



TRUE-SCREED® CLU

FLOOR UNDERLAYMENT

Technical Data	Properties	ASTM
Thickness	Up to 2" (51mm)	
Compressive Strength	up to 6000 psi (41.4 MPa)	C109
Flexural Strength	1300 psi (9.0 MPa)	C348
Fire Hazard Classification	Flamespread index 0; Fuel Contribution 0; Smoke Density 0	E84
Sand	1/8" (3mm) or less washed plaster or silica sand	E11



- High-strength Portland cement-based floor underlayment
- Resurfaces and repairs cracked or unlevel concrete floors
- Superior bonding characteristics
- Quick-setting, cost-effective for thick pours
- Lightweight and crack-resistant
- Creates a flat, durable surface for finished floor coverings
- Installed by Licensed Applicators across North America

Product Description

TRUE-SCREED® CLU is a Portland cement-based floor underlayment designed for interior use in residential, commercial, military, and industrial projects. This leveling underlayment helps transform cracked, uneven concrete floors into a smooth, strong surface for floor coverings. TRUE-SCREED® CLU provides compressive strengths up to 6000 psi (41.4 MPa). To help keep projects on schedule and on budget, TRUE-SCREED® CLU can be compatible with finished floor coverings soon after application (depending on thickness and floor covering).

TRUE-SCREED® CLU is mixed on the job site with local sand (per ASTM E11) and water to create a lightweight slurry. At 1/2" thick, the underlayment weighs approximately 4.87 lbs/ft².

Limitations

- Shall not be used in exterior locations, below grade, or where continuous exposure to moisture is likely.
- Shall not be used as a wear surface; must be covered by a finished floor covering.
- Structure shall be designed so that deflection does not exceed L/360 live or dead load. Certain floor coverings such as marble, limestone, travertine and wood may have more restrictive deflection limits. Consult the appropriate floor covering manufacturer for recommendations.
- If installed above a crawl space, subfloor must be protected by a vapor barrier.
- Metal lath reinforcement may be required for applications over a wood subfloor.
- Do not install over substrates containing asbestos.

Installation

Before, during, and after the installation of TRUE-SCREED® CLU, the building must be enclosed and the temperature maintained at a minimum of 50°F (10°C). If required, shot-blasting, sandblasting, scarifying or other engineered-approved, non-wet method shall be done on concrete surface prior to application (reference ICRI CSP 3+ standards for profile height). Prior to the installation of TRUE-SCREED® CLU, the subfloor shall be structurally sound (L/360) and broom clean, dry and free from oil, grease, paraffin, laitance, wax or other contaminants. Concrete subfloors shall be 28 days or older and free from hydrostatic pressure. Consult floor covering manufacturer for allowable Moisture Vapor Emission Rate (MVER). MVER shall not exceed 4lbs./1000 sq. ft. per 24 hours 1.8 kg per 92.9m²/24 hours. All dormant cracks above 1/8" shall be repaired to minimize telegraphing. After installation, temporary wood planking shall be placed by the GC wherever the floor underlayment will be subject to wheeled or concentrated loads. Protect installation areas from direct sunlight and excessive heat.

Installation, cont. TRUE-SCREED® CLU can be used over plywood or oriented strand board (OSB) subfloors. Wood subfloors must be properly prepared, bonded, and free from dirt and dust. When applying TRUE-SCREED® CLU to plywood flooring, specifications may require the use of metal lath on top of the primed surface before the application of the underlayment.

Prime subfloors per recommended specifications before installing underlayment. Adequate ventilation shall be provided by the General Contractor (GC) to ensure proper drying of TRUE-SCREED® CLU. This product is designed to self-cure; do not use damp curing method and/or sealing compounds. If necessary, the GC shall provide mechanical ventilation. Depending on thickness and drying conditions, the underlayment will dry within 10 to 14 days. To avoid potential problems during the drying process, the GC shall consult Hacker Industries, Inc.'s Drying Conditions Flyer and information contained on Hacker Industries, Inc.'s website for additional information concerning drying of this product.

Finished floor coverings can be installed when the TRUE-SCREED® CLU is completely dry. Consult flooring contractor for recommended procedures to test for dryness and acceptable levels of moisture. Reference Hacker Industries, Inc.'s Guidelines for Installing Finished Floor Coverings. This guideline is not a warranty and shall be used as a guideline only.

Product Data **Approximate Compressive Strength (aggregated) ASTM C109 (modified):** up to 6000 psi
(up to 41.4 MPa)

Note *Compressive strengths published herein were achieved under controlled laboratory conditions. Actual field results may differ due to environmental conditions, regional sand variations, inconsistent proportioning of field applied water, sand and Hacker Floor Underlayment, as well as differences in mixing/pumping equipment.

