

Installation Information 2016

DENDRO-SCOTT™ Root Barrier

... why use anything else?

DENDRO-SCOTT™ Root Barrier, recognised by the Environment Agency, is known for its quality and reliability. It is flexible and adaptable, specified for all types of projects, from the very large, including new builds, to small residential projects. It is an excellent and proven way to protect structures and services from **tree roots** and **Japanese Knotweed**.

Due to enhanced storage capacity, we are now able to offer a much wider range of sizes (rolls and sheets) from 1m x 10m rolls to 30m x 30m sheets. Our new Price List is available on our website: www.rootbarrier.com.

Also, we have changed the method of jointing the membrane on site from the previous glue and tape system to a butyl tape system. This makes installation quicker, easier and considerably more cost-effective.



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General installation guidelines for DENDRO-SCOTT™ Root Barrier

Vertical Installation

The root barrier membrane should be installed vertically and as taut as possible, with the grey side facing the tree. The root barrier should line the side of the trench nearest the tree, with back-filling to the blue side.

To prevent roots growing over the top, the root barrier should be brought up to ground level, or just above.

When back-filling the excavated trench, care must be taken that any sharp stones or debris that may damage the root barrier must be removed. The back-filling should be carried out to Institute of Civil Engineers standards, to prevent subsidence. As back-filling takes place, the root barrier can, in some circumstances, be dragged down during consolidation. It is important that the installer should allow for this to prevent the top of the root barrier being lower than required.

Where the soil contains flint, sharp stone or any other sharp object, these should be removed from the face of the trench, which is to be lined with root barrier membrane. If this is not practicable, consideration should be given to lining both sides of the root barrier membrane with plywood or another suitable material.

Where the root barrier will be crossed through by existing services, it will be necessary to cut the root barrier membrane and to re-seal it with DENDRO-SCOTT™ double-sided butyl jointing tape; preferably from both sides.

Where land drains will be severed by the root barrier, it is important that they be re-routed around the root barrier and not cross through it.

As with all root barriers, it is important to determine the correct depth, length and position to prevent the roots from growing under and around the root barrier.

Care must be taken that the position of a root barrier does not affect the stability of the tree(s) and that the loss of rooting material is such that it does not cause the tree(s) to go into terminal decline.

These are guidelines only—the installer must taken into account the varying conditions of individual sites; for example, the necessity to install drainage to prevent the build-up of hydrostatic pressure on sloping ground. The installer

should also ascertain whether the input of a structural engineer is required, for example, if the excavation of the trench to take the root barrier could affect existing foundations.

The manufacturers or suppliers cannot be held responsible for the non-performance of this product due to misuse or incorrect installation practices.

It is advisable when installing root barrier on depths of 2.0 metres or more that the blue side should be lined with plywood or similar to prevent damage or 'drag-down' during back-filling.

When it is deemed necessary to line the sides of individual tree pits, consideration should be given to the use of DENDRO-SCOTT™ ready-made tree pit liners, which can line pits up to a circumference of 6 metres (diameter of 1.9 metres). If a larger planting pit is required, then creating a tree pit liner for your own requirements is a simple operation using the DENDRO-SCOTT™ Root Barrier and DENDRO-SCOTT™ double-sided butyl jointing tape. As the installation of the DENDRO-SCOTT™ tree pit liner will initially restrict the development of the tree root system, there will be a need to maintain the tree(s) in a staked condition for a longer period than if it were growing in an open ground situation.

When using the DENDRO-SCOTT™ double-sided butyl jointing tape, and/or PVC cover tape, surfaces must be smooth, free from dirt, dust, etc., and dry. The joint must then be pressed together to ensure a good, continuous seal; this may be achieved by using a small roller.

