



**FLEX
MSE®**

The Ecological Solution

**For Erosion Control, Retaining Walls,
Highways and Waterways**

 **Advance**
Landscape Systems
Green your world™

Simplicity, Adaptability, and Longevity

Flex MSE® is a patented engineered solution for vegetated retaining walls and erosion control. Flex MSE bags and interlocking plates are used to build naturally resilient geomodular structures. A unique soft building material which exhibits hard material qualities, Flex MSE adapts to events that would ruin lesser systems, and only gets stronger and greener as time goes on. Flex MSE is a patented system which leverages Mechanically Stabilized Earth (MSE) principles along with geotextile technology to create strong and easy to install geomodular block structures.



Economical



Eco Friendly



Permanent



**Aesthetically
Pleasing**



**75 Year
Warranty**



Building with Flex MSE®

Flex MSE is one of the easiest systems on the market to install, vegetate and maintain.



Flex MSE bags are:

- ✓ Filled with sand and organics
- ✓ An ideal 'planter block' for many types of vegetation
- ✓ Water and root permeable
- ✓ Flexible enough to create almost any contour or angle

Flex MSE plates are:

- ✓ Made from 100% recycled material
- ✓ Designed to bridge the gap between bags to create an interlocking mechanical connection
- ✓ Engineered with friction strips for greater bag to bag mechanical connection and Geogrid hooks to connect to soil reinforcement.



The Flex MSE® Vegetated Wall system provides the strength of interlocking components without the need for concrete, rebar, wire mesh or other formwork.



Applications and Uses



Vegetated Culvert Headwalls



Riverbank Protection



Highway Walls & Slopes



Landscape & Development



Civil Infrastructure

Slope Repairs (shallow and reinforced)
Retaining Walls
Highway Walls
Bridge Abutments
Noise Barriers
Levees/Dikes



Anywhere Land Meets Water

Culverts and Pump Stations
Stream Bank Protection
River Bank Protection
Coastal Protection
Channel Linings
Detention/Retention Ponds and Reservoirs
Irrigation Canals, Ditches



Commercial and Residential

Large Landscaping Walls
Garden Walls
Site Levelling and Optimisation
Golf Courses and Parks



Emergency Use

Permanent Flood Protection Walls
Wind and Storm Protection Walls
Blast Walls and Bunkers

Flex MSE® Advantages

1

Flex MSE cuts installation times.

Flex MSE walls install in 2/3 to 1/2 of the time of conventional walls.

2

Flex MSE is lightweight and easy to transport.

93m² (1000ft²) of unfilled Flex MSE ships on a single pallet.

4

Flex MSE walls are easy to construct.

DIY'ers to professional contractors can install Flex MSE using our simple installation methods.

3

Flex MSE is cost effective.

The all-in costs for a Flex MSE wall are generally 40-50% less than other systems. Savings in machine, labor, material and transportation costs make Flex MSE an obvious choice for helping generate project cost savings.

5

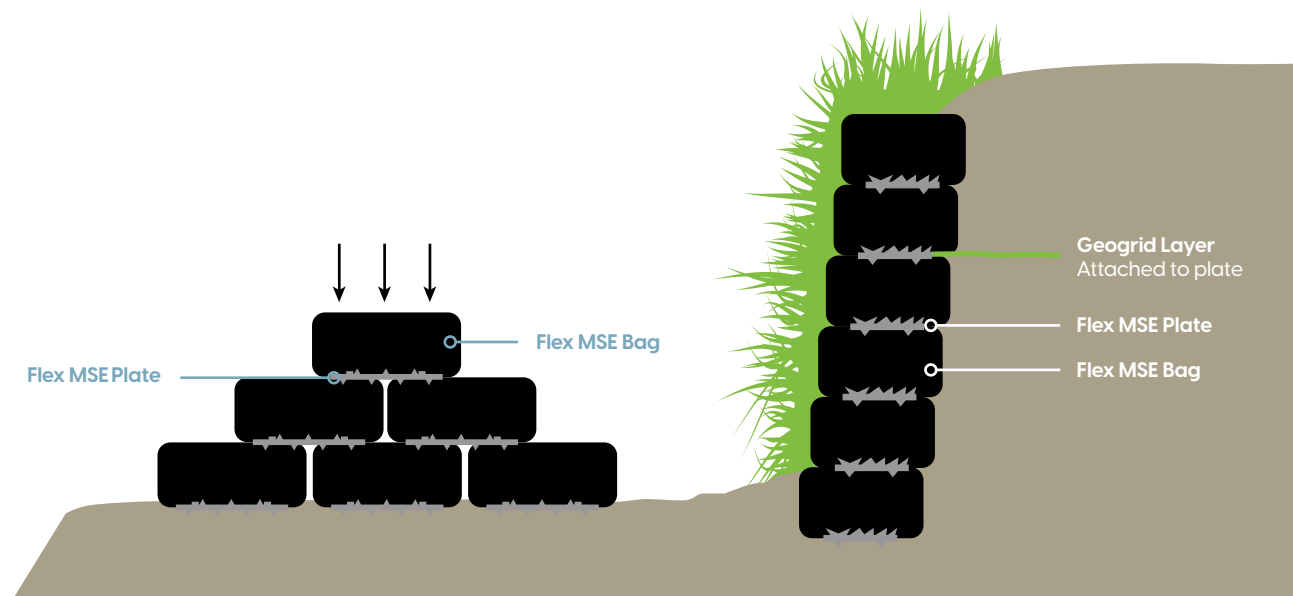
Flex MSE is ideal for a wide variety of applications.

