

Shield Ulti Coarse



Pre-mixed, Cement-based Coarse Render and Repair Bonding Layer for Fair-faced Concrete

Description

Shield Ulti Coarse is a polymer-modified, cement-based coarse bonding layer, designed for blocks and fair-faced concrete surfaces. It is supplied ready to use as a pre-bagged dry powder and only requires the addition of clean mixing water on site. It can be applied manually to give a thickness of 3 – 8 mm for one layer, and up to 20 mm in multiple layers.

Uses

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

Characteristics / Advantages

- Factory-controlled pre-blended dry mix, only requires the addition of clean water on site.
- Manual application.
- Suitable for both interior and exterior applications.
- Can be used in humid and dry conditions.
- Easy to mix and apply.
- Low VOC.

Standard Compliance

EN 998-1: Class GP, Type CS IV

Safety Instructions

Shield Ulti Coarse 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.

Shelf Life and Storage

Shield Ulti Coarse 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.

Typical Properties

Appearance/ Color	Grey powder
Maximum Aggregate Size	4.0 mm
Fresh Wet Density (@ 23°C)	1.65 – 1.85 g/ml
Working Time (@ 23°C)	45 minutes
Setting Time (@ 23°C)	5 – 8 hours
Yield / 40 kg bag	~ 26 Liters
Compressive Strength (BS EN 1015-11) @28 days	> 30 MPa
Flexural Strength (BS EN 1015-11) @28 days	> 5 MPa
Bond Strength (BS EN 1015-12) @28 days	> 0.5 MPa

Packaging

Shield Ulti Coarse is supplied in 40 kg bags.

Application Instructions

1. Surface Preparation

The substrate must be clean and free from dust, loose materials, surface contamination, and materials that prevent 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.

2. Mixing

Shield Ulti Coarse requires 8.0 – 10.0 liters of potable water per 40 kg bag depending on the desired consistency. 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 **Shield Ulti Coarse** powder slowly to the water whilst mixing and continue mixing for 3 – 5 minutes until a smooth, homogenous, lump-free consistency is achieved.

3. Application

Apply the mixed **Shield Ulti Coarse** to the prepared surface using a steel trowel to achieve the desired thickness. Apply additional layers to achieve a total thickness of up to 20 mm if necessary.

4. Curing

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

Up to 25°C: minimum of 3 days, for 8 hours.

25 – 40°C: minimum of 5 days, for 8 hours.

5. Cleaning

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

Consumption and Coverage (For 40 kg packs)

Yield: ~ 26 Liters

Consumption: 1.50 kg/m²/1 mm thickness.
12 kg/m²/ 8 mm thickness.

Coverage: 26 m²/40 kg bag/1 mm thickness.
3 m²/40 kg bag/ 8 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.
- Working area should be covered in case of harsh weather such as heavy rain, strong winds, dust, etc.

Technical Support

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