



FO-FDHB6-1

Central Heat Blower Kit

The central heat blower kit enables the distribution of heat generated by the fireplace throughout many rooms and different floors using either dedicated ducts or the house central heating ducts. The blower is normally manually controlled with a variable speed but it can be controlled by a thermostat (FO-FDHC6).

By connecting to existing central heating ducts, you can take advantage of the ductwork already in place.

If you intend on installing dedicated ducts, you can add other options to the current kit for additional comfort. The "Control System for Central Heating" (FO-FDHC6) will enable automatic control of the blower via a wall thermostat and thermal switch but for one heating zone only. The "Zone control System" (FO-FDHCZ1) combined with the "Zone Definition Kit" (FO-FDHCZ2) will provide the same features as FO-FDHC6 but for up to four different heating zones.

The back draft damper provided will prevent hot air from travelling into the ductwork unless the blower is operating. When the blower is turned on, the room air is drawn through the upper and lower louvers, which mixes with the heated air from the fireplace and reduces the overall temperature of the forced air that travels through the ductwork.

◆ **NOTE:** The blower automatically shuts off if the air temperature reaches 180°F (82°C) inside the ducts.

All wiring should be in accordance with local ordinances and the National Electric Code.

All ductwork must be in accordance with local ordinances and the National Building Code.

❖ **WARNING: IF THE BACKDRAFT DAMPER IS NOT INSTALLED, THE DUCTWORK WILL BECOME TOO HOT FOR THE SURROUNDING COMBUSTIBLE MATERIALS.**

❖ **WARNING: THE SUBSTITUTION OF ANY PART OF THIS KIT WILL VOID ALL WARRANTY COVERAGE BY RSF WOODBURNING FIREPLACES.**

❖ **WARNING: THIS OPTION CAN ONLY BE INSTALLED ON THE LEFT SIDE OF THE FIREPLACE.**

INSTALLATION

1. Plan the ductwork first. See Figure 1.

The blower can basically be installed anywhere in the house, however some thinking should go into the planning to ensure that the blower noise does not affect rooms that you would like to keep quiet. If the ductwork is passing through an area in your home that you do not wish to be heated, then the duct should be insulated. Length of runs should be as short as possible to conserve space, minimize cost and increase efficiency. Maximum duct length should not exceed 50 feet from the fireplace to the furthest outlet. There is a loss of about 15% performance at 50 feet.

Runs must be balanced as air travels along the path of least resistance. Balance the airflow by diameter and length of runs. Longer runs should have larger diameters. Houses vary in size and layout, so the ductwork must be specifically designed for each house. The cross sectional area of the distribution system must total at least 50 square inches. If you have more than 50 square inches, some of the system may be shut off, but there must always be 50 square inches of duct open at all times. For example, if 5" pipe is used for distribution, the cross section of each is 20 square inches. The minimum allowable ductwork would be three runs of 5" pipe. Up to six 5" or five 6" diameter runs can be installed from this system.

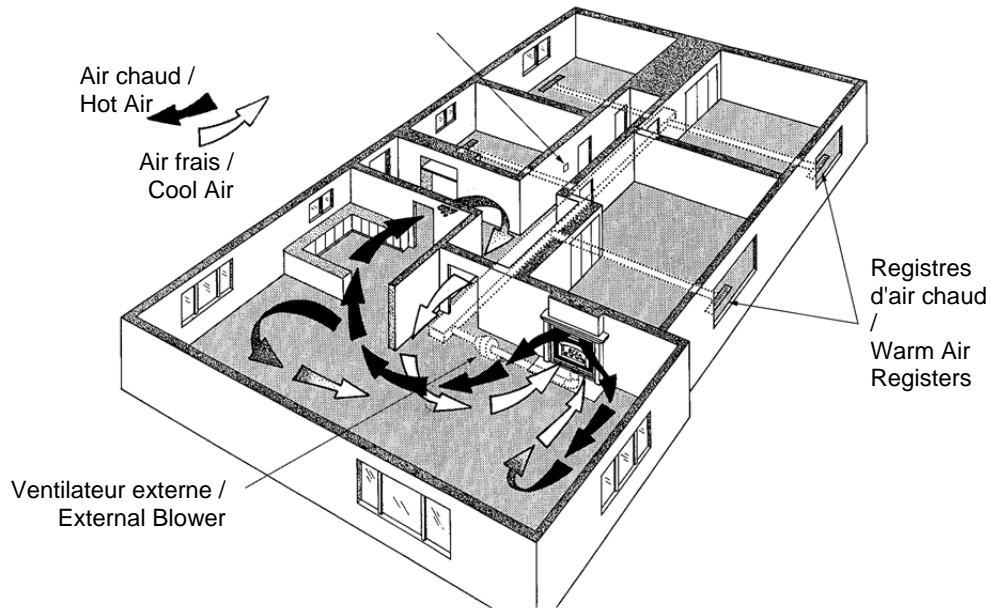
◆ **NOTE:** The central heat ductwork is single wall and may be run at a 0" clearance to combustibles. The ductwork can be installed on the outlet to the left of the flue only.