Related Products Hacker Floor Primer, Hacker TopCoat SP and Hacker Floor Sealer are available for use with TRUE-SCREED® CLU. Contact Hacker Industries, Inc. at (800) 642-3455 for more information.

Warranty *Subject to express warranty stated on Hacker Industries, Inc.'s website.*

Submittal Approvals Project Name: _____
Contractor/Architect: _____
Date: _____

Product Information
See HackerIndustries.com and bags for current recommended product specifications, literature and warnings.

WARNING!
When mixed with water, this product hardens and becomes extremely hot. DO NOT attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions may cause severe burns that may require surgical removal of affected tissue or amputation of limb. Portland cement is strongly alkaline. Direct contact can be corrosive and cause severe damage or chemical

burns to eyes and wet, moist skin. Avoid contact with eyes and skin. Wear protective glasses and clothing. If eye contact occurs, immediately flush thoroughly with water for 30 minutes and seek medical advice. Inhalation of dust may be corrosive or cause chemical burns or irritation to nose, throat and respiratory tract.

Avoid breathing dust. Use a NIOSH/MSHA-approved dust respirator. Wash thoroughly with soap and water after use. Do not ingest. If ingested, call a physician. Product safety, call (800) 642-3455. **KEEP OUT OF REACH OF CHILDREN.**

TRADEMARKS
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LEED is a registered trademark of the U.S. Green Building Council.

NOTICE
We shall not be liable for incidental or consequential damages, directly or indirectly, sustained, nor for any loss caused by application of these goods not in accordance with current printed instruction or for other than the intended use. Our liability is expressly limited to replacement of

defective goods. Any claim shall be deemed waived unless made in writing to us within 30 days from date it was or reasonably should have been discovered.

SAFETY FIRST
Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature prior to specification and installation.

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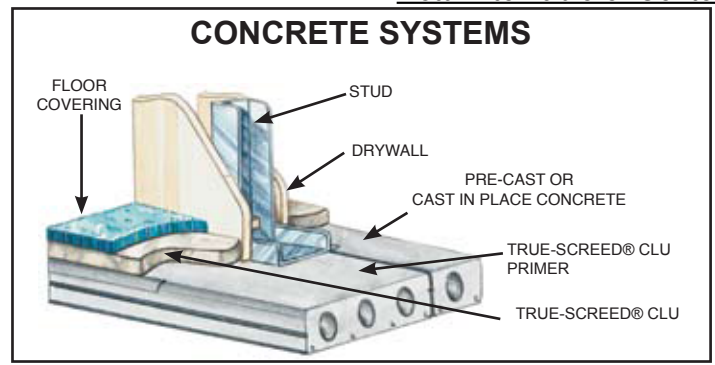
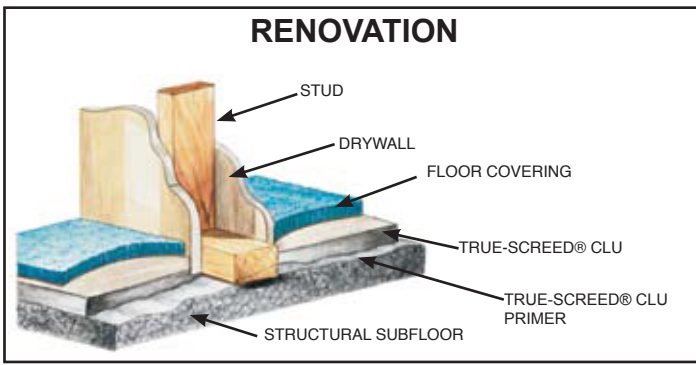
True-Screed[®]

Cementitious Leveling Underlayment

***TRUE-SCREED**[®] CLU is a breakthrough in cement underlayment technology. It delivers optimum performance and durability while providing a way to minimize downtime and keep construction projects on budget and on schedule.*

***TRUE-SCREED**[®] CLU provides a flat, crack-resistant surface for floor coverings in commercial, institutional and renovation projects.*

- **Exceptional compressive strengths; up to 6000 psi**
- **Strong, smooth surface over concrete, precast, or wood**
- **Portland cement-based; Fast drying; No troweling**
- **Cost-effective for thick pours; Meets ASTM F710**
- **Resurfaces cracked, uneven concrete floors**
- **Superior bonding characteristics**
- **Installed by Licensed Applicators**



Recommended Specifications for TRUE-SCREED® CLU

PART I GENERAL

1.1 Scope – Specify to meet project requirements

- A. Work included:
 1. TRUE-SCREED® CLU
 2. TRUE-SCREED® CLU Primer

1.2 Qualifications

- A. TRUE-SCREED® CLU shall be installed by trained and Certified, Licensed Applicators of Hacker Industries, Inc., using approved mixing and pumping equipment with a water meter.
- B. TRUE-SCREED® CLU shall be delivered in original, unopened bags and protected from exposure to harmful environmental conditions. Do not allow bags to get wet.
- C. Before, during, and after installation of TRUE-SCREED® CLU, the building interior shall be a minimum of 50°F (10°C) and a maximum 90°F (32°C).
- D. Compressive strength can be specified up to 6000 psi (41.4 MPa). Flexural strengths can be specified up to 1300 psi (9.0 MPa)
- E. TRUE-SCREED® CLU shall be used for interior applications only.
- F. Consult the material safety data sheet (MSDS) for safe handling instructions prior to using product.

