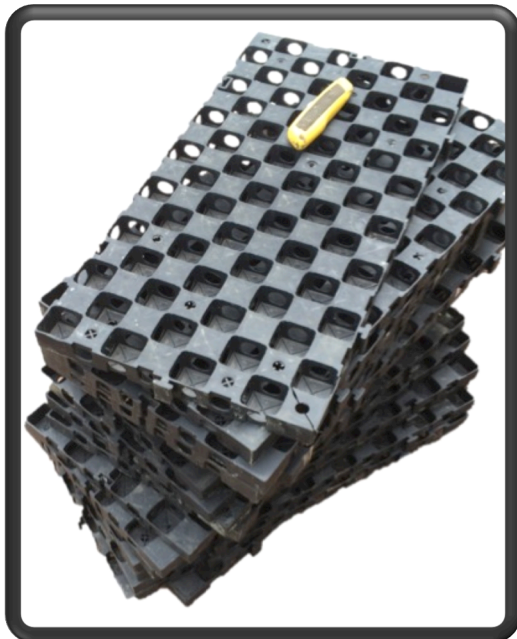


**Product Code:** CD001 - [600x290x25mm]

COREdrainage cells provide an efficient water drainage solution to a variety of applications such as:

- Driveways/ Roads, Highway Edge Drains, (Page 2)
- Retaining Wall/ Abutment Drainage, Basement Waterproofing (Page 3)
- Roof Gardens/ Green Roofs (Page 2)
- Sports Fields/ Golf Courses and Saturated Ground Drainage (Page 4)

The construction of the cells allow water to flow evenly across the surface, avoiding areas of water build up.



COREdrainage cells are made from recycled polypropylene and are extremely lightweight and strong.

When installed vertically and wrapped in a geotextile membrane they form a highly effective fin drain, incredibly thin and unobtrusive with immense water-flow capabilities.

Laid flat they form an effective horizontal drainage void making them ideal for podiums, planters and rooftop gardens.

With a rapid install time and ease of transportation these cells are the ideal solution to sub surface drainage.

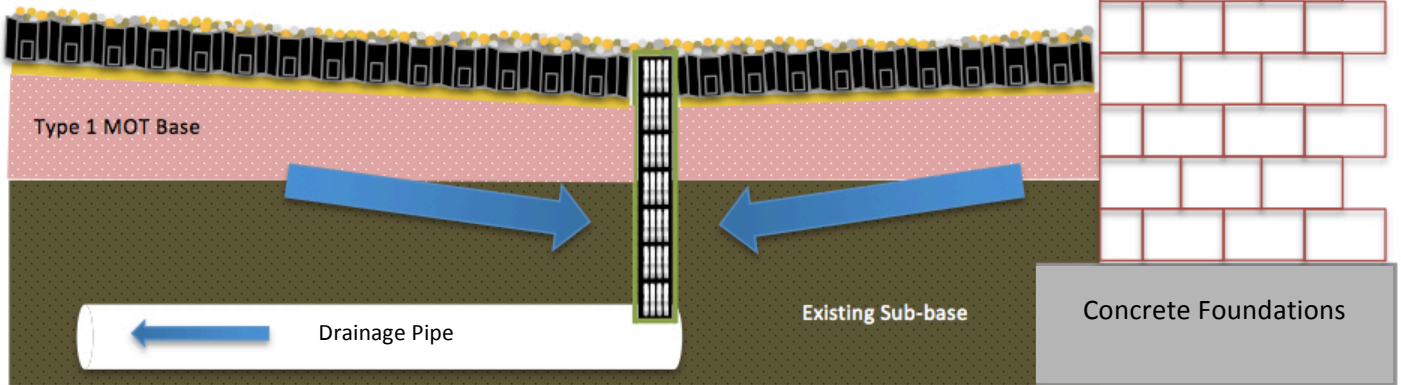
## Advantages

- Helps water flow freely, preventing waterlogged ground.
- Easily installed.
- Relieve hydrostatic pressure in the ground.
- Highly resistant to biological attack and a wide range of soil borne chemicals.
- Permeable surface area of over 80%.



## Installation of Vertical Fin Drain for Driveways, Roads and Edge Drains

COREdrainage Cells are installed vertically into the ground and sit below the finished level of the permeable surface. As the water passes through the permeable wearing course, the vertical fin drain will provide sufficient sub surface drainage to prevent the ground from becoming saturated.



When using a permeable wearing course such as COREdrive, COREgrass, permeable paving or permeable macadam the ground directly below the permeable wearing course will often become saturated with water and the water will flow in the direction that has the least resistance. If this happens to be towards your building you could end up with the wall becoming saturated with water causing damp problems.

