

Dimensions

The GeoSmart EPDM membrane is 0.8 mm thick and has a weight of 0.76 kg/m². It is available in several sizes, to meet the requirements of any silo or heap. Rolls are wound on a 2.2 m core and are delivered on pallets. Please contact your local distributor for specific projects.



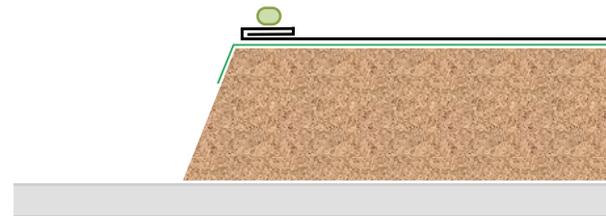
Standard roll dimensions	10.5 m x 24 m	10.5 m x 28 m	10.5 m x 32 m
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Ideal roll combinations as per silo dimensions:

Silo width	Silo length				
	30 m	40 m	50 m	60 m	70 m
8 m	x 1	x 1		x 2	x 1 x 1
10 m	x 1	x 2	x 1 x 1	x 2	
12 m		x 2		x 3	
14 m		x 2		x 3	
16 m		x 2		x 3	

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.

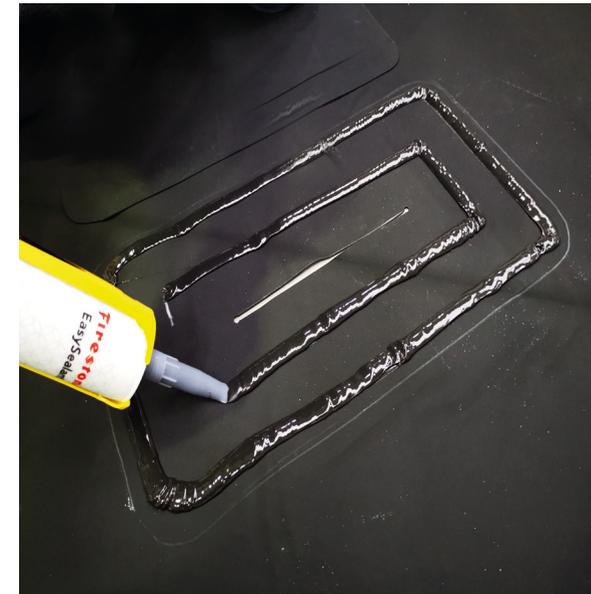


When a section has been completely utilized, fold and roll up the membrane for storage until the next season. If necessary, wash the membrane beforehand with a power water washer. Store the rolls at a height to avoid contact with rodents.



Maintenance and repair

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



Firestone

GeoSmart EPDM
Robust and durable covers for quality silage



Firestone
Firestone Building Products

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Lining for life™

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.

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



Firestone quality

Firestone, a world leader in the rubber industry, produces waterproof membranes of excellent quality. GeoSmart EPDM is a robust, durable and elastic membrane that is ideally suited for agricultural applications.

Firestone

Advantages of GeoSmart EPDM

- **Robust:** the covered silage can be walked over without any 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.

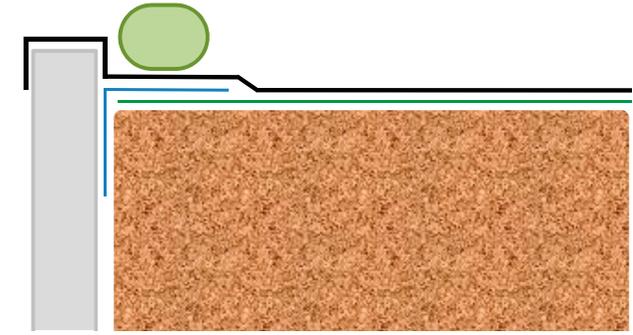
Silo/heap preparation

CLEANING, COMPACTION, and SEALING are the three most important factors for the optimization of a silo/heap.

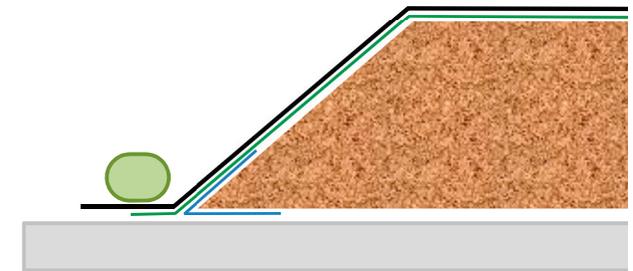
Clean the storage area. Pack the forage in layers of 15 to 20 cm to eliminate as much air as possible and to obtain a smooth surface (without wheel tracks).

Installation

1. Pre-cut the rolls to a length equivalent to the width of the silo/heap (+ 1.0 m) for installing in tiles.
2. Install a biological protection film (40 µm). This step is not needed for biogas applications.
3. Unroll the membrane over the width of the silo/heap, leaving an outside edge of 0.5 m.
4. Unfold the membrane.
5. Place the next panel with an overlap of 20 cm (tiling). Repeat steps 3 to 5 to the end of the silo/heap.
6. Install continuous ballast along the entire perimeter of the silo/heap and transversely on the overlapping areas (maximum inter-distance of 10.5 m).



Lateral detail of a bunker silo



Lateral detail of a silage heap

