

# Rendercem® RP

High performance, ready to mix, cementitious dry mortar for  
internal and external walls and ceiling plastering



The Construction Alchemists

## Description

Rendercem® RP is a ready to mix cement based plaster which needs just addition of prescribed quantity of water during site mixing. It consists of Portland cement, active binders, special additives and graded sand. It can be used on internal and external walls and ceilings. It is suitable for stone, block and brick masonry works.

## Features & Benefits

- Pre-batched and pre-packed, no need to do site batching, just needs addition of mixing water at site. Consistent quality of constituent materials ensured
- High quality mortar- manufactured under stringent controlled factory environment
- Suitable for hand mixing and manual application
- Faster application on both vertical and overhead surface
- Can be applied at 10mm to 12mm thickness in single layer
- Good smooth plastered surface on trowelling
- Obviate necessity for storing sand and cement at site

## Primary Application

Rendercem® RP can be used in all situations of plastering applications such as external and internal concrete walls, brick masonry, stone masonry, concrete block masonry walls and ceiling plasters in buildings. It can be used for creating eaves cornices, drip moulds, architectural ornamentation etc. typically in the exterior of the buildings.

## Technical properties

Water powder ratio	0.12 to 0.14
Fresh wet density	1.8 to 2.0 g/cc
Min. Compressive strength @ 28 days	20 MPa
Minimum application thickness per layer	10mm to 12mm

## Application Instructions

### Surface Preparation

The surface should be rough, absorbent to a limited extent, strong and clean; that is - free of dust, oil or paint that could impair the bond between plaster and surface. Roughness improves adhesion by providing a positive "key" for plaster to grip onto. Absorption removes the water film between surface and plaster that would tend to weaken adhesion. Excessive absorption will dry out the plaster.

Prior to the application of Rendercem® RP, the substrate shall be cleaned to remove loose particles, dust, oil, laitance or any bond inhibiting substances adhering to the surface. The cleaning can be carried out with suitable means like wire brushing, water jetting, mopping and blowing with compressed air. It is recommended to level the surface locally in case of larger undulations exceeding 10 mm with a wet mix of Rendercem® RP, followed by application of plaster. The strength of the substrate should be greater than or equal to that of the hardened plaster.

### Mixing

Add 3.0 to 3.75 liters of clean water to 25kg bag of dry mix powder. Mix for 3-5 minutes (or depending on the mixing efficiency for the time necessary to obtain a uniform and lump free mix) in a cement mixer. Hand mixing is not recommended.

### Application

Apply Rendercem® RP using mortar trowel. For accurate work, apply mortar strips before the wall is plastered. These are narrow strips of plaster at suitable intervals on the wall that act as guides for the striker straight edge. Using a rectangular plasterer's trowel, push plaster onto the wall or ceiling using heavy pressure to compact the plaster and ensure full contact with the substrate. Once the plaster starts to stiffen, it should be struck off to a plane (or curved) surface using a light striker straight edge.

If plaster is to be applied in more than one layer, the underlayer(s) should be scored with roughly parallel lines about 20 mm apart and 5 mm deep. The purpose of scoring is to provide a key for the next coat and to distribute cracking, if any, so that it is less noticeable.

For the final coat, use a wood float to remove ridges made by the striker straight edge. At the same time fill in any depressions and float flush with the surrounding plaster. If a very smooth texture is required, a steel trowel may be used on the surface, however such a surface is generally not recommended because it tends to craze and show up imperfections.

### Curing

After the plaster has been applied and finished, it is essential to protect it from the sun and wind by covering it with a plastic sheet and keeping it moist for a minimum period of 7 days. Alternatively, Talrakcure® AS curing compound can be sprayed on the finished surface of the plaster to completely cover the surface. This obviates the necessity of water curing.

## Common Problems

Problem	Description	Cause	Solution
Grinning	Positions of the mortar joints are clearly visible through the plaster	Different rates of suction between the mortar and the bricks	Apply plaster undercoat before plastering.
Crazing	Network of closely spaced, fine cracks.	Over-trowelling or sprinkling water for finishing smooth	Do not over-trowel and sprinkle water on the plaster for smooth finishing
Cracking	Randomly spaced cracks	Movement of the wall or shrinkage of the plaster which is caused by excessive loss of water from the plaster. Excessive suction by the bricks or blocks. Exposure to direct sun or wind	Pre-soak the substrate before applying plaster. Limit plaster thickness to a maximum of 12.5 mm per layer. Cure the surface with water or by spraying curing compound Talracure® AS on the surface as early as practicable.
Lack of hardness	Plaster that is easily chipped away or is easily scraped off after hardening	Plastering in full sun and wind. Not wetting absorbent bricks. Addition of extra water after first mixing. Use of tampered pre-mix	Avoid causes listed
Debonding	Plaster not staying on the wall after hardening	Dust on the wall when plastering. Mixes with excess water. Very thick layers of plaster (> 12.5 mm).	Prepare surface properly before plastering. Limit plaster thickness to a maximum of 12.5 mm per layer. Do not use excess water

## Estimating Packaging

Rendercem® RP is supplied in 25kg lined HDPE bags.

## Consumption

0.18 to 0.2 kg/sft/mm thickness of plaster. However, the actual consumption may vary depending on the surface texture.

## Storage

Rendercem® RP has a shelf life of 12 months if kept in dry store in original, unopened bags. If stored at high temperature and/or high humidity conditions the shelf life may be reduced.

## Precautions Health & Safety Instructions

Rendercem® RP is non-toxic. Use of gloves and goggles recommended. Any splashes to the skin or eyes should be washed off with ample of clean water. In case of prolonged irritation, medical advice should be sought. Rendercem® RP is non-flammable.



**Talrak Construction Chemicals Pvt. Ltd.**

An ISO 9001:2015 Certified Company

### Works:

Plot No. 115-A, 1st Phase. Harohalli Industrial Area,  
Kanakapura Taluka - 562 112. Ramanagar Dist.  
[www.talrak.in](http://www.talrak.in)

## Important note :

Talrak products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Talrak endeavours to ensure that any advice, recommendation specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.