Horizontal Installation

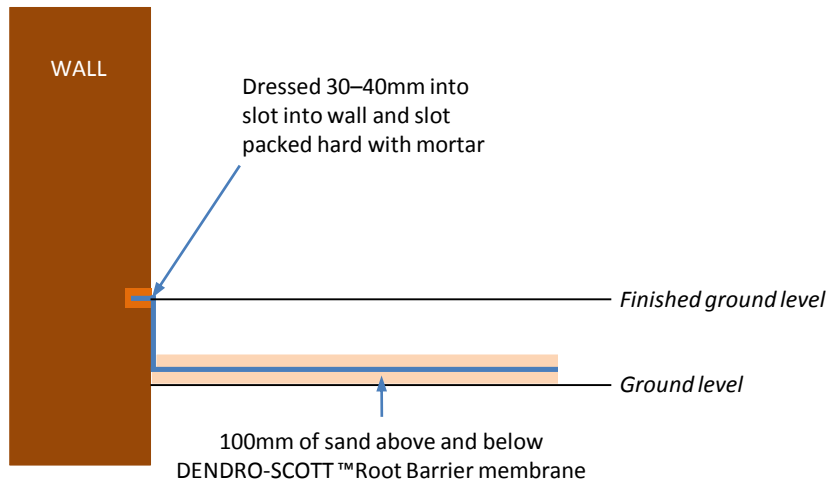
Where the DENDRO-SCOTT™ root barrier is being laid horizontally, for example, to control Japanese knotweed, Operatives should first consult with Peter Scott Tree Care (Southern) Limited.

Peter Scott Tree Care (Southern) Limited reserves the right to alter these guidelines at any time.

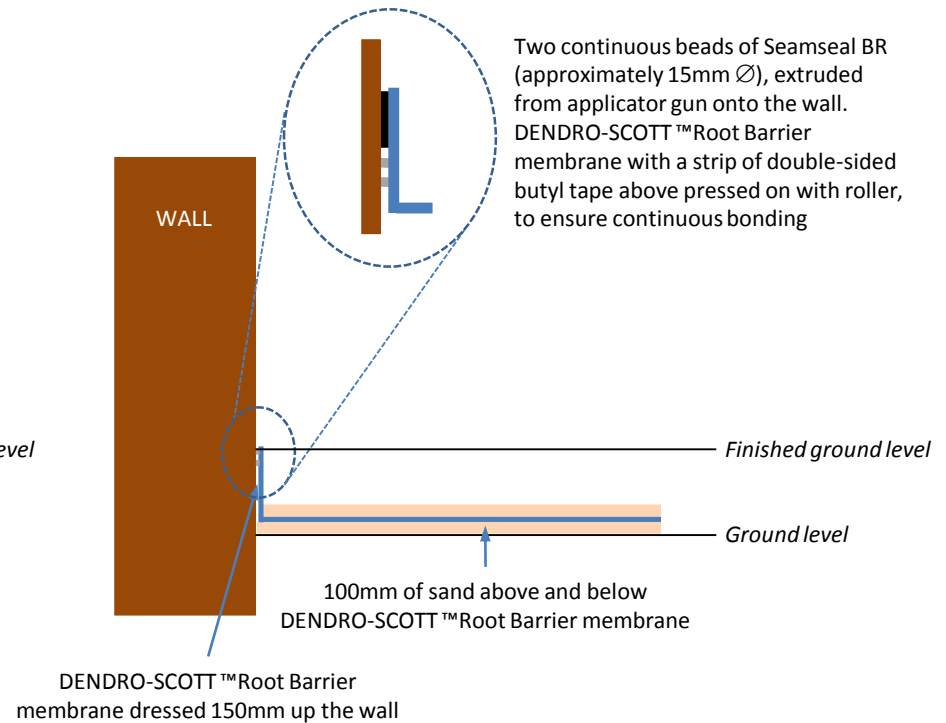
Securing DENDRO-SCOTT™ Root Barrier to a wall—External

We recommend two options for securing DENDRO-SCOTT™ Root Barrier to a wall ...

