

THIS METHOD STATEMENT COVERS THE PREPARATION & APPLICATION OF MasterTop 1230.

METHOD STATEMENT: MasterTop 1230

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, high pressure water jetting, scarifying BUT only if followed by surface grinding, or surface grinding by itself.
- 1.3. **NOTE: Acid etching** should not be used unless there is no other suitable means of preparation. If acid etching is used, great care should be taken to ensure all acid residue is removed, by washing the floor thoroughly with copious amounts of water.
- 1.4. If any part of the floor is contaminated by oil, grease or fat, the contamination should be removed before other forms of preparation are undertaken.
- 1.5. At free edges such as aisleways and doorways the floor topping should 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.
- 1.6. 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 grit sandpaper (ICRI Surface Profile CSP 2-3 as a guide).
- 1.7. Surface defects exposed during surface preparation such as shrinkage cracks, blow holes, minor honey combing, minor damage to joint arrises, etc. shall be filled with **MasterBrace ADH 2200** a thixotropic two component surface filler.
- 1.8. Larger repairs can be carried out using products from the **MasterEmaco** 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 joint backer rod in joints, with the top of the backer rod either flush or 1-2 mm above the floor surface. Push nails between the backer rod and the side of the joint, leaving the nails protruding, to act as markers. **MasterTop 1230** will be laid 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 50 mm wide masking tape along free edges.

2. APPLICATION PROCEDURES:

- 2.1. Before starting application of the topping, 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 backup mixer available in case of a break down.



- 2.3. A slow speed (300 600 rpm) heavy-duty electric drill or hand-held mixer fitted with a **Collomix DLX** mixing head or similar.
- 2.4. Security of the power supply should be verified.
- 2.5. MasterTop 1230 can be applied using notched trowels or pin screeds.
- 2.6. Spiked rollers and spiked shoes are essential pieces of equipment when laying **MasterTop 1230.**
- 2.7. 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.
- 2.8. Do not apply when the relative humidity is greater than 90%, or the dew point is reached.
- 2.9. Do not apply in direct sunlight.
- 2.10. During hot weather, it is preferable to lay **MasterTop 1230** 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 1230**, the surface should be sealed / primed using **MasterTop 1200** diluted with 0.5 L of a suitable thinner (Xylene / MEK / Acetone).

NOTE: Alternative surface sealer / primer is MasterTop P 650 to be used without dilution.

3.2. Pour the reactor (Part B) into the base (Part A) of either the MasterTop 1200 resin or MasterTop P 650, then mix the components together for 1-2 minutes using a slow speed drill (300 - 600 rpm) fitted with a Collomix DLX mixer head. ONLY IF using MasterTop 1200 resin as the surface sealer then add the solvent and mix for no less than 1 minute.

Do NOT add solvent when using MasterTop P 650 as the surface sealer / primer.

- 3.3. Depending on surface texture, use a short or medium pile roller, to apply the mixed material to the prepared substrate, ensuring total coverage. Application rates will vary depending on substrate roughness and absorption but should be in the range of 6-8 m² / L irrespective of the sealer / primer system used.
- 3.4. Allow the sealer coat to cure to a tack free state before starting application of the topcoat.
- 3.5. Any areas showing a dull "matt" appearance should be re-primed and again allowed to cure (this indicates a very porous concrete surface).

4. PRE - MIXING OF RESIN TOPCOAT:

- 4.1. Pour the contents of the colour pack into the base (PTA) and then mix the components together using a slow speed (300 600 rpm) handheld mixer fitted with a suitable mixing paddle (**Collomix DLX** mixing head or similar).
- 4.2. Mix for no less than 1 minute, before pouring this into a clean large size mixing bucket (30 L) and then adding the **MasterTop 1230** filler (PTC) whilst continuing to mix until a uniform colour is obtained, free of streaks or lumps of unmixed filler (minimum 2 minutes).
- 4.3. Prepare as many kits as required to this stage prior to starting any application work.



5. FINAL MIXING OF TOPCOAT

- 5.1. Remix the pre-mixed base (PTA) + colour pack + filler (PTC) for 30 seconds and then add the reactor (PTB) and continue to mix until a streak free even colour is reached and there are no visible lumps of filler (PTC), etc.
- 5.2. Repeat the above process for each individual kit only as and when it is required based upon the application speed of the team.

