

Product overview

Product description

ALKA 110 is a two-component, pigmented epoxy coating for industrial and commercial concrete floors. It forms a continuous, hard-wearing wearing layer in roller-applied or specified self-smoothing systems. The selected thickness, primer and surface texture are matched to traffic, cleaning and service exposure.

Key advantages

- Hard-wearing epoxy finish supports everyday industrial floor service.
- Seamless construction provides a continuous surface that is straightforward to clean.
- Gloss finish improves the presentation of prepared concrete floors.
- Compatible aggregate or decorative builds allow a range of specified finishes.

Recommended uses

- Warehouses, stores and packaging areas.
- Workshops, garages and manufacturing floors.
- Commercial premises, showrooms and other indoor floor areas.
- Laboratory or food-processing floors where the complete build is approved for the actual exposure.

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.

Epoxy flooring. Engineered for duty.

Two-component, coloured epoxy coating for roller-applied and self-smoothing flooring systems.

CHEMISTRY	FINISH	APPLICATION
Two-component epoxy	Gloss; textured builds possible	Brush, roller or specified spread application

Product profile

ALKA 110 is a multi-purpose epoxy floor coating for prepared concrete in industrial and commercial environments. It forms the resin coating layer in a selected flooring build, with the preparation, primer, application rate and finish matched to the project.

Typical project environments

Warehouses and packaging areas; workshops and garages; manufacturing and assembly floors; aircraft hangars; clean rooms and commercial premises. Food-processing, laboratory and chemical-exposure areas require a project-specific assessment of the cleaning regime, temperature and chemicals.

Design intent

A continuous, hard-wearing surface with a gloss appearance and practical maintenance requirements. The legacy TDS describes 100% solids, solvent-free epoxy with mechanical and chemical resistance. These descriptions are not a quantified VOC certification, a slip rating or an unlimited chemical-resistance claim.

Typical layer arrangement

03 ALKA 110 wearing layer

Roller coating or nominated self-smoothing build; texture as specified

02 Project-selected primer / preparation layer

Product choice and compatibility to be confirmed for the substrate

01 Mechanically prepared concrete

Sound, clean substrate with assessed moisture, repairs and joint details

Schematic only. Not to scale; not a project specification or a fixed coat schedule.

Selection checkpoint

Tell ALKA the floor area, substrate condition, traffic, chemical exposure, cleaning method and reopening programme before selecting the build.

Technical data & curing

Values below are transcribed from the ALKA 110 source TDS, version 3.1 dated 8 June 2026. They are legacy declared values, not newly tested results.

PROPERTY	SOURCE VALUE / CONDITION
Components	A: coloured liquid; B: transparent liquid
Colour range	AS 2700 colours and RAL K7, as listed in source
Mixed density at 20°C	1.6 kg/L
Mix ratio A:B	5:1 by weight OR 3:1 by volume
Pot life at 20°C	Approximately 25 minutes
Application temperature	Table heading: ambient & substrate; listed limits: +10°C to +40°C
Relative humidity	Approximately 80% maximum
Substrate moisture	Maximum 12% by weight - test method and suitability require confirmation
Storage / shelf life	Minimum 12 months unopened; dry, frost-free conditions, +10°C to +30°C
Packaging	24 kg pre-proportioned A+B kit; source also states 16 L*

CURE STAGE	APPROXIMATE TIME AT 20°C
Touch dry	8 hours
Light traffic	3 days
Full cure	7 days

Use the correct timing

Pot life is not a guaranteed floor working time. Temperature, batch size and conditions affect application and cure. A validated recoat window is not supplied in the source PDF; confirm it before scheduling.

*Pack check: 24 kg divided by 1.6 kg/L equals 15 L, not the stated 16 L. The pack-volume discrepancy must be resolved before final issue.

System selection & working methods

Select a build by the actual floor duty, not by appearance alone. The following methods explain the installation sequence; they do not establish an approved product combination or replace a job-specific coating schedule.

