Technical Data Sheet (TDS)

SMP-960 One-Step®

Polymer-Based Wood Flooring Adhesive

Special features

- Moisture cured wood adhesive
- Non-etching
- Requires no moisture testing (some restrictions apply)
- Cleans easily even after cured
- Provides excellent sound and moisture barrier capabilities
- Reduces installation time by providing 4 steps reduced to 1

GEV-EMICODE EC 1 very low emission

Product Description

STAUF SMP-960 One-Step is an advanced formula, unique polymer 4-in-1 adhesive designed for professional wood flooring installation. It replaces isocyanate-containing urethane adhesives, which can etch flooring surfaces. It is ozone and environmentally safe since it has no solvents or other hazardous materials. It is certified 'green' and qualifies for LEED credits. And it meets ASTM standards for sound and impact noise control. Long open time allows for easy installation. Since no water or solvent is present, it will not cause dimensional changes to wood flooring. SMP-960 offers superior flexibility and moisture-mitigating capability.
The adhesive spreads easily and has a non-slump formula that will help insure contact and adhesive transfer. It allows fast installation even with complicated patterns due to its strong green grab. There is no flash time required, so installation can commence immediately. Rolling is neither required nor recommended. It offers superior flexibility and is designed to keep the flooring in place, yet allow for normal movement during seasonal changes to the flooring.

Pre-Installation Checklist

A successful installation requires proper preparation of the subfloor. Read and understand all applicable guidelines and technical data sheets before installation. Follow industry standards and flooring manufacturers' recommendations for subfloor moisture content, design, layout, and application of flooring materials. All flooring material's backing must be solid, sound, and free of anti-adherents. All slab constructions must meet the specific requirements of the floor covering to be installed.

Sub Floor Examination

Prior to installation, the subfloor must be checked according to NWFA installation guidelines. It must be solid and sound, flat, permanently dry, clean, free of chaps, indentations, and anti-adherents, and resistant to pressure and tension. The moisture content of all floors must be measured before installation. All wood floors should have 6-9% moisture content at installation. There should be no more than a 4-5% variance in moisture content between the wood flooring and any wood subfloor. See NWFA guidelines and the wood flooring manufacturer's recommendations for details.
No moisture testing is required for installation of engineered wood floor in new construction as long as a new STAUF #12 clip-on blade is used for every pail, there is 100% coverage of the adhesive on the subfloor, the spread rate does not exceed 35 SF/gal and concrete floors are at least 30 days old.
The following conditions MAY NOT be present: Hydrostatic pressure, Excessive vapor emissions, Missing or compromised vapor barrier, Standing water or visible dampness, Uneven and/or unapproved subfloor materials, Improper substrate preparation, Excessive exterior water (damaged water pipes, sinks, icemakers, faulty plumbing, flooding, etc.), Excessive topical moisture, improper ventilation or conditioning, or faulty maintenance of flooring, Use of Adhesives as a moisture control system below grade.

Sub Floor Preparation

Depending on the type and condition of the subfloor, a mechanical treatment (e.g., mechanical brushing, grinding, or sanding) may be required. The intensity of such work must be determined on-site by the installer. Dust, paint, residual adhesives, dirt, oil, grease, sealers, curing compounds, waxes, silicates, laitance, or other surface contaminants must be removed by suitable means. Cleaning the surface with an industrial vacuum cleaner is recommended. Cracks and gaps must be filled with concrete crack filler unless they are expansion joints. Level when necessary to 3/16 inches within 10 feet. Heated subfloors, gypcrete, and lightweight concrete must be primed. Fast-curing cementitious leveling or patching compounds might reduce the flash and work time of water-based products due to absorption and should be primed.

Installation Procedure

Spread the adhesive with the appropriate notched trowel. Avoid excessive adhesive thickness by passing the trowel evenly through the adhesive at a 45° angle. There is no flash time, so installation should begin immediately. Lay the flooring into the adhesive, correctly position it and press down firmly. Rolling is neither required nor recommended. Be sure to check the boards at regular intervals to ensure a good adhesive transfer from subfloor to flooring is achieved. Bowed boards or boards over low spots should be weighted down until the adhesive cures.

