

# Product Datasheet: ARC 791(E)

## 100% solids, high-build, quartz (SiO<sub>2</sub>) reinforced, highly chemically resistant, modified epoxy coating that can bond to damp concrete, concrete resurfacer. ARC 791(E) industrial coating is designed to:

- Resurface concrete damaged by chemical attack or mechanical stress
- Replace acid resistant tiles, epoxy mortars, fiberglass, and conventional overlayments
- Bond to damp concrete, making substrate impermeable for aggressive chemicals
- Apply to vertical substrates at nominal dft of 6 mm (240 mil) using ARC 797(E) primer
- Easily apply by trowel

#### **Application Areas**

- Acid and alkali spill areas
- Bottling lines
- Equipment bedding
- Pump bases/grouting
- Wastewater treatment
- Concrete tanks/sumps
- Food processing plants
- Trenches and drains
- Structural support columns
- Tile repointing



### Packaging and Coverage

Nominal, based on a 6 mm (240 mil) thickness

- System Kit covers 4.10 m<sup>2</sup> (44.13 ft<sup>2</sup>) Contains:
  - 1 x ARC 797(E) primer pack
  - 1 x ARC 791(E) resin pack
  - 3 bags of QRV reinforcement
- Bulk Kit covers 16.70 m<sup>2</sup> (180.00 ft<sup>2</sup>) Contains:
  - 1 x ARC 797(E) Bulk kit primer pack
  - 1 x ARC 791(E) resin
  - 1 x ARC 791(E) curing agent
  - 12 bags of QRV reinforcement

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

Colors: Gray





#### **Features and Benefits**

- Fine, textured and resistant to wide range of chemicals
  - Covers a broad range of chemical exposures
- Coefficient of thermal expansion comparable to concrete
  - Resists cracking & delamination
  - Longer life
- 100% solids; no VOCs; no free isocyanates
  - Enhances safe use
  - Serves demanding applications
- Bonds to dry or damp concrete
  - Saves time and versatile
- Reinforcement coupling agent minimizing coating voids
  - Permeation resistant
  - User-friendly consistency
- Adhesion exceeds cohesive strength of concrete

Technical Data			
Composition Matrix	A compounded epoxy resin reacted with modified aliphatic amine curing agent		
Reinforcement	Densely packed proprietary quartz pretreated with polymeric coupling agent		
Cured Density		2.2 gm/cc	137 lb/ cu.ft.
Compressive Strength	(ASTM C 579)	644 kg/cm <sup>2</sup> (63 MPa)	9,160 psi
Tensile Strength	(ASTM C 307)	149 kg/cm² (14.6 MPa)	2,126 psi
Flexural Strength	(ASTM C 580)	281 kg/cm² (27.6 MPa)	4000 psi
Flexural Modulus of Elasticity	(ASTM C 580)	0.75 x 10 <sup>5</sup> kg/cm <sup>2</sup> (0.75 x 10 <sup>4</sup> MPa)	1.08 x 10 <sup>6</sup> psi
Bond Strength Excellent - 100% Concrete		>28 kg/cm² (>2.8 MPa)	>400 psi
Linear Coefficient of Thermal Expansion	(ASTM C 531)	30 x 10 <sup>-6</sup> cm/cm/°C	17 x 10 <sup>-6</sup> in/in/°F
Thermal Compatibility to Concrete	(ASTM C 884)	Passes	
Impact Resistance	(ASTM D 4272)	Greater than Concrete	
Taber Abrasion H-18/250 gm wt/500 cycles	(ASTM D 4060)	97 mg Maximum Weight Loss	
Maximum Service Temperature (Dependent on service) (Water Immersion) Continuous (Water Immersion) Intermittent		93°C	150°F 200°F
Shelf life (unopened containers)	3 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility]		



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