



Enviro Science Technologies

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FLEXI PATCH

For Filling Joints And Repairing Concrete Floors.

Flexi Patch was developed specially for use as joint filler and patching concrete surfaces in industrial and warehouse floors.

Unique Advantages:

- Self-leveling Flexi Patch is design to fill saw out joints and expansion joints for concrete floors.
- Has Adhesion to all types of concrete and masonry surfaces.
- Will resist to oil, fat, grease, motor oil, food acid, mineral oil, brine, liq smoke, detergent and water.
- Will not shrink or crack.
- Flexible enough to move with the floor joints.
- Flexible enough to stand heavy fork lift traffic.
- Require minimum surface preparation.

Basic Use:

- Industrial and commercial concrete floors.
- Excellent for control and construction joints.
- Specifically designed to be used right after the joints are saw out.
- Can be used to repair spall and damaged concrete surfaces by adding silica sand with Flexi Patch (See detailed instruction, how to mix and repair, further on this product data section 114).

Advantages:

1. May be installed and will cure at temperature as low as 5°f.
2. Require minimum surface preparation.
3. Has adhesion to all types of building materials.

101 - (1) Technical Data Flexi Patch Joint Filler

Two Components

Part A and Part B

Color

Black, Greg, off White

Type

Self Leveling

102 - (2) Technical - Data for repairing and patching spall Concrete Surfaces

Three Components	Part A and Part B
Silica Sand as (Filler)	Part C
Color	Gray and Black
Type	Trowel grade or poured in place

Physical Data		
<u>Test</u>	<u>Test Method</u>	<u>Results</u>
Abrasion Resistance	Tabor Method	Excellent
Elongation	ASTM D-421	100%
Adhesion	ASTM D-1191	200 PSI
Tensile Strength	ASTM D-421	1800 PSI
Hardness: Shore A	ASTM D-676	70 + and -5
Flexibility	_____	Excellent
Weathering	_____	Excellent
Compressive Strength	ASTM D-685@25°C	More than 7000 PSI
Pot Life @ 68'f minute	_____	Approximately 30
Initial Cure @ 68'f	_____	6 to 8 hours
Final Cure @ 68'f	_____	24 to 72 hours
Solid Content	_____	100%
Shrinkage	_____	None

Note: Above tests were run at 68'f (Except noted)

104 Estimation of coverage

*Flexi Patch joint filler chart for 1 gal unit.

(Follow coverage chart below in linear feet)

<u>Width of Joint</u>	<u>Depth of Joint</u>							
	<u>1"</u>	<u>1 1/4"</u>	<u>1 1/2"</u>	<u>2"</u>	<u>3"</u>	<u>4"</u>	<u>5"</u>	<u>6"</u>
1. <u>1"</u>	25	22	19	12	10	8	4	3
2. <u>3/4"</u>	35	29	24	22	15	13	6	5
3. <u>1/2"</u>	45	38	31	26	19	12	8	7
4. <u>1/4"</u>	90	66	53	40	27	20	16	13

105 Estimated Coverage

Coverage table shown above is estimated at room temperature.

- One unit 9lbs contain 270 cubic inch of material
- One unit consists of part A and part B
- Coverage will depend upon the workmanship and wastage.

106 Correct Joint Designs

Flexi Patch should be installed full joint depth in control joints and 2” minimum depth in construction joints. Do not use Backer Rod with Flexi Patch Joint Filler. To prevent from running through shrinkage cracks at bottom of joint, use 1/8” to 1/4 of silica sand.

107 When to Install

Flexi Patch Joint Filler is designed to be used on freshly placed and freshly saw cut concrete. However it may be installed anytime after the placement of concrete of final cure.

108 Application Method

1. Surface preparation: floor should be cut at desired width and depth. Joint and floor should be dust free, moisture free, ice free, and oil free before the application.
2. Mixing method:
 - A. Mixing must be done at room temperature (68’f) or above. Do not mix smaller batch for partial mixing. Part A and Part B are exact amount.
 - B. Mix Part A with slow paddle mixture makes sure there is no moisture can enter while mixing. Add Part B into Part A while mixing; pour all part B amount into mixture. Expect weight is required for curing.
 - C. Mix at least for 2 minutes. Exact timing required while mixing. Mix till it becomes uniform.
 - D. Once the unit is mixed, it has a pot life of 30 minutes at 68’f.
 - E. Now mixture is ready to pour into the joints, for faster and cleaner application, take mixture out into smaller plastic container or cup before pouring into smaller joints.
 - F. Once the mixture is poured into the joint than follow up with putty knife or scrapper for smoother application.
 - G. We do not recommend cleaning of agitator between next container mixing.
 - H. For cleaning up uses mineral spirits or odorless solvent for scappers and agitator.

