

Product overview

Product description

ALKA 112 is a two-component epoxy floor coating selected for applications requiring an extended working period. It forms a continuous resin layer on properly prepared concrete within an approved flooring build. Chemical exposure, moisture conditions and overcoating requirements are assessed before the system is specified.

Key advantages

- Extended working time assists placement planning over practical work areas.
- Brush and roller application allows straightforward edge and detail work.
- Continuous epoxy film supports a low-permeability floor build.
- Adhesion and mechanical performance suit properly prepared industrial substrates.

Recommended uses

- Industrial floors where placement time is a key consideration.
- Warehouses and manufacturing areas with a specified resin floor build.
- Chemical-service floors after review of the actual exposure.
- Prepared damp concrete only where its moisture condition and complete system are expressly approved.

Product and system selection

Use this overview with the technical data, preparation, application and limitations in the following pages. Confirm the complete build with ALKA for the actual substrate and service conditions.

Product & system selection

Two-component, extended-working-time epoxy floor coating

Industrial floors where longer placement time and chemical-service selection are required.

Where this product fits

SYSTEM POSITION — CONCEPT ONLY	SELECTION / CONTROL
Selected wearing / finish coat	Product, texture, thickness and exposure approval
Primer / receiving resin layer	Named compatible material; correct recoat condition
Prepared, repaired concrete	Sound substrate, accepted moisture and movement details

Specify the complete application

DECISION	SELECTION TO RECORD
Substrate	Exact substrate, condition, moisture and existing coating.
Duty	Traffic, weather, water, chemicals, temperature and cleaning as relevant.
Finish / interface	Required colour, sheen, texture and compatible adjacent layers.
Acceptance	Nominate the inspection, test method and release conditions before work.

Limits of use

Do not use touch-dry time as permission for immersion, chemical exposure or heavy traffic.

Technical data

Typical data and application conditions are listed below. Contact ALKA Technical Support for fields requiring confirmation before specification or use.

PROPERTY	VALUE / CONDITION
Mix ratio	5:1 by mass or 3:1 by volume as stated in source; verify matched pack
Mixed density	1.60 kg/L; confirm test temperature
Pack	24 kg; any 16 L equivalence requires correction
Pot life	45 minutes at 20°C
Application temperature	8–30°C; source RH limit approximately 80%
Touch dry	1 day at 20°C
Light duty / full cure	3 days / 7 days at 20°C
Nominal thickness	Conflicting 0.60–0.70 mm and 0.20–0.30 mm source instructions; confirm selected build
Consumption	0.25–0.40 kg/m ² roller; 1.50–2.00 kg/m ² self-smoothing
Recoat window	Validated minimum / maximum and preparation outside window required
Shelf life	12 months unopened; storage range requires approval

Interpreting the data

Values depend on the stated temperature, humidity, film build, test method and substrate. Typical laboratory figures are not automatic project acceptance criteria. Changes to colour, thinner, aggregate, mix proportion or layer build can change performance.

Units and test basis

Keep mass and volume mixing ratios distinct. State whether solids are by mass or volume and whether thickness is WFT (wet film), DFT (dry film) or total system build. Coverage is theoretical unless an actual site yield is stated.

Substrate & work preparation

PREPARATION STAGE	REQUIRED APPROACH
Survey the slab	Identify concrete condition, old coatings, cracks, joints, falls and contamination. Record the intended load, cleaning and exposure before choosing the complete build.
Mechanical preparation	Remove weak concrete, laitance and incompatible coatings to a sound, open surface. Degrease contamination before mechanical work and use suitable dust extraction.
Moisture and condensation	Use the specified quantitative moisture test and acceptance limit. Record air/substrate temperature, humidity and condensation risk; a plastic-sheet check alone is not a quantitative acceptance test.
Repairs and movement	Repair static defects with the nominated material. Preserve structural and movement joints through the finished floor; investigate moving cracks instead of rigidly bridging them.
Existing finishes	Determine adhesion, chemistry and contamination. Prepare and test the complete proposed build on a representative area; appearance alone cannot prove compatibility.

Establish the application release point

The applicator and responsible technical reviewer should accept the substrate, repairs, environmental conditions, material identity and system schedule before work starts. Record the moisture method and readings, substrate/air temperatures, humidity and condensation assessment where relevant.

Materials and equipment

Check labels, component pairing, batch numbers, expiry and storage history. Provide suitable mixing, application and inspection equipment, clean containers and calibrated measuring tools. Keep contaminated tools and residues away from fresh material.

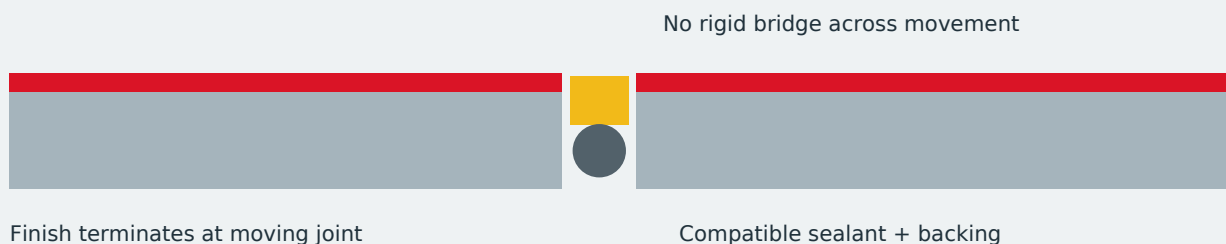
Representative trial

Where condition or compatibility is uncertain, trial the complete proposed preparation and coating sequence. Agree the sample location, cure time, appearance and adhesion assessment before extending the work.

