# **ECMACRYSTAL 206**

# Crystalline Mortar for Waterproofing Sealing of Concrete Joints

# **Description**

ECMACRYSTAL 206 is a crystalline waterproofing mortar, consisting of proprietary blend of Portland cement, quartz aggregates, micro-fibers, antishrinkage additives and special active chemicals. It is in powder form, when mixed with water becomes a troweled/ putty consistency mortar that is used to repair and permanently waterproof sealing of inner honeycombed or damaged concrete patches, construction joints, cracks, etc. ECMACRYSTAL 206 crystalline mortar when used to seal concrete joints/ cracks, etc. comes in contact with water reacts with un-hydrated cement particles and moisture to form millions of needle-shaped crystals which grow and seal the cracks, pores, voids and capillaries in the concrete, thereby providing lasting imperviousness to water.

#### Uses

ECMACRYSTAL 206 crystalline waterproofing system is used for waterproof sealing of Leaking cracks, Joints, Patches of damaged/ honeycomb concrete, Covings, Tie-rod Holes, Pipe penetrations, etc. in concrete constructions. This mortar can also be used for stopping active leaks in a wide variety of conditions. When used in conjunction with ECMACRYSTAL 203 coating, ECMACRYSTAL ADMIX 204 & ECMACRYSTAL 205 Dry shake system or any other waterproofing system, it greatly improves water tightness of the concrete structures.

#### **Advantages**

- Resists extreme hydrostatic pressure from either positive or negative surface of the concrete slab
- High compressive strength
- Highly resistant to aggressive chemicals, resists chemical attack of sewage and industrial wastes
- Can seal hairline cracks up to 0.5 mm.
- Non-toxic and VOC Free, safe for contact with potable water
- Contains no chloride
- Suitable for external and internal applications.

# **Technical Specifications**

Appearance & Physical State	Grey, Powder form
Mixed Density g/cm <sup>3</sup>	1.200±0.10
Pot Life @ 27°C	20-30 Minutes
pH	12
Compressive Strength @ 27°C, 60% R.H.	
1 Day	>15 MPa
3 Days	>30 MPa
7 Days	>40 MPa
28 Days	>50 MPa



### **Application Instruction**

**Surface Preparation:** Surfaces must be clean and structurally sound. Cut and open the cracks & joints in regular U or V shape or 25mm x 30mm groove size. Remove all loosely adhered particles, dirt, laitance and other contaminants by wire brush or water blasting. Surface must be in damp/ SSD condition prior to application of ECMACRYSTAL 206 crystalline waterproofing mortar.

**Mixing**: Mix ECMACRYSTAL 206 with clean potable water to suitable consistency (approx. mixing ratio 4.5-5 parts powder to 1-part water by volume) using mechanical mixer for 5 minutes till a lump free and homogenous mortar is obtained. Mix only the applying quantities for 20 minutes.

**Application:** Apply ECMACRYSTAL 206 mortar/ putty on the prepared surface using a trowel and seal the cracks/ joints/ grooves/ holes or to repair damaged concrete patches properly. In critical situations, apply a thick coat of ECMACRYSTAL 203 to the surface prior to application of ECMACRYSTAL 206.

**Curing**: ECMACRYSTAL 206 treated surfaces must be kept moist for a minimum of 72 hours. After initial set, treated surfaces shall be fog sprayed 3 to 4 times daily. For warmer climates, more frequent spraying may be required. It is important to keep the ECMACRYSTAL 206 crystalline waterproofing system moist to allow the crystal formation to occur and grow.

# **Packaging**

ECMA CRYSTAL Mortar is supplied in 25 Kg HDPE moisture resistance bag.

#### Coverage

ECMACRYSTAL 206 consumption will be approx. 15 RMT/Bag for U shape cracks (25mm x 25mm size)

#### **Shelf Life**

06 Months in original unopened sealed condition.

#### Storage & Handling

Material should be stored in moisture free, cool and dry shade. Please do not use hook and handle carefully during transport.

## **Safety Precautions**

ECMACRYSTAL 206 crystalline waterproofing system contains chemicals that may cause irritation to the eyes and skin. Goggles, rubber gloves and long sleeves should be worn when working with these products. Refer to product material safety datasheet prior to use.



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