

AUAV00053 Dulux Avista Internal Flooring Waterbased Epoxy Low Sheen / Tinted to an Avista or Dulux colour on New Concrete floors [Interior]

Substrate and Substrate Preparation

Substrate Notes

Concrete is a mixture of Portland cement, fine and coarse mineral aggregates, water and admixtures. Concrete floor slab construction consists of concrete poured into formwork in which reinforcing steel had been laid. The formwork (usually timber) holds the slab together as the concrete cures. The concrete should be kept wet according to best practice methods to allow the cement to fully hydrate during the curing process of 4-6 weeks to allow it to reach its design strength. Methods include ponding, wet hessian, wet sand or plastic sheet. If allowed to dry out prematurely, concrete will develop laitance, a weak, friable layer on the surface.

A waterproofing membrane should be laid underneath the slab to prevent moisture from rising up from the soil through the slab and causing efflorescence. The presence of laitance or efflorescence will interfere with coating adhesion.

Substrate Preparation Notes

Assess suitability

Concrete must be placed, compacted and cured in accordance with good building practice for 28 days minimum. Examine the floor for the presence of dirt, oils, grease, curing agents, laitance, efflorescence and other surface contaminants. If a wax based curing compound had been used, coating of the concrete is not recommended as the wax prevents adhesion to the concrete. Check the extent of cracks, voids, mechanical damage and other imperfections.

Clean surface

Remove all surface and subsurface contamination using by a cleaning method appropriate for the contamination type encountered. For example, remove dirt, dust, grease or oils by washing with a free-rinsing, alkaline detergent such Gamlen CA 1 in strict accordance with the manufacturers written instructions and all safety warnings. Pay attention to expansion joints. Thoroughly rinse with fresh potable water to remove all detergent residues. A clean surface is indicated when the rinsing water wets out the surface instead of beading on the surface. Repeat until the surface is clean. Allow surface to dry.

Repair surface imperfections

Thoroughly and completely clean out, rout out (as required) and fill cracks, voids or other imperfections with a two-pack epoxy repair paste such as Nitomortar AP® in strict accordance with the technical data sheet.

Do not fill expansion joints with any rigid fillers. Leave these until after the floor is painted.

Note: Do not overcoat epoxy repair mortars with any clearcoat in areas exposed to UV; UV exposure will cause chalking of the epoxy surface and potential delamination of the coating system.

Abrade surface

Diamond grind, blast-track or mechanically abrade concrete floors in strict accordance with SSPC-SP 13/NACE No. 6 Joint Surface Preparation Standard "Surface Preparation of Concrete" to remove laitance, curing compounds, hardeners, loosely adhering concrete, and/or other contaminants. The resultant surface should be a sound, uniform substrate, with a concrete surface profile in the range of CSP 2-3 as laid out in ICRI Guideline 310.2R-2013, "Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair".

Note Dulux does not recommend acid etching as a form of surface preparation. Remove all dust by thorough vacuum cleaning.

Check moisture

Check moisture content of the floor prior to painting and ensure that it is no greater than 6%*.

* To minimise the risk of moisture interference, Dulux recommends the following 2 tests be conducted prior to coating; ASTM F2659-10 "Standard Guide for Preliminary Evaluation of Concrete, Gypsum Cement and other Floor Slabs and Screeds using a Non-Destructive Electronic Moisture Meter" (Moisture Content to be <6%), and ASTM D4263 "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method" (no visible moisture present). If there is concern about moisture in the substrate, refer to your Dulux Technical Consultant for further evaluation.

Note: The testing listed above cannot guarantee avoidance of future moisture related problems particularly with existing concrete slabs. This is especially true if the use of an under-slab moisture vapor barrier cannot be confirmed or concrete contamination from oils, chemical spills, unreacted silicates, chlorides or Alkali Silica Reaction (ASR) is suspected.

Coat surface

Check that the surface is clean, dust-free and defect-free prior to coating. Apply the floor coating system in strict accordance with the technical data sheets and specification without delay before the floor becomes recontaminated. Allow floor coating system to fully cure.

