Titebond® 531 EPOXY MOISTURE CONTROL SYSTEM

Franklin International

531

- Warranted with recommended adhesives
- Significantly reduces moisture transmission
- Resists mold and mildew
- One coat coverage
- Easy to mix and apply

Titebond® 531 Moisture Control System solves the challenges of moisture transfer from concrete subfloors to wood flooring by reducing the transmission rate of moisture. The system consists of two pre-measured components that are mixed together to form a coating that is applied to the concrete surface. The easy-to-use formula will reduce the moisture vapor transmission rate from concrete subfloors by 75%-90% depending on the coat weight and coverage per sq. ft. applied of Titebond 531. When used as directed with recommended Titebond wood flooring adhesives, Titebond 531 is fully-warranted. It dries fast, is tack-free overnight, has a low odor and eliminates the need for bead blasting or other inconvenient measures. In addition, it helps reduce the potential for mold and mildew growth caused by subfloor moisture. Titebond 531 provides the professional installer with a cost-effective, convenient system designed to reduce concrete subfloor moisture in wood flooring installations.

Solutions for Flooring & Construction
Construction Products Division
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Why Professional Installers Prefer Titebond® 531

Warranted Installation System
Titebond® 531 comes with the option of two unique warranties when used as directed with recommended Titebond Wood Flooring Adhesives. The warranty is non-transferable and only covers the cost of the materials and labor. Refer to the warranty section of literature for complete details.

Moisture Reduction
Subfloor moisture is the number one concern for wood flooring installations in new home construction. Titebond 531 will effectively reduce 75%-90% of vapor transmission in concrete per ASTM E-96 specifications, depending on coat weight and coverage per square foot.

Cost-Effective Protection
Unlike other systems that can cost over $3 per foot, Titebond 531 offers the security of reducing moisture transmission at a reasonable price. It gives the professional installer the most cost-effective, premium warranted system in the industry today. In addition, it is a better value than vinyl underlayment applications.

Mold and Mildew Information
Titebond 531 is mold and mildew resistant. In addition, when used properly as a concrete coating, it can help reduce the transmission rate of moisture from a concrete subfloor into the flooring above it, thereby reducing the potential for mold growth. However, it is not meant as a crack patch and will not prevent moisture from entering through unpatched cracks or from cracks that occur over time in the subfloor, both of which can provide a moisture source for mold growth. Titebond 531 will also not prevent moisture collection from sources other than the subfloor/substrate or prevent mold growth on materials other than the product itself.

Preferred Packaging Design
Titebond 531 is designed with the installer in mind. All components of the product are packaged together within one container. The package allows for Part B to be mixed into the pail containing Part A. This allows for a new container to be used each time the product is mixed. The installer does not need to search for a clean container, thereby reducing the concern of contamination. The packaging configuration of Titebond 531 eliminates the possibility of “creative chemistry” on the job site. Titebond 531 was not designed to be partially mixed and must be used according to the recommended directions.

Easy-to-Use
Titebond 531 is easy to mix and apply. It can be mixed to a uniform color within a couple of minutes and should be applied with a 3/8” medium nap roller. To spread the product, pour a “wet-line” of material approximately 3” wide the length of the room along the starting wall. Do not allow material to get on walls. Spread the material with a roller; avoid excessive pressure on the roller, as excessive pressure will limit the amount of material being spread. Spread the Titebond 531 at a rate covering 400 square feet per unit (gallon size) and 100 square feet per unit (quart size) for Gold Warranty or 250 square feet per unit (gallon size) and 62 square feet per unit (quart size) for Platinum Warranty.

Non-Blushing Formula
The phenomenon known as “blushing” occurs when an oily or waxy residue forms on top of an applied epoxy surface. Titebond 531 has been formulated with quality raw materials that normally do not require the coating to be wiped with solvent prior to installation, when applied in recommended conditions. The non-blushing characteristic greatly reduces the potential for obstacles associated with inadequate surface preparation.

Storage/Shelf Life
Store in a clean, dry environment above 60°F. Shelf life is one year from date of manufacture.

