

Premium Plus-Floor Leveling Compound

UZIN NC 170

High strength self-leveling compound

DESCRIPTION:

Fast drying portland-based self-leveling compound without depth limitation. Excellent flow and working time properties produce level, flat surfaces with good absorbency for all floor coverings and adhesives.

SUITABLE FOR:

- ▶ Interior use only
- ▶ Producing flat and smooth surfaces for the installation of textile, resilient, ceramic, and wood floor coverings
- ▶ Use as a self-leveling layer over existing hard surface flooring such as well bonded terrazzo, ceramic tile, stone, and well bonded epoxy coatings
- ▶ Use over structurally sound concrete, APA Exposure Type 1 plywood and OSB, or equally rated subfloor materials
- ▶ Use over well bonded adhesive residues including cutback adhesive*
- ▶ Residential and commercial applications
- ▶ Use with radiant floor heating systems

*See "Substrate Preparation" for additional information



FEATURES AND BENEFITS:

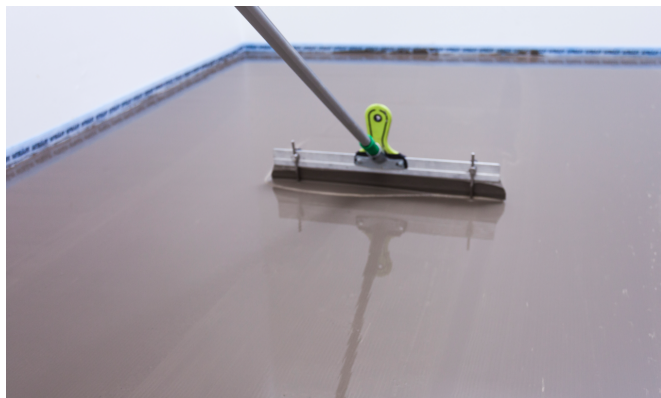
- ▶ Fast setting • Walkable in 2 hours
- ▶ Fast drying • Accelerates installation schedule
- ▶ Versatile • Applies from 1/16" (1.5 mm) to unlimited depth
- ▶ Very smooth surface • Improves adhesive coverage rate
- ▶ Excellent mixing properties • Pumpable
- ▶ Very high compressive and tensile strengths • Ideal use in Healthcare facilities

TECHNICAL DATA:

Packaging	50 lb (22.7 kg) paper bag
Storage	up to 9 months**
Water quantity	6.25–6.75 quarts per 50 lb bag (6.0–6.5 liters per 22.7 kg bag)
Color	gray
Coverage	60 sq. ft. at 1/8" per 50 lb bag* (5.57 m ² at 3 mm per 22.7 kg bag)*
VOC	0 g/L
Working time	20-30 minutes*
Ready for foot traffic	2 hours*
Ready for covering	see ready for covering chart
Minimum application temperature	50 °F (10 °C) at floor level
Flow ring spread	~6.2 in (158 mm) ASTM C1708
Strength	compressive: 6,000 psi at 28 days flexural: 1,000 psi at 28 days ASTM C1708 air cure only
Fire reaction	ASTM E84 Class A

*At 70 °F (21 °C) and 50 % relative humidity. Surface profile and porosity, application depth, temperature, and humidity will affect dry time and coverage.

** In original unopened packaging, when stored indoors in dry, moderate conditions between temperatures of 50F - 90F (10C - 32C).



PRODUCT PROPERTIES:

UZIN NC 170 is the ideal combination for multipurpose use, with the best application properties, early strength development, and load-bearing capacity.

SUBSTRATE PREPARATION:

The subfloor must be structurally sound, solid, dry, free from active cracks, clean, and free of all contaminants, including but not limited to dust, grease, oil, paint, wax, curing, and sealing compounds, or cleaning solution residue that would impair adhesion. If necessary, mechanically prepare and clean the surface by grinding, shot blasting, or sanding, and thoroughly vacuum off all loose material and dust following OSHA recommended guidelines. Do not use sweeping compounds. Any weakly bonded or soft surface material, such as loose patching compounds, leveling compounds, floor coverings, or coatings, must be removed. Do not apply this product over any acid-etched or chemically abated adhesive surfaces. Wood substrates must provide a rigid base and be securely fastened without excessive vertical movement. The surface of the wood must be clean and free of oils, grease, wax, dirt, varnish, shellac, and any contaminants that would impair adhesion. If necessary, sand down to bare wood. Do not apply UZIN products directly to fire-retardant or pressure-treated wood surfaces. Please refer to the UZIN Substrate Preparation Guide for additional information.

CAUTION: Inhalation of asbestos dust may cause asbestosis or other serious bodily harm. Do not sand, grind, or disturb any surface or adhesive residue that may contain asbestos or lead, as harmful dust may result. Refer to the Resilient Floor Covering Institute's publication "Recommended Work Practices for Removal of Resilient Floor Coverings" for instructions.

Substrate Moisture Testing and Assessment

Evaluate concrete substrates following ASTM F710 guidelines. Select a suitable UZIN moisture vapor retarder if required. UZIN NC 170 and UZIN acrylic primers are not vapor retarders and allow water vapor diffusion. Always reference the limitations of the UZIN products, floor covering, and adhesive manufacturers' guidelines. If these limitations are in conflict, the most stringent requirements shall apply.

UZIN Moisture Mitigation System-Concrete Substrates

UZIN Moisture Vapor Retarder (MVR)				
Surface	UZIN MVR	Max RH*	pH control	UZIN Primer
Concrete all grade levels, no ASTM E1745 vapor retarder requirement	PE 460	100%	5-14	PE 280
Concrete all grade levels	PE 414	95%	5-14	PE 280

*ASTM F2170 using in situ probes.

