

How to Build

TREATED PINE HEAVY DUTY CRIBWALL



Heavy Duty Crib Walls provide an attractive easy to construct retaining wall system suited for applications where ground conditions are not suitable for deep post embedment and soil conditions are suitable for crib wall construction.

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



GIPPSLAND TREATED PINE

Ph. (03) 5134 5333

www.gtpine.com.au

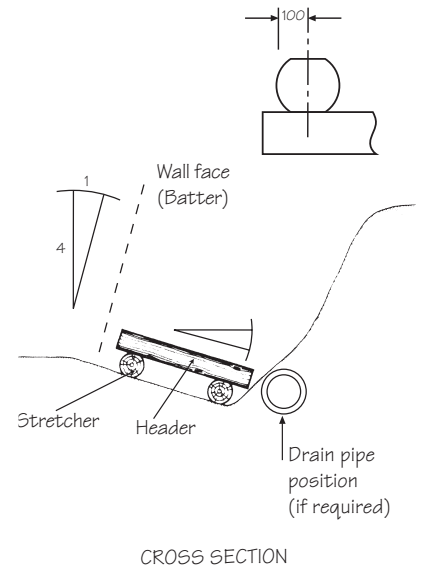
Construction

Crib walls can be constructed from either slabs machined from logs ranging from 125 to 150mm diameter or landscape timbers. Stretchers are available in 2.4 and 1.8 metre lengths, while headers are supplied in 0.6, 0.9 and 1.2 metre lengths. The correct choice of headers and stretchers for your particular application are dependent upon the height of the wall and the soil type.

Please consult with your local engineer for more detailed design information.

1. Setting Out

Crib walls must be constructed with a backwards lean (batter) of 1:4. A template should be prepared on which a spirit level can be placed to ensure the correct angle of the base and batter is maintained as the wall progresses.



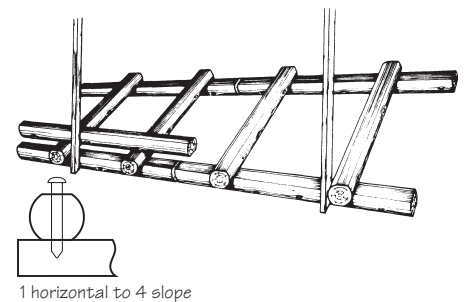
2. Foundation Stretchers

Once the foundation stretchers are in position, the first layer of headers is placed in position at the correct centres. (See diagram A). Headers should be pre-drilled and secured to the stretchers by driving a galvanised bridge spike into the stretcher. Each level must be secured in this manner as the wall progresses. Timber angle guides should be nailed periodically along the wall to ensure the correct batter is maintained.

3. Backfill

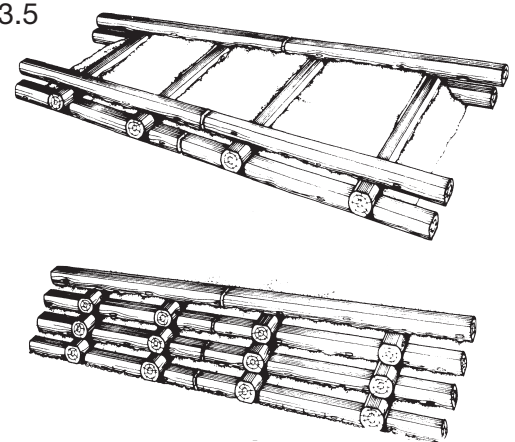
Place backfill on a continuous basis as the wall progresses ensuring the back fill is sufficiently compacted. Ensure that each layer is filled and tamped down on an individual basis.

Do not leave the back filling until the wall is completed or the soil will not be sufficiently compacted.



4. Backfill Material

The material used for back fill is very important. For 2.0 metre high walls, dense silt or silty sand can be used. For walls up to 3.5 metres, sand or gravel and sand is required to allow adequate drainage. Above 3.5 metres, clean gravel, sand or broken stone is required.



Slope Analysis and Materials Calculations

5. Wall Arrangements

The diagram below shows three possible crib wall arrangements. Consult with your engineer on the most suitable design to be used for your application. You will need to know the height of the wall, the soil type and the angle of the backfill slope.

