

Geotextiles





Field-Proven Geosynthetic Solutions for Over Two Decades

Geotextiles CONTECH® offers the broadest range of high-quality geosynthetics available: woven and nonwoven geotextiles for soil filtration, separation, or drainage; STRIPDRAIN®, a geocomposite drain system used for subsurface water collection; TENSAR® structural reinforcement geogrids; Turf Reinforcement Mats such as Pyramat[®], for reinforcing vegetation and erosion control; and, asphalt reinforcing grids and paving fabrics. **Turf Reinforcement Mats**





broadest range of highquality geosynthetics

Geotextiles Add Stability and Improve Long-Term Performance

CONTECH Geotextiles, with their high strength and defined filtration qualities, have a solid history of long-term performance in applications involving separation, filtration, drainage and erosion control. They also improve the performance of asphalt pavement overlays and are beneficial in many other applications.

These high-quality geotextiles are available in a variety of weights and strengths to meet differing job requirements: interstate highway, parking lot, haul road, erosion control or a subsurface drainage system.

Since performance requires selecting the correct type and style for the intended function, general AASHTO recommendations for CONTECH geotextiles are shown in Table 1.

TABLE 1 **AASHTO M288-00 Standard Specifications** (American Association of State Highway and Transportation Officials) Design/ Nonwoven Woven Service **Application** Class* Geotextile Geotextile Subsurface Drainage Class 2 (Default) C-60NW $C70/06^{(1)}$ <15% passing 0.075 mm sieve 15%-50% passing 0.075 mm sieve C-60NW C70/06>50% passing 0.075 mm sieve C-60NW C70/06 <15% passing 0.075 mm sieve C-40NW 15%-50% passing 0.075 mm sieve C-40NW >50% passing 0.075 mm sieve C-40NW Temporary Silt Fence Unsupported **C-50NW** Supported C-35NW Permanent Class 1 (Nonwoven) or **Erosion Control** Class 2 (Woven Monofilament) <15% passing 0.075 mm sieve C70/06 C-80NW C70/06 15%-50% passing 0.075 mm sieve C-80NW C70/06 >50% passing 0.075 mm sieve C-80NW Separation (CBR>3) Class 2 (Default) C-300/C-250 C-60NW Class 3 C-40NW C-200/C-180 Stabilization Class 1 (Default) C-60NW C-300/C-250 (1 < CBR < 3)Class 2 C-60NW C-300/C-250 Class 3 C-40NW C-200/C-180 Paving Fabric N/A C-46NW

- * "Service Class," or "Survivability Class" per AASHTO M288, is a guide based on data showing that long-term performance is a direct function of installation stresses. A Class 1 service rating applies to applications where typical installation stresses are high and a more durable geotextile is recommended. Class 3 is the lowest rating, indicating typically minimal installation stresses. The Default Class is noted for each application and should be used in lieu of site-specific knowledge to justify a higher service class/less robust geotextile. % passing refers to the in-situ soil.
- (1) Exception to permittivity.

Standard Specifications

CONTECH Nonwoven Geotextiles — Synthetic Engineering Solutions

These are typical applications for CONTECH needlepunched Nonwoven Geotextiles:

Subsurface drainage

Light-to-medium weight CONTECH nonwoven geotextiles are highly effective in drainage/filtration applications involving groundwater flow through the geotextile. Typical applications include aggregate-filled subsurface drainage systems, where the geotextile functions as a filter envelope.

CONTECH nonwoven geotextiles reduce the potential for blinding and clogging in most soil conditions when applied in accordance with accepted engineering practice.

Roadway separation

Deploying medium-to-heavy weight CONTECH nonwoven geotextiles directly on soft, saturated subgrades preserves expected road life by preventing aggregate from inter-mixing with the subgrade. The drainage and filtration attributes of CONTECH nonwoven geotextiles, in this application, also provide planar flow to help minimize pore water pressure in the subgrade.

Hard armor underlayment

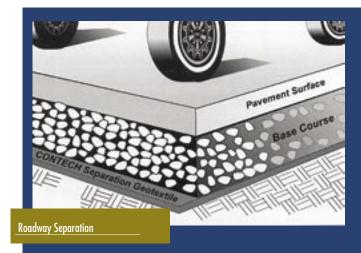
CONTECH nonwoven geotextiles relieve hydrostatic pressure beneath hard armor and prevent subsoils from migrating through the erosion control system.

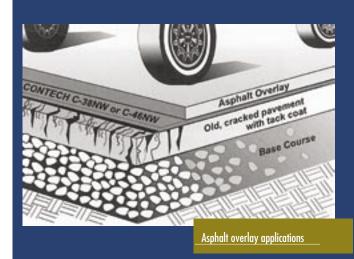
Asphalt overlay applications

CONTECH's C-38NW and C-46NW nonwoven geotextiles are specifically engineered for asphalt overlays.

When installed as a fabric interlayer before placing a new asphalt overlay, these geotextiles extend overlay life, reduce

maintenance costs, and act as a permanent moisture barrier. Application of a paving fabric requires a tack coat prior to placing the asphalt overlay on existing pavement surfaces.







