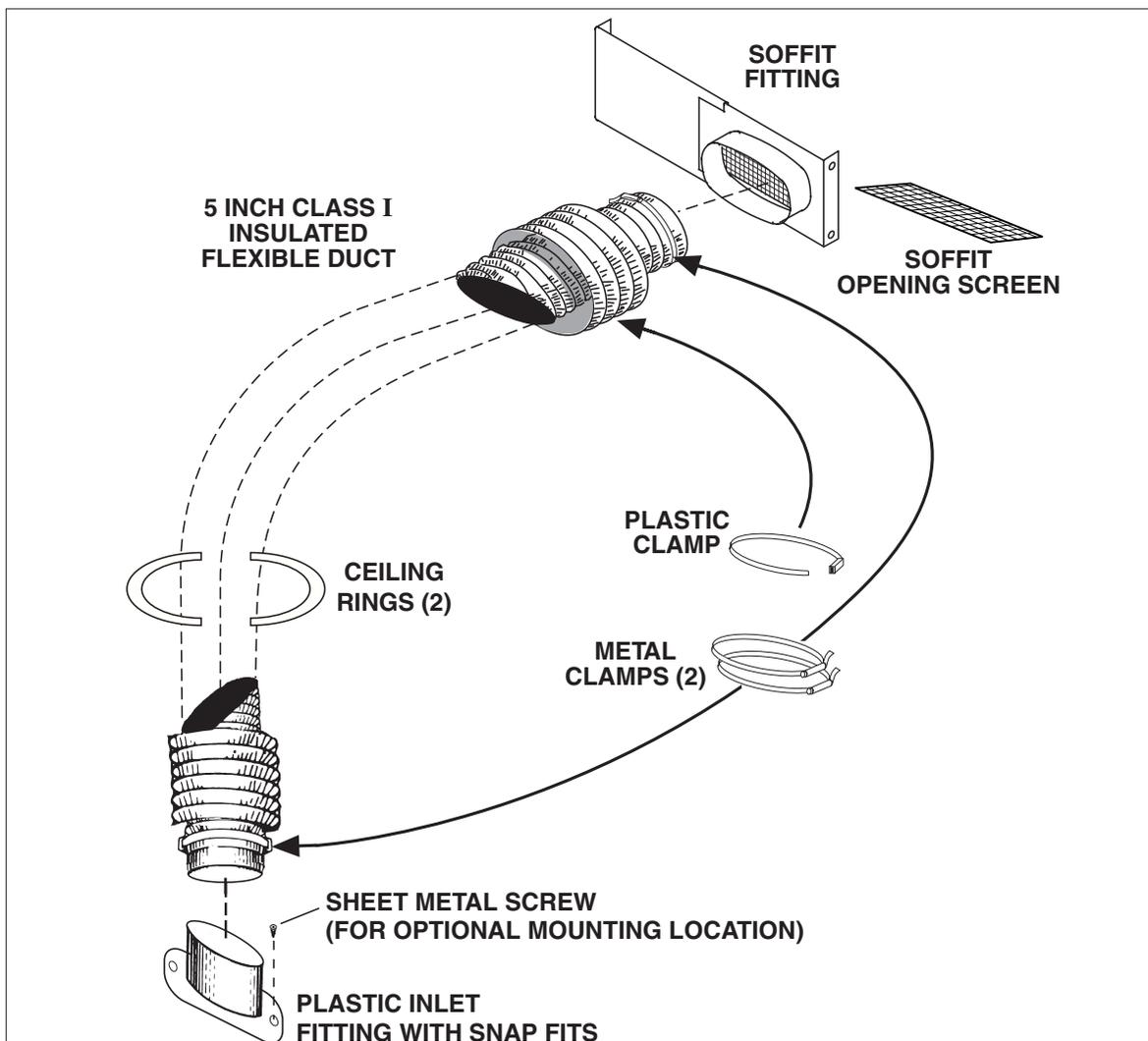


VentilAire™ III Soffit Vent System

Installation Instructions

917201 - Soffit Kit



Components Included in Each Kit

Kits conform to H.U.D. Manufactured Home Construction and Safety Standard for ventilation, paragraph 3280.103(b)(1-6). Effective May 30, 2006.