Flex MSE works seamlessly with utilities and landforms and integrates perfectly with other building materials and systems.

6

Longevity

With Flex MSE's **75 year warranty**, lifetime costs can be 1/4 of conventional systems.



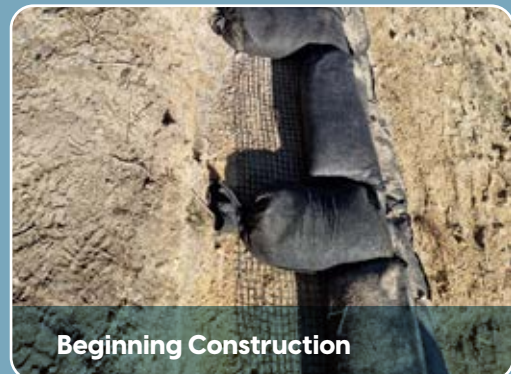
Installation and Vegetation

Installation

- 1** Place Flex MSE plates 760mm (30") apart in a shallow, relatively level trench.
- 2** Center a Flex MSE bag on top of each plate, laid end to end.
- 3** Place a single Flex MSE plate over each bag joint, in a 1:1 ratio.
- 4** Lay each row of bags squarely over the Flex MSE plates, creating an offset 'running bond' pattern. Plates should be completely covered.
- 5** Tamp or lightly compact the bags to create a level course.
- 6** Place and compact backfill every two courses or as required.
- 7** Repeat this process until the desired height is reached, adding reinforcement as required.
- 8** When using Geogrid, the Flex MSE plate's grid hooks secure Geogrid at the select layers.

Vegetation

- A key advantage of Flex MSE is its ability to accept almost all types of vegetation over 100% of the face.
- Vegetation can include grasses, ground covers, flowers, vines, and small shrubs.
- Hydroseeding, live planting and live staking walls are examples of vegetation methods that work well with the Flex MSE system.



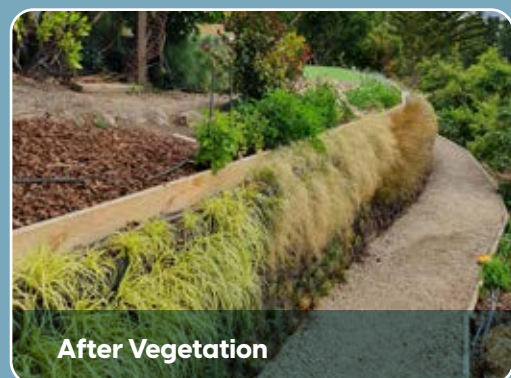
Beginning Construction



Underway



Applying Hydroseed



After Vegetation

Flex MSE® System

Component Specification

Flex MSE Plate

Provides a positive mechanical connection between the Flex MSE bags, effectively interlocking each and every bag into one solid unit. The Flex MSE plate incorporates our patented friction strips and two geogrid hooks per plate.

Dimensions:

Height	42mm (1.65")
Length	285mm (11.22")
Width	99mm (3.90")
Spikes	11
Hooks	2
Weight	63g (2.2oz)



Flex MSE Bag

Flex MSE bags provide the ideal planter block for permanent vegetation. These bags have a filtering functionality to prevent soil particle seepage while permitting.

Dimensions Unfilled:

Width	380mm
Length	890mm

Dimensions Filled:

Width	300mm
Length	600mm-650mm dependent on compaction level.
Height	140mm





For further info or questions, contact:

0800 600 789

sales@advancelandscape.co.nz

Head Office/Main Warehouse: 491 Waterloo Road, Christchurch 8042

Northland Branch: 6 Springs Flat Road, Kamo, Whangarei 0112

Trade Warehouse: 126 Captain Springs Road, Onehunga, Auckland 1061

www.advancelandscape.co.nz

 **Advance**
Landscape Systems
Green your world™