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In design methods for reinforced soil structures, cohesive soils have been avoided as back-fills, as they have lower bond strength with the reinforcing element and generate excess pore water pressures and experience large amounts of deformations when subject to variation in moisture content or upon the application of external loads. However, encouraging results are reported with the use of geotextiles as reinforcements for cohesive soil filled slopes. Successful use of nonwoven geotextiles with good drainage properties in test embankments and a real site situation are reported. However, due to high extensibility, their use as long term reinforcements is in doubt. This was realised in the real site situation and engineers had to use a secondary reinforcement to increase the life of the slope.

Woven geotextiles that have very good tensile properties, however, have not been tried as reinforcements for cohesive soils because of their poor drainage property. The fabrics used in cohesive soils should possess good drainage property only at the initial stages, as once the excess water is drained out, the problem of pore water pressure will not exist. With this in mind research is being carried out to engineer woven geotextiles with increased drainage property.

These woven geotextiles have better transmissivity than the existing nonwoven geotextiles which were successfully used in experiments on cohesive soil filled slopes. It can be concluded that it is possible to use geotextiles successfully as reinforcements in cohesive soil filled slopes, solving a number of geotechnical problems and with enormous amount of financial savings.