



Level Set® 350 Self-Leveling Underlayment

Updated June 2025

1. PRODUCT NAME

TEC® Level Set® 350 Self-Leveling Underlayment

2. MANUFACTURER

TEC Specialty Products LLC
1105 South Frontenac Street
Aurora, IL 60504-6451 U.S.A.
800.832.9002 Customer Service
800.832.9023 Technical Support
tecspecialty.com

3. DESCRIPTION

Ideal for fast track renovation applications, Level Set 350 is a high-performance, hybrid self leveling underlayment that can be installed from ¼" to 2" without extension. The high compressive strength, ultra-low shrinkage formula is ideal for preparing old interior subfloors including distressed gypsum, concrete, wood and mixed substrates.

Key Features and Benefits

- High flow, easy placement and a very smooth surface
- Ultra-high compressive strength >5,500 psi (37.92 Mpa)
- Long working time up to 60 minutes with forgiving healing performance
- Designed for low-prep—No CSP requirement
- ASTM E84 Flame Test Class A certified
- Thickness range from ¼" (6.4 mm) up to 2" (50 mm)
- Applied up to 4" (10.2 cm) with two lifts
- Walkable in 2 to 4 hours, flooring installation in 24 to 48 hours
- Very low shrinkage
- Crack-free up to 2"
- Pourable or pumpable

Packaging

50 lb. moisture-resistant bags (22.68 kg)

Product #10015817

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)
¼" (6 mm)	2.2-2.6 (10.7-12.7)	25 sq. ft. (2.32 m²)
½" (12 mm)	4.6-5.3 (22.5-25.9)	12.5 sq. ft. (1.16 m²)
1" (25 mm)	9.1-10.5 (44.4-51.3)	6.25 sq. ft. (0.58 m²)
1½" (38 mm)	13.7-15.8 (66.9-77.1)	2.778 sq. ft. (0.25 m²)

Suitable Substrates

When properly prepared, suitable substrates include:

- Concrete
- Ceramic, porcelain or quarry tile
- Pavers
- Cement or epoxy terrazzo
- Cement backerboard
- Metal
- VCT or full glued down, non-cushioned vinyl sheetgoods
- Exterior grade plywood (with reinforcement lath)
- Oriented Strand Board (OSB) (with reinforcement lath)
- 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 be structurally sound and free from any contaminants that may inhibit bond, including oil, grease, dust, loose or peeling paint, sealers, floor finishes, curing compounds or contaminants. Minimum tensile bond strength of 72 psi (0.5 MPa) is required. Substrate temperature should be a minimum of 43°F (6°C) and air temperature maintained above 50°F (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 a minimum of ⅛" to ¼" (3-6 mm) wide gap where Level Set 350 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 Level Set 350.** See Primer label for application instructions. It is recommended to test for substrate moisture content to ensure it meets the floor covering manufacturer's requirements. On or below-grade substrates must have an intact vapor barrier (≥ 6 mil poly) properly installed below the slab. **Remediation of excessive moisture conditions must be addressed prior to the installation of Level Set 350. Level Set 350 can be installed over concrete with RH of 75% or less, or an MVER of less than 3 lbs per 1,000 ft² per 24 hours.** 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 Level Set 350. To reduce moisture vapor emissions to an acceptable level, use TEC® LiquiDam™ Penetrating Moisture Vapor Barrier or LiquiDam EZ™ Moisture Vapor Barrier (see product data sheets 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*.** Regulations may require that adhesives be tested to determine asbestos content. Always follow all local/state/provincial and federal regulations for removal and disposal of asbestos or other hazardous materials.

*Cutback Adhesive Residue (non-asbestos) – Application over asphalt-based cutback adhesive residue is acceptable provided it is a thin layer and is well bonded. Subfloor preparation of the existing cutback adhesive requires only that the ridges or high spots be knocked off, typically with 1-3 passes of a mechanical scraper. NOTE: Mechanical removal of cutback by sanding, grinding or blasting can be hazardous since old cutback adhesive may contain asbestos. Harmful dust may result. Inhalation of asbestos dust may cause asbestosis or other serious bodily harm. Consult all applicable government agencies for rules and regulations concerning the removal of floorings and adhesives that contain asbestos. Tacky or pressure-sensitive adhesive must be mechanically removed by a method such as shot blasting.