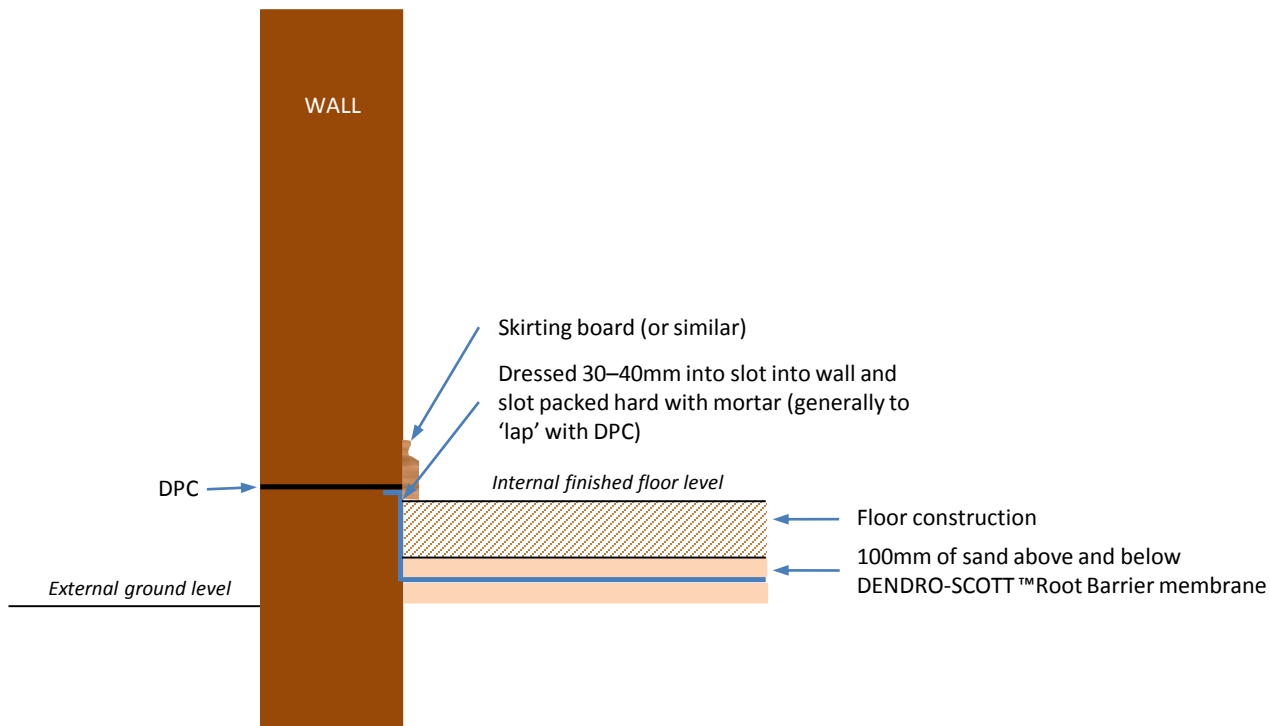
Option A:



Option B:

