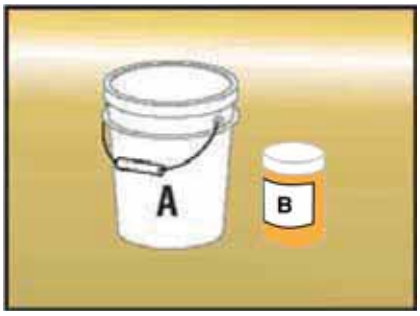
Powercrete® R-65/F1 Girth Welds / Rehabilitation

Liquid Epoxy Coating with Quick Application and Long Term Corrosion Protection of Bare Steel

Powercrete R-65/F1 is a 100% solids liquid epoxy coating with quick cure time for efficient, user-friendly application to allow fast backfill. Along with excellent application productivity, R-65/F1 provides sound longterm corrosion protection of the bare steel substrate, outstanding adhesion, abrasion, and impact resistance. This high build two component epoxy can easily achieve a dry film thickness of up to 40+mils in a single application. Product can be applied on bare steel by spray or by hand (brush, roller, and trowel). Powercrete R-65/F1unique combination of handling and performance is best suited for girth welds corrosion protection of the new and rehabilitation of the operational pipeline. For large diameter pipe, please consult a Corrosion Protection Group representative.

This Manual Application guides gives detailed explanation on manual application of Powercrete R-65/F1. For spray application refer to application specifications for plant or field applied Powercrtete R-65/F1 over bare steel**.**

1. Product



1. The two component epoxy coating is supplied in premeasured kits. Part A (large container) is the base and Part B (small container) is the curing agent.
Prior to application ensure that the temperature of both parts is above 20º C (68º F).

2. Application Kit

2. The application kit contains latex gloves, trowels, mixer for electric drill, hand stirrer, wet mil gauge, and disposable face mask

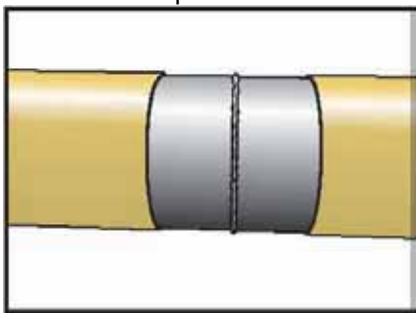
3. Surface Preparation

3. Ensure that the surface is clean of grease, oil, salts, and other conta-minants. If necessary, use Acetone, MEK or other suitable solvent. Perform cleaning when pipe is 3º C (5º F) above dew point.

4. Surface Preparation

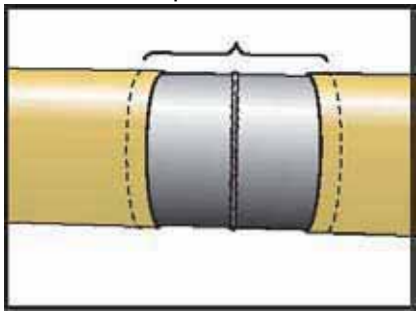
4. Blast clean surface to a near white ISO-8501, NACE No. 2, SA-2 1/2 (SSPC-SP 10) or better using particle blasting or Monti MBX Bristle Blaster tool. Must create a surface profile of 2.5 to 4 mils. Sweep (brush-off) blast adjacent FBE or mainline coating 50 mm (2") to either side of bare steel area (i.e. cut-back area).

5. Surface Preparation



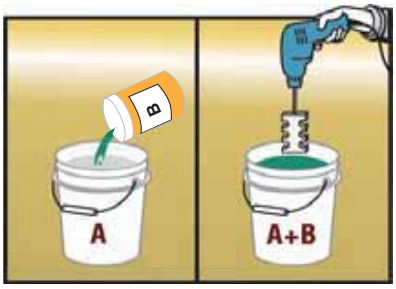
5. Burnishing or polishing using power wire brush or grinder is prohibited. Surface preparation can be controlled using surface profile tape or profilometer. Dry surface and insure ideal surface preparation using a tack cloth or by non-petroleum solvent (like Acetone) right after sand blasting or Monti-MBX Bristle Blasting tooling, to clean all contaminants.

6. Surface Preparation



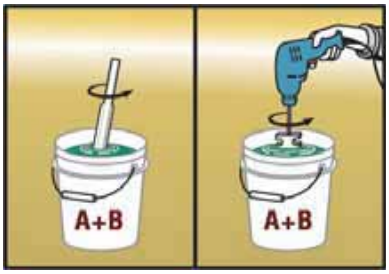
6. Warm the pipe substrate and adjacent area to 65°C (150°F), with propane torch, so as to illuminate moisture. Do not scorch the heat so that substrate develops blackening due to residual carbon powder.

