

Use of Drainage Net For Exfiltration Systems

Tech Sheet # 5
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The following provides supporting information for use of **drainage net** for exfiltration systems. The current specification published in the LandSaver Design Manual and Installation Instructions requires an AASHTO M288 Class 2 non-woven fabric completely around the angular stone envelope. A commonly used fabric is Mirafi 160N. The function of the non-woven fabric is to separate the open graded stone backfill from the insitu soils and prevent fines migration into the stone voids. LandSaver always recommends a separation material. This Tech Sheet describes the use of a **drainage net** as an alternate separation material along the bottom of the exfiltration bed or trench.

The primary motivation for specifying **drainage net** is to enhance exfiltration capacity by eliminating the potentially restrictive layer of non-woven separation fabric on the bottom of the exfiltration bed or trench. In this application, an open web, geo-net may be an acceptable substitute for the non-woven separation fabric below the stone bedding. Non-woven fabric continues to be specified for the sidewalls and top of the stone envelope.

The recommended drainage net is the SKAPS Transnet™ HDPE GeoNet TN 160 manufactured by SKAPS Industries in Commerce, Georgia. This drainage net is appropriate for all angular stone gradations specified by LandSaver in Table 2 of the LandSaver Design Manual.

Note: The application for a drainage net is limited to systems that are above seasonal high groundwater. The drainage net does not provide structural reinforcement. Use of a drainage net as an alternate to non-woven fabric must be specified or approved by the design engineer.

Figure 1. Placement of the Drainage Net

