



EZ Level® Premium Self-Leveling Underlayment

1. PRODUCT NAME

TEC® EZ Level® Premium Self-Leveling Underlayment (323)

2. MANUFACTURER

H.B. Fuller Construction Products Inc.
1105 South Frontenac Street
Aurora, IL 60504-6451 U.S.A.
800.552.6225 Office
800.832.9023 Technical Support
800.952.2368 Fax
tecspecialty.com

3. DESCRIPTION

EZ Level Premium Self-Leveling Underlayment is a cement-based, pourable, pumpable and free flowing underlayment. It is designed for smoothing and leveling most subfloors and is particularly well-suited for large areas. The resulting smooth finish is ideal for the installation of all types of floor covering, including ceramic or natural stone tile, carpet, resilient, laminate flooring and wood flooring. For interior dry area use only.

Key Features and Benefits

- Single coat application
- For featheredge up to 1½" (38 mm) depth, up to 5" (12 cm) with proper aggregate
- Can be applied directly over green concrete
- Fast setting—dries to walkable surface in 2 to 4 hours, with flooring installation in 12 to 16 hours
- Contributes to LEED® project points
- High compressive strengths
- Pour or pump application
- Superior mixing and flowing characteristics
- Self-drying formula
- Zero VOC
- Contains 10% pre-consumer recycled material

Packaging

50 lb. moisture-resistant bags (22.68 kg)

Product #15035125

Coverage

Coverages shown are approximate. Actual coverages may vary according to substrate conditions and thickness of applications.

Application Depth	Approximate Weight in Pounds per Square Foot (kg/m²)	Approximate Coverage per 50 lbs. (22.68 kg)
⅛" (3 mm)	1.1-1.3 (5.4-6.3)	48-54 sq.ft. (4.4-5 m²)
¼" (6 mm)	2.2-2.6 (10.7-12.7)	24-28 sq.ft. (2.2-2.6 m²)
½" (12 mm)	4.6-5.3 (22.5-25.9)	12-14 sq.ft. (1.1-1.3 m²)
1" (25 mm)	9.1-10.5 (44.4-51.3)	6-7 sq. ft. (.55-.65 m²)

Suitable Substrates

When properly prepared, suitable substrates include:

- Concrete
- Ceramic, porcelain, or quarry tile
- Pavers
- Cement or epoxy terrazzo
- Cement backerboard
- Exterior grade plywood (with reinforcement lath)
- Oriented Strand Board (OSB) (with reinforcement lath)

- VCT or full glued down, non-cushioned vinyl sheet goods
- Gypsum substrates (properly primed) with minimum tensile bond strength 72 psi (0.5 MPa)

Substrate Preparation (In accordance with ASTM F710)

All materials should be stored at 50°F (10°C) to 90°F (32°C) 24 hours prior to installation. It is required that all surfaces must be structurally sound and free from any contaminants that may inhibit bond, including oil, grease, dust, loose or peeling paint, floor finishes or waxes, etc.

Minimum tensile bond strength of 72 psi (0.5 MPa) is required.

Substrate temperature should be a minimum of 43°F (6°C) during application and air temperature maintained above 50° (10°C). DO NOT cover existing building expansion joints, isolation joints or any crack or joint subject to movement.

Provide control joints where specified. Create ⅛" to ¼" (3-6 mm) wide gaps where self-leveling underlayment abuts walls, columns, and fixtures by installing a self-sticking foam such as weather stripping tape or damp sand (vacuum up sand after self-leveling underlayment has cured). **Surfaces must be primed with TEC Multipurpose Primer prior to installation of EZ Level.** See primer label for application instructions. It is recommended to test for substrate moisture content to ensure it meets floor covering manufacturer's requirements.

EZ Level can be installed over green concrete with a maximum of 99% RH.

Remediation of excessive moisture conditions must be addressed prior to the installation EZ Level. This product is not a moisture vapor barrier.

