

# TOTAL DRAINAGE PROTECTION FOR WALLS

## Ausdrain Wall Drainage System

Basement Walls and Retaining Walls constructed underground come into contact with water conductive earth. Penetrating water has the tendency to find any possible points of weakness sometimes resulting in widespread and often irreparable damage. The collection and build up of ground water also creates a great deal of hydrostatic pressure placing large stresses on wall structures.

The Ausdrain Wall Drainage System provides the ultimate solution to these problems. Vertical Walldrain Panels create a structural void between the wall and the back-filled area. Filter Fabric surrounding the panels allows water to filter into the void, prevents sediment from entering the system and cushions the waterproof membrane.

Water entering the system experiences an undisrupted flow that feeds directly into the Ausdrain Filter Pipe where it is discharged to designated stormwater outlets.

The result is a continuous discharge of water preventing any water from coming into contact with the wall surface and also providing relief from hydrostatic pressure.

### MAIN BENEFITS

- Efficient water collection through the vertical void
- Undisrupted flow of filtered water to designated outlets or sumps
- High compressive strength withstands ground and structural movement
- Acts as the membrane protection layer
- Eliminates the need for gravel as the primary back-fill material
- Maintains a dry structure as water is unable to penetrate to the wall
- Void separation facilitates ventilation to the wall
- Rigid panels sit completely flush against the wall during installation

### FEATURES

- Filter fabric wrapped on both sides
- 30mm core (void)
- 100mm sleeve fits consecutive panels
- Height up to 2.85 metres
- Panels made to order to exact heights

### OTHER BENEFITS

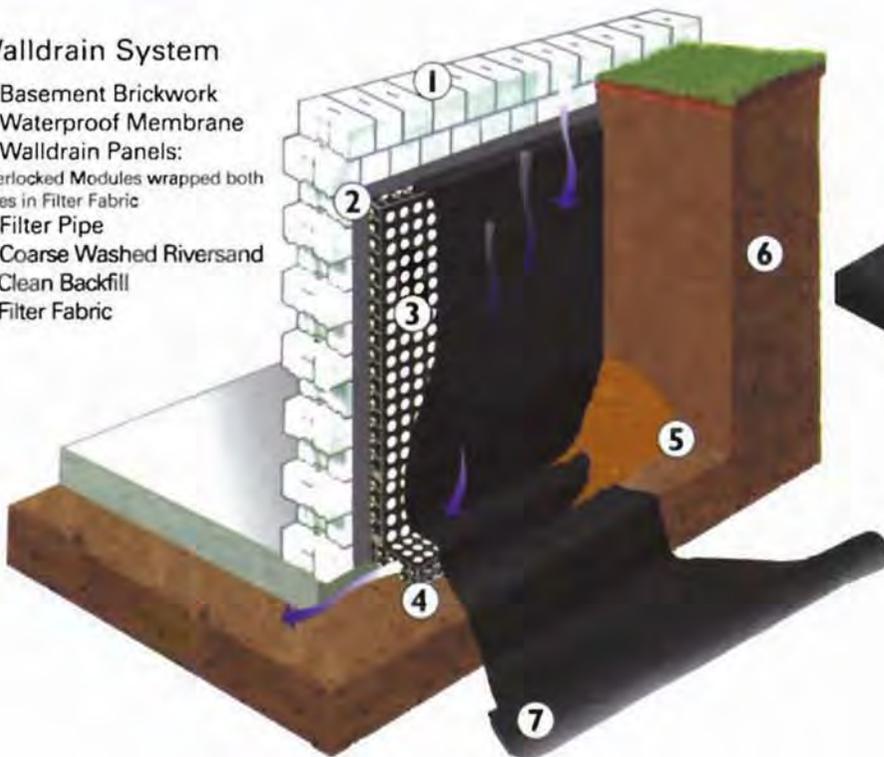
- Light-weight
- Easy to handle and install
- Superior drainage efficiency
- High compressive strength
- Durability
- Cost-effective

### Step-Down Approach



### Walldrain System

1. Basement Brickwork
2. Waterproof Membrane
3. Walldrain Panels: Interlocked Modules wrapped both sides in Filter Fabric
4. Filter Pipe
5. Coarse Washed Riversand
6. Clean Backfill
7. Filter Fabric

