METHOD OF STATEMENT
FOR EPOXY
TERRAZZO FLOORING
(EPTop Terrazzo 200)

INDEX

A. SCOPE

This method of statement is specially designed to provide a definitive guide for the application of EPOXY TERRAZZO (**EPTop Terrazzo 200)**. It should be read in conjunction with all relevant Technical Datasheets of the material.

B. OUTLINE SPECIFICATION

Having adequately prepared and primed the substrate, the **EPTop Terrazzo 200** will be applied at a minimum depth of 8-10 mm. Having cured sufficiently, the **EPTop Terrazzo 200** will be grouted and polished using floor polishing machines as well as hand grinding equipment to give a gloss / matt finish as per the requirements.

C. TOOLS AND EQUIPMENT REQUIRED

- Forced Action Mixer
- Slow Speed Electric Mixing Drill
- Mixing Vessels
- Roller Tray
- Rollers/Brushes
- Spatulas
- Notched and Flat Squeegees
- Masking Tape
- Screed Laying Box
- Straight Edges
- Trowels
- Floor Polishing and Hand Grinding Equipment

D. SURFACE PREPARATION

Prior to commencing preparation, the area must be closed to all traffic and other trades. Entry to the area must be restricted to the contractor carrying out the resin flooring works only.

Concrete and screed should be at least 28 days old. Having a water content ratio less than 6%.

The object of surface preparation is to highlight areas of weakness that may need additional repair and to provide a clean, absorbent, suitably textured surface, suitable to provide an optimum bond with the floor finish.

All contamination, oil, grease and fats, should be removed using proprietary degreaser or detergent as appropriate and the surface allowed to dry prior to further treatment.

All construction contaminants such as plaster, fillers and paint must also be removed. Laitance will be removed together with minor surface contamination by vacuum assisted diamond grinding equipment. Larger open areas will be prepared using walk behind equipment, edgework and inaccessible areas will be prepared using hand-held diamond grinding equipment. Minor repairs to cracks, day joints and small voids will be carried out using Epoxy Mortar / Putty.

E. APPLICATION ENVIRONMENT

Do not start the application if the substrate and air temperatures are less than 12°C. Ideally the temperatures should be in the range of 18-35°C.
Do not apply when the relative humidity is greater than 90%, or if the dew point is reached.

Avoid application in direct sunlight as this is likely to negatively affect the quality of the finish.

During hot weather, if it is not possible to control the temperature within the work area it is desirable to apply resin systems in the early morning or late afternoon or early evening when the temperature is falling.

F. PROTECTION

Primex can spray from rollers contaminate adjacent surfaces. Protect areas such as the base of walls and columns with lightweight polythene extending at least 500mm up the wall.

Adjacent floors, including those previously treated with the same resin system on previous days, must be protected against contamination by resin sprayed from rollers using lightweight polythene extending a minimum of 1000mm into the adjacent area.
All terminations should be masked with either 50mm cloth or masking tape. The tape should be removed prior to the initial set of the resin to facilitate easy removal.

G. SUBSTRATE REPAIRS

On most sound reasonably, dense surfaces Primer Putty and Primer Mortar require no priming. Week, friable, or excessively porous substrates will require priming with Primer prior to the application of the repair mortar.

Minor defects such as static cracks, day-joints, honeycomb pitting, minor gauges and small holes up to 10mm deep will be filled using Primer Putty. Putty is provided in a 2-component 5 kg unit. The entire contents of both components will be decanted into a suitably sized mixing vessel and mixed using a slow-speed electric mixer for 2-3 minutes until a homogenous mix is obtained. Due to the small size of the unit, for small quantities, it is possible to mix the contents by hand using a suitable spatula. Hand mixing will be carried out in an appropriately sized container and both components mixed together for a minimum of five minutes.