BUILD	SEQUENCE & CONTROL POINT
Roller-applied coating	Prepare and repair concrete; apply the nominated primer where required. Apply ALKA 110 uniformly with a compatible roller and cross-roll while workable. Avoid repeated rolling after the material starts to thicken. Check actual mass used against measured area.
Self-smoothing wearing course	Establish levels and containment first. Spread the specified mixture with a suitable squeegee or notched tool. Work successive mixes into a wet edge. Use any de-aeration step only within the approved working time and method. Do not assume a thin coat will correct slab flatness.
Textured / broadcast finish	Apply the nominated receiving coat and distribute the specified dry aggregate while it can still be embedded. After cure, remove unbound material. Apply the specified locking coat evenly. Aggregate size, loading and sealing affect texture and cleaning.
Existing coated floor	Identify the old coating, contamination and bond. Remove unsound material. Establish compatibility and adhesion on a representative trial area. A sound-looking surface is not evidence of adhesion or compatibility.

Primer and finish selection

Use the primer named in the approved system for the measured substrate condition. ALKA 100 may be considered where the ALKA flooring specification nominates it; it is not automatically a moisture barrier. Assess porosity and outgassing, and do not leave untreated pinholes beneath the wearing layer.

Where an additional finish is proposed for appearance, UV exposure or cleaning, obtain written compatibility and recoat instructions for that product. An arbitrary clear coat does not validate exterior suitability or chemical resistance of the whole build.

Equipment and site organisation

Provide a controlled mixing station, appropriate electric mixer and paddle, clean containers, calibrated measuring equipment if authorised, spreading tools, rollers, extraction and suitable PPE. Separate clean and contaminated work zones. Stage materials so mixed resin is placed promptly and batch records remain traceable.

Agree the appearance

Approve colour, texture and gloss on a representative sample before the main works. Plan visible bays and batch changes; repairs and separate application stages can remain visible.

Preparation & application

01 Assess and prepare the substrate

Inspect concrete condition, existing coatings, contamination, cracks, joints, drainage and moisture sources. Mechanically remove laitance, weak concrete and incompatible coatings. Degrease contaminated areas before mechanical preparation. Vacuum thoroughly using suitable dust extraction.

Assess cracks before repair: moving cracks and movement joints need a movement-accommodating detail. Use a compatible repair system and allow it to reach the required condition before coating. A plastic-sheet moisture check alone is not a quantitative acceptance test.

02 Establish the application hold point

Record substrate and air temperature, relative humidity, moisture test method and results, and the risk of condensation. Confirm the nominated primer or scratch coat, surface profile and acceptance criteria with ALKA. Do not coat standing water, condensation or an unsound surface.

03 Mix complete, correctly proportioned units

Pre-stir Part A for 2 minutes. Add Part B at the stated ratio and mix with an electric stirrer for at least 3 minutes. Scrape the vessel sides and base and ensure a uniform mixture. Keep any supplied pigment addition consistent with the approved pack instructions. Do not add water or unapproved thinner.

04 Place, finish and protect

Use brush or roller for the nominated coating build; use a squeegee or suitable spreading tool for a specified self-smoothing build. Maintain a wet edge and consistent application rate. Confirm the target thickness before work: the source contains conflicting per-coat thickness instructions. Spray application requires separate equipment and safety guidance.

Protect the fresh floor from damp, condensation and water for at least 24 hours. Isolate the area from traffic and contamination during cure. Inspect coverage, finish, joints and defects before handover. Do not equate touch-dry condition with readiness for traffic or chemical exposure.

Coverage requires a confirmed build

Legacy consumption: roller coating 0.25-0.40 kg/m²; self-smoothing / locking coat 1.5-2.0 kg/m². These are source ranges, not universal coverage guarantees. Do not combine them with an unconfirmed thickness schedule.

Quantity planning & sequencing

SOURCE APPLICATION	SOURCE MASS RATE	THEORETICAL AREA / 24 kg
Roller coating	0.25-0.40 kg/m ²	60-96 m ²
Self-smoothing / locking coat	1.50-2.00 kg/m ²	12-16 m ²

Areas above are calculated as kit mass divided by the source consumption range. They exclude waste, primer, repairs, aggregate and surface-profile demand. The source does not establish that one coat is a complete flooring system.