If you have an existing hot air system, you can safely "tie in" to this hot air system. Tie-ins into existing ductwork **MUST BE DOWNSTREAM FROM THE EXISTING FURNACE**. Hot air ducts must **NOT** be connected to the return air of the central heating system. Directing air in the right direction will reduce reverse flow. See Figure 2 for examples.

2. Install the backdraft damper as per the instructions provided with the FDHC6-1 option.
3. Locate the blower in a convenient location (see Figure 3). The blower may be installed vertically or horizontally, preferably at least 10 feet away from the fireplace. The horizontal installation can utilize either the supplied mounting bracket or, if you want to install the blower farther away from the ceiling, you can use plumber's strapping. A vertical installation must use the mounting bracket.
4. Install the sound-proof flexible duct on the inlet of the blower. Using ½" self-tapping screws and washers, secure the flexible duct directly to the blower. This will eliminate most of the noise caused by the airflow through the louvers of the fireplace.
5. Install the remaining ductwork between the back draft damper and the sound-proof flexible duct. Only 8" diameter metal ducts (rigid or flexible) may be used. Any other size will not work properly.
6. Install the ductwork between the outlet side of the blower and the selected rooms. You may connect plastic ducts to outlet of the blower, provided the temperature rating of the ducts is at least 250°F (121°C). Do not use plastic ducts in a chase.

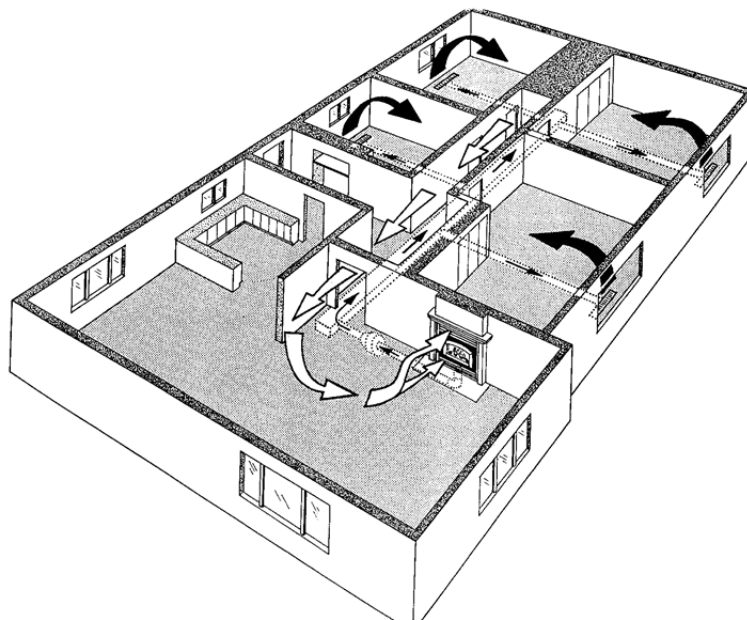
◆ **NOTE:** When the blower is in operation, it removes air from the room where the fireplace is located. If this room can be cut off from the rest of the house (e.g. with a door), a grille with an opening of at least a 100 square inch must be installed to allow the air to return to the fireplace. Otherwise periodic smoking from the fireplace may result.

7. Install the variable speed switch in a regular 2"x4" electrical box in a convenient location on a wall that is close enough to the fireplace that the blower can be turned off when reloading.
8. Using conventional 14/2 gauge wiring; connect the external blower in series with the variable speed switch to a 110Volt - 15 amps circuit breaker (see Figure 4).



Circulation de l'air à travers le foyer et la maison avec un ventilateur de chauffage central fermé.

