



u rule the floor

# UFLOOR SYSTEMS

## WOOD FLOORING LEVELING COMPOUND UP TO 1"

# UZIN NC 174

**Calcium Aluminate self leveling compound designed for wood floor installations with Level Plus Effect.**



<b>CE</b>
UZIN UTZ AG Dieselstraße 3 D-89079 Ulm
See date of manufacture on the packaging
<b>EN 13813 CT-C50-F10</b> Cementitious levelling compound for substrates in interior locations
Fire resistance <b>A 2 fl-s1</b>
Compressive strength <b>C 50</b>
Tensile strength <b>F 10</b>



### Description

Universal, self-leveling underlayment and smoothing compound for all types of interior floor covering work.

Suitable for/on:

- Producing level, absorbent, flat and smooth surfaces for hardwood flooring
- A smoothing layer over structurally sound solid concrete in new construction or renovation projects above, on or below grade, cast in place or pre-cast concrete. Lightweight concrete must have a minimum compressive strength of 3000 psi and 75 lbs. surface density.
- A smoothing layer over existing hard surface flooring such as well-bonded terrazzo, ceramic tile, stone and well-bonded epoxy coatings
- New, sound, OSB underlayment or equally rated subfloor materials
- Existing substrates such as thin and dense non water-soluble adhesive residues on concrete including asphalt mastic residues (see "Important Notes")
- High stress loads in residential, commercial and industrial locations such as hospitals, shopping centers, industrial facilities, etc.
- Radiant floor heating systems (hydronic or electric)

### Product Properties

Highly plasticized premium leveling compound with special raw material technology known as the Level Plus Effect. The Level Plus Effect with super-polymers provides exceptional flow characteristics and a surface structure promoting an increased adhesive coverage rate. The special advantage of UZIN NC 174 is the ideal combination of multipurpose use, the best application properties, highest strength development and load bearing capacity.

**Composition:** Special cements, mineral fillers, polyvinyl acetate copolymers, flow agents and additives.

### Features

- Level Plus Effect
- 1/16" – 1"
- Pumpable
- Fast setting, smooth surface
- Low stress
- Shear resistant under wood flooring
- Overwatering stability
- Very high compressive and tensile strengths
- EMICODE EC 1 R PLUS / Very low emission PLUS
- Optimized aggregate size
- Significantly longer working time

### Technical Data

Packaging:	55 lb. paper bag (25 kg)
Shelf-Life:	minimum 6 months
Water quantity required:	5-3/4 to 6 quarts (5.5 to 6 liters) per 55 lb. bag
Color:	grey
Coverage rate:	approx. 64 sq. ft @ 1/8" depth - 55 lb. bag
Working temperature:	min. 60°F (16°C) at floor level
Working time:	20 – 30 minutes*
Set to foot traffic:	after 2 hours*
Ready for covering:	after 18 hours @ 1/8" depth*
Compressive strength:	5300 psi after 28 days (ASTM C 109)
Flexural strength:	1100 psi after 28 days (ASTM C 348)

\*At 70°F (21°C) and 65% relative humidity

### Benefits

- Superior flow characteristics
- Versatile, can be extended with sand
- Minimizes time and effort
- Accelerates floor covering installation
- Great for weak substrates
- Suitable for all glue-down wood applications
- Extended safety range for mixing
- Exceeds most floor covering manufacturer recommendations
- Greater jobsite flexibility
- Designed for exceptional wood floor adhesive bonding
- Very user friendly

## Exceptional adhesive bonding surface



## UZIN NC 174 Directions for Use:

### Substrate Preparation

The substrate must be sound, load-bearing, dry, free from cracks, clean and free from materials (dirt, oil, grease, curing agents and sweeping compounds) that would impair adhesion. Test the substrate in accordance with applicable standards relative to moisture content. Any weakly bonded or soft surface layers such as separating agents, loose adhesives residues, leveling compounds, coverings or coatings must be removed by brushing, abrading, grinding or shot-blasting. Thoroughly vacuum off all loose material and dust.

Select suitable primer from the UZIN Product Guide according to surface type and condition or seek technical assistance.

Allow primers to dry thoroughly.

Always gritbind reaction resin or polyurethane primers/sealers such as 2-Component Epoxy UZIN PE 480 or the 1 Component UZIN PE 414 Turbo respectively.

As with all polymer modified cements, it is always recommended to test for moisture content of the existing substrate to ensure that it meets the finished floor covering manufacturer's requirements. Cement-based products are not designed as a moisture barrier. Moisture mitigation must be addressed prior to the application of NC 174. Please refer to the Product Data Sheets for UZIN PE 414 Turbo and UZIN PE 480 for appropriate moisture mitigation options.

### Application

1. Pour approximately 5-3/4 to 6 quarts (5.5 to 6.0 liters) of cold clean water into a clean container. Sprinkle in the bag contents (55 lbs.) while stirring vigorously (minimum 650 rpm) and blend to a viscous, lump-free consistency. Use a drill fitted with the UZIN Mixing Paddle for leveling compounds. Do not mix too thin.
2. Pour the mix onto the primed substrate and distribute evenly with an UZIN Smoothing Trowel or the UZIN Gauge Rake. For thicker coats or when using a smoothing trowel, flow and surface finish can be improved by using the UZIN Spike Roller. Where possible, apply to the desired depth in one application. (Apply at least 1/8" minimum depth for exposure to castor wheels and on non-absorbent surfaces.)