If substrate moisture content exceeds the maximum allowed by the flooring manufacturer, then moisture mitigation must be applied prior to application of EZ Level. To reduce moisture vapor emissions to an acceptable level, use TEC® LiquiDam™ Penetrating Moisture Vapor Barrier or LiquiDam EZ™ Moisture Vapor Barrier prior to application of TEC Multipurpose Primer and EZ Level (see product data sheet for details). **For installation over adhesive (except for tacky and pressure sensitive adhesive), remove adhesive by scraping (mechanical removal, DO NOT use chemical adhesive removers) until all that remains is a thin transparent layer of adhesive residue.**

Single Layer of Exterior Grade Plywood or Oriented Strand Board (OSB) with Lath:

Wood subflooring must be securely fastened with screw type or ring shank nails and adhesive. Installations of exterior grade plywood or OSB (APA Rated Sturd-I-Floor OSB, Exposure 1 or better) require ¾" (19 mm) single layer minimum thickness on bridged floor joists up to 24" (60 cm) on center, with a maximum deflection of 1/360 of the span. Allow a gap of ⅛" to ¼" (3-6 mm) between sheets of plywood or OSB. Long edges of subfloor must be tongue and groove or supported by bridging between floor joists. Use suitable TEC surface preparation products (PerfectFinish™, VersaPatch®, Fast-Set Deep Patch) to plug all floor openings, gaps and cracks and install termination dams to prevent any seepage. Prime the floor and allow it to dry to a clear film. Next, staple ¼" (6 mm) galvanized diamond metal or plastic lath to the floor overlapping 2" (5 cm) at seams. Staple every 6" (15 cm) around the perimeter and overlaps, and every 8" (20 cm) in the field of the lath. Install EZ Level based upon the following joist spacing in the table below:

Joist Spacing (o.c.)	Minimum SLU thickness with lath over single layer ¾" (19 mm) tongue and groove subfloor
16" or less (40 cm or less)	⅜" (9 mm)
20" or less (50 cm or less)	½" (12 mm)
24" or less (60 cm or less)	⅝" (15 mm)

Double Layer of Exterior Grade Plywood without Lath: Exterior Grade Plywood subflooring must be a minimum thickness of ⅝" (15 mm), securely fastened with screw type or ring shank nails and adhesive. Maximum floor joist spacing is 16" (40 cm) o.c. with a maximum deflection of 1/360 of the span. Allow a gap of ⅛" to ¼" (3-6 mm) between sheets of plywood. Long edges of subfloor must be tongue and groove or supported by bridging between floor joists. Install Exterior Grade Plywood underlayment, minimum thickness of ⅝" (15 mm) with ⅜" (3 mm) gap between sheets. Underlayment fasteners should not penetrate joists below. For ¾" (19 mm) tongue and groove subfloor thickness over joists 16" (40 cm) o.c., install Exterior Grade Plywood underlayment, minimum thickness is ½" (12 mm) with ⅛" (3 mm) gap between sheets.

Use suitable TEC® surface preparation products (PerfectFinish™, VersaPatch®, Fast-Set Deep Patch) to plug all floor openings, gaps and cracks and install termination dams to prevent any seepage. Prime the floor. Allow primer to dry to a clear film. Maintain minimum thickness for EZ Level® of 3/8" (9 mm).

Radiant Heating Systems: For radiant heat system installations, always prime the substrate before installing heating system components on the substrate surface. Heating system must be off 2 days before and kept off for 7 days after installation.

Electric Wire Systems Installed Over Substrate – EZ Level may be used in conjunction with wire systems installed over concrete, single layer plywood/OSB subfloors with plastic lath or double layer plywood floors without lath. Follow the requirements for each substrate stated above and maintain minimum thickness of self-leveling underlayment above the wire of 1/4" (6 mm).

Electric Mat Systems Installed Over Substrate – Mat system configurations can vary by system manufacturer. Contact system manufacturer for installation instructions.

