

Hydrain 350

Sheet Drain

PRODUCT DESCRIPTION - Hydrain 350 sheet drain is a two-part prefabricated soil sheet drain consisting of a formed polystyrene core covered with a woven polypropylene filter fabric on one side of the core. The fabric is bonded to each dimple to prevent soil intrusion into the water channel, and allows the water to pass into the drain core while restricting the movement of soil particles which might clog the core. The core provides compressive strength and allows water to flow to designated exits.

BASIC USES - Hydrain 350 sheet drain is designed for vertical and horizontal drainage applications at shallower depths requiring a high compressive strength and moderate flow capacity and the strength and filtration properties of a woven geotextile. Hydrain 350 provides full-coverage protection to waterproofing materials.

Typical Physical Properties			
	U. S. Value	S. I. Value	Test Method
Fabric Properties			
Material	Polypropylene	Polypropylene	
Grab Tensile Strength	365 x 200 lbs	1620 x 890 N	ASTM D-4632
Puncture Strength	105 lbs	470 N	ASTM D-4833
Trapezoidal Tear	155 x 75 lbs	510 x 330 N	ASTM D-4533
Mullen Burst Strength	480 psi	3304 kPa	ASTM D-3786
Elongation	10%	10%	COE-22125-86
AOS	40 sieve	380 micron	ASTM D-4751
Permittivity	1.36 sec ⁻¹	1.36 sec ⁻¹	ASTM D-4491
Permeability	0.003 in/sec	0.092 cm/sec	ASTM D-4491
Flow Rate	100 gal/min/ft ²	4074 L/min/m ²	ASTM D-4491
Core Properties			
Material	Polystyrene	Polystyrene	
Thickness	0.25 inch	6.35 mm	
Compressive Strength	30,000 lbs/ft ²	1484 kN/m ²	ASTM D-1621 (Mod)
Product Properties			
Flow Capacity	9 gal/min/ft	112 L/min/m	ASTM D-4716
Roll length	50 ft	15.24 m	
Roll width	4 ft	1.22 m	
Roll weight	42 lbs	19 kg	

All physical properties are typical values. Standard variations in mechanical properties of 10% and in hydraulic properties of 20% are normal.

INSTALLATION INSTRUCTIONS

DRAIN ATTACHMENT METHODS - For attaching drain to waterproofing material, concrete or wood, several methods may be used including metal stick pins, nails driven through washers or wood lathing, construction adhesives or double sided tape. Discuss materials compatibility with Hyload before using adhesives. Typically any method used for attaching Hyglass protection board will work with drain. To attach drain to bare earth, use 4"- 8" anchor pins with washers.

VERTICAL - Hydrain 350 may be installed starting at the top or bottom of the wall. The roll may be installed either vertically or horizontally. When installed vertically, the core flange should be at the upstream edge. This flange position minimizes water seepage behind the drain. When installed horizontally, the flange edge of the core should be at the top.

HORIZONTAL - The edge of the core with the flange should be at the upstream side of the plaza.

CORNERS - Bend Hydrain 350 to make inside corners. For outside corners, cut drain core flush with corners leaving 3" of extra fabric. Wrap fabric around exposed edge of drain core securing with tape to back side of core.

BACKFILLING - Soil is to be placed and compacted directly against the drain. Direct compactor exhaust away from drain. Backfill to a minimum depth of 6" above drain to allow for coverage after settlement.