Don’t get caught in the cold

Maximise midwinter work with Resene Wintergrade paints

Painting in winter can be a challenge with the cold weather playing havoc with application and performance.

Waterborne paints are typically based on tiny, thermoplastic particles that deform and stick to one another during the stresses of drying and film formation. Particles deliberately engineered to be soft, form films easily even at quite low temperatures. The softness, however, extends to the finished film, making it prone to damage from dirt retention. Hard particles can be made, but they require heat, or large amounts of plasticising solvents, in order to form films.

A paint film dried in the cold can crack and even just dry to a powder. This is because the acrylic base needs some warmth to make the particles soft enough to stick together. There’s an intermediate set of temperatures between 5°C to 10°C where the film appears normal but looks can be deceptive as the coating is likely to have much poorer than normal durability. The surface temperature of the substrate may be considerably colder than the ambient air temperature, which creates even more of a challenge for normal paints.

The Resene Technical team first developed a small range of winterised products that will dry in temperatures down to 3°C, which have been used in winter conditions for over 10 years.

To make it even easier to choose a wintergrade finish, Resene now offers Resene Wintergrade Additive, which you can add to a range of selected waterborne Resene paints to winterise them. This will enable you to achieve a wintergrade finish in a wider range of products and colours.
The Resene Wintergrade range of products includes:

- **Resene Wintergrade Lumbersider**
  (see Data Sheet D34a), waterborne low sheen.

- **Resene Wintergrade Sonyx 101**
  (see Data Sheet D30a), waterborne semi-gloss.

- **Resene Wintergrade Quick Dry**
  (see Data Sheet D45a), waterborne primer undercoat.

- **Resene Wintergrade Additive**
  for addition to selected Resene waterborne paints to enable them to be applied in colder conditions.

All of these products can be applied in temperatures as low as 3°C. Do not apply in temperatures over 10°C - use standard Resene decorative finishes instead.

Resene also offers a made to order service, so if you need 200L or more of your chosen wintergrade finish, Resene can add the wintergrade additive and do the mixing for you.

Resene Wintergrade products in use:

- **Copthorne Hotel**
  www.resene.com/archspec/products/copthorne.htm

- **Durie Hill Elevator tunnel**
  www.resene.com/archspec/products/durie_hill.htm

- **Hawkes Bay Opera House and Precinct**
  www.resene.com/archspec/products/opera_house.htm

- **Lakeside apartments, Wanaka**
  www.resene.com/archspec/products/lakeside_apartments.htm

- **Palmerston North Commercial Union building**
  www.resene.com/archspec/products/cold.htm

- **The Clocktower at the Cardrona Alpine Resort**
  www.resene.com/archspec/products/clock.htm

- **Westpac Community Theatre**
  www.resene.com/archspec/products/westpac_theatre.htm

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