AUAV00049 Dulux Avista Resurfacing Base Compound / with Extended Wear Sealer on New Exposed aggregate floors [Exterior]

Scope of Works

The Avista Resurfacing System is a decorative cement based coating, suitable for application over existing cured concrete surfaces.

Substrate and Substrate Preparation

Substrate Notes

Exposed aggregate refers to concrete substrates that feature decorative stone aggregates or small pebbles at least 1mm in size on the surface. The surface finish can vary widely, depending on the aggregate type and colour and method of application. One method is to add the decorative aggregate to the concrete mix and to spray a surface retarder onto the freshly laid wet concrete surface. Once the concrete has set, the surface is low pressure washed to remove the surface retarder and loose concrete to expose the decorative aggregate component. Another method is to embed the decorative aggregate into the freshly laid wet concrete surface.

"Pebblecrete" can refer either to exposed aggregate or to a polymeric render coating comprising a resin filled with decorative pebbles, which is trowelled onto the surface and levelled off. The polymeric version looks like exposed aggregate but can present serious challenges for coating adhesion.

The profile and condition of exposed aggregate on exposure can be of variable consistency resulting in loose aggregate and/or friability of the surface. It is recommended that a test area representative of the worst standard of surface degradation be prepared in accordance with any proposed coatings specification for review of technical and aesthetic performance.

Exposed aggregate finished may contain iron-bearing minerals which oxidise to form water-soluble stains resembling rust. Where such oxide staining is present, specific preparation and the use of a solvent borne coating is required to prevent bleeding of the stain through subsequent coatings.

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 Dulux Protective Coatings 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

- Primer — Dulux Avista Resurfacing Primer
- 1st Coat — Dulux Avista Resurfacing Base Compound
- 2nd Coat — Dulux Avista Resurfacing Base Compound
- 3rd Coat — Dulux Avista Concrete Sealer Extended Wear Semi Gloss
- 4th Coat — Dulux Avista Concrete Sealer Extended Wear Semi Gloss

Coating System

Primer — Dulux Avista Resurfacing Primer

Coat Type	Datasheet
Primer	**AUAV00007 Dulux Avista Resurfacing Primer**

Read the full Datasheet details at Dulux Avista Resurfacing Primer

Components
1

Application Methods
Roller **Floor Squeegee** **Broom**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)			10

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

Coating Application Details
Shake Avista Primer container well before opening and then dilute 1 part Primer to 3 parts water in a clean bucket (4 litres of mixed Primer will cover approximately 40m² depending on the porosity of the concrete).

Apply the mixed primer to the surface using a soft broom, roller or sprayer. Spread evenly across the surface so primer doesn't pool as this can affect adhesion. Whilst the surface is still wet, the resurfacing coating can be applied.

Whilst the surface is still wet, Dulux Avista Resurfacing Compound can be applied as per the instructions on the bag.

1st Coat — Dulux Avista Resurfacing Base Compound

Coat Type	Datasheet
1st Coat	**AUAV00006 Dulux Avista Resurfacing Base Compound**

Read the full Datasheet details at Dulux Avista Resurfacing Base Compound

Components
3

Pot Life	Yield
appox. 30 minutes, depending on ambient conditions	**12.5L**

Application Methods

Floor Squeegee | Broom | Trowel | Hopper Gun

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	15	30	
Recoat Time **	40	NA	

V.O.C. Level	Meets GBCA V.O.C. Requirements?
11 grams per litre	**Not Applicable**

Coating Application Details

Add required amount of clean potable water (3.6 - 4.0 L).in a clean 20L bucket and add Avista Resurfacing Colour Oxide and mix thoroughly with mechanical mixer at low speed until mix colour is uniform.
Slowly add Dulux Avista Resurfacing Base Compound, mixing continually.
Once full content has been added, mix for a further 3 minutes. This step is critical in activating the polymers to achieve an even consistent mixture.

First coat should always be applied to a damp, primed surfaces. Applicable to all trowel or squeegee application methods.

Squeegee/Trowel application (recommended for first coat)

Pour a manageable quantity of Dulux Avista mixture onto the damp, primed concrete surface. Use squeegee or trowel evenly spread the resurfacing compound over the surface.
Do not exceed a thickness of 4 mm per coat, as this may lead to shrinkage cracking.
Subsequent trowel or spray coats can be applied to achieve desired decorative finish.

Spray application

Application will require a moisture trap air compressor & hopper gun. Recommended minimum compressor specs: 12 cfm with a 70L tank.
Add mix to hopper, ensuring not to overfill - recommend half full.
Before applying to surface, spray on separate fibro test board to obtain desired texture. Adjust pressure to vary texture.
Spray evenly across the surface, holding the hopper approximately 600mm from the ground.
Once area has been completely covered, allow to dry sufficiently to walk on.