These instructions are primarily intended to assist qualified individuals experienced in the proper installation of heating and/or air conditioning appliances. Some local codes require licensed installation/service personnel for this type of equipment. All installations must be in accordance with these instructions and with all applicable national and local codes and standards.

Before beginning the installation, read these instructions thoroughly and follow all warnings and cautions in the instructions and on the unit.

Introduction

VentilAire is the most efficient way to introduce outdoor freshness to interior environments. It works in conjunction with the furnace blower and existing duct system and is able to work independently when the heating and cooling system is off. Best of all, VentilAire is a cost-effective way to substantially improve air quality and help control attic condensation in manufactured homes.

The VentilAire Soffit Vent System is designed for use with NORDYNE Series gas, oil and electric furnaces and electric air handlers.

Warranty

NORDYNE offers a limited warranty with the purchase of your new Soffit Vent system. The system is warranted for one (1) year, Parts and Labor, against any defects in materials and/or workmanship.

Due to many variable factors and conditions which the Soffit Vent System cannot control, the system is not warranted to prevent or cure moisture condensation problems in the home.

How It Works

The home's Thermostat is the control device for selecting continuous Whole-House Ventilation. When the Thermostat is in the "WHOLE-HOUSE VENTILATION" position, the unit blower will operate continuously; independent of COOL or HEAT modes. When the furnace blower is operating, a negative pressure (suction) is created in the furnace plenum. This suction draws in fresh outdoor air which is mixed with the home's return air then distributed through the home duct system. When HEAT or COOL modes are selected, the fresh outdoor air and home return air are conditioned prior to being distributed throughout the home.

Installation Instructions

DO NOT REMOVE THE OVAL KNOCKOUT IN FURNACE TOP BEFORE COMPLETING STEP ONE.

1. Determine the location of the plastic inlet fitting.
Gas Furnace (See Figure 1) - Oval knockout located at the top, near the front of the furnace.

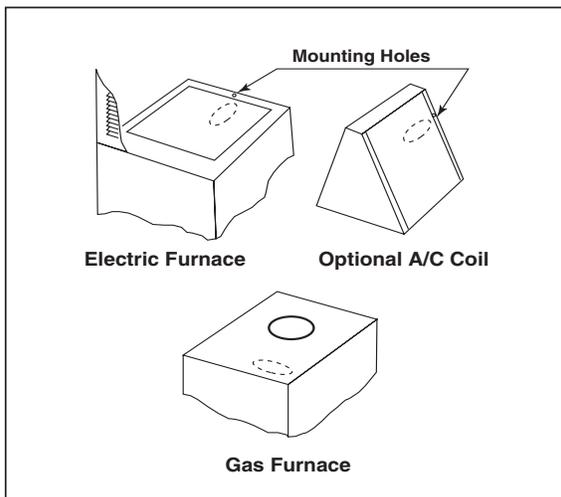


Figure 1. Plastic Inlet Fitting Location

Air Handler - Oval knockout located on the sides of the air handler.

Downflow Electric Furnace (see Figure 1) - The plastic inlet fitting may be mounted in the rear of the cabinet over the return air filter. When using an optional air conditioning coil, it may be mounted to the front or rear coil end-plate flange using the mounting holes provided.

An optional VentilAire Attachment Kit may be purchased to attach the plastic inlet fitting to the coil or wall in Heat/Cool and Heat only (no coil) applications. The plastic inlet fitting snaps into the Bracket opening without screws. The kit is Nordyne part number **919328**; bulk kit with 24 brackets along with fasteners.

