QUANTUM® CLEARCOAT
Recoatable High Gloss Clear Polyurethane Finish PC 435

FEATURES
• OUTSTANDING WEATHERING AND CHEMICAL RESISTANCE
• EXCELLENT APPLICATION PROPERTIES BY SPRAY
• EXCELLENT GRAFFITI RESISTANCE
• HIGH GLOSS FINISH

USES
QUANTUM® CLEARCOAT is a premium quality, high gloss crystal clear two-pack acrylic polyurethane. QUANTUM® CLEARCOAT has been designed for superior weathering and gloss retention even in areas of extreme UV radiation. QUANTUM® CLEARCOAT is readily recoatable with minimal surface preparation. QUANTUM® CLEARCOAT, when used over QUANTUM® FX imparts exceptional gloss, depth of colour and sparkle and offers very high visual impact to areas of high public scrutiny such as hotel lobbies, commercial facades, restaurant and cafe interiors, showrooms, awnings, lifts, furniture, and many areas in sporting facilities and retail complexes. QUANTUM® CLEARCOAT, when fully cured, exhibits excellent graffiti resistance.

SPECIFICATIONS
AS/NZS 3750.6

RESISTANCE GUIDE

WEATHERABILITY
Excellent gloss retention on exterior exposure

SOLVENTS
Excellent resistance to splash and spillage of common alcohols, aliphatic and aromatic hydrocarbons, esters and ketones

HEAT RESISTANCE
Up to 120°C dry heat

WATER
Excellent resistance to fresh and salt water but not suitable for immersion

SALTS
Unaffected by splash and spillage of most salt solutions

ALKALIS
Good resistance to splash and spillage of most common alkalis

ACIDS
Suitable for splash and spillage exposure to most acids

ABRASION
Excellent when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION
Acrylic polyurethane coating

APPLICATION CONDITIONS
Min Max
Air Temp. 10°C 45°C
Substrate Temp. 10°C 45°C
Relative Humidity 85%
Concrete Moisture <10%

COATING THICKNESS (MICRONS)

Min Max Recommended
Wet film per coat (μm) 80 130 100
Dry film per coat (μm) 35 55 45

COMPONENTS
Two

VOLUME SOLIDS
43%

VOC LEVEL
<510 g/L

FLASH POINT
-4°C

SUITABLE SUBSTRATES
Suitably primed and coated steel, aluminium, MDF, galvanised steel, concrete, compressed fibre cement or fibreglass

PRODUCT CODE
722-30900 Clearcoat Gloss
976-87350 Standard Hardener

PRIMERS
Most Dulux® two pack epoxy primers and single pack oil based primers

INTERMEDIATES
Quantum® FX, Dulux® polyurethanes

APPLICATION METHODS
Conventional, airless spray or air assisted spray. Brush and roller suitable for small areas only.

DRIYING CHARACTERISTICS AT 45 μm DRY FILM THICKNESS*

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Humidity</th>
<th>Touch</th>
<th>Handle</th>
<th>Full Cure</th>
<th>OVERCOAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>25°C</td>
<td>50%</td>
<td>1 Hour</td>
<td>5 Hours</td>
<td>7 Days</td>
<td>5 Hours</td>
</tr>
</tbody>
</table>

*These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying.

SPREADING RATE
ASSUMING NO LOSSES

9.5 square metres per litre equals 45 μm dry film thickness

NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.
# QUANTUM® CLEARCOAT

## TYPICAL SYSTEMS

This is a guide only and not to be used as a specification. Your specific project needs must be discussed with a Dulux Protective Coatings Consultant.