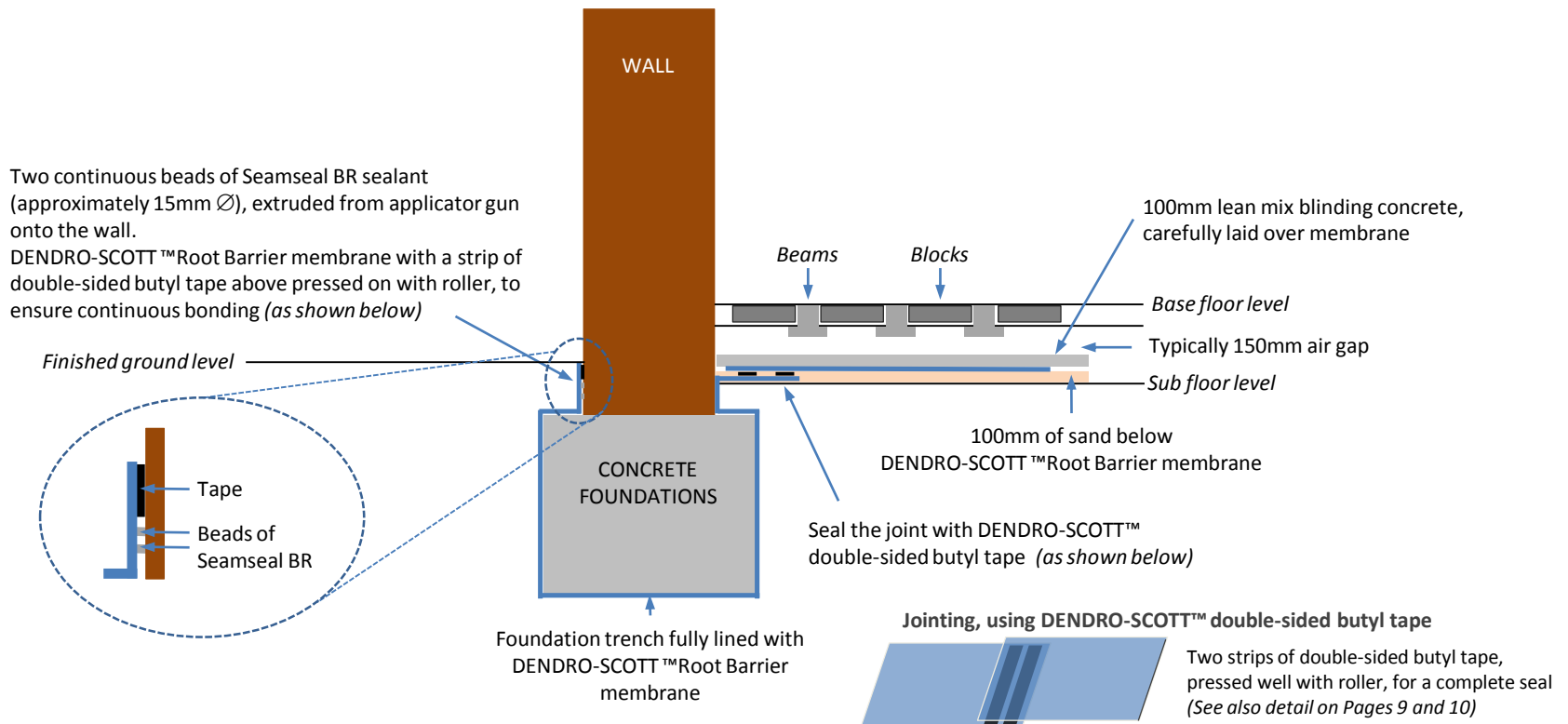


Securing DENDRO-SCOTT™ Root Barrier to a wall—Internal



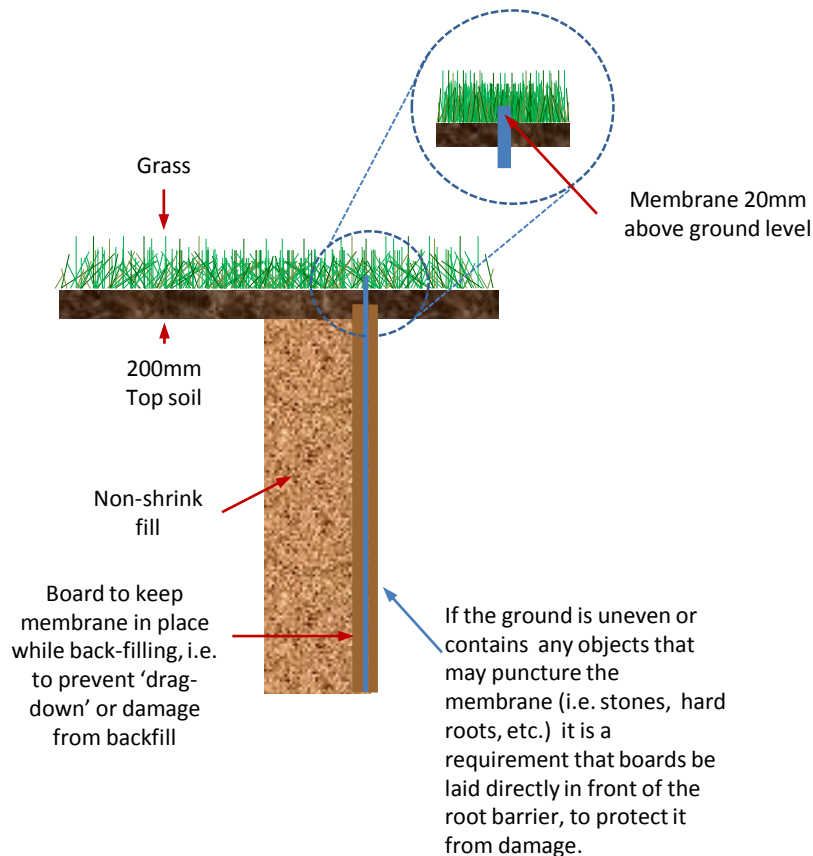
Installing DENDRO-SCOTT™ Root Barrier under foundations, with beam and block floor

Typically, the first step is to line the foundation trenches with DENDRO-SCOTT™ Root Barrier and fill trenches with concrete, leaving sufficient membrane for overlaps to central section. The overlaps should then be protected, by carefully burying in sand, until the construction is ready to install the central sections of membrane. The foundation sections and central sections are then to be jointed with two strips of double-sided butyl tape. Finally, as soon as possible, concrete to be placed over the central sections, for permanent protection.

