

## Ventilation system with fireplace

### Simultaneous operation of a ventilation system with fireplaces

The calculations for controlled domestic ventilation are based on DIN 1946-6.

If a room-air-independent fireplace is installed in connection with our ventilation systems, the LUNOS planning for a pure exhaust air system is designed for a maximum negative pressure of 8 Pa, i.e. so many supply air elements are planned that a negative pressure of 8 Pa is not exceeded.

In the case of a room air-dependent fireplace, the system is designed for a maximum negative pressure of 4 Pa.

For systems with heat recovery  $e^2$ , the pressure for the calculation is 2 Pa (weak wind) or 4 Pa (strong wind) and for hybrid systems ( $e^2$  in connection with exhaust fans) 4 Pa.

However, these values may differ due to structural conditions or unforeseeable influences. It is strongly recommended that the values be checked by a specialist after commissioning.

LUNOS cannot assess whether or not a pressure switch must be installed for fireplaces that are independent of room air. This always remains the decision of the chimney sweep, designer or building supervisor.



### To the room air dependent fireplace

DIN1946-6:

"Ventilation systems must not interfere with the proper operation of combustion systems. The requirements for the installation and the combustion air supply of fireplaces are summarised in the state firing regulations". (Item 8.5.1)

"The operation of room air-dependent fireplaces with fan-assisted ventilation systems / appliances requires the installation of suitable safety equipment. A distinction shall be made between alternating and joint operation of the plant / appliance and the fireplace." (Item 8.5.2)

"An alternating operation requires a safety device which ensures that the ventilation system / appliance may not be put into operation or is not operated any further if conventional fireplaces operated dependent on room air are additionally put into operation. Safety devices for alternating operation must meet performance criteria in accordance with the state of the art". (Item 8.5.3).

Please observe the instructions in the general building supervisory and / or European technical approvals for ventilation systems and fireplaces.