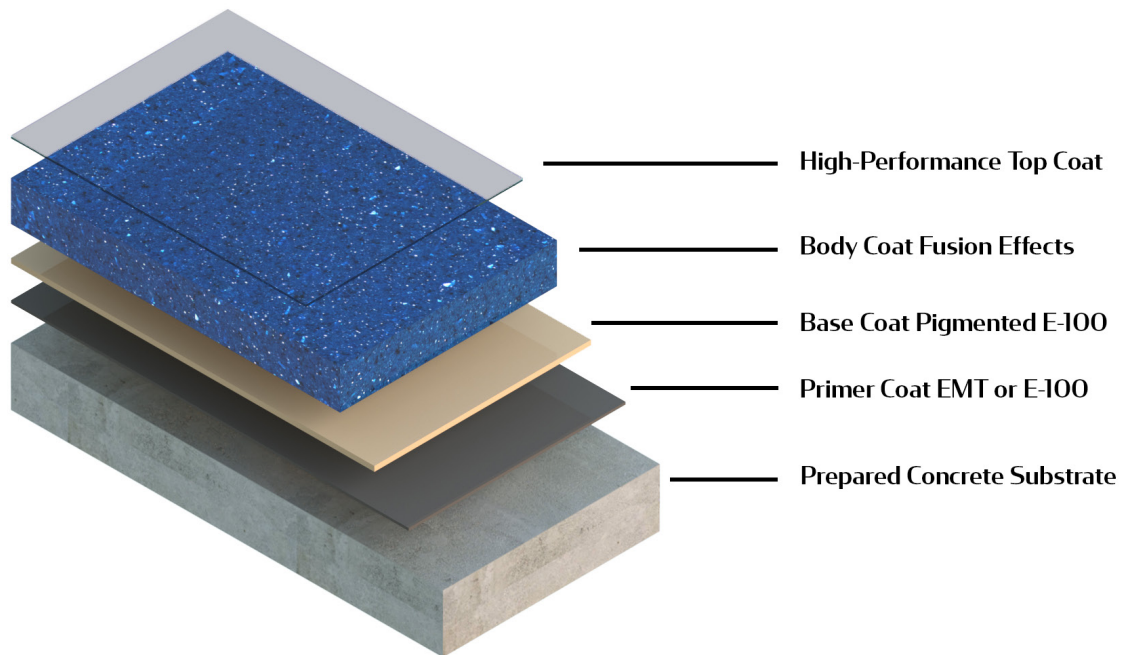


System Guide



Fusion effects

Color Infused High-Performance Floor Coating System



Fusion Effects is an aggregate-filled trowel-applied floor coating system which provides a seamless, decorative, sanitary, high-performance traffic surface. The Fusion Effects system installs faster than conventional epoxy-quartz coatings with fewer man hours. Repairs of minor damage to the surface, when needed, are virtually undetectable. Fusion Effects floor coating system offers a cost-effective option for commercial, industrial and residential floors with excellent durability and beautiful styling.



- TYPICAL USES

Fusion Effects floor coatings are ideally suited for commercial, industrial and residential applications:

- Restaurants and Retail Stores
- Commercial Offices and Corridors
- Universities and Schools
- Hospitals and Medical Facilities
- Nursing Homes
- Basements and Garages
- Restrooms

- PRODUCT ADVANTAGES

- Time-saving economical installation
- Range of standard and custom colors
- Seamless coating for easy cleaning
- High gloss or satin finishes
- Optional added slip resistance
- Nearly invisible repairs

- FUSION EFFECTS SYSTEM COMPONENTS

- EMT or E-100 Epoxy Primer
- E-100 Epoxy with E-Tint pigment Base Coat
- Fusion Effects three component blend
- Select urethane and polyaspartic top coats

- TOOLS REQUIRED FOR MIXING AND APPLICATION

- ½" heavy-duty drill
- Jiffy-style mixing paddle
- Fusion Effector notched rake
- Porcupine metal tine roller
- Stiff rubber squeegee
- Magic Trowel
- 3/8" nap lint-free rollers
- Floor buffer w/ sanding screens, 80 and 100 grit
- 5-gallon paint stick
- Margin trowel
- Personal Protective Equipment
- 5-Gallon Mixing Pails

- SURFACE PREPARATION

Follow instructions in the EMT and E-100 Technical Data Sheet for substrate preparation and moisture testing. If conditions exceed the limits of E-100 use EMT as the primer. Pre-fill static joints and cracks, gouges and other larger defects with Crack Filler or other suitable compound. Identified expansion joints, moving or not, must be honored through the system and may be filled with a flexible joint sealant after the coating has cured.