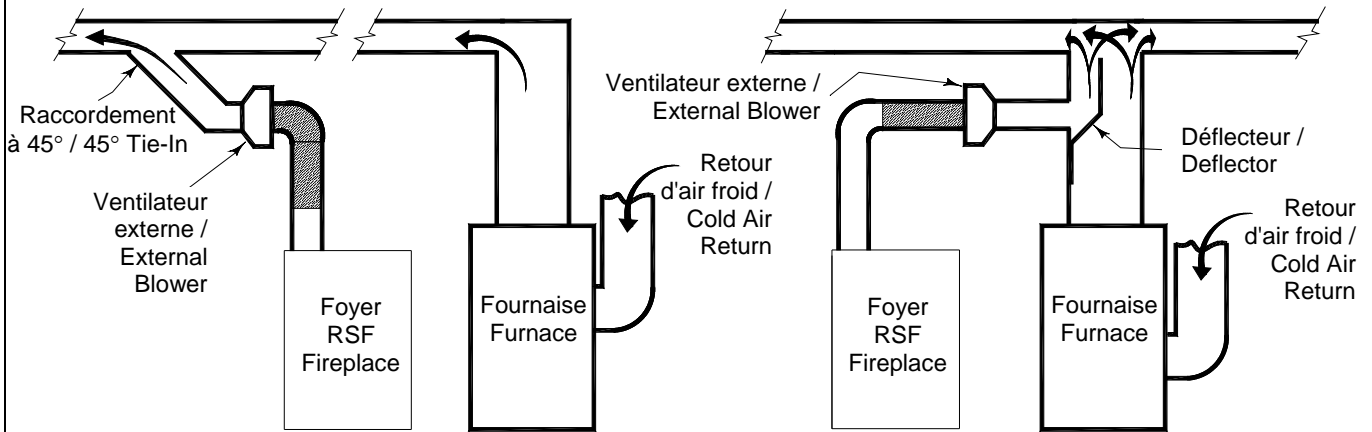
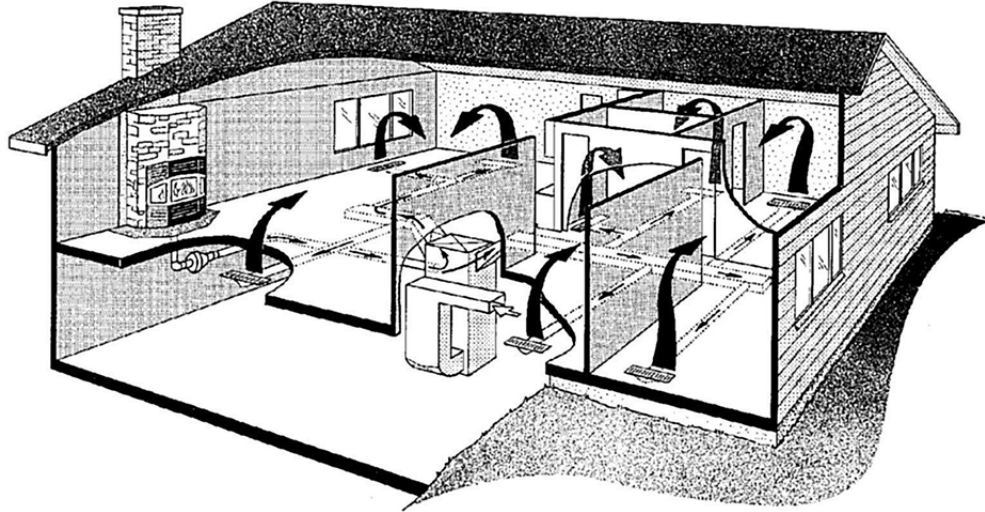
Air circulation through the fireplace and the home with the central heat blower "OFF".



Circulation d'air à travers le foyer et la maison avec un ventilateur de chauffage central allumé (le thermostat du ventilateur demandant de la chaleur).

Air circulation through the fireplace and the home with the central heat blower "ON" (blower thermostat calling for heat).

**Figure 1 Exemples de conduits dédiés/
Examples for dedicated ducts**



Raccordement à un système de chauffage pour une circulation à travers une partie du réseau de conduits de chauffage de la maison.

Tie-in to the heat plenum for circulation to part of the house duct system.

Raccordement à un système de chauffage pour une circulation à travers tout le réseau de conduits de chauffage de la maison.

Tie-in to the heat plenum for circulation throughout the entire house duct system.

**Figure 2 Exemples de raccordement à des conduits existants /
Examples of tying-in to existing ductwork**

Autre emplacement possible du ventilateur
Alternative Blower Location

2 conduits de 6" de diamètre min.
2 Ducts Runs of 6" diameter min.

Conduit flexible insonorisant
Sound-Proof Flexible Duct

Dégagement à zéro
Zero Clearance

3 conduits de 5" de diamètre min.
3 Ducts Runs of 5" diameter min.

