texrite™ by cemix

PRODUCT INFORMATION

flowrite 250 fs

Self-leveling, fast setting, pourable cement based underlayment

FLOWRITE 250 FS is a fast setting, portland cement based, polymer modified "self-leveling underlayment" for applications from featheredge to 1" thick. With the addition of water only, it becomes a free-flowing liquid. The resulting finish is a smooth and durable surface that is acceptable for the installation of all floor coverings. **FLOWRITE 250 FS** has an accelerated hydraulic cement blend to reduce dry time and shorten wait time before covering with carpet, resilient and hardwoods flooring. It can also be used during cooler and/or more humid conditions for more rapid hardening and curing.

TEXTURE:
Powder consisting of portland cement, graded sand, organic and inorganic chemicals.

COLORS:
Gray.

PACKAGING:
50lb (22.7 kg) bag.

BASIC USE:

> **FLOWRITE 250 FS** needs to be mixed with water only; it will flatten or level concrete slabs, mortar beds or plywood surfaces before the application of ceramic tile, stone, wood, carpet or resilient floor coverings. Use for installation were dry time or wait time needs to be reduced based on increased thickness of the pour application, cooler/humid weather conditions or reduced job time before application of the finished flooring.

AREA OF USE:

It can also be used in rehabilitation projects where old terrazzo, ceramic tile, plywood floors and steel decking must be made ready for new flat, level, floor coverings. **FLOWRITE 250 FS** may be used in interior applications to fill or correct tilted, wavy uneven floors receiving decorative floor coverings. Use it to resurface severely scarred, rough concrete or use to fill isolated low spots or ponding depression in floor areas. Pour the underlayment to correct the surface back to level.

BENEFITS:

> **FLOWRITE 250 FS** will produce a faster, truer, level, lower labor time and effort surface over a conventional screed and trowel mortar method.
> Use of **FLOWRITE 250 FS** application.
> **FLOWRITE 250 FS** hardens quickly by hydration. Surfaces can be walked on in 2 - 4 hours and can have floor coverings installed within 12 - 24 hours.
> When cured, the finished underlayment will have similar properties to concrete.

LIMITATIONS:

> **FLOWRITE 250 FS** must not be used over gypsum-based surfaces, old adhesive residue, paints, over-spray paint, gypsum residue, particleboard, stripwood, plastics, vinyl, elastomeric membranes and epoxy or urethane floor coverings.
> **FLOWRITE 250 FS** is for interior use only.
> Use in temperatures 40 - 100 ºF (4- 38 ºC) and do not allow mortar to freeze for the first 72 hours.
> All applications require use of Texrite's Bonding Primer 500.
> Do not use **FLOWRITE 250 FS** as a wearing surface or over substrates subject to hydrostatic pressure or prone to water saturation/soaking.
> Do not apply over elastomeric or flexible membrane.

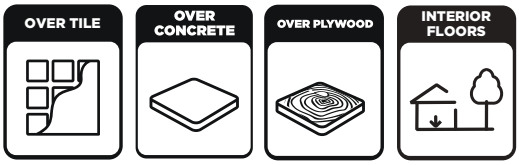
TECHNICAL DATA

Flowing time @ 72 ºF	15 minutes
Initial set @ 72 ºF	15-20 minutes
Final set @ 72 ºF	60-90 minutes
Compressive strength (psi) ASTM C109	
1 hour	> 850
2 hours	> 1250
4 hours	> 1700
24 hours	> 2300
28 days	4200
Flexural strength (psi) ASTM C348 28 days	1000
Tensile strength (psi) ASTM C109 28 days	500

INSTALLATION:

PREPARATORY WORK

All surfaces must be clean, dry, structurally sound, rigid, non-flexing and conform to proper building codes. The surface must be 40 - 90 ºF (4-32 ºC) during application and initial cure (72 hours). Remove all compounds, asphalt, cut back residue, old adhesives and other foreign matter. Failure to remove these items causes bond loss and voids product warranty. Roughen smooth, slick, steel troweled concrete. Remove all foreign matter and/or roughen surface by mechanical scarified or shot-blasted to prepare surface. Test surface for bond



cleanliness by applying multiple droplets of clean water to the bond surface and observe absorption. These water droplets should quickly absorb and darken the surface to indicate a clean and bondable surface. If water droplets remain beaded or unabsorbed or partially absorbed, then the surface is not ready for application and contaminate removal will be required.

CEMENTITIOUS SUBSTRATES

CONCRETE FLOORS, SLABS OR MORTAR BED

Concrete shall be completely exposed, fully cured, free of moisture and hydrostatic pressure (moisture test should be done prior to application). Chip, sandblast or hammer out any spalled unsound concrete. Remove any resulting dust. Next, prime the clean surface with Texrite's Bonding Primer 500 diluted 1:1 with water. Evenly paint brush, paint roller or broom wet primer to surface. On porous concrete or rough texture surfaces, two primer coats may be required. Allow Texrite's Bonding Primer 500 to dry clean with no wet spots or become tacky before applying **FLOWRITE 250 FS**. Reapply more primer if first application is allowed to dry past 24 hours.

