



# VitraFUSE

*Fusion Bonded Epoxy Coatings*

## Fusion Bonded Epoxy Powder Coatings

Fusion bonded epoxy powder coatings, typically referred to as FBE Coatings, are epoxy-based technologies that are applied to steel pipe, concrete reinforcing bars (rebar) and on various piping connections, valves to protect them from highly corrosive environments. FBE Coatings provide excellent adhesion and offer superior resistance to cathodic disbondment.

FBE coatings are thermoset polymers and the name is due to resin cross-linking and the application method, which is different from conventional coatings. The resin and hardener components in the powder FBE remain unreacted at normal storage conditions. At typical coating application temperatures, usually in the range of 180° to 250°C (356° to 482°F), the powder melts and transforms to a liquid form. The liquid FBE film wets and flows onto the steel surface on which it is applied, and soon becomes a solid coating by chemical cross-linking, assisted by heat.

This process is known as "Fusion Bonding." The chemical cross-linking reaction is irreversible, and the application of further heat will not "melt" the coating and thus it is known as a "thermoset" coating.

### Ideal Applications

- Pipe
- Rebar
- Pipe Connections
- Valve Products
- And Other Highly Corrosive Applications

To view VitraFUSE available products, please visit [www.vitracoat.com](http://www.vitracoat.com).

*Revised 10.10.19*



**Vitracoat, Inc.**

2807 Marina Drive Elkhart, IN 46514 Ph: 574-264-6090 Toll-Free: 888-778-5994 Fax: 574-264-2776

[www.vitracoat.com](http://www.vitracoat.com)