

# SKIM COAT & PATCH CEMENT UNDERLAYMENT

## 1. Product Name

Skim Coat & Patch Cement Underlayment

## 2. Manufacturer

Custom Building Products

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## 3. Product Description

### BASIC USE

Skim Coat & Patch Cement Underlayment is a fast-setting, polymer-modified, cement-based compound that provides a smooth finish to interior and exterior subfloors prior to the installation of a floor covering. Mix with water to patch and level concrete or plywood as thick as 1/2" (13 mm); mix with Patching & Leveling Latex Additive to form an ultra high-strength system over a variety of floor coverings or as an embossed vinyl floor leveler.

When mixed with water, Skim Coat & Patch Cement Underlayment applications include:

- Concrete
- WonderBoard®, cement backerboards
- Exterior grade plywood, when used in interior dry areas

When mixed with Patching & Leveling Latex Additive, Skim Coat & Patch Cement Underlayment applications include:

- Ceramic tile, pavers, brick
- Stone
- Concrete terrazzo
- Sheet vinyl
- VCT
- Cutback adhesive (non-water soluble)

Under floor coverings, Skim Coat & Patch Cement Underlayment can be used with:

- Ceramic tile, pavers, thin brick
- Stone, terrazzo
- Carpet
- Wood, parquet
- Sheet vinyl
- VCT laminated flooring

## COMPOSITION & MATERIALS

Skim Coat & Patch Cement Underlayment is a blend of Portland cement, sand, and inorganic polymers.

## SIZES

Skim Coat & Patch Cement Underlayment is packaged in 25 lb (11.34 kg) bags.

## BENEFITS

- Quick-setting formula permits floor covering installation in as little as 60 – 90 minutes
- Smooths the finishes on interior and exterior subfloors
- Patches and levels concrete and plywood to 1/2" (13 mm)
- Combines with Patching & Leveling Latex Additive for added floor system strength

## LIMITATIONS

- Do not bond directly to hardwood, lauan plywood, particleboard, parquet, cushion or sponge back vinyl flooring, metal, fiberglass, plastic or OSB panels.
- Do not use over lightweight concrete or gypsum underlayment, OSB, particleboard, hardwood floors, parquet floors or metal.
- Do not use over cushion backed vinyl flooring.
- Do not use when temperature is below 50° F (10° C).

## ACCESSORIES

Patching & Leveling Latex Additive can be used to improve adhesion and performance for skim coat or hard to bond surfaces. With Skim Coat & Patch Cement and SpeedFinish™ Patching and Finishing Compound, this additive can be used in place of water for increased bond strength; with Skim Coat & Patch Cement Underlayment, it can also be used to form a high-strength system over a variety of floor coverings.

## 4. Technical Data

### APPLICABLE STANDARDS

American National Standards Institute (ANSI) — ANSI A108, A118 & A136 American National Standards for the Installation of Ceramic Tile

### ASTM International (ASTM)

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Specimens)
- ASTM C191 Standard Test Methods for Time of Setting of Hydraulic Cement by Vicat Needle

Tile Council of North America (TCNA) — TCNA Handbook for Ceramic Tile Installation, TCA Method EJ171

TECHNICAL PROPERTIES

Property	Results
Pot life @ 70° F (21° C)	10 minutes
ASTM C191	
Initial set @ 70° F (21° C)	20 minutes
Final set @ 70° F (21° C)	35 minutes
Drying time before floor covering installation	60 – 90 minutes
ASTM C109	
Compressive strength	
1 day cure	2300 psi (161.7 kg/cm <sup>2</sup> )
28 day cure	4600 psi (323.4 kg/cm <sup>2</sup> )
Flexural strength, 28 days	800 psi (56.3 kg/cm <sup>2</sup> )
Bond strength, 28 days	400 psi (28 kg/cm <sup>2</sup> )

ENVIRONMENTAL CONSIDERATIONS

Custom Building Products is committed to environmental responsibility in both products produced and in manufacturing practices.

Use of Skim Coat & Patch Underlayment can contribute to LEED® certification.

