

Surface Preparation, Mixing and Application Instructions

General Instructions

- Proper surface preparation is critically important for the long term performance of the ARC NVE VC system.
- The prepared concrete surface must be structurally sound, with contaminants thoroughly removed and roughened to > an ICRI CSP 3 profile (similar to #60 grit sandpaper finish).
- A vapor barrier is required for slab-on-grade applications. If no vapor barrier is present, it is essential to 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	Scabbling
Steel shot-blasting	Dry abrasive blasting	Grinding

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 NVE VC System Kit

General Information

The ARC NVE Veil Coat (NVE VC) kit is comprised of the following:

- ARC NVE Primer Part A
- ARC NVE Veil Coat Part A
- ARC CHP (catalyst)

ARC NVE Primer (Mixing)

- Add the required amount of catalyst (ARC CHP) to Part A (NVE Primer) according to the following:
Weight mix ratio (A:B) - 45:1
Volume mix ratio (A:B) - 47:1
- If application temperatures are lower than 16°C (60°F) you can increase the amount of catalyst (ARC CHP) by 10%
- Mix by hand or low speed power tool
- Potlife or working time of mixed primer kit is 45 -55 minutes @ 25°C (77°F).

ARC NVE Primer (Application)

- Apply the Primer uniformly to a wet film thickness of 125-175 µm (5-7 mil), using a brush, roller or spray to the freshly prepared concrete surface. Top coatings with the NVE Veil Coat may begin immediately.

ARC NVE Veil Coat (Mixing)

- Add the required amount of catalyst (ARC CHP) to Part A (NVE Veil Coat) according to the following:
Weight mix ratio (A:B) - 47:1
Volume mix ratio (A:B) - 47:1
- If application temperatures are lower than 16°C (60°F) you can increase the amount of catalyst (ARC CHP) by 10%
- Mix by hand or low speed power tool
- Potlife or working time of mixed primer kit is 45 -55 minutes @ 25°C (77°F).

ARC NVE Veil Coat (Application)

Apply the Veil Coat uniformly to a wet film thickness of 250-375 µm (10-15 mil), using a brush, roller or spray to the primed concrete surface. To reduce the chance of vapor blistering or disbondment, the NVE Veil Coat should not be installed while the concrete's temperature is rising. In outdoor applications, it is best to install in the evening or at night to avoid this problem. Subsequent coats may be applied according to the table below.

- The minimum application temperature for ARC NVE PN and NVE VC is 10°C (50°F)
- Do not apply subsequent coats if exposed to direct sunlight for more than 4 hours
- A sweep blast of the exposed topcoat is required before continuing the application

Note: For application onto concrete where high moisture levels exist, please refer to ARC Technical Bulletin 16 available from ARC Technical Services.

NVE Veil Coat Curing Schedule

	10°C 50°F	16°C 60°F	21°C 70°F	26°C 80°F
Overcoat Begin	3 hrs.	1.5 hrs.	1 hrs.	30 min
Foot Traffic	4 hrs.	2.5 hrs.	1.5 hrs.	1 hr.
Overcoat End	72 hrs.	60 hrs.	48 hrs.	24 hrs.
Full Load	8 hrs.	4 hrs.	2 hrs.	1 hrs.
Full Chemical	32 hrs.	28 hrs.	24 hrs.	16 hrs.

Coverage/Spreading

ARC NVE Veil Coat System kit covers 9.60 m² (103.30 ft²) @ 500 µm (20 mil)

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 mechanically abraded.

Storage

Store all components in a cool (<25°C/77°F) space out of direct sunlight and away from sources of ignition or flame. Shelf life is 1 year when stored under these conditions.

Safety

Before using any products, always review the appropriate Safety Data Sheets (SDS) or appropriate 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): 1 year [when transported and stored between 10°C (50°F) and 24°C (75°F)]