\*At 70°F (21°C) and 65% relative humidity.

### Ready for Application

Depth	Ready for Application
1/8"	18 hours*
1/4"	24 hours*
1/2"	48 hours*

### Coverage Rate

Depth	Approx. coverage rate
1/8"	64 sq. ft per 55 lb. bag
1/4"	32 sq. ft per 55 lb. bag

### Leveling Application Tools

**UZIN Drum: 59267**  
**UZIN Gauge Rake: 59771**  
**UZIN Smoothing Trowel: 59631**  
**UZIN Water Bucket: 10412**  
**UZIN Telescoping Extension Pole: Part #12503**  
**UZIN Spike Roller: 13638 (Only sold separately; not included in Drum Kit)**  
**UZIN Mixing Paddle: 59597**

**UZIN Drum Kit (includes Drum, Rake, Trowel, Bucket, Paddle, and Pole): Kit Part #59973** \*All items also sold separately.

### Important Notes

- Shelf life minimum 6 month in original packaging when stored in dry conditions. Carefully and tightly reseal opened packaging and use the contents as quickly as possible.
- Optimum conditions are 60 – 77°F (16 - 25°C) and relative humidity below 65%. Low temperatures, high humidity and greater depth will delay, while high temperatures and low humidity will accelerate the setting, drying and readiness for covering. In summer, store in cool conditions and mix with cold water.
- Expansion, movement and wall-connection joints must be reflected through the floor covering. Where necessary, fit UZIN Expansion Strips to any structures to prevent the mix from flowing into connection joints. (For depths greater than 1/4", expansion strips are highly recommended.)
- Pumpable using continuous-feed mixer-pumps such as m-tec duo mix, P.F.T.-Monojet, etc.
- When applying in multiple layers, allow the compound to dry completely, then prime with UZIN PE 260. When the PE 260 is dry (approx. 1 hour\*) apply the next layer of leveling material. The second layer of NC 174 must not be thicker than the first.
- For depths greater than 1/2", extend leveling material up to 50% (equal to 27.5 lbs) using 0.8 clean, dry quartz sand.
- For depths greater than 1/2" on surfaces that are moisture sensitive (such as gypcrete) or weak (old adhesive residues), use epoxy resin primer such as UZIN PE 480 gritted.
- Do not use in exterior or wet areas.
- On substrates with old asphalt mastic residues, it is recommended to remove the residue by mechanical means before coating with an UZIN Primer. (Call the UZIN Technical Dept. for assistance.)
- NOTE: Complete mechanical removal of asphalt mastic (i.e. grinding, sanding, shot blasting) can be hazardous as old mastic may contain asbestos. **Do not sand or grind adhesive residue. Harmful dust may result.** Inhalation of asbestos dust may cause asbestosis or other serious bodily harm. Please consult applicable government agencies for rules and regulations concerning removal of flooring or adhesives containing asbestos. Also refer to the Resilient Floor Covering Institute and ASTM F819 for recommendations on use of solvents and adhesive removers.
- Protect freshly applied leveling compounds from drafts, direct sunlight and direct sources of heat.
- The following standards, regulations and notices are applicable and especially recommended:
  - ASTM F 710-08 "Construction of concrete slabs to receive resilient flooring"
  - ASTM C 109 modified "Test method for compressive strength of hydraulic cement mortars"
  - ASTM F 1869-04 "Measuring moisture vapor emission rate of concrete subfloors using Anhydrous calcium chloride"
  - ASTM F 2170-02 "Determining moisture humidity in concrete floor slabs using in-situ probes"

### Protection of the Workplace and the Environment

#### PRECAUTIONS:

CAUTION: Irritant. Contains cement. Cement produces strong alkaline on reaction with water. Avoid contact with skin and eyes.

FIRST AID: In case of skin or eye contact, rinse thoroughly and immediately with water. In the event of skin or eye irritation, obtain medical treatment. When mixing wear a protective dust-mask. Use protective gloves.

Observe safety information on product label as well as material safety data sheet (MSDS). Presents no physiological or ecological risk when fully cured. EMICODE EC 1 R – very low emission.

WARNING: This product contains chemicals (crystalline silica) known to the state of California to cause cancer and birth defects, or other reproductive harm.

DOT UN-Number: Not regulated  
Hazard Class/PG: Not regulated

#### Disposal:

Dispose of empty packaging according to local, state and federal regulations. The above information is based on our experience and testing. UFLOOR Systems is not responsible for the variety of associated materials and variable construction and working conditions that occur on jobsites. The quality of your work depends on your own professional judgment and product usage. If in doubt of any application recommendation or instruction, conduct a small test or obtain technical advice. Observe the installation recommendations of the floor covering manufacturer. The publication of this Product Data Sheet invalidates all previous Product Information.