



Bale Wrapping Guide

Our Stretch Film

Introduction

At Sigma Agriculture, we offer three different stretch films to fit your specific needs, as well as a full portfolio of complimentary products. This guide will help you understand Sigma's stretch film products as well as the **most effective and efficient use** of these products.

Background

In 1993, a new company set out to change the landscape of the stretch film industry. A few years later, Sigma saw the importance of creating a **specialty product line** for the **agricultural industry**.

It was readily apparent from the early beginnings of Sigma AG that clients need more than stretch film for all their silage needs. For this reason, we added several creative and innovative crop packaging solutions to our line-up, **all under one roof!** Always looking to educate and innovate, we are continuously searching for more agricultural solutions to fit our client's needs.

At the heart of our manufacturing philosophy is a core belief that our products should be **simple to use across a variety of equipment**.



General Information

Bales should be as densely packed as possible:

- Less air means better silage;
- Less bale shrinkage; and
- Better shape is maintained.

Net Wrap can improve bale size and shape thanks to increased coverage and pressure on the bale. Twine however can cause depressions and air pockets. These pockets of oxygen should be avoided to improve silage!



**SIGMA
ULTRA5™**

Ultra 5

Developed for the world's toughest climates, it's reliability and consistency makes Ultra 5 bale wrap the easy choice for all types of round or square bales.

**SIGMA
PERFORMANCE5™**

Performance 5

Performance 5 is a 5-layer, blown, silage film engineered for outstanding machinability for increased efficiency in the field.

**SIGMA
SILA-SEAL™**

Sila-Seal

Sila-Seal is our medium duty, all-purpose conventional silage stretch film that delivers high feed value efficiently and profitably.

More Info

Blown Film

All silage film made by Sigma Stretch Film is produced via the blown extrusion process. This technique creates **great puncture resistance, more chemical bonds throughout the film and allows for bi-axial orientation**. It is a slower process than for cast film, as there is no time required for bonds to be created for this technique, but ultimately blown film is the best and strongest method.

Mold and Spoilage

Ensure bales are covered with at least 6 layers of film at all points. Check for holes and ensure there are no air pockets in your bales. Any spoiled material should be removed before feeding to livestock. Spoilage is caused by excess air entering the bale during the fermentation processes.

Film Storage Information

Film should not be stored in direct sunlight. The ideal storage temperature ranges from **15 to 20 degrees Celsius**. All rolls must be handled carefully to ensure edges are not damaged, for this reason, we recommend keeping rolls in their boxes until the moment of use. You may also consider keeping rolls in a tractor or compartment prior to their use.

Bale Storage Information

Stacking areas should be primarily in the shade, if possible. Ensure there are **no holes** in bales prior to stacking. Bales should be **stacked immediately** (no more than 12 hours) after wrapping. Stacking sites should be level and well drained. **We do not recommend stacking bales over 3 high**, and very wet bales should not be stacked at all. Lastly, bales must be kept far away from fertilizer and other potential contaminants/hazards.

Measuring Stretch

To measure stretch, **mark the roll prior to wrapping with 2 lines, 10 inches apart**. After one revolution, stop the wrap cycle. Find the marks now that the film has been applied and measure the new distance between them. This number should line up with your machines pre-stretch fearing (usually 55% +/- 10 percent). If the stretch is **too high, extra resistance may be occurring**. Ensure the machine is clean. If the stretch is **too low, the film may be slipping through the carriage**.

Timing

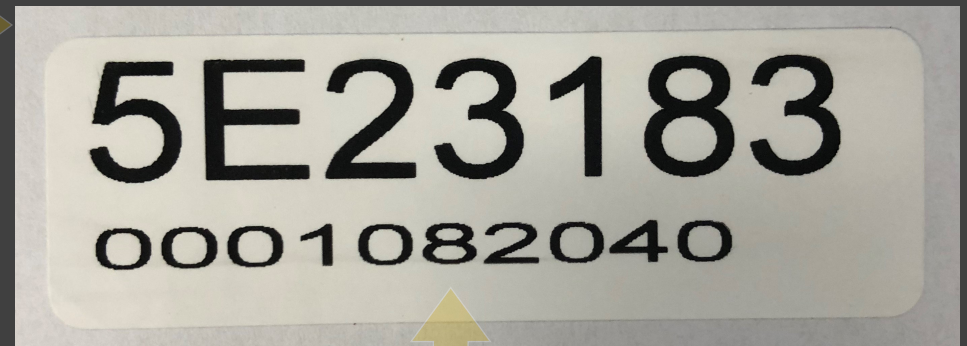
Wrapping within 2-3 hours after baling is ideal. DO NOT wrap in the rain.

Repair Tape

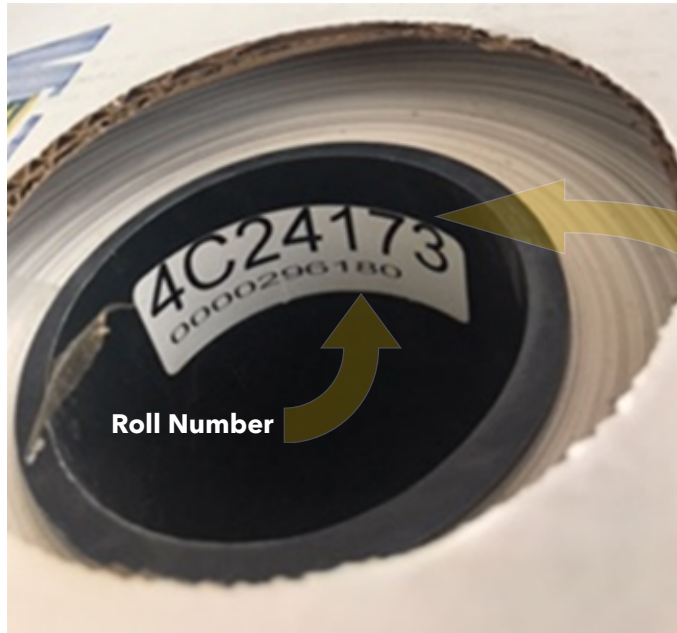
Silage repair tape is intended to cover holes and can be bought along with your silage wrap.

Reading our Label

Production Line (Line 5)
Alphanumeric Month Code (E=May)
Day (23rd)
Year (2018)
Shift (Third)



Roll Number



Production Line (Line 4)
Alphanumeric Month Code (C=March)
Day (24th)
Year (2017)
Shift (Third)



For more information please visit our website at www.sigmaag.com
or contact us at info@sigmaag.com