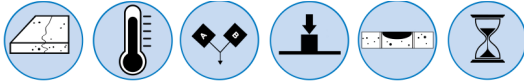


# CRACKBOND® HEALER/SEALER



### Product Description

CRACKBOND® HEALER/SEALER is a two-component, deep penetrating, fast cure, high strength epoxy coating that will reduce intrusion of moisture and water soluble materials into concrete. The ultra-low viscosity of CRACKBOND HEALER/SEALER provides superior substrate wetting that allows quicker penetration into static cracks of concrete surfaces. It may be successfully applied and cured at temperatures between 40 °F and 105 °F (4 °C to 41°C).

### General Uses & Applications

- Structurally repair micro-cracks in concrete surfaces
- Sealing in dry and damp environments for runways, parking garage decks, horizontal elevated roadways & bridge decks
- For use in interior concrete slabs and exterior slabs above grade
- Primer for bridge deck overlay
- Protects against de-icing salts

### Advantages & Features

- Ultra-low viscosity of 64 cP at 75 °F (24 °C), 100% solids epoxy formulation
- Superior bond-strength, adhesion and wear characteristics
- Very low surface tension permits deep penetration into deck
- Non-volatile
- Improves the integrity of cracked and aging concrete surfaces
- Open to traffic in 6 hours at 75 °F (24 °C)
- Gravity penetration into hairline cracks and cracks due to concrete shrinkage
- Protects, preserves and extends life of concrete surfaces
- Seals surface to help prevent water and chloride intrusion
- Moisture insensitive

### STANDARDS & APPROVALS

**AASHTO M235 / ASTM C881-15**  
Type I, II, IV & V Grade 1 Class B & C

(See ATC website for current Department of Transportation approvals throughout the United States)

**Availability:** Adhesives Technology Corp. (ATC) products are available online and through select distributors providing all your construction needs. Please contact ATC for a distributor near you or visit [www.atcepoxy.com](http://www.atcepoxy.com) for online purchasing options or to search for a distributor by zip code.

**Color & Ratio:** Part A (Resin) Clear: Part B (Hardener) Amber, Mixed Ratio: 3:1 by volume, Mixed Color - Clear

**Storage & Shelf Life:** For best results, store between 40 °F (4° C) and 90 °F (32 °C). Shelf life is 12 months when stored in unopened containers in dry conditions.

**Installation & Coverage:** See Manufacturer's Printed Installation Instructions (MPII) available within this Technical Data Sheet (TDS). Due to occasional updates and revisions, always verify that you are using the most current version of the MPII. In order to achieve maximum results, proper installation is imperative. One gallon yields 231 in<sup>3</sup> (3.8 L).

**Clean-Up:** Always wear appropriate protective equipment such as safety glasses and gloves. Clean uncured materials from tools and equipment with mild solvent. Cured material may only be removed mechanically.

### Limitations & Warnings:

- Do not mix in a plastic pail and do not leave mixed material in any pail past the recommended pot life duration - see MPII
- Do not thin with solvents, as this may affect cure
- Concrete should be a minimum of 28 days old prior to sealing
- Do not apply if rain is expected
- Allow sufficient time for the substrate to dry after rain or other inclement conditions
- Placement not to exceed recommended temperature as outgassing may occur
- Not intended to repair active or moving cracks

**Safety:** Please refer to the Safety Data Sheet (SDS) for CRACKBOND HEALER/SEALER. Call ATC for more information at 1-800-892-1880.

**Specification:** The healer/sealer shall be a two-component, 3:1 mix ratio epoxy system supplied in premeasured containers. At 7 days and temperature of 75 °F (24 °C), the healer/sealer shall have a compressive yield strength of 10,640 psi (73.4 MPa) and a compressive modulus of 391,100 psi (2,697 MPa) per ASTM D695. The healer/sealer shall be CRACKBOND HEALER/SEALER from Adhesives Technology Corp., Pompano Beach, Florida. The healer/sealer shall be installed per the Manufacturer's Printed Installation Instructions (MPII) for CRACKBOND HEALER/SEALER epoxy system.

