

# HICOAT E10

## Moisture Barrier Bitumen Emulsion Coating

**HICOAT E10** is a liquid bitumen emulsion coating which dries off to form a tough yet flexible moisture barrier protective membrane. It is a superior quality coating manufactured by using a blend of high quality bitumen compound and selected mineral fillers.

The product is VOC free and is extremely low on emissions. Being highly thixotropic and easy to apply, makes the product highly suitable for application on concrete surfaces as a moisture barrier coating.

### APPLICATION FIELDS

- Concrete foundations which are above the water table
- Block works
- Building facades prior to cladding

### BENEFITS

- VOC free. No health or environmental hazard.
- Odorless. Safe to apply in poorly ventilated or confined areas.
- Easy to apply. Cold applied. No additional heating is required.
- Highly thixotropic. Can be applied at high thickness on vertical surfaces without any sag or flow.
- Good resistant to soil chemicals like chlorides and sulphates.
- Good adhesion on most substrates.
- Non-flammable.
- Conforms to ASTM D 1227, Type III, Class 1

### METHOD OF APPLICATION

**HICOAT E10** coating shall be applied as per the following general method of application:

#### a. Conditioning and preparation of substrate:

The performance and ultimately the durability of the coating largely depends on the condition of the substrate on which it is coated on. Therefore, conditioning and preparation of the substrate is of utmost importance prior to the application of the coating.

The surfaces shall be thoroughly cleaned to remove all loose flakes, dust particles and cement laitance (for new concrete). Surface defects like potholes and pinholes on building facades on the concrete shall be repaired with an appropriate concrete repair mortar.

#### b. Priming

On new concrete surface the bitumen coating can be applied directly without applying a priming coat. However, it is highly recommended to apply a priming coat on all old and highly porous substrates for improving the adhesion of the subsequent coats. The priming coat can be prepared in the work site by diluting the bitumen coating with 20% clean potable water. The diluted coat shall then be mixed thoroughly with a proprietary paddle mixer to ensure homogeneity of the mix.

Primer application can be done by a brush or roller. On large areas the application may be done by an airless spray gun.

The applied primer should be allowed to dry before applying subsequent coats. The primed area shall be re-primed if there is a delay in the application of the top coat for more than 24hours.

#### c. Top Coat

Application of **HICOAT E10** is done by a suitable applicable roller or brush. Large area application may be done by an airless spray gun. When applying by airless spray, the emulsion coating has to be diluted and brought to the appropriate consistency for proper application. (Please Consult HiSpec Technical Services Team).

The coating shall be applied in a minimum of 2 coats for optimum performance.

The coverage rate will vary depending on the area of application and the nature of protection required. The coverage rate varies from 1m<sup>2</sup>/lt. per coat (to achieve a 350microns DFT used as the vapour barrier protection coating on concrete foundations) to 4m<sup>2</sup>/lt. per coat (to achieve a 100microns DFT used as moisture barrier coating on building facades).

When applying multiple coats, all subsequent coats shall be applied when the previous coat has dried off completely.

#### d. Protection of applied coating

As the coating is bitumen based, it is extremely important to protect the applied coating especially on foundations from damage from ongoing site activities. Appropriate measures (e.g.150micron polyethylene sheet) may be taken to cover and protect the coating.

#### NOTE:

- a. Being water based the bitumen in the pail or drum has a tendency to sediment when stored for long durations. Therefore, it is recommended to stir the pail with a mixing paddle or roll the un opened drum on the ground for a few minutes to remove all sediments.
- b. In hot climatic areas, some amount of water may evaporate out during storage. This may make the coating quite viscous and difficult to apply. Additional water up to 5% may be added at the work site to improve the application consistency.

#### **COVERAGE RATE**

Moisture vapor barrier coating for building facades: 4 m<sup>2</sup>/lt. per coat (D.F.T of 100 microns)

Damp proofing of block work & concrete foundations: 1m<sup>2</sup>/lt. per coat (D.F.T. of 350 microns)

#### **STORAGE & SHELF LIFE**

**HICOAT E10** pails or drums should always be stored in dry and shaded areas. The product should not be kept exposed to direct sunlight or kept near to any source of heat.

The product Shelf life is up to 24 months when stored as per recommendation. Failure to comply with the recommended storage conditions may result in premature deterioration of the product.

#### **HEALTH & SAFETY**

**HICOAT E10** is a VOC free product. Therefore, the product is non-hazardous to health and environment. However, as a precautionary measure and to avoid sticking of the bitumen to hands and skin, it is recommended to use gloves and safety goggles. In case the bitumen stains on skin or splashes to eyes, wash the affected area with plenty of fresh water immediately.

In critical cases seek medical assistance.

#### **TECHNICAL SPECIFICATION**

PROPERTIES	VALUES	TEST STANDARD
Form	Thick Viscous Liquid	-
Color	Dark Brown	-
Density, g/cc	1.02±0.02	ASTM D 1475
Solid Content	35±5%	ASTM D 1644
Firm set @25°C	24 hours	-
Application temperature	5°C to 50° C	
Service temperature	-5°C to 85 ° C	

#### **PACK**

<b>HICOAT E10</b>	15 kg. pail & 200 lt. drum
-------------------	----------------------------