



EZE-DRAIN V, V-2, HD GEOTEXTILE DRAINAGE COMPOSITE

1. PRODUCT

UPI EZE-DRAIN HD is a high strength prefabricated drainage composite consisting of a three-dimensional, high-impact resistant polymeric core with a woven polypropylene filter fabric bonded to one side of the core. The formed dimples of high-impact resistant, polymeric core provide drainage space and interlocking at overlaps.

EZE-DRAIN V and V-2 are high strength prefabricated drainage composites consisting of a three-dimensional, high-impact resistant polymeric core with a nonwoven, needle-punched polypropylene filter fabric bonded to one side of the core. The formed dimples of high-impact resistant polymeric core provide drainage space and interlocking at overlaps. EZE-DRAIN V-2 has the added benefit of a polymeric sheet adhered to the back of the core to prevent the drainage core from die cutting into softer waterproofing membranes.

The woven and nonwoven fabrics are bonded to the cups of the core by reattachable glue so as to prevent the filter fabric from being pushed into the flow channels of the core during backfill operations.

EZE-DRAIN V, V-2 and HD are supplied in rolls with additional filter fabric extending beyond all four edges of the core, in order to facilitate overlap of adjacent sections. Fabric lap details may be customized for special project requirements. EZE-DRAIN V, V-2 and HD conforms to the property values listed under Typical Technical Data.

2. BASIC USES

EZE-DRAIN HD prefabricated drainage board is designed for horizontal drainage applications requiring a high compressive strength and high flow capacity and the filtration properties of a woven geotextile. The core side of EZE-DRAIN HD is placed against the horizontal surface. EZE-DRAIN HD provides full-coverage protection to UPI buried membrane waterproofing materials.

EZE-DRAIN V and V-2 prefabricated drainage composites are designed primarily for vertical, one-sided sub-surface drainage applications requiring a high compressive strength and a high flow capacity. The core side of EZE-DRAIN V and V-2 is placed against the wall surface of a foundation, retaining wall or other similar structure. EZE-DRAIN V and V-2 provide full-coverage protection to UPI buried membrane waterproofing materials.

3. PACKAGING

EZE-DRAIN V, V-2 and HD are supplied in 4ft. by 50ft. panels and are shipped in rolls with dimensions of 48" in length by 18" in diameter. Typically 6 rolls are strapped to a pallet.

Where a drain pipe will be used, position the lower end of core horizontally to allow drainage pipe to rest on core. Pull fabric around pipe and tuck under core. If weep holes or discharge pipes in the wall are used instead of a drain pipe, cut ½" holes in the flat back of the core at these locations; do not cut fabric. Place the lower edge of next panel (edge without a flange) overlapping the flange of the previously installed panel. Overlap the fabric in the direction of the water flow.

4. TECHNICAL SERVICE

Technical assistance is available by contacting:

URETHANE POLYMERS INTERNATIONAL, INC.
10880 Poplar Avenue
Fontana, California 92337
Phone: (909) 357-7200
Fax: (909) 357-7215

5. GENERAL INFORMATION

EZE-DRAIN V drainage panels may be installed in a variety of construction applications. They may be installed against retaining walls, foundation walls (both waterproofed and non-waterproofed) and lagging systems with buttress/landfills. The panels can terminate at the top of the footing and are flexible enough to form right angles to cover the top of the footing. EZE-DRAIN HD is used in horizontal applications between concrete slabs, with pavers or in planters. EZE-DRAIN eliminates the need for a protection course over waterproofing systems. Native soils can be used over EZE-DRAIN.

6. INSTALLATION

FOUNDATION WALLS/ VERTICAL APPLICATIONS: EZE-DRAIN V and V-2 panels can be installed in rows or columns with the fabric side toward the soil. Each method has its advantages depending on the criteria of the project as to which method is best.