The mixed Putty will be applied using a steel trowel pressing the material firmly into the void to be filled. The material will be applied within the pot life of 30 minutes. Excess material will be scraped off before hardening to leave a smooth, closed surface flush with the surrounding material Primer Putty will be sufficiently hard to accept foot traffic after 8 Hours. To ensure inter-coat bonding, subsequent applications of Terrazzo products should occur within 36 hours. If this time is exceeded, the surface will require abrasion using a grinding block to small isolated areas or a vacuum-assisted diamond grinder to larger areas.

H. INSTALLATION OF DEMARCATION TRIMS

Demarcation trims will be formed of aluminum metal angle. The depth will be equal to the final finished specified floor thickness plus 2mm. The trims will be installed at all terminations and on either side of all movement joints. In addition, patterns may be set out on the floor to be treated using the trims. Where patterns are to be formed, this will be set out and marked on the floor using chalk markers and string lines. The trims will be adhered using proprietary gun grade polyurethane adhesive and the adhesive permitted to dry for 2 hours prior to floor priming. Should curved patterns be required, serrated angle trim will be used to permit the trim to be bent to shape. Simple curves will be set out and adhered in the same way as straight trims; more complex patterns will require the use of template formers.

I. APPLICATION OF EPOXY TERRAZZO

Primex EP 100 & Crete Mesh (Fiber Mesh) Application

The prepared concrete substrate will be primed using one coat of **Primex EP 100**, scattered with 0.4-0.8mm quartz aggregate at the rate of approximately 0.1kg per m^2. **Primex EP 100** is provided in 5 kg units made up of two components, resin and hardener. The entire contents of both components will be decanted into a suitably sized mixing vessel and mixed using a slow-speed electric mixer for 2-3 minutes until a homogenous mix is obtained. The mixed material will be decanted into an appropriately sized scuttle and applied within twenty minutes using a medium pile synthetic wool roller at the minimum rate of 200ml per m^2. Should excessively

porous areas of the substrate become apparent during the preparation, the primer consumption will be increased. Whilst wet the primer will be scattered with 0.4-0.8mm quartz aggregate at the approximate rate of 100g per $m^{2.}$ Areas of the substrate that require more aggressive preparation will consume additional primer if not smoothed with diamond grinding equipment or repair compound. The primer will be permitted to cure until tack free and for a maximum of 24 hours prior to being overlaid. The **Crete mesh** to be provided can range from 145 GSM to 225 GSM according to the floor conditions. In general, the mesh provided is 160GSM.

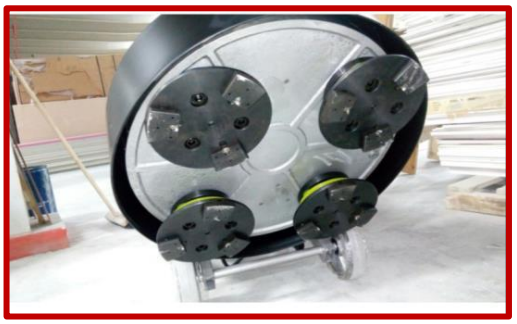
EPOXY TERRAZZO SET

The **EPTop Terrazzo 200** is supplied 3 component units, made up of **Resin, Hardener with Binder**. Prior to starting the forced action mixer, the entire aggregate component will be poured in. The entire contents of the hardener component will be added to the resin component and mixed with a slow speed electric mixer for one minute until a homogenous mix has been achieved. The mixed resin and hardener will be added to the aggregate which will be mixed for a minimum of 30 seconds until all the aggregate is evenly coated with resin. It must be noted that it is important to mix the resin with the aggregate for the minimum time necessary to achieve an even coating and that all mixes are mixed for the same length of time to prevent excessive and uneven crushing of the aggregate.

The mixed material will be decanted into the screed box. The screed box will be set to apply the material so that after trowelling the material is at the correct final finish depth plus 2mm, requiring 1.5 kg per mm per m^2, to match the height of the demarcation trims. The screed box will be pulled across the floor leaving the appropriate quantity of screed on the floor. The screed will be finished with a steel trowel to a flat and even finish, closing up any “tramlines” left for the screed box. The screed will cure for the minimum time required to become tack free and accept foot traffic and for a maximum of 36hours.