5. Installation

PREPARATORY WORK

General Surface Preparation:

Surfaces must be structurally sound, clean, dry and free from grease, oil, dirt, curing compounds, sealers, adhesives and other contaminants that would prevent a good bond. Glossy or painted surfaces must be sanded, stripped and cleaned of waxes, dirt and other contaminants. Ambient temperature, surfaces and materials should be maintained above 50° F (10° C) and below 100° F (38° C) until adhesive cures.

Cementitious Surfaces:

Concrete or plaster must be porous, fully cured and must accept water penetration. Test by sprinkling water on various areas of the substrate. If water penetrates, a good bond can be achieved; if water beads, surface contaminants are present, and loss of adhesion may occur. Contaminants should be removed before installation. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a broomed or brushed finish to enhance the bond. Smooth concrete slabs must be mechanically abraded to ensure a good bond.

Plywood Substrates:

Plywood floors, including those under resilient flooring, must be structurally sound and must meet all ANSI and deflection requirements. For questions about proper subfloor installation, call Custom Building Products.

WonderBoard® Backerboards:

As an alternative to an additional layer of plywood, WonderBoard Backerboard may be installed over plywood subfloors.

Cutback Adhesive Over Concrete:

Adhesive layers must be removed, as they reduce mortar bond strength to cement surfaces. Use extreme caution; adhesives may contain asbestos fibers. Do not sand or grind adhesive residue, as harmful dust may result. Never use adhesive removers or solvents, as they soften the adhesive and may cause it to penetrate into the concrete. Adhesive residue must be wet scraped to the finished surface of the concrete, leaving only the transparent staining from the glue. To determine desirable results, do a test bond area before starting.

METHODS

Mixing

Mix 1 gal (3.78 L) clean, cool water to a 25 lb (11.34 kg) bag of Skim Coat & Patch Cement Underlayment. For applications over cutback adhesive, sheet vinyl, terrazzo, ceramic tile or plywood, or to level embossed sheet vinyl, substitute Patching & Leveling Latex Additive for water. Slowly add powder to liquid, while mixing with a low speed drill of 300 rpm or less and mixing paddle to a lump-free consistency. Mix amounts that can be applied within 10 minutes.

Application

Dampen all surfaces except wood. Using a broad knife or trowel, force material into all cracks and voids as thick as 1/2" (13 mm) and finish flush with the surface. For skim coating, use a smooth-edged trowel to level the surface area. Only spot patching should be done to wood surfaces. If a leveling layer over 5' (1.5 m) in diameter is required, use a LevelQuik® or LevelLite® Self-Leveling Underlayment.

Drying Time

Allow to dry for 60 – 90 minutes. Drying time can vary with temperature and humidity. Test for moisture content before applying vinyl or wood flooring.

Coverage

A 25 lb (11.34 kg) bag covers approximately 25 – 27 ft<sup>2</sup> (2.3 – 2.5 m<sup>2</sup>) at 1/8" (3 mm) thickness.

**PRECAUTIONS**

This product contains Portland cement. Avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, flush with water for 15 minutes and consult a physician. Use with adequate ventilation; do not breathe dust and wear a NIOSH approved respirator. If ingested, do not induce vomiting; call a physician immediately.

**BUILDING CODES**

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

**6. Availability & Cost**

Contact the manufacturer or visit the [www.custombuildingproducts.com](http://www.custombuildingproducts.com) website for information about product cost and availability.

**7. Warranty**

Skim Coat & Patch Cement Underlayment is eligible for Custom Building Products' Lifetime Installations Systems Warranty.

Custom Building Products ("Custom") warrants to the original consumer purchaser that its product shall be free from defects in material and workmanship under normal and proper usage for a period of one year following the date of original purchase. Custom's sole liability under this warranty shall be limited to the replacement of the product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty will not extend to any product which has been modified in any way or which has not been used in accordance with Custom's printed instructions. Custom makes no other warranties either express or implied. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

For details and complete warranty information, contact Custom Building Products or visit the Custom Building Products website: [www.custombuildingproducts.com](http://www.custombuildingproducts.com).

**8. Maintenance**

Properly installed product requires no special maintenance.

**9. Technical Services**

For technical assistance, contact Custom Building Products or visit the website: [www.custombuildingproducts.com](http://www.custombuildingproducts.com).

**10. Filing Systems**

Additional product information is available from the manufacturer upon request.

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