

Titebond®
THE PRO'S ADVANTAGE™

991 PROVANTAGE

WOOD FLOORING ADHESIVE

- **ADVANCED VOC-COMPLIANT SOLVENT TECHNOLOGY**
- **SUPERIOR STRENGTH AND GREEN GRAB**
- **TROWELS AND SPREADS EASILY**
- **HIGHLY MOISTURE RESISTANT**

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 clean-up, 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.

Features and Benefits

- Specifically designed for use in new construction
- Up to 65 sq. ft./gallon for engineered flooring
- Solvent-based performance, superior strength
- No flash time is required – wet lay installation method
- Open time is 30-45 minutes
- Easy clean-up – wet and cured adhesive can be easily removed from surfaces with mineral spirits
- Ideal for installation of all engineered flooring, as well as bamboo and solid flooring up to 5/8" thick
- VOC-compliant with all federal and state regulations as well as the SCAQMD
- 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

Specification Guide

Type of Flooring/Flooring Thickness	Jobsite/Subfloor
• All parquets measuring less than 3/4" thick	• New, old or existing concrete, properly treated light weight concrete
• All engineered flooring	• Below-grade concrete
• Solid wood flooring measuring 5/8" or less in thickness	• Plywood
• Bamboo flooring	• OSB (oriented strand board)
• 3/4" solid shorts (less than 24")	• Radiant heated slabs
• 5/8" plywood (2'x8' or 4'x4')	• Clean and unwaxed vinyl/cork



PHYSICAL PROPERTIES (TYPICAL)

Type: Advanced solvent	Calculated VOC: 6.3 g/L
Color: Beige	Weight/gallon: 10.45 lbs.
Solids: 67%	Viscosity: 125,000 cps @ 72°F
Flashpoint: 7°F (Pensky-Martens Closed Cup)	
Freeze/Thaw stability: Not affected by freezing	
Storage life: 1 year in tightly closed container	

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)

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 a Titebond moisture control system should be used.

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.

ORDERING INFORMATION

Product Code	Size	Units Per Package	Weight	Packages Per Pallet
8179	3.5 Gallon Metal Pail	1	40.53 lbs.	36

APPLICATION GUIDELINES

All parquets measuring less than 3/4" in thickness

- Trowel Size - 1/8" x 1/8" x 1/8" (Square-notch)
- Coverage - Approximately 65 sq. ft. per gallon



All engineered flooring

- Trowel Size - 3/16" x 1/4" x 11/16" (c-c V-notch)
- Coverage - Approximately 65 sq. ft. per gallon



Solid flooring and bamboo with a width less than 3" and measuring 5/8" or less in thickness

- Trowel Size - 3/16" x 1/4" x 1/2" (c-c V-notch)
- Coverage - Approximately 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

- Trowel Size - 3/16" x 3/16" x 3/16" (Square-notch)
- Coverage - Approximately 35 sq. ft. per gallon



Cork underlayment

- Trowel Size - 1/16" x 1/16" x 1/16" (Square-notch)
- Coverage - Approximately 125 to 185 sq. ft. per gallon



CAUTION STATEMENT: DANGER: EXTREMELY FLAMMABLE. VAPOR HARMFUL.

Contains methyl acetate, oxydipropyl dibenzoate and residual vinyl acetate. Keep away from heat, sparks and flame. Wear appropriate personal protective equipment when handling and using. Use only with positive cross-ventilation. Avoid breathing vapors. Do not swallow. Do not allow eye contact or prolonged skin contact. Uncured product can cause eye or skin irritation. Prolonged or repeated overexposure to solvents in uncured product can cause central nervous system, peripheral nervous system, eye, skin, liver, kidney or respiratory system effects. **First Aid:** If dizziness or other adverse effects are experienced, move to fresh air; contact physician if discomfort persists. If eye contact occurs, flush eyes with water for 15 minutes; contact physician immediately. If swallowed, do not induce vomiting; contact physician immediately. Wash skin contact areas with soap and water; contact physician if irritation persists. Read Material Safety Data Sheet before using this product. **KEEP OUT OF THE REACH OF CHILDREN.**

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.

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