

## SPECIFICATION DETAILS

### Structural grades

There are a range of structural grade finger joint and or laminated timber products produced in accordance with the Australian Standards. These grades were developed to assist designers and specifiers in the selection of these products and their associated design properties.

#### Characteristic strengths for Design Pine structural products

GL Grade rigidity	Characteristic Strengths (MPa)			Elastic Moduli (MPa)		
	Bending	Tension Parallel to grain	Shear in Beam	Compression parallel to grain	Short modulus of elasticity parallel to end grain	Short duration modulus of for beams
GL 10	22	11	3.7	26	10000	670
GL 8	19	10	3.7	24	8000	530
F 7	20	10	2.1	15	7900	530

### Appearance grades

There are three standard finishing grades that may be specified. The appearance grade relates to aesthetic appearance of the visible surfaces of the all products. This classification bears no relationship to structural performance of the timber. **Design Pine has an appearance grade A finish.**

#### Definition of Appearance Grades

Appearance grade	Description
A	This grade is intended for the use in application where appearance of the member is important and clear or painted finishes are used. All surface voids are filled or repaired. Unless it is specified otherwise and sanded to a minimum of 60-grit finish.
B	The grade is intended for use in painted applications where appearance is important but a planed finish is acceptable. The machining shall conform to No. 2 dressed surfaces grade as defined in AS 2796. Occasional skips in surface are permissible and minor
C	This grade is intended for use in applications where appearance is not important. All blemishes and voids are acceptable

### Service classes

The Service class defines what products may be used in which applications, depending on glue type as per the environmental conditions to which they are exposed. This classification bears no relationship to structural performance of the timber. The three services classes are defined as per Australian Standards. **Design Pine products are compliant to Service Class 3.**

#### Definition of Service Classes

Service Class 1 (SC1) Interior, Dry	Service Class 1 is characterised by a moisture content in the material corresponding to a temperature of 20°C and relative humidity of the surrounding air only exceeding 65% for a few weeks per year. E.g. Domestic House, commercial offices. Note: In Service Class 1 the average equilibrium moisture content in most softwoods will not exceed 12%
Service Class 2 (SC2) External, protected	Service Class 2 is characterised by a moisture content in the material corresponding to a temperature of 20°C and relative humidity of the surrounding air only exceeding 85% for a few weeks per year. E.g. Roofed Pergolas, porches, open sheds Note: In Service Class 2 the average equilibrium moisture content in most softwoods will not exceed 20%
Service Class 3 (SC3) External, exposed	Service Class 3 is characterised by a climatic conditions leading to higher moisture content than Service Class 2, or where timber is directly exposed to sun and/or rain. Bridges, Decks, Exposed pergolas, Marine structures

### Timber preservation

In order to meet the service classes outlined above, **Design Pine is treated to H3** with an organic preservation system for all above ground external applications.

#### Hazard Rating Exposure

<b>H1</b> Inside above ground.	<b>H4</b> Outside, In Ground.
<b>H2</b> Inside Above Ground.	<b>H5</b> Outside, In Ground, in contact with or in fresh water.
<b>H3</b> Outside, above ground applications.	<b>H6</b> Marine Water.

### Wind loading

Wind loads have been determined from AS4055-2006 "Wind loads for housing"

Region	Vu m/s	Qu Kpa	Vs	Qs Kpa
N1	34	0.69	26	0.41
N2	40	0.96	26	0.41
N3	50	1.50	32	0.61
N4	61	2.23	39	0.91
N5	74	3.29	47	1.33
N6	86	4.44	55	1.82



Innovative Timber Ideas

# Design Pine

www.designpine.com

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### Identification

Each Design Pine product bigger than 66x18 will have a tag stapled on the end of each board,



#### This tag identifies the following

- Design Pine Logo
- Hazard level (e.g. H3),
- Structural grade (e.g. F7, GL8, GL10) if applicable
- The Australian Standard to which the product has been manufactured
- Service class for the Glue type (e.g. SC3)
- Treatment plant number
- The manufacturer's details

### Timber

The timber used in the manufacture of Design Pine is drawn from plantation grown Radiata Pine. Throughout the manufacturing process, all natural imperfections (knots, pith) have been removed to produce defect free boards.

### Moisture content

Design Pine moisture content has been regulated throughout the manufacturing process. The moisture content target is 8-15%.

### Preservative

Design Pine utilises an organic preservation system for exterior above ground applications (H3). The organic biocides and synthetic permethrin will prevent the onset of decay and resist insect attack. Any cut or notch requires a preservative sealer to be applied prior to priming. Design Pine is not to be placed in contact with the ground.

### Primer

The genuine blue primer used on all Design Pine products can be left exposed to the weather for up to 12 weeks prior to painting is required. All bare patches of exposed wood fibre are required to be re primed prior to topcoats being applied.

### Storage

Design Pine needs to be stored in a dry well ventilated area prior to installation.

### Fixings and fasteners

When fixing Design Pine into its final application ensure the fixings are either hot dipped galvanised or stainless steel. Design Pine is non corrosive to these fasteners or fixing products.

### Painting

Design Pine products have a genuine primer applied allowing topcoats to be directly applied to the boards.

1. Apply preservative sealer to any cut ends and notches.
2. Remove residues and re prime ends notches and bare patches of wood fibre.
3. Apply two coats of quality exterior paint.

### Safety

When cutting and handling Design Pine products it is recommended to wear gloves, and nose, eye and throat protection to prevent dust ingestion.

### Disposal

Off cuts and sawdust in non hazardous and can be disposed of through standard waste collection and disposal facilities. Never burn Design Pine off cuts.

