



Advanced Adhesive Technologies, Inc.

AAT-322 FG Sheet Vinyl Pressure Sensitive Adhesive Specification Sheet

Description:

AAT-322 FG Sheet Vinyl PSA is an acrylic based adhesive specifically formulated for installing sheet vinyl with fiberglass cores and PVC cushioned backs intended for use with pressure sensitive adhesives (PSA). AAT-322 can be used on all grade levels over concrete and approved wood sub-floors in the absence of excessive moisture emissions and alkalinity. (MVER max. 5lbs./1000 sq ft/24 hours ASTM F 1869, RH 75% ASTM F 2170, pH 5-10)

AAT-322 is nonflammable, contains no carcinogens, no solvents and is non-toxic. AAT-322 has excellent plasticizer migration resistance. AAT-322 is freeze-thaw stable. This zero VOC adhesive is protected by the CleanGuard® two-stage antimicrobial. CleanGuard® is a specifically formulated broad-spectrum, anti-microbial agent that protects our adhesives and sealers from microorganisms, such as mold or mildew, in both the wet and dry state.

Site Conditions:

The sub-floor should be prepared according to the standards and practices set forth in the document ASTM F 710. The building should be completely enclosed. All outside doors and windows should be properly installed with latching mechanisms in place.

Landscaping should be sufficiently completed to direct water away from the building. Gutters and downspouts should be in place.

All concrete, masonry, plastering, drywall, and other wet work should be completed and thoroughly dry prior to beginning the installation. Texturing and paint primer coats should be completed. Where possible the installation of the base molding should not take place until after the flooring has been installed.

Adequate ventilation should be available. The HVAC system for the building should have a consistent temperature of 65-75°F (air and sub-floor) and humidity levels should be between 35-55% for a minimum of 72 hours prior to and following the installation.

Basement and crawl spaces should be dry and adequately ventilated. Sub-floors must be checked for moisture content and emissions using industry accepted methods. Crawl spaces should meet local building codes regarding minimum heights, cross ventilation, and the use of vapor retarders.

Sub-floors must be free from dust, dirt, grease, wax, curing agents, sealers, oil, and any other bond inhibiting substances. The sub-floor should be level within 3/16" in 10' or 1/8" in 6'.

Densified concrete must be dry with moisture emission rates that do not exceed 5 lbs/1000 sq ft / 24 hours as measured by the Anhydrous Calcium Chloride Test (ATSM-1869-04) and for lightweight aggregate concrete the relative humidity of the slab should be less than 75% according to the ASTM F 2170 standard. The concrete surface pH must be between 5 and 10. Before moisture testing begins, the slab must be cured for a minimum of 30 days. Fill low areas with a cementitious leveling compound or latex mild additive latex patch with 3,000 psi compressive strength. Leveling compounds must be tested to ensure they are properly cured within the manufacturer's specified requirements before proceeding with the installation. Mechanical surfaces profiling is the preferred sub-floor preparation method. Mechanically profile the sub-floor to medium-grit sandpaper texture. Sanding or scoring with open paper or a titanium disk is preferred. Remove curing and parting compounds and other surface hardeners and floor coatings according to the manufacturer's instructions. Lightweight or acoustical concrete, less than 3,000 psi, must be primed with a compatible primer such as AAT-570 Primer/Sealer.

For Wood Joist Systems the sub-floor should be structurally sound, free of loose panels or boards, and free of protruding fasteners. Moisture content should be within normal industry standards for the areas average environmental conditions. Underlayment panels should be fastened according to the manufacturer's specifications. All panel seams should be sanded level and prepared according to the manufacturer's instructions. Minimum sub-flooring: 5/8" CDX plywood sub-floor/underlayment (Exposure 1), maximum 16" o.c. construction. Install the flooring perpendicular to the floor joists. Do not install flooring over existing glue-down wood flooring or nailed down wood flooring that is wider than 3 1/4". Wide plank floors must be covered with an acceptable underlayment.