Seal structural control or expansion joints with a flexible polyurethane sealant such as Parchem® Nitoseal PU 400 in strict accordance with the technical data sheet. Do not paint over floor joint sealant.

Coating System Summary

- 1st Coat Dulux Avista Internal Flooring Waterbased Epoxy Low Sheen
- 2nd Coat Dulux Avista Internal Flooring Waterbased Epoxy Low Sheen
- Optional Dulux Avista Internal Flooring Waterbased Epoxy Low Sheen

Coating System

1st Coat — Dulux Avista Internal Flooring Waterbased Epoxy Low Sheen

Coat Type 1st Coat	Datasheet AUAV00008 Dulux Avista Internal Flooring Waterbased Epoxy Low Sheen
------------------------------	-----------------------------------------------------------------------------------------

Read the full Datasheet details at <https://duspecplus.com.au/pdf/datasheet/dulux-avista-internal-flooring-waterbased-epoxy-low-sheen/08097c51-fd53-45ca-bbb1-1f32218442af>

Components 2	Mixing Ratio 1:1
------------------------	----------------------------

Pot Life
1 hour

Application Methods

 **Roller**
 **Hopper Gun**

	Min	Max	Recommended
Theoretical Spread Rate *	<input type="text" value="6"/>	<input type="text" value="10"/>	<input type="text"/>
Wet Film Per Coat (microns)	<input type="text" value="100"/>	<input type="text" value="167"/>	<input type="text" value="133"/>
Dry Film Per Coat (microns)	<input type="text" value="50"/>	<input type="text" value="83"/>	<input type="text" value="67"/>
Recoat Time **	<input type="text" value="4 hours"/>	<input type="text"/>	<input type="text" value="4 hours"/>

Meets GBCA V.O.C. Requirements?
Not Applicable

Coating Application Details

Mix A and B in correct proportions (1:1 by volume) in a clean, dry 20L bucket. Mix thoroughly for a minimum 3 minutes with a mechanical mixer at low speed until mix colour is uniform (white).
Transfer contents into separate clean bucket. Ensure no unmixed product remains in the first bucket. Mix again.
Add 1 x 400ml Avista Waterbased Colour Tint per 8L kit.
Mix thoroughly until even colour is achieved.

Note: First coat can be diluted up to 10% with water.
Apply product with a roller or spray with hopper gun. Roller tray required for roller application. Ensure coats are applied evenly and not too thick.
First coat can be diluted up to 10% with water. Allow approximately 4 hours between coats, depending on conditions.
Second coat to be applied undiluted. Third coat may be required in the lighter colours.
To obtain a lower slip factor it is advisable to use the appropriate slip reducing additive with the sealer for better grip under adverse conditions.

2nd Coat — Dulux Avista Internal Flooring Waterbased Epoxy Low Sheen


Coat Type 2nd Coat	Datasheet AUAV00008 Dulux Avista Internal Flooring Waterbased Epoxy Low Sheen
------------------------------	-----------------------------------------------------------------------------------------

Read the full Datasheet details at <https://duspecplus.com.au/pdf/datasheet/dulux-avista-internal-flooring-waterbased-epoxy-low-sheen/08097c51-fd53-45ca-bbb1-1f32218442af>

Components 2	Mixing Ratio 1:1
------------------------	----------------------------

Pot Life
1 hour

Application Methods

 **Roller**
 **Hopper Gun**

	Min	Max	Recommended
Theoretical Spread Rate *	6	10	
Wet Film Per Coat (microns)	100	167	133
Dry Film Per Coat (microns)	50	83	67
Recoat Time **	4 hours		4 hours

Meets GBCA V.O.C. Requirements?
Not Applicable

Coating Application Details

Mix A and B in correct proportions (1:1 by volume) in a clean, dry 20L bucket. Mix thoroughly for a minimum 3 minutes with a mechanical mixer at low speed until mix colour is uniform (white).
Transfer contents into separate clean bucket. Ensure no unmixed product remains in the first bucket. Mix again.
Add 1 x 400ml Avista Waterbased Colour Tint per 8L kit.
Mix thoroughly until even colour is achieved.

Note: First coat can be diluted up to 10% with water.

