

# Gyproc Elite 90 One Coat Gypsum Plaster

BP0003



## Description

Gyproc Elite-90 is a one coat gypsum plaster for use on almost all backgrounds, e.g. brickwork, block work or concrete. It provides a smooth, inert, high quality surface to internal walls and ceilings and a durable base for application of decorative finishes. It is a lightweight, retarded hemihydrate, premixed gypsum plaster, incorporating expanded perlite aggregate, requiring only the addition of clean water to prepare it for use.

## Features

- Eliminates two-step process of Sand Cement Plaster and POP punning
- Doesn't require water curing
- No shrinkage cracks
- Non-combustible (when tested in accordance with BS: 476: part 4:1970), therefore a good form of thermal protection to the building structure.
- Use of light weight aggregates in the plaster mix help to improve the Thermal resistance. (Thermal Resistance  $R = 0.07\text{m}^2\text{K/W}$  at 13mm thickness)
- GRIHA and Greenpro Certified.

## Technical & Physical Parameters

Dry Bulk Density	670 $\text{Kg/m}^3$ (Max)
Wet Bulk Density	1.4-1.5 $\text{g/cm}^3$
Water To Powder Ratio	1:1.5
Setting Time	20-25 min

## Chemical Composition

Calcium Sulphate Hemihydrate :  $\text{CaSO}_4 \cdot \frac{1}{2} \text{H}_2\text{O}$

## Drying Type

Setting

## Identification & Packing

Elite-90 is packed in HDPE bags. The outer layer of the bag is printed with the product image, safety instruction, batch number, date of manufacturing, UOM, correspondence address and application instructions.

## Available Sizes

25 kg

## Shelf life time

Approx. 3 months from the date of manufacture.

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## Coverage

Applied Thickness	13 mm
Coverage*	24 sq-ft/25 kg bag

## Standard Compliance

IS 2547 (Part I)-1976 for chemical characteristics

IS 2547 (Part II)-1976 for physical characteristics

## Application

### Storage & Handling



Gyproc Elite-90 is supplied in 25Kg bags. The dimensions of the bag ensure that a well-filled appearance is presented when filled and the bags can be stacked on a pallet in a stable and well-stacked array. Bags should be stored dry, as absorption of water shortens the setting time, causes set lumps to form in the bags and may reduce the strength of the set plasterwork. No hooks or any sharp tools should be used to carry bags from one location to another.

### Background Preparation

Surfaces should be reasonably dry, clean and protected from the weather, and suitable for the chosen specification. In addition, before plastering concrete backgrounds, ensure that any mould oil or other agents present are removed from the surface. No-fines concrete does not require wetting prior to plastering. Plaster should not be applied onto a 'green' background or when any free water is visible. Clean water should be applied 5-10 minutes before plaster application to control the suction. In-situ or pre-cast concrete which are exceptionally smooth or having low suction will require pre-treatment with Gyproc Bond-It bonding agent.

### Mixing

Gyproc Elite-90 is pre-mixed with aggregate and only clean water needs to be added to prepare it for use. Mixing should be carried out in a clean tray or bath. Excessive mechanical mixing should be avoided. Tools and water used in mixing must be clean. Contamination from previous mixes can shorten the setting time and in turn reduce the strength of the plaster when set. Water to plaster ratio (1 part of water: 1.5 part of plaster by weight) should be maintained to have good cohesive workable mix. Prepare plaster mix as much as required depending upon the immediate scope of work. Once the mix has begun to set, additional water is not to be added, as performance properties of plaster will get altered, thus affecting workability, cohesiveness, adhesion properties and strength.

### Application

Gyproc Elite-90 should be applied with firm pressure, built out to the required thickness, and ruled to an even surface and left as an undercoat to form a key for finish coat. A thin plaster mix is made and applied as a finish coat to provide smooth surface. It can be applied to an average thickness range of 6-15 mm on walls in one coat and up to 10 mm on ceilings. For thickness above this range, material needs to be applied in two coats. The thickness should not increase to more than 30 mm (average thickness) on walls and 20 mm (average thickness) on ceiling. After complete drying for usually 72 hrs (depends upon thickness and weather conditions) the plain smooth leveled surface is ready for painting.



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## Tiling

Tiles up to 20 kg/m<sup>2</sup> can be applied directly to the Gyproc Elite-90 except where the system includes a bonding agent. As the total weight of tiles and plaster applied over a bonding agent is limited to 40 kg/m<sup>2</sup>, considerations should be given to tiling directly to the background. If plastering to provide a background for tiles, avoid polishing the surface. Polished plaster surfaces should be roughened and a suitable primer used.

## Precautions

- Dissimilar expansion and contraction of RCC and brick / stone masonry could cause stresses and at times separation. To reduce the separation cracks, use of 145 GSM glass fiber mesh (at the junction) is recommended.
- It is not suitable for use in long continuously damp or severely humid conditions.

**Saint Gobain India Pvt Ltd** - Gyproc® Business reserves the right to revise product specification without notice. The information herein should not be read in isolation as it is meant only as guidance for the user, who should always ensure that they are fully conversant with the products and systems being used and their subsequent installation prior to the commencement of work.

\*Above parameters are tested under lab conditions. Actual performance depends on site usage, conditions and working.