Limitations

When using other than STAUF products in conjunction with STAUF primers, sealers, leveling compounds, or adhesives, STAUF denies any and all responsibility for any ensuing problems and/or damages without prior written authorization from STAUF.
In case of an accident, injury, spill, or exposure, see SDS for information. Consult the Technical Data Sheet at www.staufusa.com for updated information.
Do not install solid wood below grade. Do not use on concrete with curing agents or sealers. Do not install wood flooring with a moisture reading above 9%. Do not use adhesive as a leveling material. This adhesive will not prevent moisture-related damages to wood flooring caused by flooding, busted pipes, etc., or where moisture conditions are in excess of limitations outlined in the Subfloor Examination.
This adhesive is mold and mildew-resistant and water resistant when fully cured. However, it will not prevent moisture-related damages to wood flooring unless it is used as a moisture barrier (if applicable) within the limitations set forth in the Technical Data Sheet.
The foregoing representations are based on the results of our most current product and material testing within a controlled environment and are of a non-obligatory advisory nature only. As such, they do not constitute an express or implied warranty of any kind including the Warranty of Merchantability and/or Fitness for a Particular Purpose. Because we have no control over the actual quality of workmanship, materials used, and worksite conditions, STAUF USA LLC will in no event be liable for any incidental and/or consequential damages. Therefore, we strongly recommend that prior on-site testing be conducted to refer to and study the suitability of the product for the intended purpose. With the release of this Technical Information Sheet, all its prior versions become invalid. For warranty and warranty disclaimer information please see our Limited Lifetime Warranty @ www.staufusa.com

General Features

- LEED qualified
- Contains no isocyanates
- Contains no water
- Contains no solvents
- Contains no VOC (calc. per CA Rule 1168)
- Certified green
- Certified very low emission
- Nonflammable
- High solids content
- Ozone friendly
- Moisture and sound barrier in one step process
- Freeze/thaw stable
- Bridges cracks

Installation Features

- Wet lay - no flash time required
- Strong green grab
- Non-slump formula
- Bridges normal sub floor variations
- Eliminates hollow spots
- Very low odor
- Cleans with acetone
- No rolling required
- Does not cause cupping of wood flooring
- Long open time
- Spreads easily
- Higher temp and RH will shorten drying time

Long Term Features

- Resistant against aging
- Remains elastic
- Sound reduction: STC & IIC @ 72/74 dB
- Suitable for radiant heat systems with primer
- Allows normal dimensional changes in wood flooring
- Adhesive is waterproof when cured
- No health hazards

Approved Flooring

- Engineered Wood Flooring
- Ceramic & Stone
- Strip Flooring
- Shorts
- Planks, up to 7 in wide
- Solid Wood Flooring must be straight and flat
- Bamboo or Eucalyptus Flooring (except Strand Woven Products)

Approved Subfloors

- Concrete Slabs
- OSB (underlayment grade)
- Plywood (underlayment grade)
- Ceramic Tiles
- Stone, Terrazzo
- Cured Leveling Compounds
- Radiant Heated Subfloors
- Wet Concrete Slab up to 14#/24hr/1000SF and 92% RH

Approved Primers

- Primer is normally not required
- STAUF AQP-200 Eco-Prime

Approved Sealers

- Sealer is normally not required

Approved Leveling Compounds

- STAUF ULC-500 Universal Leveling Compound

Approved Trowels and Spread Rate

- Moisture Barrier-#12: up to 35 SF/gal. (Must use one per pail)

Cure Time until Normal Traffic

- Approx. 48 hours

Clean-Up

- Use acetone while wet
- Remove mechanically if dried

Temperature Range during Installation

- 50-90F (10-32C)

Relative Humidity Range during Installation

- 30% - 80%

Packaging Size

- 3 gal. Plastic Pail
- 48 per pallet

Color

- Brown

Shelf Life

- 12 Months in original, unopened container

Shear Strength

- 363 psi (2.5 N/mm²)

Water Vapor Permeability [ASTM E-96]

- 0.1 g / 24h * m² * mmHg
- 0.1 perms* inches

Open Time	30% R/H	50% R/H	80% R/H
50F/10C	2 1/2 hours	2 hours	1 1/2 hours
70F/21C	1 3/4 hours	1 1/4 hours	1 hour
90F/32C	1 hour	50 mins	40 mins