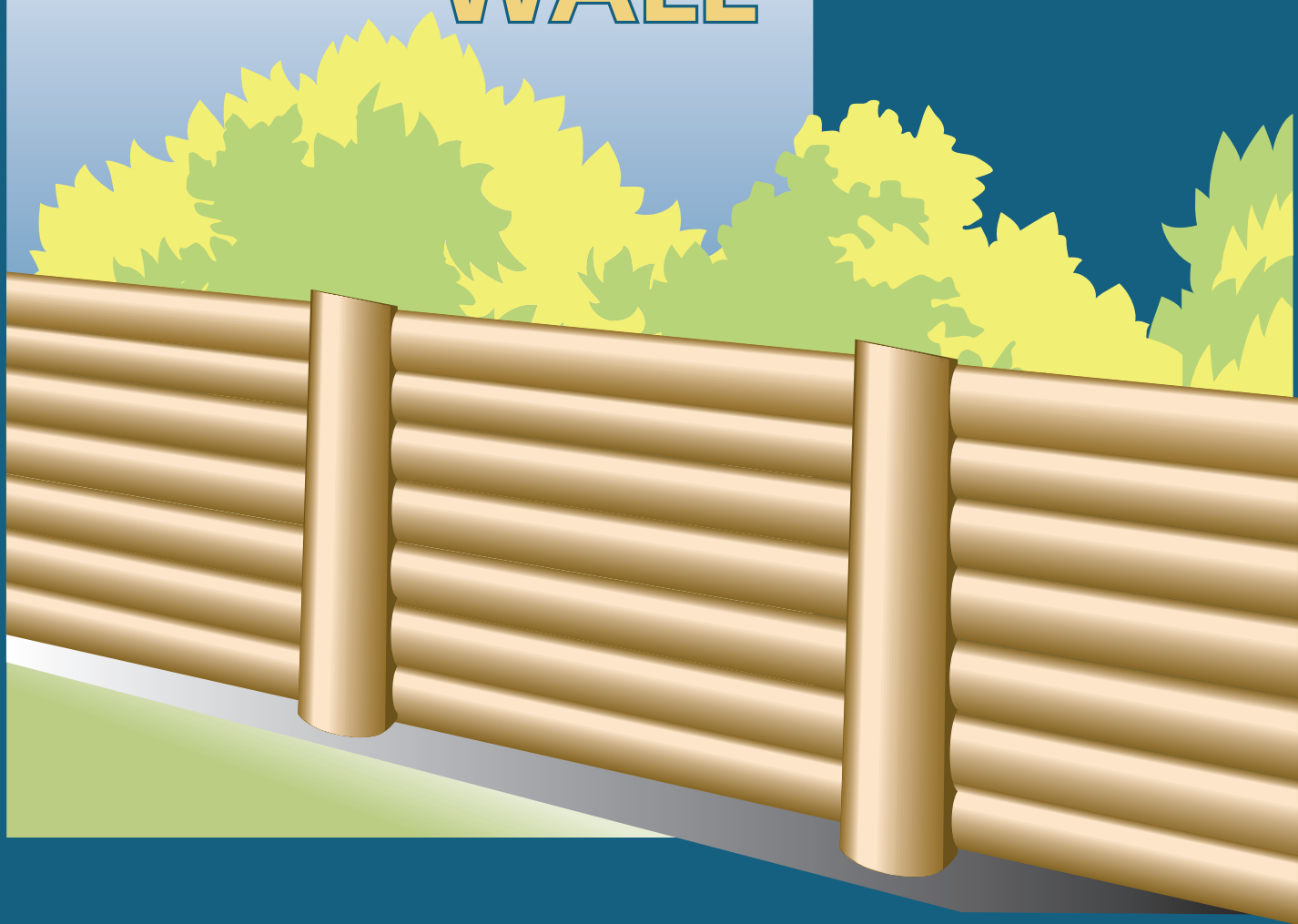
How to Build

TREATED PINE CANTILEVER WALL



The following design specifications are provided only as a guide to assist in the design and construction of treated pine cantilever retaining walls. Proper use of treated pine logs and slabs in cantilever wall contruction will provide a beautiful long lasting, structurally sound, retaining wall system.

