

GENERAL

Armor-Rez PC 100 is a thin-film protective coating consisting of a two-component epoxy primer and a two-component chemical-resistant polyurethane topcoat. Armor-Rez PC100 offers a high-gloss, easy-to-clean surface with excellent chemical and abrasion resistance. Armor-Rez PC100 suitable for applications in light manufacturing, warehouses, retail and garage floors.

MOISTURE VAPOR EMISSION TESTING

All interior concrete floors are subject to possible moisture vapor emission and/or excessive alkalinity that could ultimately cause coating failure. Prior to application, calcium chloride moisture testing should be conducted according to ASTM 1869-04.

SURFACE PREPARATION

Surface preparation is vital to the long-term success of the installation. All surfaces to be coated must be clean, sound and free of mastics or other contaminants that may interfere with bonding. The concrete must be shotblasted or diamond ground to achieve a CSP 1-3. Properly prepared concrete must have a texture similar to 80-120 grit sandpaper.

Small depressions, cracks and hole should be filled with Epoxy 300 Flex Paste or Epoxy 400 thickened with fumed silica. Large holes should be filled with an epoxy mortar consisting of 4-5 parts aggregate (30 mesh silica or graded trowel sand) to 1 part Epoxy 400. This mortar must be placed directly over a primer coat of Epoxy 400 while the primer is still wet.

APPLICATION OF THE PRIMER COAT

Mix Epoxy 100 pigmented 4 parts A to 1 B. Mix the two components using a low-speed drill for 1 minute. Then add 20-30% water and mix for an additional 2 minutes using a low-speed drill. It is important to mix no more material than can be applied in 45 minutes.

Once the material is completely mixed, pour a usable amount onto the floor. Use a cut-in brush to coat the edges and control joints. Then, using a flat squeegee or roller, spread the material at a rate of 200-250 square feet-per-gallon.

Once the material is spread evenly, it must be back rolled to ensure even coverage.

If a non-skid texture is desired, you may broadcast a 30-40 mesh particle into the wet coating and then back roll to ensure an even distribution. Allow the primer to cure for 8-12 hours prior to proceeding with the topcoat.

APPLICATION OF THE POLYURETHANE TOPCOAT

Once the Epoxy 100 is cured, you can apply the polyurethane topcoat. Prior to the installation of the topcoat, it is recommended you make a visual inspection of the primer, looking for any debris that has been trapped. A razor blade scrapper or sand paper should be used to remove any imperfections. Make sure to sweep or vacuum the surface prior to proceeding with the topcoating process.

Mix the specified polyurethane at the ratio on the data sheet for 2 minutes. Then, immediately pour a usable amount onto the floor and spread it using a flat squeegee or roller. As soon as the material is spread, back roll using a 3/8th inch nap roller to ensure an even coverage. It is very important to keep a wet edge when installing the pigmented polyurethane topcoat. No more than 5 minutes should lapse between sections. Failure to keep a wet edge could result in a visible tie-in line. For exterior desert applications, a UV package must be incorporated.

The application rate of this coat should be 250-325 square-feet-per-gallon. Over application of the polyurethane could lead to film defects such as bubbles, blisters and overall softness of the topcoat.