PLYWOOD FLOORS

Floor, framing system and subfloor panels in wood construction shall meet IRC for residential building codes or IBC for commercial building codes. Plywood surface shall be of exterior (EGP) grade and be secured rigid, non-flexing with substrate base to support product weight and occupant loading/movement. Allow an expansion gap of 3/16" to 1/4" (5 - 6 mm) between individual sheets of plywood. Fill these gaps with flexible caulking. Surface must be primed using BONDING PRIMER 500, diluted 1 to 1 with water. After the primer has dried, nail or staple an approved thin, plastic lath or galvanized, corrosion-resistant coated metal lath to the floor. Next mix and pour the **FLOWRITE 250 FS** according to instructions and apply at 3/16" to 1" (5-25 mm) thickness (ratio 1 water : 2 primer : 3 powder, by volume). Apply this slurry-primer to the substrate by paint brush or paint roller and let it dry to touch on surface. Apply to surface that can be covered/bonded the same day. If allowed to dry 24 hours, re-apply slurry-primer coat. Next mix and install **FLOWRITE 250 FS** as normal.

EXPANSION JOINTS

Expansion joints, contraction joints (saw cuts), construction joints (cold joints) and structural cracks shall never be bridged over with **FLOWRITE 250 FS**. They should continue through the **FLOWRITE 250 FS** and subsequent tile work. Provide movement joints every 20 - 25 ft (6 -7.6 m) in each direction. Where floor is exposed to direct sunlight, provide movement joints every 8 - 12 ft (2.4 - 3.6 m in each direction). Install perimeter movement joints where **FLOWRITE 250 FS** abuts restraining surfaces such as perimeter walls, dissimilar floors, curbs, columns and pipes. An architect or stuctural engineer must specify expansion joints and show location and details on drawing.

MIXING

Mix one 50 lb (22.7 kg) bag of **FLOWRITE 250 FS** with 5 quarts (4.7 liters) of clean water. An exact measurement of water is required. Extra water or over-watering voids the product's warranty. Visual signs of over-watering include unwanted surface color changes, cracking, curling and/or delamination. Measure or reduce water content to prevent occurrence. Add the powder to the measured liquid and mix with a 650 RPM power mixer, open loop mixing wand until a lump-free mix is obtained. Best mixing method is 2 bags of **FLOWRITE 250 FS** at a time; pour this on the floor, then mix the next 2 bag batch mix as needed to complete an area. For large scale pumping of **FLOWRITE 250 FS**, contact Texrite's technical department.

APPLICATION

Pour **FLOWRITE 250 FS** in a "corner" or "deepest fill" area and work outward using an adjustable mortar spreader. Spiked shoes will be ecessary to walk in the fresh wet mortar. Use finish blade or steel trowel for extra thin tapering. **FLOWRITE 250 FS** will be free-flowing liquid or flowable state for approximately 12 - 15 minutes. Ceramic tile installed with a Texrite's dry-set mortar system may be installed on **FLOWRITE 250 FS** when the mortar is firm enough to walk on. If **FLOWRITE 250 FS** is to be applied in multiple pours, allow it to cure 24 hours and re-apply Texrite's Bonding Primer to each previous layer prior to application of subsequent pours. When multiple pours are to be used to achieve an entire floor thickness of 2" (5 mm) or greater, it is recommended that a mortar bed is detailed by an architect.

APPLICATIONS IN LARGE AREAS

Prime all areas and allow to be dry to touch, using foam insulation tape as temporary barrier/dam to create smaller workable zones or sectors.Then mix and apply **FLOWRITE 250 FS** in narrow single zones or sectors across the entire area. Use spreader tool to drag any excess **FLOWRITE 250 FS** to adjacent sector where the next zone will be poured; establishing the required thickness as work progresses. Keep repeating this procedure until each zone has been leveled. Always pour freshly mixed **FLOWRITE 250 FS** into the wet edge of a previous pour that is still in the flowable state. This procedure allows sequential poured sections to blend together. Do not adjust tiles in mortar after they have been set past 10-15 minutes. Do not abut tile to perimeter walls or restraining surfaces. Leave a minimum spacing of 1/4"(6 mm), void of any setting material or tile, to allow for expansion. Fill the 1/4" (6 mm) spacing with caulk or sealant if exposed. NOTE: As a practical test, it is recommended that three or more separate twelve inch square areas of tile be bonded to the properly prepared surface with the actual tile and bonding materials that will be used on the finished installation. These should be allowed to cure for 3-7 days and then removed with a hammer and chisel. At this point, one can determine if adequate bond has been obtained or if a problem exists.

COVERAGE

50 lb (22.7 kg) bag covers approximately 50 - 55 sq ft (4.6 - 5.1 m2) at 1/8" (3 mm) thickness. 1 gal (3.7 liters) Texrite's Bonding Primer 500, diluted per direction covers 250 - 300 sq ft (23 - 28 m2) of smooth concrete. Rough textures or absorptive surfaces will reduce primer coverage.

CLEANING

Water is all that is needed to remove uncured product.

CURING

A minimum cure is 12 - 24 hours depending on ambient temperatures. Do not allow mortar to freeze for the first 72 hrs. Like concrete, the strength increases significantly with age during the first 28 days. Always check for permissible moisture levels of vinyl, carpet, rubber, wood, flooring, etc. per flooring manufacturer's requirements before covering over this product.

STORAGE LIFE:

One year if kept dry in sealed bag.

SAFETY - CAUTION: May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains portland cement. If any cement or cement mixtures get into eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water.

KEEP OUT OF REACH OF CHILDREN

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