



**Resilient
Epoxy
Flooring
and
Grouting
Systems**

PRODUCT DATA SHEET

ICO-FLAKE SYSTEM™

Product Description

ICO Flake™ combines the durability and protection of epoxy and urethane coatings with the beauty of decorative vinyl flakes. It offers several advantages over conventional vinyl tile floors, including a seamless, high gloss finish, greater resistance to moisture infiltration, less maintenance (no wax finishes), greater selection of colors, and superior wear resistance. **ICO Flake™** can be applied with a partial flake broadcast into the pigmented epoxy base coat, or as a full flake broadcast that completely covers the epoxy base coat. By using the latter, "full flake" system, imperfections in the substrate are more completely masked.

The **ICO Flake™** system consists of a base coat of our **ICO Coat XT** (extra thick) pigmented coating applied at about 125SF/gallon, broadcast with colored vinyl flakes, then sealed with a clear coat of **ICO Ure Guard 80** – our high gloss, UV resistant polyurea. In cases where the slight odor of **ICO Ure Guard 80** might be objectionable, then our clear epoxy sealer, **ICO Sealer**, can be substituted.

Nine standard color combinations of the flakes are available, or single colors can be ordered (with the liquids only) and mixed on site. **ICO Flake™** is sold in convenient 500SF kits or in more economical 5,000SF bulk packs.

Product Application

ICO Flake™ floors are suitable for residential and commercial garages, retail establishments, and institutions such as hospitals, schools and cafeterias where a hygienic, easy to clean surface is mandatory. It is ideal for moderate-heavy pedestrian areas and can be offered with various anti-slip surfaces for outdoor areas.

By incorporating our moisture tolerant primer, **ICO Primer LV**, this system is ideally suited for slab-on-grade installations where some residual moisture might interfere with adhesion of conventional flooring surfaces, such as carpet, tile and linoleum. Consult with the manufacturer as to acceptable levels of moisture.

Chemical Resistance

With **ICO Ure Guard 80** as the top coat, the **ICO Flake™** system has good chemical resistance to dilute acids, caustics and some solvents. See Product Data Sheet for **ICO Ure Guard 80** for specific recommendations. If higher chemical resistances are required, then **ICO Sealer** is recommended.

Physical Properties (with ICO Ure Guard 80 top coat)

Hardness (Shore A) :	90
60° Gloss :	80
Adhesion to concrete:	>450psi (concrete fails)

Physical Characteristics

Density, lbs./gal.	ICO-Coat XT	ICO-Ure Guard 80	Mixing Ratios	By Volume	By Weight	
Part A	12.55	8.6	ICO-Coat XT, A:B	2.5:1	3.75:1	
Part B	8.40	9.6	ICO Ure Guard 80	2.6:1	2.3:1	
Part A&B Mixed	11.40	8.9				
Viscosity cpms @70°F	ICO-Coat XT	ICO Ure Guard 80	Curing Times at	50°F	70°F	90°F
Part A	7000	55	ICO-Coat XT			
Part B	500	1750	Pot Life	50min	30min	20min
Part A & B Mixed	3000	200	Work Time	70min	55min	30min
			Tack Free	22hrs	8hrs	4hrs
			Hard, Foot Traffic	50hrs	28hrs	12hrs
			Hard, Truck Traffic	64hrs	36hrs	16hrs
			ICO-Ure Guard 80			
			Pot Life	40min	60min	80min
			Tack Free	4hrs	1hour	30min
			Hard, Foot Traffic	16hrs	8hrs	4hrs

Color Availability

Full broadcast available in nine standard blends. Partial broadcast available in wide variety of color flakes and blends.

Shelf Life

1 year in unopened container, stored at 70°F, (6 months for **ICO Ure Guard 80**)

Packaging and Coverage Rates

Basic Kit- 500SF @ 20-25 mils – consists of 4 gal, **ICO Coat XT**; 6 gal, **ICO Ure Guard 80** and 75lbs Flakes (20lbs for partial broadcast).

Bulk Pack-5000SF @ 20-25mils – consists of 40 gal, **ICO Coat XT**, 60 gal, **ICO Ure Guard 80** and 715lbs Flakes (220lbs for partial broadcast).

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 for at least 30 days. If not possible, then measure rate of moisture evaporation with plastic sheet and contact ICO Tech Service.
2. Prepare concrete by mechanical means, preferably by shot blasting, to leave a clean abraded surface. In case of old coated concrete, remove all old coating down to bare concrete.
3. For a more uniform finish, rout out all cracks and control joints and fill flush with **ICO Gel** and allow to dry tack free.
4. For less-than-28 day old concrete, or for damp concrete, prime first with **ICO Primer LV or LVFC** and allow to dry tack free.
5. Apply first coat of **ICO Coat XT**, pigmented to match the most predominant flake color, at a coverage rate of about 125SF/Gal. Broadcast in flakes to the still-wet surface. If a full broadcast, make sure the flakes totally hide the base coat. If a partial broadcast is desired and the floor is exposed to UV light, we recommend a thin top coat of **ICO Ure Guard 60** pigmented to match the **ICO Coat XT** be applied and flakes broadcast into that coat. Allow floor to dry hard.
6. Lightly screen or sand the floor to remove high spots and any loose flakes, then apply **ICO Ure Guard 80** at about 125SF/gal as a clear sealer coat. For a perfectly smooth surface, apply a second clear coat of **ICO Ure Guard 80**

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

Precautions

1. **Do not apply below 50°F or within 5 degrees of dew point (if ICO Ure Guard 80 used).**
2. **If partial flake system used and UV discoloration is a problem, then apply second base coat using ICO Ure Guard 60 pigmented and broadcast flakes into it, followed by application of ICO Ure Guard80 Clear coat**
3. **For best results, order ICO Coat XT (base coat) in pigmented color that matches flake color selection.**

Product Specification

The specified area shall receive an application of the **ICO-Flake™** as manufactured by **International Coatings, Inc.**, Franklin Park, Illinois. The system shall be installed by following the manufacturer's recommendations pertaining to surface preparation, mixing, and application. The base material shall be 100% solids, low odor epoxy coating with a 60 deg gloss rating of 80. The top coat shall be a two part, polyurea with maximum VOC of 20%, a Shore A hardness of 90, a tensile elongation of 85% and a 60° gloss of 80.

Mission Statement

Our mission is to provide our customers the highest possible quality products and services and by so doing, build long term relationship based on mutual trust and respect.

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.

WARRANTY - All products manufactured by us are warranted to be first class material and free from defects in material and workmanship.

Liability under this warranty is limited to the net purchase price of any such products proven defective or, at our option, to the repair or replacement of said products upon their return to us transportation prepaid. All claims hereunder on defective products must be made in writing within 30 days after the receipt of such products in your plant and prior to further processing or combining with other materials and products. WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY OF ANY OF OUR PRODUCTS FOR ANY PARTICULAR USE, AND WE SHALL NOT BE SUBJECT TO LIABILITY FROM ANY DAMAGES RESULTING FROM THEIR USE IN OPERATIONS NOT UNDER OUR DIRECT CONTROL.

THIS WARRANTY IS EXCLUSIVE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND NO REPRESENTATIVE OF OURS OR ANY OTHER PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS.

