

APAC™

989

Universal Urethane Wood and Rubber Flooring Adhesive



DESCRIPTION

APAC 989 is a premium, moisture-cured, polyurethane-based wood and rubber flooring adhesive. The nonflammable, high-solids formula has good trowelability, high initial tack and superior cured bond strength. *APAC 989* contains no water that can cause bowing or cupping of the wood flooring during application. This product exhibits exceptional adhesion to many surfaces, including metal, rubber, tile, terrazzo, wood and concrete. *APAC 989* cures to a very tough rubbery bond that exhibits exceptional long-term aging characteristics and is virtually waterproof.

FEATURES & BENEFITS

- One-part moisture-cured urethane
- Can be used outdoors
- Utilizes rapidly renewable raw materials
- Extremely low-odor formula with negligible VOC content

USES

WOOD FLOORING: 3-ply or 5-ply engineered plank, acrylic impregnated, solid plank flat-milled, shorts, plywood and parquet flooring, solid hardwood planks, laminated wood planks and parquet wood flooring. Not recommended for foamed-back parquet.

EXPANDED APPLICATIONS: Recycled rubber tiles, rubber tiles, cork underlayment, stair treads and nosing, and 1/4" subfloor underlayment

AREAS OF USE

- Residential (rental apartments, condominiums and homes)
- Commercial (office buildings, hotel rooms and hallways, and restaurant dining areas)
- Heavy commercial (hotel lobbies, convention centers, airports and department stores)
- Institutional (hospitals, schools, universities, libraries and government buildings)

RECOMMENDED SUBSTRATES

Exterior-grade plywood, Group 1, CC type; other approved wood underlayments (per flooring manufacturer's recommendations); concrete and properly prepared cement terrazzo; cement-based self-leveling underlayments and patching compounds; properly prepared and primed gypsum underlayments that meet the requirements for compressive strength according to ASTM F2419; and properly installed *APAC 70* floor-covering moisture barrier

Note: Consult Technical Services for installation recommendations regarding substrates and conditions not listed.

SURFACE 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. All surfaces must be level, even, flat and smooth. Surface variation is not to exceed 3/16" in a 10-ft. span. Refer to wood-flooring manufacturer's guidelines. Refer to APAC's Surface Preparation Guidelines at www.apacadhesives.com.

LIMITATIONS

Do not install over any substrates containing asbestos. For interior installations only. Do not apply over any adhesive residues including cutback. Product is not recommended for flooring designed for nail-down installations only. Do not install in areas not recommended by the wood-flooring manufacturer. Do not install when the moisture vapor emission rate (MVER) exceeds 3 lbs. per 1,000 sq. ft. per 24 hours, when using the anhydrous calcium chloride test (ASTM F1869). Do not install when the relative humidity (RH) of the concrete slab exceeds 75% (ASTM F2170). Use only when the substrate temperature is between 50°F and 90°F. Do not use for exotic wood flooring. Do not use for plank widths greater than 5". *APAC 989* is not warranted against moisture-related failures.

Install only in areas recommended by the flooring manufacturer. Building owners should be advised of the flooring manufacturer's guidelines for climate control settings (temperature and humidity). These conditions must be monitored and kept constant in order to ensure the overall performance and long-term success of the installation.

MIXING

Note: Choose all appropriate safety equipment before use. Refer to MSDS for more information.

- Ready to use; no mixing is necessary.

INSTALLATION

Read all installation instructions thoroughly before installation.

1. Use a moisture meter to check the RH of the wood flooring, surface of the substrate and general jobsite area. Follow the wood-flooring manufacturer's guidelines.
2. Select the appropriate notched trowel (see "Typical Trowels and Approximate Coverages" section).
3. Spread adhesive evenly over the subfloor, keeping the trowel at a 45° angle to the subfloor.
4. Install flooring in strict accordance with flooring manufacturer's written instructions.
5. Immediately clean any adhesive smudges from the flooring material's surface with *APAC 988* urethane adhesive remover wipes while the adhesive is still fresh/wet. Note: *APAC 989* is extremely difficult to

remove when cured.

6. Immediately clean tools with APAC 988 cleaner while the adhesive is still fresh/wet.
7. Protect from light traffic for 12 hours, and from heavy traffic for 24 hours.

APPLICATION CONDITIONS

Application Characteristics over Porous and Nonporous Substrates (at 73°F and 50% relative humidity)			
	Flash Time*	Working Time**	Adjustment Time***
Engineered wood flooring	0 minutes	45 to 60 minutes	2 to 3 hours

* *Flash time: The amount of time recommended for the adhesive to remain exposed to the air following application before the installation of floor covering.*

** *Working time: The maximum amount of time that an adhesive can remain exposed to the air and still effectively bond to the floor covering.*

*** *Adjustability time: The window of time when adjustments can still be made to the position of the floor covering without compromising the bond of the adhesive.*

Note: Flash, working and adjustment times vary based on temperature, humidity, substrate porosity, trowel size and jobsite conditions.

TECHNICAL DATA

Polymer type	Polyurethane
Percent solids	100%
VOCs	37 g/L
Color	Tan
Shelf life	1 year when stored in original packaging at 73°F
Storage conditions	50°F to 90°F
Flash point (Tag)	> 200°F

Note: Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

PACKAGING

Product Code	Size
95568221	5 U.S. gals. (18,9 L)
95563221	3.5 U.S. gals. (13,2 L)

TYPICAL TROWELS AND APPROXIMATE COVERAGES*



Cork underlayment
1/16" x 1/16" x 1/16"
125 to 185 sq. ft. per U.S. gal.



Finger block parquet and rubber flooring
1/8" x 1/8" x 1/8"
70 to 80 sq. ft. per U.S. gal.



Wood flooring < 1/2" thick
3/16" x 3/16" x 3/16"
32 to 42 sq. ft. per U.S. gal.



Wood flooring 1/2" to 5/8" thick
1/8" x 1/4" x 1/4"
40 to 50 sq. ft. per U.S. gal.



Wood flooring 3/4" thick
1/4" x 1/4" x 1/4"
30 to 40 sq. ft. per U.S. gal.

* *Trowel dimensions are depth/width/space. Coverages shown are for estimating purposes only. Actual jobsite coverages may vary according to substrate conditions, type of trowel used and setting practices.*

INDUSTRY STANDARDS AND APPROVALS

LEED Points Contribution	LEED Points
MR Credit 5, Regional Materials*	Up to 2 points
MR Credit 6, Rapidly Renewable Materials	1 point
IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants	1 point

* *Using this product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.*

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**