

Specifications for 20 mil Floor Coating System

Part 1 : Scope

Product and Application

This specification describes the application of a two part epoxy floor coating for light traffic areas.

1.1 Acceptable Manufacturers

ICO Coat, as manufactured by International Coatings of Franklin Park, IL or approved equivalent epoxy resin floor coating.

1.2 Performance Criteria

1. Tensile Strength (ASTM D-638)
 - Minimum : 6000psi
2. Tensile Elongation (ASTM D-638)
 - Minimum: 1.5%
3. Hardness, Shore D (ASTM D-2240)
 - Maximum: 80
4. 60° Gloss
 - Minimum: 80
5. Bond Strength to Quarry Tile
 - Minimum: 1000 psi
6. Vapor Transmission Rate (ASTM E-96)
 - Maximum : .03 perms
7. Taber Abrasion C517, 1000g 1000 Cycles (ASTM D-1044)
 - Maximum: 106 mg loss
9. % Solids
 - 100%
10. Chemical Resistance: must withstand constant immersion for at least 72 hours to the following chemicals: 10% nitric, 20% sulfuric, 50% sodium hydroxide, brake fluids, skydrol, and kerosene.

1.3 Materials

1. Component "A" shall be an epoxy resin of the epichlorohydrin bisphenol A type
2. Component "B" shall be a blend of cycloaliphatic amines with non- blushing characteristics.
3. All material shall be solvent-free.
4. Material shall be available in a fast cure ("FC") version for applications down to 50F

1.4 Surface Preparation

All new concrete surfaces that will be covered with the systems specified herein should have received a steel trowel, light broom finish and shall be free of all form release agents, curing agents or sealer applications. Concrete shall have cured a minimum of 28 days. If this is not practical, then consult manufacturer for recommended procedures.

A. General

1. The moisture vapor transmission rate of any slab-on-grade shall be checked using a calcium chloride test kit. The measured vapor transmission rate shall not exceed 5 pounds. Consult manufacturer for further directions.
2. Remove any oil or grease spots with appropriate degreaser, followed by pressure washing.
3. All new or old concrete should be lightly brush- blasted to obtain minimum 80 grit profile. Remove any old, poorly adhering coating.
4. All open cracks 1/8" and greater should be v-notched to a 1/2" width by 1/2" depth and cleaned of any debris, then filled flush to surface with **ICO Gel** epoxy crack filler.

1.5 Material Application

A. Priming

1. Priming is recommended when surface dampness is present. Prime with **ICO Primer LV or LVFC** at a coverage rate of 200-250 SF/gal and allow to dry tack free. Re-prime any dry appearing spots.

B. Coating Application

1. Mix **ICO Coat Part A and B** in the specified prescribed amounts using a low speed (<750 rpm) jiffy-style mixer for at least 30-60 seconds, or until completely uniform.
2. Immediately pour contents out onto the floor in a ribbon pattern and spread with a flat squeegee at a coverage rate of 160SF/gal followed by back rolling with a fine (1/4") nap roller. Broadcast in dry silica sand or color quartz at size and quantity to achieve desired texture. Allow to dry tack free.
3. Apply a second coat of **Floor Coating** at a similar coverage rate as #2. Total film thickness: 20 mils DFT (dry film thickness).
4. (Optional) In place of second epoxy coat, for better gloss and color retention, apply top coat of **Ure Guard 60**, same color as base coat, at coverage rate of about 350SF/gal.

C. Expansion Joints

1. Do not cover over expansion joints.
2. Remove any existing joint material beforehand and apply coating into joints with brush.
3. Fill joint with **ICO Lastic Gun Grade** flush with surface.

1.6 Protection of Finished Work

1. Prohibit foot traffic on floor for 24 hours after laying (at 70°F). At 50°F, this time should be extended to 48 hours.
2. Rinse off any chemicals that may come in contact with the freshly laid (for first 7 days) floor immediately.

1.7 Cleanup

- A. Dispose of all unused and waste materials.
- B. Tools can be washed in warm, soapy water when wet, but after drying, can only be cleaned by grinding or with a paint stripper.

- C. Unused resin can be set off with proper amount of hardener and disposed of in regular trash bins.

1.8 Warranty

- Installer shall provide a one year warranty against chemical attack, normal wear and tear and loss of adhesion.

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