

VARASHIELD 20 POLYMER CEMENT WATERPROOFING SLURRY

DESCRIPTION

VARASHIELD 20 is supplied as a ready to use two component product consisting of a dry powder mix (Part A) and a specially formulated liquid polymer (Part B).

The dry powder (Part A) is a carefully designed blend of selected cements, fine graded sand fillers, non-metallic reinforcing fibres, water reducing chemicals, Microsilica, auxiliary modifying agents and surface active chemicals. The liquid polymer (Part B) consists of a blend of a unique new technology flexible pure acrylic aqueous polymer modified with auxiliary chemicals to enhance brushability, ease of application, water repellency and high resistance to the penetration of carbon dioxide and chloride ions.

USES

- ◆ As a waterproof lining for water retaining structures/ swimming pools.
- ◆ As a waterproofing coating for sea-water structures.
- ◆ As a waterproofing coating for concrete slabs (roofs, balcony, floors, kitchen floors, bathrooms under tiling etc.)
- ◆ As a protective coating for underground structural concrete.
- ◆ As a backing of marble and granite to prevent surface staining.
- ◆ As a protection to concrete surfaces from carbonation and chloride attack.
- ◆ As a general-purpose thick coating to ensure water tightness of the structure.
- ◆ As coating for sewage treatment plants.

ADVANTAGES

- ◆ **Easy to use** : Easily brushable product and may be adjusted to be applied by trowel in special cases.
- ◆ **Constant quality** : Factory controlled pre-packed materials and locally manufactured always fresh product.

- ◆ **Durability** : This combined blend of new technology materials deliver high quality and superior durability waterproofing protection.
- ◆ **Adhesion** : Excellent bonding to porous and non-porous surfaces.
- ◆ **Flexibility** : Good flexibility to ensure all round performance under severe climatic conditions.
- ◆ **Anti-carbonation** : A membrane of 1 to 1.5mm thickness provides an excellent shield against the penetration of carbon dioxide and chloride ions.
- ◆ **Waterproofing** : Excellent even under pressure.
- ◆ **Vapour Permeability** : A cured slurry membrane of 1 to 3 mm thickness is vapour permeable and allows the substrate to breathe.
- ◆ **Special Features** : A fully cured membrane is non-toxic, hard wearing seamless shield capable of bridging surface cracks.

MIXING

VARASHIELD 20 is supplied in pre-measured units and should be mixed on the site using clean plastic pails. In a 20 litre pail put the 4 litres of Part B and add 4 litres of water mix thoroughly. Remove about three litres and keep aside. Now add all 24 kg powder Part A slowly under stirring to a lumpfree paste adding additional liquid as necessary and finally add all the liquid kept aside to a nice brushing paint like consistency.

Do not mix more material than can be utilised within 1 hour's time. For small size mixes, use 2 volumes of powder for 1 volume of liquid. Mix thoroughly and keep mixed during application. Do not re-mix by adding water.

SURFACE PREPARATION

All concrete to be treated with **VARASHIELD 20** should be clean. Remove laitance, dirt, grease etc., by means of high pressure water blasting, sand blasting or mechanical wire brushing. The surface for application should be well soaked with water,

advance of time and prior to the installation of the slurry.

APPLICATION

Apply properly mixed **VARASHIELD 20** whilst the concrete surface is damp. Use a stiff bristle brush or roller. For depressions more than 6mm make a trowellable mix using lesser quantities of liquid polymer (Part B) and apply using a trowel. Where more than one coat is necessary or specified, apply the second coat after previous coat has dried. Install in 1 or 2 coats a membrane of minimum thickness 1.5mm and do not exceed a thickness of 4mm.

If **VARASHIELD 20** is used in areas that will be walked on or if required to toughen the coating applied then use of fibreglass or other reinforcing fabric is recommended. This is pressed into position whilst the first coat is still tacky and then followed by a full second coat.

NOTE: Whilst using in hot weather conditions or in order to improve brushability, upto 2% (i.e. 400ml). Water may be additionally added per pack.

Curing Period: Whilst there is no need for a curing aid, it is important that applied surface is allowed to cure on its own for atleast 7 days at 30⁰ C and above or 14 days at 20⁰ C or below. Any testing (if required) should be carried out after the curing period.

NOTE: If **VARASHIELD 20** is used in tanking situations it is preferable to wash down the surface with water after the curing period and then put into use.

Coverage: 1.8 kg per square metre at 1 mm thickness. 1 jumbo pack covers about 15 square metres at 1 mm thickness.

PACKAGING

VARASHIELD 20 is available in a 28kg double-pack consisting 24 kg of dry powder (Part-A) and 4 Ltrs of liquid (Part-B).

PRECAUTION

Cleaning : All equipment must be cleaned with water immediately after use. Mixes containing this product must not be emptied into drainage systems.

Protection : All works must be protected from rain and frost until fully hardened. It is recommended to Protect with polyethylene sheeting or similar.

Storage : Shelf life is 12 months when stored dry conditions at moderate temperature and humidity. Protect Part-B from frost.

PERFORMANCE STANDARDS

BS - 1881 Part - 5 1983 - I.S.A.T.
DIN 1048 : Water penetration test.

HEALTH AND SAFETY

VARASHIELD 20 is non toxic but is mildly alkaline. Gloves should be worn during application. Splashes to the skin or eyes should be removed with clean water. In the event of prolonged irritation, seek medical advice.