

Product Datasheet

Resicoat® RB-600 Electrostatic Spray Application for Reinforcing Steel Code: HKF30R

Product Description

Resicoat® RB-600 is a Fusion Bonded Epoxy coating for steel reinforcing bars which complies with the requirements of ASTM A 775/A 775M standard specification for Epoxy coated steel reinforcing bars and meets or exceeds all test standards of the Federal Highway Administration (FHWA), AASHTO M284, AASHTO M254 as well as qualifying to the test standards of ASTM A 884.

Powder Properties

| | Typical value | Method |
|------------------------------------|--|------------|
| Binder system | Epoxy resin | |
| Color | Bright – green | |
| Specific gravity | 1.20 – 1.25 g/cm ³ | ISO 8130-2 |
| Gel time at 450° F (232° C) | 3 – 5 sec | |
| Storage stability | 6 months from date of manufacturing at ≤ 80° F (27° C) | |

Application Data

| | |
|---|---|
| Surface Preparation | Blast clean using steel grit to NACE No.2 near white metal with a minimum surface profile of 1.5 to 4.0 mils. |
| Preheating temperature | 430 – 470° F (221 – 243° C) object temperature |
| Time to quench at above mentioned temperatures | 28 sec. |
| Post cure conditions | No post curing required. |

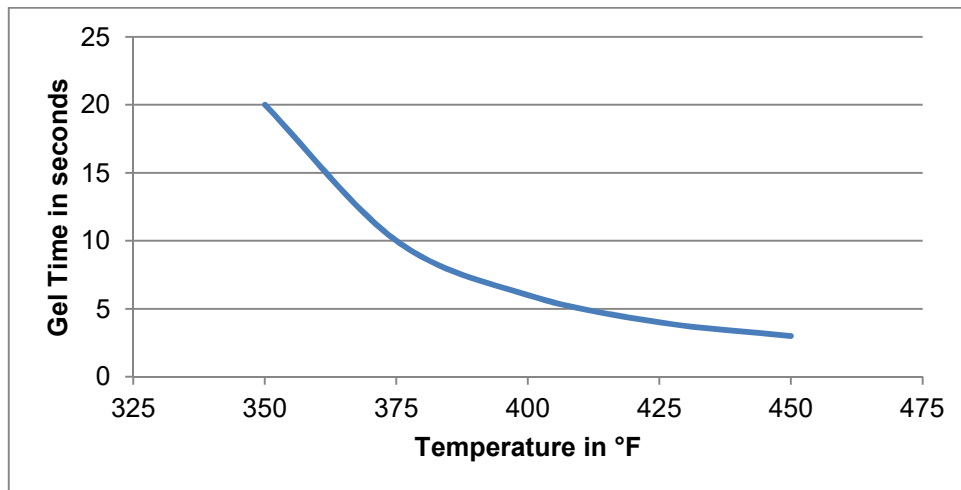
Material Properties

| | | |
|-----------------------------------|---|--|
| Recommended film thickness | 7 – 12 mils (175 – 300 µm) | |
| Chemical Resistance | No blistering, undercutting or cracking | ASTM G 20, ASTM A 775/A 775M 45 days at 70 °F immersed in 3mol CaCl ₂ , 3mol NaOH, saturated Ca(OH) ₂ and distilled water |
| Cathodic Disbondment | 2 – 3 mm | ASTM G 8, ASTM A 775/A 775M 168 hours at 75 °F, -1.5 V, 3 % NaCl |
| Salt Spray Resistance | 2.4 mm average | ASTM B 117, ASTM A 775/A 775M 800 hours at 95 °F, 5 % NaCl |
| Chloride Permeability | < 0.28 x 10 ⁻⁴ (detection limit) | ASTM A775/A 775M 45 days at 75 °F, 3mol NaCl |
| Coating Flexibility | no cracks or tears | ASTM A 775/A 775M 180° bend of #6 rebar around 6 inch mandrel at 73 °F |
| Relative Bond Strength | > 85% of mean strength for uncoated bar | ASTM 944 |

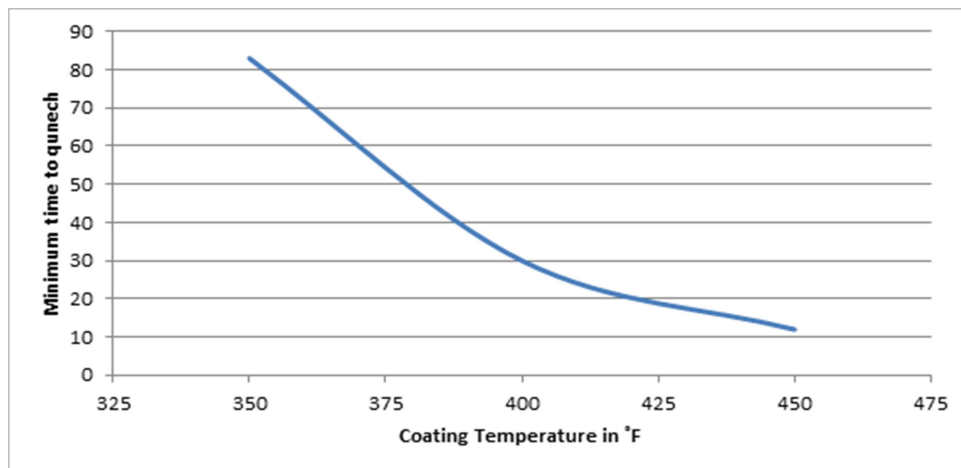
Material Properties (continued)

| | | |
|----------------------------|--------------------------|--|
| Abrasion resistance | < 30 mg weight loss | ASTM D 4060, ASTM A 775/A 775M CS-10, 1000 cycles, 1 kg load |
| Impact resistance | 9 Nm impact, no cracking | ASTM G 14, ASTM A 775/A 775M |
| Gouge resistance | < 50% penetration | NACE TM0215-2015, CSA Z245.20-14 |

Gel Time



Cure window



**Recommended
Patch Material**

HI-BUILD EPOXOLINE SERIES 66HS (G9085 = Product code for color green)

This product is fully tested at WJE and conforms fully to ASTM A 775-17.

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GK

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Disclaimer: This Product Data Sheet is based on the present state of our knowledge and on current laws. The data referring to Powder Properties, Application Data and Physical Tests is based on lab based samples. Factors such as quality or condition of the substrate may have an effect on the use and application of the product. It remains the responsibility of the user to test thoroughly if the product is applicable for the intended use. The use of the product beyond our recommendation releases us from our responsibility, unless we have recommended the specific use in writing. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. We are not liable for any application-technological advice. The Product Data Sheet shall be updated from time to time. Please ensure you have the latest version before using the product. All products and Product Data Sheets are subject to our standard terms and conditions of sale (GCS). You can receive the latest copy of GCS via internet or our post address. Brand names mentioned in this Product Data Sheet are trademarks of or are licensed to the AkzoNobel group.