



The Chemical Company

PRODUCT DATA

9 09 67 23 **Resinous
Flooring**

SELBY™ 400 SERIES COATINGS

Pigmented epoxy floor and wall coatings

Description

Selby™ 400 Series Coatings are high-solids epoxy polymer systems. They are designed for use on both floors and walls. Selby™ 400 Series Coatings handle light to medium traffic. Alternate cure agents can be used to achieve various properties.

Yield

First coat: 160 ft²/gallon (4 m²/L)

Second coat: 260 ft²/gallon
(6.5 m²/L)

All coverage rates are approximate. Coverage rates will vary with the desired texture and the porosity of the concrete.

Packaging

1 gallon (3.79 L) cans

5 gallon (18.95 L) pails

55 gallon (208 L) drums available by special order

Color

12 standard colors (see the Selby™ Color Selector)

Custom colors are subject to minimum quantities, increased manufacturing lead-times, and premium cost. Contact Selby™ for further information.

Shelf Life

2 years when properly stored.

Storage

Store and transport in unopened containers in a clean, dry area. Protect from freezing.

Features

- High gloss
- Ability to choose various curing agents
- Pigmented coating
- High-build coating
- Economical pricing
- Very low VOC
- Available with Selbabioc added growth

Benefits

- Good light reflectivity
- To achieve desired application properties
- Many color options
- Excellent hiding power
- Lowers total floor installed cost
- No noxious solvent fumes
- Does not support fungus, bacteria, and yeast

Where to Use

APPLICATION

- Where superior abrasion resistance is required
- Used as grout coat and topcoat in the Selbaclad 425 System
- Use as a topcoat to provide an orange-peel finish
- Base resin used in multiple Selby™ systems
- Decorative commercial floors and walls
- Warehouses
- Clean rooms
- Industrial floors
- Cafeterias
- Laboratories

LOCATION

- Vertical and horizontal surfaces
- Interior

SUBSTRATE

- Over new and existing concrete surfaces and toppings

How to Apply

Selby™ systems are installed by approved contracting firms. Selby™ is a globally branded product line with industry synergies around the world.

The following is only a summary of the installation techniques used by Selby™ approved contractors. Refer to the Installation Guideline for more information.

Surface Preparation

1. Floors must be structurally sound and fully cured a minimum of 28 days. Test floor for vapor drive in accordance with ASTM D 4263.
2. Repair concrete as necessary.
3. Use a commercial degreaser to clean floors of oil, grease, and other bond-inhibiting materials.
4. Remove curing and parting compounds and other surface hardeners and floor coatings in accordance with the manufacturer's instructions.
5. Mechanical surface profiling is the method of surface preparation for both new and existing floors. Mechanically profile the floor to CSP 3 (approximating medium-grit sandpaper) as described by the International Concrete Repair Institute. Do not use acid etching for surface preparation. Do not use any method that will fracture the concrete.
6. Apply a 5 by 5 ft (1.52 by 1.52 m) test in an inconspicuous area that meets the owner's expectations for appearance, slip resistance, and performance.

SELBY

Technical Data

Composition

Selby™ 400 Series coatings are two-component high-solids epoxy polymers.

Typical Properties

PROPERTY	VALUE
Service temperature, ° F	180
VOC, lbs/gal	0.47 (57)

Test Data

PROPERTY	RESULTS	TEST METHODS
Adhesion, psi	100% concrete failure	ASTM C 882
Abrasion, mg loss; CS-17 Wheel, 1,000 g load, 1,000 cycles	0.087	ASTM D 4060
Moisture-vapor transmission, perms	0.4	ASTM E 96
Impact resistance	Passes	MIL-D-3134F
Hardness, Shore D	85	
Rate of burn	Self-extinguishing	ASTM D 635
Surface flammability		ASTM E 162
Flame spread index	9.29	
Smoke deposit, mg/ms	0.1	
NSB class	1	

Unless otherwise noted, test samples were cured 7 days at 73° F (23° C).

Chemical Resistance

Full chemical resistance is achieved after curing for 7 days. For resistance to a specific chemical compound, consult the Selby™ Chemical Resistance Guideline. Contact your BASF representative for more information.

Mixing

1. Properly mix the components for this product in the following ratios.

APPLICATION	COMPONENTS	MIX RATIO
Primer	A750 / B725	2 to 1
Base coat	A455 / B451	2 to 1
Topcoat	A455 / B451	2 to 1

Alternate cure agents can also be used with Selby™ 400 Series coatings

Selbaclad standard topcoat	A455 / B451	2 to 1
Selby™ OP floor coating, horizontal orange peel	A455 / B452-OP	2.5 to 1
Selbaglas, Selbaglaze, vertical-grade orange peel	A455 / B726	2.5 to 1

2. Mix each component separately before mixing together to ensure uniform consistency.
3. Combine Parts A and B in a suitably sized container. Use the proper ratios of A and B; scrape the sides of the containers to ensure a complete reaction.
4. Mix properly for 3 minutes with a slow-speed drill and Jiffy-style mixing paddle at 350 rpms. Keep the paddle below the surface to avoid entrapping air. Do not mix by hand.

Priming

Install the mixed primer to the properly prepared surface. Allow to cure.

Application

1. Install the epoxy base coat at 160 – 200 ft²/gallon (8 – 10 mils WFT). Allow 12 hours to cure before applying the second coat.
2. Apply the second coat at approximately 160 – 200 ft²/gallon (8 – 10 mils WFT). Allow the final floor to cure 24 hours before opening to traffic.

3. For a slip-resistant surface, broadcast and backroll various aggregates to achieve the desired results; contact BASF Technical Service for more information.

Drying Time

Primer: 12 – 24 hours

Second coat: 12 – 24 hours

Recoat window: 12 – 24 hours

All drying times assume 70° F (21° C); lower temperatures will extend drying times.

Maintenance

Regular cleaning and maintenance will prolong the life of all polymer flooring systems, enhance their appearance, and reduce any tendency to retain dirt. Follow the Selby™ Flooring Protection and Maintenance guide to maximize the life of the floor.

For Best Performance

- Where greater color or stability is required, use Selby™ N300CR.
- Precondition these products to 70° F (21° C) for 24 hours before using.
- Do not exceed a recoat window of 24 hours. If in doubt, call your BASF representative of flooring specialist.
- Where highly chemical-resistant epoxy coatings are desired; see the Selbachem product data sheet.
- Do not expose Selby™ 400 Series Coatings to any chemicals until fully cured (7 days).
- Use an effective moisture barrier for substrates on or below grade; if not present, contact your BASF representative for options.
- Install this product at a substrate temperature between 50 and 85° F (10 and 30° C).
- The architect and owner should address joint details with the contractor before the job starts.
- BASF representatives or flooring specialists are available to assist you in the selection of the proper flooring system. Call 1-888-243-6739 for in-house and field technical assistance.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health, Safety and Environmental

Read, understand and follow Material Safety Data Sheets and product labels for all components of this flooring system prior to use. The MSDS can be obtained by searching for them on www.BuildingSystems.BASF.com, e-mailing your request to basfbscst@basf.com or calling 800/433-9517. Use only as directed.

**For medical emergencies only,
call ChemTrec (1-800-424-9300).**

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Form No. 1025773 9/07
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