These specifications are for guideline purposes only. For further information contact a consulting engineer or your local shire council.

GTP

GIPPSLAND TREATED PINE

Ph. (03) 5134 5333 www.gtpine.com.au

Cantilever Treated Pine Retaining Wall Specifications

Retaining Wall Member & Contruction schedule *2*3

Soil Type	Post Centre To Centre spacing (mm)	Wall Retain Earth Height	Post Embedment		Upright Post Diameter	Horizontal Walling		Alternative Embedment depth to Note 3
			Drill Diameter (mm)	Min Depth		Pine Planking (P5)	Round Walling (P5)	
Average to Good Soils Hard Clay, Compact Fine Sand	**900**	900 1200 1500	300 300 300	800 1100 1500	125 150 200	200x50 200x50 200x50	100 DIA 100 DIA 125 DIA	700 1000 1300
	1200	900 1200 1500	300 300 450	900 1200 1600	150 175 225	200x50 200x50 200x75	100 DIA 125 DIA 125 DIA	800 1000 1400
	1800	900 1200 1500	300 450 450	1100 1500 1900	175 200 250 *1	200x75 200x75 200x75	125 DIA 125 DIA 125 DIA	1000 1300 1600
	2400	900 1200 1500	300 450 450	1300 1700 2200	175 225 250 *1	200x75 200x100 200x100	125 DIA 125 DIA 125 DIA	1100 1500 2000
Poor Soils Soft Clay, Clay Loam, Poorly Compacted Sand & Clays with Silt	**900**	900 1200 1500	300 450 450	1200 1600 1900	125 175 225	200x50 200x50 200x50	100 DIA 100 DIA 125 DIA	1000 1400 1700
	1200	900 1200 1500	300 450 450	1400 1700 2000	175 200 250 *1	200x50 200x50 200x75	100 DIA 125 DIA 125 DIA	1200 1500 1800
	1800	900 1200 1500	450 450 450	1600 1900 2300	200 225 275 *1	200x75 200x75 200x100	125 DIA 125 DIA 125 DIA	1400 1700 2000
	2400	900 1200 1500	300 450 450	1800 2200 2700	175 250 *1 300 *1	200x75 200x100 200x100	125 DIA 125 DIA 150 DIA	1600 1900 2400

*1 Check availabilty of 250,275 and 300 diameter posts before specifying these timbers. *2 The schedule does not permit surcharge loads to the walls.
*3 See figure 1 on reverse side for clarification of terminology

