



ICO Patch

Product Data Sheet

Product Description

ICO-Patch is a three part, 100% solid epoxy patch material consisting of our **ICO Coat Clear** resin and **ICO Fill Patch** sand in a 10:1 mix, by weight. As such, it can be applied in virtually any thickness down to 1/8" in a single pass and be ready for service in as little as 10 hours @ 70°F. For faster cures, please see **ICO Quick Patch**. It provides an excellent wear surface with a compressive strength of over 10,000 psi.

As a heavily-filled system, it must be applied over a wet or tacky primer, **ICO Primer LV or LV FC**. In constantly damp areas, we recommend reducing the aggregate: liquid ratio to 8:1 to provide a more impervious surface.

Product Application

ICO-Patch is primarily designed for use as a low cost, high strength filler material for resloping or building up worn concrete floors or for filling deep holes. It is also ideal for building berms, curbs or pump bases, when use of conventional or polymer concrete is too time consuming. In corrosive environments, use of one of our more chemically resistant coatings or toppings as a sealer over the **ICO Patch** is recommended. See our **Chemical Resistance Chart** for exact product recommendation.

Chemical Resistance

ICO-Patch is almost always coated with one of our more chemically resistant coatings or toppings. See **Milamar Coatings Chemical Resistance Chart**, or contact **Milamar Technical Service**.

Physical Properties

Tensile Elongation (ASTM D-638 <neat resin>):	2.8%	Gardner Impact Strength:	120 in. lbs.
Hardness, Shore D:	80	Compression Strength (D-695):	10,360 psi
Tensile Strength (ASTM C-307):	1690 psi	Flammability (D-635):	Self-Extinguishing

Physical Characteristics

Mixing Ratios:	By Volume	By Weight
Part A : Part B	2.2:1	2.5:1
Aggregate: Liquid	6.3:1	10:1

Density, lbs. /gal.		Viscosity @ 77°F, cps	
Part A:	9.5	Part A:	800
Part B:	8.4	Part B:	50
A&B Mixed:	9.1	A&B Mixed:	450

Curing Times @:	50°F	70°F	90°F
Pot Life:	35 min.	30 min.	20-25min.
Work Time:	40 min.	30 min.	15-17 min.
Tack Free:	18 hrs.	8 hrs.	3 hrs.
Hard, Foot Traffic:	28 hrs.	10 hrs.	6 hrs.
Hard, Truck Traffic:	30 hrs.	18 hrs.	10 hrs.

Maximum hardness achieved after 7 days at 77°F.

Shelf Life 1 year at 77°F in unopened containers

Color Availability

Standard colors: Unpigmented, Concrete Gray

Packaging and Coverage Rates

Filled System (10:1)

Basic Kit : 24 SF at 1/4"

Bulk Pack : 240 SF at 1/4"

Drum Kit : 2,400 SF at 1/4"

Installation

Please refer to our Application Specs for detailed instructions. Particular care must be taken to follow those instructions precisely to assure proper installation.

1. New concrete should be allowed to cure a minimum of 28 days and/or be checked with a rubber mat or plastic sheet to insure adequate curing time.
2. All surfaces to be covered should be power washed, shot blasted, acid etched, scarified or sanded to present a clean, sound substrate to which to bond to. Surface must have a minimum texture of 20-40 grit.
3. When used as a heavily aggregate-filled patch (usually at least 6:1 by volume, sand: liquid), **ICO Patch** must always be applied over a wet or tacky **ICO Primer LV** or **ICO Primer LV FC**.
4. The three ingredients should be mixed in the prescribed ratios, using a low speed, paddle-style mixer (maximum 750 rpm), until uniform in color and consistency.
5. Do not mix less than the prescribed amount of any ingredient or add any solvent to the mix.
6. The prepared mix may be spread using screed strips, gauge rakes or notched trowels. Fill holes flush to the surface of the surrounding area. One half inch is minimum thickness. Do not feather edge.
7. After finish trowelling the surface may be back rolled with a short nap roller to remove blemishes. The roller can be slightly damp with isopropyl alcohol to prevent pickup.

8. When used in an area subjected to constant wash-downs, adjust aggregate: liquid ratio to 8:1 by weight.

9. For corrosive conditions, apply one of International Coating's more chemically resistant top coatings (see International Coatings Chemical Resistance Chart). Note, that because ICO Patch is porous, a grout coat thickened up with ICO Thickener or Cab-O-Sil should first be applied, followed by a second top coat.

Failure to follow the above instructions, unless expressly authorized by a Milamar Technical Service Representative, will void our material warranty.

Precautions

- 1. Do not apply below 50°F.**
- 2. Must be applied over wet or tacky primer.**
- 3. In areas subjected to chemicals and/or wash-downs, must be sealed with one of Milamar's more chemical resistant toppings.**
- 4. Do not apply less than a ¼".**

Product Specification

The specified area shall receive an application of **ICO-Patch** as manufactured by **Milamar Coatings LLC of Oklahoma City, Oklahoma**. The material shall be installed by precisely following the manufacturer's published recommendations pertaining to surface preparation, mixing, and application. The material shall be a low odor, three part, solvent-free 100% solids epoxy system specifically designed for economically filling depressions and deep holes or sloping floor surfaces to insure proper drainage before the application of a finish coating or overlayment. It must be able to be applied at any thickness over 1/2", in one application, without developing shrinkage cracks. It shall be a mix ratio of 10 parts **ICO Fill Patch** sand to one part of resin and catalyst by weight. It must have a minimum compression strength of 10,000psi, as measured by ASTM D-695.

The data statements and recommendations set forth in this product information sheet are based on testing, research and other development work which has been carefully conducted by us, and we believe such data. Statements and recommendations will serve as reliable guidelines. However, this product is subject to numerable uses under

varying conditions over which we have no control, and accordingly we do NOT warrant that this product is suitable for any particular use. Users are advised to test the product in advance to make certain it is suitable for their particular production conditions and particular use or uses.

LIMITED WARRANTY

Milamar Coatings products are manufactured to be free of defects in material and workmanship in meeting the properties specified on its individual Product Data Sheets. Users and installers of Milamar Coatings products are solely responsible for determining the suitability of the products for specific product applications. Milamar Coatings makes no Warranty or Guarantee, express or implied, including warranties of fitness, design compatibility or merchantability, for any particular use and shall have no responsibility or liability, including direct, indirect or consequential damages, due to injury, delay or third party claims for installation or repair. Likewise, Milamar Coatings assumes no liability of any nature for products that are adjusted in the field or that do not utilize all specified Milamar Coatings components. Should any Milamar Coatings product be proved to be defective within one year from the date of shipment, Milamar Coatings will, at its sole discretion, either replace the material; issue a credit to the customer's account; or provide a cash refund for the initial, paid purchase price of the material. Potential claims regarding product quality must be received in writing by Milamar Coatings within 30 days of the discovery of such potential defect. This Warranty is exclusive of all other warranties, expressed or implied, and may only be adjusted in writing, signed by an officer of Milamar Coatings, L.L.C.

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