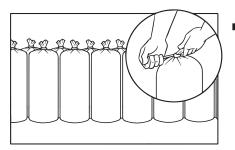
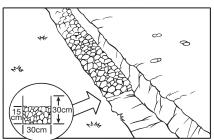


INSTALLATION GUIDE



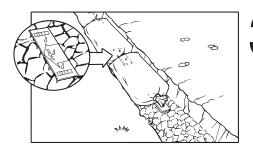
FILLING & CLOSING FLEX MSE GTX BAGS

Fill the Flex MSE Bags with a mix of 70-80% clean granular soils and 20-30% high quality organic materials by volume. If desired, add grass seed to the soil blend while mixing. Clayey and silty granular soils are not recommended. Fill the Bags consistently to the top and seal them tightly with a standard cable tie. Re-bar ties, sewing, stapling and hog rings are also acceptable.



PREPARATION

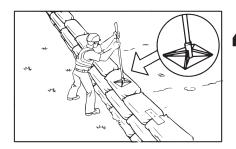
Dig a trench a minimum of 30cm deep and 30cm wide for the length of your Flex MSE structure. Add 15cm of clean granular material to the trench for leveling. The purpose of the trench is to lock the base into place and protect the structure from being undermined by erosion. Taller or in-water structures may require deeper entrenchment, per a designing Engineer's specification. For water applications, armoring the base layers of Flex MSE Bags with appropriate hard material is considered best practice.



PLACE FLEX MSE BAGS & INTERLOCKING PLATE AT BASE

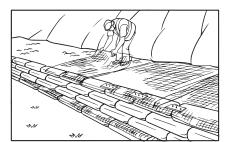
In certain applications, place the Flex MSE interlocking Plate on the ground below the first row of Bags for additional strength. Place the interlocking Plate so that you are reading the "This Side Up" label and the Plate's Arrow is pointing toward the front of your structure. Space the interlocking Plate so that it will lie directly below the joint of each Bag (approx. 75cm apart).

Place the first row of Bags lengthwise in your trench, spacing them with 2cm between the ends of the Bags. Use a hand tamper or light compactor to flatten the Bag into the open spaces and create a uniformly level course. **Do not overlap the Bags.**



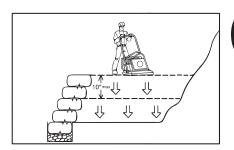
PLACING SUBSEQUENT ROWS

Place a Flex MSE interlocking Plate over the joints of all Flex MSE Bags on each row. Offset each new row of Bags in a "running bond" pattern over the previous row so that the interlocking Plates and Bag joints lie below the middle of Flex MSE Bag on top. After placing the Bag with the desired set back, tamp or walk on top of Bags to lock them onto the interlocking Plate. The Bag face may shift forward with compaction so monitor your set-back as you build the structure. It is recommended to use a batter board or other method of measure to ensure that your angle is consistent.



GEOGRID PLACEMENT (Where required)

Where soil reinforcement is needed, place the lengths of appropriate Geogrid from the front face of the Bags toward the back of the fill area. Orient the Geogrid in the correct direction of its strength. Place the interlocking Plate over the Geogrid at the joints between the Flex MSE Bags. Pull the Geogrid snug, removing folds and wrinkles. Place the next layer of Bags as per Step 4 over the interlocking Plate and Geogrid. Walk on or tamp the row to engage the Flex MSE Plate. Place backfill soil from the front face of the structure to the back of the fill zone; this technique keeps the Geogrid flat and tightly connected to the face.

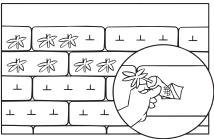


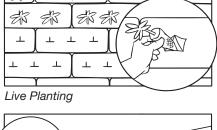
BACKFILLING & COMPACTING THE STRUCTURE

Backfill and compact the fill materials after every two rows of Bags. Structures with a very gentle angle may require partial backfilling every row to prevent Bags from slumping back. Compaction should be done on no more than 25cm thick layers of fill. A vibrating plate compactor is preferred. The typical clean gravel fill zone used behind concrete units is not recommended for Flex MSE structures. Vegetation will penetrate the Flex MSE Bag and grow into the backfill zone, further stabilizing the structure.

Vegetation can be installed during or upon completion of construction. Brush

Layering and Live Staking are done as you build the wall. Live Planting and





Hydroseeding are done after completion. When Live Planting the wall, make up to three small 7 by 7cm plant pocket (I) cuts in each Bag to insert up to a 10cm plant plug. If combining Hydroseeding and Live Planting, apply seed first and then add live plant materials. Thoroughly saturate the structure prior to planting. Preseeding the Bag fill material is an option which can be used in combination

with each of the above methods for added vegetation. Vegetation choices are the owner's preference and should be discussed with



Live Staking / Brush Layering

local experts. Choosing grasses, small bushes and groundcover that are suitable for the local climate and exposure will decrease water needs and increase plant viability.

QUESTIONS?

VEGETATION

0800-600-789

or email sales@advancelandscape.co.nz