PART II PRODUCTS

2.1 Materials

- A. Cement Underlayment: TRUE-SCREED® CLU as supplied by Hacker Industries, Inc.
- B. Sand Aggregate: Sand shall meet the requirements of the TRUE-SCREED® CLU Sand Specification.
- C. Water: Cool, potable and free from impurities, not to exceed 70°F (21°C).
- D. Primer: TRUE-SCREED® CLU Primer.

2.2 Mix Designs

- A. TRUE-SCREED® CLU mix proportions and methods shall be in strict accordance with supplier recommendations.

PART III EXECUTION

3.1 Preparation

- A. Shot-blasting, sandblasting, scarifying or other engineered-approved, non-wet

method shall be done on concrete surfaces prior to application (reference ICRI CSP 3+ standards for acceptable profile height). Note: With successful bond test, degree of preparation may vary.

- B. TRUE-SCREED® CLU is not an encapsulate, consult local and Federal authorities for proper removal of asbestos.
- C. General Contractor (GC) shall confirm the subfloor is structurally sound (L/360) and conditions are suitable for installation of the floor underlayment.
- D. Thoroughly clean surface of all substances that could interfere with the bond of TRUE-SCREED® CLU. These include, but are not limited to, dirt, paint, tar, wax, asphalt, oil, grease, latex compounds, sealers, curing compounds, form release agents, laitance, wax loose toppings, foreign substances and adhesive residue.
- E. Subfloor shall be properly prepared, sound, dimensionally stable, fully cured and at least 28 days old and free from hydrostatic pressure. Consult floor covering manufacturer for maximum allowable Moisture Vapor Emission Rate (MVER) and retained moisture content in substrate. Shall not exceed 4 lbs. per 1,000 sq. ft. per 24 hours (1.81kg per 92.9m² /24 hours).
- F. Ambient room temperature and concrete subfloor shall be between 50-90°F (10-32°C) before TRUE-SCREED® CLU installation.
- G. Provide for expansion and control joints where specified, including the perimeter of the room, columns, supports and equipment pedestals. Don't bridge joints. Ensure joints are honored through TRUE-SCREED® CLU and primer. Cuts in TRUE-SCREED® CLU shall be at least 1/4" (6mm) wide.
- H. All dormant cracks greater than 1/8" shall be repaired to minimize telegraphing through the underlayment.
- I. Always prime prepared surface with Hacker approved primer prior to installation of TRUE-SCREED® CLU.

- J. Metal lath is required for applications over a wood substrate.

3.2 Application

- A. Scheduling: Application of TRUE-SCREED® CLU shall not begin until the building is enclosed, including roof, windows, and doors.
- B. Application: Install TRUE-SCREED® CLU at specified thickness by placing contents of bag, sand and water into an approved high-speed mixing device with a water meter. TRUE-SCREED® CLU shall be pumped on the floors areas, spreading and screeding to a smooth surface. Protect underlayment from direct sunlight and drafts.
- C. Allow expansion joints to continue through TRUE-SCREED® CLU.

3.3 Protection

- A. After installation, temporary wood planking shall be placed by the GC wherever underlayment will be subject to wheeled or concentrated loads.

3.4 Curing and Drying

- A. TRUE-SCREED® CLU is designed to self-cure; do not use damp curing method and/or sealing compounds.

3.5 Preparation for Installation of Floor Coverings

- A. Consult finished floor covering manufacturers' recommended specifications.

3.6 Field Quality Control

- A. Slump Test: TRUE-SCREED® CLU mix shall be tested for slump as it is being pumped using a 2" by 4" (51mm by 102mm) cylinder and plexiglas.
- B. Field Samples: Cubes shall be tested as recommended by Hacker Industries, Inc. in accordance with ASTM C109 modified. Test results shall be available to the architect and/or contractor upon prior request from applicator.

Note: For recommended installation instructions over precast concrete plank, contact Hacker Industries, Inc.



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For the Licensed Applicator in your area, please call our toll-free number, (800) 642-3455

Note: For Warranty information, please contact Hacker Industries, Inc. at (800) 642-3455.