Revision 2.2

#### ORDERING INFORMATION

**TABLE 1: CRACKBOND HEALER/SEALER Adhesive Packaging, Dispensing Tools and Mixing Nozzles**

Package Size	3 Gallon Kit <sup>1</sup> (11 L)	200 Gallon Kit (757 L)	360 Gallon Kit (1,363 L)	1080 Gallon Kit (4,088 L)
Part #	B3G-HEALSEAL	B50G-HEALSEAL-A B50G-HEALSEAL-B	B270G-HEALSEAL-A B90G-HEALSEAL-B	B270G-HEALSEAL-A B270G-HEALSEAL-B
Case/Kit Qty.	2.25 gal Part A 0.75 gal Part B	150 gal Part A 50 gal Part B	270 gal Part A 90 gal Part B	810 gal Part A 270 gal Part B
Pallet Qty.	36 kits	1 Pallet (3 Part A, 1 Part B)	2 Totes (1 Part A, 1 Part B)	4 Totes (3 Part A, 1 Part B)
Pallet Weight (lb.)	1,192	1,920	3,420	10,005



**B3G-HEALSEAL**

1. Resin and hardener each packaged separately inside one 5 gallon outer container.

#### MATERIAL SPECIFICATION

**TABLE 2: CRACKBOND HEALER/SEALER performance to ASTM C881-15<sup>1,2</sup>**

Property	Cure Time	ASTM Standard	Units	Sample Conditioning Temperature			
				Class B	Optional	Class C	
				40 °F (4 °C)	50 °F (10 °C)	75 °F (24 °C)	
Gel Time - 60 Gram Mass <sup>3</sup>	----	C881	min	238	50	25	
Consistency or Viscosity		C881	cP	135	129	64	
Compressive Yield Strength	7 day	D695	psi (MPa)	11,620 (80.1)	10,580 (72.9)	10,640 (73.4)	
Compressive Modulus			psi (MPa)	455,200 (3,138)	430,400 (2,968)	391,100 (2,697)	
Tensile Strength		D638	psi (MPa)	8,640 (59.6)	8,580 (59.2)	9,860 (68.0)	
Tensile Elongation			%	4.6	3.5	3.3	
Bond Strength Hardened to Hardened Concrete		2 day	C882	psi (MPa)	1,760 (12.1)	2,420 (16.7)	2,240 (15.4)
		14 day		psi (MPa)	2,950 (20.3)	2,650 (18.3)	2,540 (17.5)
Bond Strength Fresh to Hardened Concrete				psi (MPa)	1,680 (11.6)		
Flexural Properties (Procedure A)	Strength	D790	psi (MPa)	15,180 (105)			
				Tangent Modulus	728,200 (5,021)		
Heat Deflection Temperature	7 day	D648	°F (°C)	151 (66.1)			
Thermal Cycling - 5 cycles (Neat)		C884	----	Pass - No Cracking or Delamination			
Water Absorption	14 day	D570	%	0.53			
Linear Coefficient of Shrinkage	----	D2566	%	0.0008			

**TABLE 3: CRACKBOND HEALER/SEALER CURE SCHEDULE<sup>1</sup>**

Base Material Temperature °F (°C)	Pot Life <sup>2</sup> min	Tack-Free Time <sup>3</sup> hr
40 (4)	90	>40
50 (10)	60	22
75 (24)	15	5
90 (32)	5	3

1. When ambient or base material temperature falls below 70 °F (21 °C), condition the adhesive to 70 - 75 °F (21 - 24 °C) prior to use.
2. Pot life determined by mixing the entire 3 gallon (11 L) kit and determining the length of time for the core to reach critical temperature of 125 °F (52 °C) based on ISO 10364-2015 Section 6.4, or when initial outgassing was observed.
3. Tack-Free time based on ASTM D2377.