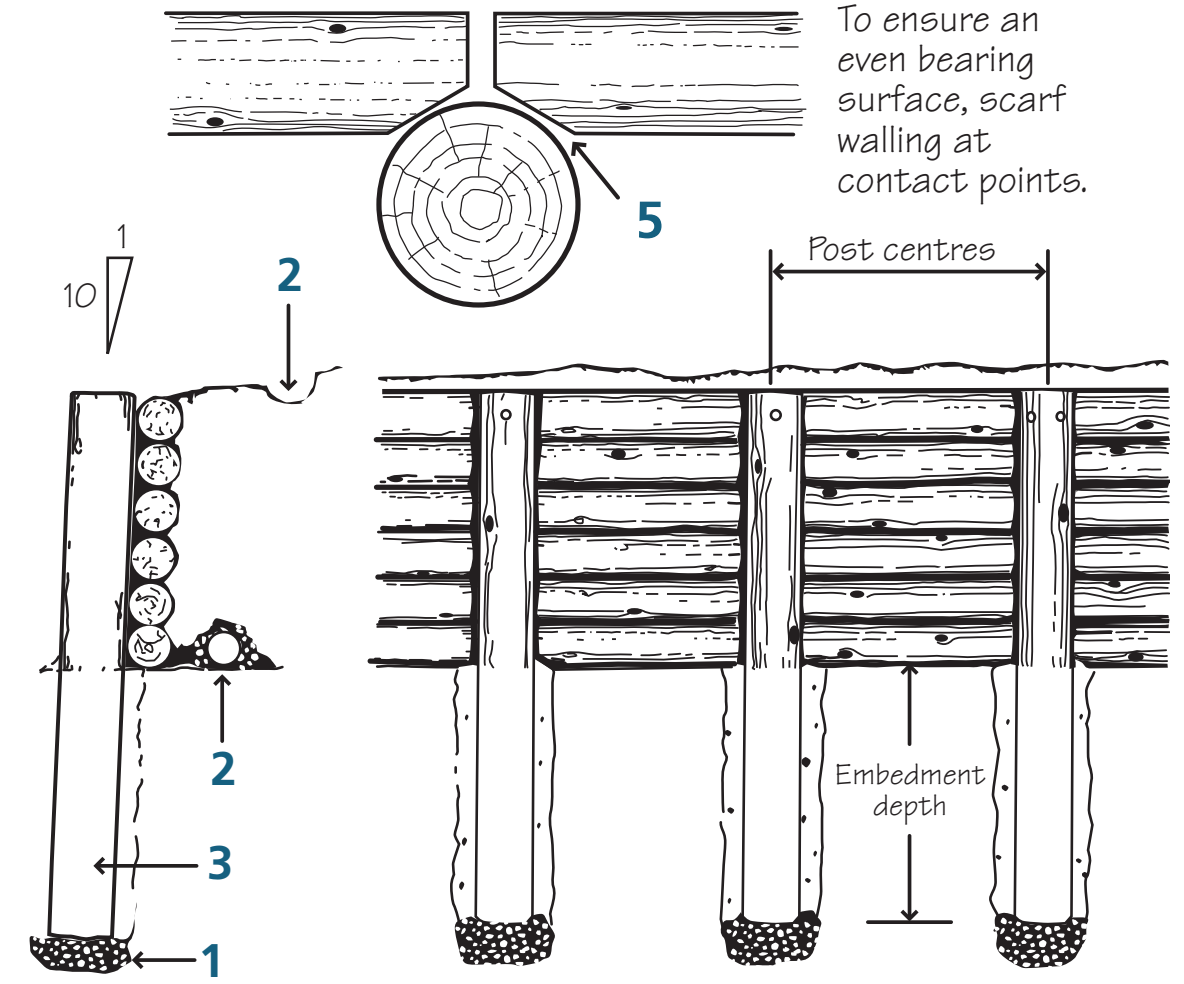
Notes

1. All timber used in the construction to be preservative treated in accordance with Australian Standard 1604

2. Backfill material must be free draining and must not exhibit expansive characteristics

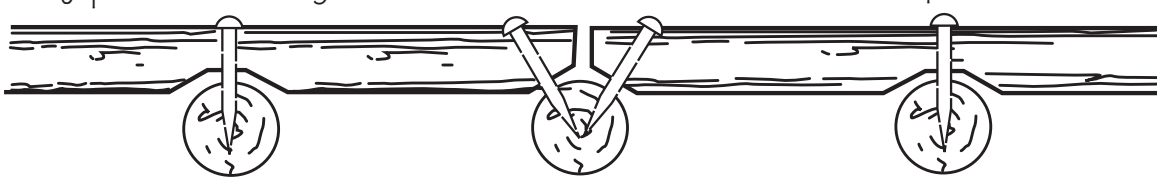
3. Reduced embedment depths are only allowed where an additional continous in-ground sleeper is located immediately in front of each post. The sleeper must be 200 by 25mm thicker than the respective planking sleepers.

4. These specifications are for guideline purposes only. For further information contact a consulting engineer or your local shire council.



Ensure walling joints meet on post centres

Only pre-drill walling timbers



Drive spikes into posts

Hazard Classification

AUSTRALIA

H1 INSIDE, ABOVE GROUND

CONDITIONS: Completely protected from the weather and well-ventilated.
BIOLOGICAL HAZARD: Lyctid borers.
EXAMPLES: Susceptible framing, flooring, furniture and interior joinery.

H2 INSIDE, ABOVE GROUND

CONDITIONS: Protected from wetting.
BIOLOGICAL HAZARD: Borers including termites.
EXAMPLES: Framing, flooring and similar, used in dry situations.

H2 F Conditions and Biological hazard as for H2 although approved for use South of the Tropic of Capricorn only.
Example: Framing (envelope treatment).

H2 S Conditions and Biological hazard as for H2 although approved for use South of the Tropic of Capricorn only.
Example: LVL / Plywood (glue-line treatment).

