



User's Guide/Specifications

# Floor Savers<sup>™</sup> Floor Repair Compounds

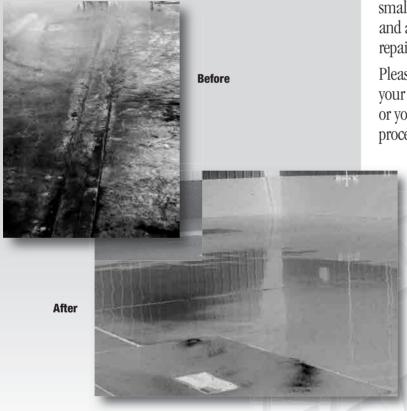
Protect your floors from chemical attack, reduce wear and tear, increase safety and improve appearance with Devcon® FloorSavers™ products.

Slippery floors and cracks present hazard areas. Reduce these potential hazards with Devcon FloorSavers<sup>™</sup>.





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## **Surface Preparation**

To maximize the advantages of FloorSavers™ products, proper surface preparation is essential. Surface conditions will vary from job to job, and the following guidelines will help in the preparation for most repairs.

Determine your needs and priorities first with a complete floor survey, from high traffic areas to low traffic areas to determine if damage is being caused by moisture, leaking chemicals or variations from temperatures. Even the smallest cracks can result in future failure and a simple coating might prevent costly repairs later on.

Please, contact Devcon's Technical Service if your problem is not addressed in this guide, or you have any questions about how to proceed with your repairs and coatings.

Questions? Contact Devcon Technical Services:

800-933-8266



### APPLICATION TIPS

- Wear protective clothing and equipment.
- Area should be well ventilated.
- Temperature can greatly affect cure and pot life of epoxies. Normal application temperature is 72°F. Lower temps will increase cure time and higher temps will decrease cure time.
- Use a variable speed, heavy duty drill with a Jiffy Mixing Blade Model HS or equivalent. Do not move blade up and down while mixing as this may create unwanted bubbles to form.
- Set up barriers to prevent damage to new repair until it has properly, and fully cured.

## **Cleaning & Priming**

## **CLEANING SURFACES**

## CHEMICAL (Figure 1)

- Thoroughly clean area with a strong detergent using power scrubbing equipment or pressure washing.
- Ensure all surface contamination (dirt, grease, oil, etc.) are removed from surface.

## **ABRASIVE BLASTING (Figure 2)**

Using high speed steel shot creates a clean surface and sound profile for coating. This will take off all concrete curing agents, sealers and latents from the floor.

### **SCARIFYING**

Also recommended to create a good, yet deeper, surface profile.

### **SCABBING (Figure 3)**

Utilizes air-driven hammers to remove the top layer of concrete for an acceptable surface profile.

### HAND SCRAPING AND GRINDING

Also acceptable methods of achieving a good surface profile.

## **SPOT TEST TO ENSURE PROPER BONDING**

To ensure proper bonding, a spot test is highly recommended. Mix a small quantity of coating material to be used and apply to a *clean* test area. If the paint doesn't "wrinkle off", leave for 5 days, then test the bond by scraping with a putty knife or use the "tape" test as follows: cut an "X" into the surface, place the tape firmly over the cut, then remove tape with a hard, fast pull. If the test coating fails either test, remove the old finish as described above.

### PREVIOUSLY COATED CONCRETE

The use of Devcon's epoxy coatings over previously coated surfaces should be considered a short term application due to the nature of the integrity of the previous coating. Paint which is peeling or degrading in any way *must be completely removed* by sanding, a paint stripper or abrasive blasting.

If paint is intact, clean surface thoroughly with a strong detergent and abrade to roughen surface.

