CERAMIC EPOXY
FOR FITTINGS

ELECTROSTEEL USA

GENERAL SPECIFICATIONS

FEATURES & BENEFITS

High abrasion resistance, Flexible film characteristics, High corrosion resistance, High dielectric strength, Low permeability,Class 1 fire and smoke rating, Machinable film, Acceptable for food contact. In pipelines conveying slurries or septic sewage this coating can provide a robust effective protection enhancing the longevity of performance.

MATERIAL

Perma Shield 431™ - Amine cured novolac epoxy containing by volume of ceramic quartz pigment.

SURFACE PREPARATION

Uniformly abrasive blast using angular abrasive to a NAPF 500-03-05: Fitting Blast Clean #1 condition, no staining. When viewed without magnification, the interior surfaces shall be free of all visible dirt, dust, annealing oxide, rust, mold coating and other foreign matter. Any area where rust reappears before application shall be reblasted. The surface shall contain a minimum angular anchor profile of 3.0 mils (76.2 microns) (Reference NACE RP0287 or ASTM D 4417, Method C). Must be clean, dry and free of oil, grease and other contaminants.

LINING

After surface preparation and within 12 hours of surface preparation, the interior of the pipe shall receive 40 mils nominal dry film thickness. No lining shall take place when the substrate or ambient temperature is below 40°F. The surface also must be dry and dust free. If flange pipe or fittings are included in the project, the lining shall not be used on the face of the flange.

COATING OF BELL & SPIGOT END

Due to the tolerances involved, the gasket area and spigot end at least 6 inches back from the end of the spigot end must be coated with 6 mils nominal, 10 mils maximum using Perma-Shield 431™ Joint Compound. The Joint Compound shall be applied by brush to ensure coverage. Care should be taken that the Joint Compound is smooth without excess buildup in the gasket seat or on the spigot ends. Coating of the gasket seat and spigot ends shall be done after the application of the lining.

NUMBER OF COATS

Ductile Iron: 40 mils (1015 microns) (nominal) in one or more coats. Note: Number of coats and thickness requirements will vary with substrate, application method and exposure. Use Series 44-721 to increase film build. Amounts vary by kit size, refer to the Series 44-721 product data sheet. Contact your Tnemec representative for more information.

TOUCH-UP & REPAIR

Perma Shield 431™ Joint Compound shall be used for touch-up or repair in accordance with manufacturer's recommendations.

HANDLING

Lined fittings must be handled only from the outside of the fittings. No forks, chains, straps, hooks, etc. shall be placed inside the fittings for lifting, positioning, or laying. The fitting shall not be dropped or unloaded by rolling. Care should be taken not to let the fitting strike sharp objects while swinging or being off loaded.

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