

# Heat-Zone®-Gas Air Duct Kit

- Installation & Operation Instructions -

# **Approvals**

The flexible duct in this Heat-Zone-Gas air duct kit is manufactured and marked to the requirements of UL-181, Class I air duct.

## Introduction

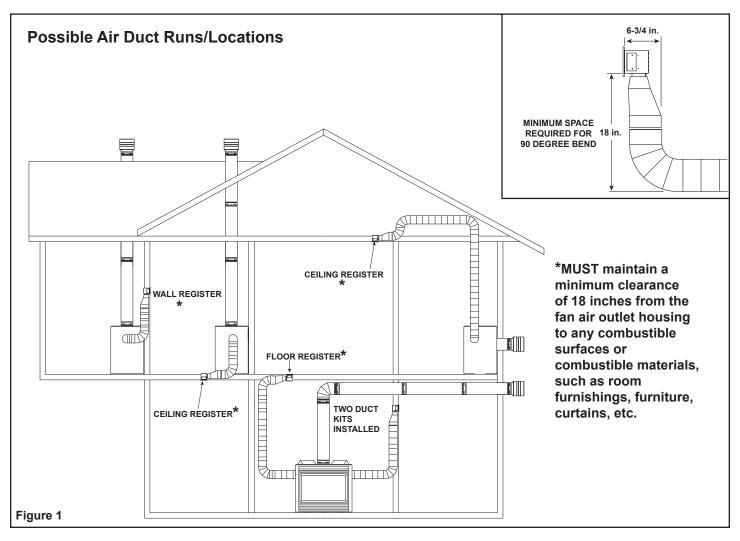
The Heat-Zone-Gas accessory kit conveys warm air from the fireplace through air duct(s) to remote locations in the same room or other rooms of the building. See Figure 1. One or two Heat-Zone-Gas kits can be installed on the fireplace.

# **Preliminary Preparation**

#### Contents of kit:

DESCRIPTION	SERVICE PART NO.
20 ft. Length of 6 in. Insulated Round Duct	659-200
Fan Housing Assembly	659-001A
Junction Box	659-122
Variable Wall Rheostat	BC10
Air Register	659-150
Register Adaptor Frame-Thick	695-125
Fireplace Duct Collar	659-125
Duct Adaptor (Round to Oval)	659-129

If any parts are missing or damaged, contact your Dealer before starting installation. **DO NOT** install a damaged kit. Be sure to also reference the fireplace Installers Guide.



This kit is tested and safe when installed in accordance with this installation manual. It is your responsibility to read all instructions before starting installation and to follow these instructions carefully during installation.

Installation of this kit **MUST** be performed by a qualified service technician.

The Heat-Zone-Gas kit is carefully engineered and must be installed only as specified. If you modify it or any of its components you will void the warranty, and you may possibly cause a fire hazard. Installation must be done according to applicable local, state, provincial, and/or national codes.

**CAUTION!** All wiring should be done by a qualified electrician and shall be in compliance with local codes and with the National Electric Code ANSI/NFPA No. 70-current (In the United States), or with the current CSC22.1 Canadian Electric Code (in Canada).

#### **Pre-Installation**

1. Plan the location of the fireplace and the warm air duct run(s). See Figure 1 for potential installation options.

**Note:** A minimum clearance of 18 inches to any combustible materials or combustible surfaces such as room furnishings, furniture, curtains, etc., is required from the fan housing air outlet. Plan for this clearance prior to installation of the Heat-Zone-Gas kit. See Figure 3 and Figure 4.

#### **Venting Guidelines**

**MAXIMUM** Duct Run = 20 ft. (6.1 m) for useful heat output. Insulated duct included with kit will not lose significant heat.