H3 OUTSIDE, ABOVE GROUND

CONDITIONS: Subject to periodic moderate wetting.
BIOLOGICAL HAZARD: Moderate decay fungi, borers and termites.
EXAMPLES: Weatherboard, fascia, pergolas (above ground), window joinery, framing, decking and laminated verandah posts.

H3A** OUTSIDE, ABOVE GROUND

CONDITIONS: Products predominantly in vertical exposed situations and intended to have the supplementary paint coat system that is regularly maintained.
BIOLOGICAL HAZARD: Moderate decay fungi, borers and termites.
EXAMPLES: Fascia, barge boards, exterior cladding, window joinery, door joinery and non-laminated verandah posts.

H4 OUTSIDE, IN-GROUND

CONDITIONS: Subject to severe wetting.
BIOLOGICAL HAZARD: Severe decay fungi, borers and termites.
EXAMPLES: Fence posts, garden walls less than 1m high, greenhouses, posts and landscaping timbers.

H5 OUTSIDE, IN-GROUND OR IN FRESH WATER

CONDITIONS: Subject to extreme wetting and/or where the critical use requires a higher degree of protection.
BIOLOGICAL HAZARD: Very severe decay fungi, borers and termites.
EXAMPLES: Retaining walls, piling, house stumps, building poles and cooling tower fill.

H6 MARINE WATERS

CONDITIONS: Subject to prolonged immersion in sea water.
BIOLOGICAL HAZARD: Marine wood borers and decay fungi.
EXAMPLES: Boat hulls, marine piles, jetty cross-bracing, landing steps and similar.

Note: Please refer to the complete standards for more detailed information. **as per AS1604 and NSW TMA.

Important Information

1. Do not burn preserved wood
2. Wear dust mask & goggles when cutting or sanding wood
3. Wear gloves when working with wood
4. Some preservative may migrate from the treated wood into soil/water or may dislodge from the treated wood surface upon contact with skin. Wash exposed skin areas thoroughly
5. All sawdust and construction debris should be cleaned up and disposed of after construction
6. Wash work clothes separately from other household clothing before re-use
7. Preserved wood should not be used where it may come into direct or indirect contact with drinking water, except for uses involving incidental contact such as fresh water docks and bridges
8. Do not use preserved wood under circumstances where the preservative may become a component of food, animal feed or beehives
9. Do not use preserved wood as mulch
10. Only preserved wood that is visibly clean and free of surface residue should be used
11. Do not use preserved wood in direct contact with aluminum
12. If the wood is to be used in an interior application and becomes wet during construction, it should be allowed to dry before being covered or enclosed
13. Disposal Recommendations: Preserved wood may be disposed of in landfills or burned in commercial or industrial incinerators or boilers in accordance with federal, state and local regulations
14. If you desire to apply a paint, stain, clear water repellent or other finish to your preservative treated wood, we recommend following the manufacturer's instructions and label of the finishing product. Before you start, we recommend you apply the finishing product to a small exposed test area before finishing the entire project to insure it provides the intended result before proceeding
15. For more information visit www.naturewoodproducts.com
17. Mold growth can and does occur on the surface of many products, including untreated and treated wood, during prolonged surface exposure to excessive moisture conditions. To remove mold from the treated wood surface, wood should be allowed to dry. Typically, mild soap and water can be used to remove remaining surface mold. For more information visit www.epa.gov

Timber care

Cutting, notching or boring may expose untreated heartwood, A liberal coating of PROTIM RESEAL is recommended to restore the protective envelope. For more details refer to the PROTIM TimberCare product literature. The appearance and surface water repellency of Osmose LifeWood & *Nature*Wood can be enhanced periodically with PROTIM RainCoat UV Plus.

*For further information see separate brochure, consumer information and handling guide and guarantee documents or visit www.osmose.com.au.

These plans have been checked and approved (at the time of printing) by Roy B.Hoskins & Associates of Qld 4006 (Structural & Civil Engineers), to be technically accurate and designed in accordance with the appropriate Australian Building standards. As local & National laws are subject to change, please ensure you check with your local authorities prior to starting construction.

For customer service please call:
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