

MS - DB - MasterProtect 180 - 05/2023

THIS METHOD STATEMENT COVERS PREPARATION AND APPLICATION OF **MasterProtect 180**, HIGH BUILD EPOXY COATING NON-TOXIC, SOLVENT FREE HIGH BUILD, PROTECTIVE EPOXY RESIN COATING.

**METHOD STATEMENT: MasterProtect 180** 

#### 1. GENERAL:

- 1.1. The area to be coated shall be marked on the drawings and on the structure.
- 1.2. All areas not to be coated, but which may be affected by spillage or overspray shall be fully masked. Flora and fauna shall be protected.
- 1.3. Any further areas to be coated, shall be at the discretion of the engineer and subject to remeasurement.
- 1.4. All deviations from the original Bill of Quantities or scope of works must be agreed in writing with the engineer before application starts.

#### 2. PREPARATION:

- 2.1. All surfaces shall be free from oil, grease, friable matter and general curing compounds (wax based curing membranes shall not be used in areas to be over coated).
- 2.2. Concrete surfaces shall be cleaned using high pressure water jetting, grit blasting or other methods approved by the engineer. Surface profile equal to ICRI CSP 1-3 (max.) should be achieved.
- 2.3. Arrises shall be rounded off and surface protrusions shall be ground down to ensure a smooth substrate.
- 2.4. All blow holes and other surface defects shall be made good using MasterBrace ADH 2200.
- 2.5. Mix PTA with PTB until a uniform, streak free colour is obtained. Full packs only shall be mixed.
- 2.6. Application shall be by spatula, ensuring blow holes and other minor defects are completely filled.
- 2.7. Allow the applied material to cure for at least 6 hours before sanding down to a smooth finish flush with the concrete surface.
- 2.8. Wipe the prepared surface to remove all dust with a damp clean cloth and allow to dry.

#### 3. TEMPERATURE CONDITIONS:

- 3.1. MasterProtect 180 shall be used when the ambient temperature is above 10°C.
- 3.2. Substrate temperatures should not be less than 10°C. In hot weather areas, to be coated shall be shaded from direct sunlight to prevent the substrate temperature exceeding 40°C.
- 3.3. 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.



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#### 4. MIXING:

- 4.1. The total contents of the reactor component shall be poured into the base component and mixed, using a slow speed drill with suitable mixing attachment. Mixing time shall not be less than 3 minutes until a uniform colour is achieved.
- 4.2. Care shall be taken to insert the mixing head slowly into the base material due to the high viscosity of the resin.
- 4.3. NOTE: As the kit size is 13.5 kg, once mixed it is imperative that it is applied immediately. Leaving the MasterProtect 180 as a 13.5 kg mixed kit in its original container will greatly reduce its pot life, it MUST be poured out into shallow paint trays and split amongst several applicators.

Partial mixing is NOT recommended but can be done IF accurate weighing scales are available to exactly measure out both components to their correct mixing ratios.

#### 5. APPLICATION:

- 5.1. Application shall be by brush, short hair roller.
- 5.2. The first coat shall be applied giving total coverage of the prepared area, ensuring a minimum wet film thickness of 200 microns. Allow to cure for at least 6 hours (must be tack-free).
  MasterProtect 180 being a solvent free material has a wet and dry film thickness that would be the same.
- 5.3. The coating shall then be inspected for any pinholes or other defects. These shall be made good with **MasterBrace ADH 2200.**
- 5.4. The subsequent coat (s) **(WFT 200 microns minimum)** shall be applied within 16 hours at 40°C or 36 hours at 20°C. If the application of the subsequent coat(s) is delayed the previous coat shall be abraded and wiped with a lint free cloth, dampened with a suitable thinner (Xylene / MEK / Acetone) immediately prior to the application of subsequent coats. Allow solvent wipe to fully dry before continuing with the application of subsequent coats.
- 5.5. Allow the **MasterProtect 180** to chemically cure for at least 7 days before being put into contact with potable water.

# 6. CLEAN UP:

- 6.1. All equipment used should be thoroughly cleaned using a suitable thinner (Xylene / MEK / Acetone) solvent whilst the material is still fluid. Once hardened it can only be removed by mechanical means.
- 6.2. All contaminated solvent used for cleaning purposes should be either recycled or disposed of in the correct manner.



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