Prolam Coating

Coating Prolam with the correct products is essential to ensure ongoing performance (durability) as well as maintaining the visual appearance, where appearance is important.
It is important to use an oil based primer for a painted finish and an oil based stain for stain finish.

Contact us if you need any assistance: 03 526 7436 or info@prolamnz.com

Coating requirements

For Prolam products that are exposed or in-ground

All Prolam products must be coated correctly. This is essential to ensure ongoing performance (durability) as well as maintaining the appearance, where appearance is important. Compliance with all Prolam requirements, including coating requirements, is a condition of our warranty.

Instructions

These instructions apply where the product is exposed as defined in Figure 4.3(b) of NZS 3604:2011 below.

Mandatory requirements

For Prolam products that will be exposed to moisture:

- All exposed surfaces must be fully coated within 14 days of installation.
- All exposed surfaces, cut ends and joints must be sealed with a good quality stain or alkyd primer. Allow to dry as per manufacturer/supplier instructions.

For paint:

- Apply a single enamel undercoat and then apply two full topcoats compatible with the undercoat.
- Painting is to be carried out in accordance with best practice: 1 x undercoat and 2 x topcoats to achieve a total DFT (dry film thickness) of 80 microns (comprised of undercoat DFT 30 microns, topcoat DFT 25 microns/coat).
- Prolam recommends only light-coloured paints, but where a dark colour is selected it must have a light reflectance value (LRV) of greater than 45 %.
- Recoating requirements are in accordance with the manufacturer/supplier instructions.

For stain:

- Apply three coats of premium oil-based stain to all exposed surfaces including cut ends and joints.
- Prolam recommends only light coloured stains.
- Prolam recommends Cutek Oils or Dryden's Penetrating Wood Oil.

For further information

For our handling and storage requirements and for our warranty refer to: **www.prolamnz.com/technical**

Optional requirements

For Prolam products where maintenance of the appearance applies:

- Fill and sand any damage e.g., depressions, temporary fixing holes or unintended transport damage.
- Holes or large imperfections can be filled with a timber plug using an exterior glue.
- Sand the product until the surface is smooth and completely free from dirt and dust.
- Coat as above.

For Prolam posts that are to be installed in-ground:

It is recommended the in-ground portion of the Prolam post should also be coated before installation to ensure posts do not absorb moisture prior to the concrete curing.
1 coat of paint or stain is adequate for this.

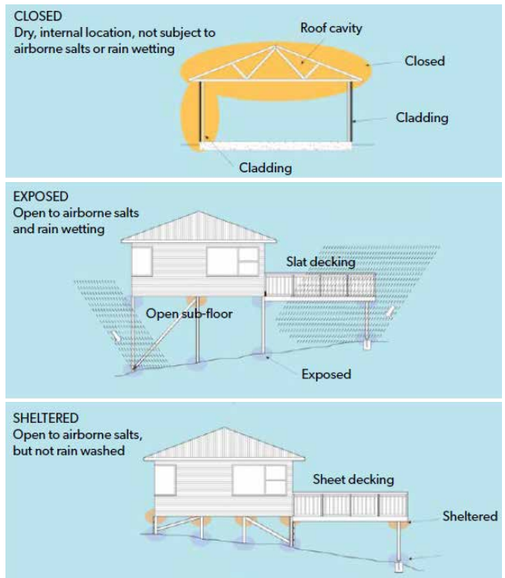

Fig 4.3(a &b) NZS 3604:2011

Coating options

Primers:

Dulux Primer

Dulux 1Step® Oil-Based Primer, Sealer & Undercoat is a fast-drying prepcoat suitable for the complete preparation of interior and exterior surfaces.

Resene Wood primer

Resene Wood Primer is based on an oil-modified alkyd resin blended with pigments to give ease of application and good penetration to substrates. Flexible and produces the ideal surface for subsequent paint finishes.

Paints:

Dulux Weathershield

Dulux Weathershield® has been specially designed to provide a tough, hard-wearing finish that provides protection from all weather conditions.

