

H21 - Temperature strategy



Location of sensor



FRATS pen. Cover with front edge and minimal opening between floor and cover. As the pig grows, the cover increases gradually.

Choice of temperature strategy depends on the design of the facility and ventilation principle

1. Place the temperature sensor in a representative spot in the facility and as close to the animals as possible. Remember, there must always be pigs below the temperature sensor in the pen.
2. If the temperature sensor is influenced by a heat source or air intake, the sensor may be covered in a PVC tube or similar device.
3. Place the outdoor sensor on the north side of the building and as close to the roof overhangs as possible to hinder solar influence.
4. The *smallest pigs* at weaning make the greatest demands to the immediate environment in the pen. Ideas that can provide a warmer immediate environment:
 - Lower cover
 - Bedding material and/or straw board
 - Curtain of plastic or paper (temporary)
 - Front edge led down to the floor and minimal openings for the pigs (dog hole plate).
 - Heating lamps in the cover.
5. The smallest pigs must not be placed in end pens, under ventilation or in pens with temperature or humidity sensors.



Be aware of

- The temperature sensor must always be with pigs below. The pen must not be empty. See photo
- The temperature sensor in the facility is not directly affected by a heat source or air intake.
- In special cases (buildings that are not situated directly east-west), the outdoor sensor can be covered by, for instance, a plate to avoid solar influence.

Additional comments - Temperature strategy

Examples of temperature strategies

IMPORTANT: Always look at the pigs, temperature under cover is only indicative.

Weaners, two-climate-controlled livestock building with partially slatted floor

Day	1	7	14	21	28	35	42	49	56
Weight, kg	5.5	6	7	8.5	11	15	18	25	30
Temp. under cover ° C	31-32	30-31	29-30	28-29	27-28	26-27	25-26	22-23	21-22
Floor under cover ° C	32	32	32	32	32	Turned off	Turned off	Turned off	Turned off
Desired room temp. *, ° C	25-26	24	24	23	22	21	20	19	18
Desired moisture**, %	60	61	61	62	63	64	70	71	72

* The room temperature must be adjusted to achieve the desired temperature under the cover.

** Note. The less moisture required, the more heat consumes the facility.

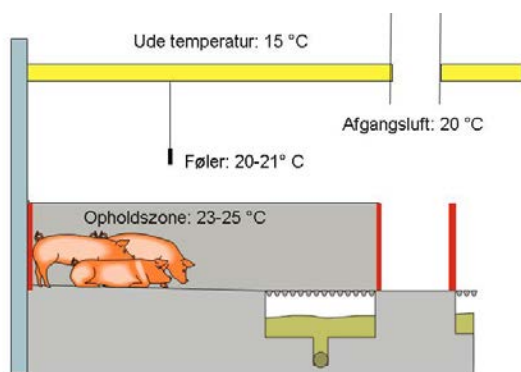
Finishers, partially slatted floor

Vægt, kg	25	30	40	50	60	70	80	90	100
Diffuse air intake, ° C	18	17	16	16	15	14	14	13	13
Radiant ventilation, ° C	20	20	19	18	17	16	15	15	15

Finishers, fully drained floor

Weight, kg	25	30	40	50	60	70	80	90	100
Diffuse air intake, ° C	20	19	18	18	17	16	16	15	15
Radiant ventilation, ° C	21	20	20	19	19	18	18	18	18

**Combi diffuse facilities are also in this group



It is important to be aware of temperature conditions in the facility and the pen when deciding on temperature strategy and settings.

At an outdoor temperature of 15° C and with a standard ventilation system, the temperature of the exhaust air and by the sensor will normally average 20° C. The temperature in the pigs' activity area will be somewhat higher. In diffusely ventilated facilities, the temperature is typically 3 to 5° C higher in the pigs' lying area than when recorded by the door. The more closed the inventory, the higher the temperature. It is easy to record the temperature in the pigs' lying area with an infra-red thermometer. Record the temperature on the pen side just above the pigs.