109 Easy Installation Guide

It may be install by pouring, by closed barrel caulk gun or by polyethylene kits. It may be applied with custom made machine with variable mixing ratio units, for narrow joints, caulk gun provides neater joints and full depth application. Apply flexi Patch Joint Filler up 1/2” from top and allow settling, within 15 to 30 minutes applying a second layer flush with the floor, and checking joints to insure low spots due to seepage.

110 Important Factors

- A. Read mixing and application guide before doing any work.
- B. Prepare surface carefully, cutting saw joints smooth as possible.
- C. For complete cure minimum 48 hrs are required. Flexi Patch will cure faster at higher temperature.
- D. Any cured material, rise up above the joint can be cut back to floor level with sharp scrapper or knife.

- E. Flexi Patch will bond to old and new cured material.
- F. Flexi Patch does not require air to cure. It has chemical cure property.
- G. This material should be installed by only caulking applicators professional

111 Important Check Points Before Application:

1. Applicator should read this “Guide” before under taking any work.
2. Flexi Patch should be stored at room temperature in a dry place; shelf life at room temperature is 6 months.
3. Follow mixing instruction carefully.
4. Do not open traffic on the treated areas for 48 to 72 hours use metal plate to cover the traffic areas. Do not let metal plate touch the material.

112 Cured Material

When Flexi Patch is fully cured it will feel like hard pliable rubber. It does not cure to be hard like concrete or epoxy. It is specially design to be like hard pliable rubber to withstand traffic. Pot life is 30 minutes after mixing part A and B.

113 Safety and storage

Flexi Patch should be stored at room temperature (68’f or above). Moisture contamination will ruin the material. When working with Part B avoid contact with skin and eyes. In case of contact, wash skin with plenty of water. For eyes get medical attention. Contaminated clothing should be washed before use. Do not smoke during mixing or application. Use in well ventilated area only.

114 Flexi Patch

Flexi Patch is designed for repairing and patching all types of concrete and masonry surfaces.

Basic Use

- Filling wide and deep joints.
- Repairing and patching large spall and damage areas.
- Use for applying between uneven slabs and floor joints

Mixing Instructions

Mix Part A & B first. (Part A weight 7lbs, Part B weight 1lbs, total weight = 8lbs)
Than add part C silica sand into mix AB mixes well till uniform and designed constancy is achieved. Use trowel or hand mix with small wooden stick or slow speed paddle type slow mixer.

115 Mixing Ratios

For self leveling - use 24lbs of silica sand with 8lbs of AB mix.

For trowel grade - use 32lbs, of silica sand with 8lbs of AB mix.

Mix well till mix is uniform and all silica is coated with AB mix.

Caution: Keep silica dry and store away from moisture. Moisture may react with AB mix and may prolong curing time.

116 Application Method

1. Cut damaged concrete areas even and smooth. Remove loose gravel and dirt. Dry up any visible moisture with air blower.
2. Coat inside surface with paintbrush using only AB mix. This will help adhesion to the sidewall of the patch.
3. Then pour ABC mix (part A, part B and part C silica sand mix) into the patching area.
4. Use trowel to even out poured material and make it even and smooth with the floor.
5. Keep mix from sticking to the trowel, use mineral spirit or odorless solvent to lubricate trowel.
6. Follow additional mixing instruction same as in section 108.

117 Cured Material

When patch is fully cured it will fill like hard concrete, cured material will not crack, chip, or come out of its place. This patch will last 10 times longer than concrete or epoxy patch.

118 Important Check Points

Do not open traffic on the treated area for 48 to 72 hrs. Use metal plate to cover the traffic areas. Do not let metal plate touch the material. To ensure complete cure patch must be tack free, to touch. Patch will not sink like concrete. It will slightly rise above the floor level.

119 Packaging

Self-Leveling Kit Include part A, 7lbs, part B, 1lbs and part C (silica sand) 24lbs.

Trowel Grade Kit Include part A 7lbs, part B 1lbs, and part C (silica sand) 32lbs.

Availability And Cost

This material is directly available to applicators from EST, FOB our dock. Please contact EST for current cost and product availability.

Limited Warranty

EST has no control over the storage handling or use of this product, thus the warranty is limited to the purchase price of the defective material only.