

3-Layer system, high performance, quartz reinforced, novolac vinyl ester lining for concrete applications requiring extreme chemical resistance and moderate abrasion & impact protection. ARC NVE industrial coating is designed to:

- Replace acid resistant tiles or overlayers of phenolic, furan, polyester, or concrete
- Protect against concentrated acids, organic & inorganic acids, solvents, and alkalis
- Easily apply by trowel

Application Areas

- Battery Rooms
- Pickling/Plating lines
- Bleaching Areas
- Sumps, Trenches & Pits
- Chemical Containments
- Pump & Equipment Bases
- Pickling Rooms
- Chemical loading stations

Packaging and Coverage

Nominal System Kit coverage 9.70 m² (104.00 ft.²) at 6 mm (240 mil) thickness

- The NVE 3-Layer, 4 component System Kit:
 1. NVE Primer Coat (PC)
 - 1 x 2.1 liter (.55 gal) container
 - Nominal DFT of 125-180 μm (5-7 mil)
 2. NVE Top Coat (TC)
 - 1 x 16 liter (4.22 gal) container
 - Nominal WFT of 6 mm (240 mil) extended with 7 bags of QRV
 3. NVE Veil Coat (VC)
 - 1 x 4.8 liter (1.27 gals) container
 - Nominal WFT of 250-375 μm (10-15 mil)
 4. ARC CHP Catalyst
 - 2 X 250 ml containers

Note: Components are pre-measured & pre-weighed. Each kit includes mixing and application instructions plus tools.

Colors: Red or Gray*

* Available from our EME Manufacturing Facility only

Maintain transport temperature below 24°C (75°F)



Features and Benefits

- **Resists concentrated chemicals i.e. Alkalis, Acids & Solvents**
 - Makes selection easy
 - Covers a broad range of exposures
- **Coefficient of Thermal expansion comparable to concrete**
 - Resists disbondment
 - Resists cracking & delamination
- **Tough quartz reinforced composite**
 - Serves demanding applications
- **Deep penetrating primer system**
 - Promote high adhesion to concrete
- **Integrated topcoat sealer system**
 - Blocks chemical penetration
 - Stops migration of chemicals
- **Reinforcement with coupling agent**
 - Minimizes coating voids
 - Permeation resistant

Technical Data

Composition	NVE PC	A modified epoxy novolac vinyl ester resin reacted with catalyst	
	NVE TC Matrix	A modified epoxy novolac vinyl ester resin reacted with catalyst	
	NVE TC Reinforcement	Proprietary quartz reinforcement blend (QRV) pretreated with polymeric coupling agent	
	NVE VC Matrix	A low viscosity modified epoxy novolac vinyl ester resin with reacted with catalyst	
	NVE VC Reinforcement	A proprietary blend of permeation resistant, inert particles	
Cured Density		2.24 g/cc	126 lb/ cu.ft.
Compressive Strength	(ASTM C 579)	801 kg/cm ² (78.6 MPa)	11,400 psi
Tensile Strength	(ASTM C 307)	100 kg/cm ² (9.9 MPa)	1,438 psi
Flexural Strength	(ASTM C 580)	177 kg/cm ² (17.4 MPa)	2,535 psi
Flexural Modulus of Elasticity	(ASTM C 580)	1.29 x 10 ⁵ kg/cm ²	1.8 x 10 ⁶ psi
Bond Strength		>39 kg/cm ² (3.86 MPa)	> 560 psi
Linear Coefficient of Thermal Expansion	(ASTM C 531)	26.7 x 10 ⁻⁶ cm/cm/°C	14.8 x 10 ⁻⁶ in/in/°F
VOC	EPA 24	2.2%	
Thermal Compatibility to Concrete	(ASTM C 884)	Pass	
Maximum Temperature (Dependent on service)	Wet Service (continuous)	135°C	275°F
	Dry Service (continuous)	200°C	392°F
Shelf life (unopened containers)	1 year [transported and stored between 10°C (50°F) and 24°C (75°F)]		