TECHNICAL DATA SHEET

SpecFlow

Premium Self-Leveling Underlayment

DESCRIPTION

SpecFlow is a cement-based, non-shrinking, self-leveling floor underlayment designed for interior use. This single-component product produces a smooth subfloor that can be featheredged and is compatible with carpet and tile adhesives. Just mix SpecFlow with water and pour or pump it; it seeks its own level to produce a smooth, flat, hard surface.

USES

SpecFlow can be used to level or smooth interior floors, and on new construction projects to correct rough, unfinished or uneven floors.

BENEFITS

- When properly mixed, produces a flowable underlayment with a flow time of 20 minutes at 70 °F (21 °C)
- Can be featheredged without fear of chipping or spalling
- Self-leveling; requires no troweling
- Can be pumped
- Produces a smooth, blemish-free surface requiring no grinding or sanding
- Compatible with subsequent adhesives for carpet, tile and similar coverings

APPLICATION

SpecFlow can be applied over many types of flooring and subfloor materials, such as wood, sound mat, vinyl adhesive and cutback. To ensure proper adhesion, perform a field test to confirm performance; in general, if SpecPrime achieves proper adhesion without peeling, a SpecFlow overlay will be acceptable. Proper substrate preparation is essential. Consult SpecChem for further information.

SpecFlow can be applied from featheredge up to 2" (51 mm), and up to 5" (127 mm) with the addition of pea gravel. SpecFlow develops a superior bond to the substrate and normally accepts foot traffic within 2–4 hours, depending on heat, humidity and other jobsite conditions.

Preparation: Follow all standard ACI recommendations. Remove all dirt, gas, oil, grease, asphalt, paint, curing compounds and all loose surface material. Concrete substrates should be profiled to a minimum CSP 3; shot blasting is preferred.

Priming: Prime all surfaces with SpecPrime at approximately 100–150 sq ft/gal (2.5–3.7 m^2/L). Apply with a brush or broom, NOT a roller. Coverage will depend on the condition and texture of the surface. Very porous surfaces will require two applications of primer. Allow SpecPrime to dry before applying SpecFlow.

Drying Time: SpecPrime – 3–4 hours at 70 °F (21 °C) and 50% relative humidity.

Mixing: Pour 4 qt (3.8 L) of water into a mixing container, then add one 50 lb (22.7 kg) bag of SpecFlow. Using a blending paddle on a heavy-duty drill (650 rpm), mix for 2–3 minutes until the mixture is smooth and lump-free. For pumping applications, mix for 1–2 minutes in the pump's mixing tank. Do not overwater or retemper. SpecFlow can be extended by adding 25 lb (11.3 kg) of clean 3/8" (10 mm) pea gravel per 50 lb (22.7 kg) of product: mix SpecFlow as described above, adding the aggregate during the last minute of mixing. If a finish coat is required, allow the first layer to harden, re-prime it with SpecPrime and apply a non-extended layer of SpecFlow.

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Installation: Pour SpecFlow over the substrate, spreading it with a long-handled spreader. SpecFlow can be pumped with an appropriately sized grout pump; for more information on grout pumps and pumping, contact SpecChem. No troweling is necessary: SpecFlow levels itself during the first 20 minutes at 70 °F (21 °C) and accepts foot traffic in 2–4 hours, depending on jobsite conditions. Wearing cleated shoes is recommended when installing SpecFlow. Under normal conditions, floor coverings can be installed in 16–24 hours, depending on jobsite conditions. All flooring adhesives compatible with concrete may be used on SpecFlow.

Do not install SpecFlow when the average daily temperature is below 40 °F (4 °C). In hot weather, work quickly and use cold mixing water, as working time will decrease.

Application – Wood Floors

SpecFlow can be applied over wood floors; however, the following substrate preparation is essential.

Surface Preparation: Wood subfloors must be solid hardwood flooring a minimum of 3/4" (19 mm) thick. The wood floor must be solid and securely fastened to provide a rigid base with no flexing; renail any areas that show movement. The wood floor must also be completely clean and free of wax, dust, grease and any contaminants that could interfere with adhesion.

Priming: Wood subfloors also require priming with SpecPrime; follow all priming instructions on the SpecPrime technical data sheet. Porous wood floors may require a second application of SpecPrime; allow the primer to dry between applications. Once the SpecPrime is applied, install galvanized expanded metal lath, stapling every 6" (150 mm) and overlapping adjacent pieces by approximately 1" (25 mm). The lath can be installed while the primer is drying, but do not walk or stand on wet primer. Allow the primer to dry thoroughly.

It is the contractor's responsibility to ensure that the subfloor is thoroughly clean, rigid and shows no flexibility before applying SpecFlow.

TECHNICAL DATA INFORMATION

Set Time at 70 °F (ASTM C266)

Initial set ..... 50 min

Final set..... 80 min

Age	Compressive (C109)	Bond w/ SpecPrime (C882 mod.)	Flexural (C348)
1 day	3,000 (20.7)	–	–
7 days	4,000 (27.6)	–	–
14 days	–	1,000 (6.9)	–
28 days	5,000 (34.5)	–	1,150 (7.9)

Values in psi (MPa).

Yield per bag ..... 0.50 cu ft (14.2 L)

Density..... 125 lb/cu ft (2,002 kg/m^3)

PACKAGING

50 lb (22.7 kg) bag

Coverage: approximately 24 sq ft at 1/4" (2.2 m^2 at 6 mm).

CLEANING

Tools, pumps and equipment may be cleaned with water before SpecFlow hardens.

SHELF LIFE

Shelf life of unopened bags stored in a dry facility is 12 months. Excessive temperature differential and/or high humidity can shorten the shelf life. Store in a cool, dry area away from direct sunlight.

LIMITATIONS

Do not allow cured SpecFlow to freeze. In adverse temperatures, follow ACI recommendations for hot/cold weather concreting. Use only potable water for mixing.

SpecFlow is adhered with SpecPrime, a rewettable primer; therefore, do not use it in areas with frequent water contact or a continuously wet environment. Concrete should be free of hydrostatic pressure, vapor transmission rates should comply with the finish

flooring manufacturer's requirements, and concrete should have a minimum compressive strength of 3,000 psi (20.7 MPa).

A minimum surface and ambient temperature of 45 °F (7 °C) and rising is required at the time of application. For optimum results, condition material to 65–85 °F (18–29 °C).

Caution: Contains cement and sand. Cement will cause irritation. Avoid contact. A dust respirator, safety goggles and rubber gloves are recommended. Avoid prolonged contact with clothing. In case of contact with eyes, immediately flush with water for at least 15 minutes and get prompt medical attention. Do not wear contact lenses when working with this product. DO NOT take internally. Keep out of reach of children.

Avoid hazards by following all precautions found in the Safety Data Sheet (SDS), product labels and technical literature. Please read this information prior to using the product.

WARRANTY

NOTICE – READ CAREFULLY

CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.

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