FEATURES AND BENEFITS
- One self-contained package
- Pre-measured portions to ensure proper mixing ratios
- Complete installation directions on containers
- Gallon size covers 400 square feet for Gold Warranty or 250 square feet for Platinum Warranty
- Quart size covers 100 square feet for Gold Warranty or 62 square feet for Platinum Warranty
- Easy to mix and apply
- Less expensive than vinyl
- 10 Year Residential Warranty; 5 Year Commercial Warranty
- Cure time is approximately 4-6 hours at 70°F
- Mold and mildew resistant
- Adhesion promoter
- Low odor

HELPFUL HINTS
Items needed:
- Recommended wood flooring adhesives: Titebond 811 Advantage, Titebond 821 Premium and Titebond 741 Ultimate
- Flat head screw driver
- Double insulated electric drill
- Mixing blade – paint mixer or plaster paddle
- Medium nap roller

For the installation of bamboo and solid products with Titebond 531, the required adhesives are Titebond 821 Premium or Titebond 741 Ultimate.
**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 paper will remove most compounds. After scouring, all loose materials must be vacuumed from the surface. Subfloor must be flat to a tolerance of 3/16" in 10'. Grinding concrete floors is recommended over using filling compounds. All filler/leveling compounds must be of Portland base and have a high compressive strength.

**Concrete Surface Preparation**

Concrete subfloors must be structurally sound and free of voids and cracks. Make repairs to concrete substrates to remove unsound or deteriorating areas. If needed, apply cementitious patch to any voids or cracks. Allow cementitious repair materials to cure per cementitious manufacturer’s recommendations. Lightweight concrete or gypsum-based subfloors/materials must have Titebond Concrete Primer (or equivalent) applied prior to use of Titebond 531. Follow directions of Titebond Concrete Primer (or equivalent).

**Moisture Content Limitations—Gold Warranty Only**

All applications are subject to moisture and should be tested for moisture prior to installation. Titebond 531 should be used on all concrete substrates where a calcium chloride reading is below 12 lbs./24 hours/1000 square feet. Concrete subfloors with a reading over 12 lbs. must be allowed to dry out prior to using Titebond 531. Do not install Titebond 531 on below-grade installations. There are no moisture content limitations when terms of the Platinum Warranty have been met. Refer to warranty section for complete details.

**Moisture Testing—Gold Warranty Only**

A Calcium Chloride Test must be completed and recorded PRIOR to using the Titebond 531 for the Gold Warranty to be obtained. Concrete with greater than 12 lbs. of emission should be allowed to dry out before applying any floor covering unless terms of the Platinum Warranty have been met. No moisture testing is required when terms of the Platinum Warranty have been met. Refer to warranty section for complete details.

**Ventilation**

Titebond 531 contains solvent. Positive cross ventilation is required at all times. Extinguish all pilot lights and flames prior to mixing or applying.

**Mixing Directions**

DO NOT THIN. DO NOT HAND MIX. Begin mixing both components in the Part A pail using a power mixer (e.g. 1/2” drill and paint or plaster paddle). Mix thoroughly for two minutes. Once Titebond 531 is completely mixed, the working time is 30 minutes. The portions are pre-measured to assure optimal performance. DO NOT MODIFY OR ESTIMATE.

**Application Directions**

Apply Titebond 531 directly to a clean and dry surface. Minimum required coverage is 4 mils wet film thickness (400 sq. ft. per mixed gallon unit; 100 sq. ft. per mixed quart unit) for Gold Warranty and 6.5 mils wet film thickness (250 sq. ft. per mixed gallon unit; 62 sq. ft. per mixed quart unit) for Platinum Warranty. Apply with a 3/8” nap roller immediately after mixing. Pour a “wet-line” approximately 3” wide the length of the room and spread with a roller. The product may also be used from a pan. Avoid excessive pressure on the roller so that an adequate amount of material will be spread. Excessive pressure will thin the material application. For best results, when using gallon size, divide the area into 4 sections and use 1/4 of the mixed product in each section. Do not extend the coverage as this will result in a voided warranty. Working time is 30 minutes once completely mixed.

**Application Conditions**

For best results, do not apply Titebond 531 when the temperature is below 65°F. Temperatures below 65°F may lead to increased curing time. Additionally, applications below 65°F are subject to a phenomenon known as “blushing”, which is an oily or waxy coating that can cover Titebond 531. If blushing occurs, it must be wiped with a solvent and allowed to dry. Follow solvent manufacturer’s directions when working with solvents and other flammable materials. Do not apply Titebond 531 if temperatures exceed 100°F. Applications exceeding 100°F will result in the product curing too quickly, which may jeopardize the quality of the bond to concrete.

**Clean-up**

Fresh coatings and tools can be cleaned with mineral spirits. Follow solvent manufacturer’s directions when working with solvents and other flammable materials.

