

LEVEL-RIGHT®
Self-Leveling Floor Underlayments

1. Product Name

Level-Right®, Level-Right® FS-10 and Level-Right® PLUS Self-Leveling Underlayments; Level-Right® WearTop™ Topping

2. Manufacturer

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3. Product Description

BASIC USE

Level-Right® Self-Leveling Underlayments are designed for thin-capping interior concrete or wood subfloors, and are appropriate for both problem floors in large projects and for small repair jobs. Level-Right WearTop™ is a self-leveling topping for concrete designed to provide a strong, even wear surface.

COMPOSITION & MATERIALS

Level-Right underlayments and topping are preblended, high-strength hydraulic cement products. See Table 1 for specific product composition details.

TYPES

Level-Right®

Level-Right is a high-strength, cementitious underlayment that pours over concrete, corrugated steel decking, old floor goods and adhesives to provide a smooth, level surface. Level-Right is specified for installation depths of 0" - 3" (0 - 76 mm). It contains recycled materials, has extremely low volatile organic compound (VOC) emissions and meets the GREENGUARD standard for low emitting products. Use of Level-Right may contribute toward earning points for LEED credits. Level-Right is also GREENGUARD Children and SchoolsSM Certified. See www.maxxoncorporation.com.

Level-Right® FS-10

Level-Right FS-10 is a Portland cement based, polymer modified, poured floor underlayment

designed for thin-topping over concrete. It levels, smoothes and repairs in 1 pour at installation depths from 0" - 3/8" (0 - 9.5 mm). It also sets and dries quickly, allowing floor goods placement soon after application.

Level-Right FS-10 is appropriate for large or small jobs. Product can be pumped in to save time, labor and cleanup when working with large flooring projects. For smaller patching and filling jobs, Level-Right FS-10 can be barrel-mixed with water and poured in place.

Level-Right® PLUS

Level-Right PLUS is a Portland cement based, polymer modified, poured floor underlayment designed for thin- or thick-topping over concrete at installation depths of 0" - 1 1/2" (0 - 38 mm). Level-Right PLUS installs in 1 pour, has a high set strength and dries quickly, allowing floor goods placement soon after application.

Level-Right® WearTop

Level-Right WearTop is a self-leveling, Portland cement, calcium aluminate-based topping designed for retrofitting old or damaged concrete floors. It is pumped in and quickly fills dips, voids and cracks to create a flat, hard wear surface. WearTop is offered standard in gray and is also available in white for staining and integral coloring.

BENEFITS

- Levels entire floors or transition areas, from featheredge to deep fill
- For use in new construction or renovation, large projects or small repair jobs
- Eliminates hand troweling
- Quick setting - Ready for foot traffic within 2 - 4 hours
- Water resistant with compressive strengths to 7200 psi (50 MPa)

LIMITATIONS

Level-Right, Level-Right FS-10 and Level-Right PLUS are self-leveling interior underlayments for thin-capping or topping concrete or wood subfloors and are not for use as wear surfaces. Level-Right WearTop should be applied for projects requiring a concrete wear surface.

4. Technical Data

APPLICABLE STANDARDS

ASTM International

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Specimens)
- ASTM C190 Standard Method of Test for Tensile Strength of Hydraulic Cement Mortars



Level-Right/PLUS/FS-10 smoothes and levels old, rough, pitted floors

- ASTM C348 Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars
- ASTM C666 Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing
- ASTM C882 Standard Test Method for Bond Strength of Epoxy-Resin Systems Used With Concrete By Slant Shear
- ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials

APPROVALS

ICC Evaluation Service, Inc. (ICC-ES) - ICC-ES Legacy Report ER-3433 for Level-Right

Underwriters Laboratories, Inc. (UL) (see Table 2 for approved design numbers for Level-Right)

PHYSICAL PROPERTIES

See Table 1 for information concerning composition and physical properties of Level-Right hydraulic cement underlayments and topping.

FIRE PERFORMANCE

Level-Right hydraulic cement underlayments and topping have the following surface burning characteristics (ASTM E84):

- Flamespread - 0
- Fuel contribution - 0
- Smoke development - 0

5. Installation

Installation of Level-Right cementitious floor underlayment products and topping must be completed by a manufacturer-authorized applicator using approved mixing and pumping equipment.

Generalized Level-Right installation instructions

TABLE 1 COMPOSITION & MATERIALS, PHYSICAL PROPERTIES

Product	Level-Right Underlayment	Level-Right FS-10 Underlayment	Level-Right PLUS Underlayment	Level-Right WearTop Topping
Uses	Thin-capping Topping corrugated steel deck Green building material	Thin-capping Levels floors/transition areas Resurfacing old/damaged floors	Thin-capping Levels floors/transition areas Resurfacing old/damaged floors	Resurfacing
Environmental considerations	GREENGUARD Children and Schools Certified	-	-	-
Subfloor types	Concrete, old floor goods, adhesive residue, wood subfloors	Concrete	Concrete	Concrete
Set time	Foot traffic 2 - 4 hours	Foot traffic 2 - 4 hours	Foot traffic 2 - 4 hours	Foot traffic 2 hours
Installation depth	0" - 3" (0 - 76 mm)	0" - 3/8" (0 - 9.5 mm)	0" - 1 1/2" (0 - 38 mm)	0" - 1" (25 mm)
Compressive strength (modified ASTM C109)	To 5500 psi (38 MPa)	To 7200 psi (50 MPa)	To 7000 psi (48 MPa)	To 6200 psi (43 MPa)
Flexural strength (ASTM C348)	1260 psi (8.7 MPa)	-	1250 psi (8.6 MPa)	1440 psi (10 MPa)
Dry density	Approx. 125 pcf (2003 kg/m ³)	Approx. 120 - 125 pcf (1922 - 2003 kg/m ³)	Approx. 120 - 125 pcf (1922 - 2003 kg/m ³)	122 pcf (1920 kg/m ³)
Tensile strength (ASTM C190)	720 psi (5 MPa)	1200 psi (8.3 MPa)	810 psi (6 MPa)	720 psi (5 MPa)
Freeze/thaw resistance (ASTM C666)	-	90% ± 3%	-	-
Shear bond strength	-	To 3160 psi (21.7 MPa)	-	-