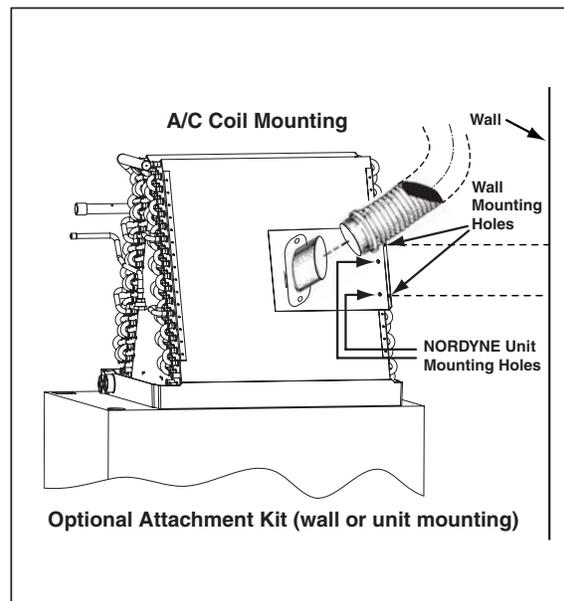


Figure 2. Downflow Electric Furnace with A/C

Electric Furnace with Nordyne A/C coil (see Figure 2) - Align and fasten the VentilAire Attachment bracket with the holes of the Nordyne coil end-plate flange.

Electric Furnace with non-Nordyne A/C coil (see Figure 2) - When using other brands of coils, the installer has the option to attach the bracket to the wall of the furnace cavity. Fastening **must** penetrate into a framing member or sheetrock anchors.

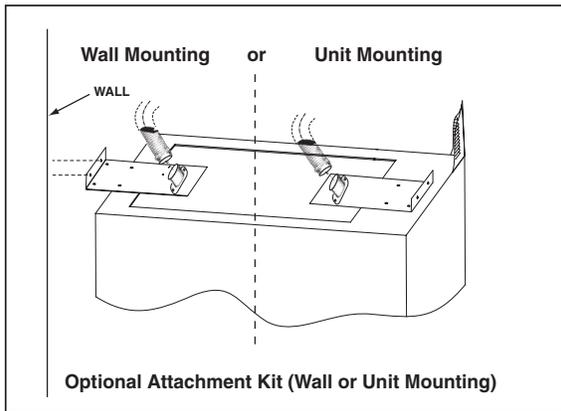


Figure 3. Downflow Electric Furnace with Heat Only

Electric Furnace, Heating only, no coil (see Figure 3) – The bracket may also be mounted directly to the front of the Electric Furnace. In wall mounting applications, the bracket should be positioned at the rear of the unit with the entire bracket opening located over the return air inlet.

NOTE: In all applications, the VentilAire system should be positioned no more than two inches (2”) from the return air inlet opening of the Furnace or Coil without interfering with the filter or coil fins.

Upflow Electric Furnace - a special adaptor (914427) may be applied over the square refrigerant line knockout.

- 2a. For oval knockout installation, place the plastic inlet fitting with locking tabs onto the sheet metal. The side with tabs further apart (back) should be inserted first, then push gently on the front in the center of the part until front tabs fall below the sheet metal and release. Part will tighten securely in place after application of metal clamp.
- 2b. For optional locations use the sheet metal screw provided through one of the clearance holes on the plastic inlet flange.
3. Cut an approximately 7-inch diameter hole in ceiling directly above the duct fitting. Avoid ceiling joists and other obstructions in the ceiling cavity.

Determine the location of the soffit fitting. It should be located as closely as possible to the ceiling grille, to allow connection using the length of flexible duct provided.



WARNING:

Disconnect main power supply before drilling through ceiling. Electrical wiring may be present.

4. Cut a rectangular opening of at least 25 square inches in the soffit between the roof trusses at the selected vent location. A 4” x 8” opening is recommended (See Figure 4).
5. Install 6” x 10” wire mesh over the hole (an air grille with a minimum of 20 square inches unrestricted area may be installed in place of the wire mesh).
6. Install the adjustable soffit fitting between two roof trusses. Secure with screws or nails.
7. Fill any space between the fitting and the roof surface with plywood or sheet metal to keep the soffit area free of insulation, as shown in Figure 4.
8. Route the flexible duct through the attic from the soffit fitting to the 7” hole in the ceiling.
9. Attach one end of the flexible duct to the duct collar of the soffit fitting. Secure the inner duct with one of the *metal* clamps provided and the insulation duct with the *plastic* clamp provided.

Recommendations to Home Owner

Moisture Control in the Home:

- Follow the recommendations of the manufacturer of your home to maintain low levels of moisture in your home.

