

MasterShield™ 330 EL (Thorolastic® S)

Acrylic Polymer Based Elastomeric Exterior Coating With Highly Protective Properties Designed for Reinforced Concrete and Plastered Surfaces

Material Description

MasterShield™ 330 EL is a 100% acrylic polymer based single part elastomeric exterior coating material that protects reinforced concrete parts against frost effect, carbonating, and degradation of various salts.

Complies with EN 1504-2

Areas of Application

- Outdoor areas, in vertical applications
- In exteriors of buildings, villas, factories, and hotels
- As decorative protecting coating on concrete, plaster, brick, and stone surfaces

Characteristics and Benefits

- Protects the structure against carbonating, and degradation of various salts
- Has crack bridging property up to 0.30 mm.
- Forms a flexible, UV resistant, and decorative coating
- Reduces reinforcement corrosion with its low CO₂ diffusion
- **MasterShield™ 330 EL** coating with 0.40 mm film thickness has equivalent carbon dioxide (CO₂) diffusion resistance of 20 cm thick concrete.
- **MasterShield™ 330 EL** elongates 300% of the first film thickness

- Ability to bridge cracks even in freezing temperature
- Gains 98% perfect elasticity in 24 hours
- Resistant to freezing-thawing cycle
- High durability.
- Vapor permeable. Enables rapid drying of the surface it is applied on
- Ready to use and easy to apply
- Does not contain solvents
- **MasterShield™ 330 EL** forms smooth and even surfaces

Processing Method


(A) Preparation of Substrate

Application surface has to be strong, dry, bearing, dustless, clean, and also in balance. Surface must be cleaned off all kinds of oil, grease, rust, and paraffin traces that can weaken adherence and no loose particles must be present. Disordered surfaces must be repaired by suitable **MasterCrete™** Range Repair Mortars. Newly plastered and reinforced concrete surfaces must be waited for 28 days curing period.

(B) Mixing

Before using **MasterShield™ 330 EL** it must be mixed with a 400-600 RPM mixer. Under no circumstances, water must be added to **MasterShield™ 330 EL**. Surface must be clean and dry. As primer, **Astar A®** is applied on surface as 2 layers to the plastered surfaces. Then **MasterShield™ 330 EL** has to be applied on

Technical Properties

| | | |
|--------------------------------|--------------------------|---|
| Structure of the Material | Improved Acrylic Polymer | |
| Color | White | LX |
| Solid Substance Content | 65 % |  |
| Density | 1,25 kg/liter | |
| Application Ground Temperature | +5°C +25°C | |
| Water Vapor Permeability: | | |
| Service Temperature | -20°C +120°C | |

Obtained in +23°C, %50 relative humidity conditions. Higher temperatures decrease the time, lower temperatures increase the time.

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primed surfaces by a suitable roll. There is no need to prime the surfaces for concrete protection, **MasterShield™ 330 EL** has to be applied on concrete surfaces by a suitable roll.

(C) Processing

MasterShield™ 330 EL should be applied on primed surfaces as 1 layer, after 4-6 hours by a suitable roll or spraying machine. Application is finished by applying the second layer after 5-6 hours.

Consumption

Min. required thickness to form a protective coating against carbonating: **MasterShield™ 330 EL**: 200-300 microns. Coverage is directly proportional to the smoothness of surface. **MasterShield™ 330 EL**: 0.56 kg/m² in 2 layers.

Point to Consider

- If environmental temperature is below +5°C or over +30°C in **MasterShield™ 330 EL** application, then suitable temperatures must be waited for.
- Applied material has to be protected from rain or frost during the first 24 hours.
- **MasterShield™ 330 EL** may be applied on strong and old painted surfaces if needed. In these cases, adherence of the existing painting has to be tested.
- **MasterShield™ 330 EL** should be applied on conditions where environment and surface temperature will no drop +5°C for 24 hours.
- Drying period between the layers must be watched for.

Cleaning of Tools

All the tools and equipments must be cleaned by water after the application. After **MasterShield™ 330 EL** is hardened, it can only be removed from the surface mechanically.

Packaging

20 kg plastic bucket

Shelf Life

12 months after the production date under appropriate storing conditions. Opened packages have to be stored by tightly sealing the cover and must be used in one week.

Storage

Must be stored in unopened original packing, and in cool and dry environment protected from freezing. In short-term storing, maximum 3 palettes can be stowed on top of each other and delivery has to be according to first in first out system. In long-term storing, the palettes must not be stowed on top of each other.

Health and Safety

It is dangerous to approach the application sites. During the application, a protective apparel, protective gloves, goggles and masks which comply with the Occupational Health and Safety Rules should be used. Due to the irritation effect of the uncured materials, the mixture should not come into contact with skin and eyes; in case of a contact, the affected area should be washed with plenty of water and soap; in case of swallowing, a physician should be consulted immediately. No food or beverages should be brought to the application area. The product should be stored and kept out of reach of children. For detailed information please consult the Material Safety Data Sheet.

Disclaimer

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is only responsible for the quality of the product **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones.

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