AAT-322 may be used to install over existing sheet vinyl and vinyl tiles if the existing flooring is well bonded. Clean the surface thoroughly and de-gloss the surface using an abrasive pad to create a suitable sub-floor. Resilient sub-floors must be free from dust, dirt, grease, wax, sealers, oil and any other inhibiting substances. These substances must be removed with the appropriate stripper/removers. Fill low areas with a cementitious leveling compound or latex milk additive latex patch with minimum 3,000 psi compressive strength. Leveling compounds must be tested to ensure they are properly cured and within the manufacturer's specified requirements before proceeding with the installation. Repair and replace loose flooring products. Never sand any resilient flooring that may contain asbestos fibers. Allow the adhesive to dry to the touch, so that there is little or no transfer of the adhesive to the finger before placing the floor covering.



Slabs with a radiant heating system are acceptable sub-floors for installing sheet vinyl with the following stipulations. The heating system should be fully operational for a minimum of seven days prior to the installation. The system should be shut down to allow the slab to cool down to room temperature before applying adhesive. Immediately after completing the installation turn the system back on and set to normal temperature. The sub-floor cannot exceed 85°F throughout the life of the installation. Check with the system manufacturer to determine that the system is designed for the desired R-rating for resilient flooring. Failure to ensure proper system design can result in excessive heat damage and tile or plank shrinkage.

Follow application and installation procedures provided with the flooring. Regulations may require that existing flooring material or coatings be tested to determine the asbestos content.

Installation Recommendations:

1. Flooring and adhesive should be acclimated to the job site conditions for 24 hours prior to the installation.
2. Sub-floor must be cleaned, free of dust, dirt, grease, wax, paint, curing or parting agents or any other substance that may affect the bond. Concrete floors must be level, fully cured, free of excessive moisture emissions, alkali and relative humidity.
3. Be familiar with the recommendations and any special instructions from the flooring manufacturer before beginning the installation. Refer to the information above for specific information regarding subfloor preparation and site conditions.
4. After the sheet vinyl has acclimated and relaxed according to the manufacturer's instructions. Trim the flooring to fit the room. Now roll or lap back approximately half of the flooring to expose the sub-floor.
5. Apply the adhesive according to the flooring manufacturer's recommendations. SEE BELOW. It is the responsibility of the installer to correctly apply the adhesive and in the proper quantity. Pay particular attention to the adhesive application that will fall at the seams. Avoid puddles, thin spots, and voids when applying the adhesive.
6. Allow the adhesive to dry to the touch, not transferring to fingers. High humidity and low temperatures will affect drying time. When applying adhesive over nonporous substrates allow additional time for the adhesive to dry to a pressure sensitive state. Placing vinyl into wet adhesive will result in an aggressive, permanent bond.
7. Carefully, place the sheet vinyl into the adhesive to avoid trapping air under the flooring. Do not drop or flop the sheet vinyl into place. Using either the "broom method" or a three-section roller (max. 75lb.), according to the flooring manufacturer's recommendations, remove any trapped air.
8. When the first half is properly adhered, repeat the process for the remaining flooring. Be careful handling the material at the glue line. Do not distort any patterns or tear the backing.
9. Keep traffic to a minimum and avoid placing heavy furniture or appliances for a minimum of 24 hours.

Application and Coverage:

Apply the AAT-322 with either a U-notched trowel, 1/16" wide x 1/32" deep x 1/32" spacing, or a 3/8" nap roller. Coverage rate is up to 250 square feet per gallon. Note: Applying adhesive with an improper trowel can cause adhesive telegraphing and can affect your warranty and performance. Do not exceed recommended coverage rates.

Specific Technical Data:

- A. Base: Acrylic Latex Emulsion
- B. Color: Light Grey
- C. VOC: 0 g/l SCAQMD Rule 1168. CRI Greenlabel Certified—low VOC PSA
- D. Application method: Apply per recommendations from floor covering manufacturer's installation instructions.
- E. Freeze-Thaw Stable to 15°F. Stability and spreadability can be affected if allowed to freeze. Frozen material should be allowed to thaw at room temperature. DO NOT agitate or stir while frozen.
- F. Clean-up: Remove wet adhesive with warm water. Use AAT-197 Adhesive Remover to remove dry adhesive.
- G. Shelf-Life: One year from date of manufacture in un-opened container when stored at 70°F.
- H. Sizes: 4 Gallon and 1 Gallon pails

For questions regarding specific installations or usage information contact AAT's Technical Department Monday thru Friday from 8 a.m. to 5 p.m. (EST) at 800-228-4583. Additional information can also be found thru our website at www.aatglue.com.