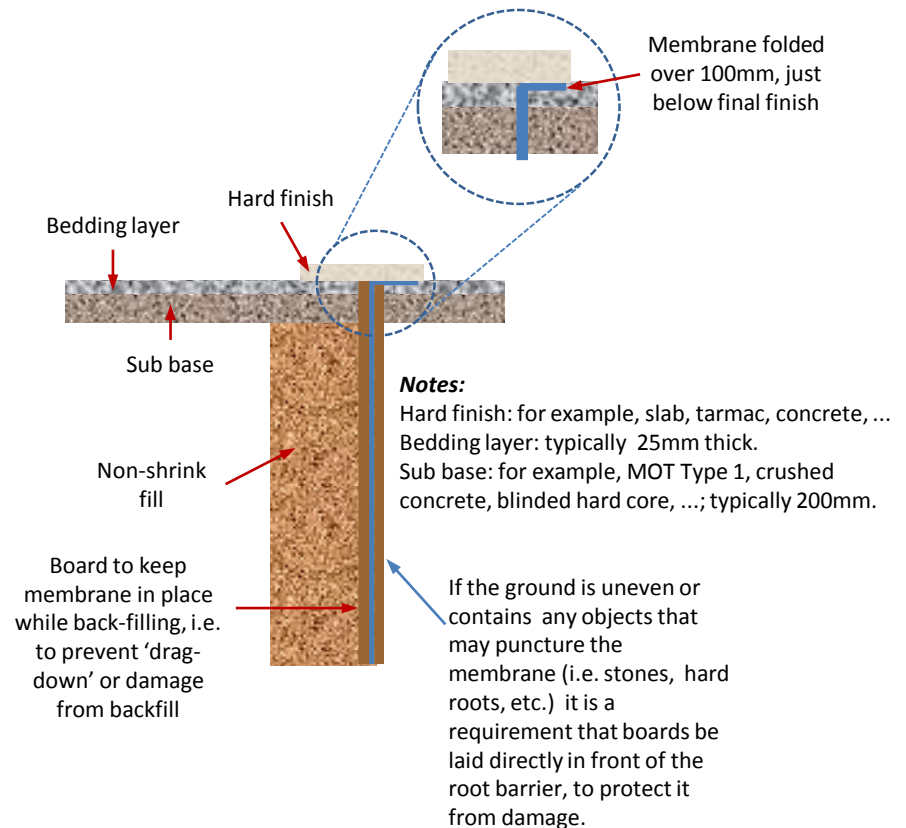


Finishing top edge of DENDRO-SCOTT™ Root Barrier (soft and hard landscapes)

Soft landscape ...

