ARMOR-REZ
CQ 100

Arizona Polymer Flooring

Application Instructions: Armor-Rez CQ 100

General
Armor-Rez CQ100 is a 1/8th inch thick decorative color quartz flooring system. This system offers excellent abrasion and impact resistance and can be combined with an optional polyurethane topcoat for areas needing improved chemical resistance and cleanability. Armor-Rez CQ100 is ideal for locker rooms, restrooms, veterinary facilities and clean rooms.

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 2-3. Properly prepared concrete must have a texture similar to 80-120 grit sandpaper. ¼ by ¼ inch key ways must be cut at all termination points and around all drains.

Small depressions, cracks, holes and control joints 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 1st Base coat and Broadcast
Mix Epoxy 400 clear 2 parts A to 1 part B. Blend the two parts together for 2 minutes with a low-speed drill. Once the material is completely mixed, immediately pour it onto the floor in usable ribbons.

Using a flat trowel or squeegee spread the material at 100 square-feet-per-gallon. Once the material has been spread to the proper thickness, back roll it immediately using a 3/8th to ½ inch nap roller to remove any notch lines.

Allow the base coat to level for 10-15 minutes, and then broadcast colored quartz to refusal at a rate of .5 pounds-per-square-foot. Allow base coat to cure for 6-12 hours prior to removing the excess quartz.

Application of 2nd Base coat and Broadcast
Once all of the loose quartz has been removed and the floor is vacuumed, mix Epoxy 400 clear 2 parts A to 1 part B. Blend the two parts together for 2 minutes with a low-speed drill. Once the material is completely mixed, immediately pour it onto the floor in usable ribbons.

Using a flat trowel or squeegee, spread the material at 100 square-feet-per-gallon. Once the material has been spread to the proper thickness, back roll it immediately using a 3/8th to ½ inch nap roller to remove any notch lines.

Allow the base coat to level for 10-15 minutes, and then broadcast colored quartz to refusal at a rate of .5 pounds-per-square-foot. Allow base coat to cure for 6-12 hours prior to removing the excess quartz.

Application of Epoxy 400 Clear Topcoat
Once all of the loss quartz has been removed and the floor is vacuumed, mix Epoxy 400 clear 2 parts A to 1 part B. Blend the two parts together for 2 minutes using a low-speed drill.

Once the material is completely mixed, immediately pour it onto the floor in usable ribbons. Using a flat trowel or squeegee, spread the material at 80-150 square-feet-per-gallon. Once the material has been spread to the proper thickness, back roll it immediately using a 3/8th -1/2 inch nap roller to remove squeegee lines and ensure a uniform coverage.

The application rate of the topcoat will affect the finished texture of the floor. Therefore, special care must be taken during this step to ensure that proper texture is achieved.

Application of Optional Polyurethane Topcoat

Once the Epoxy 400 has cured well enough to walk on it, you can apply the polyurethane topcoat as specified. For floors requiring an orange peel/mop-able texture, the floor should be sanded using 60 grit sand paper prior to the installation of the polyurethane.

Mix the specified polyurethane at the ratio on the data sheet for 2 minutes, and then immediately pour a usable amount onto the floor and spread it using a flat squeegee. As soon as the material is spread, back roll using a 3/8th inch nap roller to ensure an even coverage.

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.