APPLICATION INSTRUCTIONS

Aircraft Hanger Coating System

GENERAL

Aircraft Hanger coating systems are usually 3-coat epoxy system. Finished thickness of these systems is 4-20 mils and they are normally applied by roller or airless spray.

MOISTURE VAPOR EMISSION TESTING

All interior concrete floors are subject to possible moisture vapor emission and/or excessive alkalinity which could ultimately cause coating failure. Prior to application, calcium chloride moisture testing should be done according to the recommendations of the Vaprecision Company, Newport Beach, California.

APPLICATION OF EPOXY 100 PRIMER COAT

Material may be applied to a damp surface, but standing water should be removed. If surface is dry, sweep well to remove dust.

Recommended coverage is 200-300 sq. ft. per gallon of mixed material. Any water added to the system is not considered for purposes of coverage. A heavy primer coat improves gloss and cleanability of the finished system.

Mix only the amount of material that can be used in a 3-4 hour period. For large jobs or when the weather is hot, mix a smaller amount first for brush work.

Stir colored Part A, bringing settled pigments up from bottom of container before adding Part B. Mix 4 Parts A to 1 Part B. Stir well for 2 minutes using a wooden paddle, being sure to scrape sides and bottom of mixing vessel. Add water to achieve a good working consistency, not more than 2 quarts to 5 quarts of mixed material. Do not overthin.

Apply using a bristle brush and non-shedding medium nap roller. Do brush work first being careful to feather out the edges. When rolling material, pour a workable amount from the bucket onto the surface and disperse evenly with the roller being careful to smooth out ridges. Rolling once side to side and once up and down is suggested.

APPLICATION OF THE 400 PRIMER COAT

Epoxy 400 Damp Surface is a solvent free resin that bonds well to damp concrete. It is used in place of Epoxy 100 as a primer when a higher film build is desired. This material may be applied to any thickness.

Mix only that amount of material that can be spread during the pot life of the product - 35 minutes for regular cure and 15 minutes for fast cure. Mix the pigmented Part A well before adding Part B. Mix according to its published mixing ratio. Stir well for 2 full minutes using a wooden stir stick being sure to scrape the sides and bottom of the mixing vessel. If the material is mechanically mixed, use a low speed drill with a Jiffy type mixer. One full minute of drill mixing is sufficient.

The material should be reduced with 15% Acetone to reduce viscosity and achieve better penetration. Pour the mixed material immediately onto the floor in strips. Brush trim the edges and spread the material with a 3/8" nap roller, notched trowel or squeegee. Normally the trowel or squeegee is used when a thicker coating is desired. The mechanic doing the rolling should wear spiked shoes to walk onto the wet coating and backroll well for good distribution.

A slip -resistant surface may be achieved by sprinkling quartz aggregate or suitable sized aluminum oxide into the primer before it has cured. When choosing the particle size, remember that at least 50% of the particle must be embedded in the resin for good, long-term performance. Contact our technical service department for specified guidance.

The particles are sprinkled out of a shaker can using the same method as described for Epoxy 100. Particle spacing of approximately 1/8" apart will give good traction and easy cleanability.

APPLICATION OF EPOXY 400 BUILD COAT

Use a razor blade scraper to remove any debris which may have been rolled into the primer. Sweep well before coating.

When rolling epoxy build coat material, it is important to use the material while still early in the pot life. If the product has advanced too far into the work life, a color change may occur when rolling back into the just coated area. Have enough mechanics rolling to keep a "wet edge."

Epoxy 400 and all 100% solids materials should be poured on the floor immediately after mixing. Roll first laterally across the body and then up and down for the final distribution. Avoid leaving puddles or ridges as these will be evident after the coating cures. Application rate should be 100-200 square feet per gallon.

APPLICATION OF POLYURETHANE FINISH COAT

Polyurethane finish materials should be applied after the epoxy has dried overnight. In warmer weather, if more than 24 hours elapses between coats, check to determine if the epoxy will still soften in the presence of solvent. Do this by pouring a small amount of xylene or lacquer thinner on the surface and wait several minutes. If the coating does not soften, abrade the surface with 80 grit sandpaper or steel wool before proceeding to insure intercoat adhesion.

Use a razor blade scraper to remove any debris which may have been rolled into the epoxy base coat. Sweep well before coating.

Application of polyurethane must be done on a perfectly dry surface. Recommended coverage is 275-325 sq. ft. per gallon. Apply using a bristle brush and a non-shedding short nap roller.

Mix only that amount of material that can be used in a 1 hour period. It is advisable to mix a smaller amount first and complete brush work before mixing for the body of the job.

Stir colored Part A, bringing settled pigments up from the bottom of container before adding Part B. Mix Parts A and B in the ratio stated on the individual product data sheet. Stir well for 2 minutes using a wooden paddle being sure to scrape sides and bottom of the mixing vessel.

After brush work is completed, apply polyurethane to the body of the job. Pour a workable amount of material from the 5 gallon pail onto the surface and disperse evenly with the roller. Roll first laterally across the body and then up and down for the final distribution. Stir the material before each pouring.

If the weather is hot, be sure to work smaller areas. Be aware that after a certain point in the drying process, rolling back over the coated area can produce a slight color change.