



ROOT BARRIER
61 SOMERSET ST
WINDSOR QLD 4030

1. CURTAIN WALL/ MOISTURE CONTROL of CONTAMINATED SITES.

DESIGN & INSTALLATION GUIDELINES (Including Typical)

Depth, is determined by a civil engineer's assessment of "the zone of influence" in the soil. In "normal" reactive clay depths between 1500mm and 4 metres may be expected. on the other hand if you strike rock at 700mm, the moisture cannot move through it then that is deep enough.

Seal. Sodium Bentonite is used to seal the bottom of the trench and bind the bottom of the root barrier to the undisturbed soil.

In summary take the barrier down to soil that nothing will move through and bind the root barrier to it.

INSTALLATION SYSTEM

BARRIER PLACEMENT

Dig a trench to the required depth, insert ROOT BARRIER Ensure 50mm of root barrier is left above finished ground height (this is to allow for settlement and may be trimmed off later).

BACKFILL

In the base of the trench place a layer of pure sodium bentonite 50mm to 100mm deep, then back fill using a blend of spoil from the trench and sodium bentonite. The ratio of sodium bentonite to soil may vary depending on the type of soil, heavy clay may only need 1 part bentonite in 10 soil whilst a light sandy loam may need a ratio of 1 to 1.

PIPE CROSSINGS

Ideally cut all services, lay Root Barrier and cut small holes for penetrations to reinstate services, sealing crossings with sodium bentonite.

Alternative method is: after a trench is dug and pipe completely exposed, slot root barrier and place in the trench, using a second piece of barrier 300mm wide x the depth of the trench below the pipe, place over the slot. Lastly add a bag or two of pure sodium bentonite to the location to ensure a root and water proof seal.

JOINS

Overlap 300mm, place a 20mm spacer vertically between the two layers of overlapping barrier and back fill the trench. This will create an almond shaped void around the spacer, pour bentonite into this void and remove the spacer as it fills. The result will be a vertical column of bentonite, which will provide a waterproof but flexible seal.

TRIMMING

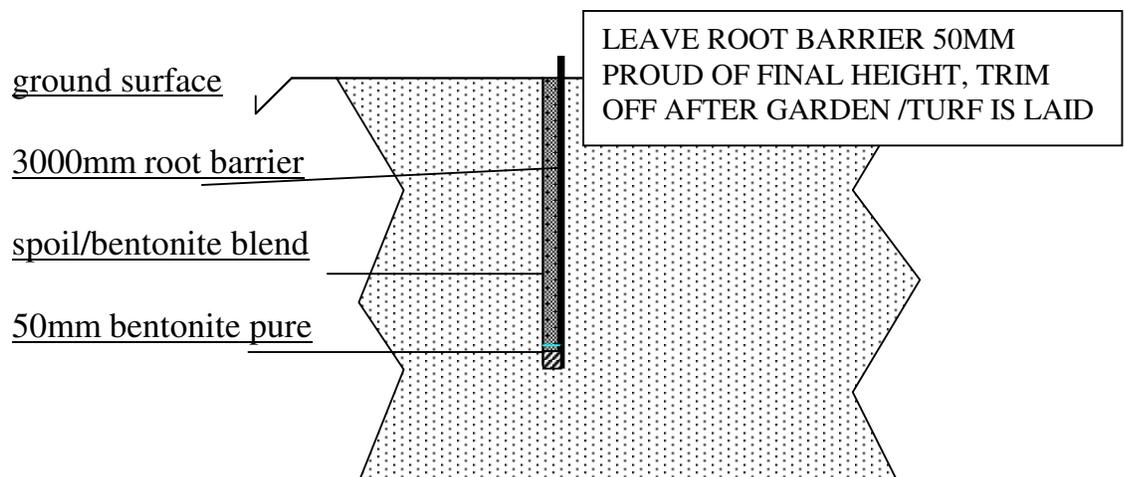
Barrier should be trimmed to just below lawn mower height but above ground (Top of Root Barrier must be exposed on completion) or top of kerb.

TYPICAL MOISTURE BARRIER INSTALLATION SPECIFICATION

Excavate a trench to a depth of **2800mm**

Place **3000mm** root barrier in the trench, followed by a 50mm layer of dry sodium bentonite in the base of the trench. Back fill with nominated fill. Trim barrier later after trench settlement ensuring finished height is such that roots cannot breach barrier.

Root barrier help line phone 1300 13 66 44.



Dec 2008