**MINIMUM** Duct Run = None: For runs out from the fireplace to adjacent room OR down to the room below.

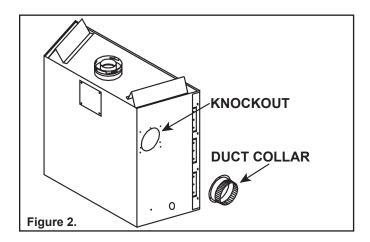
**MINIMUM** Duct Run = 31 in. (787 mm) top of fireplace to room above.

- Maintain smooth turns in duct to ensure maximum heat output.
- If using optional non-insulated pipe, as described in Step 6, heat loss will occur and shorter duct runs will yield higher heat output.

#### Installation

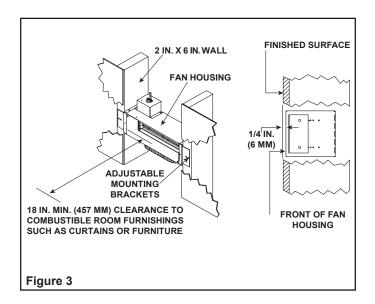
- 1. Remove the knockout or cover plate from the side or top of the appliance and discard it. See Figure 2.
- 2. Center the duct collar around the exposed hole and attach it to the fireplace with three screws.

**Note:** Do this before final positioning of the appliance.

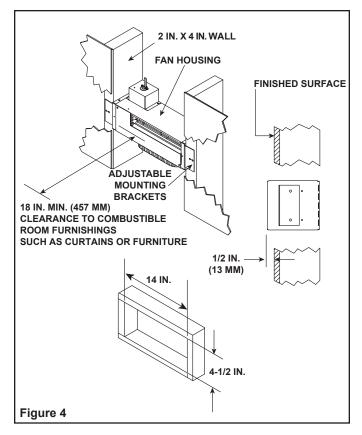


- Determine the location for the air register/fan housing assembly. Cut a 5 in. x 13-5/8 in. (127 mm x 346 mm) hole between framing members (wall studs or floor joists). The fan and electrical connections must be accessible for servicing per local code requirements.
- 4. Mount and secure the fan housing assembly to framing members so the front surface is 1/4 in. (6 mm) below the finished wall or floor surface. Use the adjustable mounting brackets and screws provided in the kit. See Figure 3 and Figure 4.

**Note:** The brackets can be rotated 180° and mounted to the back side of the 2 x 4 if necessary.



**Note**: If the fan housing is installed in a 2 x 4 wall, the front of the housing will protrude approximately 1/2 in. (13 mm) out of the wall. See Figure 3.



- Install the air duct run. Note: Fold outer poly layer of flexible duct back to maintain clearance to combustibles on the fireplace. Secure liner to the collar with clamp provided.
- 6. Insulated Round Air Duct: Attach the 6" round air duct (supplied in the kit) to the fireplace collar with sheet metal screws and run the duct to the fan housing. Attach the round-to-oval adapter to the fan housing and the air duct to the adapter. See Figure 5.

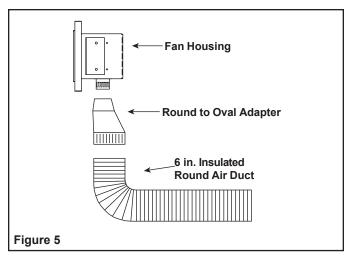
## **Optional Non-Insulated Oval Air Duct:**

**Note**: 6 in. metal oval air duct is NOT provided with this kit but can be purchased from an HVAC supplier.

Attach the round-to-oval adapter to the fireplace starting collar with sheet metal screws and a 6" oval duct to the adapter. Complete the duct run and attach the oval duct to the fan housing.

**Round And Oval Duct**: A combination of 6 in. round and 6 in. oval air duct can be used in the duct run. Oval duct components must be purchased from an HVAC supplier.

7. Support duct at intervals of no greater than four feet, with no more than 1/2 in. sag between supports as required by local code. **Note:** Secure the duct so that clearance to the fireplace outer wrap is maintained. Tape all seams with aluminum tape (1-1/4 in. minimum width, or as specified by local codes).



