

UniPlast 105

Cement-based, pre-blended thrown coat render

Description

UniPlast 105 is a cement-based, factory pre-blended, polymer modified thrown coat render. It is especially formulated to be applied by hand or can be sprayed using suitable spraying machine.

Features and benefits

- Ready to use. Just requires the addition of water.
- Factory controlled production to give a consistently high-quality product
- Suitable for internal and external applications.
- Good resistance to extreme weather conditions including coastal areas.
- Improved bond strength.

Recommended for

UniPlast 105 is used as a rough coat (under coat) in multi coat render system. It should be applied prior to the application of cement-based plaster. The suitable substrates are traditional concrete, fair face concrete, engineered concrete blocks and different types of masonry and bricks.

Composition

UniPlast 105 is composed of high strength Portland cement, selected well graded fillers and compound of selected chemicals to improve adhesion and workability.

Packaging

UniPlast 105 is available in 25 & 40 kg bags.

Coverage

When applied at 5 mm thick, coverage is approximately 9 kg/m².

Note:

Coverage rate takes no account of wastage and may vary according to surface condition and application method.

Technical data

Wet density	1.85 kg/liter
Compressive strength ASTM C579	>18 N/mm ² @28 days
Pull-off adhesion strength to concrete ASTM D7234	>0.9 N/mm ²
Pot life	60 minutes @20°C
Application thickness	5 - 8 mm/coat
Appearance	Grey powder

Note: The above strengths are affected by many factors such as water addition, mixing method, weather conditions and curing.

Surface preparation

All surfaces must be sound, clean, dry and free of any material which may impair adhesion. Scaffolding must be independently tied to allow for uninterrupted application. Any faults in the structure, particularly those which may lead to moisture penetration must be rectified. Expansion joints should be included as required by the substrate and carried through all applied materials.

High suction substrates should be evenly dampened with clean water prior to the application of **UniPlast 105**. Remove any excess water at the time of application.

Mixing

UniPlast 105 mortar can be obtained by mixing a 25 kg bag of **UniPlast 105** with approximately 8-9 liters of clean water. For best results, use as little water as possible and mix to give a workable consistency. Mix mechanically in a suitable batch mixer. A slow speed drill fitted with suitable mixing paddle can also be used.

Add the contents of **UniPlast 105** bag to the mixing water slowly while mixing. Mix for 5-10 minutes until a thick slurry (wetter mortar) consistency mortar is achieved. Do not over mix.

MIX AND USE. Mix material that can be applied within 60 minutes (pot life).

Application

Throw **UniPlast 105** by hand immediately onto the prepared substrate. Another application method is to apply **UniPlast 105** using spraying machine. Spray **UniPlast 105** through 3-4 mm nozzle at 3-5 bar pressure. The final surface of **UniPlast 105** should be rough enough to bond the following cement base plaster. Do not apply **UniPlast 105** in direct sunlight or if the ambient temperature is below 5°C. Allow to dry completely before subsequent applications. This will depend on weather conditions, but normally requires a minimum of 36 hours.

Curing

As with all cement-based products, good curing is very important to ensure that the optimum characteristics are obtained. Always cure with tap water for at least 2 – 3 days. Begin curing as soon as the final setting is achieved. The applied areas should be protected from direct sunlight and heavy wind. In cold, humid or unventilated areas, it may be necessary to leave the application for a longer curing period.

Important notes

Do not apply:

- In damp/wet conditions.
- In temperatures below 5°C or above 30°C.
- On elevations in direct sunlight or where the substrate is hot.

Finishing

Key coat made with **UniPlast 105** can be filled with **UniPlast 125/125F** base coat (or jobsite sand/cement render) to have an even surface as per project's specification.

Cleaning

Clean tools with water immediately after use.

Hardened materials should be cleaned mechanically.

Storage and shelf life

To maintain its quality and suitability for use, the product should be stored in its unopened packaging, off the ground on pallets or similar structures, in a cool and dry environment. When stored under these recommended conditions, the product remains suitable for use for 12 months from the manufacturing date stated on the packaging.

Health and Safety

This product contains cement which may cause skin irritation. It may cause allergic skin reaction and eye damage. Avoid breathing dust. Wear protective gloves, eye goggles and clothing. In case of skin contact, wash with plenty of water. In case of eye contact, rinse continuously with water for several minutes and seek medical attention. Dispose excess material to special waste collection point in accordance with local & national regulation. Keep out of reach of children.

For further information, please ask for Safety Data Sheet for this product.

The most up-to-date TDS can be obtained from ACC Customer Service Department, or downloaded from our website: www.acc.com.eg.