

# FLAP DUCT



## CALF BARN VENTILATION

- Solutions for every calf barn
- Fully automated (Optional)
- Easily adaptable
- Existing and New Construction
- Developed by a Veterinarian who is also an Agriculture Engineer

For the last 25 years VENTEC CANADA has helped its customers in animal production optimize the efficiency of their operations.

VENTEC CANADA products reduce animal stress due to temperature change, diseases, injuries and mortality through innovative solutions for effective ventilation, patented and durable.

The accessibility of VENTEC CANADA products is via an international distribution network.

**Contact us to find your nearest dealer.**



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# FLAP DUCT

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[www.ventec.ca](http://www.ventec.ca)





# COMMONLY ASKED QUESTIONS

## → HOW DO THESE SYSTEMS WORK?

Positive pressure systems use a fan located at the end of the barn to deliver fresh outside air along a heavy duty fabric tube. The tube carries fresh air the length of the barn and discharges it through holes located above each pen.

## → HOW LONG CAN THE TUBE BE?

Experience has shown an operating length of 140 feet for a single fan system is possible. Longer runs can be accomplished but will require specialized fan equipment and advanced design considerations. In most situations, a tube can ventilate a width of 20-25 feet.

## → WON'T THIS ADDED VENTILATION MAKE IT TOO COLD IN THE WINTER?

Great care is taken in the design of each ventilation system to ensure that fresh air is delivered to the calf without creating a draft in cold weather. A properly designed ventilation system delivers a blanket of fresh air that gently settles over each calf. The use of variable speed fans and the internal membrane technology found in FLAP DUCT® offer unmatched air speed control.

## → I HAVE FANS IN MY BARN ALREADY, ISN'T THAT ENOUGH?

Having fans in a barn does not mean the calf pens are adequately ventilated. Often the air inside the calf pen is poorly ventilated despite having numerous fans throughout the barn. If you are unsure about the ventilation status of your calf barn, call and schedule a calf barn ventilation evaluation with your sales representative.

## → ARE THESE SYSTEMS EASY TO INSTALL?

Yes! The positive pressure tube system comes complete from the manufacturer with everything necessary for installation along with an installation diagram.



Ventec offers its clients this technology built on the innovation of FLAP DUCT®. This system of membranes, or flaps, can be moved up or down to control air flow based on seasonal needs for better animal comfort.

Ventec offers the FLAP DUCT® in 2 different sizes and 2 hole pattern configurations. The automated option is shown below, offered by Ventec Canada. See your sales representative for more details.

# RETROFITTED BARN

FLAP DUCT'S AIRTIGHT MEMBRANE IS AN IDEAL SOLUTION FOR THIS TYPE OF CALF HOUSING, AS IT CAN DIRECT AND CONTROL THE FRESH AIR EXITING THE DUCT BASED ON SEASONAL NEED.



## WARM WEATHER

In warm weather, turn the variable speed fan to high, increasing airflow and position the internal membrane to the top of the duct using the lever control mechanism. Air from the fan will force the airtight internal membrane to the top of the duct, blocking the holes on the top and forcing air through the series of large-diameter holes at the bottom of the duct. Showering calves with high speed, cooling air; blowing away annoying flies and keeping bedding dry.

## COLD WEATHER

In cold weather, turn the variable speed fan to low, decreasing airflow and use the lever control mechanism to position the airtight internal membrane to the bottom of the duct, blocking the large diameter holes. This diverts the fresh air away from the calves through multiple small holes in the top of the duct, causing it to deflect off the ceiling and gently fall into the calf pen.

# CURTAIN SIDEWALL BARN

IN NATURALLY VENTILATED BARN WITH CURTAIN SIDEWALLS, FLAP DUCT'S PERFORATED MEMBRANE ALLOWS FOR QUICK AND EASY CHANGING BETWEEN COLD WEATHER AND WARM WEATHER VENTILATION SYSTEMS.



## WARM WEATHER

During warm weather, the variable speed fan is set to high and the internal membrane is in the up position, allowing the large diameter holes in the bottom of the duct to discharge fast air onto the calves. Being able to rapidly switch between a cold weather and warm weather system, with just the flick of a lever, is particularly useful in the spring and fall when the nights are cold and the days are warm.

## COLD WEATHER

During cold weather, the variable speed fan is set to low and the internal membrane is in the down position, overlapping the large diameter exterior holes with the smaller holes in the membrane, creating weak, steady air jets that deliver slow, non-drafty air to calves. Additional "relief" holes can be added to the top of the duct to discharge excess air safely away from calves in cold weather.