

## Floor / wall coating, economical, high build epoxy, 90% solids

### Uses

A heavy duty, commercial abrasion resistant treatment for concrete floors that is attractive and easily cleaned. Highly resistant to chemical attack and the action of commercial type traffic.

Suitable for use in wet areas where strict levels of hygiene and cleanliness are required or where chemicals are manufactured, spilled or are an integral part of the process.

Used in chemical industry, schools, high traffic applications and many other installations.

Specially selected and processed grades of quartz sand anti-slip grits are available to make safe all types of working areas for both personnel and plant.

Durafloor HS may be used without non-skid grit as a sealer on epoxy floor screeds or as a high quality protective coating for walls, coves, drains, etc and is available in standard colours.

### Advantages

- Long lasting and easily maintained with good resistance to most chemicals and solvents
- Provides safety for plant and personnel while saving on cleaning and maintenance costs
- Economically installed compared to similar systems
- Excellent adhesion to concrete
- Provides an attractive satin finish
- Available in a wide range of light reflective colours to provide a brighter work area

### Description

Durafloor HS is a four component (Base, Hardener & 2 Durafloor Colour Packs) epoxy resin high build coating. The formulation was chosen to allow the incorporation of non-skid grits and provide a high degree of chemical and abrasion resistance.

The finished floor is a satin finish coloured to individual requirements. It has excellent adhesion qualities, is impervious and easily cleaned.

Durafloor HS is available in a range of standard colours by adding Durafloor Colour Packs. Please contact your nearest Parchem representative.

NB: Care has been taken to ensure that colours manufactured under our modern process are as close as possible to agreed reference samples. However, it should be noted that no guarantee can be given of exact colour matching.



An on site trial should be carried out to ensure that the correct grade of grit is chosen so that the required degree of skid resistance and aesthetic appearance is obtained. Consult Parchem when alternative specialised grits are required.

### Technical Support

Parchem offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.

### Design Criteria

Durafloor HS is designed for application in two coats to achieve an approximate total dry film thickness of 285 - 400 microns.

Substrates should be dry and not suffer, or be likely to suffer, from rising damp. If necessary, suitable damp-proof membranes should be installed to prevent this. Substrates should not have a relative humidity greater than 80% at the time of installation.

### Properties

#### Typical physical properties (8 litre pack at 23°C) - Standard hardener

<b>Solids content:</b>	90% w/w
<b>Pot life:</b>	1 hr
<b>Tack free time:</b>	3 hrs
<b>Recoat time:</b>	3 - 48 hrs
<b>Initial hardening:</b>	24 hrs
<b>Full cure:</b>	5 Days
<b>Coverage Average:</b>	5 - 7 m <sup>2</sup> /litre/coat
<b>Dry film thickness (2 coats):</b>	285 - 400 (microns)
<b>Line-marking paint adhesion to coating:</b>	
<b>Dulux Roadmaster A1</b>	Excellent
<b>Dulux Roadmaster A2</b>	Excellent

## Chemical properties

Durafloor HS is resistant to a wide range of chemicals. Specific data is available on request.

Resistance to spillages (examples only)

- Toluene
- Acetic Acid 5%
- Sodium Hydroxide 30%
- Ammonia 20%
- Used sump oil
- Hydrochloric acid
- Sulphuric Acid 30%
- Skydrol
- Sodium chloride
- Kerosene
- Petrol
- Lactic acid 5%

Surface staining may result from exposure to some aggressive chemicals.

Good housekeeping practice requires spills to be quickly removed and washed.

## Maintenance

The service life of a floor can be considerably extended by good housekeeping practices. Regular cleaning of Durafloor HS may be carried out using a rotary scrubbing machine with a water miscible cleaning agent.

## Application Instructions

### Surface preparation

It is essential that Durafloor HS is applied to sound, clean, dry substrates in order to achieve maximum adhesion between the floor coating and substrate.

As Durafloor HS is a relatively thin coating, the substrate must be fine textured. Any surface irregularities may show through causing excessive wear on high spots. If surface preparation produces an excessively deep profile on the substrate, advice should be sought from Parchem regarding suitable methods to produce a smooth and level substrate.

### New concrete floors

Unless water-reduced, the floor should be at least 28 days old and give a hygrometer reading not exceeding 80% RH. Dry removal of laitance is required via light grit-blasting or grinding. Dust and other debris should then be removed by vacuum brush.

### Old concrete floors

A sound, clean substrate is essential to achieve maximum adhesion. Light grit blasting or grinding should be carried out as for new concrete floors. Oil and grease penetration should be removed by hot compressed air treatment and primed with Nitomortar 903. Adhesion tests must be carried out to confirm sufficient preparation.