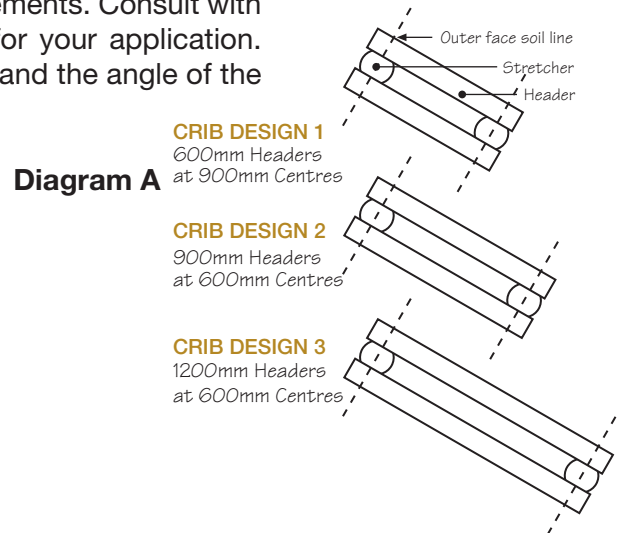


Diagram B

Crib wall components are produced from logs which have been sawn on two sides to produce a parallel slab approximately 125mm in thickness.

Crib Design	Header Length (mm)	Max Wall Height (mm)
1	600	900
2	900	1200
3	1200	1800

LENGTHS AVAILABLE
600, 900, 1200,
1800 & 2400mm

Diagram C

In order for your supplier to assist you in accurately calculating the correct crib wall design, it is important to know the angle of the backfill slope.

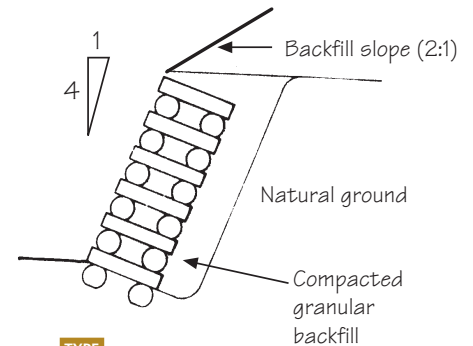
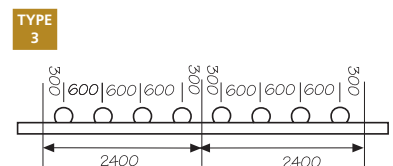
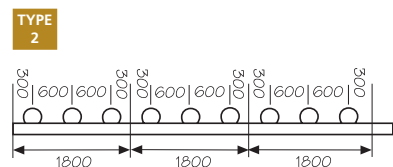
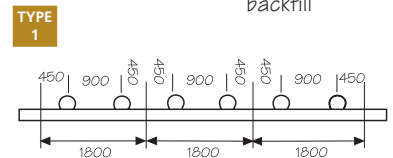


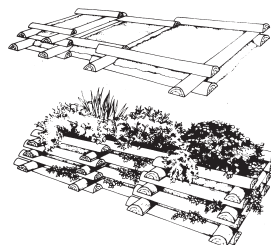
Diagram D

The diagrams below detail the layout of headers and stretchers for the three types of crib wall construction, types 1, 2 and 3. Once the wall type is selected, follow the layout pattern for the wall design chosen. For type 2 and 3 walls, 1800mm or 2400mm stretchers may be used.



Half Round Logs for Decorative Walls

Decorative walls can be constructed from half round logs as shown. (Design criteria for this brochure is based on slab rounds.)



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.

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 & NatureWood 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.

Osmose®, Lifewood®, NatureWood®, ACQ®, PROTIM®, RESEAL® and MoistureGuard™ are trademarks of Osmose, Inc. or its subsidiaries. Lifewood, NatureWood and PROTIM treated timber products are produced by independently owned and operated wood preserving facilities. CCA products are treated with Chromated Copper Arsenate preservatives. ACQ products are treated with Alkaline Copper Quaternary preservatives. PROTIM® LOSP products are treated with Tributyltin, Permethen and/or IPBC preservatives. © 04/2005 Osmose Australia # GIPSTPADIY13-0405

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:
GIPPSLAND TREATED PINE PTY LTD
 Ph. (03) 5134 5333 Fax. (03) 5134 8979
 8 Kirwin Road Morwell 3840
www.gtpine.com.au