1. Results based on testing conducted on a representative lot(s) of product. Average results will vary according to the tolerances of the given property.
2. Results may vary due to environmental factors such as temperature, moisture and type of substrate.
3. Gel time may be lower than the minimum required for ASTM C881 Type IV at 75 °F (24 °C).

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#### INSTALLATION INSTRUCTIONS (MPII)

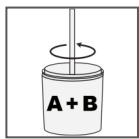
#### Surface Preparation

Concrete or substrate must be clean prior to application, structurally sound, non-friable and free of laitance (poorly bonded materials) and delaminations. New concrete should be a minimum of 28 days old. All dirt, oil, debris, wax, grease or dust should be removed. A dry surface is recommended for optimum results. If desired, the surface may be prepared mechanically using a scarifier, sandblast, shotblast or other equipment that will give the surface profile needed for the application. Remove any debris from mechanical cleaning by blowing the surface with oil-free compressed air, taking care to avoid inhalation of respirable crystalline silica dust in accordance with OSHA regulations. If surface is prepared by pressure wash, allow surface to dry 24 hours at temperatures  $>70$  °F (21 °C) and  $<50\%$  relative humidity, prior to installation of CRACKBOND HEALER/SEALER. When surface preparation is complete, it is recommended to test small section on the substrate prior to full installation. This will help confirm compatibility and good adhesion, as well as desired appearance and aesthetics.

If larger cracks are present on the surface to be sealed, these may be repaired by pressure injection with CRACKBOND LR-321 prior to being coated with HEALER/SEALER. See TDS for CRACKBOND LR-321 for details regarding pressure injection of larger cracks.

CRACKBOND HEALER/SEALER is not intended to be placed over unrepaired, spalled, blistered, delaminated, crusted, chloride damaged, polished, sealed or densified concrete and is not intended to fill or stabilize control, isolation or expansion joints.

#### Mix Instructions



**CAUTION:** Check the expiration date on the container to ensure it is not expired. **Do not use expired product!** Epoxy materials may separate which is normal and may be expected when stored over a period of time. Mix only the amount of material that can be used prior to pot life expiration - see Table 3. For convenience, the 3 gallon kit is packaged inside a 5 gallon steel pail, allowing the A & B components (3 gallons total) to be completely mixed together without the need for additional containers. **WARNING: Do not mix in a plastic pail and do not leave mixed material in any pail past the recommended pot life duration as product will begin to cure rapidly, producing excessive heat and will generate significant smoke/fumes.** Proportion parts by volume into a clean steel pail at the exact and proper mix ratio. Use 3 parts by volume of component A and 1 part by volume of component B Mix thoroughly with a low speed drill (400 – 600 rpm) using a mix paddle attachment (e.g. a Jiffy Mixer). Keep the paddle below the surface of the material to avoid entrapping air. Proper mixing will take 2 – 3 minutes.

#### Gravity Feed Application



Once the material is properly mixed, immediately pour generously onto the horizontal surface. Spread within 15 minutes when substrate temperature is 75 °F (24 °C); this time will shorten at higher temperatures - see Table 3. Allow material to pond over cracks, permitting it to sink in and heal. Use a floor squeegee to spread material evenly over the entire surface. Remove excess material using a squeegee, thin nap roller or stiff bristled broom depending on the substrate's surface profile and desired final appearance, leaving an even coat. If desired, silica sand (20 to 50 mesh) may be used to create a slip-resistant surface. Broadcast the silica sand throughout the surface, then backroll into the surface to encapsulate the sand. Allow applied material to cure. Surface may be opened to traffic in 6 hours at 75 °F (24 °C). NOTE: Environment and substrate temperature may affect cure times. If necessary, a second coat may be applied 1 hour following the product's tack-free time (see Table 3), or after all of the product has penetrated the concrete, but before 24 hours for temperatures of 50 °F (10 °C) and higher. Recoat time is dependent on substrate porosity & profile, temperature and spread rate; a longer wait time will be required in cooler temperatures.