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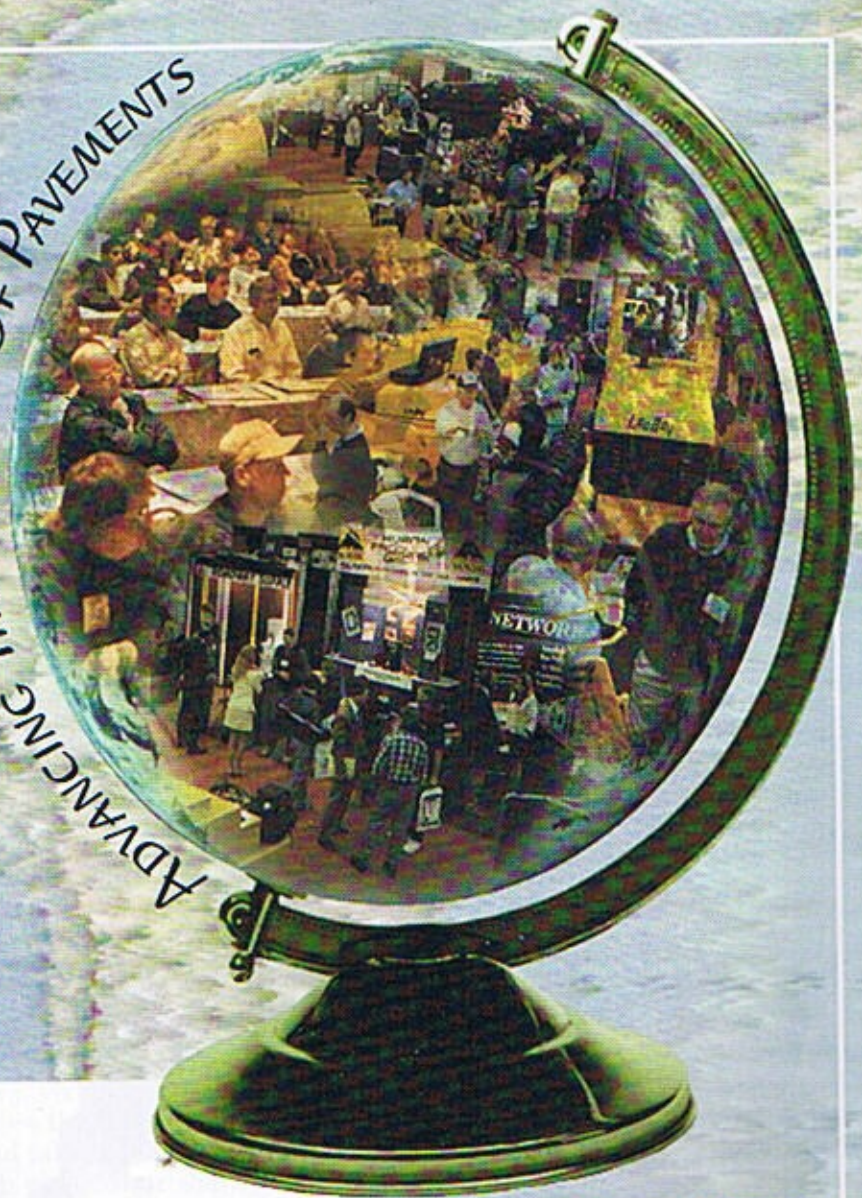

NATIONAL PAVEMENT MAINTENANCE EXPO

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- Complicated striping in Nebraska
- Successful sealcoating in Maryland
- California sweeping ruling might move east
- Effective use of paving fabrics

spun together (spunbond process). The other uses short staples of filaments 6 to 12 in. long which are arranged on a carded conveyer system. Barbed needles go up and down through the filaments, entangling the strands together forming the fabric.

A calendering (heat bonding) finish can be applied to fabric at the end of the manufacturing process.

Needlepunched fabric is thicker, fuzzy, softer and more pliable then non-needlepunched fabric. Benefits are that it installs smoother with less wrinkles due to its high elongation (stretch) and seems to bond better to the oil and old asphalt.

Numerous reports state the fabric's fuzzy side, when placed onto the asphalt tack coat on the old pavement surface, provides reinforcement at the interface. The fuzzy side provides a greater effective surface area of the fabric which offers better adhesive and shear strength with far less slippage.

Thin fabric doesn't hold tack coat as easily, resulting in bleed through, which can be hazardous to workers and equipment.

Non-heatbonded needlepunched fabrics have inherent installations problems and is not an effective paving fabric.

Installation problems include delimitation and fuzzing during installation. FHWA-Texas report 261-2 mentions problems with non-heatbonded fabrics on every test section, delaminating and fuzzing up in the wheel paths of traffic during construction. These problems result in increased labor costs and slows construction. Other results include reduced long-term performance because damaged fabric leaves little or no

Dual-sided heat-bonded fabrics have installation problems such as wrinkles and folds that transverse the full width of fabric.

Dual-sided heatbonded fabrics are thin and stiff and have a tendency to curl up when installed by hand.

membrane in the wheel paths.

Heatbonding on one side is a process where one side of the needlepunched filaments are heated to form a tough wearing surface which is necessary in a paving fabric to provide for a tough surface on one side of the fabric for truck traffic to drive on without tearing up the fabric.

The other side remains soft and fuzzy resulting in a better bond. A light heating is called calendaring, which helps the fabric hold up during construction without delamanation or fuzzing.

The only installation problem that can occur is that the fabric can be placed upside down. The heat bonded side must be up and the fuzzy side placed to the tack coat. Otherwise both delamanation and slippage can occur.

3. Dual sided heatbonded fabrics are very thin and stiff. Installation problems with dual sided heatbonded fabrics include: difficulty in placing smoothly, wrinkles and folds transverse the full width of the fabric.

Also, dual-sided heatbonded fabrics have no fuzzy side and have been prone to slippage problems. Also, the thin fabric does not hold tack coat easily and bleed-through occurs causing hazards to the workers and equipment. The fabric is stiff and has a tendency to curl up when installed by hand.

4. Resin-bonded fabrics add a chemical process which forms the fabric. This is similar to gluing and is seldom used in any geotextile anymore. The fabric is thin, stiff and has problems absorbing a tack coat since much of the absorption area is full of the chemical used for bonding.

Mounque Barazone is president of Geotextile Apparatus Co., San Diego.

Help Out Your Industry!

Watch Your Mail for *Pavement's* **1998 Contractor Ranking Survey,** which will be mailed early in February.