# Shieldplaster CP20 E

**Pre-mixed, Cement-based, Weather-resistant Leveling Plaster (3 – 20) mm**

TECHNICAL DATA SHEET

## Description

**Shieldplaster CP20 E** is a polymer-modified, cement-based leveling plaster, designed to provide a fair-faced finish for uneven surfaces. It is supplied as a pre-bagged dry powder, only requires the addition of clean mixing water on site, and can be applied manually or by wet spray application methods to give a thickness of (3 – 20) mm.

### Uses

- For internal and external walls and ceilings.
- Aesthetic repair works on concrete structures.
- Patching of fair-faced concrete imperfections such as pinholes.

### Characteristics / Advantages

- Factory-controlled, pre-blended dry mix that requires the addition of clean water on site.
- High build thickness in a single layer.
- Hand or spray application.
- Water and frost-resistant.
- Economical grade.
- Suitable for both interior and exterior applications.
- Can be used in dry and humid conditions.
- Easy to mix and apply.
- Low VOC.

### Standard Compliance

EN 998-1, CSIV–W2

ASTM C926

### Packaging

**Shieldplaster CP20 E** is supplied in 25 kg bags.

### Safety Instructions

**Shieldplaster CP20 E** contains hydraulic cement and may cause irritation to the skin or eyes. Refer to the most recent Material Safety Data Sheet for information and advice on the safe handling, storage, and disposal of the product.

### Typical Properties

| | |
|---|---|
| Appearance/ Color | Grey powder |
| Maximum Aggregate Size | 600 µm |
| Bulk Density | 1.55 ± 0.1 g/ml |
| Fresh Wet Density (@ 23°C) | 1.75 ± 0.1 g/ml |
| Working Time (@ 23°C) | 45 – 60 minutes |
| Setting Time (@ 23°C) | 6 – 8 hours |
| Yield / 25 kg bag | ~ 16 Liters |
| Compressive Strength (BS EN 1015-11) @28 days | ≥ 11 MPa |
| Flexural Strength (BS EN 1015-11) @28 days | ≥ 3.5 MPa |
| Bond Strength (BS EN 1015-12) @28 days | ≥ 0.70 MPa |
| Capillary Water Absorption (BS EN 1015-18) @28 days | < 0.20 Kg/ $m^2.min^{0.5}$ |

### Shelf Life and Storage

**Shieldplaster CP20 E** has a shelf life of 12 months when stored in its original unopened packaging in cool and dry conditions, protected from direct sunlight, heat, and moisture. Shelf life may be reduced if the recommended storage conditions are not followed.

### Application Instructions

#### 1. Surface Preparation

The substrate must be free from dust, oil, laitance, or materials that may reduce bond or prevent adhesion. The substrate surface should be roughened slightly by suitable means to provide a key for the plaster. A key coat plaster/ spatterdash (**Shield Key Coat E**) should be applied before the application of **Shieldplaster CP20 E** to enhance adhesion.

Prior to application, thoroughly saturate the surface to provide a saturated surface dry condition (SSD). Poor-quality concrete may require soaking for a significant length of time. Any surface water should be removed using an oil-free compressed air jet.

TECHNICAL DATA SHEET

## 2. Mixing

**Shieldplaster CP20 E** requires 3.50 – 4.00 liters of potable water per 25 kg bag. For optimum results, mixing should be performed using a forced-action high-shear mixing paddle, powered by a heavy-duty electric mixing drill.

Add the pre-measured amount of water to a clean mixing bucket. Add the **Shieldplaster CP20 E** powder slowly to the water while mixing and continue mixing for 3 – 5 minutes until a smooth, homogenous, lump-free consistency is achieved. Allow this mixture to stand for 3 – 5 minutes and then re-mix for 2 minutes before use. Do not add additional water to the mix.

## 3. Application

Apply the mixed **Shieldplaster CP20 E** to the prepared surface using a steel trowel or a suitable spraying machine to achieve the desired thickness (3 mm up to 20 mm). The surface of the applied material can be troweled smooth or textured by suitable means depending on the required finish.

## 4. Cleaning

All mixing equipment and application tools should be cleaned immediately with clean water. Hardened material should be mechanically removed.

## 5. Curing

Protect freshly applied material from rain and strong drying winds. Treat exposed surfaces with an appropriate curing compound **(Shieldcure AB)** or use other approved curing methods such as polyethylene sheeting or wet hessian, water curing is recommended as per the below pattern:

**Up to 25 ˚ C**: minimum of 3 days, for 8 hours
**25 – 40˚C**: minimum of 5 days, for 8 hours.

## Consumption and Coverage (For 25 kg packs)

Yield: 16.0 – 16.5 Liters

Consumption: 1.50 – 1.60 kg/m$^2$/1 mm thickness.
30 – 32 kg/m$^2$/20 mm thickness.

Coverage: 15.5 – 16.5 m$^2$/25 kg bag/1 mm thickness.
0.75 – 0.85 m$^2$/25 kg bag/20 mm thickness.

## Limitations

- Ensure substrate suitability prior to application of the product. To assess the suitability, a test area should be applied.
- Do not apply the product if the ambient temperature is less than 5°C.
- Hot weather practices should be adopted during application and curing if the temperature is above 35°C. In hot conditions, store the material in a cool environment prior to mixing and use chilled mixing water.
- The working area should be covered in case of harsh weather such as heavy rain, strong winds, dust, etc.
- **Shieldplaster CP20 E** should not be used on painted surfaces.

## Technical Support

Refer to contacting technical information, method statement, or contact the technical support team for any inquiry.

**Address: Manaseer Group, 8th Circle, King Abdullah II St. 302**
**P.O. Box 925988 Amman, 11110, Jordan**
**Phone +962 6 5800600**
**Fax. +962 6 5833890**
**Email: info.shield@manaseer-ic.com**
**Website: www.manaseergroup.com**

**LEGAL DISCLAIMER**: All information provided, and recommendations made herein are intended to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use in order to make their own final decision regarding suitability. We do not guarantee results, freedom from patent infringement, or suitability of resultant products for any suggested application with respect to the use of any formula or material described herein.