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

with Lath: Wood sub-flooring 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 ⅓₆₀₀ 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 (Feather Edge Skim Coat, 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 Level Set 350 based upon the joist spacing shown in the table below:

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

Product Data

Double Layer of Exterior Grade Plywood without Lath: Exterior Grade Plywood subflooring must be a minimum thickness of 5/8" (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 1/8" to 1/4" (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 5/8" (15 mm) with 1/8" (3 mm) gap between sheets. Underlayment fasteners should not penetrate joists below. For 3/4" (19 mm) tongue and groove subfloor thickness over joists 16" (40 cm) o.c., install Exterior Grade Plywood underlayment, minimum thickness is 1/2" (12 mm) with 1/8" (3 mm) gap between sheets.

Use suitable TEC surface preparation products (Feather Edge Skim Coat, 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 Level Set 350 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 – Level Set 350 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 – Level Set 350 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 and prime immediately with TEC Multipurpose Primer to prevent surface rusting.

Storage

Store in a cool, dry area, away from direct sunlight. Do not store open containers. Protect product from rain or other water intrusions.

Shelf Life

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

Limitations

- For interior use only.
- 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, tempered hardboard (e.g. Masonite), particle board, or lauan plywood.
- Level Set 350 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 Level Set 350 surface.
- When installing over this product, treat it as a gypsum based underlayment. This might require priming or other additional steps before applying finished floor covering.
- Do not apply moisture control systems over Level Set 350.
- Do not use Level Set 350 in wet areas with constant water exposure such as pools.

Cautions

Read complete cautionary information printed on product container prior to use. 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, TEC Specialty Products LLC cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

4. TECHNICAL DATA

Level Set 350 Self-Leveling Underlayment	
Description	Typical Results
28 Day Compressive Strength (ASTM C109)	>5,500 psi (37.92 MPa)
28 Day Flexural Strength (ASTM C348)	>1,000 psi (6.89 MPa)
28 Day Shrinkage	<0.025%

Greater than: > Greater than or equal to: ≥ Less than: < Less than or equal to: ≤

Physical Properties

Description	
Physical State	Dry powder
Color	Gray
Surface Burning Characteristics (ASTM E84 Class A)	Flame Spread Index: 0 Fuel Contribution: 0 Smoke Development: 0
Working Time	40-60 minutes*
Walkable	2-4 hours*
Flooring Installation	24-48 hours depending on flooring
Flow (ASTM C1708)	5-6 inches (12.7-15.2 cm)*
Storage	Store in a 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

For applications utilizing barrels or buckets: Mix 2-3 bags of Level Set 350 at a time. In a clean, appropriate sized container, add 5.25 qts. (5.0 L) of clean, cool potable water for **EACH** 50 lb. (22.68 kg) bag. Next add the Level Set 350, 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 over mix or move the mixer up and down while mixing as this could 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: Level Set 350 can be mechanically mixed using either an in-line continuous mixer and pump or a batch mixer and pump using 5.25 qts. (5.0 L) clean potable water for **EACH** 50lb (22.68 kg) bag of powder. The minimum required hose length is 200 ft. (61 m) for in-line continuous mixers.

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 Level Set 350 installation, adjust the equipment 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. Please refer to Flow (ASTM C1708) and regularly check product flow during pumping to prevent over- or under-watering of the product. 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). 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 Level Set 350 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. Level Set 350 has a working time 40-60 minutes at 70°F (21°C). **Temperature and humidity will affect flow, working time and set time.** Verify that the minimum depth of pour is at least ¼" over the highest point of floor. Minimum depth of ¼" (6 mm) is required for heavy rolling loads. Maximum Level Set 350 thickness is 2" (51 mm) neat. It is the sole responsibility of the installer to determine the suitability and compatibility of the Level Set 350 for the user's intended use.

*For smaller areas, a finish trowel may be used to move material as needed.

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.

Curing

Protect from excessive temperature, air movement and direct sunlight during cure. Turn off all HVAC systems that could impact the curing of the surface of the product whenever possible for up to 24 hours after installation.

NOTE: Level Set 350 is not a wear surface and should be protected from construction trade traffic until the final floor covering is applied.

Clean-up

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

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. **TEC Specialty 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 TEC Specialty 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

Divisions 3 and 9



To learn more, visit TECSpecialty.com



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