Minimum 2 coats at total of minimum 3mm thickness required to achieve sufficient wear factor.
The Dulux Avista Resurfacing System must be sealed once the surface is completely dry. Options for sealing include:
- Dulux Avista General Purpose Sealer (S/G or matt)
- Dulux Avista Extended Wear Sealer
- Dulux Avista 2 Pack Urethane
- Dulux Avista Polyaspartic Sealer

SDS Number	SDS Link
	View SDS Link

2nd Coat — Dulux Avista Resurfacing Base Compound

Coat Type	Datasheet
2nd Coat	**AUAV00006 Dulux Avista Resurfacing Base Compound**

Read the full Datasheet details at Dulux Avista Resurfacing Base Compound

Components
3

Pot Life	Yield
appox. 30 minutes, depending on ambient conditions	**12.5L**

Application Methods

Floor Squeegee | Broom | Trowel | Hopper Gun

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	15	30	
Recoat Time **	40	NA	

V.O.C. Level	Meets GBCA V.O.C. Requirements?
11 grams per litre	**Not Applicable**

Coating Application Details

Add required amount of clean potable water (3.6 - 4.0 L).in a clean 20L bucket and add Avista Resurfacing Colour Oxide and mix thoroughly with mechanical mixer at low speed until mix colour is uniform.
Slowly add Dulux Avista Resurfacing Base Compound, mixing continually.
Once full content has been added, mix for a further 3 minutes. This step is critical in activating the polymers to achieve an even consistent mixture.

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Squeegee/Trowel application (recommended for first coat)

Pour a manageable quantity of Dulux Avista mixture onto the damp, primed concrete surface. Use squeegee or trowel evenly spread the resurfacing compound over the surface.
Do not exceed a thickness of 4 mm per coat, as this may lead to shrinkage cracking.
Subsequent trowel or spray coats can be applied to achieve desired decorative finish.

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Application will require a moisture trap air compressor & hopper gun. Recommended minimum compressor specs: 12 cfm with a 70L tank.
Add mix to hopper, ensuring not to overfill - recommend half full.
Before applying to surface, spray on separate fibro test board to obtain desired texture. Adjust pressure to vary texture.
Spray evenly across the surface, holding the hopper approximately 600mm from the ground.
Once area has been completely covered, allow to dry sufficiently to walk on.

Minimum 2 coats at total of minimum 3mm thickness required to achieve sufficient wear factor.
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- Dulux Avista Extended Wear Sealer
- Dulux Avista 2 Pack Urethane
- Dulux Avista Polyaspartic Sealer

SDS Number	SDS Link
	View SDS Link

3rd Coat — Dulux Avista Concrete Sealer Extended Wear Semi Gloss

Coat Type	Datasheet
3rd Coat	**AUAV00001 Dulux Avista Concrete Sealer Extended Wear Semi Gloss**

Read the full Datasheet details at Dulux Avista Concrete Sealer Extended Wear Semi Gloss

Components
1

Application Methods

Air Spray **Brush** **Roller** **Broom**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	3	6	4
Wet Film Per Coat (microns)	80	150	120
Dry Film Per Coat (microns)	40	80	60
Recoat Time **			2 hours

V.O.C. Level	Meets GBCA V.O.C. Requirements?
684g/L	**Not Applicable**

Coating Application Details

Application Methods

Sealer to be applied by a suitable solvent resistant broom or 11mm-22mm nap roller. Roller used will depend on the profile of the concrete.
The sealer must be mixed prior to application using a stirrer or paddle.
To apply sealer, pour sealer into a roller tray, and evenly roll or broom onto the surface.
Ensure sealer is not applied too thick and no pooling occurs as this may cause bubbling.
Avoid excess sealer build up on the edges of the roller. This can lead to roller lines in the surface.
An additional coat of sealer can be applied after a minimum of 2 hours, (recommended recoat 2 hours)

Drying time: Minimum of 2 hours between coats when applied at 25°C and above at 50% relative humidity. Recoat times will be longer in cooler weather (<25°C) or higher humidity.
Do not apply sealer at temperatures below 8°C or above 35°C.
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 e.g. wet areas, steep slopes and pool surround areas.

SDS Number	SDS Link
PAR000614	**View SDS Link**

4th Coat — Dulux Avista Concrete Sealer Extended Wear Semi Gloss

Coat Type	Datasheet
4th Coat	**AUAV00001 Dulux Avista Concrete Sealer Extended Wear Semi Gloss**

Read the full Datasheet details at Dulux Avista Concrete Sealer Extended Wear Semi Gloss

Components
1

Application Methods

Air Spray **Brush** **Roller** **Broom**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	3	6	4
Wet Film Per Coat (microns)	80	150	120
Dry Film Per Coat (microns)	40	80	60
Recoat Time **			2 hours

V.O.C. Level	Meets GBCA V.O.C. Requirements?
684g/L	**Not Applicable**

Coating Application Details

Application Methods

Sealer to be applied by a suitable solvent resistant broom or 11mm-22mm nap roller. Roller used will depend on the profile of the concrete.
The sealer must be mixed prior to application using a stirrer or paddle.
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Do not apply sealer at temperatures below 8°C or above 35°C.
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 e.g. wet areas, steep slopes and pool surround areas.

SDS Number	SDS Link
PAR000614	**View SDS Link**

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 23°c and 50% relative humidity, these may vary under different conditions.
Do not apply in temperatures below 10°C as curing time is significantly delayed. It is not advisable to apply onto very hot surfaces (greater than 40°C) as this can affect cure. Therefore, under very hot conditions it is advisable to shade the application area.
Avista Resurfacing System is a decorative coating and cracks in the concrete base may reflect through the surface.

Disclaimer

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.