# **Electrical Connection Using Included Rheostat**

- 8. Install the variable speed (with "OFF" setting) wall Rheostat in a convenient location. This switch will control the Heat-Zone-Gas fan operation.
- Wire 110 VAC service TO the wall Rheostat and FROM the wall Rheostat to the fan junction box. Use wire nuts to secure the 110 VAC service wires to the hot and neutral fan wires and screw the 110 VAC ground wire to the fan junction box. See Wiring Diagram - Figure 6.
- 10. Screw the fan junction box to the fan housing.
- 11. Screw the register adapter frame and the air register to the fan housing.
- 12. Complete the fireplace installation per instructions.

# Electrical Connection to HHT IntelliFire Touch® Controls

13. Wire the Heat-Zone-Gas blower assembly from the blower junction box to the appliance.

**Note:** If the IFT-ACM fan port not used for an appliance fan, it is capable of accommodating and operating two Heat-Zone-Gas kits.

- 14. Using a standard 120 volt plug-in, wire the ends of the wires from the blower junction box (or junction boxes if two Heat-Zone-Gas kits will be installed) to the plug-in inside the appliance. See Figure 7.
- 15. Attach the plug-in to the ACM fan outlet.
- 16. Re-pair the remote to the appliance.
- 17. Complete the fireplace installation per the instructions included with the fireplace.

## Operation

- 1. Start the fireplace per instructions and allow it to warm up.
- If using the included rheostat, turn the wall Rheostat "ON" and adjust the variable speed based upon desired air flow at the air duct register.
- 3. If using the IFT RC400 remote, select the fan speed icon from the menu and adjust the speed based upon the desired air flow at the air duct register.

#### **Maintenance**

Service and maintain the gas fireplace per instructions.

Keep the air register(s) clean and free of any blockage.

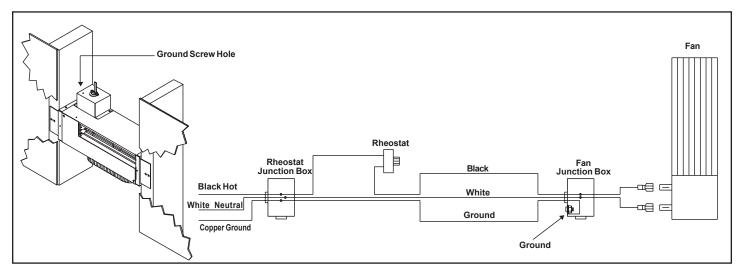


Figure 6 Rheostat Control

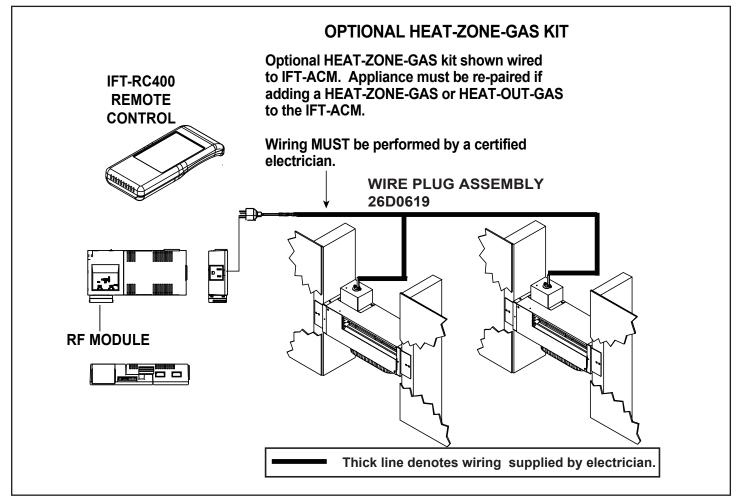


Figure 7 IntelliFire Touch Controls

Please contact your Hearth & Home Technologies dealer with any questions or concerns.

For the location of your nearest Hearth & Home Technologies dealer, please visit www.hearthnhome.com.

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