

## Treated pine – building for the long term



**Treating wood to improve its longevity or reduce maintenance is almost as old as the use of wood itself. Today, pine treated by one of a range of preservative processes is the material of choice for a wide range of internal and external applications.**

### **The advantages of treated pine**

Treated pine delivers a range of advantages, including;

- Increased service life – protects against decay, insect attack and other hazardous conditions
- Versatility - can be used outdoors, indoors, above ground or underground and in direct contact with fresh or salt water
- Design flexibility - to economically overcome difficult site situations
- A choice of finishes
- Cost efficiency

### **Applications**

Treated pine is a versatile material with a wide range of load-bearing structural and other applications including:

- Stumps, sub-floor timbers
- Framing and roofing
- Wall linings, cladding, fascia
- Timber decking, pool surrounds
- Pergolas
- Fencing, landscaping, playgrounds
- Poles and posts, hay sheds
- Bridges, railings, marinas, piers
- Oyster farms, vineyards
- Railway sleepers, truck floors
- Water cooling towers

### **Type of treatments include**

Fixed water-borne preservatives (ACQ, copper azole, CCA), which will not leach out even when in contact with running water, are most suitable for domestic buildings, posts, poles, landscaping fencing, cooling towers, decking, cladding, etc.

Light organic solvent preservatives are designed for timbers not in contact with the ground. They should be used for factory-assembled joinery, e.g. window frames, and for building elevated decking, pergolas and fascias. They are also used to make garden furniture.

Creosote, modified creosote, and other oil-type preservatives are most suited for heavy duty exterior work, such as railway sleepers,

bridge decking, transmission poles, marine piles and fencing.

### **Treatment processes include**

**Vacuum/Pressure Impregnation:** Use water borne or oil preservatives to achieve deep protection for piles, poles, fencing, building timbers and many types of wood used in domestic and industrial construction.

**Double Vacuum/Immersion:** e.g. LOSP, is used to protect building timbers not in ground contact, e.g. cladding, decking and fabricated joinery components.

**Dip/Spray:** Typically use boron compounds that are applied to protect timber against insect attack in indoor or sheltered situations above ground. They are popular treatments for softwood house framing.

### **Treatment levels**

Treatment hazard 'H' levels are dependent on application, exposure (inside, outside, in-ground, above-ground use), and biological hazard protection (insects or decay). Timber can be treated from an H1 to an H6 level depending on the above factors.

### **Standards**

The main timber preservation standard is:

AS/NZS 1604 series: Specification for preservative treatment (5 parts). The use of products that meet this Standard is recommended.

### **Properties**

Treated pine has the same structural properties as untreated pine. Durability ratings are increased, however these vary according to treatment. Suppliers will provide details of treatments and their suitability for specific applications.

### **Finishes**

Treated pine can be left to weather naturally, however for the best performance, including long service life, it should have a finish applied. Treated timber can be painted or stained just like untreated timber. If paint or stain is not used for the final finish, a water repellent is recommended.