PRIMING:

UZIN NC 170 requires the floor surface to be primed before application. According to floor surface type and absorbency, select a UZIN primer. For detailed UZIN primer information, please refer to the UZIN primer datasheet located at us.uzin.com. or contact UZIN for technical guidance.

UZIN Primer Quick Reference Chart			
Surface	Absorbency	UZIN Primer	Max RH
Concrete-all grade levels, portland-based leveling compounds, cement terrazzo*	porous	PE 360 PLUS	85%
	porous	PE 260	85%
	non-porous (dense)	PE 260, PE 280	85%
UZIN PE 460 or PE 414 TURBO as non MVR coating	non-porous	PE 280	85%
Prepared adhesive layers	non-porous	PE 260, PE 280, PE 414 w/PE 280	-
Plywood, OSB, underlayment	porous	PE 260	-
Dense coatings, ceramic tile, epoxy terrazzo	non-porous	PE 280	-
Metal with protective coating	non-porous	PE 280	-
Bare metal-refer to UZIN Metal Adhesion Chart then prime	non-porous	PE 280	-

APPLICATION:

- Optimum product application conditions are 60–77 °F (16–25 °C) and relative humidity between 40-60 %.
- Pour 6.25–6.75 quarts (6–6.5 liters) of cold, clean water per 50 lb bag into a clean container.
- Slowly pour in the powder and mix vigorously for 1 minute per bag until blended to a viscous, lump-free consistency. Use a heavy-duty drill with a UZIN Flat Cage or Oval mixing paddle (minimum 650 rpm).
- Pour the mix onto the primed substrate. Working time is approx. 20-30 minutes.
- Coverage rate at 1/8" (3 mm) depth is approx. 60 sq. ft. per 50 lb bag.
- Product has no depth limitation.
- Distribute product evenly with a suitable gauging tool (A) and smooth or spike roll the wet finish promptly (B).
- Product is dry to accept foot traffic after 2 hours.
- Ready for installation of common floor coverings after approx. 15 hours. Depth of application, ambient conditions, and surface porosity will affect dry time.
- Storage up to 9 months in original unopened packaging, when stored indoors in dry, moderate conditions between temperatures of 50F - 90F (10C - 32C)

UZIN PE 460 and UZIN PE 414 TURBO Coatings, Ceramic Tile, Dense and Smooth Coatings, Epoxy Terrazzo

Prime with UZIN PE 280. Apply UZIN NC 170 at a minimum of 1/32" (1 mm) for use with dispersion (water-based) adhesives for nonporous surfaces and two-component epoxy adhesives. Apply at 1/8" (3 mm) thickness when using dispersion wet set adhesives with resilient floor covering.

Ready for Covering*	
Common floor coverings	15 h
Ceramic	3 h
Natural stone, wood	24 h

*At 1/8" (3 mm) depth over porous surface at 70 °F (21 °C) and 50 % RH.

IMPORTANT NOTES:

- ▶ High temperatures and low humidity will accelerate the setting, drying, and readiness for covering. Low temperature, high humidity, and greater depths will delay drying. In summer, store in cool conditions and use cold water.
- ▶ Do not apply to wet surfaces. Observe surface temperature at a minimum 5°F (3°C) above the dew point with temperature on the rise during application.
- ▶ Protect freshly applied material from drafts, direct sunlight, direct sources of heat, and freezing temperatures.
- ▶ Install UZIN Foam Expansion Strips at verticle transitions (walls, pipes, door framing) for depths greater than 1/4" (6mm). Expansion joints must be honored through the leveling compound and floor covering, prevent the mix from flowing into expansion joints.
- ▶ Pumpable using continuous feed mixer pumps.
- ▶ For information regarding sand extension please call the UZIN Technical Dept.
- ▶ If multiple layers of leveling compounds are necessary, allow the first layer to dry completely and then prime with UZIN PE 260 (1:3 dilution) or PE 360 PLUS. The second layer must not exceed the thickness of the first layer.
- ▶ Substrate conditions (surface profile, density or surface strength, in-service use) are recommended to be qualified before application of leveling compounds that will exceed 1/2" (12.5 mm) depth. UZIN PE 460 reaction resin gritted with a broadcast of clean, dry sand #20 (ASTM U.S. Sieve Number) should be considered. Please contact UZIN for technical guidance.
- ▶ Do not use in exterior or wet areas.

- ▶ The following standards and product regulations apply:
 - ASTM F710 "Standard Practice for Preparing Concrete Floors To Receive Resilient Flooring"
 - ASTM C1708 "Standard Test Method for Self-leveling Mortars Containing Hydraulic Cements"
 - ASTM F2170 "Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes"
 - ASTM F1869 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride"
 - ASTM C150 "Standard Specification for Portland Cement"
 - ASTM C219 "Standard Terminology Relating to Hydraulic and Other Inorganic Cements"

COMPOSITION:

Special cements, mineral aggregates, redispersible polymers and additives.

PROTECTION OF THE WORKPLACE AND THE ENVIRONMENT:

Read and follow all safety and environmental precautions and instructions on the packaging label and the Safety Data Sheet (SDS). The SDS is available at www.uzin.com.

WARNING: This product can expose you to chemicals including crystalline silica, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

DISPOSAL:

Dispose of the material in accordance with applicable laws and regulations. Avoid product to get in contact with soil, waterways, drains, or sewers. Empty containers or liners may retain product residues.

INDOOR AIR QUALITY INFORMATION

Certification: SCS Indoor Advantage™ Gold

VOC content: 0 g/L; compliant with SCAQMD rule 1113

VOC emission: Conforms to the CDPH Standard Method (CA 01350) V1.2-2017; TVOC emission between 0.5 and 5.0 mg/m³