

Product sheet

AD-532+ adhesive

Adhesive·Adhésif
AD-532 +



Urethane based adhesive

■ USE

- Commercial and residential
- For adhering an acoustical membrane or engineered wood flooring to concrete or to a wood surface (plywood or OSB) and the engineered wood glue on membrane.

■ FEATURES

- 100 %-solids, fast-setting and moisture-cured urethane adhesive
- Solvent free and contains no water
- Virtually odorless
- Low VOC (15 g/L)
- Lighter than most urethane adhesives

■ MECHANICAL ASSETS

- Easy to spread
- Excellent initial grab to hold the boards in place during installation
- High mechanical strength

■ VERSATILITY

- Approved for use with prefinished and unfinished; parquet, laminated boards, acrylic impregnated wood, cork and all forms engineered wood flooring materials.
- Can be used in elevated subfloor moisture conditions of up to 12 lbs. (5,44 kg) moisture vapor emission rate (MVER) and 95% relative humidity (RH) when a specific installation method and trowel notch configuration are used.
- Can be used with all kinds of in floor heating systems

■ CREDIBILITY

- Meets strict wood flooring manufacturer's requirements
- Contribute to obtain LEED® credits

LEED® synthesis sheet

AD-532+ adhesive

AD-532+ adhesive:

Product contribution to LEED® Canada-NC 2009

LEED® Canada-NC 2009

Contribution

Materials and Resources (MR)

Credit MR 5 – Regional Materials

Requirements

Use building materials or products that **have been extracted, harvested, recovered and processed** within **800 km (500 miles) (2,400 km** if shipped by rail or water) **of the final manufacturing site.**

Demonstrate that the **final manufacturing site** is within **800 km (500 miles) (2,400 km** if shipped by rail or water) of the **project site** for these products.

If only a fraction of a product or material is extracted, harvested, recovered, processed and manufactured locally, then only that percentage (by weight) must contribute to the regional value. The minimum percentage of regional materials for each point threshold is **20 % (1 point)** or **30 % (2 points)**.

Non-compliant

Comments

AD-532+ is a urethane based adhesive designed to glue engineered wood flooring and AcoustiTECH acoustical membranes. This product is ideal for indoor residential, commercial, heavy commercial and institutional use.

The **AD-532+** adhesive does not contribute to this credit since none of the components used in its composition are extracted, collected, treated and recovered within **800 km** by truck or **2,400 km** by train or by boat of the final production site. Moreover, adhesives are not significant and are often excluded from this credit's calculations.

The percentage calculation was performed by considering the requirements of Credit **MR 5** and the maximum distance radius (which depends on the means of transportation used).

The **AD-532+** adhesive's final place of manufacturing is located in Garland, **TX (75041)**.

The origin of the main components and the mean of transportation used must be validated for every project.

All data on regional materials components were identified and validated by a third party – Vertima Inc.

Credit MR 6 – Rapidly Renewable Materials

Requirements

Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year cycle or shorter) for **2,5 %** of the total value of all building materials and products used in the project.

1 to 2 points

Comments

The **AD-532+** adhesive can contribute to this credit since **10,8 %** of its components are considered as rapidly renewable materials (typically harvested within a ten-year cycle or shorter).

All data on rapidly renewable materials components were identified and validated by a third party – Vertima Inc.

* Vertima's interpretation regarding potential contribution and compliance of the product and/or system for the LEED® credits are based on information given by the clients who are responsible for its veracity and integrity. Vertima is validating given proof and vouchers with manufacturers and their suppliers. Therefore, Vertima cannot be held responsible for false information or misinterpretation.

Indoor Environmental Quality (IEQ)

Credit IEQ 3.2 – Management plan: before occupancy

Requirements

Develop an **IAQ** management plan and implement it after all finishes have been installed and the building has been completely cleaned before occupancy.

Option 2 - Air Testing

Conduct baseline IAQ testing, after construction ends and **prior to occupancy**, using testing protocols consistent with the United States Environmental Protection Agency Compendium of Methods for the Determination of Air Pollutants in Indoor Air and as additionally detailed in the LEED® Canada Reference Guide for Green Building Design and Construction. Demonstrate that the contaminant maximum concentrations listed are not exceeded.

