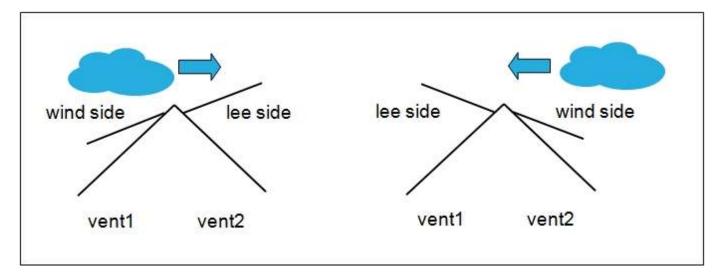
Ventilation

- 1. Ventilation general
- 2. Ventilation lee side/wind side

1. Ventilation general

Most greenhouses have 2 vent sets, vent1 and vent2. Vent1 is usually the vent on the side of the barn or the street.

Depending on the wind direction a vent is the lee side or the wind side.



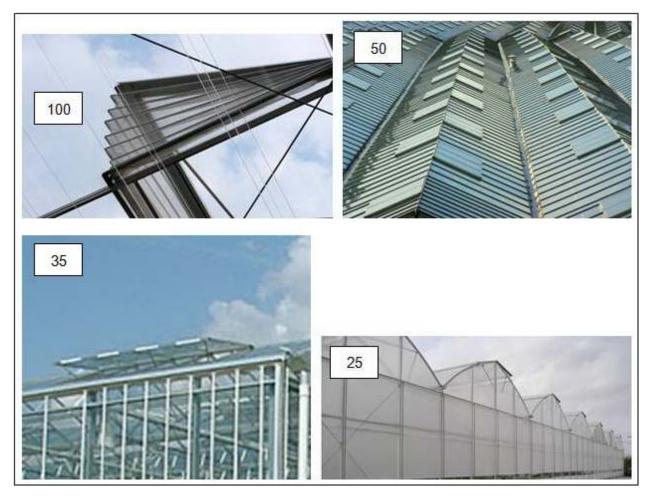
The setting list of "Ventilation general" is as follows:

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ettings Status Alarms Measure & Actuate	· ·			
Settings	Unit	Value		
influence step size (P-control oa)	%	50		
lee side priority over wind side		Yes		

influence step size (P-control oa)

This setting is used to adjust the vent position as a function of the capacity of the vents. The larger the number, the greater the step sizes.

- 1. For a small ventilation capacity (2 vents for ventilation): set to 100
- 2. For normal ventilation capacity: set to 50
- 3. For a bigger ventilation capacity: set to 35
- 4. For a large ventilation capacity (continuous ridge ventilation): set to 25



In the control the following ratio is defined:

influence step size (P-control oa)	P-range lee side	P-range wind side
0	7 - 15.6	9 - 20
25	6 - 13.3	8 - 17.8
50	5 - 11.1	7 - 15.6
75	4 - 8.9	6 - 13.3
100	3 - 6.7	5 - 11.1

Example:

The step size is 50%. The lee side P-range is 5°C in hot, windless weather and 11.1°C in cold and/or very windy weather.

lee side priority over wind side

There are settings for the lee side and wind side.

Often the settings for the wind side set such that it first vent with the lee side and then to the wind side.

So by differentially adjusting these settings is shown how to be vent. There is no setting "backrun wind side."

If you opt for NO, a uniform ventilation amount is used for the lee and wind sides. The degree of ventilation uniformity also depends on:

- whether or not a different setting has been entered in lee and wind side ventilation temperatures
- the moderate-large ventilate setting
- the % wind influence setting

If you opt for YES, the desired ventilation amount is used in hot weather with a larger lee side vent position and a smaller wind side vent position. If the greenhouse temperature is too high, the lee side is gradually opened first as far as the maximum vent position, followed by the wind side.

2. Ventilation leeside/windside

The setting list of "Ventilation lee side" and "Ventilation wind side" you can adjust to the following lists:

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lee side vent position minimum: ViP	%	0			
lee side vent position maximum: ViP	%	100			
lee side influence moderate - large ventilate: ViP	%	50	1		
lee side vent position humidity: ViP	%	0.0			

✓ Sa Status Alarms Measure & Actuate					
wind side vent position minimum: ViP	%	0	•		
wind side vent position maximum: ViP	%	100			
wind side influence moderate - large ventilate: ViP	%	50	•		
wind side vent position humidity: ViP	%	0.0	-		

lee side vent position minimum: ViP lee side vent position maximum: ViP The limits of the vent.

lee side influence moderate - large ventilate: ViP

This setting is used to ensure that slightly more ample ventilation is provided particularly in spring and autumn.

- Extremely moderate ventilation: set lower than 0
- Very moderate ventilation: set to 0
- Normal ventilation: set to 50
- Ample ventilation: set to 100
- Ample ventilation and to switch off the automatic weather-dependent limitation of the 'lee side: computed reduced maximum vent position': set to 101

Normally setting moderate - large ventilate is set on 50% on the lee side and 30% on the wind side.

lee side vent position humidity: ViP

The plant produces moisture by transpiration.

If the outdoor temperature is low, this moisture condenses against the roof, ducts and outside walls.

If the outdoor temperature increases, there is less condensation, and moisture has to be discharged via a minimum vent position.

The vent position hunidity is a small vent position which operates as a minimum vent position and is used irrespective of the greenhouse temperature.

You can make use of influences such as outdoor temperature and wind speed to prevent too much cold air entering.

Normal vent position hunidity is used only on the lee side.