

1. Product Name

Crackbond JF311 Polyurea Heavy Duty Joint Filler

2. Manufacturer

Adhesives Technology Corp.
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3. Product Description

GENERAL DESCRIPTION

Crackbond JF311 is a two component, rapid curing 1:1 ratio, Polyurea Joint Filler designed for heavy duty traffic and freezer applications. It is a self leveling, 100% solids, low viscosity, flexible system that provides 10-15% movement of installed joint width. **Crackbond JF311** can be used at temperatures between -40°F - 120°F.

Quick Selection Guide	
Coverage (22 oz cart)	1/4" joint x 2" depth 6.7 feet
Gel-Time (72°)	3 min.
Cure Time (72°)	90 min.
Application Temperature Range	-40°F. – 120°F.

BASIC USE

Crackbond JF311 is used to fill interior control joints or new construction saw joints on horizontal concrete surfaces. **Crackbond JF311** is designed for industrial floor applications receiving heavy duty vehicle traffic. **Crackbond JF311** can be used in exterior applications, when minimal joint movement from thermal cycling will occur. With a very rapid cure time, repaired joints can be opened to traffic in 90 minutes (at 72°F).

LIMITATIONS: Crackbond JF311 is not intended for joints that are subject to high movement. **Crackbond JF311** is a moisture sensitive product. Joints that are wet or damp must be primed with a concrete repair polymer and allowed to set for 20 – 25 minutes.

COLOR

"A" Component (ISO): Amber MIXED: Concrete Gray
"B" Component (Poly): Gray

SOLIDS: Weight: 100% Volume: 100%

SHELF LIFE: 18 Months

STORAGE STABILITY: Product must be stored in unopened containers at 60°F – 90°F.

SIZE/PACKAGING

Cartridge Sizes: **Crackbond JF311** is available in:

- 9 oz. cartridges; part number: A9-JF311HN
- 22 oz. cartridges; part number: A22-JF311

The resin and hardener are uniformly dispensed from a dual cartridge system and mixed simultaneously through a mixing nozzle, providing installers with a self mix delivery system.

SYSTEM REQUIREMENTS:

System Size	9 oz.	22 oz.
Product:	A9-JF311HN	A22-JF311N
Dispensers (air):	N/A	TA22HD
(manual):	TM9HD	TM22HD
Nozzle:	T12HGR	T12

Bulk Sizes: **Crackbond JF311** is also available in:

- 10 gallon kit; part number; B10GM-JF311
- 100 gallon kit; part number; B100G-JF311

Due to rapid gel-time, bulk sizes only recommended for pump applications.

4. Technical Data

Technical Data		
Properties	ASTM	Results
Tensile Strength (psi)	D412	1,200 psi
Elongation	D412	82 %
Bond Strength (psi)	C882	400 psi
Shore A Hardness	D2240	75 – 80A
Adhesion to Concrete (psi)	D4541	275 psi
Abrasion Resistance		Excellent
Viscosity of Resin (ISO component)		600 cps at 77°F.
Viscosity of Hardener (POLY Component)		460 cps at 77°F.
Gel-Time / Cure Time		3 minutes (100 gram mass / 90 minutes
Note: Higher temperatures and larger quantities will shorten the gel-time. Lower temperatures and smaller quantities will lengthen the gel-time.		

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Sample Specification – Joint filler material shall be a two component, 1:1 ratio, 100% solids polyurea system supplied in a two component side by side cartridge and dispensed through a static mixing nozzle supplied by the manufacturer. The polyurea material must have a tensile strength of 1,200 psi and an elongation of 82%, per ASTM D412. Cured adhesive shall have a Shore A hardness of 75 – 80A as per ASTM D2240. Adhesive shall be **Crackbond JF311** manufactured by Adhesives Technology Corp., Pompano Beach, Florida.

5. Installation

Job site preparation and work flow – to achieve the desired results, carefully follow these procedures!

