

# VARACRETE LM-011

## SPECIAL POLYMER EMULSION FOR THIN BED CEMENTITIOUS MORTARS

### DESCRIPTION

**VARACRETE LM-011** is a specially formulated liquid polymer emulsion recommended or use as an additive for thin bed mortars in installing tile, paver, brick, marble and stone. These mortars are suitable for interior and exterior use over concrete as well as masonry type surface. **VARACRETE LM-011** is suitable for application which will be subject to continuous underwater immersion such as swimming pools, fountains etc.

### USES

**VARACRETE LM-011** based mortars are used for installing ceramic tiles, mosaic tiles, quarry tiles, natural stone, marble, terrazzo tiles, glass mosaic tiles, thin bricks. These mortars are recommended for use over new and old concrete, masonry surfaces, gypsum plaster, concrete blocks, concrete screeds, gypsum wallboard, concrete plaster, calcium silicate blocks, existing terrazzo tiles.

### ADVANTAGES

- ◆ **Excellent Adhesion** : **VARACRETE LM-011** imparts a three fold increase in the bond strength of mortars.
- ◆ **Chemical Resistance** : A multi fold increase in the chemical resistance of portland cement mortars. It resists urine, sugar, brine, milk and dilute chemical solution.
- ◆ **Easy to use** : **VARACRETE LM-011** mortars are plastic and easily workable.
- ◆ **Versatility** : One material for walls and floors, porous tiles, vitrified tiles, quarry tiles, pavers and marble, interior and exterior.
- ◆ **Safe** : Non-flammable and non-toxic during storage, mixing, application and when cured. Locally manufactured always fresh product.

### APPLICATION

When used with **AKARSH** products, please refer to the respective data sheet for application instructions.

When used with site produced cementitious mixes, carefully follow the instructions as follows:

Dry concrete or substrates should be cleaned to remove rust ,grease, laitance and contaminations. Then dampen the application area thoroughly using clean water.

- ◆ **Mixing**: Mix 1 part Portland cement with 1 part finely graded sand and add **VARACRETE LM-011** to achieve desired consistency. 50 kg of Portland cement mixed with 50 kgs of sand will require approximately 20 litres of additive.
- ◆ **Placing**: Apply mortar to the substrate using the proper trowel. Scrape mortar into good contact with the substrate. Normal thickness of the mortar is approximately 3 - 6 mm. Do not apply more material than can be covered in 10 - 15 minutes. For large tiles and marble apply this extra mortar to the back of each piece to ensure complete coverage.

### WORKING TIME

- ◆ **Pot life** : **VARACRETE LM-011** based mortars will remain workable in the mixing container for 1 - 2 hours in cool weather. In warmer area the pot life will be shorter.
- ◆ **Open Time** : When applied with a trowel, the open time will be approximately 30 - 40 minutes. Open time will vary depending on ambient temperature and conditions.

## COVERAGE

Description	Coverage/Kg of VARACRETE LM-011
Wall Tile	1.5 - 1.75 m <sup>2</sup>
Ceramic Mosaics	2.0 - 2.25 m <sup>2</sup>
Quarry Tile	1.0 - 1.25 m <sup>2</sup>
Marble & Terrazzo Tiles	0.75 - 1.00 m <sup>2</sup>
Slurry Bond Coat	2.0 - 2.25 m <sup>2</sup>

**Latex Mortar Setting Beds:** One (1) Part Portland cement with three (3) parts sand mixed dry and then gauged with a sufficient quantity of liquid latex additive **VARACRETE LM-011** to bring the cement setting bed to the proper consistency for placing. Amount of gauging liquid required and the consistency of cement setting bed for using a dry tamp method shall be decided by actual site trails.

## TYPICAL PROPERTIES

Thick Set Mortar Mix using **VARACRETE LM-011**

- ◆ **Consistency** : Mortar Type.
- ◆ **Water absorption to ANSI A 118.4 (F - 7)** = 3.2%.
- ◆ **Compressive strength : ASTM C 109 - 38** N/mm<sup>2</sup> @ 28 days.
- ◆ **Bond strength to ANSI A 118.4 (F 8.2.5)** = 3.5 N/mm<sup>2</sup>.

**Cleaning:** Clean tools and the surface of the finished work with water while mortar is fresh.

## PACKAGING

**VARACRETE LM-011** is available in 5, 20 and 200kg packing.

## PRECAUTIONS

**Cleaning:** All equipment must be cleaned with water immediately after use. Mixes containing this product must not be emptied into drainage systems.

**Storage:** Shelf life 12 months when stored in dry conditions at moderate temperature and humidity. Protect the product from frost.

**Fire resistance:** The product is not flammable.

## PERFORMANCE STANDARDS

**VARACRETE LM-011** confirms to the performance requirements of **ANSI A 118.4**, **ANSI A 118.1** and **ANSI 136.1**.

## HEALTH AND SAFETY

**VARACRETE LM-011** is non toxic but it is mildly alkaline. Gloves should be worn during application. Splashes to the skin or eyes should be removed with clean water. In the event of the prolonged irritation, seek medical advice.