## **PRIMING SURFACES**

## **CONCRETE SURFACES (Figure 4)**

All prepared concrete surfaces should first be coated with a 6-8 mil coating of Epoxy Coat™ 7000 Non VOC #12710. Epoxy Coat™ 7000 Non VOC #12710 should be thinned with mineral spirits by 10% to act as a primer to "wet into" the pores of the concrete for a good, thin first coat. This prime coat will reduce outgassing if the concrete is porous. Epoxy Coat™ 7000 Non VOC #12710 can be applied with a 3/8" epoxy nap roller. A squeegee can also be spread first for larger applications and then "back rolled" with a roller for a final smooth 6-8 mil thick coating.

## **ROUGH AND PITTED SURFACES**

Extremely rough and pitted concrete may require a 2-step priming process of approximately 6 wet mils per coat.

## **METAL SURFACES**

It is essential that all surfaces must be roughened, ideally by grit blasting (10-40 mesh grit size) or by grinding with a coarse wheel or disk to create edges to lock into (all abrasive preparation should be preceded by chemical cleaning with Devcon's Cleaner Blend<sup>TM</sup> 300 #19510, to remove all traces of oil, grease, dust and other foreign substances).

## **CONTAMINATED METAL SURFACES**

Metal that has been contaminated by sea water, or other salt solutions, should be grit and high pressure water blasted. Let dry overnight to allow any salts in the metal to "sweat" to the surface. Repeat if necessary. A test for chloride content should also be done prior to applying epoxy.

Questions? Contact Devcon Technical Services:

800-933-8266



## Patching & Repairing Concrete

The most common repairs are to cracks and holes in concrete floors. Spalling or complete floor deterioration may have occurred.

Without proper coatings, damage from chemicals, acids or moisture will continue. Floor Patch™ and Ultra Quartz<sup>™</sup> provide excellent protection for these problem areas.

## First, follow the guidelines previously described for SURFACE PREPARATION.

## **FLOOR PATCHING (Figure 1)**

Ideal for most patching repairs. A three-part system that includes resin, hardener and aggregate for strong, economical repairs. Trowel on Floor Patch™ #13100/13120 at a minimum of 1/4". Allow to cure for 16 hours.

Floor Patch™ FC #13110 is a fast curing version of Floor Patch™. Packaged with a Primer for applications in cold or wet environments. Hardens in 15 minutes, functional cure in 3 hours.

## **EXPANSION JOINTS (Figure 2)**

For expansion joints, fill with Devcon's Flexane® Fast Cure Liquid #15050. See coverage chart below.

NEW! CRACKS AND GAPS (Figure 3)
FloorSavers™ Concrete Crack Repair #13400 is a self-leveling urethane compound designed to repair cracks and gaps in concrete - quickly and easily. Grey in color and cartridge fits in a standard caulking gun. Coverage is 20.3 linear feet at 1/4" wide x 1/4" deep gap.

## **FILL HOLES (Figure 4)**

Use **Deep Pour Grout™ #13800** for rebuilding worn concrete or pouring equipment pads up to 6" deep. Bonds to concrete or metal and resists most

ACID RESISTANT FLOOR PATCHING (Figure 5)
Ultra Quartz™ #13550 is is a premium quality, three component, 100% solids formulation quartz aggregate and priming system. The color matches that of concrete. Generally recommended for making repairs where the area may be prone to chemical or acid attack.

FLOOR RESURFACING (Figure 6)
Use Floor Patch™ Resurfacer #13130 to rebuild concrete surfaces that have worn to the aggregate in areas. Apply the self-leveling Resurfacer using a squeegee to a minimum of 1/4" for best results. The Resurfacer takes un-even surfaces and levels them to the original smooth concrete surface.

