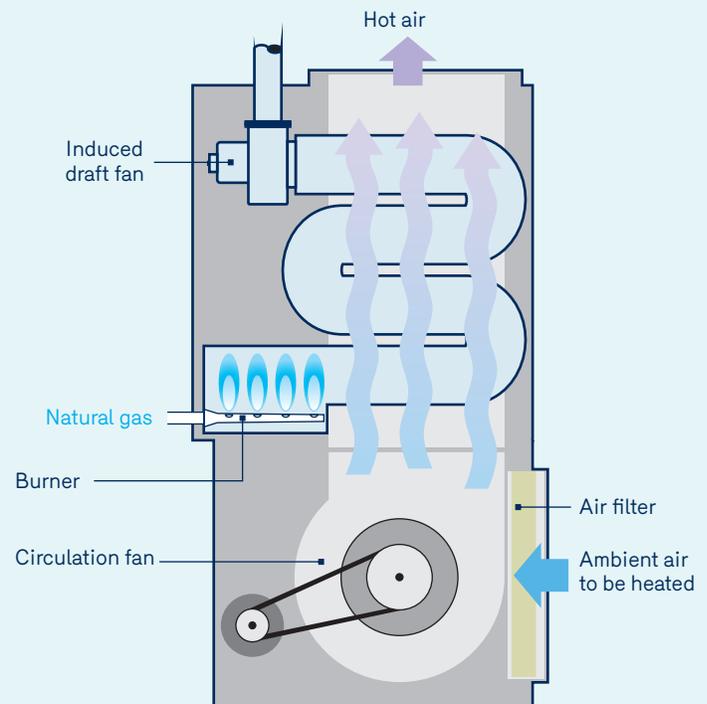


# Natural gas hot air generator

## Concept

The heat generated by combustion is transmitted to the ambient air through an exchanger. On one side, the combustion products are sucked into the exhaust duct; on the other side, the ambient air circulates, activated by the blower. The heated air is routed through distribution ducts to the various areas to be heated. These same ducts can be used to introduce filtered or cooled fresh air. The system then can be used to treat the air.

The temperature is controlled by a thermostat installed in a master control room. For the past few years, this technology has benefited from technological advances in motors and controls. These improvements mean that very efficient units can be installed with the possibility of modulating the power and air flow according to the occupants' real needs. It is common practice today to zone this type of system, i.e. control the setpoint temperature in different sectors or rooms of a residence, an office or a small building.



## Advantages

- Can include the functions of 4 appliances in 1: air heating, filtration, air conditioning, humidification, even fresh air intake.
- Indoor temperature can be regulated by one or more thermostats.
- Easy installation: this type of appliance, besides allowing vertical exhaust through the roof or lateral exhaust through a wall, can be placed in an upright or prone position, depending on the installation space available.
- Excellent comfort due to good heat distribution and the absence of stratification caused by continuous agitation by the fan.
- Using a simple heating appliance, a system can be equipped several air-treatment options.

## Applications

Hot air generators can be used in most installations because they offer great flexibility of use and design.

- Apartment buildings
- Condominiums
- Residences
- Small businesses
- Small office buildings

## List of manufacturers

Here is a non-exhaustive list of manufacturers. Hot air generators may be obtained from the following suppliers:

- Allied Air (Armstrong, Ducane)
- Carrier (Bryant, Carrier)
- ECR International(Olsen)
- Goodman (Amana, Goodman)
- ICP
- ICP (Arcoaire, Heil, Keeprite, Tempstar)
- Lennox (Aire-flo, Lennox)
- Maytag
- Rheem/Ruud (Rheem, Ruud, Weatherking)
- Trane
- Yorx (Coleman, Luxaire, Yorx)

## Selection criteria

- Select the unit to be installed according to recognized methods, such as ASHRAE, CSA, etc., and based on the heating and air conditioning needs specific to the building.
- Verify the capacity of the existing ducts during a replacement.
- Confirm the space available, exhaust possibilities, etc.
- With the improvements in the quality of building insulation, controls and motor power, and with a good choice of diffusion grilles, it is common practice to heat spaces with hot air blown from the ceiling.

## Installation standards

1. An air generator must be installed by a contractor who holds the appropriate licences.
2. For any work concerning ventilation ducts, refer to a competent contractor who works according to standard practices.
3. The clearances around the appliance, as specified by the manufacturer, must be respected; allow at least 90 cm around the burner for maintenance.
4. The requirements of the CAN/CSA-B149.1 gas code in force must be respected.

**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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