<table>
<thead>
<tr>
<th>SURFACE</th>
<th>ENVIRONMENT</th>
<th>PREPARATION GUIDE</th>
<th>SYSTEM</th>
<th>DFT (μm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEEL – NEW</td>
<td>Coastal (AS2312.1 Cat C5)</td>
<td>Abrasive blast clean AS1627.4</td>
<td>1st Coat Zincanode®402</td>
<td>75 μm</td>
</tr>
<tr>
<td></td>
<td>Exceeds System PUR5</td>
<td></td>
<td>2nd Coat Duremax® GPE MIO</td>
<td>200 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3rd Coat Quantum® FX</td>
<td>55 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4th Coat Quantum® Clearcoat</td>
<td>45 μm</td>
</tr>
<tr>
<td>STEEL – NEW</td>
<td>Low – Interior (AS2312.1 Cat C2)</td>
<td>Abrasive blast clean AS1627.4</td>
<td>1st Coat Duremax® GPE ZP</td>
<td>125 μm</td>
</tr>
<tr>
<td></td>
<td>Exceeds System PUR2</td>
<td></td>
<td>2nd Coat Quantum® FX</td>
<td>55 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3rd Coat Quantum® Clearcoat</td>
<td>45 μm</td>
</tr>
<tr>
<td>CONCRETE</td>
<td>Exterior/Interior</td>
<td>Remove release agents and other</td>
<td>1st Coat Durebild® STE</td>
<td>125 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>surface contaminants</td>
<td>2nd Coat Quantum® FX</td>
<td>55 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3rd Coat Quantum® Clearcoat</td>
<td>45 μm</td>
</tr>
<tr>
<td>HARDWOOD &amp; MDF</td>
<td>Interior</td>
<td>Sand and dust down before and after</td>
<td>1st Coat Luxeypoxy® 4 White Primer/Quantum® FX/Quantum® Clearcoat</td>
<td>50 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>first coat</td>
<td>2nd Coat Quantum® FX</td>
<td>55 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3rd Coat Quantum® Clearcoat</td>
<td>45 μm</td>
</tr>
<tr>
<td>ALUMINIUM &amp; FIBREGLASS</td>
<td>Exterior/Interior</td>
<td>Clean, degrease and abrade surface</td>
<td>1st Coat Luxeypoxy® 4 White Primer</td>
<td>50 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2nd Coat Quantum® FX</td>
<td>55 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3rd Coat Quantum® Clearcoat</td>
<td>45 μm</td>
</tr>
<tr>
<td>FIBRE CEMENT SHEET</td>
<td>Exterior/Interior</td>
<td>Clean, degrease and lightly sand surface. Dust down.</td>
<td>1st Coat Luxeypoxy® 4 White Primer</td>
<td>50 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2nd Coat Quantum® FX</td>
<td>55 μm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3rd Coat Quantum® Clearcoat</td>
<td>45 μm</td>
</tr>
</tbody>
</table>

**NOTE:** If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT and full opacity. Appearance may greatly differ depending on application method (brush, roller and spray).

Plasterboard surfaces may move and crack, particularly at the joints. Quantum® FX is not sufficiently flexible to be suitable over surfaces prone to movement, therefore, ensure that any movement is borne by expansion joints and that these joins are masked off when applying Quantum FX.

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### SURFACE PREPARATION

Specifiers should follow the surface preparation guidelines from the data sheet for the primer or first coat selected.

The surface must be clean, sound and free from moisture, grease, oil, dirt, rust, loose paint, and other contaminants. Degrease surface with Gamlen CA 1 detergent (according to the manufacturer’s written instructions and all safety warnings) and then abrade to provide a key for the coating system. If application of the second coat has exceeded the recoat window of the first coat (refer to data sheet) then the entire surface MUST be abraded.

**Steel:** Round off all rough welds, sharp edges and remove weld spatter. Remove grease, oil and other contaminants in accordance with AS1627.1. Degrease with Gamlen CA 1 (a free-rinsing, alkaline detergent) according to the manufacturer’s written instructions and all safety warnings. Abrasive blast clean to a minimum of AS1627.4 Class 2.5 with a blast profile of 40 – 70 microns. Remove all dust brushing or vacuum.

**Non-ferrous metals:** Round off all sharp edges. Remove grease, oil and other contaminants in accordance with AS1627.1. Whip blast with fine non-metallic media such as plastic, glass or garnet to provide a key. Remove all dust with compressed air. Alternatively, degrease and abrade the surface with a non-metallic abrasive pad wetted with Gamlen CA 1 (a free-rinsing, alkaline detergent) and water. Rinse thoroughly with fresh potable water.

**Concrete:** Concrete must be at least 28 days old before coating. Remove curing compounds, oil, grease and other oily contaminants with Gamlen CA 1 (according to the manufacturer’s written instructions and all safety warnings). Remove all laitance and loose material. Fill any large cracks or voids using Luxeypoxy® Filler.

**CFC Sheet:** Sand thoroughly and remove all dust. To prevent moisture ingress and delamination of the coating system, prime and paint all sides of the panel.

**MDF and hardwood:** Sand thoroughly and remove all dust. Resand lightly after priming to remove raised fibres. To prevent bowing, prime all sides of the panel.

