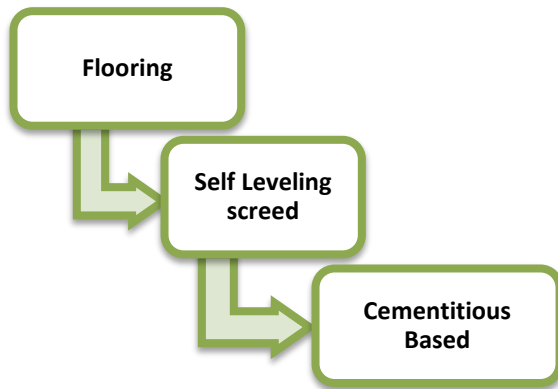


## FAMILY TREE



## PRODUCT DESCRIPTION

Single component cement based component floor self-levelling, heavy duty underlay. It is formulated from cement modified with high quality polymers and a collection of carefully selected additives that provides high bond strength, crack free, fast setting and hardening surface.

It provides smooth flat surface with ease of application and maximum flow without any shrinkage or cracking.

It is excellent for reinstatement of existing or new concrete floors which are subject to movement of industrial equipment, forklift, etc.

## FIELD OF APPLICATION

<b>Area Type</b>	: <input checked="" type="checkbox"/> Dry	<input type="checkbox"/> Semi-wet	<input type="checkbox"/> Submerged
<b>Area Location</b>	: <input checked="" type="checkbox"/> Underlay for carpet	<input checked="" type="checkbox"/> Underlay for tiles	<input checked="" type="checkbox"/> Underlay for vinyl flooring
	<input checked="" type="checkbox"/> Underlay for Epoxy flooring	<input checked="" type="checkbox"/> commercial Floor	<input checked="" type="checkbox"/> Industrial Floor
<b>Type of Application</b>	: <input checked="" type="checkbox"/> Horizontal	<input type="checkbox"/> Vertical	
<b>Substrates</b>	: <input checked="" type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Porous Tiles	<input checked="" type="checkbox"/> Screed

## PROPERTIES

• Flat Surface.	• Smooth finish.
• Foot traffic possible in 2 -3 hrs and heavy traffic after 24 hrs.	• Easy to maintain.
• Economical.	• Can be over coated with any epoxy or polyurethane coating after 2 days.
• Very high bond strength and impact resistance.	• Does not require water curing is required.
• Highly impermeable and dense material.	• Fast repairs of uneven concrete floors.
• Can be applied over large areas without cracks.	• Fast repairs of existing uneven concrete floors.
• Dimensionally stable.	• Easy to use, needs addition of water.
• Installation can be carried out in a single application up to 20 mm.	• Rapid curing and fast hardening.
• Eliminates the need for sand and cement screeds.	• No water curing required.

## PREPARATION

<b>Working Conditions</b>	: 5° to 45°C
<b>Tools / Equipment</b>	: Mechanically powered mixer, plastic bucket, steel trowel, spike roller.
<b>Substrate</b>	: Surfaces to be laid must be clean, sound, dry, and free of mould release agents, bond breaking coatings, curing compounds or any other form of contamination. Mechanical means like shot blasting, scarifying, wire brushing, grinding, chipping followed by washing with clean water can be adopted. Remove any loose, weak concrete. Refurbish such areas with suitable repair material. Ensure that the surfaces are left in a rough condition. Cut all edges at right angles. The substrate should be saturated with water prior to priming. Newly placed concrete should have been cured sufficiently to attain its design strength and limit further shrinkage. Concrete floors must be at least 21 days old prior to application.
<b>Priming</b>	: Prepared surfaces should be primed with proper type of primer. The primer should be brushed into the substrate using a stiff brush, broom or roller and allowed to become tacky (5-10 mins)

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before the application. In case of extremely porous substrate, two coats of primer are recommended. Allow the first coat to dry before applying the subsequent coat.

**Joints** : In general, the product shall not be placed above expansion or construction joints. NASA Flexseal shall be used to manipulate the joints.

## MIXING

**Ratio** : 5.5 Ltr of clean & fresh water per 25 kg.

**Process** : Add clean and fresh water to the clean plastic mixing bucket. Add the powder slowly while the mixer is operating. Mixing should be carried out using a slow speed drill machine fitted with a paddle. Keep mixing for 2 minutes. Stop the mixer and use spatula to scrape the edges and the bottom of the container for any lumps. Continue mixing for further 1 minute. Ensure that mixing is arranged to provide a continuous pour of the product.

