Technical Data Sheet (TDS)

PIC-850 Contractor's Urethane Adhesive

Moisture Cured Urethane Wood Flooring Adhesive

Special features

- Holds ridges well non slumping
- Moisture cured
- Requires no moisture testing (some restrictions apply)
- Excellent all around choice for adhering to multiple surfaces
- Strong shear strength
- Easier spread than most moisture cured urethanes

Product Description

STAUF PIC-850 Contractor's Urethane Adhesive is a urethane-based, high-strength adhesive for professional wood flooring installation. It qualifies for LEED credits. Long open time allows for easy installations. Since there is no water present, it will not cause dimensional changes to wood flooring at installation. It grabs, holds, and keeps wood floors in place. This adhesive is waterproof when fully cured and will not dissolve if it gets wet. However, it will not prevent moisture-related damage to wood flooring.

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. 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.

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.

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.

Any adhesive on the surface of the flooring must be cleaned up immediately to prevent damage to the finish.

Storage

Seal pail tightly and store in a cool dry place.

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.

Do not install solid wood below grade. Do not use on concrete with curing agents or sealers except approved STAUF Sealers. Do not use on damp subfloors. Do not install wood flooring with a moisture reading above 9%. Do not use adhesive as a leveling material.

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.

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 water
- Contains no chlorinated solvents
- Nonflammable
- High solids content
- Ozone friendly
- Isocyanate based Urethane for strong bond
- Freeze/thaw stable

Installation Features
- Wet lay - no flash time required
- Non-slump formula
- No rolling required
- Does not cause cupping of wood flooring
- Long open time
- Spreads easily
- Higher temp and RH will shorten drying time
- Cleans with urethane cleaner

Long Term Features
- Resistant against aging
- Suitable for radiant heat systems with primer
- Allows normal dimensional changes in wood flooring
- Adhesive is waterproof when cured

Approved Flooring
- Engineered Wood Flooring
- Rubber Flooring
- Parquet
- Bamboo or Eucalyptus NOT approved
- Underlayments
- Laminate Flooring

Approved Subfloors
- Concrete Slabs
- OSB (underlayment grade)
- Plywood (underlayment grade)
- Felt backed Sheet Vinyl (well bonded, sanded, asbestos-free)
- Ceramic Tiles
- Stone, Terrazzo
- Cured Leveling Compounds
- Radiant Heated Subfloors
- Epoxy Sealers (100% solid, cured)

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

Approved Sealers
- STAUF ACS-210 True-Seal
- STAUF ERP-270 Perma-Seal

Approved Leveling Compounds
- STAUF ULC-500 Universal Leveling Compound
- STAUF SLC-540 Self Leveling Compound
- STAUF QFF-560 Quick Feather Float

Approved Trowels and Spread Rate
- Engineered Floors-#5 (3/16 x 1/4 x 3/8 in) up to 60 SF/gal.
- Parquet-#3 (5/32 x 1/8 x 3/16 in) up to 70 SF/gal.
- Moisture Barrier-#12: up to 35 SF/gal. (Must use one per pail)
- Underlayments-#15 (3/32 x 3/32 x 3/32 in) up to 130 SF/gal.

Cure Time until Normal Traffic
- Between 24 and 48 hours

Clean-Up
- Acetone when wet
- Product will damage surfaces - clean while wet

Temperature Range during Installation
- 50-90F (10-32C)

Relative Humidity Range during Installation
- 30% - 80%

Packaging Size
- 4 gal.plastic pail
- 36 per pallet

Color
- Grey

VOC (Rule 1168 calc.) [g/L]
- 30

Storage
- Dry

Shelf Life
- 9 Months in original, unopened container

Shear Strength
- 189 psi (1.3 N/mm²)

Open Time	30% R/H	50% R/H	80% R/H
50F/10C	1-1/2 hours	1-1/4 hours	1 hour
70F/21C	1-1/4 hours	1 hour	45 mins.
90F/32C	1 hour	45 mins.	30 mins.