

THIS METHOD STATEMENT COVERS THE PREPARATION AND APPLICATION OF **MasterTop 1221 F**, AN ACRYLIC FLAKE BASED DECORATIVE EPOXY RESIN FLOORING SYSTEM

**METHOD STATEMENT: MasterTop 1221 F**

**1. SUBSTRATE PREPARATION:**

- 1.1. Prior to starting preparation, close the area to be prepared to all traffic and other trades.
- 1.2. The preferred methods of substrate preparation are; captive blasting using medium shot, or surface grinding. Acid etching is not recommended.
- 1.3. If any part of the floor is contaminated by oil, grease or fat, the contamination shall be removed before other forms of preparation are undertaken.
- 1.4. At free edges such as aisleways and doorways the floor coating / topping shall be terminated properly. Cut a groove in the substrate along the line of termination. The groove to be at least as deep as the thickness of the topping with the inner edge cut at a 20° angle.
- 1.5. Prepare the concrete substrate using the chosen method, removing all laitance and weak or friable concrete. The finished surface should have the texture of medium to coarse sandpaper.
- 1.6. **The prepared surface MUST have a tensile pull-off value of at least 1.5 N/mm<sup>2</sup>.** Application onto a substrate that does not comply with the required pull-off values is extremely risky and would invalidate any warranties that may have been offered.
- 1.7. Surface defects exposed during preparation such as shrinkage cracks, blow holes, minor honeycombing, minor damage to joint arrisses, etc. shall be filled with **MasterTop 2200** a thixotropic two component surface filler.
- 1.8. Larger surface repairs / levelling can be carried out using products from the **MasterEmaco or MasterTop BC 1215 / MasterTop BC 1235 / MasterTop BC 1245** repair range.
- 1.9. NOTE: When it is known prior to starting work on the floor that repairs are required, the repairs should be executed before general preparation is undertaken.
- 1.10. Remove joint sealant if installed.
- 1.11. Place polyethylene joint backer rod in joints, with the top of the backer rod flush with the floor surface. Push nails between the backer rod and the side of the joint, leaving the nails protruding, to act as markers. **MasterTop 1221 F** will be applied over the joint, the joint being cut-out later.
- 1.12. When floor preparation is complete, vacuum the area to remove all dust and debris.
- 1.13. Protect areas such as the bottom of walls and columns that may be splashed when the wet epoxy is being rolled with the spiked roller.
- 1.14. Place 50mm wide masking tape along free edges.

## 2. APPLICATION PROCEDURES:

- 2.1. Before starting application of the coating, ensure that all materials and tools are on hand to allow completion of the work, the floor is dry and dust free.
- 2.2. Ensure that the mixing equipment is adequate, with a back up mixer available in case of a break down.
- 2.3. A heavy-duty handheld mixer (300-600 rpm – Collomix X06 or similar) fitted with a suitable mixing head (Collomix DLX) is ideal for mixing this type of product.
- 2.4. Security of the power supply should be verified.
- 2.5. Spiked shoes are essential pieces of equipment when applying **MasterTop 1221 F**.
- 2.6. 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 18-30°C (at least 3°C above the dew point).
- 2.7. Do not apply when the relative humidity is greater than 85%, or if the dew point is reached.
- 2.8. Do not apply in direct sunlight.
- 2.9. Do not expose to chemical spillage or place in direct contact with water during the first 24-36 hours of curing.
- 2.10. During hot weather it is preferable to apply **MasterTop 1221 F** in the late afternoon or early evening, when the temperature is falling, if the temperature of the building is not controlled.

## 3. SURFACE SEALING & PRIMING:

- 3.1. Prior to application of the **MasterTop 1221 F**, the concrete substrate should be sealed using **MasterTop P 650**.
- 3.2. Pour the reactor into the base, then mix the components together for 1-2 minutes using a suitable mixer as described above (2.3).
- 3.3. Depending on surface roughness, use a short or medium pile roller to apply the mixed **MasterTop P 650** to the prepared substrate, ensuring total coverage. Application rates will vary depending on substrate roughness and absorption but should be in the range of **0.15-0.3 kg/m<sup>2</sup>**.
- 3.4. Allow the primer coat to cure to a tack free state before starting application of the base coat.

