

CODE: VS-480

**PRODUCT NAME:**

**Vinyl Ester Mortar**

**DESCRIPTION:**

VS-480 is a three component modified vinyl ester flooring material. It is used in applications that require high impact and abrasion resistance to acids.

The cured system provides a durable topping that withstands mechanical load and chemical attack .VS-480 is used in areas subjected to solvents, acids, fats, oils, water and various chemicals. Its dense surface prevents penetration of corrosive while allowing for easy cleaning. It is also suitable for tiling or bricking.

**TECHNICAL DATA:**

Binder	Vinyl Ester
Pigment	Chemical resistant pigment
Finish	Gloss-Semi flat
Color	Grey, Cream
Specific gravity after mixing	2.1±0.2 Kg/Lit
Volume solid	100 %
Flash point	90 °C
Typical dry film thickness	1mm- 3 cm
Number of coat	One
Mixing ratio by weight	Base : 100 parts Hardener : 2-4 parts Powder:300-400 parts
Substrate	Primed concrete
Application method	Pour and Spread by Conventional saw tooth Trowel
Theoretical spreading rate ( at 3 mm)	0.3 M <sup>2</sup> /Lit
Thinner / Cleaner	Not applicable
Packing	Base : 3.6 kg Hardener : 0.1 kg Powder:10-14.5 Kg
Shelf life	6 Months

## Mechanical Properties

Compressive strength	Aprox. 14000 psi
Flexural strength	Approx.4000 psi
Tensile Elongation	2-3 %
Tensile strength	Approx.1750 psi
Adhesion to concrete	370 psi(concrete fails)



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## Drying Times

Temp	Touch dry	Hard dry	Overcoating		Full cure
			Min	Max	
15°C	6 hours	15 hours	32 hours	-	13 days
25°C	4 hours	12 hours	24 hours	-	7 days
40°C	3 hours	9 hours	18 hours	-	4 days



**Note:** Drying times are dependent on applied film thickness; all data in this catalogue are reported at recommended DFT.

## Pot life

Temp. of paint	15°C	25°C	40°C
Pot life	60 minutes	40minutes	20 minutes

## Surface Preparation

All surfaces to be coated should be clean, dry and free from contamination .Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:1992.

Oil or grease should be removed in accordance

with SSPC-SP1 solvent cleaning

### Primed surfaces

VS-480 can be applied over approved primers. The primer surface should be dry and free from all contamination, and VS-480 must be applied within the overcoating intervals specified

## Concrete Surfaces

Concrete should be cured for a minimum of 28 days prior to coating. The moisture content of the concrete should be below 6% .All surfaces should be clean, dry

All Cracks in the concrete shall be filled by VS-480, before applying topcoat.

Surface preparation shall not take place in following conditions:

- 1-At temperature below 5 °C.
- 2-When the relative humidity greater than 50-60%.
- 3-When the metal surface temperature is less than 3 °C above dew point.
- 4- Out side day light hours on exterior locations

## REPAIR:

- Damaged concrete must be cut back to sound material e.g. by use of pneumatic tools.
- All concrete contaminated with acids, chlorides, etc. must be remove.
- Repair layer must not be applied in thickness exceeding 12 Cm, but if thicker layers are required, then application may be built up layer by layer, leaving 1 hour between each coat.
- If overcoating with itself or other coatings, surface must be kept free of condensation, moisture and direct sunlight between coats.
- Remove dust, dirt and contamination before recoating.

## Application Method

The mix ratio of VS-480 varies depending the application:

- a) A ratio of 100 parts resin to 300 parts powder by weight is suggested for any overhead pointing, full joint and bed joint installation.
- b) A ratio of 100 parts resin to 350 parts powder is suggested for repainting joints and as a setting bed or full joint mortar for masonry floors and walls.
- c) A ratio of 100 parts resin to 400 parts powder, by weight, is suggested for new construction of tile chest/ tower.

For mixing of three components please apply this instruction:

- 1) Place VS-480 and catalyst in a mixing container.
- 2) Add powder to it and mix for approximately two minute or until all the powder is thoroughly dispersed.



### Tile and Brick joints:

Install the mortar to conventional brick laying techniques. Apply mortar using two sides of brick forming a "V" profile. Place brick on the setting bed and slide it into place to attain a 3 mm wide joint. Strike excess mortar before the mortar begins to set.

### Setting Beds:

When using VS-480 as a bed joint over a membrane, apply a coat of EP-301 over the membrane and allow it to dry. Apply the mortar with 3/16 inch V-notched trowel held at a 45 degree angle. Place a sufficient amount of mortar to provide a continuous bond coat to the specified thickness. Do not apply more mortar than can be covered in 10 to 15 minutes.

### HEALTH AND SAFETY

This product is Flammable. Keep away from heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

- 1-Circulate adequate fresh air continuously during application and drying.
- 2-Use fresh air masks and explosion proof equipment.
- 3- Prohibit all flames, sparks, welding and smoking.