

APPLICATION OF IVORY 340 TANK LINING SYSTEM

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1. SCOPE

This document describes the method of applying the Ivory 340 Epoxy Tank Lining System.

2. REFERENCES

- 2.1. Ivory 340 Data Sheet.
- 2.2. Quality Control Doc. Ref: QA QC 340 Epoxy Tank coating
- 2.3. Material Safety Data Sheet for Ivory 340 Epoxy.

3. RESPONSIBILITIES

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3.1. The preparation and review of this document is the responsibility of;

Preparation - Technical Manager
 Approval - Managing Director
 Review - Technical Manager

3.2. Site Q.C. action is the responsibility of:

Pre-Access inspection
 On-going day to day
 Final Inspection
 Contract Manager
 Site Supervisor
 Q.A. Manager

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4. WORKS PROCEDURES

4.1. PRECLEANING PRIOR TO ABRASIVE BLASTING.

- 4.1.1. Remove all traces of oil and other contaminants using a suitable detergent / degreaser.
- 4.1.2. Rinse area thoroughly and leave to dry.
- 4.1.3. Carry out random inspections using a white lint cloth soaked in white spirits and rubbed across the surface. The lint cloth should not display the pick up of residual oil or soluble contaminants.

4.2. ABRASIVE BLAST CLEANING:

The blast cleaning operation shall be to remove laitance and provide an anchor pattern of approximately 100-200 microns.

4.3. FILLING / REPAIRS TO STEEL WORK WHERE REQUIRED:

4.3.1. **HOLES**

- Holes smaller than 10mm diameter to be filled using Flowprime thixotropic scraper coat. If found that after blasting the concrete shows a significant of holes the Flowprime application may be omitted and the surface be completely covered with the Flowprime thixotropic scraper
- Holes larger than 10mm diameter to be covered Flowtex F1 epoxy mortar.

4.3.2. **OVERLAP**

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All plate laps, roof support plate and the like to receive an epoxy fillet using lvory 319 epoxy filler to provide a smooth transition between surfaces.

4.3.3. FLOOR AND SIDE PLATE CURB ANGLE

An epoxy fillet having a radius of 20mm to be formed using Ivory 319 epoxy filler.



4.3.4. UNEVEN AND IRREGULAR SURFACES

All uneven and irregular surfaces which does not conform to be made good using suitable epoxy compound (Flowcrete can not specify one product as this will be dependent on the extent of repairs to be conducted Sharp edges around outlets or pipes to be ground to provide a minimum radius of 10mm.

4.4 PRIMING:

Apply by roller or spray one coat of Flowprime epoxy or Flowprime 348 primer to a D.F.T. of 250 microns.

4.5 340 LAMINATE SYSTEM

Application of 2 layers 300gm chopped strand matt.

Onto the Flowprime apply a coating of 340 clear at spread rate of approximately $2m^2/\ell$ (500microns) and embed first layer of chopped strand matt, saturate and completely wet out the glass by applying additional 340 clear.

Once first layer is completely saturated apply a second layer of chopped strand matt repeating the above process.

Finish of the laminate by applying a surface veil.

Overlap each section of glass fibre by 100mm

Total consumption of resin for the process to be approximately 1.8 - 2l/m².

4.6 IVORY 340 FG (TOP COAT)

- **4.6.1** Ensure the complete absence of dust or contamination by vacuum cleaning and wiping with a clean, damp cloth.
- **4.6.2** Lightly abrade the laminate using 100 grit sandpaper to remove any irregularities.
- **4.6.3** Solvent wipe the surface using epocy enamel thinners prior to application of the 340 FG.

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- **4.6.4** Apply 1 coat coat by means of Brush, roller or spary at a rate of 4-5m2/l (200-250microns in the same direction of the product flow and allow to cure for 12 hours.
- **4.6.5** Apply 2nd coat coat by means of Brush, roller or spary at a rate of 4-5m2/l (200-250microns in the same direction of the product flow and allow to cure.

5. TESTING:

- **5.6.1** When the completed coating is sufficiently hard carry out inspection as per QA/QC DOCUMENT. Any defects to be spot marked using a Koki pen.
- 5.6.2 Careful observation to be made of the cured COATING to detect the presence of under curing with suspect areas being subjected to a solvent test to confirm under curing.

6. REPAIR:

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- **6.6.1** Repair any areas where porosity was detected by abrading the surface of the cured coating, cleaning and re-applying a 5cm x 5cm patch over this area as detailed in 4.5.
- **6.6.2** Under cured areas to be cut out and the coating re-applied ensuring that the patch overlaps the existing laminate by 75mm on all sides.