

Surface Preparation

Proper surface preparation is critical to the long term performance of ARC HT-S. 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 and degreasing and then abrasive blasting to a cleanliness of **White Metal (Sa 3/SP5) or Near-White Metal (Sa 2.5/SP10)** followed by removal of all abrasive residues.

Mixing

To facilitate mixing and application, material temperature should be between 20°-35°C (68°-95°F). Each kit contains two pre-measured components in proportion as per the correct product mix ratio. If further proportioning is required, they should be divided according to the mix ratios:

Mix Ratio	By Weight	By Volume
A : B	8.4 : 1	4.7 : 1

Add Part B to Part A and mix thoroughly. Continue until the material is completely mixed, indicated by a homogeneous color with no streaks.

Working Time – Minutes

	10°C	16°C	25°C	32°C	This chart defines the practical working time of ARC HT-S, starting from when mixing begins.
	50°F	60°F	77°F	90°F	
5 liter	140	120 min.	90 min.	60 min.	
16 liter	120	100 min.	70 min.	45 min.	

Application

ARC HT-S is normally applied as a two coat system with a total dry film thickness of 750-1,000 µm (30-40 mil). The recommended application temperature is 20°C-35°C (68°F-95°F). ARC HT-S may be applied by brush or roller using a lint free short nap roller, as well as airless spray. For spray application please consult ARC Technical Bulletin #6 (Spray Equipment Guidelines) and spray equipment and set up guidelines. Prior to its light load cure state, ARC HT-S 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)	5 liter	6.67 m ² (71.76 ft ²)
	16 liter	21.33 m ² (229.63 ft ²)

Curing Schedule

	10°C	16°C	25°C	32°C	Note: Full mechanical 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. In dynamic flow and abrasion conditions (wet or dry), ARC HT-S must be post cured at 95°C (203°F) for 12 hours prior to use.
	50°F	60°F	77°F	90°F	
Tack Free	10 hrs.	8 hrs.	6 hrs.	4 hrs.	
Overcoat Begin	8 hrs.	6 hrs.	4 hrs.	3 hrs.	
Overcoat End	20 hrs.	16 hrs.	12 hrs.	8 hrs.	
Full Service	5 days	4 days	3 days	2 days	

Clean Up

Use commercial solvents (Acetone, Xylene, Alcohol, and 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): 2 years [when stored between 10°C (50°F) and 32°C (90°F) in dry, cool, covered facility]