

Surface Preparation

Proper surface preparation is critical to the long term performance of ARC T7 AR. 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 abrasive blasting to a cleanliness of **White Metal (Sa 3/SP5) or Near-White Metal (Sa 2.5/SP10)** followed by thorough removal of abrasive residues.

Mixing

Each kit consists of one bag of ceramic reinforcement Part C (15.6 kg), one T7 AR Part A resin (3.8 kg), one T7 AR veil coat Part A resin (0.9 kg) and one Part B catalyst (75 ml ARC CHP, packaged separately). Prior to starting, all materials should be stored between 10° - 26°C (50°-80°F) for at least 48 hours prior to application.

Premix T7 AR Part A to re-disperse any settled or separated material. Add 50 ml of Part B (ARC CHP). Adjust Part B addition by 10% up if material temperature is between 10°C - 21°C (50°F - 70°F). Adjust Part B addition by 10% down if material temperature is above 26°C (80°F). Thoroughly scrape the sides and bottom of the container to completely mix both components. Pour 1/3 of Part C ceramic reinforcement into the 20 liter pail, and slowly pour the combined T7 AR Part A (resin) and Part B (catalyst), mixing all components uniformly. Gradually add remainder of ceramic reinforcement and blend all components until a uniform consistency is achieved (3-5 minutes). Apply immediately by trowel. As with all styrenated products, proper ventilation must be maintained during mixing, application and curing. In the event the kit needs to be split, the ratio for ARC T7 AR resin (Part A) to reinforcement (Part C) is listed below:

Mix Ratio	By Weight
A : C	1 : 4.1

Working Time – Minutes

	10°C	16°C	21°C	26°C	32°C	This chart defines the practical working time of ARC T7 AR, starting from when mixing begins.
	50°F	60°F	70°F	80°F	90°F	
20.4 kg Kit	60 min.	50 min.	45 min.	30 min.	20 min.	

Application

ARC T7 AR does not contain a primer, so it is important to apply a thin scratch coat of mixed material onto the substrate, prior to the main build coat. Once the scratch coat has been applied, the recommended film thickness of 3 - 4 mm (120 - 160 mil) can be achieved. It is important to “press” the ARC T7 AR into the substrate, while troweling. Once the desired film thickness has been achieved, a smoothing coat of ARC T7 AR VC should be applied to seal the surface.

The ARC T7 AR VC also requires the addition of ARC CHP catalyst. Using the cap as a measuring device, fill the cap and pour into the ARC T7 AR VC. Mix thoroughly and apply by brush or roller to the surface of the ARC T7 AR. It is important to allow the ARC T7 AR to develop enough mechanical strength to support the application of the ARC T7 AR VC without tearing. Use the curing schedule below to define the proper time to begin application of ARC T7 AR VC.

Coverage

Thickness	Coverage
3 mm (120 mil)	2.50 m ² (27.00 ft ²)
4 mm (160 mil)	1.67 m ² (18.09 ft ²)

Curing Schedule

	10°C	16°C	21°C	29°C
	50°F	60°F	70°F	85°F
ARC T7 AR Overcoat Begin	150 min.	120 min.	100 min.	70 min.
ARC T7 AR VC Overcoat Begin	12 hrs.	6 hrs.	2 hrs.	1 hr.
ARC T7 AR VC Overcoat End	5 days	4.5 days	4 days	3 days
Full Chemical	72 hrs.	48 hrs.	24 hrs.	16 hrs.

Clean Up

ARC T7 AR cures in a very short period of time. All clean-up activities must be carried out as soon as possible to prevent material hardening onto the tools. Use commercial solvents (Acetone, Methyl Ethyl Ketone) to clean tools immediately after use. Once cured, the material would have to be abraded off.

Storage

Store Part A and Part B in closed containers out of direct sunlight and in a dry location. Keep away from heat and flames. Shelf life is six months when stored at 10-24°C (50-75°F). Refrigerated storage will extend the storage life of ARC T7 AR. Bring material temperature to between 10-26°C (50-80°F) 24 hours before use to aid in application.

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.

Maintain transport temperature below 24°C (75°F). Shelf life (in unopened containers): 6 months [when transported and stored between 10°C (50°F) and 24°C (75°F)]