

Capacity Charts

As-fed upright silo capacity

Size, ft (diameter x height)	Corn silage & haylage			HMSC	Ground HMSC	Ground HM ear corn
Moisture content	70%	60%	50%	30%	30%	30%
12x30	80	65	50	89	95	70
12x40	115	90	70	120	128	94
12x50	155	120	95	151	160	120
14x40	160	120	96	165	172	128
14x50	213	160	127	208	220	163
14x60	266	200	160	251	264	198
16x30	146	110	88	150	166	123
16x40	209	156	125	220	224	167
16x50	278	208	167	274	285	213
16x60	347	260	208	330	345	259
18x40	265	198	159	270	284	211
18x50	352	264	211	350	360	269
18x60	440	330	264	422	437	328
18x70	530	398	318	496	520	389
20x40	326	245	196	340	350	260
20x50	435	326	261	428	445	332
20x60	543	407	326	525	540	404
20x70	655	491	393	617	638	480
20x80	767	575	460	708	736	557
24x50	626	470	375	600	640	478
24x60	782	587	469	763	776	582
24x70	943	707	565	897	918	692
24x80	1,104	828	662	1,032	1,060	801
24x90	1,275	955	764	1,165	1,209	920
30x80	1,725	1,293	1,035	1,628	1,656	1,252
30x90	1,990	1,493	1,195	1,840	1,888	1,434

Wagon capacity

Depth, ft	Approximate tons (as-is basis)							
	Length, ft (65% moisture)				Length, ft (55% moisture)			
	14	16	18	20	14	16	18	20
3	3.5	4.0	4.5	5.0	2.5	3.0	3.5	4.0
4	4.5	5.5	6.0	6.5	3.5	4.0	4.5	5.0
5	6.0	6.5	7.5	8.5	4.5	5.0	5.5	6.5
6	7.0	8.0	9.0	10.0	5.5	6.0	7.0	7.5
7	8.0	9.5	10.5	12.0	6.0	7.0	8.0	9.0
8	9.5	11.0	12.0	13.5	7.0	8.0	9.0	10.0

Estimated as-fed capacity for bunkers and piles

Enter avg width*	1.	_____	ft
Enter avg length	2.	_____	ft
Enter avg height	3.	_____	ft
Multiply 1x2x3	4.	_____	lb/ft ³ in structure
Est as-fed density**	5.	_____	lb/ft ³
Multiply 4x5	6.	_____	lb as-fed in structure
Divide by 2,000	7.	_____	tons as-fed in structure

*To determine dimensions for piles, look at the slopes of each side of the pile. Visualize how much of the slope would need to be "folded back" on itself to square up the sides of the pile to determine average width.

**Use known as-fed density when possible. Otherwise, start with these average densities: 40 lb for haylage and corn silage; 60 lb for HMSC; and 45 lb for earlage/snaplage. Use higher or lower numbers for well packed or poorly packed units, respectively.

Determine how much Silage Sentinel™ you need

- Multiply the length by the width of the bunker or area where you intend to place the pile.
- Allow for 4- to 10-foot overlap at seams.
- Add 3 to 4 feet at each edge.
- We highly recommend wrapping bunker sidewalls.



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SILAGE SENTINEL™

Oxygen barrier plastic
with industry-leading
technology for greater
dry matter recovery
and less spoilage



Service & technology to get
the most from your forage
www.vitaplus.com/forage-foundations





SILAGE SENTINEL™

Oxygen barrier plastic for greater dry matter (DM) recovery and less spoilage

Proven effective

With research-proven EVOH technology, Silage Sentinel is impermeable to oxygen throughout every inch of the roll. When oxygen is eliminated from the silo, it results in better fermentation, minimal silage loss, less spoilage, and improved animal intakes and health. This adds value to the bottom line in terms of DM recovery, animal performance and labor savings.

Research shows:

- Silage Sentinel is better at preserving DM in the top 3 feet of silage than standard plastic. Silage Sentinel Red is at least 529 times more effective in blocking oxygen than a standard black-and-white cover.
- Silages covered with Silage Sentinel do not spoil and heat upon feedout as quickly as silages covered with standard plastic.

Product options:

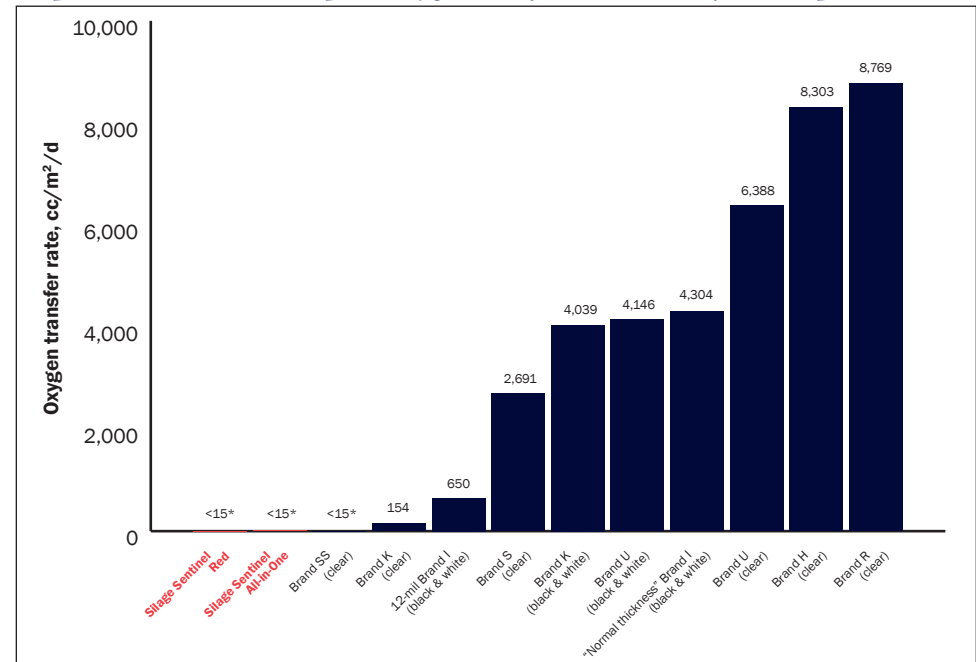
Silage Sentinel Red: 1.8-mil clear, red film used in combination with a conventional plastic cover

- Manufactured with research-proven oxygen barrier technology
- Can be stretched to 668% before tearing
- Clings to silage contours, restricting oxygen flow beneath the plastic
- Recyclable
- **With this two-layer system, if the top layer is punctured, the Silage Sentinel Red layer provides additional protection.**

Silage Sentinel All-in-One: 5-mil black-and-white plastic with incorporated oxygen barrier technology

- One-layer system with same oxygen barrier technology as Silage Sentinel Red
- Can be stretched to 706% before tearing
- Recyclable
- High UV resistance
- **Tough and durable with high puncture resistance**
- **Less labor required for one-layer system**

All plastics are not created equal: Oxygen transfer rates (OTR) of various plastic covers.



*An oxygen transfer rate (OTR) less than 15 cc/m²/d is considered to be the highest oxygen barrier (HOB) plastic.

