## Dulux Avista Concrete Patch Repair Compound Feather 0-10mm



# Economical high strength patch repair mortar (feather - 10 mm)

## Description

Dulux Avista Concrete Repair Compound is supplied as a ready to use blend of dry powders which requires only the site addition of clean water to produce a highly consistent, high strength repair mortar. The material is based on a blend of cements and graded aggregates, to provide a mortar with good handling characteristics.

## Uses

High strength patch repair mortar for repairing concrete surfaces. Can be applied from feather edge up to 10 mm. It may be used internally and externally for small patch repairs.

## **Advantages**

- Rapid strength gain will generally accept pedestrian traffic at 16 hours
- High strength, abrasion and weather resistance
- Single component product eliminates site batching and requires only the site addition of clean water
- Excellent bond to the concrete substrate
- Contains no chloride admixtures

## **Properties**

Results obtained at 23°C using 3.3 L of water / 20 kg bag.

Property	Typical result	
Compressive strength	20 MPa @ 1 day	
(AS 1478.2 - 2005):	40 MPa @ 7 days	
	55 MPa @ 28 days	
Modules of Rupture	3.8 MPa @ 1 day	
(Flexural strength)	6.8 MPa @ 7 days	
(AS1012.11 - 2000):	8.0 MPa @ 28 days	
Indirect Tensile	2.2 MPa @ 1 day	
Strength (AS1012.10	4.1 MPa @ 7 days	
- 2000):	5.0 MPa @ 28 days	
Dimensional change	< 500 microstrain @ 7 days	
(Drying shrinkage)	< 1000 microstrain@ 28 days	
(AS1478.2 - 2005):		
Working life:	2 hours @ 23°C	
Setting time at 23°C:	Initial set - 5 hours	
	Final set - 7 hours	
Traffic time:		
Pedestrian	30 hours @ 15°C	
	16 hours @ 23°C	
	12 hours @ 30°C	
Vehicular	54 hours @ 15°C	
	24 hours @ 23°C	
	20 hours @ 30°C	
Fresh wet density:	Approximately 2100 kg / m <sup>3</sup>	
	dependent on consistency	

## Design criteria

Dulux Avista Concrete Repair Compound is designed for horizontal use. It may be used for small patch repairs from feather edge up to 10 mm. Thicker sections can be reinstalled using Dulux Avista Concrete Repair Compound 3 to 40 ml. Consult Dulux Avista for further information.

## **Application Instructions**

#### Notes

To avoid possible reflective cracking in the Dulux Avista Concrete Repair Compound repair, it is essential that live cracks and joints in the substrate be given proper attention. Due consideration must always be given to existing joint details and these must be followed through the Dulux Avista Concrete Repair Compound repair; live cracks should be treated by an approved method. For further information, contact your local Dulux Avista sales office.

#### Preparation

Clean the surface and remove any dust, unsound or contaminated material, plaster, oil, paint, grease, corrosion deposits or algae. Where breaking out is not required, roughen the surface and remove any laitance by light scabbling, grit-blasting, scabbling or by needle-gun to form a good key.

Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser. The effectiveness of decontamination should then be assessed by a pull-off test.

Expose fully any corroded steel in the repair area and remove all loose scale and corrosion deposits. Steel should be cleaned to a bright condition paying particular attention to the back of exposed steel bars. Grit-blasting is recommended for this process.

Where corrosion has occurred due to the presence of chlorides, the steel should be high pressure washed with clean water immediately after grit-blasting to remove corrosion products from pits and imperfections within its surface.

The prepared area should be blown clean with oil-free compressed air.

#### **Reinforcing steel priming**

Apply one full coat of Dulux Metalshield Cold Galv Primer to all exposed reinforcing steel and allow to dry before continuing. If any doubt exists about having achieved an unbroken coating, a second application should be made and, again, allowed to dry before continuing.

#### Substrate priming

The substrate should be thoroughly soaked with clean water and any excess removed immediately prior to priming. Any areas of the substrate which dry out before application of the primer must be re-dampened before continuing.

Thoroughly scrub Dulux Avista Resurfacing Primer diluted (1 part modifier and 2 parts water) into the dampened surface taking care to ensure complete coverage particularly around the edges.

Apply the topping whilst the Dulux Avista Resurfacing Primer is still tacky. The priming operation must be repeated if the initial coat has dried out.

In exceptional circumstances, eg; where a substrate/repair barrier is required or where the substrate is wet or likely to remain permanently damp. Contact your local Dulux Avista sales office for further information.

#### Mixing

Care should be taken to ensure that Dulux Avista Concrete Repair Compound is thoroughly mixed. A forced action mixer is essential. Mixing in a suitably sized drum using an approved spiral paddle in a slow speed (400/500 rpm) heavy duty drill is acceptable for the occasional one bag mix. Free-fall mixers must not be used. Mixing of part bags should never be attempted.

