



TERRAM geotextiles can be unrolled directly onto a subgrade with adjacent and subsequent rolls overlapped between 300mm and 1000mm - the softer the subgrade, the greater the overlap. A combination of overlapping and sewing may be more economical where the subgrade strength is particularly low, or in other critical situations (see the 'Jointing methods for TERRAM Geotextiles' pdf document downloadable at www.terram.com).

Vehicles and plant must not run directly on exposed textile. Construction traffic should be restricted to areas of textile which have been covered with sub-base and preferably compacted to the minimum required depth.

Sub-base selection and placement

The sub-base must be well-graded, compactable and for permanent works, capable of transporting rising water and resistant to long-term degradation. Recommended grading bands for compactable granular materials are shown in Fig. 3.

The sub-base thickness will depend on loading and on the strength of the subgrade. The thickness should take into account the maximum anticipated axle load, both during construction and in service, and should be increased by 10-20% on bends or where a slightly inferior sub-base is used.

Sub-base should be bladed forward over the textile and graded down to the required un-compacted depth. Typical practice with a firm subgrade is to place the sub-base in layers which are compacted to 150mm using a vibro-roller.

With a soft subgrade it is prudent to place at least 300mm of lightly-compacted sub-base in one lift (500mm on an exceptionally soft subgrade) before overlaying this with a thinner layer of better-compacted material.

A very low-CBR subgrade, heavier traffic loadings, or a poorly-graded sub-base may require differing techniques. For example, heavy compaction with a very soft clay subgrade can lead to rutting and heave, and it may be necessary to increase the initial layer thickness and allow time for consolidation of the subgrade before the placement of thinner layers and applying more intense compaction.

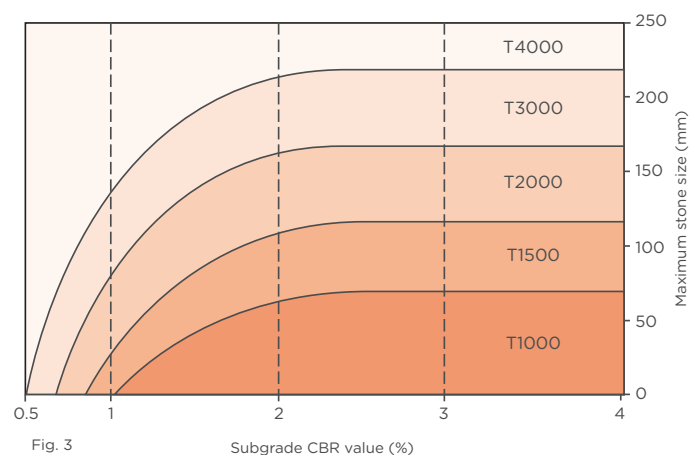


Fig. 3

Subgrade CBR value (%)