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METHODOLOGY

Waterproofing showers with **dura.®flex**

how to with a.b.e.®

SURFACE PREPARATION

Any surface to be screeded, plastered or patched must be thoroughly CLEAN and SOUND with a fine wood float type of finish. It must be free from grease, oil and any other foreign matter. Laitance, dust, loose particles and any spalling or flaking surface must be removed.

All joints in the brick or blocks is to be to be flush with the surface of the bricks or blocks.

APPLICATION INSTRUCTIONS

Mixing

The liquid component should be poured into a plastic or metal drum having a volume of a least 20 litres. This should be placed onto a plastic sheet to avoid contamination. The powder component is gradually added to the liquid whilst mixing with a Paddle Mixer or other approved spiral paddle attachment on a variable speed drill. Mixing is continued, constantly moving the paddle around the drum, until a lump-free slurry is obtained. This should take a minimum of 3 minutes and a maximum of 5 minutes.

Note: The preferred drill speed is between 280 and 640 rpm.

Mixing warning

dura.flex may exhibit satisfactory handling characteristics even though inadequately mixed. This will result in a significantly lower level of performance or possible failure. It is therefore essential that mixing instructions are strictly adhered to with particular emphasis on the time of the mixing operation.

Pre-wetting of substrate

Thoroughly dampen the substrate surface with water using a brush, roller or spray bottle.

High porosity substrates will require more dampening than dense substrates. Do not apply the coating when the substrate is wet, but allow the water to soak in until the substrate is just visibly damp before proceeding.

General

The first coat should be applied at a wet film thickness of 1mm (coverage per coat is 1.8 kg/m² or 1 litre/m²). To ensure the correct thickness is achieved, measure out an area (for example 200 m²), then calculate how much material will be needed to cover this area. Monitor the coating thickness during application at regular intervals using a wet film gauge. Care must be taken to attempt to fill all imperfections such as blow-holes during application. If not they can be filled while the coating is still fluid by using a dry sponge. If the coating has dried before these imperfections are found they can be filled using fresh material.

Allow first coat to cure for a minimum of 4 hours at 20 °C/50% RH and longer at lower temperatures or higher humidity's. The exact drying time will depend on surface temperature, relative humidity and air movement. High temperatures and/or low humidity will reduce the drying time. This can vary from 1 to 16 hours. The maximum ambient temperature for application is 40 °C.

The first coat should be left to dry until firm and un-markable to the touch. There is no maximum time between coats, however the surface may need cleaning with clean water prior to application of the subsequent coats to remove potential contamination.

No curing membrane is required, however the freshly applied coating should be protected from rain.

Brush application

The most suitable type of brush is a soft bristled wallpaper paste brush (120 to 220 mm wide) or block brush. Load the brush up well and spread the material to the required thickness. If the brush begins to drag during application, do not add water to the material but dampen the surface again. Finish in one direction for a neat appearance.

For floor application, a soft bristled broom is recommended. Pour the material on to the substrate and then spread to the required thickness.

Note

Should a reinforcing membrane be used in conjunction with the **dura.flex** ensure that it is **ecofelt** as it is alkali resistant. All corners on the walls and floors needs a 200 mm wide **ecofelt** membrane to be incorporated in the **dura.flex**, 100 mm either side of each face. The flat surfaces do not require **ecofelt** membrane. The corner details are carried out first before the over all application of **dura.flex**.

Curing

Allow a minimum cure time of equivalent to 7 days at 7 °C (3 days at 20 °C and above). This is to ensure the full physical properties are developed.

LIMITATIONS

dura.flex should not be used when the temperature is below 5 °C. The product should not be exposed to rainfall or moving water during application or within 4 hours at 20 °C. The maximum ambient temperature for application is 40 °C.

dura.flex should not be used on external surfaces where an aesthetic appearance is critical because differences in environmental conditions during cure may cause colour differences in the final surface. If any doubts arise concerning temperature or substrate conditions, consult the local a.b.e.® office.

Coverage

Nominal coverage rate: 5 m²/15 kg kit for 1.5 mm wet film thickness. (3 kg/m² total application i.e. 1 kg/m² per coat – 3 coats required)

The coverage figure given is theoretical, due to wastage factors and surface irregularities of the substrate, coverage figures may change.

PLASTERING THE SURFACE APPLICATION

Application of **dura.latex** modified systems takes place in two stages:

1. Priming with adhesive slurry.
2. Placing of the mortar.

1. ADHESIVE SLURRY FOR PRIMING

The gauging liquid consists of equal volumes of **dura.latex** and clean potable water. Adhesive Slurry is made from equal parts of clean dry sand (up to 3 mm particle size) and ordinary Portland Cement. These are dry mixed and then gauged with sufficient gauging liquid to give a viscous but easily brushed consistency. The slurry is brushed well into the pre-dampened substrate using a stiff broom or brush. If the priming slurry dries before the application of the mortar the it must be totally removed and primed again. The mortar must always be applied into a wet primed surface, failing this loss of adhesion of the mortar will occur.

2. PRODUCTION AND PLACING OF MORTAR

The gauging liquid composition will vary depending upon the thickness of the mortar layer to be placed:

Mortars up to 12 mm thickness are gauged with 1 volume **dura.latex**: 1 volume water.

Mortars between 12 - 20 mm thickness are gauged with 1 volume **dura.latex**: 2 volumes water.

Mortars exceeding 20 mm thickness are gauged with 1 volume **dura.latex**: 3 volumes water. Mortars are ideally mixed in a pan mixer and mixing time should not exceed 2 minutes to keep air entrapment to a minimum.

A mortar is made from 2 to 4 volumes of dry aggregate – not exceeding maximum 3 mm particle for plasters nor 8 mm particle for screeds – dry mixed with 1 volume Ordinary Portland Cement.

This mix is then gauged with the appropriate gauging liquid to produce a stiff but workable material – a so called earth damp consistency.

The mortar is applied to the still wet slurry, consolidated, levelled and smoothed following good plastering or screeding practice. Finishing is made easier if tools are wetted from time to time with **dura.latex**.

CURING

The newly applied mortar must be protected from rain, direct strong sunlight and wind since too rapid drying will produce shrinkage, cracking and reduce cohesion. The newly laid surface must be kept damp for at least 5 days to promote good curing.

Cleaning and disposal

Immediately after application is completed, clean all tools and equipment with clean water. Hardened material can be removed by mechanical means.

Waste material should be allowed to harden overnight then disposed of as non-hazardous waste.

OPTIONAL FINAL COAT

Apply **abe.cote tough epoxy paint** to the plastered surface. Prime coat plus 2 top coats – coverage approximately 10 m² per litre per coat.

All product data sheets are to be read for any additional information required.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot – because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied – accept any liability either directly or indirectly arising from the use of **a.b.e.®** products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements.

TYPICAL SHOWER WATERPROOFING DETAIL USING **dura.®flex**

