FLIP DUCT®. A truly unique, easy-to-use calf barn ventilation system.

Currently, every calf barn ventilation system on the market has a key limitation: single season use.

Many of these systems use low-output fans connected to small diameter ducts to deliver low volume, slow air for winter ventilation. They work well for winter. But they lack the ventilation power needed for warmer weather conditions.

Some farms are now adding high-output fans connected to large ducts to deliver more ventilation power during warm weather. These systems work well, yet require more fans, ducts, controllers, and electricity – resulting in increased costs for a system used only 3 to 4 months each year.

These limitations were the inspiration for FLIP DUCT®, the only single-duct ventilation system engineered for both warm and cold weather seasons.

The key difference between FLIP DUCT® and conventional systems can be seen in the manufacturing process.
Conventional fabric ducts are made by sewing together two flexible fabric sheets.

The bottom sheet contains holes, allowing air to be discharged onto calves once the duct is inflated.

FLIP DUCT® is manufactured with a patent-pending internal liner membrane sewn into the middle of the duct. The liner allows a cold weather hole pattern to be placed on one side of the duct and a warm weather hole pattern on the opposite side.

Duct rotation enables you to position the seasonally appropriate hole pattern downward, to discharge fresh air toward calves.

This single-duct system combines a cold-weather duct with a warm-weather duct, providing proper calf barn ventilation all year round.

Let’s look at how easy it is to install FLIP DUCT®, and then see it in action.
Two horizontal cables span the length of the barn and attach to eye bolts at each end. FLIP DUCT’s lightweight, inflatable material easily slips over the barn’s ventilation fan shroud. A clamp secures it to the fan.

Metal snaps securely sewn into the sides of FLIP DUCT® attach to the cables at 3 and at 9 o’clock. Vertical cables suspended from the barn roof attach to the horizontal cables, preventing sag.

FLIP DUCT® can be designed to perform at any height or location in the barn.

In cold weather, a variable-speed fan set to low pushes air through the series of small-diameter holes at the bottom of the duct, gently delivering slow, non-drafty fresh air to calves.

Hole patterns are customized to each barn’s unique pen layout.

When warm weather arrives, simply rotate FLIP DUCT®.

One person can flip a 100-foot length of tube in approximately 10 minutes. Here’s how.
First, detach FLIP DUCT® from the wall-mounted ventilation fan, freeing the tube to rotate.

Next, unclip the series of metal snaps, securely sewn into the tube, from the cable at 3 o'clock, and re-clip them to the cable at 9 o'clock. Unclip the snaps originally at 9 o'clock, and re-clip them to the cable at 3 o'clock.

Reach inside the end of FLIP DUCT®, where it attaches to the ventilation fan. Lift the internal, lightweight membrane and place it over the top of the fan shroud. Turn on the fan. Set the variable speed controller to the high-speed setting, increasing air flow.

Air from the fan pressurizes the tube, forcing the membrane to the top of FLIP DUCT® and inflating the entire run. The cold-weather hole pattern, now located at the top, is blocked.

In this position, air flows only through the series of large-diameter holes at the bottom,
allowing high-speed air
to shower calves with cooling comfort,
while simultaneously blowing away annoying flies and helping to keep bedding dry.
The simple steps for rotating FLIP DUCT® are performed only twice per year, once in spring – in anticipation of warm weather, and once in fall – in anticipation of cold weather.
FLIP DUCT®. A truly unique and simple-to-install innovation for calf barn ventilation.
For more information, contact us at Crystal Creek®. We'd be happy to discuss how FLIP DUCT® can work in your calf barn. Call 888-376-6777.