

## 1. PRODUCT NAME

IFR (Industrial Floor Repair)

## 2. MANUFACTURER

PROFLEX® Products, Inc.  
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## 3. PRODUCT DESCRIPTION

PROFLEX® Industrial Floor Repair (IFR) is a Portland cement based, polymer modified, fiber reinforced, rapid setting, one component, structural repair and leveling mortar. IFR is for interior and exterior restoration of deteriorated concrete elements and slabs. It may be placed into forms or used in horizontal applications. IFR may be used as an exposed industrial wear surface or as an underlayment for resilient, carpet, laminate, ceramic tile, and wood flooring.

### Advantages

- Provides a compatible bonding surface for tile and carpet adhesives.
- Can be nailed into.
- Unaffected by water after cure.
- Reduces down time - can be in service for 1 - 3 hours depending on use and conditions.
- Low shrinkage, provides a stable bond line for improved adhesion.
- Excellent abrasion and impact resistance.
- Resists freeze / thaw damage.
- Thermally compatible with concrete.
- Excellent adhesion and increased flexural strength.

### Suitable Substrates

- Concrete
- Cement mortar beds
- Exterior grade plywood\*
- Cement terrazzo
- Ceramic backer boards\*

\*Consult instructions prior to use.

### Packaging / Coverage

IFR 40 lb. pail, 36 pails per pallet

40 sq. ft. per 40 lb. pail at 1/4" thickness. Coverage will vary based on thickness of pour and porosity of substrate. Refer to product installation guide and technical data sheet for additional information. Application also may require using PROFLEX® Liquid Latex as primer, 1 gallon containers. Coverage will also vary based on porosity of the substrate. Refer to installation guidelines for specific uses.

## 4. TECHNICAL DATA

Set Time	VICAT (ASTM C-191)	20 minutes initial 30 minutes final
Compressive Strength	ASTM C-109	1 hour 2000 psi 3 hours 3500 psi 1 day 5000 psi 28 days 7500 psi
Tensile Strength	ASTM C-109	7 days 400 psi 28 days 470 psi
Flexural Strength	ASTM C-348	7 days 1250 psi 28 days 2550 psi
Shear Bond Adhesion	ASTM C-882	7 days 1950 psi 28 days 2550 psi
Modulus of Elasticity	ASTM C-492-4	4.22 x 106 psi

## 5. INSTALLATION

### Surface Preparation

PROFLEX® IFR should be applied only when the temperature of the air, surface, and material is above 50°F and rising, and will not fall below that for 24 hours after application. Avoid placing product in conditions of high winds or direct sunlight.

**Floors:** All surfaces must be cleaned and structurally sound. Remove all deteriorated concrete, loose material, oil, grease, wax, water soluble materials and all foreign matter. A mechanical method of surface preparation is recommended. To confirm the suitability of the surface for adhesion of the coating, install a 10' x 10' test patch at the maximum designed thickness anticipated on the project and subject it to anticipated service conditions before beginning the entire job. For ease of application and optimum performance, dampen the area to be coated, except wooden floors, with clean water. Remove any standing water and let the surface dry before priming of substrate.

### Priming

Surfaces will be easier to work and yield a better bond if they are primed with PROFLEX® Latex Additive.

*Over Concrete* - For optimum performance, prime concrete surfaces undiluted.

*Over Wood (interior only)* - use only new plywood decking as a substrate. Prime the surface just prior to applying. May be applied while the surface is either tacky or dry.

### Mixing

**Do not mix more material that can be placed in 15 minutes.** Use 2 ¾ quarts of clean, potable water for each 40 lb. pail of powder. Small adjustments in water (several ounces) may be made to adjust workability.

*Mixing Procedures: Mechanical mixing is preferred for best results.*

### Applications ⅛" - ¼"

In a clean container, **using a slow speed ½" drill (500 - 650 rpm) with a plaster-type mud paddle**, slowly add the powder to the mixing water while the drill is turning. Mix for only 2 - 3 minutes until a lump-free, trowelable consistency is achieved.

**Using a mortar mixer:** Place the water in the mixer. Break a minimum of two bags of powder in the turning blades. Mix for only 2 - 3 minutes until a lump-free, trowelable consistency is achieved. Avoid over mixing as this will entrap air reducing adhesion and strength.

**Using a mortar box with hoe:** Place a little of the water in the mortar box, add the powder, then add the rest of the water. Mix until a lump-free, trowelable consistency is achieved. Do not overwater.

### Applications ¾" - 1½" thick

Add 20 lbs. of clean, washed and drained ¾" crushed stone to each bag of mixed product. Thoroughly blend in the stone to achieve a uniform distribution in the mix.

### Applications 1½" - 3" thick:

Add 32 lbs. of clean, washed and drained ¾" crushed stone to each bag of mixed product. Thoroughly blend in the stone to achieve a uniform distribution in the mix.

### Applying

Immediately place PROFLEX® IFR compound after mixing, working the material into all holes and crevices, eliminating any air pockets to assure maximum bond. Trowel surface to achieve proper elevation. All control and expansion joints must be carried through the product. Do not bridge them because they may crack.

**Cleanup:** Clean all tools with water before product hardens. If product hardens, it must be mechanically removed.

### Curing

PROFLEX® IFR does not require special curing under normal conditions. When exposed to extreme heat or drying winds, however, ultimate strength and bonding may be improved by applying it to a substrate that is saturated surface dry and keeping the surface of the mortar damp. Cover with a sheet plastic as soon as IFR is dry to the touch but do not soak or saturate with water.

- Thinset mortar with ceramic tile can be placed in approximately 1 hour.
- Floor coverings that are not moisture sensitive (most carpets), can be placed in approximately 2 hours.
- Moisture sensitive floor coverings, such as sheet vinyl, rubber, VCT, and carpets with non-porous backings, may usually be placed after 12 hours under normal conditions. Follow flooring manufacturer's requirements on waiting times.

**Test for moisture emission rate:** In order to prevent glue-down installation failures due to moisture and alkalinity, concrete floors should be tested for moisture emission rate. The moisture emission rate of a concrete floor is expressed in lbs./1000sq.ft.-24hrs. Many manufacturers recommend 3 - 5 lbs. (ex: 5lbs./1000sq.ft.-24hrs.) Consult manufacturer's of floor coverings and adhesives for their requirements on moisture emission rates for specific coverings.

Patched areas are foot traffic ready in 1 hour, and forklift ready in 3 hours.

## 6. AVAILABILITY

PROFLEX® Products are available nationwide.

To locate PROFLEX® products in your area, please contact:

Phone: 877-577-6353

Website: [www.proflex.us](http://www.proflex.us)

## 7. WARRANTY

PROFLEX Products, Inc. offers a limited warranty for this product when used in accordance with printed specifications. A copy of the limited warranty can be obtained by calling technical services at 877-577-6353 or visiting [www.proflex.us](http://www.proflex.us)

## 8. MAINTENANCE

None required, but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

## 9. TECHNICAL SERVICES

Technical assistance

Information is available by calling the Technical Support

Toll Free: 877-577-6353

Fax: 863-937-9624

Technical and safety literature: To acquire technical and safety literature, please visit our website [www.proflex.us](http://www.proflex.us)

## 10. FILING SYSTEM

Division 9