

991 PROVANTAGE

Advanced Solvent VOC-Compliant Wood Flooring Adhesive

- **Advanced VOC-Compliant Solvent Technology**
- **Superior Strength & Green Grab**
- **Trowels and Spreads Easily**
- **Highly Moisture Resistant**

FEATURES AND BENEFITS

- Specifically designed for use in new construction
- No flash time is required – wet lay installation method
- Open time is 30-45 minutes
- Helps minimize hollow and popping spots
- Sets up quickly and minimizes board movement—even during seasonal changes
- Approved for use with Titebond 531 Moisture Control System
- Wet and cured adhesive can be easily removed from surfaces with mineral spirits

ORDERING INFORMATION

- 3.5 Gallon Metal Pail / 1 Unit Per Package
40.53 lbs. / 36 Pails Per Pallet
Product Code: 8179

Titebond® 991 PROvantage Wood Flooring Adhesive is based on proprietary VOC-compliant advanced solvent technology. This unique combination provides the installer with the benefits of solvent adhesive technology, while being environmentally responsible and complying with all federal and state VOC regulations. The product's incredible green grab allows flooring installations to be completed with little or no tape. It is ideal for use in new construction, as it lends itself to quick installations and improved productivity primarily with all engineered flooring, as well as bamboo and solid wood flooring up to 5/8" thick. Floor traffic can occur as soon as four hours after the installation. Titebond 991 PROvantage trowels smoothly and is easier to cleanup, wet or dry, when compared to urethane adhesives. The adhesive is highly moisture resistant, and is not adversely affected by exposure to moisture or water.



**EASY
CLEAN UP**

**SOLVENT
BASED
PERFORMANCE**

**SUPERIOR
STRENGTH**

Titebond®
THE PRO'S ADVANTAGE™

PHYSICAL PROPERTIES (TYPICAL)

- **Type:** Advanced solvent
- **Color:** Beige
- **Solids:** 67%
- **Flashpoint:** 7°F (Pensky-Martens Closed Cup)
- **Freeze/Thaw stability:** Not affected by freezing
- **Storage life:** 1 year in tightly closed container
- **Calculated VOC:** <50 g/L
- **Weight/gallon:** 10.45 lbs.
- **Viscosity:** 125,000 cps @ 72°F

SUBFLOOR PREPARATION

All substrates must be clean, dry, structurally sound, properly cured and free of dirt, oil, paint, old adhesive, wax, sealers and curing agents. General scouring with 20 grit or #3 1/2 open coat sandpaper will remove most compounds. All loose materials must be vacuumed from the surface after scouring. The subfloor must be flat to a tolerance of 3/16" in a 10' radius. Hollow spots, popping spots and squeaks are related to unevenness in the subfloor. Grinding concrete floors is preferred over the use of filling compounds. If filling/flattening compounds are used, they must be Portland-based cementitious material and have a compressive strength equal to or greater than 3000 psi when cured. Use of adhesive over light weight concrete and all gypsum-based materials requires the use of an approved concrete primer prior to application of adhesive. Remove all existing base, shoe molding and door thresholds prior to continuing the installation. All door casings must be undercut with either a jamb saw or a hand saw. Use a piece of the flooring as a guide to determine the thickness needed.

INSTALLATION

USE THIS PRODUCT ONLY IF ADEQUATE VENTILATION CAN BE PROVIDED. Use a properly fitted, air-purifying respirator with organic vapor cartridge that complies with all applicable standards while troweling this product. If proper ventilation cannot be provided, a different Titebond adhesive should be used. Open doors and windows for cross ventilation and use fans to accelerate ventilation. Temporarily block vents and air returns during the installation to prevent the drifting of solvent vapors. All pilot lights and flame sources must be extinguished prior to installation and until solvent has evaporated. Titebond 991 PROvantage should be installed using the "wet lay" installation method and installer should not work on top of the wood. Titebond 991 PROvantage SHOULD NOT BE FLASHED. Begin laying the wood flooring immediately after troweling the adhesive with the correct trowel. To reduce slippage, secure the first starter row with Titebond Tape. Work in small sections to ensure proper transfer of the adhesive to the wood flooring, placing remaining planks firmly into adhesive. Proceed in this manner until the field is complete, making sure to allow for proper expansion space around the room. Refer to flooring manufacturer for expansion spaces. After completion, wedge the flooring so that it remains tight during the drying process. Planks which are not flat should be weighted for several hours. Before leaving for the day, walk the floor and look for any defects or other cosmetic blemishes. This will also ensure the wood flooring is properly seated into the adhesive. After the adhesive has dried, remove and discard the wedges. Maintain ventilation for 24 hours after installation to remove any solvent vapors.

