



In slope applications, the normal force is the weight of the bag over the shear connectors. In flat slopes, the normal force is minimal.

NOTE: In areas of wave action and flow along the units, the bags may lift or "rock" from the water action. The 4.5 in Envirollok pin eliminates the chances of the units lifting off the connectors.

Shear resistance from Envirollok Pin Connector:
 $2(90 + N \times \tan(26)) = 2(90 + 45 \times \tan(26)) = 223 \text{ lbs/ft}$

Shear resistance from Envirollok Twining:
 $\text{width} \times \text{Tult} / \text{unit width} = 4.75\text{in} \times 1500 \text{ ppf} \times 2 / 24 \text{ in} = 593 \text{ lbs/ft}$

Total force to remove a unit from the wall is 816 lbs/ft -> 1633 lbs/unit