6. APPLICATION

- 6.1. Pour the mixed material in a strip along the edge against which the application will start. Start the levelling operation immediately.
- 6.2. Using a notched trowel or pin screed, spread the material at the desired thickness.
- 6.3. Mixed material: 46 kg = 25.70 L (1 L = 1.79 kg)

Coverage:

- (a) $2 \text{ mm} = 2 \text{ L/m}^2 (3.58 \text{ kg/m}^2)$
- (b) $3 \text{ mm} = 3 \text{ L/m}^2 (5.37 \text{ kg/m}^2)$
- (c) $4 \text{ mm} = 4 \text{ L/m}^2 (7.16 \text{ kg/m}^2)$

NB: Above coverages do not allow for any wastage or for the substrate profile.

- 6.4. When placing fresh material, pour it in a strip along the edge of and into the previously levelled **MasterTop 1230**, so that the different mixes blend together as they are levelled and rolled.
- 6.5. As soon as sufficient material has been laid to allow the operative with the spiked 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 should wear spiked shoes to allow him to walk in the wet material.
- 6.6. The spiked roller is used to aid the release of air from the **MasterTop 1230**, to smooth out trowel / pin rake marks and ensure uniformity of colour.
- 6.7. Rolling can be considered as a continuous operation. Rolling should only cease when air no longer rises to the surface and the surface finish is acceptable, or when a cut made with a knife in the wet material does not heal within 30 seconds.

7. OPTION 1: TOPCOAT - MasterTop TC 943 (Pigmented)

- 7.1. Before mixing the **MasterTop TC 943**, precondition both the base (PTA) and reactor (PTB) components to a temperature of 15°C 25°C.
- 7.2. Mix the base (PTA) and reactor (PTB) components of the **MasterTop TC 943** with a slow speed drill and small diameter spiral paddle (300 400 rpm) for at least 2 minutes and avoid any entraining of air into the mix. Pour into a clean container and mix for a further 1 minute.



7.3. Apply the mixed material by squeegee & medium nap / pile roller at the following coverage rates.

Product	No of coats	Coverage
MasterTop TC 943	1	0.12 kg/m ²
(Pigmented)		

NOTE: Please refer to MasterTop TC 943 method statement for application methodology.

8. OPTION 2: TOPCOAT - MasterSeal TC 258 (Pigmented)

8.1. Thoroughly mix the **MasterSeal TC 258** using a slow speed (300 - 400 rpm) drill with a suitable small diameter spiral mixing paddle. Apply one coat of **MasterSeal TC 258** by medium pile roller or squeegee as per the following coverage rates:

Product	No of coats	Coverage
MasterSeal TC 258 (Pigmented) (Single Component)	1	0.25 kg/m²

- 8.2. Allow to cure 24 hours before applying line marking.
- 8.3. Allow to fully cure for 7 days for heavy traffic.

9. OPTION 3: TOPCOAT - MasterSeal TC 257 (Pigmented)

9.1. Thoroughly mix the **MasterSeal TC 257** using a slow speed (300 - 400 rpm) drill with a suitable small diameter spiral mixing paddle. Apply one coat of **MasterSeal TC 257** by medium pile roller or squeegee as per the following coverage rates:

Product	No of coats	Coverage
MasterSeal TC 257 (Pigmented) (Two Component)	1	0.25 kg/m²

- 9.2. Allow to cure 24 hours before applying line marking.
- 9.3. Allow to fully cure for 7 days for heavy traffic.

10. FORMING DAY JOINTS:

10.1. At the predetermined termination point lay two strips of 50 mm wide masking tape, one on top of the other along the line of the intended joint. Place a strip of self-adhesive foam tape of a suitable thickness near the back edge of the strip.



- 10.2. Stop laying the MasterTop 1230 at the foam strip. Allow to cure overnight.
- 10.3. The following morning lift the edge of the masking tape and fold back. The **MasterTop 1230** will break along the line of the masking tape. If the break is not clean enough, it can be recut with a sharp knife or an angle grinder.
- 10.4. Prior to starting laying operations, tape a 1 m wide sheet of polythene on top of the existing **MasterTop 1230**, along the cut edge, to protect it from being splashed with wet resin.
- 10.5. When rolling with the spiked roller has ceased in the vicinity of the day joint, remove the polythene and tape.

11. MOVEMENT JOINTS:

- 11.1. Where joints have been treated as in points 1.10, strike a chalk line along the nails protruding from the joint, remove the nails, then cut along the joint line with a saw or angle grinder, to reform the joint. Cut the epoxy back to the joint face, remove the sharp arris and reseal the joint.
 - Note: Any masking tape used during the application process should be removed before the resin hardens.



Recommended mixing paddle for MasterTop 1230

Collomix DLX or similar

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