

THIS METHOD STATEMENT COVERS PREPARATION AND APPLICATION OF **MasterProtect 1860**.

METHOD STATEMENT: MasterProtect 1860

1. SURFACE PREPARATION: NEW CONCRETE.

- 1.1. All surfaces to be sound, smooth, free from oil, grease, friable matter and general curing compounds (wax based curing membranes shall not be used in areas to be over coated).
- 1.2. All concrete surfaces to be coated shall be cleaned using high pressure water jetting, grit blasting or other methods approved by the Engineer.
- 1.3. Arrases shall be rounded off and surface protrusions shall be ground down to ensure a smooth substrate.
- 1.4. All blow holes and other minor surface defects shall be made good using **MasterProtect 1860 TIX**.
- 1.5. **MasterProtect 1860 TIX** is a single component material and should not require any special mixing other than briefly stirring.
- 1.6. Application shall be by spatula or trowel, ensuring blow holes and other minor defects are completely filled.
- 1.7. As soon as the putty has hardened sand down to remove any excess and wipe the area with a damp clean cloth to remove all dust etc.

2. SURFACE PREPARATION: EXISTING CONCRETE.

- 2.1. All concrete surfaces to be coated shall be cleaned using high pressure water jetting (>400 bar), grit blasting or other methods approved by the Engineer. All Algae and marine organism growth must be totally removed during this cleaning process
- 2.2. Wash down the prepared area with a weak solution of household bleach and water (10% solution) using a stiff scrubbing brush or high pressure washer (large areas/ speed of process in tidal zones)
- 2.3. Follow this with a final rinse using clean potable water.
- 2.4. Allow the concrete surface to become visibly dry or mechanically blow the surface dry if necessary, to speed up the coating process – important in tidal zone applications
- 2.5. Arrases shall be rounded off and surface protrusions shall be ground down to ensure a smooth substrate.

3. PRIMING OF POROUS / WEATHERED CONCRETE SURFACES – IF REQUIRED.

- 3.1. Porous or weathered concrete surfaces may require the use of a primer coat to reduce the risk of blow / pin holes appearing.
- 3.2. Mix **MasterProtect 1860** with 5 to 10% (Maximum) by volume of clean Xylene / MEK / Acetone and apply to the prepared surface either by airless spray or paint brush at a rate of approx. 0.25 L/m² ensuring an even “film” is created.
- 3.3. Allow the primed surface to dry for 10-20 minutes.
- 3.4. Any blow holes and other minor surface defects highlighted by the prime coat shall then be made good using **MasterProtect 1860 TIX**.
- 3.5. **MasterProtect 1860 TIX** is a single component material and should not require any special mixing other than briefly stirring.
- 3.6. Application shall be by spatula or trowel, ensuring blow holes and other minor defects are completely filled.
- 3.7. As soon as the putty has hardened sand down to remove any excess and wipe the area with a damp clean cloth to remove all dust etc.
- 3.8. Any large scale repairs to the surface unearthed during the cleaning process may require the use of alternative repair products – Contact Master Builders Solutions Technical Department if in doubt.

4. APPLICATION CONDITIONS:

- 4.1. **MasterProtect 1860** shall be used when the ambient / sea temperature (in the case of Tidal Zone applications) is above 15°C.
- 4.2. Substrate temperatures should not be less than 15°C. In hot weather, areas to be coated shall be shaded from direct sunlight to prevent the substrate temperature exceeding 40°C.
- 4.3. Coating shall not be applied if the humidity is likely to rise above RH 85% or the dew point is reached before or during the application.
- 4.4. Surface moisture content of the substrate should not exceed 10% - there should be no water “sheen” visible on the surface at the time of application. If necessary, use clean compressed air or an electrical “blower” to aid in drying of the surface.

5. MIXING:

- 5.1. Open the tin and mix the contents thoroughly using a slow speed drill 200 - 300rpm with suitable mixing attachment. Ensure the material is scrapped off the bottom and sides of the tin and mix for 2-3 minutes.

6. APPLICATION:

- 6.1. Application shall be by brush or suitable airless spray equipment.
- 6.2. The first coat shall be applied at a rate of 0.35 L/m² ensuring total coverage of the prepared area. This application rate should be checked frequently using a wet film thickness gauge (350 microns Wet Film Thickness (WFT) = 200 microns Dry Film Thickness (DFT)) and allowed to dry for ±30 minutes.
- 6.3. The coating shall then be inspected for any pinholes or other defects. These shall be made good with **MasterProtect 1860 TIX** and sanded back.
- 6.4. A minimum of two coats is recommended to provide a final system thickness of not less than 400 microns DFT. In the case of Tidal Zones, it may be necessary to apply the second coat at the next low tide and therefore the surface **MUST** be thoroughly washed and cleaned (as per 3.1 / 3.2)
- 6.5. The second and any subsequent coats (to achieve thicknesses in excess of 400 microns) shall be applied at right angles to the previous coat and within 24 hours at 40°C or 36 hours at 20°C. If the application of the subsequent coat is delayed further, the previous coat should be lightly abraded and cleaned (as per 3.1 / 3.2) prior to the next coat being applied.

6. AIRLESS SPRAY:

- 6.1. For large areas, application using Airless Spray equipment is recommended. Airless Spray equipment such as Graco X90DH3 or similar can be used.
- 6.2. Spray with a tip size of 21-25 thou and a line pressure of approx. 85 Bar. Remove ALL filters in the spray gun and lines prior to application.
- 6.3. Test areas should be sprayed to confirm suitability of the final finish and wet film thicknesses (WFT's) etc. prior to starting on the main areas.

7. CLEAN UP:

- 7.1. **MasterProtect 1860** being a rapid drying material requires that any spillages or overspray etc. should be cleaned up and removed from surfaces immediately (solvent wipe etc.) before it dries. Once dry the coating can only be removed by mechanical means.
- 7.2. Ensure all spraying equipment is thoroughly cleaned immediately upon completion of spraying to prevent traces of the coating drying and creating blockages in the hoses and spray nozzles etc.

STATEMENT OF RESPONSIBILITY

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