

NZDU02297 Dulux Surfaceshield HD on New Precast, Tilt-up and Off Form Concrete [Exterior]

Scope of Works

Surfaceshield HD (heavy duty) is a water-based solution used to protect vertical surfaces from damage caused by graffiti and pollution as well as meeting the most stringent VOC regulations. Surfaceshield HD is a non-sacrificial coating and hence long term surface protection is achieved after a single application. Its non film-forming characteristics mean that Surfaceshield HD penetrates even the smallest pores without modifying the optical appearance of the substrate. Graffiti on surfaces protected with Surfaceshield HD can be removed using hot water pressure, making it the ideal solution where economic maintenance cleaning is desired. The use of graffiti removers may also be required in combination with hot water pressure cleaning for the removal of stubborn graffiti. Surfaceshield S (sacrificial) is a microfilm surface treatment that is safely and efficiently applied onto a range of surfaces to provide protection against graffiti and normal atmospheric dirt and grime. It is water-based, non flammable, and meets the most stringent VOC regulations. Surfaceshield S allows for the safe, effective and economical removal of most types of graffiti, saving the surfaces from costly traditional methods of removing graffiti such as chemical stripping, abrading or scarifying. Once graffiti has been removed, Surfaceshield S can be economically reapplied and avoids the high cost of preparing and re-painting surfaces. ANTI GRAFFITI OVER TILT UP, PRECAST AND OFF FORM CONCRETE – SPECIALIST WATER BASED SACRIFICIAL COATING SYSTEM Gloss level: Invisible Coating type: Water based copolymer/Waterborne vegetable biopolymer sacrificial coating

Substrate and Substrate Preparation

Substrate Notes

For other masonry and cementitious substrates (such as concrete block) please use the Masonry substrate.

OFF FORM CONCRETE

Off-form Concrete is produced by placing suitable forms and shoring to hold the wet concrete into the required shape. Reinforcements are placed within or on the formwork to give concrete its strength. Once the formwork and shoring are removed the result is the off form concrete.

TILT UP

Tilt-up concrete is derived simply from the method of construction, wall panels are cast on a horizontal surface that then require lifting, and tilting vertically into their final position. Construction is commenced with the laying of the structures foundation and floor slab, wall panels are then cast on the floor one on top of each other in a stack arrangement.

PRE-CAST

Pre-Cast concrete are concrete panels that are cast on horizontal vibrating beds that are then cured in racks that are delivered to site that then require lifting, and positioned into their final position.

Substrate Preparation Notes

ASSESS SUITABILITY

Concrete, mortar and cement based products need to be fully cured for at least 28 days before painting, unless using Dulux AcraTex HAR primer.

PREPARE SURFACE

Remove any powdery layers, laitance, efflorescence and protrusions of mortar by detergent cleaning, wire brushing, water blasting or a suitable chemical treatment.

CLEAN

Clean the surface thoroughly by water blasting or detergent cleaning, where a commercial cleaner is added to hot or cold water and surface is washed / scrubbed thoroughly with a stiff bristle broom and then rinsed clean with fresh water. This may need to be repeated on extremely dirty surfaces to ensure removal of efflorescence or other poorly bonded surface material. Ensure that the surface is dry, clean and free from dust. Check for the presence of release agents (bond breakers) by sprinkling water onto the substrate, if water beads on the surface then release agents are still present and require removal. Use Dulux AcraTex 400/4 Tiltwash to remove release agents, according to label instructions. Repeat the water bead test.

REPAIR SURFACE IMPERFECTIONS

Fill any cracks or surface imperfections with a suitable filler or patching compound, with the addition of 10-20% fresh Portland cement to match the existing surface. Structural control or expansion joints should be filled with flexible, paintable mastic.

CHECK MOISTURE

Concrete moisture should be less than 10%.

RENDERING OF NEW BRICK/ BLOCKWORK & MASONRY

Refer to Dulux AcraTex Texture coatings for suitable levelling and texture systems.