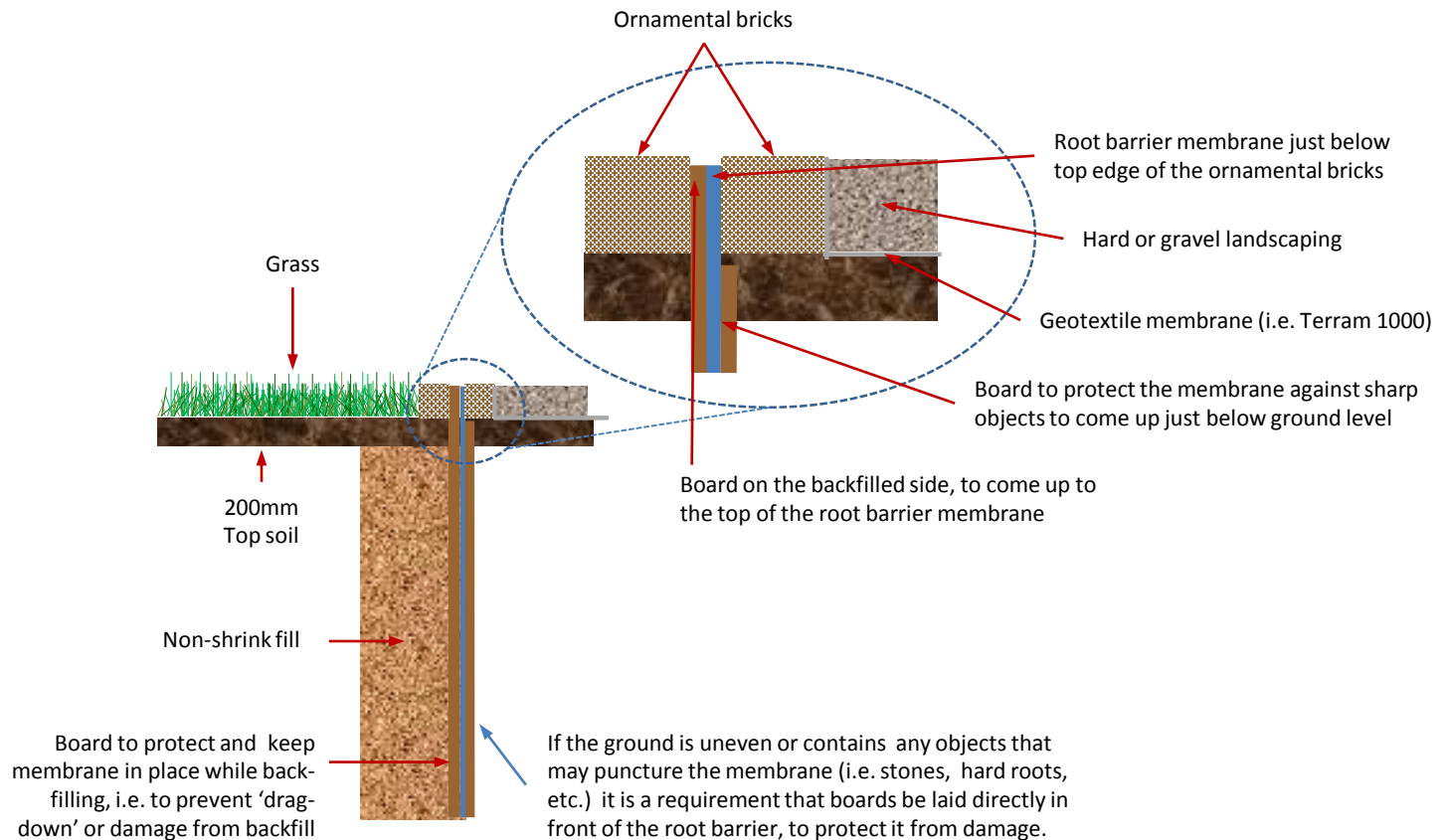


Hard landscape ...

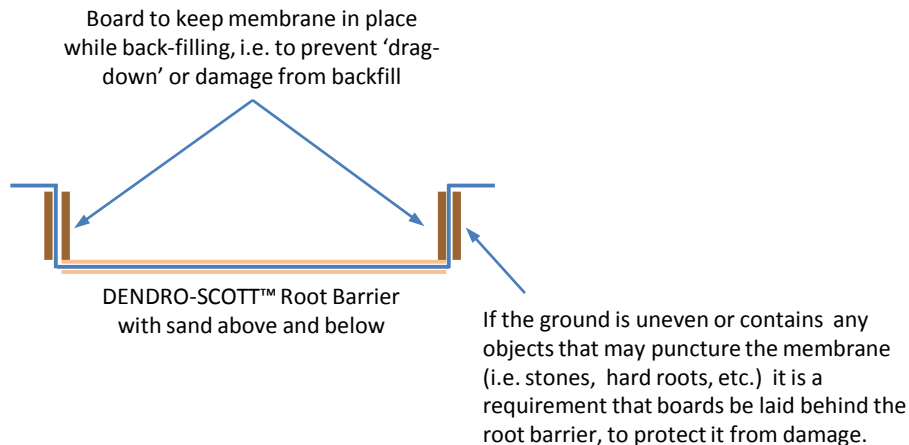


Finishing top edge of DENDRO-SCOTT™ Root Barrier (using ornamental bricks and landscaping)

Using ornamental bricks and landscaping finish ...



Lining a pit (non-foundation) with DENDRO-SCOTT™ Root Barrier



Place the DENDRO-SCOTT™ Root Barrier membrane in the prepared excavation up to ground level at the sides and leave at least 100mm along the ground. Lay 100mm of sand (or more as may be required to fully protect the membrane from any damage), then lay the membrane.

Lay 100mm of sand on top of the membrane, so that there is 100mm above and below the membrane.