Worked ordering example - roller coating

Illustration only: $100 \text{ m}^2 \times 0.30 \text{ kg/m}^2 \text{ per coat} \times 2 \text{ coats} = 60 \text{ kg}$. With an assumed 10% allowance, order quantity becomes 66 kg. At 24 kg per kit, round up to 3 complete kits (72 kg). The rate, number of coats and 10% allowance are estimating assumptions, not a validated ALKA specification.

Thickness cross-check

At the source density of 1.6 kg/L, 0.30 kg/m² corresponds to 0.1875 L/m², or approximately 0.188 mm of mixed material spread uniformly. This is a mathematical wet-volume check; it is not an independently measured dry-film thickness. Confirm the source thickness discrepancy before specifying a coat build.

Batch planning and working time

Pot life is approximately 25 minutes at 20°C. The source mixing sequence includes 2 minutes of Part A pre-stirring and at least 3 minutes after adding Part B. Record the hardener-addition time. Warmer material or material held in a deep container may become unworkable sooner; do not extend it with water or solvent.

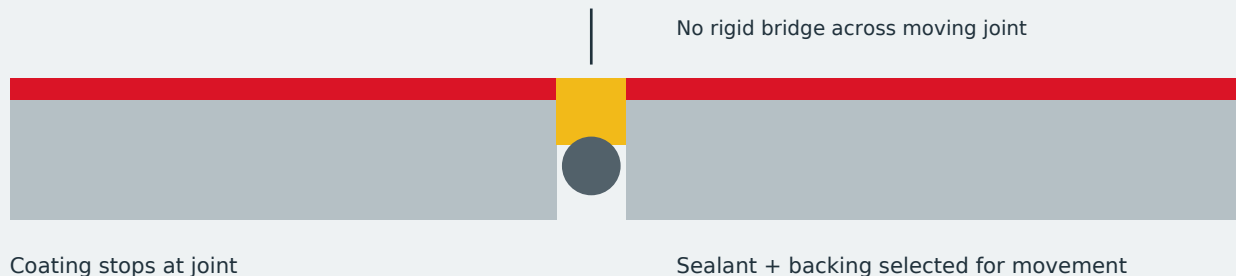
STAGE	RELEASE CONDITION
Between coats	Obtain the validated minimum and maximum recoat interval at actual temperature. Confirm a clean, sound surface.
Window exceeded / surface contaminated	Stop and obtain the cleaning, abrasion and recoating procedure. Do not assume adhesion to a glossy cured surface.
Light traffic	Legacy reference: 3 days at 20°C. Check actual cure conditions and the planned loading.
Chemical duty / heavy service	Legacy full-cure reference: 7 days at 20°C. Confirm the specific service and any additional acceptance checks.

Record the actual yield

For each bay record area, batches, kit mass, coat count and losses. Investigate deviations rather than reducing film build to achieve a quoted coverage.

Substrate, cracks & joint details

MOVEMENT JOINT / CONCEPT SECTION



Concept only. Not to scale. Dimensions, materials and movement capacity must follow the approved project detail.

SITE CONDITION	REQUIRED APPROACH
Weak or friable concrete	Remove to sound material before coating. A resin top layer cannot compensate for failure within a weak substrate. Agree strength testing and acceptance with the project team.
Oil-contaminated slab	Determine depth and extent; surface degreasing alone may be insufficient. Confirm preparation effectiveness and adhesion on a trial area.
Static cracks / voids	Investigate cause, remove weak edges and repair with a nominated compatible material. Re-profile repairs and observe the repair product cure/recoat instructions.
Moving cracks / structural joints	Refer to the designer. Retain movement capacity through the finish using a detailed joint system; do not rigidly fill and coat over it.
Damp concrete / rising moisture	Identify the source and quantify moisture using the agreed method. Decide on moisture management before selecting a primer or coating.
Falls and drainage	Confirm drainage in the substrate or designed screed. A thin epoxy coating is not a substitute for correcting falls.

Trial area and acceptance

Where the substrate or old coating is uncertain, prepare a representative trial using the proposed complete build. Agree the inspection and adhesion test procedure, test locations, curing period and acceptance criteria in advance. Document failure mode as well as any measured result.

Do not hide defects
Repair scope, movement details and moisture management should be resolved before materials are mixed.
Photograph these details before the finished coating conceals them.