When installing the EZE-DRAIN V in rows: Place the longitudinal edge of the core against the wall so that it is flush with the wall footing. Attach subsequent panes in shingle fashion, placing the longitudinal edge of the upper panel over the flanged longitudinal edge of the lower panel. EZE-DRAIN V can be attached to the UPI waterproofing with double face tape or contact adhesive.

When installing the EZE-DRAIN V in columns: Start at the low point of the wall and attach the panel to the wall. Adjacent panels should be joined together with the lateral edge of the connecting panel placed over the flanged edge of the previous panel.

The fabric from the adjacent panels should overlap the preceding panel. The fabric can be adhered with duct tape. The top or terminal edge of the EZE-DRAIN V should be sealed by wrapping the extra filter fabric around to the back side of the panel, to prevent soil or other foreign construction materials from intruding into or behind the panels. A "set back" or "ledge" condition may be encountered on some construction applications. Where this condition exists, EZE-DRAIN V panels should be installed beginning at the bottom of the wall and ending at the ledge. Subsequent courses of EZE-DRAIN V should be installed flat against the upper wall portion and placed so that 4-6" extend down and over the lower edge. The overlapping EZE-DRAIN V sections must be pushed flush against the wall during backfilling.

HORIZONTAL DECKS: Install EZE-DRAIN HD with the geotextile fabric side up. The flange edge of the core should be placed up slope, away from the drains, so that subsequent layers will overlap in a shingle fashion to shed water. Cut core and fabric to fit tightly around the floor drains. Ensure that paths to weep holes on two stage drains will remain open. Concrete, sand or mortar may be placed directly on EZE-DRAIN HD. Use care to prevent puncture or tearing of the geotextile filter fabric. All terminating edges of the drainage composite should have extra

fabric tucked behind the core to seal the edge and prevent soil from entering the core.

7. CAUTIONS/LIMITATIONS

Limit ultraviolet exposure by backfilling within 7 days of installation. Any panels damaged during installation should be replaced by the installer. *Limitations:* EZE-DRAIN is resistant to

chemicals in normal soil environments. However, some reagents may affect its performance. UPI representatives should be consulted concerning the suitability of EZE-DRAIN in unusual soil environments.

8. LIMITED WARRANTY

Urethane Polymers International, Inc. (UPI) warrants this product to be free of defects in workmanship and materials only at the time

of shipment from our factory. If any UPI materials prove to contain manufacturing defects that substantially effect their performance, UPI will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by UPI with respect to its materials. There are no other warranties, including the implied warranties of merchantability and fitness for a particular purpose. UPI specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever.

The dollar value of UPI's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the UPI material in question.

TECHNICAL DATA

<i>PROPERTY</i>	<i>TEST METHOD</i>	<i>TYPICAL VALUE</i>		
		<i>TYPE "V"</i>	<i>TYPE "V-2"</i>	<i>TYPE "HD"</i>
CORE				
Color		Black	Black	Black
Thickness	ASTM D-1777	7/16 inch	7/16 inch	7/16 inch
Compressive Strength	ASTM D-1621	15,000 lb/sq.ft.	15,000 lb/sq.ft.	21,000 lb/sq.ft.
FILTER FABRIC				
Configuration		Non-woven	Non-woven	Woven
Material		Polypropylene	Polypropylene	Polypropylene
Tensile Strength	ASTM D-4632	110 lbs	110 lbs	365 x 200 lbs
Trapezoidal Tear	ASTM D-4533	50 lbs	50 lbs	115 x 75 lbs
Burst Strength	ASTM D-3786	215 psi	215 psi	480 psi
Puncture Strength	ASTM D-4833	65 lbs	65 lbs	105 lbs
Elongation	ASTM D-4632	60%	60%	10%
Permeability	ASTM D-4401	0.3 cm/sec	0.3 cm/sec	0.092 cm/sec
Flow Rate	ASTM D-4491	150 gpm/sq.ft.	150 gpm/sq.ft.	100 gpm/sq.ft.

EZE-DRAIN (06)