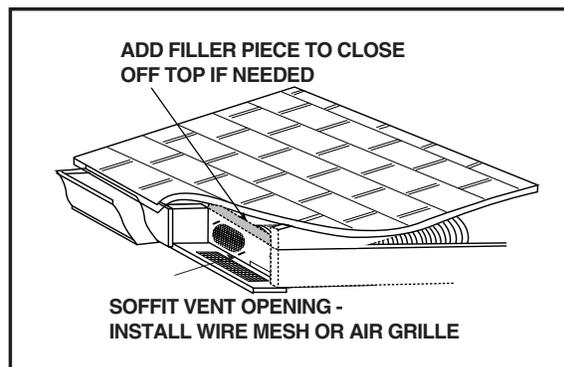


Figure 4. Installation Detail

NORDYNE Recommendations Are:

- When moisture-producing activities (cooking, bathing, etc.) are occurring, operate exhaust fans.
- Avoid hanging clothes to dry within your manufactured home.
- Vent all fuel burning appliances.
- Avoid using humidifiers.
- Avoid having large quantities of houseplants, pools of water, and other moisture-producing conditions.

- Place a vapor barrier (such as plastic sheeting) on top of the ground underneath your manufactured home.
- Ventilation openings should be provided in skirting.
- The fresh air supply to your home may be energized at any time by switching the furnace control (or the thermostat control, if so equipped) to "Whole - House Ventilation."

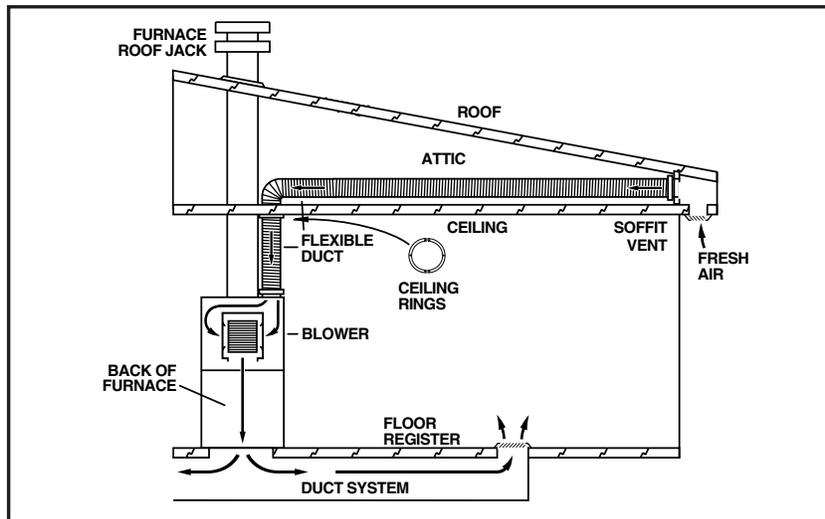


Figure 5. General Install Setup

VentilAire III and IV Application Chart

Furnace Model	Fresh Air Supply CFM - Blower Speed			
	Low	Med-Low	Med-High	High
M1*B		50 (1,429)	65 (1,857)	85 (2,429)
M1*C	60 (1,714)	70 (2,000)	80 (2,286)	90 (2,430+ *)
M2RC	75 (2,143)	90 (2,430+ *)		
M2RL	80 (2,286)	90 (2,430+ *)		
M3RL	65 (1,857)	80 (2,286)	90 (2,430+ *)	
E3EB	50 (1,429)	70 (2,000)	80 (2,286)	90 (2,430+ *)
B5BV-000K-B	50 (1,429)	65 (1,857)	90 (2,430+ *)	
B5BV-000K-C	70 (2,000)	90 (2,430+ *)		

* Manufactured homes with square footage greater than or equal to 2430 ft² should use a maximum 90 cfm rating per H.U.D. 3280.103(b)(1-6).

- Values in parentheses are maximum living space area in sq. ft. per H.U.D. 3280.103(b)(1-6).
- Furnaces are factory preset to HIGH blower speed for Whole-House Ventilation.

— INSTALLER —

Do Not Discard These Instructions. After completing the installation, return these instructions to the Homeowner's Package for owner-user's future reference. **Complies with H.U.D. Manufactured Home Construction & Safety Standards.**



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