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a.b.e.® Construction Chemicals

dura.® latex

MORTAR AND SCREED IMPROVER AND ADHESIVE

DESCRIPTION

dura.® latex is a synthetic resin polymer which is supplied as a ready to use liquid. It is designed to improve the qualities of site-batched cementitious mortars and slurries. Being resistant to hydrolysis, it is ideal for internal and external applications in conjunction with cement.

USES

- Improving adhesion of thin section cement patches, mortars and screeds to their substrates.
- Improving tensile and flexural strengths of sand/cement mixtures thus permitting thinner than usual layers.

NOTE: **dura.® latex** is NOT a concrete structural adhesive. In such cases use **epidermix 344**.

ADVANTAGES

- Single-component liquid can be easily gauged as required.
- Improves cohesion and workability.
- Improves mortars to provide waterproof repairs, renders and toppings that are highly resistant to freeze/thaw cycling.
- Improves tensile and flexural properties allowing thin applications.
- Excellent bond to concrete, masonry, stonework, plaster and blockboard.
- Contains no chlorides.
- Can be applied to damp substrates.

SURFACE PREPARATION

Any surface to be screeded, plastered or patched must be thoroughly clean and sound. 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.

Porous surfaces such as concrete brickwork must be thoroughly dampened to kill suction. Soaking should continue for some 12 hours prior to an application being made. At the time of the application no free water or ponding must be present on the surface.

TYPICAL PHYSICAL PROPERTIES OF WET MATERIAL

Consistency	Liquid
Density	1,00 g/cm ³
Colour	Wet: Milky white Dry: Translucent clear
pH value	11
Dilution	Clean water

PROPERTIES DURING USE

Consumption

As an ADHESIVE SLURRY:

±500 ml **dura.® latex**/m² (figures are approximate as quantity of **dura.® latex** used to produce workability will depend on variations in mix's water demand).

In a MORTAR:

±1,50L **dura.® latex**/m² @ 12 mm thickness.
 ±1,75L **dura.® latex**/m² @ 15 mm thickness.
 ±2,00L **dura.® latex**/m² @ 20 mm thickness.
 ±2,25L **dura.® latex**/m² @ 25 mm thickness.
 ±2,50L **dura.® latex**/m² @ 30 mm thickness.

PROPERTIES OF FINAL MATERIAL

These vary widely being affected by the quality of the aggregate, the aggregate/cement ratio used and the cement/liquid ratio achieved under the particular water demand of the aggregate. The thoroughness of post curing of the mortar will also play a significant role.

TENSILE STRENGTH improved by ±40% and FLEXURAL STRENGTH improved by ±45% using 3:1 sand-cement mortar as a control.

CHEMICAL RESISTANCE: This is not improved over the performance of normal cementitious materials.

SOLVENT RESISTANCE: **dura.® latex** is attacked by solvents.

BONDING/PRIMING (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.

MIXING

Stir well before use.

COVERAGE

Dependant on application and thickness of application.

APPLICATION

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** to 1 volume water.

Mortars between 12 - 20 mm thickness are gauged with 1 volume **dura.®latex** to 2 volumes water. Mortars exceeding 20 mm thickness are gauged with 1 volume **dura.®latex** to 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 or 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**.

CLEANING

Tools, brushes and mixing equipment should be cleaned immediately after use and before material has set with **abe® super brush cleaner** followed by washing with soap and water.

PROTECTION ON COMPLETION

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 of the Portland cement.

TEMPERATURE AND RELATIVE HUMIDITY

Do not apply concrete/screeds if temperature is below 5°C

MODEL SPECIFICATION

The adhesive screed improver will be **dura.®latex**, a single-component, latex polymer, applied in accordance with the recommendations of **a.b.e.® Construction Chemicals**.

PACKAGING

5L, 25L and 200L containers.

HANDLING & STORAGE

This product has a shelf life of 24 months if kept in a dry cool place in the original packaging. In more extreme conditions this period might be shortened.

HEALTH & SAFETY

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The safety data sheet is available from your local **a.b.e.® Construction Chemicals** sales representative.

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. **a.b.e.® Construction Chemicals** has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in building and construction technology.

