

# - Crack Fix -

## Two Component Flexible Polyurea Joint Repair System

Fast Concrete Joint Repairs - Cartridge System and in Pails

### RANGE OF APPLICATION

- √ To fill cracks, damaged control joints, construction joints on horizontal concrete
- √ For industrial floor applications which receive heavy vehicle traffic, such as fork lifts or steel wheeled carts
- √ Highly flexible, allowing slab movement, yet strong enough to protect the vertical edges of concrete from spalling under extreme loading
- √ Interior and Exterior . Only slight discoloration in UV exposure

### ADVANTAGES

- √ 100% Solids, Meets VOC Regulations
- √ Remains Flexible, Even in Cold Temperatures
- √ Return Project to Service in 60 Minutes
- √ Cures From -20OF to 130OF
- √ Highly Moisture Insensitive
- √ Odorless, No Toxic Vapors
- √ Resistant to Petrochemicals

### TYPICAL APPLICATION ENVIRONMENTS

- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| √ Industrial Facilities           | √ Airports                        |
| √ Warehouse Floors                | √ Water and Waste Water Treatment |
| √ Manufacturing Facilities        | √ Cold Storage Facilities         |
| √ Pulp and Paper Mills            | √ Food Processing Facilities      |
| √ Bottling and Canning Facilities | √ Freezers                        |

### TYPE OF MATERIAL

"Crack Fix" is a technologically advanced multiple application product. This polyurea is a moisture insensitive, self leveling, 100% solids, two component, 1:1 ratio, very flexible elastomer.

"Crack Fix" is an excellent joint and crack filler for concrete in applications that are time critical. It works well in adverse temperature conditions as the material cures rapidly in ambient temperatures from -20F to 130F. The tack free time is 5 to 15 minutes. This permits to reopen the jobsite to vehicle and foot traffic just one hour after the application.

### APPLICATION

Clean the area of debris and contaminants, such as oils, loose materials, dirt, rubber etc., to allow for good adhesion of the product. Expose clean rough concrete for best results.

If using a saw to cut concrete and clean the crack, remove all the dust from the cut out area. Make sure the area is dry. Vacuum or blow off cement dust.

For bulk mixing, pre-mix each component thoroughly. Proportion equal parts by volume of Component "A" and Component "B" through appropriate metered mixing equipment. Mix only the quantity that can be used within 2 minutes and do not allow mixed material to reside in static mixing head or mixer for more than 2 minutes or nozzle blockage may result.

Do not add solvents. They will prevent proper cure. Not for sealing cracks and joints under hydrostatic pressure or with extreme movement. Material is a vapor barrier after cure. Minimum age of concrete must be 21-28 days, depending on curing and drying conditions prior to applications.

### MAINTENANCE OF EQUIPMENT

Remove all excess sealant and any smears. Tools and mixing equipment are best cleaned immediately after use. Solvents are hazardous, are aggressive towards plastic and rubber and might be in conflict with regulations on the jobsite. Caution! Some cleaners are combustible.

### SAFETY/PRECAUTION

Protect your health! While working with this material, safety goggles, gloves and safety clothing must be worn at all times. While injecting, a full face shield is strongly recommended. Spills and blow-outs do happen! Protect yourself and others on the jobsite. Consider property in proximity of the application area to prevent loss or damage. Protect your jobsite from unauthorised persons. Store all materials and equipment safely and out of reach of children!

Observe container labels, MSDS, and instructions.

In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area. Further protection: emergency showers and eyewash stations.

## Two Component Flexible Polyurea Joint Repair System

Fast Concrete Joint Repairs - Cartridge System and in Pails

### TECHNICAL DATA

#### PHYSICAL PROPERTIES:

Color (A+B)		Charcoal Gray, Black
Viscosity (mixed)		Self Leveling
Mix Ratio (by volume)		1:1
Pot Life 100 grms at 77F		4 min
Tack Free , Thin Film at 77F		10-15 min
Initial Cure		60 min
Final Cure		5 days
% of Elongation	ASTMD-412	200
Tensile Strength, psi	ASTMD-412	700
Bond Strength, fully cured clean concrete, psi	ASTMC-882	400
Shore "A" Hardness	ASTMD-2240	80-85A
Toxicity	Essentially Non-Toxic in Cured Form	
Resistance to Chemicals	Resistant to Most Organic Solvents, Mild Acids, Alkali and Micro Organisms	

Chemical Resistance Chart  
available

#### PACKAGING:

1:1 ratio by volume units: 623g Cartridges, 40ltr Kit

Shelf Life: 1 year in original unopened container.