1 point

Comments

The **AD-532+** adhesive can indirectly contribute to this credit and can be beneficial to projects selecting the **option 2** in Credit **IEQ 3.2**: Air testing **prior to occupancy**.

AcoustiTECH has shown a marked interest in developing and selecting products that have less adverse effects on the environment. **AcoustiTECH's** adhesives are environmentally friendly and have a low VOC content and may therefore contribute to the interior air quality improvement (**IEQ**).

IEQ credit 4.1 – Low-Emitting Materials: Adhesives & sealants

Requirements

The **VOC** content of adhesives, sealants and sealant primers used must be less than the VOC content limits of the **State of California's South Coast Air Quality Management District (SCAQMD) Rule 1168**, October 2003.

1 point

Comments

The **AD-532+** adhesive complies with the **VOC** content limits of the **SCAQMD rule 1168**.

The **AD-532+** adhesive has a **VOC** content of **15 g/L** and can therefore help achieve this credit.

Regional Priority (RP)

Credit RP 2 – Regional Priority

Requirements

Up to 3 points for Regional Priority Credit 2 may be proposed for this credit that is intended to allow adding point emphasis to recognize one **or** more issues that have additional regional environmental importance.

To achieve a Regional Priority credit, the applicant must identify LEED® credits which have additional regional environmental importance.

A project must achieve the base credit and then propose that credit as a Regional Priority credit.

1 to 3 points

Comments

Please refer to the *Advantages and Aspects to Consider* section of the *Regional Priority* credit.

For a list of applicable credits, please refer to the CaGBC website www.cagbc.org, under the LEED® tools section for the LEED® NC 2009 and LEED® CS 2009 Rating Systems.

TOTAL

AD-532+ adhesive can contribute up to a total of five (5) points for LEED® Canada-NC 2009

*It is important to consider that the total amount of possible points reflects the number of achievable points in each credit categories. The product by itself cannot achieve this score, as defined above, but is considered as a beneficial element in order to achieve LEED® credits.

* Vertima's interpretation regarding potential contribution and compliance of the product and/or system for the LEED® credits are based on information given by the clients who are responsible for its veracity and integrity. Vertima is validating given proof and vouchers with manufacturers and their suppliers. Therefore, Vertima cannot be held responsible for false information or misinterpretation.

DESCRIPTION

AD-532+ is an ultra light high performance, moisture-cured 100 % urethane adhesive with solvent added and low VOC. It is designed to glue engineered wood flooring and AcoustiTECH acoustical membranes. AD-532+ can also be used in elevated subfloor moisture conditions of up to 12 lbs. (5,44 kg) moisture vapor emission rate (MVER) and 95% relative humidity (RH) when a specific installation method and trowel notch configuration are used. AD-532+ is 33% lighter than the majority of urethane based adhesives and is easy to trowel with excellent trowel-ridge-hold. It provides quick grab, excellent final bond strength and a greater amount of coverage.

WHERE TO USE

- **Residential, indoor:** rental apartments, condominiums and homes.
- **Commercial, indoor:** Office buildings, hotel rooms/hallways and restaurant dining areas.
- **Heavy commercial, indoor:** hotel lobbies, convention centers, airports and department stores.
- **Institutional, indoor:** hospitals, schools, universities, libraries and government buildings.

SUITABLE SUBSTRATES

- Exterior-grade plywood, Group 1, CC type or OSB.
- Other approved wood underlayments (per manufacturer recommendations).
- Concrete and properly prepared cement terrazzo*.
- Existing and properly prepared ceramic tile*.
- Cement-based self-leveling underlayments and patching compounds*.
- Properly prepared and primed gypsum underlayments that meet the ASTM F2419 requirements for compressive strength.**
- Properly installed radiant-heat systems.

*Consult AcoustiTECH's Technical Service Department for installation recommendations regarding substrates and conditions not listed.

**Consult AcoustiTECH's Technical Service Department for the recommended primer to be applied prior to proceeding with this type of gypsum substrate installation.