are included below. Specifications for the following specific applications are available from the manufacturer at www.maxxoncorporation.com:

- Topping concrete floors
- Topping concrete floors in gymnasiums
- Over extruded or expanded polystyrene foam
- Capping lightweight concrete
- Capping concrete floors
- Over vinyl asbestos tile
- Over precast concrete slabs
- Over terrazzo flooring
- Over ceramic, quarry and marble tile

- Over mortar bed and thin-set where tile has been removed
- Over wood subfloor
- Topping corrugated steel deck over light gauge steel framing
- Topping concrete floors in nursing homes and hospitals
- Over Maxxon Moistop for old wood frame construction
- Over wood subfloors using reinforcement
- Deep fill for topping concrete floors

PREPARATORY WORK

Deliver products in manufacturer's original, unopened, undamaged containers with identification labels intact. Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer. Remove any damaged or deteriorated material from the jobsite.

Before, during and after cementitious underlayment and topping installation, the building



WearTop pouring over damaged concrete



WearTop's new, smooth wear surface



Level-Right/PLUS/FS-10 levels instantly, filling in voids, dips and cracks, then quickly begins to set interior must be enclosed and maintained at the temperature specified by the manufacturer in accordance with the requirements of the specific application. Do not begin floor underlayment or topping application until the building is completely enclosed by roof, windows, doors and other fenestration. Install floor underlayment or topping after drywall installation, unless the finish requirements call for partition installation after pouring underlayment.

Verify that site conditions are acceptable for installation. Do not proceed with installation until unacceptable conditions are corrected. Ensure that the subfloor is structurally sound. Clean the subfloor to remove mud, oil, grease and other contaminants before applying underlayment. Fill cracks and voids with a

quick-setting caulk or patching material where product leakage could occur. Prime concrete subfloor using a primer approved by the manufacturer. Apply multiple coats of primer as necessary according to the porosity of the concrete. Allow joints to continue through cementitious underlayment at the same width.

METHODS

Level-Right mix proportions and methods must be in strict accordance with manufacturer recommendations. Mix water must be potable and free from impurities.

Install the underlayment or topping to the required depth, based on the product and application, and in accordance with manufacturer recommendations. Spread to achieve a smooth surface.

Provide continuous ventilation and adequate heat to remove moisture from the area until the underlayment or topping sets. Provide mechanical ventilation as necessary to enhance the drying process.

Maxxon offers an installation brochure for flooring materials. Refer to these guidelines for more information. The procedures described are to be used as guidelines only and do not constitute a warranty. Where floor goods manufacturers require special adhesive or installation systems, their requirements supersede these requirements.

PRECAUTIONS

During construction, place temporary wood planking over the underlayment or topping if it will be subject to heavy wheeled or concentrated loads. Protect installed products until the project is complete.

BUILDING CODES

Installation must comply with the requirements

of all applicable local, state and federal code jurisdictions.

6. Availability & Cost

AVAILABILITY

Level-Right products are available from certified dealers and regional representatives throughout the U.S., Canada and worldwide. Contact Maxxon Corporation for availability information in specific localities.

COST

Cost information may be obtained from a local Maxxon dealer.

7. Warranty

Complete warranty terms and conditions are available from the manufacturer. For details, consult Maxxon Corporation.

8. Maintenance

Some Wearthop applications may require maintenance. Consult with a Maxxon dealer.

9. Technical Services

Technical assistance, including more detailed information, product literature, test results, project lists, assistance in preparing project specifications and arrangements for application supervision, is available by contacting Maxxon Corporation.

10. Filing Systems

- SmartBuilding Index (SBI)
- ARCAT
- Sweet's Catalog Files
- GREENGUARD Environmental Institute
- Additional product information is available from the manufacturer upon request.

TABLE 2 APPROVED DESIGN NUMBERS

UL Design Numbers											
G524	G560	G561	G563	G566	G574	J917	J919	J920	J924	J927	J931
J957	J958	J966	J994	L004	L005	L006	L201	L202	L206	L208	L209
L210	L211	L212	L501	L502	L503	L504	L505	L506	L507	L508	L509
L510	L511	L512	L513	L514	L515	L516	L517	L518	L519	L520	L522
L523	L524	L525	L526	L527	L528	L529	L530	L533	L534	L535	L536
L537	L538	L539	L540	L541	L542	L543	L544	L545	L546	L547	L548
L549	L551	L552	L555	L556	L557	L558	L559	L560	L562	L563	L564
L569	L573	L574	L579	L581	L583	L585	L588	L589	L592	L593	L594
L599	M500										
ULC Design Numbers											
L003	L201	L511	L512	M500	M501	M503	M513	M514	M517		