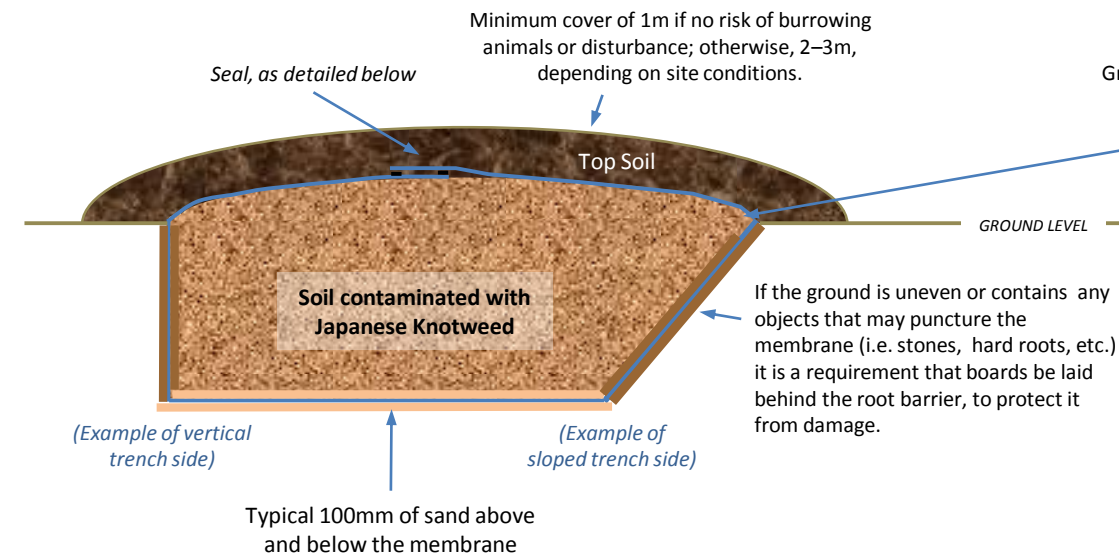
For the sides, place boards against the sides to stop it slipping back, being dragged down or damaged whilst back-filling.

The result will be a barrier against root penetration and Japanese Knotweed.

Building a 'Cell' with DENDRO-SCOTT™ Root Barrier (detail)

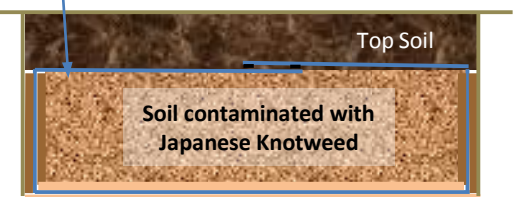
Building a cell is a cost-effective way to contain Japanese Knotweed on site.

Partially Buried/Visible cell



Completely buried cell

Grey side of membrane facing inwards, i.e. towards the contaminated soil.



Sealing cells, using DENDRO-SCOTT™ tape

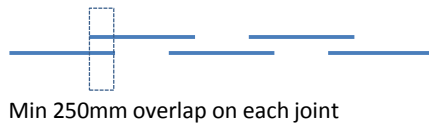


Two strips of double-sided butyl tape, pressed well with roller, to seal the cell
(See also detail on Pages 9 and 10)

Joining DENDRO-SCOTT™ Root Barrier (method)

DENDRO-SCOTT™ Root Barrier membrane comes in various sizes, but it may be necessary to cut and joint to achieve the shape you require. We also supply some ready-made larger sizes—please check with our Sales team.

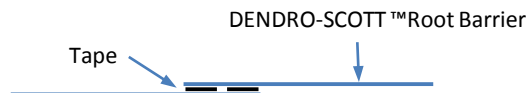
Place the rolls of membrane adjacent to each other and overlap each one to make the joint, or cut it into required size pieces (*if applicable*). These will need to be jointed together, side-by-side with tape.



Note: the grey side of the membrane to face the tree/roots.

Therefore, for vertical installations the blue side will be visible during installation.

For 'cells' to bury contaminated soil, the grey side will be the inside of the cell and the blue side will be on the outside.



Apply two strips of double-sided butyl tape, as shown and press well with roller.

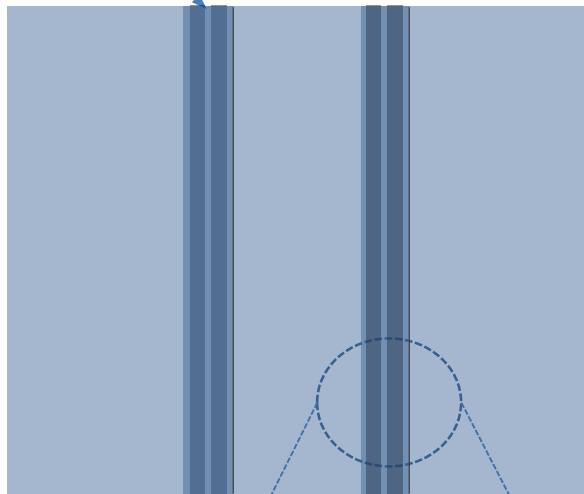


The result will be a barrier against root penetration and Japanese Knotweed

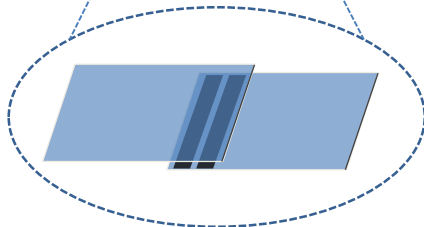
Jointing DENDRO-SCOTT™ Root Barrier (example)

Standard rolls or sheets can be jointed together to create larger custom sheets ...

