

## General

Timber is a dimensionally unstable material that expands and contracts with changing moisture content. The timber surface is eroded by U.V. light, normally changing to a grey colour leaving cellulose fibres exposed on the surface. Timber also provides a source of nutrient for mould growth. A protective system for timber needs to combat these three sources of aggression; viz. water, U.V. light and mould.

Some timbers contain resins and oils that may affect the performance of paint, such as resin pockets in pine that may soften and bleed through paints, oils in teak that may prevent penetration and adhesion of paint, and anti-oxidants in Kwila, Matai, Spotted Gum and Totara that will inhibit the drying of solventborne paints.

Reconstituted timber products are subject, to a greater or lesser degree, to the same degradation as timber. The majority of these products contain wax to improve water-resistance and wet-strength. These waxes may be dissolved in hydrocarbon solvents present in solventborne paints and then be deposited on the film surface when the solvent evaporates. This wax layer may upset the gloss and finish of the paint system and seriously retard the drying of solventborne paints by blocking the ingress of oxygen needed for curing. Particle boards containing Cedar may cause unacceptable staining.

Sharp edges on timber are very difficult to apply paint to as paint tends to flow away from edges, leaving weak spots. For best results these sharp edges should be sanded to a rounded profile.

Some factory applied primers, due to the demands of the application process, are not able to deliver everything needed in a wood primer. Check the instructions on the back of LOSP timber as it may require sanding and priming with a quality solventborne primer, such as Resene Wood Primer (see [Data Sheet D40](#)), before topcoating. Resene supplies a high quality factory primer, Resene True-Prime, to some timber mills, which overcomes these issues and alleviates the need for extra sanding and the extra coat of solventborne primer. If in doubt sand and reprime precoated timbers. Painting of such treated timber should not commence until all solvent odour has dissipated.

## Surface preparation

### D82.1 Remove all moss and mould

Thoroughly clean down to remove all loosely adhered material. Treat areas of moss or mould infestation with Resene Moss & Mould Killer (see [Data Sheet D80](#)) correctly diluted with clean water. Leave for up to 48 hours to achieve full kill. For heavy infestations further applications may be needed. Wash thoroughly with clean water to remove all residues.

### D82.2 Clean surfaces

Thoroughly wash down with Resene Paint Prep and Housewash (see [Data Sheet D812](#)) to remove all dirt, dust, grease, moss and mould residue, cobwebs and other contaminants. Rinse thoroughly with clean water. Allow to dry.

### D82.3 Sand surfaces

Thoroughly sand along the grain to remove minor imperfections and any loose surface fibres. Loose fibres may be assumed to be present if the timber is left exposed to the weather for more than one week. For flooring, machine sanding is often required to achieve a satisfactory surface. Remove dust.

**CAUTION:** Sanding dust from some hardwoods is considered carcinogenic and all timber sanding dusts must be considered potentially harmful. Always wear an effective dust mask.

Sanding dust from old lead or chromate based paints or old building materials containing asbestos may be injurious to health if inhaled or ingested. Seek expert advice and read the Resene [Putting your safety first](#) brochure if the presence of these materials is suspected.

## Timber surfaces

**Cedar, decks, fences, joinery, Kwila, Matai, pergolas, Spotted Gum and Totara**

**Referred to in Resene specification sheets:**

- 2 Timber
- 3 Timber joinery
- 4 Decks, fences and pergolas
- 8 Cedar
- 9 Kwila, Matai, Spotted Gum and Totara

**For smoke damaged surfaces see [D86](#)**

**For repaints see [D87](#)**



## D82.4 Apply Resene TimberLock

Apply one coat of Resene TimberLock (see [Data Sheet D48](#)) to bare areas at the spreading rate of 5-10 square metres per litre depending on the timber porosity. Allow 24 hours to dry. Remove excess Resene TimberLock (see [Data Sheet D48](#)) by wiping with a turps dampened rag.

### Pretreatment of timber

Resene TimberLock (see [Data Sheet D48](#)) improves the dimensional stability of the substrate, as well as improving its fungal, water and U.V. light resistance. Its use improves the durability of subsequently applied topcoats. It is especially recommended on Cedar that is to be painted, as well as on old weathered timber. Resene TimberLock (see [Data Sheet D48](#)) is not required when Resene Woodsman (waterborne see [Data Sheet D57a](#), solventborne see [Data Sheet D57](#)) is to be used.

- NB.
- (1) Always coat any end grain prior to erection.
  - (2) Never coat timber when its moisture content is higher than 17%.
  - (3) Always carry out filling procedures after priming.

## D82.5 Prime timber (waterborne)

Prime timber with Resene Quick Dry waterborne primer undercoat (see [Data Sheet D45](#)). Required for Kwila, Matai, Spotted Gum and Totara substrates.

## D82.6 Prime timber (solventborne)

Prime timber with Resene Wood Primer (see [Data Sheet D40](#)). Required for Cedar and Redwood substrates.

## D82.7 Fill timber holes and split timber

Fill all nailholes, damaged or split timber with a suitable filler applied in accordance with the manufacturer's instructions. Spot prime filler when dry with Resene Quick Dry waterborne primer undercoat (see [Data Sheet D45](#)).

## D82.8 Treat stains

If staining is evident after the application of Resene Quick Dry waterborne primer undercoat (see [Data Sheet D45](#)), apply a further coat of Resene Enamel Undercoat (see [Data Sheet D44](#)).