AD 535 EPOXY ADHESIVE

DESCRIPTION

AD 535 Epoxy Adhesive is a fast-setting, two-part reactive epoxy adhesive with low volatile organic compounds (VOCs), designed for the installation of virgin rubber and vinyl flooring. AD 535 Epoxy Adhesive provides the ultimate in bond and shear strength, and is recommended for high-traffic installations and for superior indentation resistance.

FEATURES AND BENEFITS

- Superior indentation resistance
- Fast-setting with easy trowelability
- Superior bond strength

INDUSTRY STANDARDS AND APPROVALS

- RFCI IP #1 – Recommended Installation Practice for Homogeneous Sheet Flooring, Fully Adhered
- RFCI IP #2 – Recommended Installation Practice for Vinyl Composition Tile (VCT)
- RFCI's Recommended Work Practices for Removal of Resilient Floor Coverings

WHERE TO USE

- For the installation of solid vinyl sheet, tile and plank; virgin rubber sheet and tile flooring; and VCT
- Interior commercial (office buildings, cafeterias)
- Interior heavy commercial (shopping malls, grocery stores, department stores)
- Interior institutional (hospitals, schools, universities, libraries, government buildings)

LIMITATIONS

- Do not install over any substrates containing asbestos.
- Do not install when the moisture vapor emission rate (MVER) exceeds 2,27 kg per 92,9 m2 (5 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 85% (ASTM F2170).
- Use only when the substrate temperature is between 18°C and 29°C (65°F and 85°F). The pH should be between 8 and 10.

SUITABLE SUBSTRATES

- Approved wood underlayments per the flooring manufacturer's recommendations
- Concrete, and properly prepared cement and epoxy terrazzo
- Cement-based, self-leveling underlayments and patching compounds
- Embossing levelers applied over existing, properly prepared and fully bonded ceramic tile and fully bonded VCT – one layer only
- Radiant-heat systems that have been properly installed
- Exterior-grade plywood, Group 1 ("Select" or [SEL-TF] Douglas fir), CC Type, other approved substrates (per the flooring manufacturer's recommendations)
- Properly prepared steel flooring
- Properly installed MAPEI Planiseal™ EMB or Planiseal VS moisture barriers

Consult Mohawk Group's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

SURFACE PREPARATION

- All substrates must be structurally sound, dry, solid and stable.
- The 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.
- Concrete and cement-based underlayments and patches must be fully cured and free of any hydrostatic and/or moisture problems.
- Concrete slabs exceeding 2,27 kg (5 lbs.) in MVER and 85% RH should be treated with a MAPEI two-part epoxy moisture mitigation product. Refer to Technical Data Sheets at www.mapei.com for information on these products.
- Contact Mohawk Group's Technical Services Department for surface preparation questions at product_tech@mohawkind.com or 800.833.6954.

MIXING

Note: Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet (SDS) for more information.

1. Parts A and B are packaged to exact quantity ratios for maximum performance.
2. Protect flooring from adhesive spills.
3. Pour all material out of the Part B container into Part A. Place the cap back on the Part B container and turn the container upside down to ensure that all remaining material drains into the cap. Pour the remaining material into Part A. Always mix complete units. Do not add other materials to this mixture.
4. Use a low-speed mixer to ensure that the material is mixed thoroughly to a smooth, homogenous paste consistency (generally within 3 minutes). Inadequate mixing will cause bond failure. Avoid prolonged mixing. Do not allow the mixed product to sit in the container. Immediately after mixing, apply the adhesive to the substrate.
5. Wash all tools with mineral spirits immediately after mixing. Once cured, AD 535 Epoxy Adhesive can be removed only by mechanical means.

Note: Do not leave mixed epoxy adhesive in the original container – the heat generated by this chemical mixture reduces the working time of the adhesive.

PRODUCT APPLICATION

1. Pour the entire contents onto the properly prepared substrate.
2. Select the appropriately notched trowel (see the "Approximate Product Coverage" section).
3. Spread the adhesive evenly over the subfloor, keeping the trowel at a 45° angle to the subfloor.
4. Do not spread more adhesive than can be covered with floor covering within 30 minutes.
5. After spreading the adhesive, lay the flooring immediately into the adhesive (for tiles, do not force them together tightly; rather, place them so that the seams are just touching). The working time of the adhesive will vary depending on site conditions (e.g., temperature and humidity). The adhesive is still workable when it is wet to the touch and transfers to the fingers.
6. Check adhesive transfer to the back of the flooring prior to and following cross-rolling with a 45,4-kg (100- lb.) sectional roller. The floor must be rolled prior to the adhesive hardening. Multiple rolling may be required in order to maintain proper flooring placement during cure. When rolling, make sure not to displace the flooring. Do not walk on freshly installed flooring; protect with boards.

CLEANUP

Clean up adhesive residues with mineral spirits. AD 535 Epoxy Adhesive can only be removed by mechanical means when dry.

CURING AND PROTECTION

Site conditions can greatly affect curing times of the adhesive. Do not walk on the flooring until 6 hours after the installation. If walking on the floor is necessary before this time, protect the flooring by laying sheets of brown Kraft paper over the flooring; then, lay boards across the floor to disperse the load. Movement of the flooring while the adhesive is setting may affect the bond. Wait 6 hours before allowing light traffic, and 24 hours for moderate to heavy traffic.

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.

PRODUCT PERFORMANCE PROPERTIES

Polymer type	Epoxy
Percent solids	95% to 100%
VOCs	8 g per L
Pot life	40 minutes
Color	Off white
Shelf life	1 year when stored in original packaging at 23°C (73°F)
Storage conditions	18°C to 29°C (65°F to 85°F)
Flash point	Part A > 93°C (200°F) Part B > 93°C (200°F)

APPLICATION TABLE

Flooring Type	Flash time*	Working time**
Vinyl and rubber flooring	0 to 10 minutes	30 minutes

** Flash time: 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.*

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

APPROXIMATE PRODUCT COVERAGE***

Flooring Type	Trowel Type	Coverage
Vinyl and rubber flooring	 1 x 1,5 x 1 mm (1/32" x 1/16" x 1/32")	4,9 m2 per L (200 sq. ft. per U.S. gal.)

**** Trowel dimensions are depth/width/space. Coverage shown is for estimating purposes only. Actual jobsite coverage may vary.*