ADHESIVES TECHNOLOGY CORP.
A Meridian Brand

CRACKBOND® JF-82 FAST

Fast Curing Polyurea Joint Filler

LEED CERTIFIED

Product Description

CRACKBOND® JF-82 FAST is a two-component, rapid curing, polyurea control joint filler designed for heavy duty traffic and freezer applications. Its solvent free flexible design allows for 10 - 15 % movement of installed joint width. It may be used in temperatures between -40 °F and 120 °F (-40 °C and 49 °C).

General Uses & Applications

- Treats moving cracks
- Used to fill tooled interior/exterior control joints or new construction saw joints on horizontal concrete surfaces
- Protects joint edges from spalling due to wheeled traffic
- For best performance, the maximum joint width is 3/4 in. (19 mm) and joint depth should be a minimum of 3 times the width for industrial floor applications receiving heavy duty vehicle traffic
- Minimum depth can be reduced to 1/2 in. (13 mm) for foot traffic
- May be used for exterior applications when minimal joint movement from thermal cycling will occur
- Keeps joints free of debris and provides a continuous surface for weight loading

Advantages & Features

- The repaired crack or control joint can be shaved within a minimum of 30 minutes at 75 °F (24 °C)
- Complies with ACI 302.1R-15 Guide to Concrete Floor and Slab Construction regarding control and construction joint fillers
- CRACKBOND JF-82 FAST contributes toward satisfying credits of Indoor Environmental Quality for Low-Emitting Materials under LEED®
- Treated joints may be opened to foot and light vehicular traffic in 90 minutes at 75 °F (24 °C)
- Self-leveling, low viscosity system
- Wide application and service temperature range, including freezer applications
- Acceptable for use in USDA inspected facilities

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 for online purchasing options or to search for a distributor by zip code.

Color & Ratio: Part A (Resin) Amber: Part B (Hardener) Gray, Mixed Ratio: 1:1 by volume, Mixed Color - Concrete Gray

Storage & Shelf Life: 18 months when stored in unopened containers in dry conditions. Store between 60 °F and 90 °F (16 °C and 32 °C).

Installation: See Installation Instructions available within this Technical Data Sheet (TDS). Due to occassional updates and revisions, always verify and use the most current instructions. In order to achieve maximum results, proper installation is imperative.

Clean-Up: Always wear appropriate personal protective equipment such as safety glasses and gloves. Clean uncured materials from tools and equipment using a mild solvent, such as CRACKBOND® INDUSTRIAL CITRUS CLEANER from Adhesives Technology Corp. Cured material may only be removed mechanically using a sander or grinder. Collect with absorbent material. Flush area with water. Dispose of in accordance with local, state and federal disposal regulations.

Limitations & Warnings:

- **Not for use in expansion joints**
- Color varies during cure and may discolor in exterior application
- Remove standing water, dirt & debris or any other possible bond breaker as substrate should be clean and dry for optimal result
- Product should not be stored once opened
- Cartridge balancing and crack repair instructions must be strictly followed
- Not intended for exterior or interior joints that are subject to high movement
- Resistance to traffic levels depends on sufficient bond area with in the joint; Deeper saw cuts provide more bond area for filler to resist loading; Use of backer rod or sand in joints reduces bond area and will reduce load resistance of any product
- Use of backer rod is not recommended for forklift traffic
- Before applying a topcoat, it is recommended that the user check with coating manufacturer for compatibility with polyurea based products as ATC is not responsible for coating incompatibility

IMPORTANT: The user assumes all risks when applying a topcoat. It is recommended to first try a small test area to confirm compatibility and performance. Incompatibility may result in discoloration or adhesion failure of topcoat.

Safety: Please refer to the Safety Data Sheet (SDS) for CRACKBOND JF-82 FAST. Call ATC for more information at 1 -800-892-1880.

Specification: Joint filler material shall be a two-component, 1:1 ratio, solvent free polyurea system. After a seven day cure and a temperature of 75 °F (24 °C), the polyurea material shall have a tensile strength of 5,103 psi (35.4 MPa) and elongation of > 250% per ASTM D638. Adhesive shall be CRACKBOND JF-82 FAST from Adhesives Technology Corp., Pompano Beach, Florida.

CRACKBOND® JF-82 FAST

TABLE 1: CRACKBOND JF-82 FAST Adhesive, Dispensing Tools and Mixing Nozzles[1]

Package Size	20.3 fl. oz. (600 ml) Cartridge	10 Gallon (38 L) Kit
Part #	A22-JF82FAST	B5G-JF82FAST-A B5G-JF82FAST-B
Recommended Mixing Nozzle	T12	
Manual Dispensing Tool	TM22HD	N/A
Pneumatic Dispensing Tool	TA22HD-A	Pump[2]
Case Qty.	12	1
Pallet Qty.	576	12 kits
Pallet Weight (lbs.)	1,169	1,178

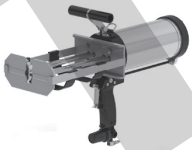
1. Each cartridge is packaged with one mixing nozzle.
2. For bulk dispensing pumps, contact ATC for recommended manufacturers.

