

# GEOSMART EPDM

**ROBUST AND DURABLE COVERS FOR QUALITY SILAGE** 





# SUCCESSFUL SILAGE

Protecting stored forage from the effects of moisture and oxygen is key for the health and profitability of a livestock farm. This is equally important on biogas facilities, to avoid a loss of energy.

The Elevate GeoSmart EPDM membrane offers a simple, durable and sustainable solution for silage cover applications, both for bunker silos and silage heaps.





#### Robust

The covered silage can be walked over without risk of damaging the membrane.



#### Durable

Resistant to UV exposure and weatherproof, the membrane can be re-used for several seasons.



### Very low permeability to liquids and gases

Optimal silage preservation quality.



# Flexible (-45°C) and elastic (> 300%)

The implementation is easy and the excellent contact with the support ensures maximum sealing.



# Quick installation

Available in large sheets, the membrane easily adapts to the dimensions of the silo or heap. Its weight eliminates the use of tires and reduces the amount of ballast needed.



# Easy to repair

Simple gluing, even after several years of exposure.



# **Environmentally friendly**

GeoSmart EPDM is a chemically inert membrane that does not release pollutants into the air or in the water. Re-using it over several years substantially reduces the waste generated by the farm or biogas facility.



# **High friction angle**

Facilitates the installation and reduces the risk of accidents by slipping.



# Self-extinguishing

The GeoSmart EPDM membrane stops burning when removed from the heat source.



#### Limited ballast

The weight of the GeoSmart EPDM membrane (965  $\rm g/m^2$ ) greatly reduces the amount of ballast needed.

# **SILO/HEAP PREPARATION**

Cleaning, compaction, and sealing are the three most important factors for the optimization of a silo/heap.

Start by cleaning the storage area. Pack the forage in layers of 15 to 20 cm to eliminate as much air as possible and obtain a smooth surface (without wheel tracks).

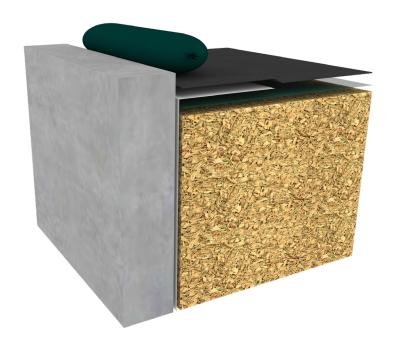
# MEMBRANE INSTALLATION

- 01. If needed, pre-cut the rolls to a length equivalent to the width of the silo/heap (+ 1.0 m) for installing in tiles.
- 02. If applicable, Install a biological protection film (40 μm).
- 03. Unroll the membrane over the width of the silo/heap, leaving an outside edge of 0.5 m.
- 04. Unfold the membrane.
- O5. Place the next panel with an overlap of 20 cm (tiling). To reduce the risk of wind uplift of the overlap, install the top layer in the direction of the dominant winds.
- 06. Install continuous ballast along the entire perimeter of the silo/heap and transversely on the overlapping areas (maximum inter-distance of 10.5 m).
- 07. Repeat steps 3 to 6 until the end of the silo/heap.

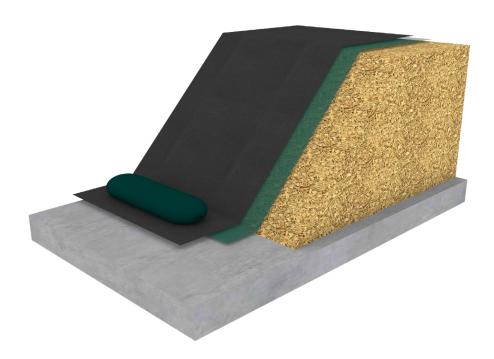
We recommend using Gravel bags as ballast in windy regions



# Lateral detail of a bunker silo

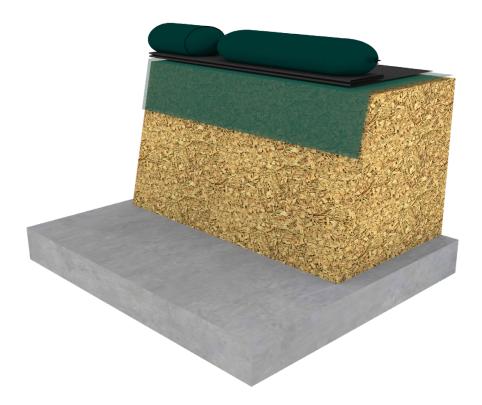


Lateral detail of a silage heap



# **USAGE DETAILS**

The reduction of air intake is critical to prevent silage fermentation within the silo/heap. We recommend to gradually fold the EPDM membrane and the biological protection film (if applicable) at the silo/heap head as needed each day and to maintain a clean front. The surroundings of the silage must also be cleaned daily.

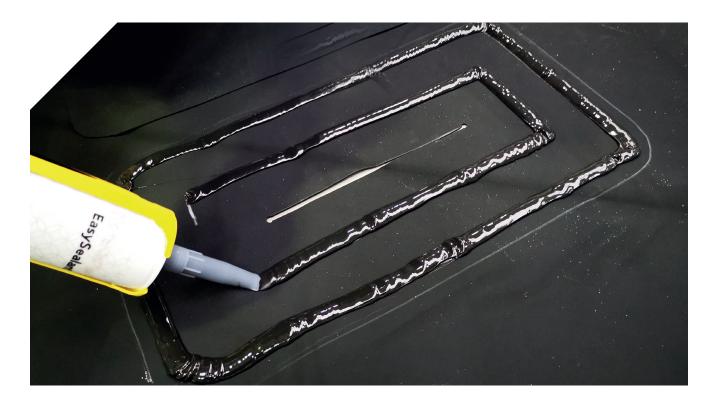


When a section has been completely utilized, fold and roll up the membrane for storage until the next season. If necessary, wash the membrane beforehand with a power water washer. Store the rolls at a height to avoid contact with rodents.



# **MAINTENANCE AND REPAIR**

GeoSmart EPDM requires little or no maintenance. We recommend, however, to check its general condition on a regular basis and repair it immediately if damage is observed. Repairs can be easily carried out using EasySealant, even after several years of exposure.



# **DIMENSIONS**

GeoSmart EPDM is 1.00 mm thick and has a weight of  $0.965 \, kg/m^2$ . It is available in several sizes, to meet the requirements of any silo or heap. Standard roll lengths are 24m, 28m, 32m, 36m. The standard roll width is 10.5 m. Rolls are winded on a 2.2 m core and are delivered on pallets.

The length of the roll should be equivalent to the width of the silo/heap plus 1.0 m. The number of rolls will be defined by the length of the silo/heap (+ 1.0 m and 0.2 m overlaps).

Please contact Vaughan Podbielski @ Cosio Industries on 021 280 7266 for specific projects.





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