Ventilateur externe
External Blower

Registre anti-refoulement
Draft Damper

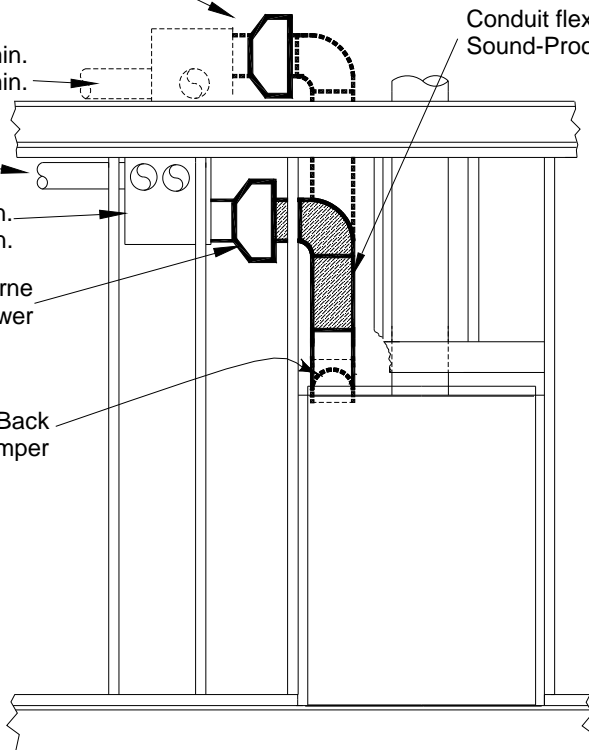
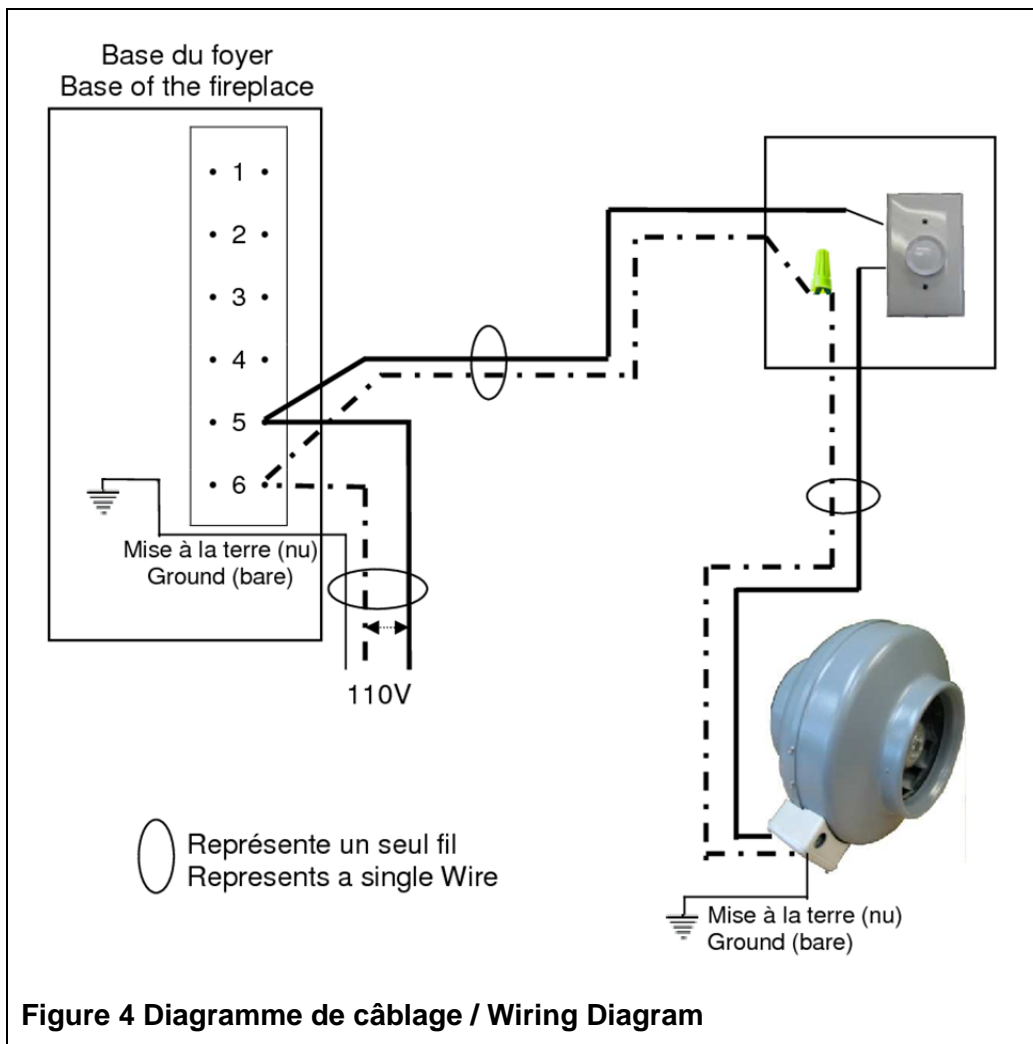


Figure 3 Exemples d'installation / Examples of installation



Liste de contrôle / Check List:

- 1 Ventilateur externe / External Blower (940002)
- 1 Registre anti-refoulement / Backdraft Damper Kit (FO-FDHC6-1)
- 1 Conduit flexible insonorisant / Sound-Proof Flexible Duct (979034)
- 1 Commutateur à vitesse variable / Variable Speed Switch (940001)
- Notice d'installation et liste de contrôle / Instructions and check list

**INITIALES
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