

Technical Data Sheet (TDS)

SMP-960 One-Step®

Polymer Based Timber Flooring Adhesive

Special features

- ▣ reduces materials and steps from 4 to 1
- ▣ provides sound reduction up to 45 dB per VIPAC test
- ▣ moisture barrier up to 14# or 92% RH



Product Description

STAUF SMP-960 One-Step is an advanced formula, unique polymer 3-in-1 adhesive designed for professional timber 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 it meets ASTM standards for sound and impact noise control. Long open time allows for easy installations. No rolling is required. Since there is no water or solvent present, it will not cause dimensional changes to timber flooring. SMP-960 offers superior flexibility and moisture-retarding capability.

The adhesive spreads easily and has a non-slump formula that will help insure contact and adhesive transfer because the ridges will bridge normal gaps between the flooring and sub floor. 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 sub floor. Read and understand all applicable guidelines and technical data sheets before beginning installation. Follow industry standards and flooring manufacturer's recommendations for sub floor moisture content, design, layout and application of flooring materials. All slab constructions must meet the specific requirements of the floor covering to be installed.

Sub Floor Examination

Prior to starting, the sub floor 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, as well as resistant to pressure and tension. Moisture content of all floors must be measured before installation. Moisture content in concrete sub floors must be below 75% RH using an in-situ probe. When used in conjunction with a #12 trowel/blade (up to 0.86 m²/L) a moisture barrier of up to 92% RH using an in-situ probe may be achieved and is warranted. All timber floors should have 8-14% moisture content at installation. There should be no more than a 4-5% variance in moisture content between the timber flooring and any timber sub floor. See NWFA guidelines and the timber flooring manufacturer's recommendations for details.

Sub Floor Preparation

Depending on type and condition of sub floor, a mechanical treatment (e.g. mechanical brushing, grinding or sanding) may be required. Intensity of such work must be determined at the site by the installer. Dust, paint, residual adhesives 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 sub floors must 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 degree 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 make certain good adhesive transfer from floor to flooring is accomplished. 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 accident, injury, spill or exposure, see MSDS sheet for information. Consult technical data sheet at www.staufusa.com for updated information. Do not install solid timber below grade. Do not use on concrete with curing agents or sealers. Do not install wood flooring with a moisture reading above 14%. Do not use adhesive as a leveling material. This adhesive will not prevent moisture-related damages to timber flooring caused by flooding, busted pipes etc., or where moisture conditions are in excess of limitations outlined in the Sub Floor Examination. This adhesive is mold and mildew resistant and waterproof when fully cured and will not dissolve if it gets wet. However, it will not prevent moisture-related damages to timber flooring unless it is used as a moisture barrier 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 Adhesive 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
- ❑ 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 odour
- ❑ cleans with acetone
- ❑ no rolling required
- ❑ no dimensional changes in timber flooring
- ❑ long open time
- ❑ spreads easily
- ❑ higher temp & RH will shorten drying time

Long Term Features

- ❑ resistant against aging
- ❑ remains elastic
- ❑ sound reduction: 45 dB per VIPAC test
- ❑ moisture barrier up to 14# or 92% RH using XBL12
- ❑ suitable for radiant heat systems with primer
- ❑ allows normal dimensional changes in timber flooring
- ❑ adhesive is waterproof when cured
- ❑ No health hazards

Approved Timber Flooring

- ❑ Engineered Timber Flooring
- ❑ Ceramic & Stone
- ❑ Strip Flooring (Solid Timber, <6 cm wide)
- ❑ Shorts (Solid Timber, <6 cm wide, <1 m long)
- ❑ Planks (Solid Timber, <18 cm wide)
- ❑ Solid Timber Flooring must be straight and flat
- ❑ Bamboo Flooring (except Stranded Bamboo)

Approved Sub Floors

- ❑ Concrete Slabs
- ❑ OSB (underlayment grade)
- ❑ plywood (underlayment grade)
- ❑ ceramic tiles
- ❑ stone, terrazzo
- ❑ cured levelling compounds
- ❑ radiant heated sub floors
- ❑ Wet Concrete Slab up to 14#/24hrs/1,000SF 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

- ❑ Trowel #12: up to 0.86 m²/L. (Must use 1 blade per pail)

Cure Time until Normal Traffic

- ❑ approx. 48 hours

Clean-Up

- ❑ Use acetone while wet
- ❑ Use plastic scraper and terry cloth when dry

Temperature Range during Installation

- ❑ 10-30 °C

Relative Humidity Range during Installation

- ❑ 30% - 80%

Packaging Size

- ❑ 3 gal. (11.56 L) Plastic Pail
- ❑ 48 per pallet

Weight [lbs./gal.]

- ❑ 13.7

colour

- ❑ brown

Shelf Life

- ❑ 12 Months in original, unopened container

Shear Strength

- ❑ 363 psi (2.5 N/mm²)

Water Vapor Permeability

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

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