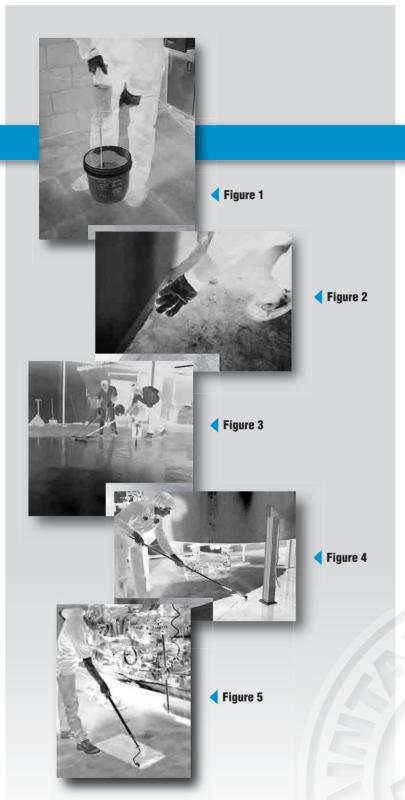
## **FLEXANE® FAST CURE LIQUID #15050**

Linear coverage per gallon (1 gallon = 9 Cartridges)

			Join	t Width			
Joint Depth	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
1/4"	308'	205'	154'	123'			7/
3/8"				82'	68'	58'	51'
1/2"				62'	51'	44'	38'

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800-933-8266 www.devcon.com



## **Protective Coatings & Skid Proofing**

Devcon's **Epoxy Coatings** ensure durable and reliable protection, improved appearance and ease of maintenance. 100% solids formulation provide smooth, even surfaces, resistant to solvents and harsh chemicals.

Anti-skid coatings help prevent injury as well as provide traction on ramps and inclined areas. Also use in areas where spills may occur such as walkways, passageways and exterior surfaces exposed to moisture.

## First, follow the guidelines previously described for SURFACE PREPARATION.

- 1. Mix coating for 2 minutes, following directions included with product (Figure 1).
- Protect areas you don't wish to coat, such as a threshold, floor outlets, walls, etc., by covering with duct tape. Remove tape before coating dries (Figure 2).
- 3. Apply epoxy coating with a 3" 4" brush, a 3/8" epoxy nap roller or notched squeegee as shown (Figure 3).

### **COATINGS** (Figure 4)

**Epoxy Concrete Sealer #12560** is a two-part system that cures clear, uses non-corrosive hardener that has excellent solvent and chemical resistance. Can also be pigmented to any color (consult Devcon Technical Services).

Epoxy Coat<sup>TM</sup> 7000 Non VOC #12710 two-part grey epoxy system is an excellent coating for warehouse floors aisles, and maintenance shop floors.

Epoxy Coat™ 7000 AR #12750 two-part grey epoxy system is a novalac system formulated to protect surfaces from severe acid and chemical attack. Use around chemical storage tanks, dike walls and containment areas.

NOTE: The use of Epoxy Coat™ 7000 Non VOC #12710 and Epoxy Concrete Sealer #12560 may create a smooth surface that is very slippery when wet.

## **ANTI-SKID COATINGS (Figure 5)**

Floor Grip™ #13090 is a three-part black epoxy coating system that is applied to a floor and then silicon carbide is broadcast over the area.

Questions? Contact Devcon Technical Services:

## **Typical Physical Properties**

## 7 Days @ Room Temperature

1	/	/ -	/	/	/	/	/ -
13 @ .25"/35 lb.	Putty	60	60	16	250	100	6-8
18 @ .25"/40 lb.	Putty	60	45	16	250	100	6-8
4.5 @ .25"/10 lb.	Putty	60	15	3	250	100	1
20.3 @ .25"/250 ml.	3,250	50	1.5	30 min.	250	100	N/A
640 cu. in/50 lb.	13,000	50	40	16	180	100	2-3
568 cu. in/41 lb.	5,000	50	40	16	180	100	6
200 @ 16mil/2 gal.	2,000	40	50	24	250	100	8-10
400 @ 8mil/2 gal.	2,000	40	60	24	180	100	8-10
400 @ 8mil/2 gal.	2,000	55	55	24	180	100	10-12
200 @ 16mil/2 gal.	3,600	60	36	24	200	100	4-6
	18 @ .25"/40 lb. 4.5 @ .25"/10 lb. 20.3 @ .25"/250 ml. 640 cu. in/50 lb. 568 cu. in/41 lb. 200 @ 16mil/2 gal. 400 @ 8mil/2 gal. 400 @ 8mil/2 gal.	18 @ .25"/40 lb. Putty 4.5 @ .25"/10 lb. Putty 20.3 @ .25"/250 ml. 3,250 640 cu. in/50 lb. 13,000 568 cu. in/41 lb. 5,000 200 @ 16mil/2 gal. 2,000 400 @ 8mil/2 gal. 2,000	18 @ .25"/40 lb. Putty 60 4.5 @ .25"/10 lb. Putty 60 20.3 @ .25"/250 ml. 3,250 50 640 cu. in/50 lb. 13,000 50 568 cu. in/41 lb. 5,000 50 200 @ 16mil/2 gal. 2,000 40 400 @ 8mil/2 gal. 2,000 55	18 @ 25"/40 lb. Putty 60 45 4.5 @ .25"/10 lb. Putty 60 15 20.3 @ .25"/250 ml. 3,250 50 1.5 640 cu. in/50 lb. 13,000 50 40 568 cu. in/41 lb. 5,000 50 40 200 @ 16mil/2 gal. 2,000 40 50 400 @ 8mil/2 gal. 2,000 40 60 400 @ 8mil/2 gal. 2,000 55 55	18 @ .25"/40 lb. Putty 60 45 16 4.5 @ .25"/10 lb. Putty 60 15 3 20.3 @ .25"/250 ml. 3,250 50 1.5 30 min. 640 cu. in/50 lb. 13,000 50 40 16 568 cu. in/41 lb. 5,000 50 40 16 200 @ 16mil/2 gal. 2,000 40 50 24 400 @ 8mil/2 gal. 2,000 40 60 24 400 @ 8mil/2 gal. 2,000 55 55 24	18 @ .25"/40 lb. Putty 60 45 16 250 4.5 @ .25"/10 lb. Putty 60 15 3 250 20.3 @ .25"/250 ml. 3,250 50 1.5 30 min. 250 640 cu. in/50 lb. 13,000 50 40 16 180 568 cu. in/41 lb. 5,000 50 40 16 180 200 @ 16mil/2 gal. 2,000 40 50 24 250 400 @ 8mil/2 gal. 2,000 40 60 24 180 400 @ 8mil/2 gal. 2,000 55 55 24 180	18 @ 25"/40 lb. Putty 60 45 16 250 100 4.5 @ .25"/10 lb. Putty 60 15 3 250 100 20.3 @ .25"/250 ml. 3,250 50 1.5 30 min. 250 100 640 cu. in/50 lb. 13,000 50 40 16 180 100 568 cu. in/41 lb. 5,000 50 40 16 180 100 200 @ 16mil/2 gal. 2,000 40 50 24 250 100 400 @ 8mil/2 gal. 2,000 40 60 24 180 100 400 @ 8mil/2 gal. 2,000 55 55 24 180 100

NOTE: Application coverage figures are based on applying the compound to a smooth, sound concrete surface. Actual coverage will vary on porous and rough surfaces.

## Chemical Resistance

**KEY: E** = Excellent **VG** = Very Good

G = Good

 $\mathbf{F} = \mathbf{Fair}$ 

U = Unsatisfactory

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FLOORING REPAIR PRODUCTS								
Ultra Quartz™	E	E	E	E	VG	E	E	E
Floor Patch™*	VG	VG	F	VG	F	U	VG	VG
Floor Patch™ FC*	VG	VG	F	VG	F	U	VG	VG
Deep Pour Grout™	VG	VG	U	VG	F	U	VG	VG
Floor Patch™ Resurfacer	U	U	U	U	U	U	VG	E
Floor Grip™	VG	VG	E	VG	U	VG	VG	E
Epoxy Concrete Sealer	VG	VG	E	VG	U	G	VG	E
Epoxy Coat™ 7000 Non VOC	VG	VG	VG	VG	F	G	E	E
Epoxy Coat™ 7000 AR	E	E	U	E	U	E	VG	E

NOTE: Epoxies are very good in water, saturated salt solution, leaded gasoline, mineral spirits, ASTM#3 Oil and propylene glycol.