For best results, the primer surface must be smooth and free of any defects. When sanding work from coarse to fine grades of paper to avoid sanding marks in the finish.
**QUANTUM® CLEARCOAT**

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>Mix each can thoroughly using a power mixer until the contents are uniform. Mix the contents of both packs together thoroughly with a power mixer and let stand for 10 minutes before use.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRUSH/ROLLER</td>
<td>Suitable for small areas only. Thin with up to 100 ml/litre with Duthin® 040 (965-42166) to aid application. When brushing and rolling additional coats may be required to attain the specified thickness.</td>
</tr>
<tr>
<td>CONVENTIONAL SPRAY</td>
<td>Up to 200ml/litre Dulux® Urethane Thinner can be used to aid atomisation. Apply in multiple wet on wet coats overlapping each pass 50%. Between two and four wet on wet coats are required to achieve opacity. Opacity may vary depending on colour. A short flash time of approximately two minutes is required between coats. Typical Set-up: Graco AirPro: 1.4mm (239542) Pressure at Triton 308: 65-100 kPa (10-15 p.s.i.) Pressure at gun: 385-420 kPa (55-60 p.s.i.) HVLP: 1.4 Fluid Tip Set</td>
</tr>
<tr>
<td>AIRLESS SPRAY</td>
<td>Standard airless spray equipment such as a Graco Xtreme 30:1 with a fluid tip of 15 thou (0.38) and an air supply capable of delivering 550-690 kPa (80-100 p.s.i.) at the pump. Thinning is not normally required but up to 150 ml/litre of Duthin® 040 (965-42166) may be added to aid application.</td>
</tr>
</tbody>
</table>

**PRECAUTIONS**

This is an industrial product designed for use by experienced Protective Coating applicators. Where conditions may require variation from the recommendations on this Product Data Sheet contact your nearest Dulux® Consultant for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the written consent of Dulux® Australia. Freshly mixed material must not be added to material that has been mixed for some time. The rate of cure is dependent upon temperature. Do not apply at temperatures below 10°C. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. Ensure that you read and understand the safety precautions on the Material Safety Data Sheets for the two components before using. The recommended thinner MUST be used as some solvents react with the isocyanate hardener seriously degrading the life of the coating. Under no circumstances should water or non-recommended thinner be allowed to contaminate the product. In hot conditions use Duthin® 040 (965-42166) for improved flow and to reduce dry spray.

**CLEAN UP**

Clean all equipment with Dulux® Urethane Thinner (965-63023) immediately after use.

**OVERCOATING**

Degrease with Gamlen CA 1 according to the data sheet. Test adhesion of existing coating by standard cross hatch adhesion test. If the coating fails, remove it. High-pressure water wash at 8.3 to 10.3 MPa (1,200-1,500 p.s.i.) to remove chalk and dust. Abrade surface to provide a good key for the new coating.

**SAFETY PRECAUTIONS**

Read Data Sheet, SAFETY DATA SHEET and any precautions on container labels. SAFETY DATA SHEET is available from Customer Service (13 23 77) or www.duluxprotectivecoatings.com.au

**STORAGE**

Store as required for a flammable liquid Class 3 in a bunded area under cover. Store in well-ventilated area away from sources of heat or ignition. Keep containers closed at all times.

**HANDLING**

As with any chemical, ingestion, inhalation and prolonged or repeated skin contact should be avoided by good occupational work practice. Eye protection approved to AS1337 must be worn while handling. Always wash hands before smoking, eating, drinking or using the toilet. Gas is evolved when isocyanate in the hardener reacts with water. If a closed container shows signs of internal pressure, cover it completely with a cloth and remove the lid slowly to prevent splashing or violent expulsion of the lid.

**USING**

Use with good ventilation and avoid inhalation of spray mists and fumes. When spraying, wear a positive-pressure, air-supplied respirator. Users must always comply with the provisions of the respective State Spray Painting Regulations at all times.

**FLAMMABILITY**

This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE. Fight fire with foam, CO₂ or dry chemical powder. On burning will emit toxic fumes.

**WELDING**

Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.

**COMPANY INFORMATION**

<table>
<thead>
<tr>
<th>Dulux Protective Coatings a division of DuluxGroup (Australia) Pty Ltd</th>
<th>DuluxGroup (New Zealand) Pty Ltd</th>
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<tbody>
<tr>
<td>DuluxGroup (Australia) Pty Ltd</td>
<td>DuluxGroup (New Zealand) Pty Ltd</td>
</tr>
<tr>
<td>1956 Dandenong Road, Clayton 3168</td>
<td>150 Hutt Park Road, Lower Hutt, NZ</td>
</tr>
<tr>
<td>A.B.N. 67 000 049 427</td>
<td>A.B.N. 55 133 404 118</td>
</tr>
</tbody>
</table>

**PACKAGING**

Available in 4 litre packs

**TRANSPORTATION WEIGHT**

1.28 kg/litre (Average of components)

**DANGEROUS GOODS**

Part A: Class 3 UN 1263 Part B: Class 3 UN 1263

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