Place 2.5-3.3 litres of drinking quality water into the mixer and, with the machine in operation, add one full 20 kg bag of Dulux Avista Concrete Repair Compound and mix for 3 minutes until fully homogeneous. Note that powder must always be added to water.

For larger areas, water should be mixed 50:50 with Dulux Avista Resurfacing Primer, for example, 1.6L of water and 1.6L Avista Resurfacing Primer to yield a 3.2L mix per 20kg bag.

#### Application

The mixed Dulux Avista Concrete Repair Compound must be applied onto the primed surface before it dries. Areas which dry too soon must be scrubbed clean and reprimed exactly as described above before continuing.

Apply the mixed Dulux Avista Concrete Repair Compound onto the primed substrate as soon as possible after mixing. The mortar should be applied evenly by trowel and tamped in place to ensure full compaction. Dulux Avista Concrete Repair Compound can be applied up to 10 mm thickness in single applications.

#### **Build-up**

Sections greater than 10 mm thickness can be achieved by application of multiple layers. In this instance, the surface of the intermediate layers should be scratch-keyed, covered with polythene sheeting secured at the edges, and allowed to set for a minimum of 7 hours (at 23°C) before continuing. Repriming as described above and a further application of Dulux Avista Concrete Repair Compound may proceed at this time.

#### Finishing

Dulux Avista Concrete Repair Compound should be struck off to the correct level and finished with a steel trowel to fully close the surface. The completed surface should not be overworked.

If overcoating with resurfacing product, strike off with a straight edge and then finish with a wooden float to provide a good key.

#### Low temperature working

In cold conditions down to 10°C, the use of warm water (up to 30°C) is advisable to accelerate strength development. Normal precautions for winter working with cementitious materials should then be adopted. The material should not be applied when the substrate and/or air temperature is 10°C and falling. At 10°C static temperature or at 10°C and rising, the application may proceed.

#### High temperature working

At ambient temperatures above 30°C, the material should be stored in the shade and cool water used for mixing.

#### Curing

Dulux Avista Concrete Repair Compound is a cement-based repair mortar. In common with all cementitious materials, Dulux Avista Concrete Repair Compound must be cured immediately after finishing in accordance with good concrete practice. Plastic or wet hessian is recommended if the Dulux Avista Concrete Repair Compound is to be overcoated with a decorative resurfacing finish.

#### **Overcoating with protective finishes**

Dulux Avista Concrete Repair Compound is extremely durable and will provide an excellent hard wearing surface to the repaired locations. A decorative resurfacing finish may be applied over the repair area after approximately 4 - 6 hours.

#### Cleaning

Dulux Avista Concrete Repair Compound should be removed from tools, equipment and mixers with clean water immediately after use. Cured material can only be removed mechanically.

#### Limitations

Dulux Avista Concrete Repair Compound should not be used when the temperature is below 10°C and falling. Do not mix part bags. The product should not be exposed to moving water during application. Exposure to heavy rainfall prior to the final set may result in surface scour. If any doubts arise concerning temperature or substrate conditions, consult yourlocal Dulux Avista branch.

## Estimating

#### **Coverage and yield**

Dulux Avista Concrete Patch	At 3 litres of water will yield approx 11 litres of
Repair Compound:	ready to use product. This will cover approx
	1m <sup>2</sup> at 10 mm thick
Dulux Avista Resurfacing Primer:	6 - 8 m² / litre

**NOTE:** actual yield per bag of Dulux Avista Concrete Repair Compound will depend on consistency used. Actual coverage rate of Dulux Avista Resurfacing Primer will vary dependent on texture and porosity of substrate. The coverage figures for other products are theoretical - due to wastage factors and the variety and nature of possible substrates, practical coverage figures will be reduced.

### **Storage conditions**

Store in dry conditions in the original, unopened bags or packs. If stored at high temperatures and/or high humidity conditions the shelf life may be reduced to 4 - 6 months. Dulux Avista Resurfacing Primer should be protected from frost.

## Supply

FC378185-20KG AVS PATCH REPAIR COMPOUND 0-10MM 20KG

FD578046-10L AVS RESURFACING PRIMER 10L

FD278182-4L AVS SOLVENT 4L

FD278182-10L AVS SOLVENT 10L

FD278182-20L AVS SOLVENT 20L

#### Important notice

A Safety Data Sheet (SDS) and Technical Data Sheet (TDS) are available from the Dulux Avista website www.duluxavista.com.au. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In an emergency, contact any Poisons Information Centre (Telephone 131 126 within Australia) or a doctor for advice.

#### Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Dulux Avista does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.



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