

FT420 Clear High Build Epoxy



DESCRIPTION

FT420 is a clear 100% solids epoxy system that is designed for use in a variety of commercial, industrial and institutional applications where color fastness and impact resistance is critical.

ADVANTAGES

- Self leveling
- Good UV resistance
- Excellent chemical resistance
- May be used with Floroseptic Additives
- High compressive strength
- Can use high aggregate loading for decorative and trowel mortar.

RECOMMENDED USES

FT420 High Build Epoxy may be used as a high build decorative/color trowelable surface. :

- Healthcare
- Kitchens
- Food & Beverage
- Shower & Locker Rooms

FOR BEST RESULTS

- For interior use only
- Not to be used when the relative humidity is greater than 75%
- Do not thin material
- Apply each coat within twenty-four hours of previous coat
- Discard any material subjected to freezing
- Surface temperature must exceed 65°F
- New concrete must be cured for sixty days at least 65°F
- Allow each coat to dry tack free before coating
- Do not apply to structurally unsound surfaces

CAUTION AWARENESS

As with all high performance coatings, the cured product may become slippery when wet or if exposed to oily conditions. For a procedure for incorporating aggregate to obtain a non-slip finish, contact your FloorTech@/IFC Sales Representative.

GENERAL DATA

Application Temperature & Humidity	55°—90°F @ 85% RH
Percent Solids By weight	100%
VOC	0% or) grams per liter
Cure Rate @70%	12 Hours @ 70° F

FT420 Clear High Build Epoxy

Product Information

Page 2 of 3

TEST / PHYSICAL PROPERTIES

Test	Description	Values
Compression Strength	ASTM C-579	10,000 psi
Tensile Strength	ASTM C-2307	3,339 psi
Flexural Strength	ASTM D-790	7,770 psi
Indentation MIL-D-3134F		No Indentation
Shore A/D		100/77
Percent Elongation	ASTM D-2370	6%
Water Absorption	ASTM C-413	0.2%
Bond Strength	ACI Committee #503 pg. 1,139-1,141 ASTM D-4060	>400psi
Abrasion Resistance CS-17 wheel, 1,000 gm load, 1,000 cycles		105mg
Water Resistance, Fed. Test Std. #141, Method 6011	ASTM D-1308	No Effect
Salt Water Resistance, Fed. Test Std. #141 Method 6061	ASTM B-117	No Effect
Thermal Shock, 100 Cycles of Alternate Freezing and Thawing		No Deterioration or Loss of Adhesion
Boiling Water Resistance (1 Hour Continuous Exposure)	ASTM D-2571	No Effect

AVAILABLE COLORS

	Red	# 434
	Beige	# 433
	Gray	# 431
	Lt. Gray	# 432
	Blue	# 435

White (#437) Yellow (#436)
Custom Colors (#438)

COVERAGE

Approximately	15 mils	105 sq. ft. per gallon
	25 mils	80 sq. ft. per gallon
	40 mils	40 sq. ft. per gallon

LIMITATIONS

This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the coating. Do not apply to floors previously treated with curing and parting compounds or other coatings unless they have been completely removed by chemical or mechanical means. Do not use on vinyl, asphalt, rubber, glazed tile, paving brick, quarry tile, Mexican tile, or similar materials.

Before applying for protection against specific chemical environments, consult Chemical Resistance Guide or FloorTech® Technical Service.

Sealed surfaces may discolor under tires due to tire plasticizer migration.

If the product is to be applied in or near areas containing food stuffs, they should be removed before the application and until the coating has fully cured and all vapors have dissipated.

Do not thin this product. Addition of thinners will slow the curing times and reduce the ultimate coverage properties of this product. Critical window for the application of second coat times will also be affected.

FLOOR INSPECTION

The area to be surfaced must be a minimum of 60 days old, clean, sound and above 65°F.

The surface must be checked to determine if a curing compound and/or coating is present.

Moisture content of all concrete surfaces to be coated and/or resurfaced must be checked to determine the presence of excess moisture or moisture vapors.

FT420 Clear High Build Epoxy

Product Information

Page 3 of 3

(Continued from page 2)

Moisture Test Options:

1. **Polyethylene Sheet Method**—apply 2x2' plastic sheet to the surface to be tested with duct tape. After 24 hours, check underside for presence of moisture.
2. **Delmhorst Moisture Meter**—this is an electrical resistance test to measure moisture content. Two holes are made in the area to be tested and two probes are inserted and a measurement is taken. A reading of >20 indicates the presence of moisture.
3. **Calcium Chloride Test**—Most accurate to measure vapor transmission by absorbing anhydrous calcium chloride. A premeasured lid is placed under an airtight cover for 60 hours after which the lid containing calcium chloride is measured and the increase in weight is a measurement expressed in pounds of water per 1,000 sq. ft. A reading above 3 indicates the presence of moisture.

SURFACE PREPARATION

Substrate must be dry and all oil, grease, curing compounds, laitance and surface contaminants removed along with previously applied incompatible coatings. Check with your FloorTech®/IFC Sales Representative to determine proper profile for recommended product systems.

The proper profile recommendation is important because it determines the thickness of the system, bond strength and wearing characteristics of the system used. A thin mil protective coating will require a tightly textured low profile to maximize bond and provide flatness to maximize durability and reflectivity.

The International Concrete Repair Institute (ICRI) Guideline No. 03732 has set forth a numerical, surface profiling indicators to be specified for various coating systems — from CSP 1 (Concrete Surface Profile) for 0—3 mil coatings to CSP 9 for >125 mil for synthetic overlays.

FloorTech® adheres to the surface profile guidelines on all coating systems as established by ICRI.

ICRI Guidelines

	<u>Dry Mil</u>	<u>Coating System</u>
CSP 1, 2 & 3	0—3 Mils	FT300/500 Series
CSP 2, 3 & 4	4—10 Mils	FT500 Series
CSP 4, 5 & 6	40—125 Mils	FT400 High Build Series
CSP 5, 6, 7, 8 & 9	>125 Mils	FT820 & FT900 Series

CHEMICAL PREPARATION

ASTM D-4258-83 Standard Practice for Surface Cleaning Concrete for Coating

ASTM D-4260-83 Standard Practice for Etching Concrete

MECHANICAL PREPARATION

Coating / overlay that requires a profile greater than a CSP 3 should be profiled mechanically by shot blasting or manual scarifying/grinding. Surface should be left with a uniform CSP texture.