- Make sure the joints are prepared in advance before starting a new cartridge. If at all possible, schedule dispensing to consume an entire cartridge at one time with no interruption of material flow.

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Dispensers (air):	N/A	TA22HD
(manual):	TM9HD	TM22HD
Nozzle:	T12HGR	T12

Note, the T12 mixer nozzle is the correct mixer for this product.

The 9 oz cartridge is packaged with the T12 Mixer nozzle.

The 22 oz cartridge is packaged with the T12 Mixer nozzle.

Dual Cartridge Joint Filler Application Instructions – Joint Preparation and Cartridge Set up

JOINT PREPARATION:

Remove all dust, debris, oil and any other contamination from the construction and/or saw cut joints. For best results re-cut joints with a dry diamond blade. If area to be caulked is wet or damp, joints must be primed with a concrete repair polymer and allowed to set. Install material into joint so that material is slightly higher than the face of the concrete. Allow Crackbond JF311 to set for approximately 45 minutes (at 75° F.) then use a sharp 8" wall scraper to shave excess material from top of slab.

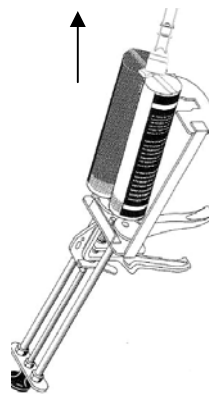
CARTRIDGE SET-UP:

While preparing cartridge for dispensing, keep cartridge in upright position to prevent material from leaking out of cartridge. Do not tilt cartridge until material is to be applied to the repair area.

IMPORTANT: During set-up of cartridge (purging air and equalizing) and initial dispensing of material, keep cartridge and nozzle assembly pointed straight up. **AFTER** purging/equalizing and initial shot of material, always keep cartridge and nozzle pointed downward to prevent material in nozzle from flowing back into cartridge.

I. Shake cartridge vigorously for 60 seconds, then stand cartridge upright for 5 minutes.

II. Insert cartridge into dispenser. Make sure it is properly positioned with shoulder of cartridge flush with front/top bracket of the dispenser. Remove plastic cap from the top of the cartridge. **IMPORTANT!** Before attaching nozzle, dispense a small amount of material into a disposable container until both materials flow evenly from cartridge. Place nozzle onto cartridge and secure by threading in a clock-wise direction. Make sure that the nozzle and cartridge assembly is secure.



III. Point nozzle straight up and slowly apply pressure to dispenser, moving product up through the nozzle until it reaches the tip, then dispense 1 stroke of material into a rag (1-2 quick bursts if using an air tool). After purging and balancing always point cartridge downward when not dispensing to prevent mixed material in the nozzle from flowing back into the cartridge.



Repairing Small Joints and/or Cracks in Concrete

IV. Place the mixing nozzle directly over the crack, 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. Over-fill the crack/joint so that material is slightly higher than the face of the concrete slab you are repairing.

V. Allow the Crackbond JF311 to set for approximately 45 minutes (at 75° F.) then use a sharp 8" wall scraper to shave excess material from top of slab.

VI. Allow material to fully cure before subjecting repaired area to any type of traffic.

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CRACKBOND JF311 CHEMICAL RESISTANCE CHART

Chemical (Reagent)	Recommended For Continuous Service	Limited Recommendation (Occasional Spills)
Acetic Acid (10%)	X	
Acetone		X
Bleach		X
Bleach (10%)	X	
Citric Acid (5%)	X	
Crude Oil	X	
Motor Oil		X
Gasoline		X
Diesel Fuel	X	
Skydrol		X
Hydraulic Oil	X	
Ethylene Glycol		X
Fatty Acids	X	
Water (Room Temperature)	X	
NaCl (10%)	X	
Hydrochloric Acid (10%)	X	
Lactic Acid (5%)	X	
Methyl Ethyl Ketone		X
Nitric Acid (1%)	X	
Phosphoric Acid (10%)	X	
Sodium Hydroxide (20%)	X	
Sulfuric Acid (20%)	X	
Toluene		X
Urea (50%)	X	
Vinegar	X	
Xylene		X

This chart is intended as an aid in evaluating the performance of the JF311 in various chemical exposures at 75°F. The data is intended as a guide only. In severe or combination exposures, a sample should be tested under actual or simulated use conditions to determine suitability.

