

Surface Preparation

Proper surface preparation is critical to the long-term performance of this product. The exact requirements for surface preparation will 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. Grinding to a rough surface profile, or machining to a rough gramophone cut, is acceptable although a subsequent lowering in adhesion may result.

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 to the correct mix ratio.

Mix Ratio	By Weight
A : B	4 : 1

Place required amounts of Part A and Part B on a clean, dry, non-porous surface (usually plastic) and begin mixing with the enclosed tool using a figure eight pattern, periodically scraping the mixing surface and tool to ensure no unmixed residue remains on either surface. Apply immediately.

Working Time – Minutes

	10°C	25°C	43°C	This chart defines the practical working time of ARC 10, starting from when mixing begins.
	50°F	77°F	110°F	
250 g (0.55 lbs.)	75 min.	40 min.	25 min.	
1.5 liters	45 min.	25 min.	15 min.	

Application

ARC 10 is normally applied at a thickness between 3 mm – 9.5 mm (120 – 375 mil), however it may be applied at a minimum thickness of 1.5 mm (60 mil). Minimum application temperature is 10°C (50°F). Using a plastic applicator or trowel, press the material into the surface profile to completely wet out the surface and build to the required thickness. Once the material is placed it may be smoothed using a variety of methods. Always apply and finish to desired contour within listed working times. If required, ARC 10 can be machined using a carbide tool bit after the product has cured to “Light Load” as described below. In certain applications requiring additional support where machining is not required, it may be advantageous to either weld expanded metal onto the surface prior to preparing the surface.

Prior to its light load cure state, ARC 10 may be overcoated with any of the ARC epoxy materials with the exception of ARC vinyl ester based coatings. If it has cured to the point of “Light Load” as described below, the surface should be roughened and dust residues removed prior to top coating. Prior to “Light Load” no additional surface preparation is required provided that the surface has not been contaminated.

Coverage

Thickness	Unit size	Coverage
3 mm (120 mil)	250 g (0.55 lbs.)	0.04 m ² (0.45 ft ²)
	1.5 liters	0.50 m ² (5.38 ft ²)

Curing Schedule

	10°C	16°C	25°C	32°C
	50°F	60°F	77°F	90°F
Tack Free	5 hrs.	3 hrs.	2 hrs.	1 hrs.
Light Load	9 hrs.	7 hrs.	3.5 hrs.	2.5 hrs.
Full Load	48 hrs.	36 hrs.	20 hrs.	16 hrs.
Full Chemical	96 hrs.	72 hrs.	36 hrs.	30 hrs.

Clean Up

ARC 10 cures to a solid mass in a short period of time. All cleanup activities must be carried out as soon as possible to prevent material hardening onto the tools. 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]