Storage Conditions: Store at 55F-95 F.

Disposal: Empty containers must be drip free.

#### Material Consumption

Filling joint slots in given dimensions.  
L/Mtr achieved with 623g. Cartridge

Width (cm)	0.63	1.27	1.90	2.54	3.17	3.81
0.63	16.1					
1.27	8.07	4.02				
1.90	5.36	2.68	1.79			
2.54	4.02	2.01	1.34	1.00		
3.17	3.23	1.61	1.06	0.79	0.64	
3.81	2.68	1.34	0.88	0.67	0.54	0.45
4.44	2.31	1.15	0.76	0.57	0.45	0.36
5.08	2.01	1.00	0.67	0.48	0.39	0.33
6.35	1.61	0.79	0.54	0.39	0.33	0.26
7.62	1.34	0.67	0.45	0.33	0.26	0.22

### Additional Information:

The installation of Crack Fix Joint Filler should be deferred as long as possible after slab placement and should not be installed prior to 30 days to ensure adequate adhesion. It is recommended that a slab cure of 60-90 days or longer to permit for greater concrete shrinkage/joint opening, lessening the expected incidence of joint filler separation. Ambient areas should be stabilized at final operating temperature prior to installation, refrigerated/frozen goods areas stabilized and held for an additional 7-14 days or longer if possible.

Joints should be completely free of concrete waste, dirt, debris, coatings/sealers and frost or visible moisture. Joint cleaning procedures must accomplish the removal of all of the above. Failure to do so will compromise adhesion. Simply "raking" debris out of joint is not an acceptable cleaning method. Preferred methods of joint cleaning include using a dustless concrete saw with diamond blade (ensure blade is slightly wider than joint or clean both sides) or sandblasting.

Choking off the base of the joint is normally not required due to Crack Fix rapid set. Do not use compressible backer rod in saw cut joints less than 50mm deep. Prior to Dispensing.

Crack Fix must be dispensed with dual-feed power dispensing equipment set to a 1:1 ratio by volume. Manual dispensing is impractical due to short working life (1-2 minute gel time).

If installing in cooler temperatures, material should be maintained at a minimum temperature of 24°C for best results. We recommend the use of a 1/2" diameter (ID) static mixer with 32 elements or more for material dispensing and proper mix. We strongly recommend performing periodic ratio checks on power dispense units to ensure proper cure. Pump tanks, lines and dispensing manifold should be clean and free of any residual materials remaining from previous filler installations.

Joints can be filled in one or two passes, depending upon joint depth and dispensing tip used. Preferred method is to fill from bottom to top using a dispensing tip that fits into the joint. Take care not to entrap air bubbles. Slightly overfill the joint, leaving a crowned profile, and allow to cure. The crown may be easily shaved off as early as 15-30 minutes after placement, depending upon temperature.

## Two Component Flexible Polyurea Joint Repair System

Fast Concrete Joint Repairs - Cartridge System and in Pails

We recommend testing various shave times to find the optimal shave which results in a filler profile that is flush with the floor's surface and free of any film from material overfill. If shave time is substantially delayed or if temperatures are low, Crack Fix shaving process may be more laboured. Should filler cure below the floor surface (due to settlement into the void at base of joint, etc.), remove top 1/2" of filler and re-apply Crack Fix.

### Correct Joint Design/Installation

Crack Fix should be installed full joint depth in saw-cut contraction/control joints.

In construction (formed) joints that are not saw-cut, Crack Fix should be installed at a minimum 50mm depth. Rod may only be used 50mm down in construction joints or saw cut joints exceeding 50mm in depth.