7. Combining and Mixing



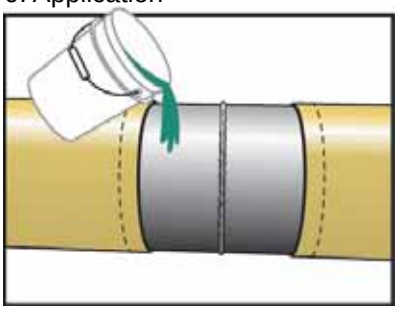
7. If necessary, warm parts A and B to 20º C (68º F). Agitate part B before mixing to avoid settling. Mix by pouring all of part B into part A. Thoroughly scrape container and lid of part B. Slowly begin mixing to avoid introducing air into the mixture.

8. Mixing



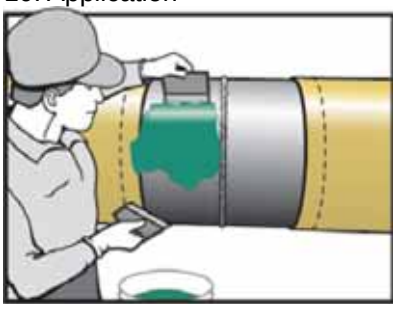
8. Use mixing speed that uniformly blends the 2 parts. Mix around 90 seconds with a electric drill mixer or 2-3 minutes with hand stirrer. Blend both parts to create uniform color with no streaks. While mixing R-65/F-1 with a drill mixer, the temperature of the epoxy should be closely monitored. When the temperature of the mixed R-65/F-1 reaches 80-90 deg. F (27-33 deg. C), it should be applied immediately onto pipe." DO NOT APPLY GELLED MATERIAL ON PIPE.

9. Application



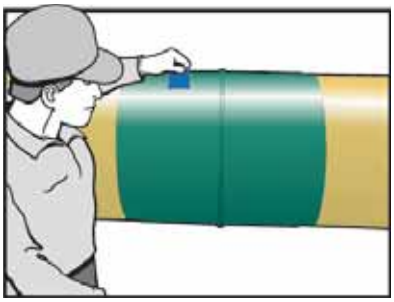
9. Reconfirm that the application temperature is above 10º C (50º F) and 3º C (5º F) above dew point. Slowly pour well-mixed epoxy onto the pipe. Apply thin film evenly to wet out substrate, then build coating to desired thickness. If the pipe is heated before and during application, R65-F-1 can be applied at temperatures below 10º C (50º F).

10. Application



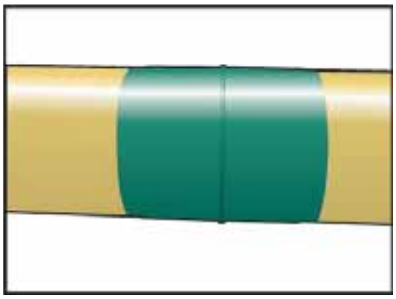
10. Use trowel, brush or roller to apply required minimum thickness of coating. Cover at least 50 mm (2") of the adjacent mainline coating.Watch & break air bubbles. The more and fast you trowel, more air-bubbles escape out of the applied material when it is wet.

11. Thickness Measurement



11. Use a wet mill gauge to measure that the desired minimum thickness has been achieved. Double check around the weld to insure minimum desired thickness.

12. Cure Times



12. The curing rate will vary according to pipe and ambient application temperature. Refer to Cure Chart to determine when to perform a shore D check. Do not perform shore D test when coating is soft. Prior to shore D testing, press the coating with thumb nail. If there is no thumb nail mark, coating would have attained 75 shore D.

Storage

For optimum performance, store Powercrete® Epoxy products in a dry, well-ventilated area. Maintain products in original packaging and sealed until just before use. Avoid exposure to direct sunlight, rain, snow, dust or other adverse environmental conditions or contaminates.

NOTE: Avoid prolonged storage at temperatures above 40ºC (104ºF) or below 5ºC (40ºF).

Safety Guidelines

Important: Read the MSDS prior to using the products. Product installation should be done in well-ventilated area and in accordance with local health and safety regulations. These application guidelines are intended as a guide for standard products. Consult your Berry Plastics representative for specific projects or unique applications.

BERRY PLASTICS CORPORATION AND SUBSIDIARIES

CORROSION PROTECTION GROUP

www.berrycpg.com

Local Distributor / Representative:

For contact details of local Distributors / Representatives Please visit www.berrycpg.com.

Headquarters : Berry Plastics Tapes & Coatings Division, Franklin MA, USA

Franklin, MA, USA
Tel: +1 508 918 1714
US Toll Free: +1 800 248 0149
Fax: +1 508 918 1910
CPG@berryplastics.com

Houston, TX, USA
Tel: +1 713 676 0085
US Toll Free: 01 888 676 7202
Fax:+1 713 676 0086
CPGH@berryplastics.com

Tijuana, Mexico
Tel USA +1 858 633 9797
Fax US: +1 858 633 9740
Tel Mexico: +52 664 647 4397
Fax Mexico: +52 664 647 4370
CPGTJ@berryplastics.com

Westerlo, Belgium
Tel. +32 14 722500
Fax +32 14 722570
CPGE@berryplastics.com

Baroda, India
Tel: +91 2667 264721
Fax: +91 2667 264724
CPGIN@berryplastics.com