

THE
**ULTIMATE
CHOICE**

EXPOL **STYRO DRAIN** is a lightweight drainage board made from 100% recycled polystyrene.

**STYRO DRAIN**

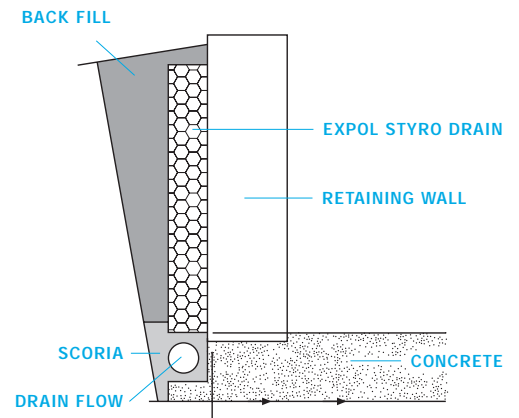
- ¥ Is a lightweight drainage material which also offers protection to the water proofing membrane on retaining and block walls
- ¥ Comes in easy to handle sheets and are 90mm thick; they can be easily cut with a sharp knife or hand saw
- ¥ Can be transported on light trailers and utilities unlike heavy drainage materials such as scoria
- ¥ Manufactured from 100% flame retardant recycled expanded polystyrene
- ¥ Has been tested by Opus International Consultants Ltd (see reverse side for test results)

INSTALLATION

Expol Styro Drain can be placed hard up against the retaining wall after the water-proofing membrane or tanking has been applied. Use Expol Construction adhesive to secure the sheets to the wall before back filling. The sheets of Styro Drain are placed on top of 100mm perforated drain surrounded by drainage gravel situated at the base of the retaining wall.

On high reach retaining walls a double thickness of Styro Drain along the base of the wall may be required to allow for increased compression and better drainage.

Expol Styro Drain should cover all waterproofing membrane and tanking. The sheets of Styro Drain should not be exposed at the top of the wall.



To assist in understanding the results, please read the following as a classification of soil according to Permeability.

Degree of Permeability	Range of Coefficient of Permeability (k) (m/s)
High	Greater than 10 ⁻³
Medium	10 ⁻³ — 10 ⁻⁵
Low	10 ⁻⁵ — 10 ⁻⁷
Very Low	10 ⁻⁷ — 10 ⁻⁹
Practically Impermeable	Less than 10 ⁻⁹



K =	1	10 ⁻¹	10 ⁻²	10 ⁻³	10 ⁻⁴	10 ⁻⁵	10 ⁻⁶	10 ⁻⁷	10 ⁻⁸	10 ⁻⁹	10 ⁻¹⁰	10 ⁻¹¹	10 ⁻¹²
Drainage Characteristics	Good						Poor		Practically Impervious				
Permeability Classification	High			Medium		Low		Very Low		Practically Impermeable			
General Soil Type	Gravels		Clean Sands		Fissured & Weathered Clays			Intact Clays					
								Very Fine or Silty Sands					

TEST RESULTS

Sample	Head (mm)	Hydraulic Gradient (i)	Density (kg/m ³)	Permeability (m/s)
1	34	0.33	11.1	4.13 x 10 ⁻³
2	34	0.33	11.3	4.30 x 10 ⁻³
3	33	0.32	10.8	4.12 x 10 ⁻³
Average		0.33	11.1	4.18 x 10 ⁻³