Quality control & troubleshooting

HOLD POINT	RECORD / VERIFY
Before mixing	Substrate acceptance; repairs and joint details; moisture method/results; air and substrate temperature; humidity and condensation risk; approved colour and build.
Each batch / work zone	Component labels, batch numbers and expiry; ratio or full-kit identity; mixing and placement times; area and quantity; application method and thickness checks.
Before reopening	Required cure period under actual conditions; uniform finish; defects rectified; joints/drains complete; agreed slip/adhesion checks; cleaning and handover instructions.

Symptoms are indicators, not a diagnosis

OBSERVATION	INVESTIGATE / RESPONSE
Soft or tacky areas	Check proportioning, mixing, temperature and cure time. Isolate the area; establish whether removal is required. Do not conceal uncured material with another coat.
Pinholes or bubbles	Check substrate porosity, outgassing, moisture and mixing technique. Determine the cause before choosing a repair or primer adjustment.
Delamination / hollow areas	Check contamination, weak concrete, moisture, preparation and intercoat condition. Identify the failure plane and repair the underlying cause.
Roller marks / uneven texture	Check working time, batch overlap, spreading rate and tool choice. Agree a repair trial; local patches may differ visibly.
Colour variation / dull patches	Check batch changes, mixing consistency, cure conditions, moisture and cleaning exposure. Compare with the approved sample after the specified cure.
Cracks / joint-edge failure	Check substrate movement, loads and joint design. For PU cement also review anchorage and thermal duty. Obtain a detail before reinstatement.

Handover and maintenance

Supply the installed build, batch record, application dates, reopening limits and cleaning instructions. Remove grit routinely; clean spills promptly using a compatible method. Trial unfamiliar cleaners in an inconspicuous area. Avoid unapproved solvent cleaning and concentrated chemical dwell.

Plan inspections around traffic and exposure. Record wear, cuts, cracks and sealant deterioration; repair early using a compatible procedure. For repairs, remove unsound material, prepare sound boundaries and observe the nominated recoat conditions. Colour and texture matching cannot be assumed.

Exposure, limitations & care

Chemical suitability must be confirmed for the exact chemical, concentration, temperature, duration, cleaning cycle and coating build. The source chemical table is headed generically for cycloaliphatic epoxy; no ALKA 110 test method or exposure duration is supplied.

EXPOSURE GROUP	SPECIFICATION GUIDANCE
Oils, fuels and salts	Listed favourably in the legacy table; confirm real exposure and cleaning requirements.
Acids, alkalis and oxidisers	Do not infer resistance across concentrations or at elevated temperature. Request written project guidance.
Solvents	The source lists acetone and MEK as poor and warns of softening under prolonged ethanol exposure.
UV / exterior exposure	Do not specify guaranteed colour stability from the generic legacy UV statement. Confirm exterior suitability and any compatible finish.
Wet or greasy traffic areas	Select texture for the actual use. No tested slip classification is established by this sheet.

Application limitations

Do not apply where significant vapour pressure may occur. The legacy 12% moisture limit does not establish resistance to rising damp or hydrostatic pressure. Do not bridge movement joints with rigid coating. No food-contact, immersion, potable-water or fire approval is established by this document.

Cleaning, maintenance and safety

The source specifies xylene for cleaning tools before cure. Keep cleaning solvent out of the coating mixture and follow its SDS. Cured material requires mechanical removal. Contain residues and dispose of them appropriately; do not discharge into drains.

Read the current SDS for every component before use. Provide ventilation and wear the protective equipment specified by the SDS and site risk assessment. Avoid skin and eye contact. Keep uncured material away from food and utensils. Low odour or high solids content does not remove handling hazards.

Remove grit and spills promptly. Agree a cleaning regime compatible with the installed finish and exposure. Inspect joints, damaged areas and high-traffic routes; repair defects before contaminants can enter beneath the floor.

Technical support

ALKA Coatings | 87 Market St, Smithfield NSW 2164

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Provide the product batch, substrate details and intended service conditions when requesting advice.

Read this Technical Data Sheet with the current component SDS and the approved project specification. Contact ALKA Technical Support to confirm project-specific conditions before use.