- MIXING AND APPLICATION INSTRUCTIONS

Priming, EMT: Refer to EMT Technical Data Sheet for complete instructions. In a clean mixing container blend one part A with one part B and mix for 4 to 5 minutes with a Jiffy-style mixer at about 300 RPM. Pour mixed product onto the floor in ribbons then spread at the desired coverage rate with a flat or notched squeegee and back roll. Use a film gauge to verify the thickness of the wet material. Proceed with base coat application within the listed recoat interval.

Priming, E-100: If EMT is not used, apply E-100 primer over bare concrete. In a clean mixing container blend two parts A with one part B and mix for three minutes using a Jiffy-style mixer. (Pigmenting the primer is optional.) Pour the mixed epoxy onto the prepared substrate in thin ribbons then use a stiff EPDM squeegee to spread at a rate of 400 square feet per gallon. Base Coat needs to be applied in approximately 1.5 hours; the epoxy primer should still be tacky.

Base Coat, Pigmented E-100: Base coat is mixed at a ratio of 2 parts A to 1 part B. If mixing less than full kits, measure the appropriate amount of part A prior to adding Pigment. Blend the selected E-Tint pigment into part A, following instructions in those products' Technical Data Sheets. Add part B to part A, and mix for three minutes using a Jiffy-style mixer. Pour the mixed epoxy onto the prepared substrate in ribbons then use a Magic Trowel or notched trowel to spread at a rate of 160 square feet per gallon (10 mils). Back roll with a lint-free roller to an even coat. Do not over-work the product. After the base coat is hard, abrade the surface with 80 grit screens under a slow rotational floor buffer. Thoroughly remove all dust by vacuum followed by lint-free cloths dampened with acetone.

Body Coat, Fusion Effects: Fusion Effects liquids are available in pre-measured packaging for use with one unit Part C. Mix in full kits only. Blend part A and part B of Fusion Effects in the part A pail, mechanically mix for three minutes using a Jiffy-style mixer. Transfer the mixed liquids to a clean five-gallon pail, then slowly add the entire pre-measured contents of the Fusion Effects part C bag to the liquid while mixing with a Jiffy-style mixer. Continue mixing until the components are thoroughly blended and lump free, approximately 2 minutes. Immediately pour the blended product onto the prepared base coat and spread with a Fusion Effector notched steel rake to a coverage rate of 65 square feet per kit. *A rubber notched squeegee will not properly spread Fusion Effects.* Follow with a metal tined "porcupine" roller to detrain air and smooth the coating. Work across the floor with additional kits while maintaining a wet edge. After the coating is hard, abrade the surface with 100 grit screens under a slow rotational floor buffer. Thoroughly remove all dust by vacuum followed by lint-free cloths dampened with acetone.



Top Coat, PS-90: in a clean mixing container blend one part A with one part B and mix for 2-3 minutes using a Jiffy-style mixer. Roll the mixed product on the floor using a roller tray and lint-free roller covers at a rate of 400 square feet per gallon. If a different top coat is selected, follow the Technical Data Sheet instructions for that product.

- **PATCHING AND REPAIRS**

While Fusion Effects is an extremely tough floor coating system damage can result from abuse. Cut out the affected area to expose bare, sound concrete. If the substrate is damaged, repair concrete damage with Crack Filler blended with clean, dry aggregate, following the product Technical Data Sheet instructions. If needed, blend and apply the pigmented Base Coat per the instructions above, allow to cure then abrade and clean the surface of all dust. For best results mix a full kit of Fusion Effects using the same lot of Part C from the original installation; color variances may occur in different lots. Apply blended Fusion Effects per Mixing and Application instructions above. Finish with the same top coat material used in the original installation. Final results of patch and repair work will depend on the extent of damage, the age of the coating, sheen and other environmental factors. It may be necessary to apply Floor Finish acrylic wax over the entire floor to better blend sheen and thus make any patch or repair less evident.

