

Take the green approach



Why DURAFIO E.E.B.S® (Environmentally Engineered Backing System)?

Our mission to develop the most environmentally-friendly synthetic turf possible began with a close examination of the components that make up our turf products and with the added goal of providing sustainable options for turf disposal other than the landfill. Our DURAFlo E.E.B.S.® backing system has provided the "greenest" solution in the world. We've revolutionized hot melt technology to create the most environmentally responsible synthetic turf products for sports and landscape.

Proven Technology

We've invested years in the development our DURAFIO E.E.B.S.® backing system, but the basic technology is not new. Hot melt polyolefin adhesive systems have been used globally in the heavily regulated geotechnical engineering field for the better part of a decade. These geosynthetic products are designed to be installed underground, providing strength and support to engineered soil structures for 100 years and beyond. In addition, the specialty carpet industry uses this technology in the manufacturing of molded automotive carpets, modular carpets, and more.

Not only is our DURAFlo E.E.B.S.® backing system 100% recyclable, but issues such as wrinkling, moisture absorption, dimensional instability and separation from the underlying base are greatly minimized, when compared with backing systems using urethane or latex adhesives. DURAFlo E.E.B.S.® is permeable and does not require a destructive hole-punch process and is far less likely to clog than a punched, urethane-backed product.



The DURAFIo Manufacturing Process

The DURAFlo process incorporates an all polyolefin system which includes:

- A polyolefin based adhesive applied to the back of tufted griege synthetic turf
- A polypropylene non-woven geotextile that is applied as a secondary backing reinforcement

A brief, low-temperature bonding method, without fillers or other bonding agents, completes the process. This process allows a number of advantages over traditional urethane backing systems:

- Lighter weight—the DURAFlo system is approximately 10 ounces per square yard lighter than a comparable urethane backed product
- Minimal water and power use during manufacturing
- No introduction of new fossil carbon into the atmosphere during our unique coating process
- No hazardous waste to dispose in a landfill

We recycle all our waste from the manufacturing process of our polyolefin Challenger products. We actually get paid for our waste!

Specify DuraFlo to ensure you Go Green

Duraflo E.E.B.S® – Secondary Backing Technical Specification

Secondary backing shall consist of a hot melt application created by injecting a Thermoplastic Polyolefin compound that encapsulates the tufted bundle before laminating a 100% Virgin Polypropylene non-woven that adds dimensional stability along with tuft bind properties. The raw materials used in the secondary coating phase must be made according to ISO standards by all vendors in the process.

- Adhesive Weight: 6-12 oz/yd² per customer specification (should not exceed avg of 12 oz per sq yd)
- Non-Woven Wt: 2.7-3.2 oz/yd.² of 100% virgin polypropylene secondary scrim to provide a dimensionally stable layer to the turf backing

The permeability rate on secondary coating system shall not be less than 60 inches /hour (per ASTM F1551 Water Permeability of Synthetic Turf Systems and Permeable Bases, DIN 18-035)

System shall NOT require perforations for drainage and must meet permeability requirements without such damage to turf system.