250mm overlap for each joint



Two strips of double-sided butyl tape, pressed well with roller, to secure the joint



Services/objects passing through DENDRO-SCOTT™ Root Barrier

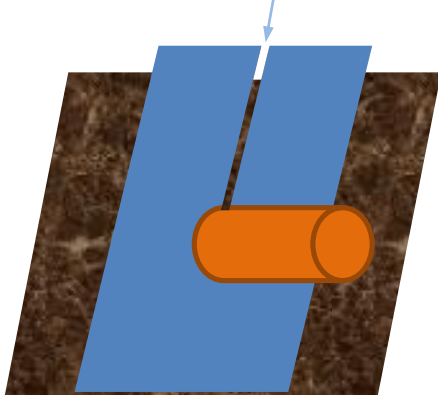
Prepare 100mm wide strips of DENDRO-SCOTT™ Root Barrier. Stick onto one side of double-sided butyl tape.



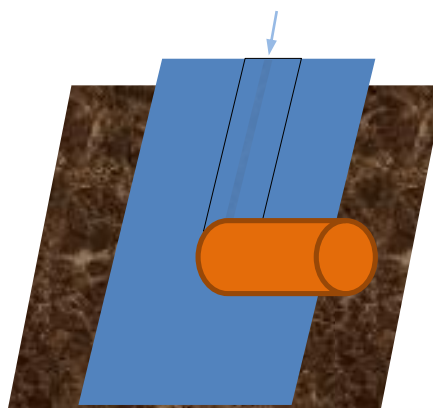
Note:

If the object passing through the DENDRO-SCOTT™ Root Barrier has a rough surface (i.e. Concrete pile) its surface should be primed with a bonding slurry, using Cementone SBR/ordinary Portland cement. The bonding slurry should be allowed to cure and dry prior to applying DENDRO-SCOTT™ double-sided butyl tape.

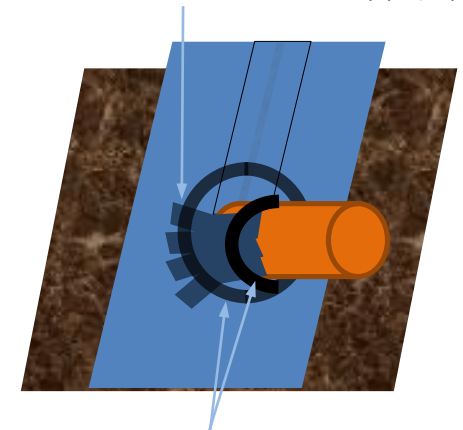
Cut a slit* in the root barrier membrane and wrap it around the pipe



Use a strip of tape backed DENDRO-SCOTT™ Root Barrier to seal the gap



Use strips of tape backed DENDRO-SCOTT™ Root Barrier (shown in darker blue here) to join and seal the membrane to the pipe (or pile)



* If laying the DENDRO-SCOTT™ Root Barrier over a pile, cut a hole just sufficient to accommodate the pile.

Example of vertical installation of DENDRO-SCOTT™ Root Barrier

Buildings can be protected from root intrusion; for example, from adjacent trees or Japanese Knotweed. The use of boards ensures that the root barrier remains in place while back-filling.



Example of using DENDRO-SCOTT™ Root Barrier to protect services

Root barriers can protect services and the membrane can be installed across service lines.



Example of residential use of DENDRO-SCOTT™ Root Barrier

Root barriers are not only for large projects; they can be used in small residential projects, with rolls from as small as 1m x 10m.



Example of custom sheet of DENDRO-SCOTT™ Root Barrier—Large cell

Custom sheets are typically the most cost-effective option for large installations.



Example of building a very large 'Cell' with DENDRO-SCOTT™ Root Barrier

Removing Japanese Knotweed from site can be problematic and extremely expensive.

DENDRO-SCOTT™ Root Barrier can be used to build a cell. In which to bury soil contaminated with Japanese Knotweed, on site.



Example of protecting foundations with DENDRO-SCOTT™ Root Barrier

Root barriers can be used to protect foundations. After the concrete has been poured, the remaining rectangular areas (floors) can be protected with sheets, jointed (with two strips of double-sided butyl tape) to effectively 'line' under the whole building.

