

Surface Preparation

Proper surface preparation is critical to the long-term performance of this product. The exact requirements for surface preparation vary with the severity of the application, expected service life, and the initial substrate conditions. Optimum preparation will provide a surface 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 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. If power mixing, use a "Jiffy" type blade and mix at low speed. Periodically scrape sides and bottom of container and mixing blade. Immediately apply.

Working Time – Minutes

	10°C	16°C	25°C	32°C	This chart defines the practical working time of ARC 858(E), starting from when mixing begins.
	50°F	60°F	77°F	90°F	
1.5 liters	54 min.	41 min.	28 min.	20 min.	
5 liters	40 min.	30 min.	21 min.	12 min.	
16 liters	*	*	*	*	* Do not mix entire kit in one batch due to short working time

Application

ARC 858(E) is normally applied at a thickness between 1.5 mm - 19 mm (60 - 750 mil) however it may be applied at a minimum thickness of 0.5 mm (20 mil). Minimum application temperature is 10°C (50°F). Using a trowel or plastic applicator, press the material into the surface profile to completely wet out the surface. 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 using 940 ml cartridge preheat cartridge to 50°C (120°F) prior to inserting in SULZER MIXPAC® gun. Adjust feed air as required to achieve desired material feed rate. Prior to its light load cure state, ARC 858(E) 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, followed by removal of any abrasive and dust residues prior to top coating. Prior to "Light Load" no additional surface preparation is required provided that the surface has not been contaminated.

If required, ARC 858(E) can be machined using a carbide tool bit once the product has cured to "Light Load" as described below. Otherwise use a diamond cutting tool or grinding tool. In certain applications requiring additional support, it may be advantageous to weld expanded metal onto the surface prior to preparing the surface.

Coverage

Thickness	Unit size	Coverage
750 µm (30 mil)	940 ml cartridge	1.25 m ² (13.50 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	20°C	25°C	32°C
	50°F	60°F	70°F	77°F	90°F
Tack Free	3 hrs.	2 hrs.	1.5 hrs.	1 hrs.	0.5 hrs.
Light Load	4 hrs.	3 hrs.	2 hrs.	1.5 hrs.	1 hrs.
Full Load	48 hrs.	36 hrs.	28 hrs.	20 hrs.	16 hrs.
Full Chemical	96 hrs.	72 hrs.	54 hrs.	36 hrs.	30 hrs.

Full chemical properties can be achieved rapidly by force curing. To force cure, first allow the material to become tack free, 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.

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