Grinding

The filled screed will be allowed to cure for a minimum of 24 hours prior to commencing the grinding process, whereas ideally it should be cured for at least 3 days. The purpose of the grinding process is to evenly expose the aggregate and highlight any voids within the screed. The **Epoxy Terrazzo** Screed will be ground dry, using vacuum-assisted floor polishing and grinding equipment using three hard metal grinding tools. The grinder will be required to remove approximately 1-2mm of material.



EPOXY TERRAZZO Grout

The ground screed will be grouted using Grout to fill any voids caused by air bubbles in the screed or aggregate “pop-outs” caused by the grinding process. Grout is provided in (5kg Epoxy Terrazzo set) kg units made up of 2 components, resin and hardener. The hardener components will be decanted into resin component and mixed using a slow speed electric mixer for 1 minute until a homogenous mix is obtained. The mixed material will be applied within ten minutes to the cured **Epoxy Terrazzo** Screed using a flat rubber squeegee or grout trowel.

Polishing

The grout will be allowed to cure for a minimum of 12-24 hours prior to commencing the polishing process. Polishing will be conducted using Vacuum assisted floor polishing grinding equipment. The polishing process is a phase process where increasingly fine diamond polishing heads are used to produce the gloss level required. The polishing pads vary from hard to soft.

Finishing

Epoxy Terrazzo requires no sealing; however, GAC recommend the application of Sealer available in Matt / Gloss can provide a sacrificial surface polish to reduce the requirement for future maintenance polishing. The Sealer provided in single component 5 kg units. The material is poured directly onto the floor and spread with a flat mop to provide an even streak free finish. The polish will be permitted to cure for a minimum of 2 hours prior to opening the area to traffic.

J. CLEANING

All resin should be removed from all tools, including roller frames, mixers, screed boxes and trowels using Cleaner or suitable solvent based resin cleaner prior to curing of the material. Used paint brushes and roller heads cannot be cleaned satisfactorily and should be disposed. Cured material can only be removed mechanically.

K. HAND OVER

The completed system may be opened to full traffic 2 hours after the surface polish has been applied. The surface should not be cleaned with water for 24 hours or cleaning chemicals for 48 hours. The finish should be inspected by the client and any concerns or defects clearly highlighted prior to opening to traffic.

L. NOTE

It is the contractors' responsibility to assess the substrate. Should the substrate be excessively porous, or should the porosity become apparent after preparation, it may be necessary to apply a second priming coat or carry out additional repairs such as hole filling and crack repair and reinforcement.

Epoxy Terrazzo:

General

Terrazzo flooring is 100% solids, two component epoxy resin system containing resin, hardener, Binder and selected decorative aggregates. **EPTop Terrazzo 200** is a trowel applied to a thickness ranging from 8-10mm and provides outstanding durability and wear, resulting in the lowest life cycle cost of any flooring system available.

Advantages

1. Unlimited matrix colors, color control, resiliency, chemical resistance and tensile-compressive strengths not found in cement-based systems.
2. Excellent for multi-colored patterns and designs.
3. Light weight and flexibility make it ideal for multi-story use.
4. The lowest maintenance cost due to non-absorbency.
5. The quickest pour to grind installation time.

Thickness: 8-10 mm

Weight: 28-30 Kgs per sqm

Maintenance

Unlike traditional flooring materials that require stringent processes and specific chemicals for their upkeep, **Epoxy Terrazzo** is generally very easy to maintain. Its gloss and sheen continue to shine through for the ages to come, giving the floor an incredible luminance and unblemished appearance. There are no joints where dirt can accumulate to spoil the look. Further, **Epoxy Terrazzo** is non-porous and crack-resistant and requires daily maintenance of only dry mopping, thus saving water, electricity, and manpower. Maintenance of extremely, high-use areas require only neutral PH cleaners and water.