SUBSTRATE PREPARATION

- All substrates must be structurally sound, dry, solid and stable.
- Substrate should be clean and free of dust, dirt, oil, grease, paint, curing agents, concrete sealers, loosely bonded toppings, loose particles, old adhesive residues, and any other substance or condition that may prevent or reduce adhesion.
- Substrates must be flat to 3/16" in a 10-ft span (4,5 mm in a 3-m span). Refer to wood flooring manufacturer's guidelines.
- Concrete and cement-based underlayments and patches must be fully cured and free of any hydrostatic and/or moisture problems.
- Use anhydrous calcium chloride tests to determine emission rate of water vapor from concrete according to ASTM F1869 or use moisture probe tests to determine RH according to ASTM F2170.
- Use a moisture meter to check the relative humidity of wood coating, substrate surface and area full of construction. (Follow the manufacturer's recommendation.)
- In case of doubt, do an adhesion test

PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|---|
| Polymer type | Polyurethane |
| Percentage of solids | 100 % |
| VOC | 15 g/L |
| Trowelability | Easy |
| Percentage of transfer required | 95 % |
| Open time | May vary depending on environmental conditions (humidity and temperature) (depending on conditions) |
| Workable temperature | 50°F - 90°F (10°C - 32°C) |
| Flashpoint | 200°F (> 93°C) |
| Odor | Low |
| Density | 10,5 lbs/US gal. (1,25 g/mL) |
| Viscosity | 131 000 cps |
| Consistency | Smooth paste |
| Color | Light Tan |
| R factor | 0,439 |
| Shelflife | 12 months when stored in original packaging at 73°F (23°C) |
| Freeze stability | Keep from freezing* |
| Storage conditions | 50°F - 90°F (10°C - 32°C) |
| Avoid traffic | 12 hours for light traffic, 24 hours for heavy traffic |
| Size | 4 US gal. (15,1 L) |

*Protect pails against freezing during transportation and storage. On site, store in a heated area and deliver all materials at least 24 hours before starting work..

RESTRICTIONS

- Do not install over any substrates containing asbestos.
- For interior installations only.
- Not recommended for flooring designed for nail-down installations only.
- Do not apply over any adhesive residues including cutback adhesive.
- Do not install when the moisture vapour emission rate (MVER) exceeds 5 lbs per 1,000 sq.ft. (2,27 kg per 92,9 m) per 24 hours, when using the anhydrous calcium chloride test (ASTM F1869), unless installed using the moisture-control method and trowel recommendations explained in the "Application" section below. Do not use this method if the MVER exceeds 12 lbs. per 1,000 sq. ft. (5,44 kg per 92,9 m) per 24 hours.
- Do not install when relative humidity of concrete slabs exceeds 80 % (ASTM F2170), F2170), unless installed using the moisture-control method and trowel recommendations explained in the "Application" section below. Do not use this method when the RH exceeds 95%.
- Use only when the substrate temperature is between 50°F and 90°F (10°C and 32°C), and when the ambient relative humidity is between 20 % and 80 %.

- Do not install solid wood flooring over any resilient flooring.
- Do not use with vinyl-backed cork and bamboo solid flooring.

MIXING

Ready to use; no mixing necessary

Note: Choose all appropriate safety equipment before use. Refer to MSDS for more information or on our website acousti-tech.com or call our Customer Service at 1-888-838-4449.

APPLICATION

DIRECT-BONDING METHOD

1. Read all installation instructions thoroughly before installation.
2. Select the appropriate notched trowel (see "Coverage" section)
3. Spread adhesive evenly over the subfloor, keeping the trowel at a 45° angle to the subfloor.
4. Only apply as much as can be installed within 45 minutes.
5. Install flooring or AcoustiTECH membrane following manufacturer's recommendations.
6. Periodically conform adhesive transfer to the backing by lifting the flooring material or the AcoustiTECH membrane (minimum 95% of the surface).
7. Roll the flooring with a 75- to 100-lb. (34,0- to 45,4-kg) roller across the width and length of the flooring surface, unless otherwise specified by the wood flooring or membrane manufacturer.
8. The floor covering can be installed immediately after the AcoustiTECH membrane installation.
9. Protect from light traffic for at least 12 hours, and from heavy traffic for at least 24 hours.

