

DYNA-SCREED® Self-Leveling Underlayment Specifications

PART I. GENERAL

1.1 Scope

Specify to meet project requirements. The conditions of the Contract (General, Supplementary, and other conditions) and the General Requirements (Sections of Division I) govern the provisions of this section. The articles contained in this section may modify, delete or add to the conditions of the contract.

1.2 Qualifications

- A. Supplier: Hacker Industries, Inc., Newport Beach, California.
- B. Installer: Installation of DYNA-SCREED® Self-Leveling Underlayment (SLU) shall be by a certified and trained, Licensed Applicator of Hacker Industries, Inc. using mixing and pumping equipment approved by Hacker Industries, Inc.
- C. All materials specified herein shall be approved by Hacker Industries, Inc., Newport Beach, CA.
- D. Compressive strengths up to 4800 psi (33.1 MPa).
- E. Material shall be delivered in original, unopened bags. Material shall be stored away from prolonged exposure to harmful environmental conditions and at a minimum temperature of 50°F (10°C). Do not allow bags to get wet.
- F. Certification: Upon completion of this portion of the work, and as a condition of its acceptance, deliver to the architect a certificate from Hacker Industries, Inc., and signed by the Licensed Applicator, stating that the material used in this work complies with the specified requirements.

PART II. PRODUCTS

2.1 Materials

- A. Self-Leveling Floor Underlayment: Floor underlayment compound shall be DYNA-SCREED® SLU as supplied by Hacker Industries, Inc., Newport Beach, CA.
- B. Subfloor Primer: DYNA-SCREED® SLU Primer.
- C. Aggregate: If aggregate extension is desired, contact Hacker Industries, Inc.
- D. Water: Potable and free from impurities, not more than 75° F (23.8° C).
- E. Underlayment Sealer: DYNA-SCREED® SLU Sealer or approved equal if required.

PART III. PREPARATION

3.1 Surface Preparation

- A. General Contractor shall confirm the subfloor is structurally sound, stable, and conditions are suitable for installation of a floor screed.
- B. Shot-blasting, sandblasting, scarifying or other engineered-approved, non-wet method shall be done on concrete surfaces prior to application (reference ICRI CSP standards 3+ for acceptable profile height).
- C. Limit design of the subfloor at a maximum of L/360 deflection.
- D. Subfloor shall be thoroughly cleaned and free of any substance that could interfere with the bond of DYNA-SCREED® SLU including, but not limited to, dirt, paint, tar, wax, oil, grease, loose toppings, etc.
- E. Substrate hydrostatic pressure conditions and vapor transmission shall not exceed 3 lbs. per square foot per 24 hours (1.4kg per 92.9m² per 24 hours). Testing to be done per ASTM F1869 prior to application.
- F. Ambient room temperature and concrete substrate should be maintained between 50-95°F (10-35°C). Temperatures shall be maintained at this range for a minimum of 28 days prior to and after installation.
- G. Newly prepared substrates are subject to "out-gassing". Out-gassing cannot be detected visually. To minimize the risk of out gassing, install primer and DYNA-SCREED® SLU when the surface and ambient temperatures are decreasing. Minimal out gassing is common and to be expected. When using an epoxy based primer out gassing will be exhibited as small air-bubbles on the surface. Re-roll areas to disperse bubble and proceed with DYNA-SCREED® SLU installation. (Consult Hacker Industries, Inc. Technical Department for additional information).
- H. All cracks in the subfloor shall be repaired to minimize telegraphing through the underlayment.

3.2 Priming

- A. Always prime prepared surface with Hacker approved primer prior to installation of DYNA-SCREED® SLU per specifications.

3.3 Mix Design - DYNA-SCREED® SLU shall be installed using Hacker Industries, Inc. approved mixing and pumping equipment with a minimum of 110 feet (33m) of hose.

- A. Mixer and pump shall be clean per manufacturer's specifications and in good working condition.
- B. Mix 1.4 to 1.5 gallons (approx. 5.4 to 5.7L) of cool potable water per 50 pound bag (approx 22.7kg) of DYNA-SCREED® SLU. Do not overwater. Do not add sand.

- C. To ensure a proper mix design, test material from the end of the hose per Hacker Industries, Inc. Quality Control Instructions.

3.4 Self-Leveling Underlayment Application

- A. Scheduling: Application of DYNA-SCREED® SLU shall not begin until the building is enclosed, including roof, windows, and doors. Protect areas from direct sunlight.
- B. Application:
 - 1. Verify that concrete surface and ambient room temperature are at least 50°F (10°C) prior to application. Temperatures shall be maintained at this temperature for a minimum of 72 hours after the installation of DYNA-SCREED® SLU.
 - 2. 1/4" (6mm) minimum average thickness over concrete slabs, can be feather-edged. Maximum recommended thickness is 2" (51mm).
 - 3. Install DYNA-SCREED® SLU at specified thickness by placing contents of bags and water into approved high-speed mixing device and blend for a minimum of 2 minutes. DYNA-SCREED® SLU should be pumped onto floor areas, spreading and screeding to a smooth surface. Place as continuously as possible.
 - 4. DYNA-SCREED® SLU is suitable for interior applications only and shall be covered by a finished floor material
- C. Protection: After installation and initial set, temporary wood planking shall be placed by the General Contractor wherever the underlayment will be subject to wheeled or concentrated loads.
- D. Curing/Drying: DYNA-SCREED® SLU is designed to self-cure; do not use damp curing method and/or sealing compounds. To achieve the optimum floor, please adhere to the following procedures:
 - 1. Protect the new floor from direct sunlight.
 - 2. Maintain temperature between 50-95°F (10-35°C).
 - 3. Protect the new floor from drafts during curing.
 - 4. Avoid walking on surface for at least 2-3 hours after installation, adjust for varying humidity and temperature conditions.
 - 5. Protect from traffic, dust and dirt from other trades until DYNA-SCREED® SLU is fully cured and the final floor covering has been installed. To protect place temporary wood planking over the new floor.
 - 6. Sealing: If required by finished floor good manufacturer, seal all areas that receive glue down floor goods with DYNA-SCREED® SLU Sealer according to the Hacker Industries, Inc.'s specifications. Any floor areas where the surface has been damaged shall be cleaned and sealed regardless of floor covering to be used. Where floor good manufacturer requires special adhesive or installation systems, their requirements supercede these recommendations.

3.5 Field Quality Control

- A. Slump Test: Each batch of DYNA-SCREED® SLU mix shall be tested for slump with a DYNA-SCREED® SLU Slump Test Kit, which is available through Hacker Industries, Inc.

- 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 architect and/or contractor upon prior request from applicator.