

SHEATHING CONCRETE FLOORS

The concrete should be reasonably firm and level. All traces of paint etc., should be removed, especially any containing Bitumen which would attack both Polyester Resin and "G.4." (Polyurethane Varnish).

If the concrete is very smooth and in perfect condition and only requires a good surface finish the whole job can be done with three coats of "G.4." as per enclosed manufacturer's notes: "G.4" Floor Coat".

We normally supply this non-pigmented but can also supply it pre-pigmented by the manufacturer in four colours including black, but on average the "G.4." pre-pigmented by the manufacturers is 35% dearer than the non-pigmented. Many of our customers use the non-pigmented and add 20% by weight of Polyester colour pastes with satisfactory results. For fish ponds only the "G.4." pigmented by the manufacturers should be used on account of risk of toxicity to fish.

SHEATHING WITH GLASSFIBRE AND RESIN

Where the surface of the concrete is irregular or rough the method is as follows.

Thoroughly clean and if necessary level the surface by addition of concrete in any hollows and ensure that the concrete is as dry as possible.

Then apply "G.4." to act as a sealant to prevent Alkali in the concrete attacking the Polyester Resin. Unless the concrete is very porous one coat of "G.4." will suffice, applied at approx. 200 grammes per sq. metre i.e. One kilo of G.4. will cover five sq. metres (5 x 10.76=53.8 sq. ft). The coat of G.4. takes approx. one hour to harden and eight hours to fully cure, but the next stage: the application of the Chopped Strand Mat with Polyester Resin "A" should be carried out as soon as the G.4. has hardened or as soon thereafter as possible, preferably within two hours or less. This is because the longer that the G.4. is allowed to Cure: the less good will be the degree of adhesion of the Polyester Resin to the "G.4." Polyurethane Varnish.

Then apply one lamination of Chopped Strand Mat of 2oz/sq.ft thickness (600gr/sq.m.) with Polyester Resin "A". the resin is applied by brush or lambswool roller and catalysed at 2% (10cc's/lb resin which is about $\frac{3}{4}$ pint). In cold conditions: below 15C the catalyst additive can be increased to 3% (15cc's) but never exceed 4% because this starts to retard hardening of the resin. The resin should be liberally applied to ensure that there is an adequate amount between the underside of the CSM and the G.4. The mat must be well rolled with a METAL ROLLER to ensure that the CSM is well saturated and all air bubbles expelled.

If a smooth finish is required a lamination of surface tissue should be applied over the top of the last lamination of CSM at the same time that the CSM is laminated. When the tissue has hardened a final surface coat is applied. If a non-slip finish is required omit the surface tissue and apply a screed of Fillite Powder mixed 50:50 by Volume with Resin "A". Otherwise apply gel coat: Resin "B" spread at 2½ozs per sq.ft. of surface area to which Polyester colour 2

paste can be added in ratio 10% by weight to the gel. Also add 2% by weight of Gel Solution "M/W": Wax in Styrene. This has to be added to all gel coats used as final surface coatings: to obviate surface tack when hard. For normal degree of traffic one lamination of 2ozs CSM suffices. For very heavy traffic use two laminations of 2ozs CSM. Ratio of Resin "A" is 2½ times the weight of the CSM.

NON-SLIP FINAL SURFACE COAT: Screed of Resin "A" and Fillite Powder.

The final surface tissue is omitted so that the screed will anchor better to the rough CSM surface. The Catalyst should always be added to the Resin before adding the Fillite: otherwise there can be adverse chemical reaction.

The mix is 50:50 by Volume: Resin to Fillite. This equates as under.

Resin "A" Specific Gravity: 1.1 One gallon Resin "A" weighs 11lbs.

Fillite: Specific Gravity: 0.65 One Gallon Fillite weighs 6½lbs.

To cover 100 sq. feet at 1/8" thickness requires: 3.25 gallons of each: Fillite and Resin.

This equates to 36lbs (16kgs) Resin "A" plus 21lbs (9.5kgs) Fillite: but a greater proportion of Fillite can be used. Some operatives scatter more Fillite Powder onto the screed before it hardens: sweeping off surplus after the screed hardens.

PIGMENTATION. The non-pigmented Fillite/Resin screed is a yellowish beige.

Polyester colour paste can be added to the resin in ratio 10% by weight: well dispersed in the resin: before adding the catalyst. Precise shade of colour will be affected by the colour of the Fillite.

RESIN to use is ----- which has Lloyds Cert. For use at 10C. Concrete floors are always colder than the air temp. It is the same price as other Resin "A": but only supplied in full ----- . Do NOT use ----- it is too waxy.