

# Stormwater and Sediment Field Day

Auckland Botanic Gardens 2008

## Silt Fence and Super Silt Fence Demonstration

Silt fencing is a commonly used sediment control practice, designed to act as a temporary barrier to intercept runoff, reduce its velocity, filter, and impound sediment-laden water from small areas of disturbed soil. When installed correctly and in appropriate locations, silt fencing has proven to be a very effective system.

Compliance issues and experience lead to changes in 2006 / 2007 to the TP90 design details for silt fences and super silt fences. These changes primarily focussed on height and embedment/footing issues, and became operative in December 2007. All new silt fence installations since that date are to be to the revised standard, if the practice is to be considered in accordance with TP90; however some lenience has been permitted to allow for old material stocks.

Silt fences are referred to in section 2.2 of TP90.

### Where to use Silt Fencing

- On low gradient sites or for confined areas where the contributing catchment is small, such as short steep batter fills and around watercourses.
- To delineate the limit of disturbance on an earthworks site such as riparian areas or bush reserves.
- To store runoff behind the Silt Fence without damaging the fence or the submerged area behind the fence.
- Do not install Silt Fences across watercourses or in areas of concentrated flows.

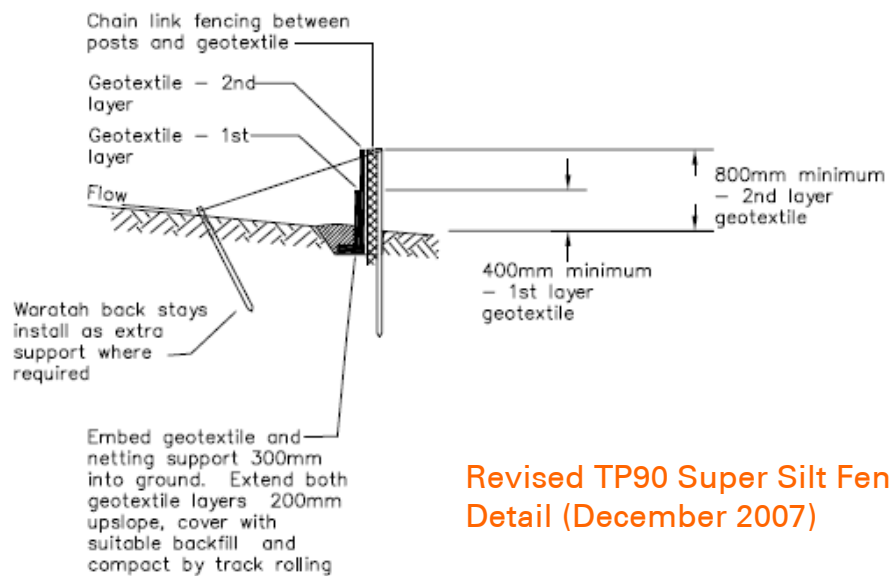
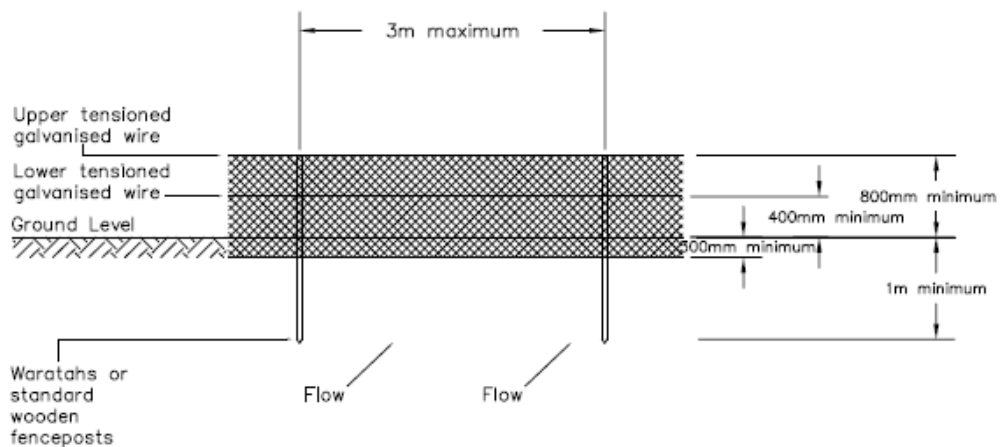
### Key Design Features of Silt Fencing

- Always install Silt Fences along the contour.
- Where this is not possible or where there are long sections of Silt Fence, install short Silt Fence returns projecting up slope from the Silt Fence to minimise concentration of flows.
- Silt Fence returns are to be a minimum of 2m in length, can incorporate a tie back, and are generally constructed by continuing the Silt Fence around the return and doubling back, eliminating joins.

