

## **GENERAL USES & APPLICATIONS**

- Anchoring threaded rod and reinforcing bar (rebar) into cracked or uncracked concrete using a hammer drill
- Suitable for dry, water saturated, & water-filled conditions using threaded rod or rebar
- Vertical down, horizontal, upwardly inclined and overhead installations
- Transportation applications:
   AASHTO M235, ASTM C881
   Type I, II, IV & V Grade 3 Class A, B & C



## **ADVANTAGES & FEATURES**

- ICC-ES ESR-4249 for use in cracked and uncracked normal weight and lightweight concrete
- Resists static, wind and earthquake loading in tension and shear - (IBC Seismic Design Categories A through F)
- Certified Drinking Water System Components (NSF/ANSI 61) Joining and Sealing
- Full cure in 45 minutes at 70 °F (21 °C)
- Resists sustained loads up to 161 °F (72 °C)
- Withstands freeze-thaw conditions
- Installation temperature range 14 °F to 104 °F (-10 °C to 40 °C)
- 18 month shelf life
- Available in 10 oz. (280 ml) and 28 oz. (825 ml) cartridges

## ULTRABOND® ACRYL-8CC PERFORMANCE TO ASTM C881-151,2,3

	Cure Time	ASTM Standard		Sample Conditioning Temperature			
Property			Units	Class A	Class B	Optional	Class C
				14 °F (-10 °C)	50 °F (10 °C)	75 °F (24 °C)	104 °F (40 °C)
Gel Time - 60 Gram Mass <sup>4</sup>		C881	min	16	8	5	5
Consistency or Viscosity		C881		Non-sag			
Compressive Yield Strength	- 7 day	D695	psi	12,820	13,490	11,430	11,830
Compressive field offerigin			(MPa)	(88.4)	(93.0)	(78.8)	(81.6)
Compressive Modulus			psi	497,300	491,600	374,400	299,100
			(MPa)	(3,429)	(3,389)	(2,581)	(2,062)
Tensile Strength <sup>5</sup>		D638	psi	2,510			
			(MPa)	(17.3)			
Tensile Elongation <sup>5</sup>			%	0.9			
Bond Strength Hardened to Hardened Concrete	2 day	C882	psi	2,530	2,440	2,320	2,600
			(MPa)	(17.4)	(16.8)	(16.0)	(17.9)
	44 day		psi	1,870	3,020	2,940	3,130
			(MPa)	(12.9)	(20.8)	(20.3)	(21.6)
Bond Strength	14 day		psi	2,510			
Fresh to Hardened Concrete			(MPa)	(17.3)			
Lie of Define the Towns and the	7 day	D648	°F	192			
Heat Deflection Temperature			(°C)	(89)			
Water Absorption	14 day	D570	%	0.74			
Linear Coefficient of Shrinkage	48 hr	D2566	%	0.005			

- 1. Product testing results based on representative lot(s). Average results will vary according to the tolerances of the given property.
- 2. Full cure time is listed above to obtain the given properties for each product characteristic.

  3. Results may vary due to environmental factors such as temperature, moisture and type of substrate.

  4. Gel time may be lower than the minimum required for ASTM C881 Type I and IV.
- 5. Optional testing for Grade 3 systems.

## **ULTRABOND® ACRYL-8CC CURE SCHEDULE 1,2,3,4,5**

Base Material Temperature °F (°C)	Working Time	Full Cure Time
14 (-10)	90 min	24 hr
23 (-5)	90 min	14 hr
32 (0)	45 min	7 hr
41 (5)	25 min	2 hr
50 (10)	15 min	90 min
70 (21)	6 min	45 min
86 (30)	4 min	25 min
95 (35)	2 min	20 min
104 (40)	1.5 min	15 min

For **SI**:  $^{\circ}F = ^{\circ}C \times 9/5 + 32$ 

- 1. Working and full cure times are approximate, may be linearly interpolated between listed temperatures and are based on cartridge/nozzle system performance.
- 2. For installations between 14 °F and 23 °F (-10 °C and -5 °C) the cartridge temperature must be conditioned to between 70 °F and 75 °F (21 °C and 24 °C).
- 3. Application Temperature: Substrate and ambient air temperature should be from 14 °F and 104 °F (-10 and 40 °C).
- 4. For installations in wet base materials, the full cure time should be doubled.
- 5. Storage Temperature is 41 °F to 77 °F (5 °C and 25 °C).