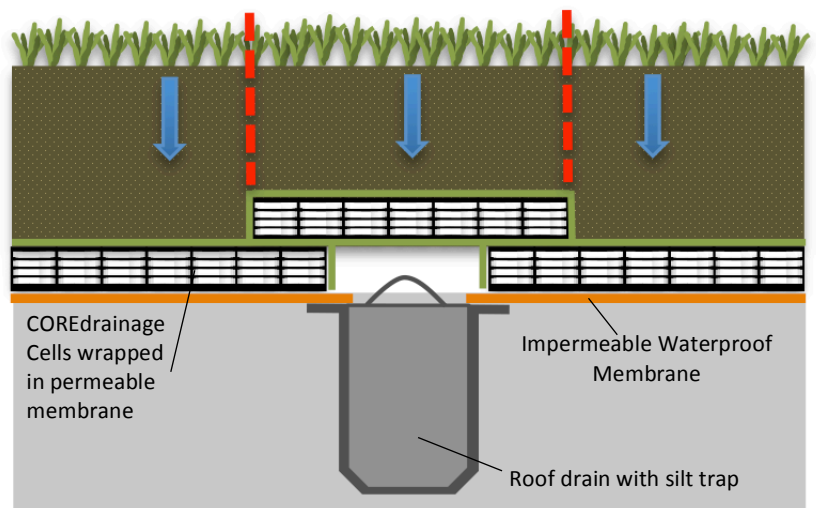
COREdrainage cells can effectively capture sub surface water and transport it away.

This application is perfect for areas where saturated ground meets an external wall of a basement room or a sloped driveway runs towards a building. COREdrainage cells will help relieve the hydrostatic pressure in the ground against retaining walls, stop the ground from becoming water logged and remove the excess water to an area where it will not cause a problem i.e. purpose built soakaway or storage tank.

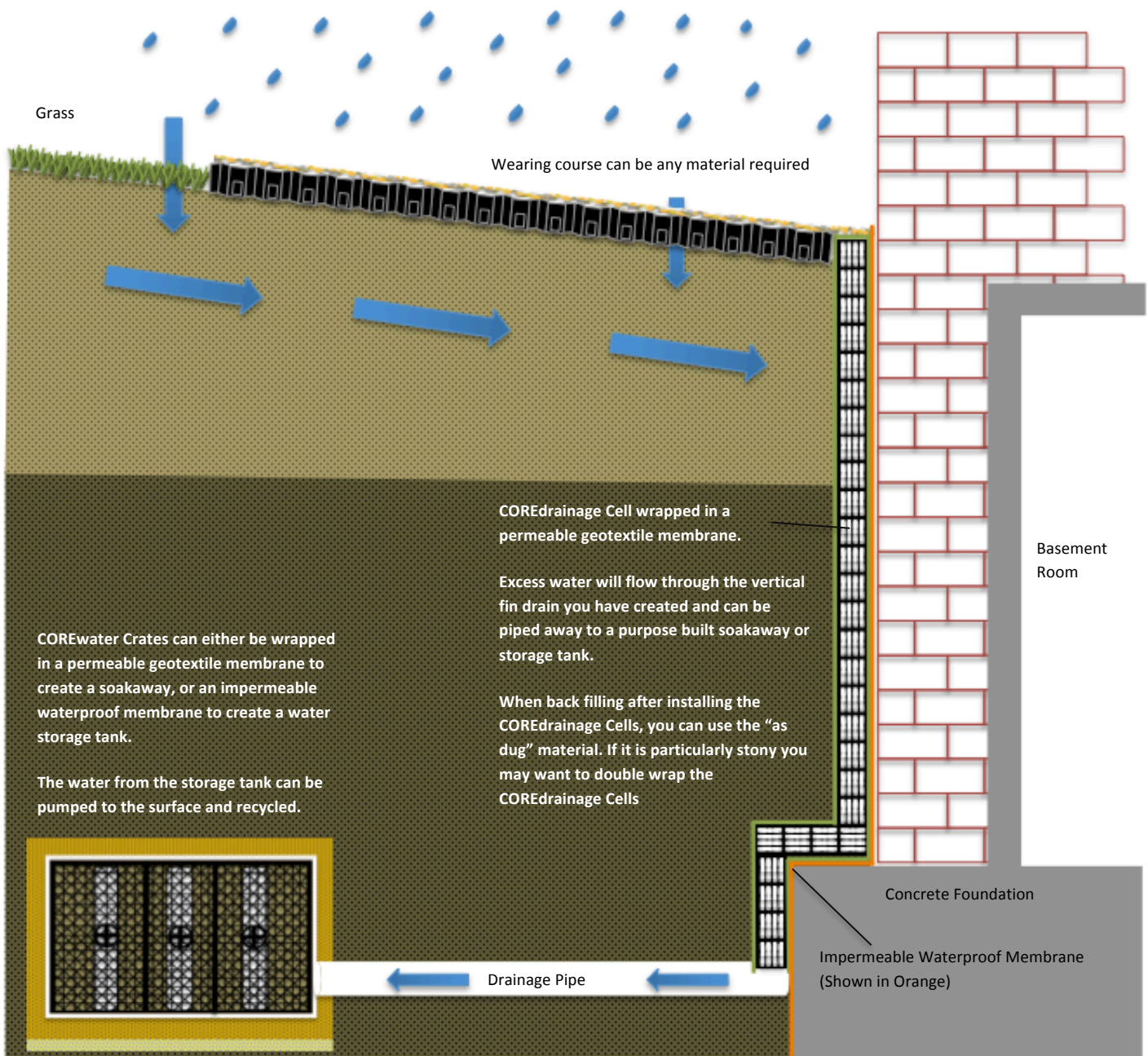
## Installation for Roof Gardens and Green Roofs