## 4. MIXING OF BASE COAT: MasterTop 1210

- 4.1. Pour the contents of the colour pack into the Part A of the **MasterTop 1210** and pre-mix until a consistent streak free colour is achieved. Use the mixer as detailed above as it ensures a smooth mix is achieved once the fillers are added.
- 4.2. Add the Part B to the pre-mixed Part A + colour pack and mix for a further 1 minute before adding the **MasterTop 1210** filler whilst continuing to mix until a uniform colour is obtained, free of streaks or lumps of unmixed filler (2 to 3 minutes).

**NB:** To avoid any possible problems with lumps of unmixed filler, it is advisable to filter the mixed material through 1mm - 1.2mm mesh (fly screen mesh) whilst decanting into **another clean pail**.

## 5. APPLICATION OF MasterTop 1210 AND ACRYLIC FLAKES:

- 5.1. Pour the mixed material in a strip along the edge against which the application will start.
- 5.2. Using a pin screed, notched trowel or roller, spread the resin to the desired coverage rate of approximately **1.56 kg/m<sup>2</sup> (1 litre/m<sup>2</sup>)**.
- 5.3. Where there are unprotected free edges, drain outlets and any gullies, ensure the **MasterTop 1210** flows into termination grooves previously cut.
- 5.4. As soon as sufficient material has been laid to allow the operative with the spike roller to work without interfering with the laying operation, rolling should begin. Rolling should always start within 5 minutes of the material being laid. The operative shall wear spike shoes to allow him to walk in the wet material.
- 5.5. The spike roller is used to aid the release of air from the **MasterTop 1210**, to smooth out trowel marks and ensure uniformity of colour.
- 5.6. Allow the **MasterTop 1210** resin to settle for 5 -10 minutes before scattering the decorative flakes. If dry patches appear, then recoat these areas so that a uniform thickness of resin is available on the surface.
- 5.7. Broadcast the decorative **Acrylic Flakes** evenly to saturation on to the wet **MasterTop 1210 (Approx. 0.3-0.5 kg/m<sup>2</sup>)**.
- 5.8. After over-night curing remove the excess **Acrylic Flakes** by sweeping. Give the floor a light scraping with the edge of the trowel or a light sanding to remove rough spots and loosely bonded flakes. Sweep thoroughly to remove the loose / excess flake (vacuum maybe required). Reclaimed **Acrylic Flakes** maybe re-used if clean and dry.

## 6. MIXING OF RESIN: TOP COATS

- 6.1. Pour the contents of the **MasterTop 1200** Reactor (Part B) into the Base (Part A) then mix the components together for at least 1 minute as previously done.

## 7. APPLICATION:

- 7.1. Pour the mixed material onto the scattered quartz aggregate and spread using a squeegee or roller to a coverage of **0.15-0.30 kg/m<sup>2</sup>**.
- 7.2. The quantity of mixed material applied determines the surface profile of the finished system.
- 7.3. Back roll with short nap paint roller.
- 7.4. Depending on the finish required, additional roller coats of **MasterTop 1200** may be required.

## 8. OPTIONAL: MATT FINISH

- 8.1. Pour the contents of the **MasterTop TC 442W Clear** Reactor (Part B) into the base (Part A) then mix the components together for at least 1 minute, using a slow speed (300-600rpm) mixer fitted with a suitable spiral mixing paddle.
- 8.2. Apply **MasterTop TC 442W Clear** over the cured **MasterTop 1200** at a coverage rate of **0.10-0.12 kg/m<sup>2</sup> per coat (1-2 coats as required)**.
- 8.3. Ensure the area is closed off to all traffic and allow curing for 48 hours.
- 8.4. Pour the mixed material into a suitable paint tray and apply to the abraded flakes using a squeegee or short pile roller at a coverage rate of **0.10-0.12 kg/m<sup>2</sup> per coat (2 coats required)** and back roll to give an even uniform finish.
- 8.5. Ensure the area is closed off to all traffic and allow curing for 48 hours.

## 9. MOVEMENT JOINTS:

- 9.1. Where joints have been treated as in point 1.10 – 1.11 above, strike a chalk line along the nails protruding from the joint, remove the nails before cutting along the joint line with a double bladed groove cutter (Such As Hilti) to re-form the joint to the required width. Cut the epoxy back to the concrete joint face and remove the sharp arris and reseal the joint with an appropriate joint sealant.

**NB:** Any masking tape used during the application process should be removed before the resin hardens.

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### STATEMENT OF RESPONSIBILITY

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