- **MAINTENANCE**

Use walk-off mats at entrances to keep the floor free of sand and abrasives to minimize scratching. Apply protective felt pads to furniture and fixtures prior to placing on the coating. Use a pH-balanced cleaner to remove light soils. A dilution of ammonia or vinegar and water will clean most contaminants off the surface. Spills should be cleaned promptly to prevent long term staining. Do not use citric-based cleaners.

- **FUSION EFFECTS SYSTEM TECHNICAL INFORMATION**

Cured Physical Properties:

- Compressive Strength – ASTM D695 – 11,800 psi
- Tensile Strength – ASTM D638 – 6,440 psi
- Flexural Strength – ASTM D790 – 9,700 psi
- Adhesion ASTM D-4541 -- >400 psi, concrete fail



- Hardness, Shore D – ASTM D2240 – 77
- Elongation, percent – ASTM D638 – 10-12
- Abrasion Resistance, 1000 gm load 1000 cycles – ASTM D4060 – 36 mg loss
- Water Resistance – Excellent
- Gloss Retention ASTM D-523 – 90+
- Coefficient of Friction – ASTM D2047 – 0.83

Chemical Resistance Chart (24 hour exposure*):

E = Excellent	F = Fair	G = Good	NR = Not Recommended
Acetic Acid (10%) – F Ammonia (28%) – E Brake Fluid – E Ethanol (100%) – G Gasoline – E Hydraulic Fluid – E	Hydrochloric Acid (10%) – E Hydrochloric Acid (25%) – F MEK – G Motor Oil – E Mustard – E Power Steering Fluid – E Skydrol – E	Sulfuric Acid (10%) – E Sulfuric Acid (50%) – NR Urine – E Vegetable Oil – E Water – E Wine – E Xylene – F	

* please to refer to alternate top coat TDS

- SLIP RESISTANCE DISCLAIMER

Notice: The Occupational Safety and Health Administration (OSHA) and the American Disabilities Act (ADA) have set enforceable standards for slip-fall protection on walking surfaces. The ADA standards are the more stringent and require a minimum coefficient of friction (CoF) on level walking surfaces of 0.6 and on ramped walking surfaces of 0.8. The system applicator / end user assumes all responsibility to provide a flooring system that meets all current safety standards. Neither Durável nor its selling agents will be responsible for any injury that may be incurred in a slip-fall accident. Furthermore, Durável recommends the use of slip-resistant aggregate in all coatings or floor systems that could possibly be exposed to wet conditions or become contaminated with oils, grease or other lubricants. Refer to the technical data sheet on acrylic wax floor finishes that meet requirements for ASTM D2047.

- LIMITATIONS

This product is not intended for public use and is intended for use by qualified contractors and installers with proper experience and training in the use of these products, and that have read the complete safety data sheet. Apply product only when substrate and ambient temperatures are within the accepted range and to substrates that are a minimum of five degrees above dew point and will remain so during product cure. During application and cure protect product from all contaminants and traffic.



- **SHELF LIFE**

Up to one year from original manufacture date when stored in its original, unopened container at room temperature.

- **WARRANTY**

Durável warrants our products to be of uniform quality, free from defects within manufacturing tolerances, and to conform to published specifications as of the date of sale. Durável has no control over the use of the product and therefore no warranty, expressed or implied, is made or can be made as to the application of the product or the results of use. The manufacturer's obligations shall be limited to refunding the purchase price or providing replacement product for material proven to be defective. Eighteen months after delivery of product all warranty and other duties with respect to the quality of the product delivered shall be presumed to have been conclusively satisfied, all liability therefore terminates, and no action for breach of any stated or implied duties may thereafter be commenced. The end user is responsible for determining the product's suitability and assumes all risks and liabilities. Under no circumstances will Durável be subject to or held liable for a consequential damage to anyone in excess of the purchase price of the product.

- **DISCLAIMER**

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Durável assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Durável assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety precautions are followed.

- **SAFETY AND DISPOSAL INSTRUCTIONS**

Read and understand the Safety Data Sheet instructions for each component before opening packaging. Disposal of product and packaging should be in accordance with applicable regional, national and local laws and regulations.