

Surface Preparation

Proper surface preparation is critical to the long-term performance of this product. The exact requirements vary with the severity of the application, expected service life, and initial substrate conditions.

Optimum preparation will provide a surface thoroughly cleaned of all contaminants and roughened to an angular profile between 75 – 125 µm (3 – 5 mil). This is normally achieved by initial cleaning, abrasive blasting to a cleanliness of **White Metal (Sa 3/SP5)** or **Near-White Metal (Sa 2.5/SP10)** followed by removal of abrasive blast residues.

Mixing

To facilitate mixing and application, material temperatures should be between 21° – 32°C (70° – 90°F). Each kit is packaged to the proper mix ratio. If further proportioning is required the kit should be divided according to the correct mix ratio.

| Mix Ratio | By Weight |
|-----------|-----------|
| A: B | 6.8 : 1 |

Pour the entire contents of Part B into Part A and mix at low speed with a variable speed drill or the supplied mixing tool for three to five minutes. Thoroughly scrape the sides and bottom of the container to completely mix both components.

Working Time – Minutes

| | 10°C | 16°C | 25°C | 32°C | This chart defines the practical working time of ARC 855, starting from when mixing begins. |
|------------|---------|---------|---------|---------|---|
| | 50°F | 60°F | 77°F | 90°F | |
| 0.75 liter | 80 min. | 70 min. | 40 min. | 25 min. | |
| 1.5 liter | 80 min. | 70 min. | 40 min. | 25 min. | |
| 5 liter | 70 min. | 65 min. | 32 min. | 20 min. | |
| 16 liter | 65 min. | 55 min. | 25 min. | 10 min. | |

Application

ARC 855 is applied at a minimum thickness of 250 µm (10 mil). Typical application thicknesses range from 375-500 µm (15-20 mil) per coat. When used alone, ARC 855 should always be applied in a minimum of two coats. Minimum application temperature is 10°C (50°F). Apply ARC 855 by brush or roller, wetting out the surface first, and then building to 1st coat film thickness. Multiple coat applications of ARC 855 may be accomplished without additional surface preparation, as long as the film is free of contamination and has not cured beyond the stage “Overcoat End” in the Curing Schedule chart below. If this period is exceeded, light abrasive blasting or sanding is required, followed by removal of any abrasive and dust residues.

If required, ARC 855 can be machined using a carbide tool prior to reaching “Light Load,” as described below. Otherwise use a diamond cutting tool or grinding tool. Prior to its light load cure state, ARC 855 may be overcoated with any of the ARC epoxy materials with the exception of ARC vinyl ester based coatings.

Coverage

| Thickness | Unit size | Coverage |
|-----------------|-------------|--|
| 750 µm (30 mil) | 0.75 liters | 0.98 m ² (10.60 ft ²) |
| | 1.5 liters | 2.00 m ² (21.53 ft ²) |
| | 5 liters | 6.67 m ² (71.76 ft ²) |
| | 16 liters | 21.33 m ² (229.63 ft ²) |

Curing Schedule

| | 10°C | 16°C | 25°C | 32°C |
|---------------|----------|---------|---------|---------|
| | 50°F | 60°F | 77°F | 90°F |
| Tack Free | 16 hrs. | 8 hrs. | 4 hrs. | 2 hrs. |
| Light Load | 36 hrs. | 24 hrs. | 12 hrs. | 6 hrs. |
| Overcoat End | 42 hrs. | 32 hrs. | 20 hrs. | 10 hrs. |
| Full Load | 96 hrs. | 48 hrs. | 24 hrs. | 12 hrs. |
| Full Chemical | 128 hrs. | 96 hrs. | 48 hrs. | 24 hrs. |

Full chemical properties can be achieved rapidly by force curing. To force cure, first allow the material to become tack free, and then heat to 70°C (158°F) for 4 hours.

Clean Up

Use commercial solvents (Acetone, Xylene, Alcohol, Methyl Ethyl Ketone) to clean tools immediately after use. Once cured, the material would have to be abraded off.

Safety

Before using any products, review the appropriate Safety Data Sheet (SDS) or Safety Sheet for your area. Follow standard confined space entry and work procedures, if appropriate.

Shelf life (in unopened containers): 3 years [when stored between 10°C (50°F) and 32°C (90°F) in dry, cool, covered facility]