

COMMODITY SPECIFICATION C8

BUILDING TIMBERS—LOW HAZARD

1. Use or Location

Building timbers out of ground contact, and in situations which are continuously protected from the weather by roofs, external walls, paint, adequate ventilation. This group includes sawn timber which will be cut during use, such as framing, interior finishing, flooring and weatherboards.

2. Preservatives

The following preservatives are commonly used with this commodity and are defined in Section F: Formulations:

Bolit
Boron Compounds
Celcure AN
Celcure BX
Celcure K33
Immutan
Tanalith FMP
Tanalith NCA

3. Processes

This commodity may be treated by processes as defined in process specifications P4, P5, P6, P7, P8, P9, P10.

4. Species

The following species may be treated by the process indicated:

Process	Species
P4	All species, suitable for building purposes other than those species in which the required standard of treatment cannot be achieved.*
P5	Pine species, Rimu.**

Process	Species
P6	Douglas fir, hinau, kahikatea, kauri, larch, mangeao, matai, miro, pines—corsican, loblolly, maritime, muricata, ponderosa, radiata, slash, strobus — pukatea, red beech, silver beech, redwood, rewarewa, rimu, tanekaha, taraire, tawa, totara.
P7	Hinau, kahikatea, mangeao, matai, miro, radiata pine, rewarewa, rimu, taraire, tawa.
P8	Radiata pine, rimu, totara, kahikatea, kauri and tawa up to 50mm in thickness.
P9	Corsican and radiata pine up to and including 100mm in thickness.
P10	Radiata pine up to and including 100mm in thickness.

*With Douglas fir, redwood, macrocarpa, Lawson's cypress, and larch, for example, it is normally difficult to achieve the required standard of treatment.

**Treatment of Rimu by Process P5 is restricted to timber not greater than 25mm thick with F3 preservatives as listed in clause 2 above, except as specifically approved on an individual plant basis.

5. Brand

Timber treated to this specification shall carry as a minimum the registered number of the plant, or be otherwise branded in accordance with the branding instructions in Appendix A2.

6. Penetration

6.1 *Penetration Required* — Complete sapwood penetration is required.

6.2 *Measurement of Penetration*—Penetration shall be determined by means of an approved spot test applicable to the preservative. Approved spot tests and methods of application are shown in Section T: Tests and Analyses.

7. Penetration Tolerance

If more than 10 percent of substandards is found in any set of samples all materials represented by those samples shall be retreated.

8. Retention

8.1 The minimum charge retentions and core loadings shall be as set out in the table below:

Process	Preservative	Minimum retention kg/m ³	Minimum sapwood core loading
P4, P5	Boron compounds for pines up to and including 50mm thick	3.2	0.1% H ₃ BO ₃ (Boric acid) equivalent for softwoods 0.2% H ₃ BO ₃ for hardwoods
	All other timbers	3.7	
	Celcure AN Celcure BX Celcure K33	3.2 1.9 2.6 for pines 3.2 for other species	0.04% arsenic
	Immutan Tanalith FMP Tanalith NCA	1.6 5.6 3.2	
P6, P7	Bolit Boron compounds	N/A	0.04% arsenic 0.1% H ₃ BO ₃ in softwoods 0.2% H ₃ BO ₃ in hardwoods
P8	Boron compounds	N/A	0.1% H ₃ BO ₃ in softwoods 0.2% H ₃ BO ₃ in hardwoods
P9	Celcure AN Celcure BX Celcure K33	N/A	
P10	Celcure AN Celcure BX Immutan Tanalith NCA	N/A	0.04% arsenic

8.2 Sampling of diffusion processes P6, P7, P8

- 8.21 Timber treated green-off-saw by processes P6, P7 and P8. The timber shall be sampled and verified for minimum core loading by an approved spot test or analysis before removal from diffusion storage. Results of all such tests

shall be entered on the appropriate charge sheets. Samplings shall be at random and shall be carried out on the following minimum basis:

Plant Production per Week	Number of Sample Pieces to be Taken per Week
Up to 24 cubic metres	10
from 24 cubic metres to 120 cubic metres	20
from 120 cubic metres to 240 cubic metres	30
from 240 cubic metres to 600 cubic metres	40
over 600 cubic metres	50

All such sample pieces shall be not less than 150mm long and shall be taken not less than 300mm from the end of any piece. They shall be retained for 1 week after testing and shall be made available for inspection by an officer of the Authority.

8.22 Predried timber treated by P7.

Predried timber shall be sampled and tested immediately after treatment, in accordance with the procedure set out in clause 8.21 above.

9. Retention Tolerance

9.1 *Processes P4 and P5*—The net retention in any charge of timber shall be not less than 90 percent of the quantity specified and over any 10 consecutive charges shall be not less than 95 percent of the quantity specified. In addition, 90 percent of the sample pieces shall contain either 0.04 percent arsenic (As) or 0.1 percent boric acid equivalent (H₃BO₃) in softwoods or 0.2 percent boric acid equivalent in hardwoods; in the sapwood core, all expressed as a percentage of the oven dry wood weight.

9.2 *Processes P6, P7 and P8*—If more than 10 percent of the sample pieces taken in any 1 week are found to be substandard, the production represented by those samples shall be considered substandard.

10. Retreatment of Substandard Charges

10.1 Those charges treated in accordance with process specifications P4 or P5 shall be redried to the moisture content set out in clause 3 of the appropriate process specification and retreated to obtain the standard required, or shall be sold as untreated.

10.2 Those charges treated by diffusion processes in accordance with process specifications P6, P7 and P8 shall be disposed of as untreated, unless dried to a moisture content not exceeding 25 percent and retreated in accordance with process specification P4 using the same preservative as was used in the initial treating taking due regard of the caution notes in clause 4, Species.

10.3 Those charges treated predried by P7 shall be redried to a moisture content set out in clause 3 of the process specification of either P4 or P7 whichever is used for retreatment, or sold as untreated.

10.4 Those charges treated by P9 or P10 shall be disposed of as untreated unless dried to a moisture content not exceeding 25 percent and retreated by P4 to the required standard.