SAFE ENCASEMENT SYSTEMS-MIDWEST

SPECIFICATION NO. 01-1
APRIL, 2001

ENCASEMENT GUIDELINE FOR PAINTED SURFACES

INTRODUCTION

The encasement system consisting of SE-110 penetrating-stabilizer (primer) and SE-120 protective skin (topcoat) has been extensively tested and found to meet the EPA's requirements for a 20-year encapsulant when applied over lead-based paint at a minimjm application rate of 10 wet mils of each product. Little or no surface preparation is required in most cases other than to remove the very loose, flaking paint. It has also been used extensively when lead-free paints are involved because of the substantial savings in surface preparation labor that can be achieved. When dealing with metal surfaces, the use of SE-110-CI corrosion-inhibiting primer is recommended to minimize or eliminate the usual preparation required to remove rust (refer to Specification No. 01-2 for further information on dealing with metal surfaces). When dealing with painted masonry walls, it is often necessary to pressure wash the surface to remove efflorescence, which also removes any very loose, flaking paint.

SURFACE EVALUATION

The suitability of a surface for the use of the Safe Encasement Systems two-coat system can, at times, be determined by visual inspection by experienced applicators. However, if any doubts exist, it is recommended that test patches be used to evaluate whether or not adequate adhesion is achieved without any removal of loose, flaking paint. After the test patches have fully cured, the adhesion is determined using an "X-cut" test. In some cases, e.g. where large areas of intact paint are present (free of cracks, peeling, flaking, etc.), an "X-cut" test should be performed on the existing paint to determine if there are adhesion problems between the existing paint and the substrate and between layers of the old paint. This could indicate that a portion of the surface is not a good candidate for encasement. Refer to Technical Bulletin No. 01-2 for further information on curing/drying and field- testing.

APPLICATION

Both the primer and topcoat are water-based, acrylic elastomers that can be applied by spraying, brushing or rolling. The SE-110 (and SE-110-CI) primers are milky as applied, but dry to a clear tacky film. The primer can be over--coated once the film is no longer milky, though it isn't fully dry at that point in time. The system is usually dry enough within a few hours to over night that the area can be re-occupied. However, complete drying to full physical properties usually requires 7-14 days, with poor drying conditions (low temperatures and/ or high humidity) possibly extending this period. No physical testing such as "X-cut" tests should be carried out until the system is completely dry. Please refer to Technical Bulletin No. 01-2 for more information on curing/drying. As regards spraying, any commercial airless sprayer capable of developing up to 3,000 PSI can be used. The choice of spray tip depends on the job. Typically, any orifice from 0.017 to 0.025 inches will work well, with the width of the spray pattern being dictated by the surface to be covered. Experience has shown that it is best to spray water through the sprayer first for several minutes. Then turn the sprayer off and transfer the feed tube to the pail of paint. Turn the sprayer back on and spray into another pail until full strength begins to discharge from the nozzle. You are then ready to paint. Cleanup is with water. Generous amounts of water should be used to flush all spraying equipment to prevent buildup in the equipment. Before using, the coating should be stirred with a power stirrer to insure the contents of the pail are uniformly mixed.

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CAULK

If the encased surface if rougher than desired due to the presence of surface imperfections (holes, cracks, thick flakes, etc.), SE-150 or SE-151 sealant (caulk) can be applied and spread with a blade to fill in holes, valleys, etc. after priming but prior to the application of the topcoat. The caulk should be allowed to dry until the surface is dry to the touch.

COVERAGES

As regards the matter of insuring that sufficient coverage is achieved, a wet film thickness gauge can be used to check the thickness of the freshly applied paint. A second way to check on the average coverage rate is to keep track of the rate of consumption and square feet of surface covered, e.g. at 10 wet mils the coverage rate is 160 sq. ft./gallon, or approximately 800 sq. ft. per 5 gallon pail. An experienced applicator will often be able to tell from the appearance (sheen) of the freshly coated surface if sufficient coating material is being applied.

CAUTION

The products should not be applied when it is possible for the temperature to fall below 32^{o}F within 10-14 days following the application. Freezing of any water remaining in the coating next to the substrate surface will destroy the bond between the newly applied coating system and the surface. Because this coating system is quite a bit thicker than conventional paints, it takes much longer to dry/cure fully.

FURTHER INFORMATION

For further information or answers to questions, please contact Safe Encasement Systems – Midwest at the number below or your nearest sales representative or distributor.

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