Dulux Timbacryl

Dulux Timbacryl® provides a high opacity, long-lasting, Low Sheen, 100% acrylic finish for exterior timber and is ideal for fences and pergolas.

Resene Lumbersider

Resene Lumbersider is a waterborne low sheen paint based on a tough waterborne resin to ensure maximum durability in all exposed conditions. Imparts a natural low sheen look that is fully washable. Ideal for use on a wide range of exterior projects. Also popular as a fence paint finish.

Resene Sonyx

Resene Sonyx 101 is a member of a new generation family of waterborne coatings optimised for superior toughness, durability and adhesion, combined with superb flowing good looks.

Stains:

Drydens WoodOil

Dryden WoodOil is a water-repellent, non-filming, timber protector. It's a true migrating oil, that migrates deep into the timber. Dryden WoodOil's water repelling properties prevent the absorption of water deep into the timber, helping to reduce excessive warping, cupping, and splitting of timber, thus extending the life span of those timbers.

CUTEK Xtreme CD50

CUTEK® Extreme CD50 a high-performance, oil-based wood stabiliser with a unique self healing effect. Penetrating deeply into timber, it highlights the natural grain and beauty of wood whilst providing robust and long-lasting protection.

CUTEK Euro

CUTEK® Euro diffuses throughout wood to control liquid and gas phase moisture, to minimise warping, cupping and splitting. By improving the dimensional stability of wood, CUTEK® Euro improves the service life of your timber.

WoodX

Wood-X are 'viscous mineral-based' oils designed to penetrate into absorbent, chemical and preservative free exterior timber products such as Western Red Cedar weatherboards, fascia's, boards, beams and mouldings.

Dark Colour Coatings

Coating Prolam with the correct products is essential to ensure ongoing performance (durability) as well as maintaining the visual appearance, where appearance is important. To ensure there is no impact on performance or appearance, topcoats on Prolam must have a LRV of greater than 45%.

What is the Light Reflective Value (LRV)?

This is a reference to the % of light a paint colour reflects. LRV is measured on a scale from 0% which is black, reflecting no light and 100% which is white, reflecting all light.

The higher the LRV, the lighter the colour, and therefore more light is reflected. The lower the LRV, the darker the colour, and this therefore attracts more heat. More heat increases the chance of resin bleeding, checking, distortion and cracking occurring, which may impact the structural integrity over time.

Example of dark beams 'checking'.

What if I use a paint less than 45%?

Ultimately the darker colour you choose, paint or stain, the greater the chance of distortion in the timber. This may impact the performance and aesthetics of the product over time. It is the responsibility of the user as to whether they wish to take this risk.

Stains don't have an LRV, how dark can I go?

LRVs are particularly difficult to determine from semi-transparent finishes such as wood stains. Light travelling through these finishes gets absorbed and/or is reflected by the underlying timber.

Hence, a stain applied over Pine will also have a substantially higher LRV than the same stain applied over, say Kwila. This is why there is not a standard LRV provided for wood stain colours,

Using lighter coloured stains will ensure the aesthetics and the structural integrity of the product is preserved for the long term. Please contact us for further advice on colours options.

How does the location of Prolam affect the colours I choose?

The location of where Prolam is installed in a build can have a variable impact on the visual aesthetics.

If Prolam is used on the north side of a building, it will be exposed to more direct sunlight than if it was used on the south side of a building. This means that more checking and distortion in the timber may be experienced, and increased maintenance may be required. Darker colours will increase these issues. Use on the south side of a building will expose Prolam to less direct sunlight, and reduces the likelihood of distortion, checking and other issues in Prolam that is painted or stained with darker colours. However, the use of dark colours remains at your own risk regardless of location.

Can I use Resene cool colours?

If you wish to choose a dark colour option, using Resene Cool Colours (or similar) may help to minimise checking, distortion and other issues but this cannot be guaranteed. The use of dark colours remains at your own risk.