

TECHNICAL INFORMATION GUIDE

Accuflex Coatings
By Superior Coating Specialists
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Description

Accuflex products (coating, patch, joint-filler and adhesives) are two-component, 100% solids polymer for restoration of concrete surfaces and protection of concrete, steel, wood, blacktop and other hard surfaces. The coating and restoration products resist salt and moisture penetration – common causes of concrete failures. Accuflex coating is elastomeric and exhibits excellent resistance to cracking due to expansion and contraction of the underlying concrete surface. Accuflex products are supplied as two components. Part R is resin containing a mineral filler and Part H (hardener) is a polymeric diphenylmethane diisocyanate (PMDI).

Uses

Accuflex is appropriate for both interior and exterior applications. Ideal for use in repairing holes, cracks and spalls in concrete surfaces. Repair broken edges of concrete and vertical holes in concrete by forming and pouring. Thinning allows the product to flow for self-leveling, crack filling and ease of spreading when used as a coating product. Thinning is also appropriate to prevent sag when coating on vertical surfaces. Adding recommended aggregate allows troweling for ramping and holding on slopes. Accuflex can be used in any thickness from more than one foot thick down to a feathered edge. Pothole repair in runways, roads and driveways can be accomplished and the area reopened to airplane or vehicle traffic within minutes.

Outstanding Features/Benefits

No VOC's and Low Odor
Superior Adhesion to Concrete & Other Surfaces
Tough Membrane that Withstands Abrasion,
Impact and Heavy Traffic

Unsurpassed Water Resistance
Exceptionally Low Chloride Permeability
Resistant to Many Chemicals and Acids

Limitations

Surface must be completely **dry** to allow adhesion. Concrete sealers and some paints may prevent adhesion.

High humidity or low temperatures will extend the cure time.

May lift underlying coatings, loose concrete, laitance or dirt...a clean, dry surface is necessary.

A light sanding/scuffing is recommended between coats.

Accuflex is UV resistant, but **not colorfast**. Lighter colors will not retain their original color when exposed to sunlight.

Physical Properties of Coating Mixture

Property	Value	ASTM
Density	1.3 g/cc	D1622
Hardness, Shore D	22 Shore D (250 mil unsupported)	D2240
Hardness, Shore D	75 Shore D (30 mil on concrete)	D2240
Ultimate Tensile Strength	425 psi	D2370
Elongation at Break	90%	D2370
Modulus of Elasticity	2500 psi	695
Compressive Strength	9000 psi	695
Taber Abrasion (CS-10, 1000 cycles)	0.1% wt. loss per 1000 cycles	D4060
Robinson Floor Test	Pass	C267
Water Absorption	0.010%	ICBO AC29
Moisture Permeability, wet cup	5.3 x 10 ⁻⁶ lbs. / hr. / ft.	D1653
Rapid Chloride Permeability	2 Coulombs	C1202
Adhesion to Concrete	>167 psi (concrete failure)	D4541
Adhesion to Steel	>400 psi (coating failure)	D4541
Gloss, 60°	25	D523
Coefficient of Linear Expansion	91.2 x 10 ⁻⁶ / °K	D5335

Typical Component Properties

Properties shown are for general information only. They are approximate values and are not a part of the product specification.

	Part H - Hardener	Part R - Resin
Net Weight (Pounds/Gallon)	10.3	12.0
Specific Gravity @ 77° f.	1.21	1.38
Viscosity @ 77° f.	200	3500

Processing Conditions

Mix Ratio (H:R) by volume - Flexible Formula	1:4 Specifics on Containers
Mix Ratio (H:R) by volume – Specialty Products	Specifics on Containers
Thinning (MEK/Toulol in 50/50 ratio recommended)	3% to 10% by weight or volume of mixed H&R
Thinning (Odorless Mineral Spirits, where odor is a concern)	3% to 5% by weight or volume of mixed H&R
Application Temperature	32°f. to 100°f. surface temperature (1)

(1) In cold temperatures, assure that there is no frost on the surface to be adhered to. In warm temperatures and bright sun, apply coatings when the temperature is falling to avoid out-gassing.

Approximate Drying/Curing Time at 70°f. and 50% Relative Humidity

Drying/curing time is affected by temperature and relative humidity. Roadway/Runway formula is preset for an accelerated cure time.

	Thin-Mil Coatings with Accuflexible Formula	Hole-Filling with Roadway/Runway Formula and Patch Product
Potlife (work time)	25-35 minutes	8-12 minutes
Tack Free	1-2 hours	15-20 minutes
Foot Traffic	4-8 hours	30-45 minutes
Heavy Traffic	24-36 hours	30-45 minutes
Between Coats	12 hours	Not Necessary

Approximate Coverage

Being a 100% solids product, theoretical wet mil and dry mil coverage figures are the same. However, coverage figures do not include material loss due to mixing, surface irregularities, or porosity. See the Accuflex Estimating Guide for additional information.

Thickness of Coating (1000 mils = 1")	Coverage per Gallon
30 mils	53.5 ft ²
20 mils	80.2 ft ²
10 mils	160.4 ft ²

Packaging

Available in 1-gallon, 5-gallon and 25-gallon kits. Specialty kits available for Roadway/Runway Pothole Repair and other applications.

Colors

The standard color is gray. Vanilla, tan, charcoal gray, black, brown, tile red, yellow, blue and green are available.

Storage and Handling

Part H (hardener) should be stored in tightly closed containers at temperatures of 40-80°f. Under these conditions, the product will have a shelf life of one year. Protect from freezing. Exposure to cold or heat for prolonged periods and exposure to moisture adversely affects the quality and shelf life of the product. The hardener may become cloudy or exhibit significant increases in viscosity if not stored properly.

Part R (resin) should be stored in tightly closed containers to prevent contamination with atmospheric moisture. Storage temperature should be 40-80°f. The product will have a shelf life of one year in unopened and properly stored containers. The resin will exhibit settling of the mineral filler upon prolonged storage, therefore the resin must be thoroughly agitated prior to use.

Health and Safety Information

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when working the Accuflex Resin and Hardener. Before working with these products, you must read and become familiar with the information on the hazards, handling and proper use of this material. The information is contained in the Material Safety Data Sheets (MSDS).

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