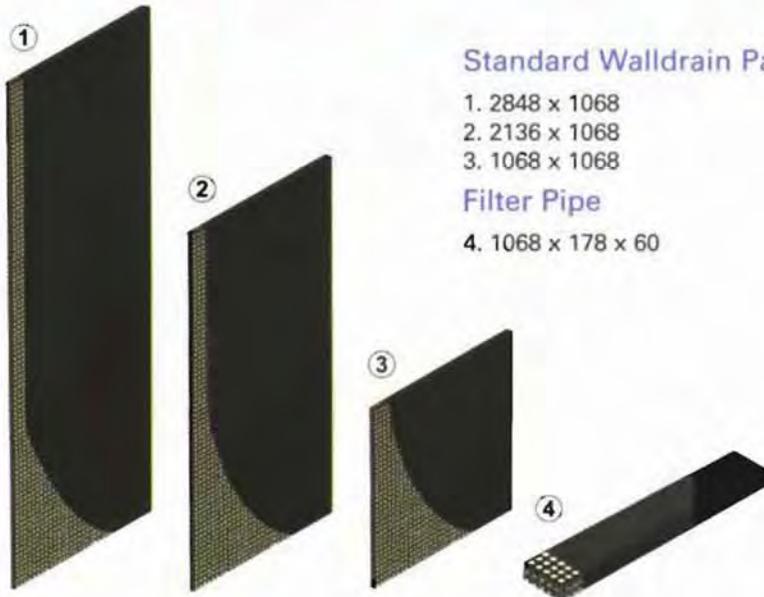


### APPLICATIONS

- Basements
- Underground Car Parks
- Foundation Walls
- Retaining Walls
- Bridge Abutments
- Tunnels

# INSTALLATION PROCEDURE

1. Filter Fabric (600mm width) is rolled along the base of the wall allowing at least 150mm to sit against the wall and Filter Pipe modules placed in a long row.
2. Walldrain panels are placed flush against the wall above the Filter Pipe detaching the 100mm flap at the base rear of the panel to allow complete coverage across the Filter Pipe.
3. Each consecutive Walldrain panel is placed adjacent to one another inside the 100mm sleeve and secured to the wall's surface (interlocking is not required).
4. Overlap the remaining filter fabric from the 600mm roll across the Filter Pipe and secure all seams along the base of the wall and between each panel using adhesive tape.
5. Outlet Pipes are fitted into the sleeve at the end of the Filter Pipe and secured using adhesive tape.
6. The base is back-filled with coarse washed river sand (more is better than less) approx 300mm height.
7. The System is back-filled with normal fill avoiding clay elements.



## Standard Walldrain Panels

1. 2848 x 1068
2. 2136 x 1068
3. 1068 x 1068

## Filter Pipe

4. 1068 x 178 x 60

## TECHNICAL DATA

### Walldrain Panels

Description: Vertical panels pre-wrapped with filter fabric on both sides ready for immediate installation. A 100mm sleeve allows consecutive panels to slot against one another.

Core Thickness:	30mm
Panel Width:	1068mm
Height:	Up to 2.85m
Weight:	3kg/sqm
Vertical Surface Void:	>65%
Volume Void:	>30litres/sqm
Compressive Strength:	>1500 kPa
Drainage Capacity:	>14400l/h/sqm
Service Temperature:	-30c +120c
Material:	Polypropylene
Filter Fabric Material:	Polypropylene

### Filter Pipe

Description: Supplied pre-wrapped with filter fabric and 100mm sleeve or in component form.

Core Thickness:	60mm
Module Width:	178mm
Length:	1068mm/2136mm
Weight:	1kg/m
Vertical Surface Void:	>65%
Volume Void:	>10l/m
Compressive Strength:	>1500 kPa
Drainage Capacity:	>14400l/h/sqm
Service Temperature:	30c+120c
Material:	Polypropylene
Filter Fabric Material:	Polypropylene

## **Disclaimer**

The information presented herein, while not guaranteed, is to the best of our knowledge true and accurate.

While every effort has been made to provide accurate and reliable information, it is up to the user of this brochure to verify all information, including designs it might be based upon, with an independent source. Application of this data must be made on the basis of responsible professional judgement.

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