Coating System Summary

- 1st Coat Dulux Acratex Tiltwash 400/4
- 2nd Coat Dulux Surfaceshield HD
- 3rd Coat Dulux Surfaceshield S

Coating System

1st Coat — Dulux Acratex Tiltwash 400/4

Coat Type
1st Coat

Datasheet
NZAC00216 Dulux Acratex Tiltwash 400/4

Read the full Datasheet details at [Dulux Acratex Tiltwash 400/4](#)

Application Methods



Air Spray



Airless Spray

	Min	Max	Recommended
Theoretical Spread Rate (m ² /L)	7	7	7

V.O.C. Level
0

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

Coating Application Details

Garden pressure atomiser/airless spray

A sample area should be trialled first then checked for the presence of bondbreaker.

Suitable substrates: Tilt Up/ Off Form Concrete/ Pre Cast Concrete

Commence application, working from bottom of panel upward.

Apply using an airless spray unit (eg Graco 695 with a .0015 - .0019 tip at 1000 psi) or a low pressure knapsack spray unit.

Large panels should be articulated into manageable work areas, always maintaining a wet edge ensuring rinsing of TiltWash is actioned prior to the area drying. If TiltWash dries, re-apply TiltWash to the affected area and rinse thoroughly.

Flood the area with an excess of material with a heavy spray rather than a thin jet or light mist. This will produce a foaming wave of excess material descending down the panel.

As TiltWash is applied the panel should take on a darkened appearance. Should this not happen, apply a second coat of TiltWash and consult with Dulux AcraTex if the panel does not darken (excessively applied water based bondbreaker may be the cause).

NOTES:

1. Chemical goggles, gloves and a mask should be worn at all times whilst pouring and applying TiltWash.
2. Application of TiltWash should be with an airless spray unit or low pressure knapsack spray only.
3. Application of TiltWash on large panels is a 2-man procedure, one to apply TiltWash the other rinsing with water. Never allow TiltWash to dry before rinsing.

RINSING TILTWASH

Rinse panel with a flood of water (heavy spray not jet) deluging panel from top to bottom.

Ensure extra care is taken whilst rinsing to ledges, sills and all fixtures on panels.

A second rinse should be performed whilst panel is still wet from initial rinse. This is to make sure all remnants of bondbreaker and TiltWash are removed.

This product should not be released into any watercourses, drains or gutters neat or diluted and should be contained and disposed of under local waste management procedures. An environmental duty of care must be executed at all times whilst using this product.

NOTES:

1. Do not wait until TiltWash is drying on panel before rinsing. Rinsing must occur whilst TiltWash is still wet and active to remove all traces of bondbreaker and TiltWash.
2. Water pressure should be at least 80 psi or 28kpa.

3. A second rinse is imperative to the performance of TiltWash.

PRIOR TO PAINTING

Cross-hatch adhesion and pH tests must be performed as per Australian Standard AS2311-Painting Buildings and AS1580-Methods of Testing Adhesion (current editions) prior to commencing full-scale works.
pH readings must be below 10 before coatings can be applied.

SDS Number
10858

SDS Link
[View SDS Link](#)

2nd Coat — Dulux Surfaceshield HD

Coat Type
2nd Coat

Datasheet
NZDU00545 Dulux Surfaceshield HD

Read the full Datasheet details at [Dulux Surfaceshield HD](#)

Application Methods



Air Spray



Airless Spray

	Min	Max	Recommended
Theoretical Spread Rate (m ² /L)	<input type="text"/>	<input type="text" value="3"/>	<input type="text" value="5"/>

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

3rd Coat — Dulux Surfaceshield S

Coat Type
3rd Coat

Datasheet
NZDU00527 Dulux Surfaceshield S

Read the full Datasheet details at [Dulux Surfaceshield S](#)

Application Methods



Air Spray



Airless Spray

	Min	Max	Recommended
Theoretical Spread Rate (m ² /L)	<input type="text" value="6"/>	<input type="text" value="2"/>	<input type="text"/>

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

Coating System Notes

* Theoretical Coverage is the area is the area covered by 1 Litre of material at the specifiaction 'Dry Film Thickness' without a loss to a smooth and non porous surface.

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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/ NZS 4361 Parts 1 and 2 and Worksafe Australia or New Zealand guidelines.