

Indirect fired make-up air unit

Concept

This appliance is used when fresh air has to be introduced from outdoors for ventilation purposes and so that indoor air quality is maintained at an acceptable level.

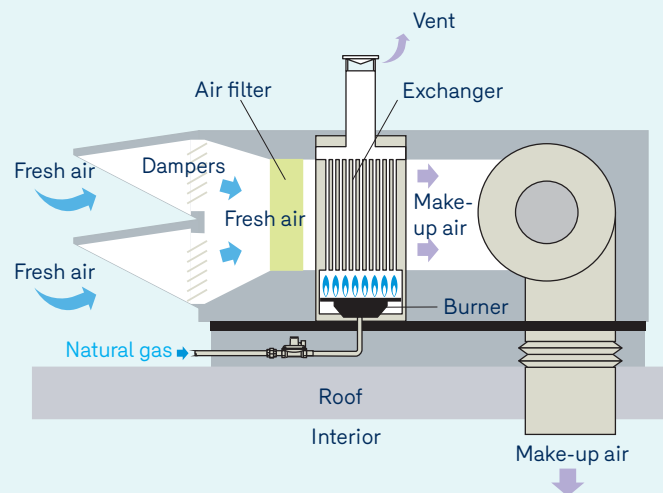
Air compensators can supply heated or cooled air, depending on the building's needs. The components of a compensator are the:

- Fan
- Heating or cooling element
- Filter
- Heat exchanger
- Electromechanical controls

With the assistance of the heat exchanger, the indirect fired system allows fresh air to enter while venting the combustion products outside the building.

These appliances can be installed both indoors and outdoors. They are available with or without modulation. The models equipped with a modulation device allow the quantity of fresh air to be reduced according to demand. Under these conditions, the appliance is coupled to a CO₂ detector or a static pressure sensor.

Air compensators consume a lot of energy and require high power to handle the often high fresh air flows. This is why they frequently operate on natural gas.



Advantages

- Comfort and good indoor air quality.
- Combustion products vented outdoors.
- No depressurization inside the building.
- Modulation can be used to reduce energy consumption.
- Preheating can be done with an energy recovery coil.

Applications

- Offices
- Schools, colleges and universities
- Hospitals
- Industries
- Big box stores
- High-rise housing (condos)

Energy Efficiency Financial Assistance*

Technology eligible for the Feasibility Studies and Implementation of Energy Efficiency Measures Grants. See energir.com for more details. The assistance is subject to a calculation of energy savings by the engineer of the customer requesting the assistance.

List of manufacturers

Here is a non-exhaustive list of manufacturers. This list may be revised and amended as needed.

- Aaon
- Airex Industries
- Bousquet Technologies
- Engineered Air
- Haakon Industries Inc.
- McQuay International
- Trane

Selection criteria

- Indoor air quality.
- Air pressure and balancing inside the building.
- Required ventilation rate and air change rate (CSST).
- Indoor temperature control level.
- ASHRAE Standard 62.1- Ventilation for acceptable air quality
- National Building Code (NBC).

Installation standard

Natural Gas and Propane Installation Code
CAN/CSA B149.1 in force.

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* Certain conditions apply.

These data are provided for guidance only. This Information Sheet is for general use and must not be considered advice. Please ask for assistance on the questions that concern you and do not rely only on the text in this Information Sheet.

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