



# NZDU00577 Dulux Quantum Clearcoat Gloss on New Precast, Tilt-up and Off Form Concrete [Exterior]

#### Scope of Works

Quantum Clear Coat is a premium quality, full gloss two-pack acrylic polyurethane. Quantum Clear Coat has been designed for superior weathering and gloss retention, while displaying the advantage of being recoatable with minimal surface preparation. Quantum Clear Coat, when fully cured, exhibits excellent graffiti resistance. This specification is designed as a anti graffiti system over bare substrates. ANTI GRAFFITI OVER TILT UP, PRECAST AND OFF THE FORM CONCRETE - 2 PACK CLEAR GLOSS Gloss level: Gloss Coating type: Two pack solvent based acrylic clear polyurethane

#### **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**

<ul> <li>1st Coat</li> </ul>	Dulux Acratex Tiltwash 400/4
<ul> <li>2nd Coat</li> </ul>	Dulux Quantum Clearcoat Gloss
<ul> <li>3rd Coat</li> </ul>	Dulux Quantum Clearcoat Gloss
<ul> <li>4th Coat</li> </ul>	Dulux Quantum Clearcoat Gloss





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 <u>Dulux Acratex Tiltwash 400/4</u>						
Application Methods						
Air Spray 🛉 Airless Spray						
	Min	Max	Recommended			
Theoretical Spread Rate (m²/L)	7	7	7			
V.O.C. Level			Meets ECNZ V.O.C. Requirements?			
0		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 SDS Link 10858 **View SDS Link** 2nd Coat — Dulux Quantum Clearcoat Gloss Datasheet 2nd Coat NZDU00525 Dulux Quantum Clearcoat Gloss Read the full Datasheet details at <u>Dulux Quantum Clearcoat Gloss</u> Application Methods **Airless Spray** Recommended Min Max Theoretical Spread Rate (m<sup>2</sup>/L) 9.5 Wet Film Per Coat (microns) 100 Dry Film Per Coat (microns) 45 Recoat Time \*\* 7 Hours Indefinite Meets ECNZ V.O.C. Requirements? **Not Applicable** 3rd Coat — Dulux Quantum Clearcoat Gloss Coat Type Datasheet NZDU00525 Dulux Quantum Clearcoat Gloss 3rd Coat Read the full Datasheet details at <u>Dulux Quantum Clearcoat Gloss</u> Application Methods **Airless Spray** Min Max Recommended Theoretical Spread Rate (m<sup>2</sup>/L) 9.5 Wet Film Per Coat (microns) 100 Dry Film Per Coat (microns) 45 Recoat Time \*\* 7 Hours Indefinite Meets ECNZ V.O.C. Requirements? **Not Applicable** 4th Coat — Dulux Quantum Clearcoat Gloss Coat Type Datasheet 4th Coat NZDU00525 Dulux Quantum Clearcoat Gloss Read the full Datasheet details at <u>Dulux Quantum Clearcoat Gloss</u>





Application Methods			
Airless Spray			
	Min	Max	Recommended
Theoretical Spread Rate (m²/L)			9.5
Wet Film Per Coat (microns)			100
Dry Film Per Coat (microns)			45
Recoat Time **	7 Hours	Indefinite	
Meets ECNZ V.O.C. Requirements?  Not Applicable			

Coating System Notes

\* Theorectical 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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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.

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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.