

Design Pine Limitations

Design Pine like all timber products have limitations, as it is a natural product which is affected by climatic changes, these being moisture and temperature.

All construction must comply with local council or building code requirements.

High risk exposure applications: These can be defined as applications in which Design Pine products are pushed to or exceed the limit of what Design Pine was designed for.

For example: if a thin (18mm) wide (185mm) board painted a dark colour (LRV>30) with very few fixings was installation in direct line of site with the sun and installed on its wide face exposed facing the sun.

This application would result in extreme levels of stress being applied to the timber, joints and paint system. Potential outcomes of the outlined installation may includes finger joint failure, board cupping due to temperature differentials on either sides of the boards, cracking on the ends, checking of the board face, the painted surface deteriorating significantly quicker causing it to crack, flake off or allow water to access the timber and resin bleed.

Poor performance of Design Pine product usually results from one or more of:

- Poor design and/or detailing.
- Poor workmanship and incorrect fixing to the supporting framework.
- Dark coloured finish (i.e. paint)
- Insufficient allowance for timber movement.
- End grain and onsite cuts not being sealed.
- Insufficient provision to prevent moisture being trapped behind the cladding

Painting

Dark colours need to be avoided in applications when Design Pine is in full exposure to the sun, especially if Horizontal to 45 degrees angle to the sun.

Paint colours need to have a Light reflective value greater the 30%, greater than 45% is ideal

Fixing

General rule of thumb for fixing timber in place is 1/3 for the boards being fixed and 2/3's for the member behind. If the fixing member is pine use annular ring shank nails, if hardwood use twist shank nails.

Fixings are required on both sides of the boards and at a regular spacing no more than 600mm apart.

Fixings are required to be stainless steel or hot dipped galvanised.