CONTECH Woven Geotextiles — Synthetic Engineering Solutions



Woven geotextiles are extremely beneficial in the following applications:

Separation

Pavement failure is frequently caused by subgrade contamination. CONTECH slit film geotextiles can prevent intermixing of foundation soils with granular base materials to maintain the structural integrity and drainage capacity of the granular base course.

CONTECH woven geotextiles may eliminate the practice of increasing base layer thicknesses in an attempt to offset performance reductions caused by loss of aggregate into the subgrade.

Stabilization

When deployed over weak subgrade soils (CBR<3), CONTECH slit film woven geotextiles separate the select aggregate from the soft subsoil to prevent 'punch-through' and loss of aggregate. A woven geotextile can act as a tensile element in a structural system that is otherwise weak in tensile strength. Once sufficient elongation has occurred, the geotextile's strength is mobilized to provide a tensile element to the aggregate section. This may lead to reduced aggregate requirements.

Hard armor underlayment

CONTECH C70/06 monofilament geotextile acts as a filter beneath riprap and various other forms of concrete revetment systems. It helps to contain sediment beneath the hard armor erosion control system to improve stability in shoreline and waterway applications.

CONTECH C70/06 monofilament geotextile is carefully engineered to provide strength and durability with the added benefit of filtration.

Filtration properties are improved relative to slit film woven geotextiles with a high percentage open area (POA) and uniform fabric opening size.

The unique woven structure of a monofilament geotextile traps soil particles while permitting high-volume flow through the fabric structure, yet, resists clogging.

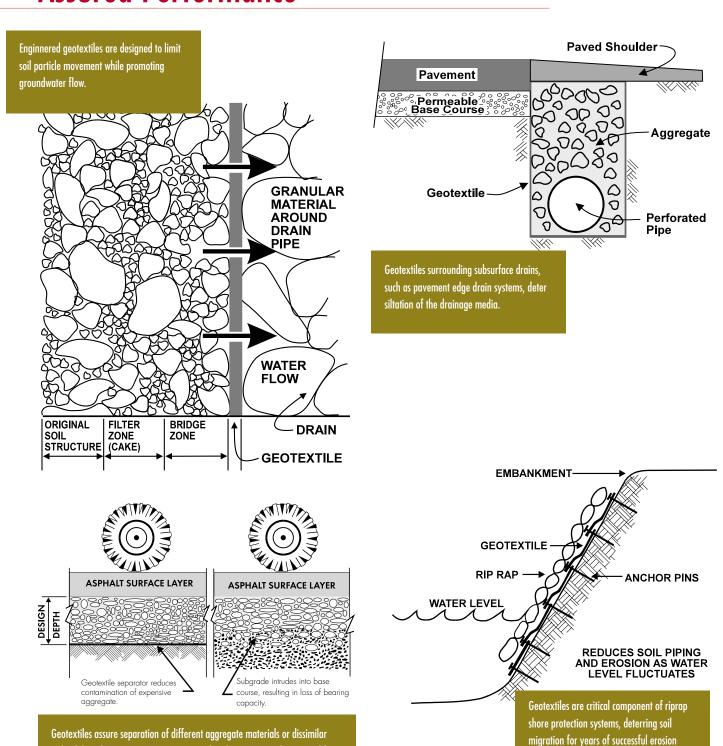
Silt Fence

CONTECH Silt Fence helps contain overland sheet flow and filters out suspended soil particles, preventing downstream deposition and acting as a defensive erosion control practice.

CONTECH Silt Fence offers a combination of UV resistance, strength, and hydraulic properties to make them ideal for use in above-ground sediment control applications.



Engineered for Durability and Assured Performance



protection.

of roadways.

soils while reducing moisture entrapment, thereby improving the service life

Leaders in Modern Geosynthetic Engineering Solutions

Only CONTECH offers such a full range of high-quality, performance-proven geosynthetic products, plus complete technical support, to provide cost-effective solutions.

Pyramat® Erosion Control Mats...

For permanent vegetation reinforcement in slopes and channels. PYRAMAT and CONTECH Turf Reinforcement Mats provide reinforcement in addition to promoting vegetation growth when used in lieu of hard armor in channels, slopes, pipe inlet/outlets and shoreline/bank protection.

TENSAR® Geogrids . . .

For soil reinforcement, base reinforcement, subgrade improvement and earth retention systems. High-strength polymer grids result in a strong and positive soil interlock.

STRIPDRAIN® Geocomposite Drainage Systems . . .

For pavement edge drains, building foundation drains, or anywhere long-term ground water control is needed. Geocomposites combine a polymer core and geotextile for efficient soil filtration, high-flow capacity and resistance to deformation under load.

STAR Grid® Asphalt Reinforcing Grids . . .

For full-lane width applications where a tensile element is required in asphalt overlays of exiting pavements. This flexible geogrid-paving fabric composite combines the benefits of a paving fabric with the tensile strength of a geogrid to prolong pavement life and reduce reflective cracking.

For more information, call one of CONTECH's Regional Offices located in the following cities:

Ohio (Corporate Office)	513-645-7000
California (San Bernadino)	909-885-8800
Colorado (Denver)	303-431-8999
Florida (Tampa)	727-544-8811
Georgia (Atlanta)	770-409-0814
Indiana (Indianapolis)	317-842-7766
Kansas (Kansas City)	913-906-9200
Maryland (Columbia)	410-740-8490
Texas (Dallas)	972-659-0828

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