



Roll-Over

CURTAIN

Owner's Manual



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Introduction

Overview

This Owner's Manual contains all essential information for the user to make full use of Sun-North's Roll-Over Curtain system.

Important Information

Roll-Over type curtain systems can be described as poly curtains that cover the sidewall ventilation openings on a livestock housing building when closed. When ventilation air is needed for temperature control & fresh air supply, the curtain can be opened from the top downwards to provide some, or more, opening as needed to let air into & through the building.

As Rollover type curtain systems open, the curtain material, instead of simply folding downwards, is rolled onto a pipe that rotates at the bottom of the curtain. The top mounted cable system, with spaced drop cables attached to the top of the curtain, lowers, or raises the curtain as needed to make opening size changes. This cable system is also attached to a rotating drum, or spool, at one end of the bottom pipe. This drum also connects to the bottom pipe by a universal joint equipped shaft to make this cable on/cable off operation and bottom rotating pipe a combined operation.

Roll-Over type curtains can therefore be kept in a taut and tidy manner, regardless of the opening position, for better appearance and potentially longer life than fold down only curtain systems.

General Operation

Roll-Over curtains can be operated by either manual or electric drive units:

Manual drives allow the operator to choose when they wish to open or close the curtain. The curtain can be left in any position to allow the desired amount of ventilation.

Electric drives can be controlled by a simple 3 way switch giving you similar options as above, or by thermostatic controllers to control the opening as needed and maintain a desired temperature range inside the building.

Pinch point safety screen should always be used on the inside of Roll-Over curtains. Material must roll from outside towards inside, thus the pinch point will be on inside and behind screen.

Covers must remain on motor and drive. (only remove for servicing unit.)

*****Do not wash during cold weather as there may be a risk of freezing*****

General Maintenance

Monthly

Check all components of the complete curtain system to ensure there is no wear/damage or problems. Repair or replace any worn/damaged items.

Items to pay special attention to:

- Cable system, check for wear/fraying and that all cables are riding in the pulleys correctly.
- Drive unit enclosures must be kept free of foreign objects, such as bird's nests.
- Operate the system to ensure that it is functioning correctly.

Seasonally

If your curtains operate in a climate with potential for outside temperatures below 0°C/32°F you need to be aware of the following conditions and implement one of the management options when applicable.

- When the outside temperature is colder than the inside temperature there is potential for condensation to form on the inside of the curtain.

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- When the outside temperature is below the freezing point there is potential that this condensation will form as frost on the inside of the curtain.
 - It is likely that frost could buildup on the inside of some of the curtains which could then be trapped inside the curtain during the rotation of the bottom pipe. This then changes the circumference and size of the bottom pipe and rolled on layers of curtain. If left unchecked, this pulls the entire rolled up unit upwards and can result in cable breakage, pulley removal or even entire drive unit removal/failure, resulting in a system that no longer functions and could leave the sidewall open and out of service.
 - Curtains that are exposed to the winter sun, i.e. south or southwest, are less likely to have frost/ice buildup issue to the same extent as other, less sun exposed curtains.

There are several best management practices that can minimize the time or amount of frost buildup.

- Maintain the inside temperature of the building as cool as possible. (e.g. dairy cows in winter 0-3°C)
- Keep the building well ventilated, ridge ventilation is especially important during colder weather to draw out moisture laden air, this will keep the humidity level low in the building, thus decreasing the potential for condensation and frost.
- Regular, or daily, use of curtain can reduce the buildup of the frost as some may fall off when curtains are operated. (Typically opening them 10-20% will be effective.) This will not prevent frost buildup or eliminate the issue but can be helpful.

If your curtains are manually operated then you should be able to operate within the capabilities of the system and not roll up ice to create this problem, this requires an operator that is aware of the issues and can judge when not to operate.

If your curtains are automated please review options for mitigating this issue (You may need 1 or more of the following):

- Switch the controls to off and then operate the curtains from the manual settings at the control. Essentially the same as if the curtains had manual operators only, at least for the coldest months. This may be an option for some or all your curtains.
- The bottom, normally rotating pipe, can be disconnected. This means that the curtain may still open from the top down in a fold down manner but the curtain slack is not taken up or roll stored. After the frost & ice season is past, the drive pipe can be re-connected. (See Roll-Over disconnection & reconnection instructions for details.) With this option it is important to note that if the curtain opens fully the cable system will likely go slack causing cables to come off pulleys and cause future problems. Some systems have Slack Cable Detectors installed which will prevent this. Otherwise, it is important to minimize the amount these curtains open while disconnected and inspect them weekly during this period.

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- Some temperature controllers allow for position control. The advantage of this is the ability to select at the control how much opening, by %, is allowable. Therefore, for cold weather conditions a maximum opening of i.e.15 % would likely be plenty while moderate seasons might be 50 % and of course an opening of 100% would be needed for hot weather. This change is easily made by the owner/operator at the control inside the building.
 - Operate the system to ensure that it is functioning correctly.

Yearly

Curtains should be cleaned periodically. Any buildup of dirt, dust, ice or other foreign material should be removed. This can be done by brushing the fabric, washing using a low pressure system (if scrubbing is required to remove extra material use only a soft bristled brush and using typical household mild cleaners. (No harsh chemicals or acids or ammonia products should be used as these could damage the material.)

Items may also become trapped in the rolling fabric including bedding, feeds, animal hair from cattle brushes and even rocks and trapped rodents. This will cause the units to operate incorrectly and will need immediate attention.

Attentive management and operation is required during all seasons.

Warranty

Labour

When a Sun-North installer delivers and installs Sun-North products, then the labour on that portion of the product he installed is warranted for 60 days from the date of installation. If there is a problem within 60 days, a Sun-North installer will return and repair the problem free of charge. If the customer installs the product, this labour warranty is not valid.

Product

This warranty covers defects in manufacturing for a period of three (3) years. Products that are not installed or maintained properly and/or are damaged by carelessness are not covered by this warranty.

Defective Products or material will be promptly repaired or replaced at Sun-North's plant, free of charge within the first 12 months from date of purchase (replacement is at Sun-North's discretion). This does not cover labour to remove or replace parts of freight, to and from the plant. Within the remaining 2 years of the warranty, Sun-North will repair the defective material at Sun-North's lowest shop rate of \$25/man hour, plus the base cost of replacement parts.

******Sun-North will be responsible only for repairs or replacements of defective material, and will NOT be liable for any incidental or consequential damages arising out of the occurrence of such defects.***

******Sun-North shall not be liable or responsible for personal injury or damage to properly caused directly or indirectly by the supplied material or product.***