## How and where to use geotextiles

 Geotextiles control soil erosion in a variety of landscape settings:

**∠**ditches

✓ slopes, ponds

✓acid slopes

✓ storm channels

rembankments rshorelines r

Golf course applications include:

rembankments reart paths

**∠**bridges

**≠**fences

**∠**bunkers **≠**greens The primary purpose of geotextiles is to prevent soil erosion. They also save labor by requiring less repair to eroded land.

Most geotextile manufacturers tout the lightweight quality of their product. Weight is important. Most repair projects require multiple rolls of material.

Root reinforcement is another quality of the best geotextiles. The purpose here is to permit root growth, and provide an anchor for secure rooting.

Texture of erosion control products varies, from mesh-like to perforated polymers.

Unlike weed control fabrics, which allow no air or sunlight through, erosion control products allow seed germination. The materials' ability to retain or allow moisture to penetrate is the key to early establishment of grasses and the subsequent permanent control of erosion of newly-graded slopes and ditchlines. Postwinter seeding, if needed, can be applied through the matting.

Akzo Industrial Systems Company of Asheville, N.C., offers the following stepby-step instruction when using its Enkamat for lining a typical 8-foot side slope ditch:

- 1) Shape and compact the ditch to specifications and dress the site so it is free of rocks, soil clumps or large vehicle tracks. Cut side slope shelves and check slots.
  - 2) Starting downstream, cut terminal



Phillips Fibers' Supac geotextile fabric separates sand from subsoil in bunkers, helps filtration and drainage, and provides structural stability.

slot and align the initial roll along the ditch center line. Stake into slot, then backfill. Roll the mat upstream over refilled terminal and stake. Progress upstream with peaked side down, working across the check slots and pinning with temporary stakes to maintain tension and alignment.

Tuck mat into slots and stake. Stretch mat about five percent before staking.

- 3) Side rolls should follow in staggered sequence behind the initial roll. Working outward from the ditch center line, overlap the first roll by four feet with another roll and lay it upslope onto the side slope
- 4) Proceeding upstream, stake overlaps and mat edges on side slop shelves at three-foot intervals.
  - 5) Repeat steps 3 and 4 with the

remaining side slope roll.

- 6) If splicing a new roll is necessary, use three-foot overlaps and shingle down-
- 7) Secure the upstream roll ends in a terminal slot.
- 8) Back-fill and tamp soil into check slots and both upper and lower terminal
  - 9) Seed area.

The most important installation tip is that the material should be securely anchored to dry ground before seeding. Overlap should be approximately four feet, at three- to five-foot intervals.

Mats are usually secured by wooden stakes or metal or plastic staples that penetrate the soil about six inches.

-Terry McIver

## WHERE TO FIND GEOTEXTILES

Advanced Drainage Systems, Inc., 3300 Riverside Dr., Columbus, OH 43221

Circle No. 300 on Reader Inquiry Card

Akzo Industrial Systems Co., P.O. Box 7249, Asheville, NC 28802; (704) 258-5050. Circle No. 301 on Reader Inquiry Card

Contech Construction Products, Inc., P.O. Box 800, Middletown, OH 45042; (513) 425-5896; makers of Eromat, a clean, weed-free, knitted straw blanket.

Circle No. 302 on Reader Inquiry Card

Environmental Protection, Inc., P.O. Box 333 Mancelona, MI 49659.

Circle No. 303 on Reader Inquiry Card

Greensia International, Inc., 3807 Wilshire Blvd., Suite 1118, Los Angeles, CA 90010; (213) 382-7070; makers of Greensia seeded fabric

Circle No. 304 on Reader Inquiry Card

Phillips Fibers Corp., P.O. Box 66, Greenville, SC 29602-0066; (502) 583-6591. Circle No. 305 on Reader Inquiry Card

Reemay, Inc., 70 Old Hickory Blvd., Old Hickory, TN 37214.

Circle No. 306 on Reader Inquiry Card

Research Products Corp.; P.O. Box 1467, Madison, WI 53701; (800) 334-6011; Earth-Gard temporary erosion control blankets.

Circle No. 307 on Reader Inquiry Card

Synthetic Industries, Inc., Construction Products; 4019 Industry Dr., Chattanooga TN 37416; (800) 621-0444; Landlok erosion mats. Circle No. 308 on Reader Inquiry Card