high cohesive strength.
- 3. Increases flexural strength.
- 4. Reduces surface dusting.

## **Coverage estimates**

Coverage will depend on the nature and flatness of the surface and the method of application. For good coverage, it is vitally important that all surfaces should be clean, smooth, plumb, level and free from defects and undulations.

#### **Precautions:**

Keep out of reach of children. Ensure adequate ventilation and do not smoke when using this product. Not to be taken internally. If accidentally swallowed drink plenty of water and seek medical attention immediately.

## Storage & Shelf Life:

At least 12 months when stored in normal, dry conditions.

#### **Packing Size:**

1 Litre & 5 Litres



Web: www.ultragreencc.com



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# **Technical Specifications:**

Ultra Admix AM1	- @27±1ºC
Appearance	- White
EMULSION:	
Total solids	- approx. 47%
PH 7	- 8.5
Specific Gravity	- 1.01
Stabilisation	-Non-Ionic
COVERAGE:	
Primer	- (NEAT) 12 <sup>2</sup> / Litre
Plaster	- 5 M <sup>2</sup> / Litre
Render	- 0.8 M <sup>2</sup> / Litre
Screed	- 0.25 M <sup>2</sup> / Litre
Slurry Coat	- 3 M²/ Litre

# **Corporate office:**

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