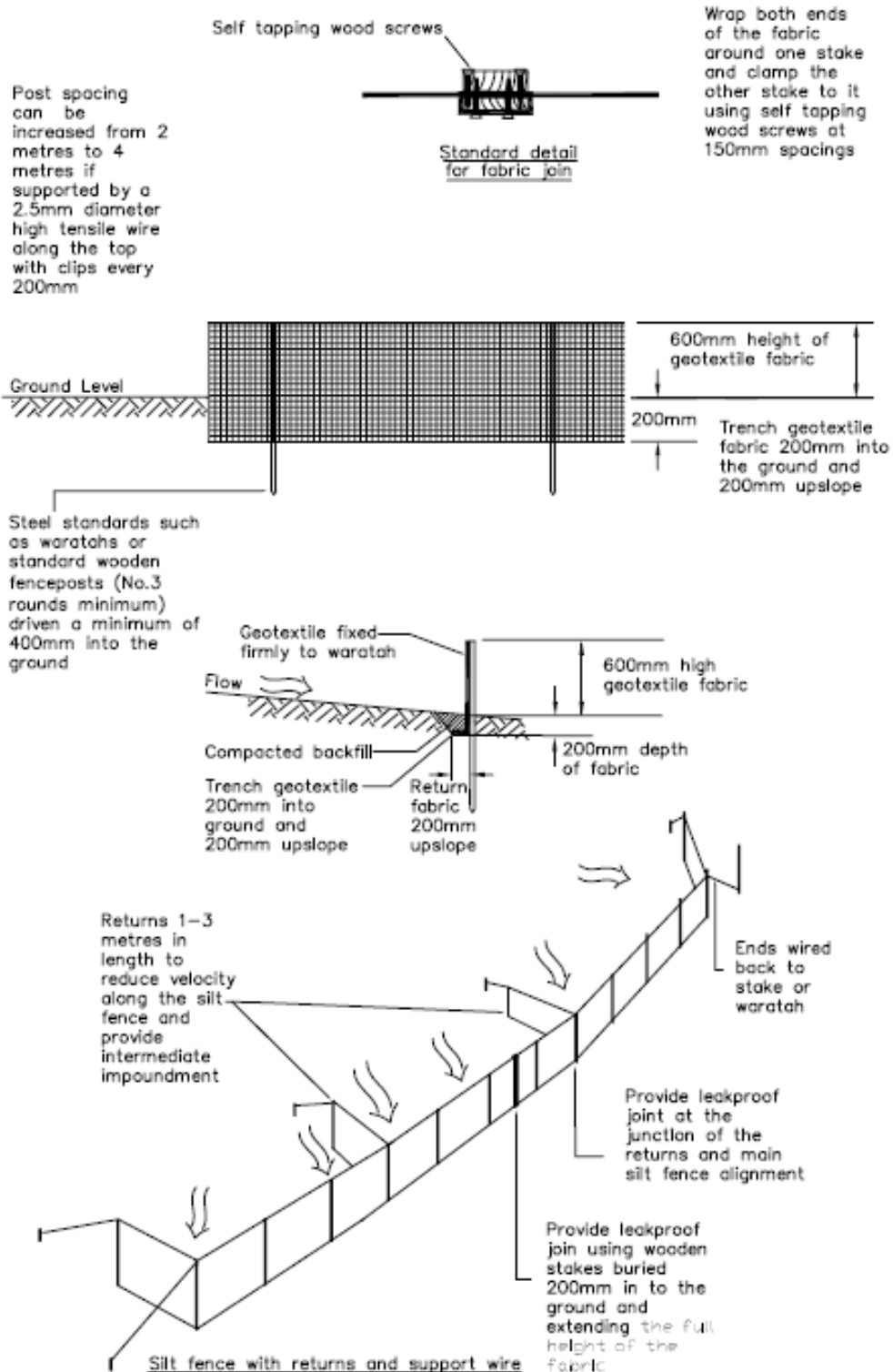
For further detail, see the drawings below and TP90.

## Maintenance Requirements for Silt Fencing

- Inspect Silt Fences at least once a week and after each rainfall. Make any necessary repairs when bulges occur or when sediment accumulation reaches 50% of the fabric height.
- Any areas of collapse, decomposition or ineffectiveness need to be immediately replaced.
- Remove sediment deposits as necessary to continue to allow for adequate sediment storage and reduce pressure on the Silt Fence. Ensure that the sediment is removed to a secure area.
- Do not remove Silt Fence materials and sediment deposition until the catchment area has been appropriately stabilised. Stabilise the area of the removed Silt Fence.



Revised TP90 Super Silt Fence Detail (December 2007)



Revised TP90 Silt Fence Detail  
(December 2007)