Titebond 991 PROvantage may be used for above-, on- and below-grade applications and on all substrates listed in this specification guide. All applications are susceptible to moisture and should be tested for moisture prior to installation in several locations within the installation area.

Acceptable conditions of concrete for above-, on- and below-grade applications are:

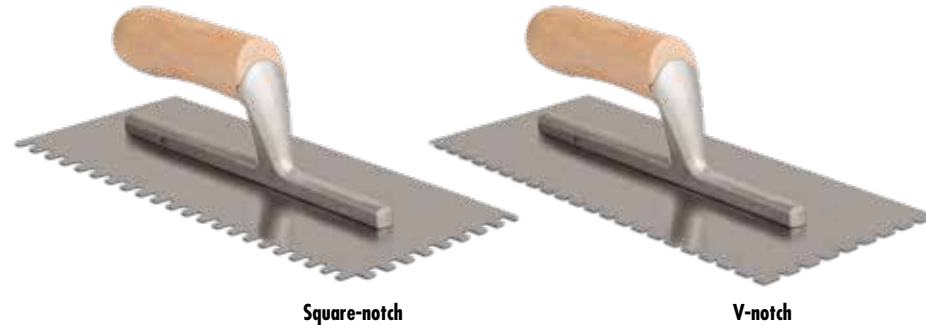
- Less than 3 lbs. /1000 sq.ft./24 hours on a Calcium Chloride Test (ASTM F1869)
- Less than a reading of 4.5 on a Tramex Concrete Moisture Encounter
- Relative humidity (RH) of 75% or less when tested with an in situ probe (ASTM F2170)
- For higher moisture readings use Titebond 531. DO NOT USE Titebond 531 Plus.

Acceptable conditions of wood substrates are a moisture reading of less than 12% or be no more than 4% different from the flooring being installed when using a Tramex, Delmhorst or equivalent wood moisture meter. If subfloor moisture conditions do not meet above guidelines at the time of flooring installation or they could exceed them at any time after installation then Titebond 531 Moisture Control System should be used. DO NOT USE Titebond 531 PLUS Moisture Control System.

APPLICATION GUIDELINES

TYPE OF FLOORING/FLOORING THICKNESS	TROWEL SIZE	COVERAGE
All parquets measuring less than 3/4" in thickness	1/8" x 1/8" x 1/8" (Square-notch)	65 sq. ft. per gallon
All engineered flooring	3/16" x 1/4" x 1/16" (c-c V-notch)	65 sq. ft. per gallon
Solid flooring and bamboo with a width less than 3" and measuring 5/8" or less in thickness	3/16" x 1/4" x 1/2" (c-c V-notch)	50 sq. ft. per gallon
Solid flooring and bamboo with a width greater than 3" and measuring 5/8" or less in thickness, and 3/4" shorts	3/16" x 3/16" x 3/16" (Square-notch)	35 sq. ft. per gallon
Cork underlayment	1/16" x 1/16" x 1/16" (Square-notch)	155 sq. ft. per gallon

Jobsite/Subfloor: New, old or existing concrete, properly treated light weight concrete / Below-grade concrete / Plywood / OSB (oriented strand board) / Radiant heated slabs / Clean and unwaxed vinyl/cork



CLEAN UP

Wet and dried adhesive can be easily removed from surface with mineral spirits. Follow solvent vendor's precautions. NOTE: Test solvent in an out-of-the-way area to make sure it will not mar or attack the surface. For specific cleaning instructions, call Franklin Technical Service at 1.800.347.4583.

DANGER. Highly flammable liquid and vapor. Causes serious eye irritation. Suspected of causing cancer if inhaled. Causes damage to organs if swallowed. (eyes). May cause respiratory irritation. May cause drowsiness or dizziness. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Use only non-sparking tools. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Prolonged or repeated contact may dry skin and cause irritation. Avoid contact with skin and clothing. Wash hands thoroughly after handling. **FIRST AID:** IF exposed: Call a POISON CENTER or physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Store in a well-ventilated place. Keep cool. **FIRE:** Use water spray (fog), dry chemical, or CO₂. Cool containers with water spray. In case of major fire and large quantities, evacuate area. Fight fire remotely due to risk of explosion. Dispose contents and container in accordance with local, regional, national, and international regulations. For additional information, refer to Safety Data Sheet.

IMPORTANT NOTICE: Our recommendations, if any, for the use of this product are based on tests believed to be reliable. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing laws and/or patents covering any material or use.

WARRANTY: The full warranty for Titebond 991 and all Titebond flooring products can be obtained at www.Titebond.com or by calling 1.800.347.4583.

VISIT WWW.TITEBOND.COM FOR THE MOST UP-TO-DATE PRODUCT INFORMATION