Mixing & application

STEP	PRODUCT-SPECIFIC PROCEDURE
01	Pre-stir A for 2 minutes; add B and mix for at least 3 minutes. Scrape the sides and base and use the mixture within its working life.
02	Plan the longer initial cure into access control. Food-area use, moisture-barrier performance and chemical resistance each need their own evidence; none follows from the word epoxy.
03	Mechanically prepare concrete, repair defects and install the specified primer. For steel lining, use an independently approved abrasive-blast, stripe-coat and lining specification.
04	Spread continuously into the wet edge. For a self-smoothing or broadcast system, agree aggregate, thickness and de-aeration method before mixing.

MOVEMENT JOINT / CONCEPT SECTION



Concept drawing only; no dimensions, tested build, product compatibility or engineering approval are implied. Follow the approved project details.

Continuity and stopping points

Plan work to natural breaks and maintain a consistent application method. Do not stretch material beyond the approved coverage. Check intermediate surfaces before covering them; remove contamination and rectify defects using an approved repair procedure.

Out-of-window or interrupted work

When the permitted interval is exceeded, or rain, dust, condensation or site damage affects the surface, assess the condition before continuing. Use the validated cleaning, abrasion, re-priming or repair method; an apparently dry surface is not proof of intercoat adhesion.

Quantity, cure & sequencing

Set the accepted consumption and coat count before ordering. Measure actual area, include surface-profile demand, repairs and losses, and round reactive material to complete matched kits.

WORKED EXAMPLE — ESTIMATE ONLY	CALCULATION
Illustration	100 m ² , two coats at 0.3 kg/m ² per coat
Net product	60 kg
With an assumed 10% allowance	66.00 kg
Complete packs	3 × 24 kg = 72 kg
Wet-volume check	0.3 / 1.6 = 0.187 L/m ² , equivalent to 187 µm WFT; this is not DFT

Basis of the example

Roller illustration only; does not establish the approved complete system. The assumed area, coat count and 10% allowance are estimating choices, not independently validated ALKA specifications.

Source timing / release references

STAGE	TIME / CONDITION
Pot life	45 minutes at 20°C
Touch dry	1 day at 20°C
Light duty / full cure	3 days / 7 days at 20°C
Recoat window	Validated minimum / maximum and preparation outside window required

Plan around actual conditions

Temperature, humidity, ventilation, substrate absorption and thickness affect drying and cure. Pot life, open time, touch dry, overcoat time and service release describe different conditions. Record when reactive components are combined; do not extend working life with unapproved water or solvent.

Release to service

Use the technically approved schedule for the actual load or exposure. Chemical immersion, vehicle loading, water testing, stacking and washing may require different release points where those duties are specified. Do not infer readiness from surface appearance alone.

Inspection, safety & handover

HOLD POINT	RECORD / VERIFY
Before work	Accepted substrate and details; material/version; approved colour/build; environmental conditions and trial result.
During application	Component/tint batches; proportions; mixing and placement times; measured area, quantity and thickness; coat count and interruptions.
Before next layer	Surface condition; permitted interval; defects and repairs; primer/receiving-layer compatibility.
Before service	Cure conditions and elapsed time; final inspections; approved test results; repairs completed and rechecked.

Product-specific checks

- Record batch proportions and mixing/placement times.
- Check material use against measured area and the approved film build.
- Agree adhesion, slip or electrical tests only where relevant to the actual system.

Investigate defects before covering them

Softness or delayed drying calls for a review of identity, proportioning, conditions and thickness. Bubbles or pinholes call for a review of moisture, porosity, air entrainment and application rate. Loss of adhesion requires locating the failure plane and correcting preparation or interface problems. Isolate affected areas; do not conceal uncured or unsound material.

Safe handling and cleaning

Read the current SDS for the actual product and every component, thinner and cleaner. Use the specified ventilation, personal protection and site controls. Spray, abrasive preparation and confined-space work need competent planning. Do not assume water-based, low odour, cured appearance or high solids means non-hazardous.

Use only the product-approved cleaner before material cures; keep cleaning solvent separate from coating thinner. Collect residues and protect drains. Cured material normally needs an appropriate mechanical removal method; avoid damaging the sound substrate.

Maintenance and handover

Remove abrasive grit and spills promptly. Trial cleaners before widespread use and avoid unapproved solvent cleaning. Inspect traffic lanes and joints; repair damage before liquids can enter below the finish.

Retain the installed system, batch and application records, inspection results, repair details and agreed cleaning/reopening instructions. The approved TDS and current SDS should be available to the applicator and owner.