A22-JF82FAST

B5G-JF82FAST-A

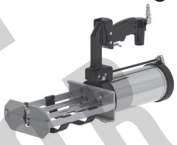
T12

TM22HD



TA22HD-A

One tool, dual grip configurations



B5G-JF82FAST-B

TABLE 2: CRACKBOND JF-82 FAST performance to ASTM Standards[1,2,3]

Property	Cure Time	ASTM Standard	Units	Sample Conditioning Temperature 75 °F 24 °C
Gel Time 60 Gram Mass	----	C881	sec	30
Tack-Free Time (30 mil Thin Film)	----	D2377	min	5 - 10
Viscosity	----	D2196	cP	Part A: 2,000 Part B: 1,900
Tensile Strength	7 day	D638	psi (MPa)	5,130 (35.4)
Tensile Elongation			%	272
Bond Strength	2 day	C882	psi (MPa)	400 (2.8)
Adhesion to Concrete	----	D4541	psi (MPa)	275 (1.9)

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. Full cure 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.

TABLE 3: CRACKBOND JF-82 FAST Cure Schedule[1,2,3]

Base Material Temperature °F (°C)	Working Time min	Trim/Shave Time[4] hr	Full Cure Time hr
0 (-18)	5	6	48
75 (24)	0.5	0.5	24
120 (49)	0.25	0.33	12

1. Working and full cure times are approximate, may be linearly interpolated between listed temperatures and are based on cartridge/nozzle system performance.
2. Application Temperature: Substrate and ambient air temperature should be between -40 to 120 °F (-40 to 49 °C).
3. When ambient or base material temperature falls below 40 °F (4 °C), condition the product between 40 to 85 °F (4 to 29 °C) prior to use.
4. Trim/Shave times are estimates and based on a 1/2 in. (13 mm) bead. At 75 °F (24 °C), some installers may prefer to wait 1 hour depending upon installation conditions.

CRACKBOND® JF-82 FAST

JOINT TREATMENT

Joint Preparation: CRACKBOND JF-82 FAST will accommodate 10-15 % movement, but is not intended for joints subject to high movement.

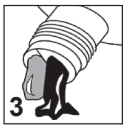
NOTE: Do not use in Expansion Joints; Use for exterior and interior control joints or slightly moving cracks

- Concrete should be at least 28 days old and bonding surface must be dry
- Heavy Duty Traffic Areas: The joint width should be a maximum of 3/4 in. (19 mm); The depth should be a minimum of 3 times the width, or 2.2 in. (57 mm)
- Light Foot Traffic Areas: The joint width should be a maximum of 3/4 in. (19 mm); The depth should be a minimum of 1/2 in. (13 mm)

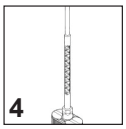
Cartridge Preparation - Invert cartridge 24 hours prior to use

Shake the cartridge vigorously for 60 seconds, then stand cartridge upright for at least 1 minute allowing any bubbles to rise to the top.

Insert cartridge into the dispenser. Make sure it is properly positioned with the shoulder of the cartridge flush with the front/top bracket of the dispenser. Point upward at a 45° angle. Remove the plastic cap and plug from the top of the cartridge.



IMPORTANT: Before attaching nozzle, balance the cartridge by slowly dispensing a small amount of material into a disposable container until both components flow evenly from the cartridge. Install mixing nozzle onto cartridge. Continue to point the nozzle upward away from yourself and others while slowly applying pressure to dispenser moving any bubbles and product up through the nozzle until it reaches the tip. Dispense the first full stroke of material into disposable container.



The cartridge is now purged and ready for use. **NOTE**: Schedule dispensing to consume an entire cartridge at one time with no interruption of flow to prevent material from hardening in mixing nozzle. If problems occur while dispensing product, replace the nozzle; the product may have begun to cure in the nozzle which will affect the mix ratio. Never transfer a used nozzle to a new cartridge. Repeat the cartridge balancing steps listed above after replacing the nozzle.

10 Gallon Kit Preparation - Blend Part B separately with a mixing paddle affixed to a power drill set on slow RPM for 2 - 3 minutes. Do not whip in air while blending. Cover until ready to pour into the proportioner pump. See pump instruction manual.

Repairing Cracks or Filling Control Joints

For optimal results, substrate and environment should be **completely dry without any presence of moisture** prior to usage. To fill cracks, use a saw or grinder with a dry diamond or concrete abrasive blade and cut along the crack opening it up to 1/8 in. to 1/4 in. wide. The edges must be a 90° angle to the surface (see Figure 2) to avoid a feathered edge (see Figure 1). See Joint Preparation section above for joint width/depth information. To repair a control joint, fill all spalls with CRACKBOND CSR polyurethane and allow to cure. Recut the control joint to remove all filler materials and to reshape the spall repairs.

Figure 1

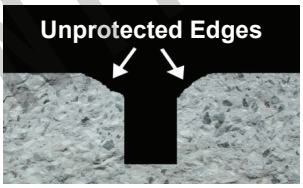
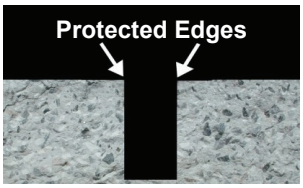


Figure 2



Blow out and remove all dust, dirt, debris, oil and any other contaminant from the control joint or crack. Allow sufficient depth for joint filler based upon minimum recommended depth of filler. Place mixing nozzle directly over the joint or repair area. Dispense material using full smooth trigger pulls (no short, choppy strokes) and allow material to gravity feed into the crack/joint. See Limitations and Warnings section for use of backer rod and sand warning.

For joints to be shaved, overfill the crack/joint so that material is slightly higher than the face of the concrete slab you are repairing. Allow product to cure for a minimum of 30 minutes at 75 °F (24 °C) then use a sharp floor scraper to shave excess material from top surface. Full cure times are temperature dependent (see Table 3).