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COVERAGE CHART

22 oz. – 53 oz. – 128 oz (Gallon)



Bulk packaging should be mixed/dispensed from a metering pump

Joint Size	Lineal Feet/Gallon	Lineal Feet per 9 oz Cartridge	Lineal Feet per 22 oz cartridge
1/8" x 1"	154.0	10.3	26.7
1/8" x 1-1/4"	123.2	8.3	21.3
1/8" x 1-1/2"	102.7	6.9	17.8
1/8" x 1-3/4"	88.0	5.9	15.2
1/8" x 2"	77.0	5.2	13.3
3/16" x 3/4"	136.9	9.2	23.7
3/16" x 1"	102.7	6.9	17.8
3/16" x 1-1/4"	82.1	5.5	14.2
3/16" x 1-1/2"	68.4	4.6	11.9
3/16" x 1-3/4"	58.7	3.9	10.2
3/16" x 2"	51.3	3.4	8.9
1/4" x 1"	77.0	5.2	13.3
1/4" x 1-1/4"	61.6	4.1	10.7
1/4" x 1-1/2"	51.3	3.4	8.9
1/4" x 1-3/4"	44.0	3.0	7.6
1/4" x 2"	38.5	2.6	6.7
1/2" x 1"	38.5	2.6	6.7
1/2" x 1-1/4"	30.8	2.1	5.3
1/2" x 1-1/2"	25.7	1.7	4.4
1/2" x 1-3/4"	22.0	1.5	3.8
1/2" x 2"	19.3	1.3	3.3

BUILDING CODES

Installation of Crackbond products must comply with applicable local, state and national code requirements.

SITE CONDITIONS

Material shall be delivered in original unopened containers and stored in a dry environment at a temperature between 60° and 90°F.

PRECAUTIONS

- Wear safety glasses
- Avoid prolonged contact with skin.
- Keep out of reach of children
- Do not take internally
- If Ingested seek medical attention immediately.
- Eye contact. Flush with water for at least 15 minutes. Call a physician immediately.

6. Availability and Cost

AVAILABILITY

Crackbond products are available through select distributors who can provide you with all of your construction needs. Please contact Adhesives Technology Corp. at (800) 892-1880 for a distributor near you.

COST

Cost information is available from your local distributor.

7. Warranty

All warranties of the product listed herein, in the corresponding ATC catalog, and in any other current literature, expressed or implied, including warranties of merchantability and fitness for a particular purpose are specifically and expressly excluded, with the following exception: At its sole discretion, ATC will repair or replace any product which it considers to be defective in material or workmanship, excepting normal wear and tear within sixty (60) days from the date of purchase from ATC. ATC shall not be liable for any injury, loss or damage, direct, indirect, incidental or consequential or arising out of use of, misuse of, negligence, accident or inability to use any ATC product.

8. Technical Services

For technical support contact Adhesives Technology Corp. at (800) 892-1880.

9. Maintenance

None required.

10. Filing System

Additional product information and specifications are available either on line at www.atc.ws or contact Adhesives Technology at (800) 892-1880 to get copies mailed to you.

Actual user performance and data may differ due to variations of base material, installation procedures and personnel, weather conditions and other factors. Adhesives Technology Corp. reserves the right to change specifications or information printed in this Tech Data Sheet without notice or liability for these changes. Adhesives Technology Corp. will not be liable for any claim based on the use of data or other information printed in this Tech Data Sheet.

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