Epoxies are generally not recommended for long-term exposure to concentrated acids and organic solvents.

## **Ordering Information**

PRODUCTS	STOCK NO.	SIZE
Ultra Quartz™	13550	35 lb.
Floor Patch™*	13100	10 lb.
	13120	40 lb.
Floor Patch™ FC*	13110	10 lb.
FloorSavers™ Concrete Crack Repair	13400	250 ml.
Deep Pour Grout™	13800	50 lb.
Floor Patch™ Resurfacer	13130	41 lb.
Floor Grip™	13090	2 gal.
Epoxy Concrete Sealer	12560	2 gal.
FL-20 Primer	15985	4 oz.
Epoxy Coat™ 7000 Non VOC	12710	2 gal.
Epoxy Coat™ 7000 AR	12750	2 gal.



Questions? Contact Devcon Technical Services:



### METAL/EQUIPMENT REPAIR Acid Resistant Coating **Casting Repair Chemical Resistant Coatings Chocking, Leveling Compound** Coating (Impact, Abrasion) **Condenser Tube Sheet Coating Corrosion Resistant Coating** $\triangle$ $\triangle$ Cyclones **Epoxy (Fast-Cure Repairs)** Fans/Exhauster Fan Blades **Holding Fixtures (Making Molds) Hopper (Rebuild and Coat)** Leaks (Drums, Pipes, Tanks) **Lining Coal Chutes** Machinable Repair Material $\triangle$ $\triangle$ **Meat & Poultry Plants** Pipe Elbow Coatings/Linings $\triangle$ Pulverizers/Mills $\triangle$ $\triangle$ **Pump Repairs-Slurry** $\triangle$ $\triangle$ **Pump Repairs-Water** $\triangle$ Rebuild Worn Threads, Keyways, Metal $\triangle$ **Repairing Engine Blocks Shaft Repairs** $\triangle$ **Tank Linings** Tank Repairs (Hole) Valve Rebuild/Repairs $\triangle$ Wet/Damp Surface Bonding **Prevent Fastener Loosening** Prevent Bearing Spinout, Lock keyways, Secure Splines **Seal Metal Pipes & Fittings**

## Usage Selector Guide

# MRO









### FLOOR REPAIR

FLOOR REPAIR	/	/	/ .	/	/	/	/	/	/ :	/ /
Acid Resistant Coating										
Anchoring Bolts in Concrete			lack							
Anti-Skid (Floors, Ramps, Docks)										
Chemical Containment Coatings									lack	
Chocking Equipment										
Coatings (Impact, Abrasion)										
Expansion Joints, Cracks										
Floors (Hole Filling & Patching)										
Leveling Equipment		/								
Leveling Floors		lack				lack				
Meat & Poultry Plants										
Metal Coatings										
Warehouse Floor Coatings										

## RUBBER REPAIR

Wet/Damp Surface Coatings

Casting Molds, Rubber Parts				A II			L
Conveyor Belt Repair							1
Coatings (Chutes, Hoppers)							1
Coating (Impact, Abrasion)		$\triangle$					ŀ
Expansion/Control Joints							l
Feeder Bowl Coating							l
Gaskets				V			l
Holding Fixtures				Ч			l
Metal Coatings							
Moldmaking							
Noise Reduction Coating	$\triangle$	Ν					ı
Potting Compounds							
Rubber Roll Repair							
Re-jacketing Electrical Cable							ı



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## Look to Devcon<sup>®</sup> and Permatex<sup>®</sup> for all your maintenance needs.

**Metal Repair** 



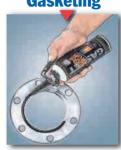
**Threadlockers** 



**Rubber Repair** 



**Gasketing** 



**Wear Resistance** 





**Thread Sealing** Precision Repairs



**Anti-Seize** 









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