MOISTURE-CONTROL METHOD

1. Read all installation instructions thoroughly before installation.
2. Select the appropriate notched trowel identified as suitable for use for high-moisture conditions (see the coverage chart).
3. Using the flat side of the trowel, key in the adhesive over the entire surface of the subfloor to ensure 100% coverage.
4. Using the notched side of the trowel, spread the adhesive consistently and evenly over the subfloor. Keep the trowel at a 45-degree angle to the subfloor and keep trowel ridges perpendicular to the direction of the board or plank.
5. Periodically check for monolithic adhesive layer to ensure 100% coverage over the subfloor and transfer to the back of the AcoustiTECH membrane or wood flooring. The 100% coverage is mandatory for applicability of the moisture-control warranty.
6. Only apply as much adhesive as can be installed within 45 minutes.
7. Install wood flooring in strict accordance with the wood-flooring manufacturer's written instructions.
8. Protect the installation from light traffic for at least 12 hours and from heavy traffic for at least 24 hours.

CLEANING

Immediately clean surfaces covered with adhesive with hot water or AD-Remover wipes when fresh and with AD-Remover wipes when dry.

STORAGE

Close container after use. Store in a cool, dry area. Keep from freezing. On site, store product in a dry and heated room for at least 24 hours before use. If frozen, turn the container up and down and allow to temper at least 24 hours at room temperature about 70°F (20°C).

EMERGENCY AND FIRST AID TREATMENT

HANDLING PROCEDURES

Wear safety glasses and waterproof gloves.

FIRST AID TREATMENT – EYES

Flush with water for 15 minutes while holding eyelids open.

SKIN

Wash with soap and water.

INGESTION

Non-toxic. Do not induce vomiting. Seek medical attention or contact poison control center immediately for any continued problems.

KEEP OUT OF THE REACH OF CHILDREN AND PETS





In the event of a chemical emergency, spill, leak, exposure or accident, call - DAY OR NIGHT -

IN THE U.S.A. AND CANADA: CANUTEC 1-613-996-6666.

LIABILITY NOTICE

Before using, user must learn and ensure they are suitable for its intended use and user alone assumes all risks and liabilities of any nature whatsoever in this regard. ANY CLAIM SHALL BE DEEMED WAIVED UNLESS NOTICE IS WRITTEN TO US WITHIN FIFTEEN (15) DAYS FOLLOWING THE DISCOVERY OF THE DEFECT OR THE DATE ON WHICH SUCH FAILURE WAS DISCOVERED

COVERAGE* - SUGGESTED TROWELS*

| Adhesives | | To glue down wood on membrane or substrate | | | | | | Floor covering features | To glue AcustiTECH membranes | | | |
|------------------------------------|----------------|--|---|---------------------------|-------------|-----------------------------------|-------------|--|------------------------------|---|-----------------------------------|-------------|
| Type | Size | Trowel | Shape | Min. coverage on membrane | | Min. coverage on plywood/concrete | | Wood features Maximum thickness and width | Trowel | Shape | Min. coverage on plywood/concrete | |
| | | | | sq.ft./gal | sq.ft./pail | sq.ft./gal | sq.ft./pail | | | | sq.ft./gal | sq.ft./pail |
| Adhesive·Adhésif AD-532+ | 4 gal / 15,1 L | 1/8" x 1/8" x 1/8" |  | 45-55 | 180-220 | 55-70 | 220-280 | Up to 4 in. wide and 4 ft. long | 1/8" x 1/8" x 1/8" |  | 55-70 | 220-280 |
| | | 5/32" x 3/16" |  | 40-50 | 160-200 | 45-55 | 180-220 | Up to 6 in. wide and 7 ft. long | | | | |
| | | 1/8" x 1/4" x 1/4" |  | 35-45 | 140-180 | 40-50 | 160-200 | All width and up to 9 ft. long | | | | |

Notes:

- The sq.ft./gal flow is the minimum flow requirements for the holding capacity of the assembly recommended. When using a higher flow rate, make sure you do not stain the floor with tape that would cause adhesive to leak.
 - Trowel : Width of the notches at the base x Depth of notch x Frequency (Distance between notches).
- In case of doubt as to the choice of adhesive or trowel, do not hesitate to contact our Customer Service toll free at 1 888 838-4449 or by e-mail service@acousti-tech.com. It is possible that an updated version of this document is available at acousti-tech.com. In case of discrepancy, the latter always takes precedence over the printed document.