COREdrainage cells are perfect for roof top gardens. First cover the existing roof with an impermeable membrane, interlock the cells and lay them directly onto the roof. Next, cover the cells with a permeable membrane, this allows the water through but prevents the cells from becoming clogged with silt. Soil can then be placed directly on top and planted. The increased water flow and high weight bearing properties of these compact modules allow for greater soil depth than alternative methods, giving you a wider variety of plants to choose from when designing your garden. COREdrainage cells also retain enough moisture to provide ideal growing conditions, when used to line roof top planters or raised beds ensuring only unwanted excess water is removed.

By placing the COREdrainage cells in the way shown below, it is possible to remove the drainage cell that is directly above the roof drain without having to detach it from the surrounding cells. This makes the roof drain easily accessible, which is helpful should you ever need to access the drain.



## Installation of a Vertical Fin Drain for Retaining Walls and Basements

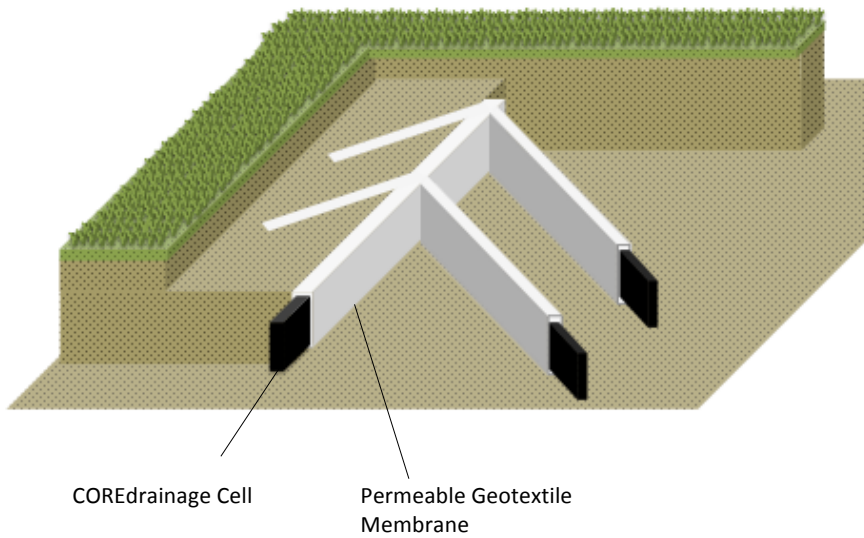


Ground saturation will increase when using a permeable wearing course such as COREdrive, permeable paving or permeable macadam. COREdrainage cells can direct the excess water away from structural and retaining walls. COREdrainage cells will help relieve the hydrostatic pressure that builds up.

Sub surface ground will often become saturated; the water that accumulates will eventually flow in the direction of least resistance. If this happens to be towards your building the wall will become saturated, this will lead to structural and damp problems that can be very costly.

COREdrainage cells provide the perfect solution to this problem.

## Installation of a Vertical Fin Drain for Sports Fields and Saturated Ground



The permeable surface of the COREdrainage fin drain is over 80% compared to the 5% of a conventional perforated pipe. Water is drawn from the soil at a greatly accelerated rate. The drainage cells are wrapped in a permeable geotextile membrane in order to let the water in but keep the silt out. If the ground conditions are stony we recommend that you double wrap the cells to protect them from becoming clogged.

At only 25mm wide with a flow rate of over 5litres per second this system is the perfect retro fit for saturated ground providing effective sub surface water flow with minimal surface disruption allowing rapid re use of the area.

The use of COREdrainage incurs less imported fill cost and has a rapid install time with minimal disruption compared to traditional drainage methods.

## Technical Specification

Description	Data	Description	Data
Product/Code	COREdrainage Cell/ CDC001	Interlocking Mechanism	Pin and Socket Connection
Product Dimensions	600x290mm	Height/Depth	25mm
UV/Chemical Resistance	Excellent	Material	100% Recycled Polypropylene
Colour	Black	Unit Area	0.174m <sup>2</sup>
Service Temperature	-10°C +40°C	Compressive Strength	>1400 kN/m <sup>2</sup> or 140 tonnes/m <sup>2</sup>
Discharge Capacity	5 litres/sec @ 1% hydraulic gradient	Horizontal Void Area	58%

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