

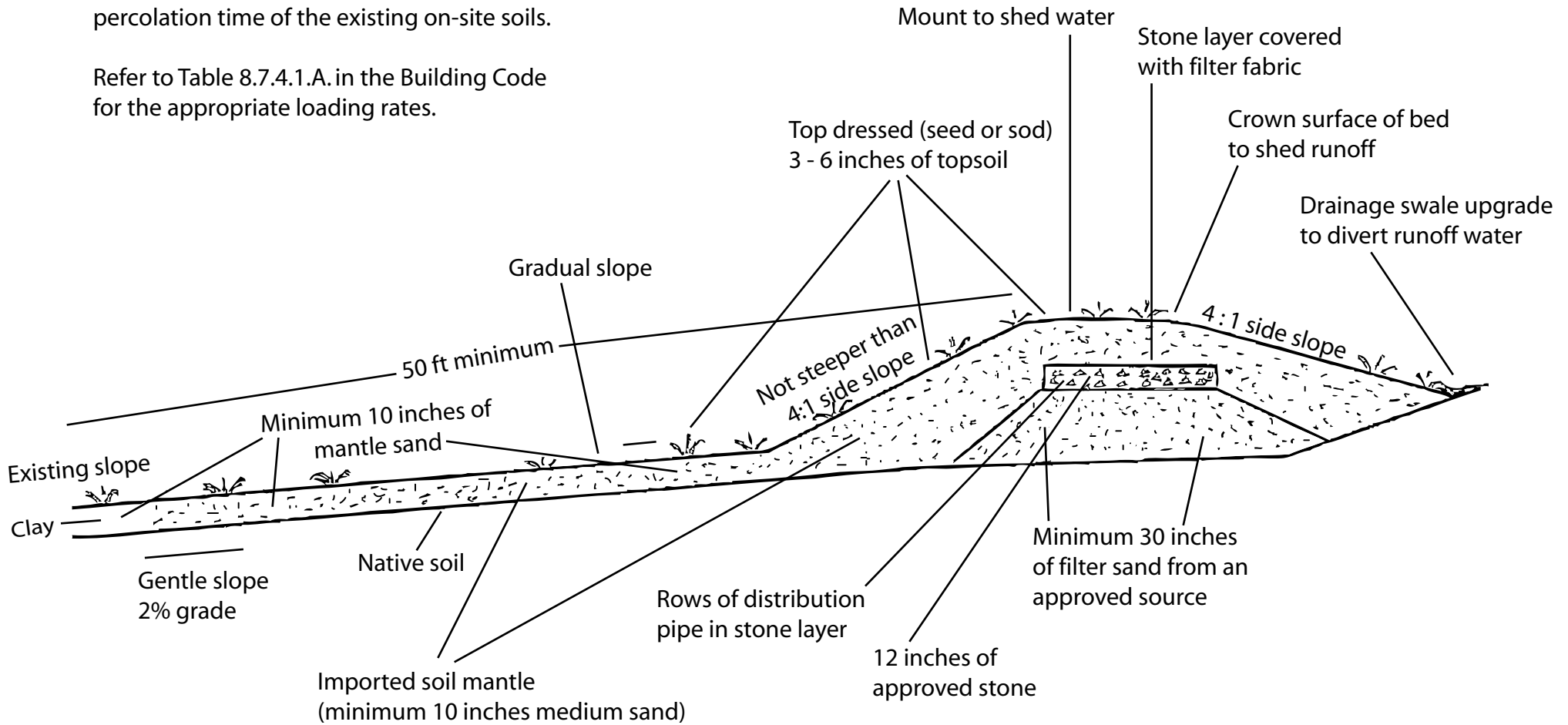
EXAMPLE OF TYPICAL RAISED FILTER BED (INSTALLED ON CLAY SOILS)

REFER TO ONTARIO BUILDING CODE
FOR THE PRECISE REGULATED REQUIREMENTS

CROSS SECTION

NOTE: The size of the soil mantle is based on the percolation time of the existing on-site soils.

Refer to Table 8.7.4.1.A. in the Building Code for the appropriate loading rates.



Alternate Description for Example of Typical Raised Filter Bed (installed on clay soils)

Note: This description is alternate text for screen reader users and other interested parties. It is not a representation of this information for builders or engineers. Refer to the Ontario Building Code for precise regulated requirements.

The diagram shows a cross section of a raised filter bed. A gentle 2 percent slope begins at the left side of the diagram, increasing upwards gradually towards the middle of the diagram where it reaches the base of a “mount to shed water”

The mount to shed water is just to the right of centre in the diagram

There is a minimum of 50 feet from the beginning of the existing slope at the left of the diagram to top of the mount to shed water. The slope of the mount to shed water is not to be steeper than 4:1. (4 horizontal to 1 vertical)

On right side of the diagram at the foot of the mount to shed water is a drainage swale upgrade to divert runoff water.

There is clay surface on the far left of the diagram, which stops as the 2% gentle slope begins. The surface of the gentle slope is covered with a minimum of 10 inches deep of imported mantle sand on top of the native soil.

As the mount to shed water begins and the slope increases, height is achieved using a deeper mantle of imported filter sand. There is a minimum of 30 inches of filter sand (from an approved source) that provides a base under the filter bed. The filter bed is embedded inside the mount to shed water. The entire mantle of sand is covered with 3-6 inches of topsoil.

The filter bed consists of rows of distribution pipes in a stone layer. The stone layer consists of 6 inches beneath the pipes and 2 inches on top. The stone layer is covered with a filter fabric. There is at least 10 inches of sand on top of the stone layer. The crown of the surface bed is to shed runoff.

The entire length of the filter bed is covered with 3 to 6 inches of top-dressed (seed or sod) topsoil.

Note: The size of the soil mantle is based on the percolation time of the existing on-site soils. Refer to table 8.7.4.1.A in the building code for the appropriate loading rates