

PROPER PRODUCT SELECTION

To help select which type of the various geosynthetics is best suited for a given application, the following list has been developed. Of course, the answer will many times be a value-engineered decision (cost versus performance).

PRODUCT TYPE	APPLICATION
Nonwoven Fabric	<ul style="list-style-type: none"> • Subsurface drainage and filtration (except for gap graded soils) • Erosion protection (except for gap graded soils) • Asphalt overlays • Stabilization and separation (usually a value engineered decision between nonwoven geotextiles, woven geotextiles, or grids) • Railroads only use heavy weight nonwovens (woven and light weight heat bonded nonwovens are detrimental to railroads) • Pond underlayments (under and/or over impermeable liners to provide puncture resistance)
Woven Slit Film Fabric	<ul style="list-style-type: none"> • Stabilization and separation (again a value engineered decision) • Silt fence
Woven Monofilament Fabric	<ul style="list-style-type: none"> • Subsurface drainage and erosion protection (mainly in gap graded soils)
High Strength Wovens	<ul style="list-style-type: none"> • Stabilization and reinforcement
Grids	<ul style="list-style-type: none"> • Stabilization and reinforcement
Drainage Nets	<ul style="list-style-type: none"> • In-plane drainage (when combined with light weight nonwovens)
PDS (Pre-fabricated Drainage Structure)	<ul style="list-style-type: none"> • Subsurface drainage
Matting	<ul style="list-style-type: none"> • Erosion protection
Combination of Grids and Nonwoven Fabric	<ul style="list-style-type: none"> • Special stabilization and reinforcement where separation is needed (usually a value engineered decision), i.e. under sewer lines or in soils prone to pumping – like railroads or access roads