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PROCEDURES:

INSTALLATION OF BIO-FLOR 182 COLOR CHIP SYSTEM ENCAPSULATION OF AGED VINYL-ASBESTOS TILE (VAT)

Introduction: The **BIO-FLOR 182** family of products creates extremely long-wearing floor surfaces over a wide variety of substrates. This Installation Procedure describes and illustrates the simple steps to converting an aged and potentially dangerous VAT floor into a seamless, safe and very attractive **BIO-FLOR 182** surface.

Photo 1 –Initial Condition

Step 1) Initial Preparation:

The first step is to thoroughly strip the aged VAT (vinyl-asbestos tile) "one last time". Old VAT floors invariably have heavy residues of waxes remaining after years of waxing to prevent airborne fiber release. Using standard, OSHA approved janitorial methods, strip the old wax and rinse thoroughly with fresh water. Check thoroughness of rinsing by placing a single drop of fresh water on the floor and checking its pH using aquarium pH paper. The pH should be in the range 6.5 – 8.5.

After the stripping procedures, mask under doors and repair damaged, loose or missing tiles. Standard masking tapes work satisfactorily but it is imperative to remove them while the coatings are still uncured. Once cured, it will be necessary to cut the masking tapes loose with a knife. A convenient repair filler material is **BIO-FLOR 182** mixed with fine sand to make a sloppy mortar.

Step 2) Apply the Colored Base Coat:

The colored base coat creates a strongly bonded foundation for the system. It is applied by roughly pouring the mixed **BIO-FLOR 182** material from a two-gallon kit over a 200 sq.ft. area. This is then distributed over the area using a squeegee because spreading the product using rollers is laborious. The squeegee works best to spread out the poured **BIO-FLOR 182** initially and to wet the tile surface but rollers are utilized for the final uniform spreading. Rollers do not work well to evenly spread the mixture when it is first poured because they tend to "skip" over the poured areas.

Spiked footwear such as golf shoes with sharpened steel spikes or specially made strap-on shoe attachments with ¾" sharp spikes are required in order to walk freely over the surface. Another footwear option is ½" plywood sized to fit the shoe with sturdy screws driven at each corner and taped firmly to the toe.

Photo 2 – Pouring the Base Coat

In Photograph 3, one technician is spreading material with a squeegee while two others are evenly spreading it by rolling. On most commercial jobs, it would be useful to use 15" or even 18" rollers since productivity is substantially improved.

Note the blue masking tape at the end of the application area. This allows neat finishing at the end of a workday and easy matching with a barely noticeable joint when restarting the next day.

Photo 3 – Step 2 Continued / Squeegee Operation

Photo 4 – Chip Broadcast and Rolling

Step 3) Broadcasting the colored chips:

After the colored base coat from step 2 has cured for about 4 hours (until it is no longer tacky), it will then be possible to walk on the surface using spiked footwear in order to spread **BIO-FLOR 182** clear glaze coat using the same techniques as the base coat.

Once the clear glaze is spread uniformly, sprinkle the colored chips with a "chicken-feeding" motion. It is useful to have a neck-supported basket to hold the chips since they begin to weigh heavily after prolonged sprinkling. Apply the chips uniformly and do not hesitate to review the sprinkled area in order to add more chips as necessary. After sprinkling, gently roll the surface again using the same rollers which spread out the clear coat. This will wet the chips and aid in uniform distribution into the film.

Step 4) Application of Glaze Coat:

Allow the "chip coat" from Step 3 to cure until firm – about 4 hours minimum. Next, apply a final coat of **BIO-FLOR 182** Clear glaze with a spreading rate of about 160 sq.ft. per gallon. This final coat adds longevity to the system and gives it a uniform high gloss with an attractive textured surface.

Note in Photo 5 that coving strips were removed prior to **BIO-FLOR 182** installation. In general, removing the cove base and replacing it with new material is far preferable to masking the existing cove base -- both for the final appearance and for productivity reasons.

Also, if you compare Photo 1 initial condition with Photo 5, you will note that the repaired area on the left hand side has completely "disappeared".

Photo 5 - Finished Floor

Maintenance:

The glossy textured surface behaves much as any "no-wax" flooring. Traffic wear affects only the "peaks" of the textured finish leaving the "valleys" untouched. Since the appearance remains untouched and glossy, this allows simple cleanup by mop or squeegee using only soap or detergents followed by a fresh water rinse. Waxing is no problem, however, and all normal types of wax preparations work well.

Cured **BIO-FLOR 182** is resistant to normal chemicals such as spilled acids, automotive oils, fuels and greases, solvents such as xylol, food products such as greases, juices and so on. If spills occur, they may be removed using strong solvents such as xylol, paint thinner or other industrial grade cleaners.

Other **BIO-FLOR 182** systems are available for specific applications such as battery rooms, loading docks and material handling areas. In addition to the **BIO-FLOR** flooring products, TFT also manufactures compatible lead-free, chromium-free and solvent free safety marking products.