

## Boron treated timber

Boron or boric treated timber is used predominantly as framing timber treated to hazard class H1.2.

Timber can also be boric treated to hazard class H3.1 and used as cladding, fascia and for similar purposes where there is no risk of moisture entrapment. In such cases the timber is pre-primed (grey primer) prior to despatch from the production site and should be painted in situ with a minimum two top coats.

The boric preservative is designed to protect against attack from borer and to prevent decay caused by exposure to moist or damp conditions.

# Boron and the environment

Boron, the key ingredient in boron preservative, is a trace mineral that occurs in some arid regions of the world. It has no adverse effects on the environment and in fact enters the environment through various natural processes such as weathering of rocks containing boron, geothermal steam and evaporation of seawater.

# Boron and human health

Under normal use conditions no long term health effects of exposure to boron in boron treated timber have been found. Boron is believed to be beneficial to certain health conditions in prescribed dosages and formulations.

### Handling boric treated timber

- When power sawing or machining any timber wear goggles to protect eyes from flying particles and a mask to prevent dust inhalation.
- As with any building material which could accumulate dust, dirt and other extraneous matters, normal personal hygiene practices should be followed after handling treated timber.
- Because some Boron may be leached out of the timber if it is exposed to standing water or persistent rain over extended periods, boric treated timber should be covered or otherwise protected from standing water or the rain during storage and transport prior to use. Treated timber frames should be closed in as soon as possible.
- Packets of boric treated timber should be rested on treated bearers free of ground contact, vegetation and water.
- Where boric treated timber is cut or notched, the exposed surfaces should be coated with a brush or spray on remedial preservative.
- On mitre joints on weatherboards and in similar jointing situations the cut surfaces must be coated with an alkyd, acrylic or latex primer and the joint protected from the weather.

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### Using boric treated timber

Because boron is a non-fixed water based preservative it is primarily to be used in situations protected from the weather.

However, if the timber is factory primed and subsequently coated with a minimum of two further coats of a well maintained paint system on all exposed surfaces in situ, then it is suitable for use in exposed, out of ground contact applications where there is no risk of moisture ingress or entrapment. The top coats should be applied within a month of exposure to avoid the possible need to re-prime.

Typical uses of boric treated timber:

H1.2 Framing and similar structural applications protected from the weather

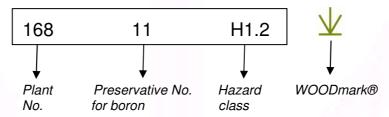
H3.1 Fascia, weatherboards and external joinery where there is no risk of water entrapment.

### Recognising boric treated timber

Boric treated timber can readily be identified in a number of ways.

Boric treated timber must be branded with a series of three sets of numbers which identify the treatment plant, the use of boron preservative (11) and the hazard class. This data can be branded repetitively in ink or by incision along the length of the timber, burn branded at one end or printed on a plastic tag fixed to one end of each piece.

Typical brand layout for boric treated timber



- Where H1.2 boric structural or framing timber is branded at one end with a burn brand or plastic tag it needs to be colour dyed pink. It does not need to be dyed pink if it is repetitively branded along its length.
- H3.1 boric treated timber is normally branded along its reverse face and is pre-primed in grey.

### Facts about boric treated timber

- Boric treated timber is safe to handle and poses little risk to the environment. Consult with your local authority about disposal of waste such as off cuts and sawdust.
- The amount of boron present in boron treated timber is well below internationally accepted tolerable limits (TL) for human health.
- Boric treated timber should be stored away from the weather or closed in where erected as a frame at the earliest opportunity, although laboratory tests indicate that even after many weeks of exposure to wetting, a residual amount of boron sufficient to provide protection will remain in the wood.
- Do not burn boron treated wood in heating or cooking fires.
- Do not use boron treated timber residues for garden mulch or animal bedding.

#### WOODmark<sup>®</sup> brand timber – your assurance of quality treatment

Reputable Boron treaters are licensed to use the WOODmark® brand. The WOODmark® brand signifies that timber has been treated to the requirements of the New Zealand Standard NZS 3640:2003 and that the treater follows the quality assurance procedures laid down in the New Zealand Timber Preservation Council's Timber Preservation Quality Manual.

Make sure you buy and use only WOODmark® branded treated timber and wood products.

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