

# HI-TECH Systems

## **"ProMender Flex"** Rapid Cure PolyModified Concrete Crack Repair

### Product Description:

ProMender Flex is a rapid set, high strength low viscosity modified polymer repair material for concrete. This technologically advanced two part, 1:1 system is 100% solids and is designed for rapidly and structurally filling of cracks in concrete. It offers slight flexibility for ease of shaving.

### Applications:

- ✓ Filling cracks in concrete on parking decks
- ✓ Traffic area spalls & crack repairs
- ✓ Floor repair
- ✓ Stops additional damage
- ✓ Fill & repair spall before coating
- ✓ Used to "knit" cracked slabs

### Advantages:

- ✓ 100% Solids, No VOC's
- ✓ Meets USGBC LEED Criteria – IEQ4.1
- ✓ Cures from -20° F to 130° F.
- ✓ "Drive-Over" in 10 minutes
- ✓ Produces High Strength Quickly
- ✓ Self-leveling
- ✓ Self Priming
- ✓ Fast initial set; rapid gain to ultimate strengths.

### Physical Properties:

Viscosity (Mixed)	100-130 cps
Hardness, durometer (ASTM D2240)	93 to 97A
Tensile Strength, PSI (ASTM D412)	4900
Elongation % (ASTM D412)	10% to 12%
Compressive Strength (neat)	3000 psi
(ASTM D695) (with sand)	4100 psi
Bond Strength (ASTM 882-99)	4000 psi
Pot Life C-881 77° - 100 Grams	3 mins

### Shelf Life/Storage Conditions:

Shelf life is 1 year in original unopened container. Recommended storage temperature should be between 75°F to 90°F. Do not allow product to drop below 45°F.

### Concrete Application Recommendations:

Clean the area of debris and contaminants that would act to de-bond ProMender Flex such as oils, loose materials, dirt, rubber etc. 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. Use of compressed air is acceptable if product bonds. Make sure the area is dry. Vacuum or blow off cement dust.

***ProMender Flex is slightly moisture sensitive and should not be applied to very wet surfaces.***

### Coverage Information – 22 oz. Cartridge:

Must consider waste. For random cracks, guesstimate the average size. Crack depth is unknown causing more or less use of the product. For bulk repairs, calculate the cubic inches required. 1 gallon = 231 cubic inches.

### 22 oz. Cartridge Coverage Rate:

Width	¼"	½"	¾"	1"	1-1/4"	1-1/2"
¼"	52.9					
½"	26.5	13.2				
¾"	17.6	8.8	5.9			
1"	13.2	6.6	4.4	3.3		
1 ¼"	10.6	5.3	3.5	2.6	2.1	
1 ½"	8.8	4.4	2.9	2.2	1.8	1.5
1 ¾"	7.6	3.8	2.5	1.9	1.5	1.2
2"	6.6	3.3	2.2	1.6	1.3	1.1
2 ½"	5.3	2.6	1.8	1.3	1.1	.87
3"	4.4	2.2	1.5	1.1	.87	.73

### Available In:

- 22 oz. Cartridges
- 1 Gallon Kit (with proportioning chambers)
- 2, 7 & 10 Gallon Kits

**Chemical Resistance:**

Test Procedure; ASTM D-1308 @72°F  
 R=Recommend  
 RC=Recommend Conditional =some swelling or discoloration  
 N=Not Recommend  
 1=Some discoloration only

<u>Chemical</u>	<u>Result</u>
Acetic Acid 10 %	R
Acetone	RC
Battery Acid (Sulfuric Acid)	RC
Brake fluid	R
Chlorine (2,000 ppm in water)	R
Citric Acid	R
Gasoline	R
Hydraulic Oil	R-1
Methanol (5%) Gasoline	RC
Motor Oil	R-1
Toluene	RC
Vinegar	R
Water	R
Xylene	R

**Safety:**

MSDS will be mailed immediately upon receipt of a purchase order or upon request. All personnel should read and understand product Material Safety Data Sheets. Long sleeve overalls or disposable overalls, rubber gloves, splash shields, rubber or leather boots should be worn. Do use near high heat or open flame. Do not take internally. Keep out of the reach of children.

**Disposal And Clean Up:**

Empty containers must be drip free. Cured product may be disposed of without restrictions. Excess liquid 'A' and 'B' material should be mixed together and allowed to cure, then disposed of in the normal manner. Cured materials may be stripped or peeled from plastic tools and containers. It is recommended that metal tools be cleaned within one hour of use by cutting or peeling cured material from tool.

**Warranty:**

HI-TECH warrants its products to be free of manufacturing defects and that they will meet HI-TECH's current published physical properties when applied in accordance with HI-TECH's directions and tested in accordance with ASTM and HI-TECH's standards. There are no other warranties by HI-TECH of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. HI-TECH Corporation shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, including any warranty of merchantability or fitness for a particular purpose or from any other cause whatsoever.