### Epoxy screeds

Durafloor HS may be applied to Parchem's epoxy resin screeds. High spots or trowel marks should be rubbed down

and dust and other debris removed by vacuum cleaning.

## Mixing

Stir the base and hardener components prior to mixing. Add the two Durafloor colour packs to the base component and mix in a suitable mixing vessel thoroughly using a low speed electric drill and suitable stirrer for 1 minute. Add hardener component and continue to mix for a further 3 minutes.

## Application

### 1st Coat

Having made the test and primed, if necessary, apply Durafloor HS by brush or roller at a rate of 5 - 7 m<sup>2</sup> per litre or slightly heavier if medium grit is to be used.

As soon as approximately one square metre has been coated, cover with the required grade of grit. The Durafloor Medium Grit should be lightly and uniformly broadcast over the wet Durafloor HS.

If any areas have lost their gloss, recoat lightly before applying grit. When treating large areas, divide the floor into 1 metre strips by placing a suitable masking tape onto the floor prior to commencing application. Note: Ensure that during placement, the tape is kept true and straight.

When the first coat is hard (usually the next morning - refer to "Properties" section) sweep off all excess grit. For good appearance and easier cleaning, it is important that all loose grit be removed at this time.

When abutting to previous work ensure that after the removal of the tape there is no residual tape or adhesive contamination remaining. The adjoining fresh coat of Durafloor HS must be blended into the existing coat so as to avoid any seam, as this could subsequently result in adhesive failure.

### 2nd Coat

Mix the liquids as before and using a paint roller (mohair is recommended) apply a coat over the grit. (See "Coverage"). It is important that this final coat be uniform but the exact rate of application may be varied to suit the finish required. A heavy final coat will give an easily cleanable floor but a fairly light coat will give the best slip resistance in wet conditions.

Brushes and rollers must be washed thoroughly at least once each hour and immediately after finishing. Use Solvent 10 to clean up solution and when finished give brush a final wash in soap and water. Rollers should be discarded after use.

At temperatures of 20°C - 30°C foot traffic may be permitted after 24 hours, and light vehicular traffic after 72 hours. However, in cold weather a longer period before use may be required. For best results, do not apply below 10°C. Allow 5-7 days before subjecting to chemical attack or severe abrasion.

Durafloor HS should not be applied to any surface subject to

# Durafloor® HS

back water pressure; otherwise failure of the bond is likely to occur.

Intending users should always consult Parchem if there is any doubt as to whether a proposed application may involve conditions other than “ordinary”. Such extraordinary conditions include:

- Porous or poor quality concrete causing excessive use and absorbency of the product.
- Unusually cold condition during curing (<10°C)
- Above ambient temperatures of service (40°C) eg; floors subject to hot water.
- Severe, or unusual, chemical attack.
- Severe, or unusual, conditions of service beyond the limiting physical and chemical properties of epoxies.

Care should be taken in selecting colours as some will darken or develop a brown tinge when exposed to sunlight or certain chemicals. This effect is noticeable on white, light coloured and grey systems; on brown, yellow and red colours it is less noticeable.

Durafloor HS is not recommended for exterior use where it is subjected to sunlight or in applications involving prolonged water immersion. Contact Parchem for detailed information.

## Cleaning

All tools and equipment should be cleaned immediately after use with Solvent 10. Hardened material can only be removed mechanically.

## Limitations

- Note: To ensure a uniform colour, use only components with identical batch numbers in the one application area or contact Parchem for advice.
- Durafloor HS should not be applied to surfaces known to suffer from rising damp or having a relative humidity reading greater than 80%. Refer to Parchem for further advice.
- Durafloor HS should not be applied at temperatures below 10°C.
- Durafloor HS is also not recommended for use where it is subject to high concentrations of hot chicken fat. Refer to Parchem for further information on applications subject to these conditions.

## 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.

- Durafloor HS is not recommended as an application over tiles.

## Estimating

### Supply

Total pack size: 8 litres

414600 - Durafloor HS Base

414649 - Durafloor HS Hardener

412040 - Durafloor Medium Grit: 20 kg bags

### Coverage

Average: 5 - 7 m<sup>2</sup>/litre on concrete per coat

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

## Storage

### Shelf Life

Durafloor HS has a shelf life of 24 months if kept in a dry place below 35°C in the original, unopened packs.

### Storage conditions

Store in dry conditions between 10°C and 30°C, away from sources of heat and naked flames in the original, unopened packs. If stored at high temperatures the shelf life may be reduced. Durafloor HS should be protected from frost.