

General Instructions:

Surface Preparation, Mixing and Application Instructions

- Proper surface preparation is critically important for the long term performance of the ARC CS4(E) system.
- The prepared concrete surface must be structurally sound, free from all contaminants and roughened to an >ICRI CSP 3 profile (similar to #60 grit sandpaper).
- ARC CS4(E) can be applied on damp concrete without using ARC 797(E) primer.
- A vapor barrier is required for slab on grade application. If no vapor barrier is present, check for vapor transmission.
- For detailed information on surface preparation and application, please refer to ARC Application Procedures for Concrete or contact your ARC specialist.

Surface Cleaning & Profiling Methods

Hydro-Blasting	Scarifying
Steel Shot-Blasting	Dry Abrasive Blasting

Specific to Old Concrete:

Remove all surface contaminants thoroughly, including:

Old Coatings	Dust	Laitance
Soluble Salts	Loose Concrete	Hydrophobic Contaminants

- Remove grease, oils, and grime by washing the concrete surface with an emulsifying alkaline, water-base cleaner; rinse thoroughly.
- Employ one or more of the Surface Cleaning Methods listed above.

Specific to New Concrete

- Allow a minimum of 28-day cure of new concrete before preparation.
- Employ one or more of the Surface Cleaning Methods listed above.

ARC CS4(E) System Kit: Mixing

To facilitate mixing and application, material temperatures should be between 21°C-32°C (70°F-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	Volume
A : B	2.3 : 1	1.8 : 1

Prior to mixing ARC CS4(E), pre-mix Part A to suspend any settled reinforcements.

- When applying by hand, add Part B to Part A. Mix by hand for 1 minute. Shift a small portion of this mix back to the Part B container and scrape the walls of this container to remove all traces of residue. Add this portion back to the Part A container.
- Continue to mix product until product is uniform in color and consistency, no streaks. Power mixing should be accomplished with a variable speed, high torque, low speed mixer with a non-air entraining mix blade such as a "Jiffy" blade.
- Do not mix more product than can be applied within the stated working time.

ARC CS4(E) System Kit: Application

- Applying any coating, such as ARC CS4(E), to concrete surfaces which are warming up due to daily sun exposures may result in air voids due to "outgassing". It is always best to apply coatings to concrete AFTER they have reached their maximum daily surface temperature and have begun to cool down.
- Application temperature range 10°C (50°F)-32°C (90°F) (substrate).
- ARC CS4(E) may be applied by notched squeegee, spray system,

brush, or roller using a lint free nap roller such as mohair. For maximum protection against immersion or spills, a 2 coat system is recommended.

- ARC CS4(E) may be spray applied by airless spray equipment without solvent dilution. Please consult your local ARC specialist for equipment specifications and recommendations. Apply initial pass at 75-125 µm (3-5 mil). Build successive passes to achieve final desired thickness.
- To avoid sagging on vertical surfaces the maximum wet film thickness should be between 250 µm-375 µm (10-15 mil) per coat.
- Multiple coat applications of ARC CS4(E) may be accomplished, without additional surface preparation, as long as the film is free of contamination and has not cured beyond the stage stated as "Light Load" in the Curing Schedule chart below. If this period is exceeded, light abrasive blasting or sanding is required followed by removal of abrasive residues.

Coverage/Spreading Rate

	500 µm (20 mil)
16 liter	32.00 m ² (344.45 ft ²)

Working Time-Minutes

	10°C	16°C	25°C	32°C
	50°F	60°F	77°F	90°F
16 liter	45 min	35 min	20 min	10 min

'Working Time' begins when mixing is initiated.

The minimum application temperature is 16°C (60°F), although application will be easier at 25°C (77°F).

Curing Schedule

	10°C	16°C	25°C	32°C
	50°F	60°F	77°F	90°F
Foot Traffic	16 hrs.	12 hrs.	10 hrs.	6 hrs.
Light Load	36 hrs.	24 hrs.	16 hrs.	9 hrs.
Full Load	64 hrs.	40 hrs.	30 hrs.	20 hrs.
Full Chemical	180 hrs.	140 hrs.	100 hrs.	80 hrs.

Force curing at 65°C (150°F) after material has reached Foot Traffic will accelerate cure time to 8 hours plus Foot Traffic time.

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 mechanically abraded.

Storage

The recommended storage temperature is between 10°C (50°F) and 32°C (90°F). Intermittent deviations from this range which may occur during shipping are acceptable as long as the material is pre-warmed to room temperature before use. The shelf life is two years in unopened containers. Mix each liquid component well before using.

Safety

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