



59

FLEX-FLO SELF-LEVELING UNDERLAYMENT

BASIC USES

For leveling and repairing concrete, exterior grade plywood surfaces, or existing floor surfaces such as vinyl composition tile*, cutback adhesive-coated floor surfaces*, Portland cement-based terrazzo, or ceramic tile. Produces a smooth, level surface, for installation of all types of ceramic or stone tile, vinyl composition tile or sheet goods, carpet, or hardwood.

* Check with Flextile Ltd. as to acceptability of specific surfaces.

COMPOSITION AND MATERIALS

A polymer modified, cementitious self-leveling underlayment, which cures rapidly to provide a smooth level surface.

FEATURES

- Excellent adhesion to new concrete and plywood surfaces without priming.
- Saves time - finds its own level without troweling.
- Easy to use - just mix with water and apply.
- Fast curing - flooring can be installed within 2 - 4 hours.
- Can be applied in thickness of feather-edge to 12 mm (1/2").
- Non-Flammable.

LIMITATIONS

Not intended for use as an exposed traffic surface. Not intended for exterior use. Do not use over particleboard, Masonite, chipboard, gypsum-based products, or similar unstable materials. Do not use over cushioned resilient flooring, rubber, plastic, paint, asphalt, or plywood surfaces in wet areas. Do not use over single layer plywood floors. Use only on surfaces, which are maintained at a temperature above 10°C (50°F) and below 35°C (95°F) during application and for at least 72 hours after application.

LEED Points Contribution

MR Credit 5, Regional Materials*
IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants
IEQ Credit 4.3, Low-Emitting Materials – Flooring Systems
**May be eligible*

LEED Points

Up to 2 points

1 point

1 point

TECHNICAL DATA

There is no specific ANSI product designation for self-leveling underlayments.

Typical Physical Properties

Pot Life	40 minutes
Flow Time	20 - 30 minutes
Self-Healing Time	10 - 20 minutes
Initial Set	2 - 4 hours*
Final Set	4 - 6 hours
Final Cure	28 days
*depending on porosity of surface	

Compressive Strength (ASTM C-109)

@1 day	11.7 MPa (1700 psi)
@7 days	19.3 MPa (2800 psi)
@28 days	33.1 MPa (4800 psi)
Specific Gravity (dry)	1.78
Specific Gravity (wet)	1.89
pH (paste)	approx. 12
Cleanability :	with water before material dries
Shelf Life:	6 months from production date when stored in dry, heated conditions

Approx. coverage per 50 lb bag:

4.65 M² (50 Ft²) @ 3mm (1/8") thickness

- Coverages given are for estimating purposes only. Actual coverages may vary depending on job site conditions and installation techniques used.

INSTALLATION*PREPARATORY WORK*

Surfaces must be structurally sound, well cured, dry and free of grease, oil, dirt, paint, curing compounds or sealers, or other foreign matter. Damp mop or vacuum to remove dust or surface debris. Where necessary, scarify or sand to remove dead or scaled concrete, or other contaminants, which could affect bond.

Concrete surfaces should have a wood float or steel trowel with broom finish. Roughen smooth concrete surfaces. Plywood floors should be designed for maximum deflection of 1/360 of span. This normally requires an overlay of 16 mm (5/8") exterior grade plywood over 25 mm (1") nominal boards or 16 mm (5/8") plywood when on joists 40 cm (16") O.C. Fasten overlay with screw type nails and glue where possible. Leave a 3 mm - 6 mm (1/8"-1/4") gap between sheets of overlay and next to all vertical surfaces to allow for expansion. Priming is not required on good quality concrete or exterior grade plywood. Priming is recommended on porous concrete, old cutback adhesive, properly cleaned vinyl composition tile, terrazzo, or existing ceramic tile. Prime these areas with Flextile 4040 Primer SL for Concrete.

APPLICATION

Add approximately 5.25 - 5.75 liters (1.4 - 1.5 US gallons) of cool, clean water to a clean mixing container. While mixing, slowly add 22.7 kg (50 lb) bag of 59 Flex-Flo Self-Leveling Underlayment powder. Avoid using high-speed mixers. Mix until smooth and lump free.

Pour the mixed material immediately on the floor surface and spread with a straight edge or squeegee. Material should be mixed to permit a continuous supply to the mechanics spreading the material. On larger applications, this can most easily be accomplished using continuous mixing and pumping equipment. DO NOT overwork the material, and supply sufficient material to cover high spots. DO NOT cover existing expansion or control joints.

CURING

DO NOT walk over material until it has been allowed to cure. Foot traffic may be allowed, and floor coverings installed after 2 - 4 hours. Protect from direct sunlight, moisture, excessive heat or draft during cure.

CAUTION

Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid extended contact with skin where possible and wash exposed skin areas promptly with water. If any cement or cement mixtures get into the eye, rinse immediately and repeatedly with water and get prompt medical attention. Keep out of reach of children.

SAFETY

Refer to Flextile Material Safety Data Sheet for detailed health and safety information.

AVAILABILITY AND COSTS

Flextile 59 Flex-Flo Self-Leveling Underlayment is available from Flextile Ltd. and its distributors in 22.7 kg (50 lb) bags. Cost: Data supplied upon request.

WARRANTY

Flextile warrants that this product is of merchantable quality and is suitable for the purpose for which it is intended. Flextile's liability under this warranty shall be limited to replacement of its product found to be defective or, at its option, a refund of the purchase price.

MAINTENANCE

No maintenance is required except where damages result from unforeseen circumstances. Repair procedures shall be directed by Flextile or its distributors.

TECHNICAL SERVICES

Flextile maintains a well-equipped laboratory able to test its products in conjunction with the products with which they are used. Technical assistance for use of Flextile products is available upon request.

RELATED REFERENCES

Current editions of TTMAC 0930 00 & TCNA Ceramic Tile Installation Manuals.

Mar 29, 2011 (v.1.)