Hydronic Systems Installed Over Substrate – EZ Level may be used in conjunction with hydronic systems installed over concrete or 3/4" (19 mm) single layer plywood/OSB subfloors with lath. Follow the requirements for each substrate stated above and maintain minimum thickness of self-leveling underlayment over the heating tubes of 1/2" (12 mm) (depending on the diameter of the tubing, two lifts of self-leveling underlayment may be required). When installing ceramic tile over hydronic systems the application of a crack isolation membrane over the self-leveling underlayment is recommended.

Hydronic Systems Embedded in Concrete Substrate – Follow the requirements for concrete substrate installations stated above and maintain minimum thickness of concrete over the embedded heating tubes of 3/4" (19 mm). When installing ceramic tile over hydronic systems the application of a crack isolation membrane over the self-leveling underlayment is recommended.

Metal Substrates: Suitable metal substrates include non-galvanized steel, stainless steel, copper, aluminum and lead. Metal substrates must be fully supported, firmly attached and rigid with no flexing or vibration. In addition to the General surface contaminants listed above, metal surfaces shall be free of rust or corrosion. Remove by sand blasting, wire brush or other mechanical means. To prevent rusting of unpainted steel, prime with TEC Multipurpose Primer immediately after surface cleaning.

Storage

Store in cool, dry area away from direct sunlight. Do not store open containers.

Shelf Life

Maximum 1 year from date of manufacture in properly stored, unopened package.

Limitations

- For interior use only.
- EZ Level is not a wear surface and should be protected from construction trade traffic until the final floor covering is applied. Do not allow heavy or sharp metal objects to be dragged directly across the EZ Level surface.
- Do not apply when the temperature is below 50°F (10°C).
- Not for use in conditions of hydrostatic pressure or excessive moisture.
- Do not apply over sealed concrete, strip wood flooring, tempered hardboard (e.g. Masonite), particle board or lauan plywood.

Cautions

For medical emergency information, call 1-888-853-1758.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered TEC brand product(s) under normal environmental and working conditions. Because each project is different, H.B. Fuller Construction Products Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

EZ Level Premium Self-Leveling Underlayment (323)

Description	Typical Results
28 Day Compressive Strength	5000 psi (34.2 MPa)
28 Day Flexural Strength	1100 psi (7.5 MPa)
28 Day Shrinkage	0.025-0.045%

Physical Properties

Description	
Physical State	Dry powder
Color	Gray
Working Time	15-20 minutes*
Walkable Hardness	2-4 hours*
Flooring Installation	12-16 hours*
Flow (ASTM C1708)	5"-6" (12.7-15.2 cm)
Storage	Store in cool, dry area away from direct sunlight. Do not store open containers.
Shelf Life	Maximum 1 year from date of manufacture in properly stored, unopened package.

*Temperature and humidity will affect flow, working time and set time.

5. INSTALLATION INSTRUCTIONS

Mixing

Mix 2-3 bags of EZ Level at a time. In a clean, appropriate sized container, add 5.25 qts. (5L) of clean, cool potable water for **EACH** 50 lb. (22.68 kg) bag. Next, add the EZ Level, while mixing at full speed using a mixing blade suitable for the mixing container shape attached to a heavy-duty 1/2" (12 mm) drill (minimum 650 rpm). Do not add extra water. Mix completely for a minimum of 2 minutes until lump free, adding no additional water. Do not overmix or move the mixer up and down while mixing as this will entrap air, lower the strength and may cause cracking and/or pin holing. The formation of a white film on the surface is an indication of overwatering. To keep the job moving, it is recommended that two mixing drums be used simultaneously. This will allow one mixing container to be poured while the other is being mixed. **Use full bags only.**

For applications utilizing a pumping system: EZ Level can be mechanically mixed using either an in-line continuous mixer and pump or a batch mixer and pump using 5.25 qts. (5 L) clean potable water for **EACH** 50lb (22.68 kg) bag of powder. The minimum required hose length is 100 ft. (30.5 m) for in-line continuous mixers. For horizontal applications greater than 300 ft. (91.4 m) and vertical applications greater than 40 ft. (12.2 m) contact TEC® Technical Services at 800-832-9023.