**Points of Attention** : Do not mix part bags or add extra water, as this alters the water to powder ratio and affects the final performance of the product. Do not mix material in quantities that cannot be applied within the pot life of the product Application.

## APPLICATION

**Application Method** : By steel trowel.

**Thickness** : Application thickness from 5mm to 20mm per single layer.

**Coverage** : 15 ltr/25 kg bag.  
1.5 m<sup>2</sup>/bag at 10 mm thickness.  
Actual coverage depends on finish, porosity and texture of the substrate.

**Position** : The described process is suitable for vertical and horizontal applications.

**Priming** : Prepared surfaces should be primed with proper type of primer. The primer should be brushed into the substrate using a stiff brush, broom or roller and allowed to become tacky (5-10 mins) before the application. In case of extremely porous substrate, two coats of primer are recommended. Allow the first coat to dry before applying the subsequent coat.

**Process** : Pour the mixed material on the primed surface while the substrate is still tacky. Spread and level it with a steel trowel and roll it using spike roller to get a uniform surface finish. For better results, pouring and levelling should be done in a continuous process. Wear spiked shoes during application. Work up to 10 mm in a single layer.

**Curing** : Finished surface must be protected for at least 16 –20 hrs by covering with a polythene sheet as soon as the product has achieved its final set (after 60-90 minutes). Applied material should not be water cured.

**Cleaning** : All tools / equipment shall be cleaned immediately after use with water. Hardened materials should be cleaned mechanically.

## PACKING

**Standard Package** : Apollo Floor CS25 is available in 25 Kg.

**Custom Package** : Special packages can be arranged for large requirements.

**How to Order** : Specify the Product Name followed with a hyphen and package size.

## STORAGE CONDITION

**Shelf Life** : 12 months from the date of manufacturing.

**Temperature** : 2°C and 50°C.

**Points of Attention** : Store in shaded area and properly sealed in its original packing.

## TECHNICAL PROPERTIES

PROPERTY	STANDARD	VALUE
Standard	ASTM C109, ASTM D4541, BS 6319-3 & BS 6319 - 7	

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Testing Conditions		Tests were carried out in Apollo R&D laboratory @ 25°C	
<b>Component</b>		Single component	
<b>Form</b>		Powder	
<b>Colour</b>		Grey	
<b>Fresh Wet Density</b>		2.00 kg/ltr ± 0.05	
<b>Working Time</b>		20 - 30 mins	
<b>Traffic Time</b>		Foot traffic after 3 hrs Vehicle traffic after 24 hrs	
<b>Compressive Strength</b>	ASTM C 109	1 Day	15 N/mm <sup>2</sup>
		7 Days	25 N/mm <sup>2</sup>
		28 Days	35 N/mm <sup>2</sup>
<b>Flexural Strength</b>	BS 6319 – 3	6 N/mm <sup>2</sup> at 28 Days	
<b>Bond Strength</b>	ASTM D4541	> 2 N/mm <sup>2</sup> at 28 Days	
<b>Tensile Strength</b>	BS 6319 – 7	4 N/mm <sup>2</sup> at 28 Days	

## ATTENTION

<b>PPE</b>	:	It is recommended to use full PPE while working with the product to avoid any possibility of irritation to skin or eyes. In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary.
<b>Hazardous Classification</b>	:	Hazardous transportation.
<b>Fire</b>	:	Non-flammable.

## APOLLO AT THE GLANCE

Apollo is confident with the technical solutions and high quality end products served to the customers.

Apollo invites you to explore other services and products:

- |  |                                      |                                      |
|--|--------------------------------------|--------------------------------------|
| • R&D and manufacturing custom solutions | • Adhesives                          | • Bonding Agents Systems             |
| • Building Finishing Systems             | • Concrete Admixture                 | • Concrete Repair Systems            |
| • Flooring Systems                       | • Grouts & Anchoring Systems         | • Painting & Putty Systems           |
| • Protective Coatings                    | • Sealant & Jointing Solutions       | • Structural Strengthening Solutions |
| • Surface Treatment Solutions            | • Tile Adhesive & Grouting Solutions | • Waterproofing Systems              |