

Floor underlay, economical sub-base build mortar (up to 200 mm thickness)

Uses

Durafloor Levelbase is designed as a heavy duty sub-base underlay which forms a smooth, hard surface to be used under Durafloor Leveltop and Fosroc Cemtop GP & XD where deep sections are required.

Durafloor Levelbase can be used in both new construction and refurbishment projects.

Advantages

- Economical
- Very fast application by pump, enables large areas of floor to be completed in a working day
- Can be applied directly onto prepared concrete floors, eliminates traditional sand cement screeds
- Dimensionally stable, can be installed in large areas
- Excellent adhesion to prepared substrates
- Rapid hardening and curing allows speedy access for overcoating with Durafloor Leveltop, Cemtop GP or XD
- One pack product, applied by pump eliminates on-site batching and ensures consistency of mixed product

Description

Durafloor Levelbase consists of a blend of selected cements and aggregates modified with polymers and flow agents. It is used in conjunction with Durafloor Level Prime.

Durafloor Levelbase is supplied as a grey powder which requires only the addition of water to produce a self smoothing free flowing material.

The product is designed for installation by a continuous mixer pump, but can also be applied by hand.

Technical Support

Parchem offers a comprehensive range of high performance, high quality flooring, jointing and repair products for both new and existing floor surfaces. In addition, Parchem offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.

Design Criteria

Durafloor Levelbase is designed for application thicknesses of up to 200 mm. Thicker application is possible however your local Parchem sales office should be consulted for specific advice in this situation. Durafloor Levelbase can be applied to clean, sound and well prepared concrete substrates which are free from loose material, oil, grease, paint etc. and has a minimum compressive strength of 20 MPa.

The relative humidity of the concrete substrate must not be greater than 80% at the time of installation.

New concrete should be at least 14 days old.

Consult Parchem for advice on the suitability of other substrates or where thickness exceeds 200 mm.

Properties

The values given below are average figures based on 4.5 litres of water added per 20 kg bag of Durafloor Levelbase. Actual values obtained on site may show minor variations from those quoted.

Physical properties

Compressive strength (70 mm cubes cured @ 23°C 40% RH):	
1 day	15 MPa
3 days	20 MPa
7 days	23 MPa
28 days	30 MPa
Time to foot traffic @ 23°C:	4 hours
Time to overlaying @ 23°C:	24 hours*

* for thicknesses up to 200 mm

Maintenance

If damage has occurred to Durafloor Levelbase prior to the installation of the final floor finish, repair of that area can be achieved by removing any loose material, prime the repair area with Durafloor Level Prime, allow to dry and repair with Durafloor Levelbase.

Application Instructions

Although Durafloor Levelbase has been designed for application by pump, the product can also be mixed and applied by hand.

Preparation

The substrate should be clean, sound and free from loose material and contamination such as plaster, oil, paint and grease.

New concrete should be at least 14 days old.

Excess laitance should be removed by light scabbling or captive shot blasting followed by vacuuming to remove dust debris. Oil and grease must be removed.

Large cracks and holes may be filled using a mix consisting of equal volumes of Durafloor Levelbase and clean sharp sand made up to a trowellable mortar by the addition of a small amount of water. Prime the substrate with Durafloor Level Prime prior to repair.

Priming

The object of priming is to seal the substrate to prevent air release from the subfloor rising and forming bubbles and

pinholes on the surface of the Durafloor Levelbase. Extremely porous substrates may require two priming/sealing coats. If two primer coats are required, the second coat must be allowed to dry before applying the Durafloor Levelbase.

Installation by pump

This is a specialised activity and the product must be applied by a Parchem recommended contractor who has been fully trained in the use of the product and equipment.

Application procedure is as follows

- Thoroughly prepare the floor surface.
- Prime the surface with Durafloor Level Prime, broken down with 4 parts water to 1 part Durafloor Level Prime (by volume) and allow to dry.
- Reprime the surface with Durafloor Level Prime if necessary, and allow to dry.
- Apply Durafloor Levelbase to the required thickness onto the dry, primed surface.

Installation by hand

Mixing

- Each 20 kg bag of Durafloor Levelbase requires the addition of 4.2 - 4.5 litres of clean, cool water to produce a free flowing self smoothing consistency.
- Pour the mixing water into the clean mixing vessel. Add the powder slowly to the water, mixing continuously with a heavy duty drill fitted with a suitable paddle. Mixing should continue for at least 3 to 4 minutes until a smooth creamy consistency is obtained.
- Do not mix more Durafloor Levelbase than can be reasonably laid within the flow time of the material. However, ensure that subsequent mixes are ready to enable continuous pouring until the area to be surfaced is complete.

Application procedure is as follows

- Thoroughly prepare the floor surface.
- Prime the surface with Durafloor Level Prime, broken down with 4 parts water to 1 part Durafloor Level Prime and allow to dry (Fosroc Nitobond AR may also be used).
- Reprime the surface with Durafloor Level Prime if necessary, and allow to dry.
- Pour the mixed material on to the dry primed surface, spread with trowel and allow to self-smooth. Best results are achieved when the pouring and levelling is a continuous process.

Note: If the mix stiffens it should be discarded, do not attempt to re-mix with water.

Bulking Out

Durafloor Levelbase can be bulked out if necessary, however, this will reduce the flow characteristics of the mix. Up to 10 kg of clean dry washed sand/aggregate can be added to each 20 kg of Durafloor Levelbase.

Sand/aggregate size should be in the range 1 mm to 5 mm with the maximum aggregate size being no larger than one third the minimum thickness layer being applied.

Water addition must stay at 4.2 to 4.5 litres per 20 kg of Durafloor Levelbase (30 kg blended with aggregate).

Cleaning

Durafloor Levelbase and Durafloor Level Prime should be removed from tools and equipment with clean water immediately after use. Hardened material can only be removed mechanically.

Limitations

Although Durafloor Levelbase has a 28 day compressive strength of 30 MPa, it is designed as a sub-base material only and NOT as the final surface.

Durafloor Levelbase must not be used in areas subject to permanent wetting or where rising damp is likely.

To prevent rapid drying protect from direct sunlight and/or drying winds during application and the final curing period.

If the surface onto which Durafloor Levelbase is applied moves or cracks, reflective cracking may occur.

Note: Water addition outside the recommended levels as stated in this Technical Data Sheet will cause excess water to bleed from the mix causing potential delamination of any topping material.

Estimating

Supply

430095 - Durafloor Levelbase:	20 kg bag
480005 - Durafloor Level Prime:	1 litre
480016 - Durafloor Level Prime:	5 litre
480017 - Durafloor Level Prime:	20 litre

Coverage

Durafloor Levelbase: Each 20 kg bag yields approx. 12.25 litres when mixed with 4.5 litres of water

Durafloor Level Prime: 10 - 20 m²/litre

The coverage figures given are theoretical - due to wastage factors and the variety and nature of possible substrates, practical coverage figures will be reduced.

Durafloor® Levelbase

Specification Clause

Floor areas so designated should be covered with Durafloor Levelbase as manufactured by Parchem. The product should be applied in accordance with the manufacturers application instructions

Storage

Durafloor Levelbase should be stored on pallets in dry conditions. Under these conditions the product will have a shelf life of 18 months.

Durafloor Level Prime has a shelf life of 12 months if stored at 20°C and protected from frost and extreme heat.

Important notice

A Safety Data Sheet (SDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.