



FREESTONE ECO

RETAINING WALL SYSTEM[®]

The Freestone ECO Retaining Wall System is a sustainable DIY retaining wall system which is manufactured with recycled glass aggregates to provide a unique smooth finish that shimmers in the light.

CONSTRUCTION METHODS

The Freestone ECO Retaining Wall System can be built using three different construction methods.

The most suitable method to build the Freestone ECO wall is always selected with consideration to the overall wall height, soil conditions and any loads that impact on the retaining wall such as vehicle traffic, fences or steep slopes.



OPTION 1

Backfilled with 300mm wide blue metal drainage layer

This is a common method for building low non load bearing gravity garden wall. Freestone ECO blocks are built over a compacted gravel footing on a 25mm sand bed; all blocks are filled with 20 mm blue metal. An ag-pipe drain is set up at the back of the wall base and then subsequently backfilled with a 300mm drainage layer.

· Suitable for low walls dependant on soil conditions and any loads, refer to design table 1.



OPTION 2

Backfilled with no-fines concrete drainage layer

Per option 1, Freestone ECO blocks are built as a gravity wall over a compacted gravel footing on a 25mm sand bed. However, to increase the strength of the wall and therefore build higher walls, the blue metal block infill and drainage layer in option 1 is replaced with a “no-fines” concrete mix which both strengthens and increases the mass of the wall.

The “no-fines” concrete still allows water to flow into the drain below.

· Suitable for walls up to 2 metres high subject to engineers design. Refer to design table 2.



OPTION 3

Reinforced and concrete filled on a concrete footing

Freestone ECO blocks are built on a reinforced concrete footing. The Freestone ECO blocks are simply stacked together and reinforced with horizontal and vertical steel, placed in the purpose made locations within the blocks. The blocks are then core filled with concrete to form a reinforced block retaining wall, without the use of mortar.

· Suitable for walls up to 3 metres high subject to engineers design. Refer to design table 3.