Before starting, ensure the mixer and pumps are completely clean and in good working order. Refer to the manufacturer instructions for specific maintenance and cleaning. Prior to EZ Level installation, adjust the pump to ensure proper mixing and a uniform distribution of sand is achieved throughout the mix. Do not overwater as this will lower the strength and may cause cracking and/or pin holing. To avoid segregation and over watering during installation, the water settings may require adjusting. Check the product consistency to ensure a uniform distribution of the aggregates during pumping. The conditions that can affect the overall performance are, but not limited to, length of hose, water temperature, water pressure, substrate, ambient air temperature, and powder temperature. On the end of the hose attach a mesh-screen sock to trap any foreign or unmixed material. Always test pump using the actual maximum hose length and conditions before installation to ensure proper application and appearance is achieved. Test the mixed material periodically from the pump to ensure suitable mix and flow prior to general application.

Application

Apply when air temperature is between 50°F (10°C) and 90°F (32°C) within 24 hours of application. Close all windows, doors and HVAC vents to minimize air flow. Divide the areas to permit continuous placement without cold joints. Pour or pump the blended EZ Level onto the floor and disperse with a gauge rake. Use cleated shoes to avoid leaving marks. Optimum results can be obtained by providing a continuous wet flow throughout the application. EZ Level has a working time of 15-20 minutes at 70F (21C). Maximum thickness of EZ Level® is 1 1/2" (38 mm) neat in a single application or up to 3" (7cm) with two applications. **Temperature and humidity will affect flow, working time and set time.** It is the sole responsibility of the installer to determine the suitability and compatibility of the EZ Level for the user's intended use.

Up to 5" (12 cm) thickness may be poured with the addition of aggregate [well-graded, washed, dry pea gravel 1/8" (3 mm) or larger]. First mix EZ Level Premium Self-Leveling Underlayment as instructed. During placement add equal parts of the aggregate to mixed self-leveler by volume, mix until completely coated. To ensure proper bond, all aggregate and substrate must be completely coated

with the underlayment mixture. Do not use sand. For further information, please contact your TEC® representative.

Multiple lifts: For installations using multiple lifts of self-leveling underlayment, the first lift should be allowed to cure until walkable. Application of two coats of primer are required prior to the second lift as outlined on the Multipurpose Primer product data sheet with the first coat being 1:3 primer to water, and the second coat being 1:2 primer to water.

Clean-up

While material is still fresh, wash tools, hands, and equipment with warm soapy water.

Curing

EZ Level dries to walkable hardness in 2 to 4 hours. Most floor coverings can be installed in 12 to 16 hours. Protect from excessive temperature, air movement and direct sunlight during cure. Turn off all HVAC systems whenever possible for up to 24 hours after installation. For best results, always test performance of finished floor systems prior to installation.

NOTE: EZ Level is not a wear surface and should be protected from construction trade traffic until the final floor covering is applied.

6. AVAILABILITY

TEC premium surface preparation, tile, stone, carpet, wood and resilient floor covering installation products are available nationwide.

To locate TEC products in your area, please contact:

Phone: 800-832-9002

Website: tecspecialty.com

7. LIMITED WARRANTY

The product(s) covered by this Product Data Sheet are sold subject to a Limited Warranty and related terms. **H.B. Fuller Construction Products disclaims the implied warranties of merchantability and fitness for a particular purpose and all incidental and consequential damages arising out of the sale, purchase or use of this product.** For Limited Warranty details visit tecspecialty.com. To obtain a hard copy of the Limited Warranty call H.B. Fuller Construction Products at 800-832-9023 or mail a written request to the address in Section 2 of this Product Data Sheet.

8. MAINTENANCE

Not applicable

9. TECHNICAL SERVICES

Technical and safety literature

To acquire technical and safety literature, please visit our website at tecspecialty.com.

10. FILING SYSTEM

Division 9



Conforms with LEED v4 low emitting interiors.
Compliant with (CDPH) Standard Method v1.2 VOC Emissions.



To learn more, visit TECSpecialty.com



H.B. Fuller Construction Products Inc. | 1105 South Frontenac Street Aurora, IL 60504-6451



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