Apply product with a roller or spray with hopper gun. Roller tray required for roller application. Ensure coats are applied evenly and not too thick. First coat can be diluted up to 10% with water. Allow approximately 4 hours between coats, depending on conditions. Second coat to be applied undiluted. Third coat may be required in the lighter colours.
To obtain a lower slip factor it is advisable to use the appropriate slip reducing additive with the sealer for better grip under adverse conditions.

Optional — Dulux Avista Internal Flooring Waterbased Epoxy Low Sheen

Coat Type
Optional

Datasheet
AUAV00008 Dulux Avista Internal Flooring Waterbased Epoxy Low Sheen

Read the full Datasheet details at <https://duspecplus.com.au/pdf/datasheet/dulux-avista-internal-flooring-waterbased-epoxy-low-sheen/08097c51-fd53-45ca-bbb1-1f32218442af>

Components
2

Mixing Ratio
1:1

Pot Life
1 hour

Application Methods



Roller



Hopper Gun

	Min	Max	Recommended
Theoretical Spread Rate *	6	10	
Wet Film Per Coat (microns)	100	167	133
Dry Film Per Coat (microns)	50	83	67
Recoat Time **	4 hours		4 hours

Meets GBCA V.O.C. Requirements?
Not Applicable

Coating Application Details

Mix A and B in correct proportions (1:1 by volume) in a clean, dry 20L bucket. Mix thoroughly for a minimum 3 minutes with a mechanical mixer at low speed until mix colour is uniform (white).

Transfer contents into separate clean bucket. Ensure no unmixed product remains in the first bucket. Mix again.

Add 1 x 400ml Avista Waterbased Colour Tint per 8L kit.

Mix thoroughly until even colour is achieved.

Note: First coat can be diluted up to 10% with water.

Apply product with a roller or spray with hopper gun. Roller tray required for roller application. Ensure coats are applied evenly and not too thick.

First coat can be diluted up to 10% with water. Allow approximately 4 hours between coats, depending on conditions.

Second coat to be applied undiluted. Third coat may be required in the lighter colours.

To obtain a lower slip factor it is advisable to use the appropriate slip reducing additive with the sealer for better grip under adverse conditions.

Coating System Notes

* Practical Spreading Rate will vary from the quoted Theoretical Spreading Rate due to factors such as method and condition of application and surface roughness.

** Recoat times are quotes for 25°C and 50% relative humidity, these may vary under different conditions.

Disclaimer

This Specification is copyright to DuluxGroup (Australia) Pty Ltd and/or DuluxGroup (New Zealand) Pty Ltd (collectively, 'Dulux'). It may not be varied or altered without the prior written consent of Dulux, and if it is, Dulux has no responsibility or liability for those variations.

Unless Dulux has provided you with a customised, project-specific specification, this Duspec+ document does not represent that any particular product or product system will be suitable for your project.

Any information provided in this Duspec+ is given in good faith and is believed by Dulux to be correct at the time of publication. Products and coating systems can be expected to perform as indicated in this Duspec+ document, provided the substrate is in good condition, the coatings are applied by a suitably experienced and skilled applicator, and the preparation, application and maintenance is followed strictly as set out in this Duspec+ document, and as recommended on the applicable Dulux Product Data Sheet and Safety Data Sheets for the relevant products (available from www.duspecplus.com.au). Climatic conditions at application time can affect Duspec+ documentation suitability and product performance.

The correct colour or colour match is the responsibility of the applicator. Colours will change over time and Dulux does not guarantee that the same colour newly mixed will match a colour applied earlier which has been subjected to weathering or other change elements. No product colour is guaranteed against colour change.

Where any liability of Dulux in respect of this Specification cannot by law be excluded, Dulux's liability is limited, as permitted by law and at Dulux's option, to resupply of the relevant products or services or to reimbursing the cost of those products or services.

WHERE LEAD MAY BE PRESENT: The asset manager is responsible for verifying the presence of lead and determining whether to remove or encapsulate the lead. If lead is present, the work must be done in strict accordance with AS 4361 Parts 1 and 2 and Worksafe Australia guidelines.