* Determining whether the sub-floor is porous or non-porous is the responsibility of the user. You can check the sub-floor by placing two drops of water in several areas across the sub-floor. The sub-floor is porous if the water is absorbed within a few seconds. If the water beads and is not absorbed within a few seconds the sub-floor is non-porous.

Warranty:

AAT products are manufacture red to rigid Quality Control Specification and warranted to be free of defects. Defective brought to our attention within one year of manufacture will be replaced at no charge to our customer. Complete warranty information can be obtained by calling 800-AAT-GLUE and requesting a copy or by visiting our Website at www.aatglue.com.



MATERIAL SAFETY DATA SHEET

NPCA HMIS

H = 1
F = 0
PH = 1

Prepared by: **Tim Brown**
Date: **September 26, 2007**

SECTION I

Manufactured by: Advanced Adhesive Technologies, Inc.
Street Address: 419 South Glenwood Avenue, Dalton, GA 30721
Emergency Telephone No.: Chemtrec (800)424-9300 24hrs. Or (706)226-0610 8a.m.-5p.m. ET
Product Class: Floor Covering Adhesive
Manufacturer's Code Identification: AAT-322
Trade Name: FG Sheet Vinyl Pressure Sensitive Adhesive

SECTION II — HAZARDOUS INGREDIENTS

None

SECTION III — PHYSICAL DATA

Boiling Range: Greater than 212° F
Vapor Density: Lighter than Air
Evaporation Rate: Slower than Ether
Percent Volatile by Weight: 40-43%
VOC Emission: 0 g/l (calculated per SCAQMD Rule 1168)

SECTION IV — PHYSICAL DATA

DOT Category: Nonflammable
Flash Point: N/A
LEL: Not Known
Extinguishing Media: Water mist, dry chemical, CO₂, mechanical foam
Unusual Fire and Fighting Hazards: Liquid adhesive will not ignite. Dried adhesive will ignite if heated over 150°C and or exposed to ignition source, producing CO, CO₂, smoke and hydrocarbons.
Special Fire Fighting Procedures: If dried adhesive ignites, use dry chemical, foam extinguishers, or a fog nozzle. For small fires, CO₂ extinguishers can be used. Use air mask when combating dried adhesive fires.

SECTION V — HEALTH HAZARD DATA

Threshold Limit Value: Non-established
Effects of overexposure: Wet-possible lightheadedness, nausea, and/or mild dermatitis could develop. Dry-None.
Emergency and First Aid Procedures: Flush eyes with ample water. Wash skin with soap and water. If ingested, treat symptomatically and contact physician.

SECTION VI — REACTIVITY DATA

Stability: Stable
Incompatibility: (Materials to avoid)
Conditions to avoid: Closed area with open container
Hazardous Decomposition Products: None
Hazardous Polymerization: Will not occur
Conditions to avoid: Strong acids or oxidants, temperatures below 20°F

SECTION VII — SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Scoop up excess with shovel, wash remainder with water.
Waste Disposal Method: Landfill or incinerate as per local and state regulations.

SECTION VIII — SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required with adequate ventilation.
Ventilation: Open windows, exhaust fan, open air area
Protective Gloves: May be desirable for people with sensitive skin.
Eye Protection: Safety glasses or goggles.
Other Protective Equipment: None required

SECTION IX — SPECIAL PRECAUTIONS

Precautions to be taken in handling and storing: Store in a cool, dry place. Optimum storage temperature 70°F. Shelf Life – One year from date of manufacture in an unopened container.
Other precautions: Keep from freezing. If frozen, allow adhesive to thaw at room temperature. DO NOT agitate or stir until adhesive is completely thawed. Keep sealed when not in use.