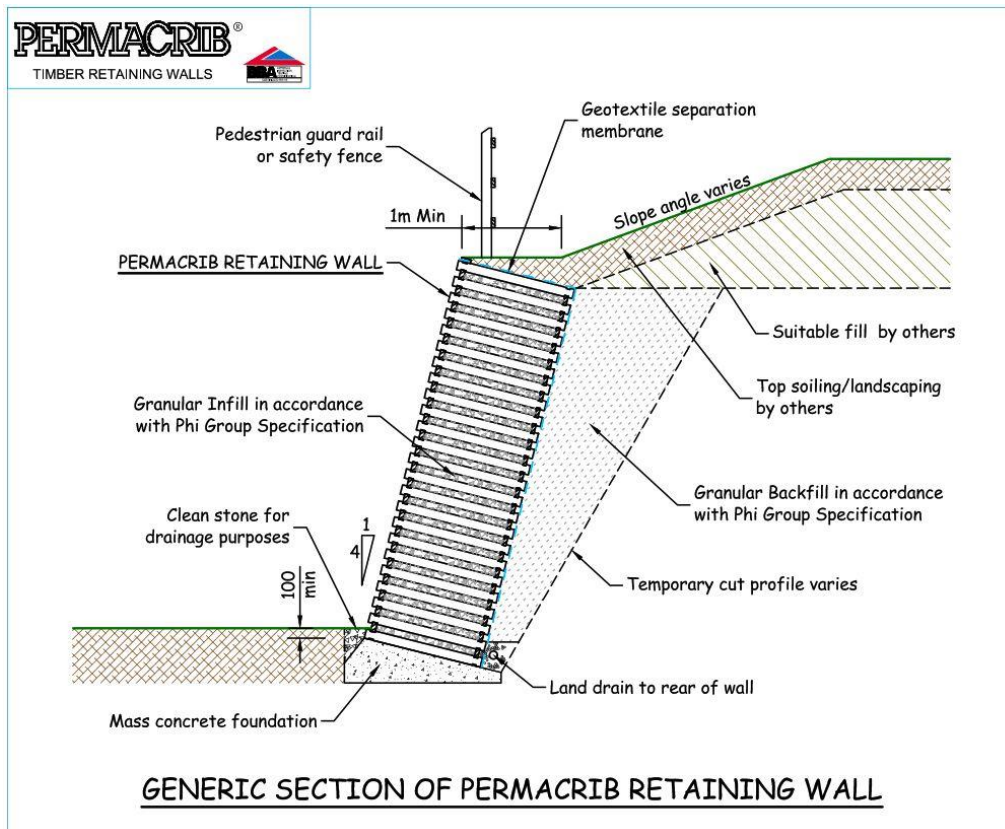


PERMACRIB

Timber Crib Retaining Wall

The Permacrib timber crib retaining wall system is a tried and tested method for the construction of gravity retaining and walls and is as an alternative to reinforced concrete walls, sheet or bored piles, gabions etc. Phi Group has designed and constructed over 1,000 Permacrib retaining walls in the last ten years. As confirmed by the BBA technical approval process, the Permacrib retaining wall system has a desired service life of 60 years based on the treatment being carried out in accordance with BS8417:2011. All Permacrib components carry PEFC certification.



Permacrib consists of four main elements:

1. Mass concrete foundation
2. Timber header and stretcher components
3. Granular infill material
4. Granular backfill material

Advantages:

● **Cost**

Permacrib is a cost-effective alternative to traditional methods of retaining wall construction, using timber components which also makes it a more sustainable solution.

● **Design**

Phi Group will carry out a full design service in house using the seven available Permacrib model sizes. Our designs are limited to the internal design of the retaining structure including the consideration of overturning, sliding and bearing failure modes. Design information will be supplied to you for incorporation into an overall slope design which is to be the responsibility of you, or a suitably qualified Geotechnical Engineer

● **Construction**

Permacrib is very quick to construct, with 100m² face area a week easily achievable with a three man gang. If a shorter programme is required then Phi Group have the resources to increase gang size and therefore output. All of our on-site labour is directly employed, so a complete design, supply and installation package is available for peace of mind.

- **Flexibility**

We have seven different model sizes available, so we can provide you with the most economic structure depth for the retained height, especially where retained height decreases over the length of the Permacrib wall. Course heights are 161mm and header stacks are 750mm apart, so variations in top of wall or foundation level can be easily accommodated. Using timber components, it is easy to work with so corners, angle changes and walls built on a radius are all possible.

- **Face Finish**

The Permacrib system is installed at a 4V:1H batter (76°), so is less imposing than a vertical structure. Phi Group recommend any planting be carried out from the base or top of the wall ,to make ongoing maintenance of the vegetation easier. Climb prevention measures are available if required, that are typically installed for the bottom 2.0m of the structure. Various fencing can be accommodated to the top of the Permacrib wall, and will be assessed during our design.



Phi Group offers the full design, supply and construction package for the Permacrib timber crib retaining wall system nationwide from our three regional offices. We deal with all project sizes and offer a free estimating service to assess the suitability of the Permacrib system and offer advice to add value to your project.

Typical Applications are:-

- Widely used across all sectors, including residential, schools, warehouse and logistic developments, commercial & hospital developments.
- Typically used in a cut situation, but can also be used when raising levels on site.
- Used where a softer aesthetic finish is required, such as in back gardens or landscaped areas.

Head Office

Montis Court
Bouncers Lane
Cheltenham
Gloucestershire GL52 5JG
T: 01242 707600
E: southern@phigroup.co.uk
W: www.phigroup.co.uk

Northern Office

7A Harewood Yard
Off Weardley Lane
Harewood, Leeds LS17 9LF
T: 0113 3607660
E: northern@phigroup.co.uk
W: www.phigroup.co.uk

Scottish Office

15 Pitreavie Court
Pitreavie Business Park
Queensferry Road
Dunfermline KY11 8UU
T: 01383 329400
E: scotland@phigroup.co.uk
W: www.phigroup.co.uk