**Curing Time**

Flooring may be installed over the Titebond 531 after the product is tack free or about 4-6 hours at 70°F. Be aware that temperatures below 65°F may increase curing time. Do not attempt to install flooring over Titebond 531 after 72 hours. If installation is delayed beyond 72 hours, the subfloor must be lightly abraded using a buffer. Clean the floor thoroughly before applying adhesive. For questions, call Franklin Technical Service at 1-800-347-4583.
PARTICULAR PURPOSE CONCERNING THE PRODUCT. Franklin's obligations shall be Purchaser's sole and exclusive remedy against Franklin for any liability with respect to the Product whether any claim for recovery is based upon or arises out of any contract, negligence, tort, (including strict liability) or otherwise and that IN NO EVENT SHALL FRANKLIN BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, including, without limitation, loss of income, loss of time, loss of sales, claims asserted by Purchaser's customers, injury to personal property or injury to any person. This warranty is made only to Purchaser and is not transferable.

WARRANTY INFORMATION—PLATINUM WARRANTY

Coverage Rate Platinum Warranty:
6.5 mils wet film thickness (250 sq. ft. per mixed gallon unit, 62 sq. ft. per mixed quart unit)

Statement of Platinum Warranty:
Franklin International (Franklin) warrants to its immediate commercial purchaser for resale (Purchaser) that, for a period of 10 Years for residential applications, or for 5 Years from the date of installation for commercial applications, engineered wood flooring products covered by a valid subfloor moisture warranty that are installed with Titebond Urethane Wood Flooring Adhesives on a concrete subfloor that has been treated with the Titebond 531 Moisture Control System (the Product), will be free of the following moisture related problems due to moisture from the concrete subfloor: cupping, buckling, surface discoloration, and release from the subfloor. In addition, Franklin warrants that mold and mildew will not grow on the Product itself for a period of five years after installation.

Obtaining Warranty Performance
If Purchaser believes that the above warranty has been breached, Purchaser must provide Franklin with a written estimate of the cost to repair the subfloor or to install a new subfloor, including labor and materials necessary to repair the subfloor. Franklin reserves the right to refuse any estimate and to identify acceptable installers. It is a condition of obtaining warranty performance that repairs be approved by Franklin prior to the time they are made. Franklin will reimburse Purchaser for costs Purchaser actually incurs for labor and materials necessary to repair or replace one time the affected area(s) of the installed wood flooring by the approved installer. In the event Franklin determines that the above warranty regarding mold and mildew resistance of the Product itself has been breached, Franklin will, at its option, replace the affected Product or refund the price paid by Purchaser for the affected Product.

Exclusions from Coverage
The above warranty does not apply if (1) all instructions regarding preparation, installation and use of the engineered wood flooring products, Titebond Urethane Wood Flooring Adhesives, and Product are not strictly followed; (2) the Product is used for below grade installations; (3) poor job site pre-inspection, installation, and maintenance procedures are followed; (4) the concrete subfloor is not clean, flat, free of debris and structurally sound; (5) the moisture content of the subfloor is not free of visible moisture including darkening of concrete, standing water, condensation, and/or moisture content of concrete subfloor is or becomes greater than 12 lbs. per a calcium chloride moisture test; (6) the property of the installation does not have proper drainage; (7) moisture related problems are related to flooding, leakage, improper ventilation, improper maintenance or cracks in the subfloor or foundation; or (8) problems arise due to defects in the wood flooring, or misuse or abuse. Further, the Product is not intended for mold or mildew abatement.

Limitations
To the extent permitted by law, the obligations set forth above are Franklin's sole obligations and Purchaser's exclusive remedies and except as set forth above, Franklin makes no other warranties concerning the Product whatsoever. FRANKLIN DISCLAIMS AND EXCLUDES ALL OTHER EXPRESS WARRANTIES AND ALL IMPLIED WARRANTIES INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A

PHYSICAL PROPERTIES (TYPICAL)

Titebond 531 Mixture
- Weight/gallon mixed 8.59 lbs.
- Viscosity mixed 340 cps
- Calculated VOC mixture 98 g/L
- Tack Free Time 4-6 hours 70°F
- Storage Life 1 year in a closed container

Resin (Part A)
- Weight/Gallon 9.18 lbs.
- Viscosity 260 cps
- Color clear
- VOC 103 g/L
- Flash Point 105-110°F

Hardener (Part B)
- Weight/Gallon 9.18 lbs.
- Viscosity 600 cps
- Color amber
- VOC 84 g/L
- Flash Point 120°F

ORDERING INFORMATION

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Customer Service 1-800-669-4583
Technical Service 1-800-347-4583
Supersedes all previously published materials.