



## MODEL DFS L-VENT / TYPE B GAS VENT INSTALLATION INSTRUCTIONS (sizes 4", 5", 6", 7", 8")



**A MAJOR CAUSE OF VENT RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIRSPACES) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS VENT BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.**

### General:

Read these and the appliance manufacturer's installation instructions carefully before starting. Failure to comply with instructions will void vent certification.

Type L-Vent is designed for venting approved oil or gas appliances producing draft hood flue gases not exceeding a temperature of 570°F (299°C).

Type B Gas vent is designed for venting approved gas appliances equipped with draft hoods and other Listed gas appliances specified for use with Type B Gas vent which produce flue gases not exceeding 480°F (249°C).

Minimum clearance between the vent and combustible materials is 3 inches for L-Vent and 1 inch for Type B gas vent. L-Vent or B-Vent that extends through any story above that on which the connected appliance is located is to be provided with enclosures having a fire resistance rating equal to or greater than that of the floor or roof assemblies through which they pass.

Framing dimensions of enclosures and at joist or rafter levels shall be a minimum of 6" larger than the outside of the vent for L-Vent and 2" larger for B-Vent.

Near the vent base, post a notice of the type of appliance for which the DFS installation to combustibles is installed. If installed at 1" airspace, it is limited to B-Vent (gas) only. If it is installed at 3" airspace, it may be used with oil (as an L-Vent) or gas (as a B-Vent).

Connection of the vent to the appliance(s) shall be in accordance with applicable codes.

Bird screens may be susceptible to blockage through freezing moisture in areas of low ambient temperatures. Consult authority having jurisdiction.

Only parts specified by these instructions shall be used. Any other parts may affect the chimney's performance.

### Planning:

A vent shall extend at least 3 ft. above the highest point at which the vent comes in contact with the roof, and not less than 2 ft. above the highest roof surface or structure within 10 ft. horizontally of the chimney. Not more than 8 in. of

chimney flue above the top of the chimney cap may be considered in computing this height.

Locate the vent so as to avoid cutting joists, rafters, or other load bearing structural members. Also, route around plumbing and electrical lines. Locate the base of the vent close to the appliance

### Installation Procedure

#### Support Assembly:

- 1) The Support Assembly will safely support up to 60' of vent. If the vent exceeds this height, use additional support assemblies at intervals not exceeding 60'.
- 2) Frame a four-sided hole in the floor with dimensions 6" larger than the vent's outer diameter if installing it as an L-Vent and 2" larger than the vents outer diameter if installing it as a B-Vent. Place the Support Assembly on the upper side of the hole with the spacers fitting inside the hole (spacers ensure proper clearance to combustibles) and support band on top.
- 3) Nail the support assembly to the floor with three 3" nails on each side.
- 4) Lower the first vent section (male end up) through the support's band and clamp the band to hold the vent at the desired height. Additionally, secure the band to the vent's casing with four #8 x 3/8" long sheet metal screws.

#### Assemble Vent Sections:

- 1) Install additional lengths of vent above the first.
- 2) Fit the female end over the male collar and fasten it with a clockwise twist.
- 3) Adjustable Lengths telescope over a regular length and are secured by tightening the clamp.

#### Firestop Spacers:

- 1) Where the vent passes through a floor or ceiling a Firestop is necessary. The Firestop may be installed at either the top or bottom side of the joist.
- 2) Place the Firestop spacer around the vent with the spacer brackets towards the framed hole.
- 3) Push the Firestop flat to the joist and fasten it to the framing with four nails.
- 4) At the level where the vent penetrates the air/vapor barrier, special attention is required. Seal the Vapor Barrier to the Firestop or Ceiling Support Assembly using an appropriate caulking compound.

Note: Refer to Fig.1 (reverse side) for guidance.

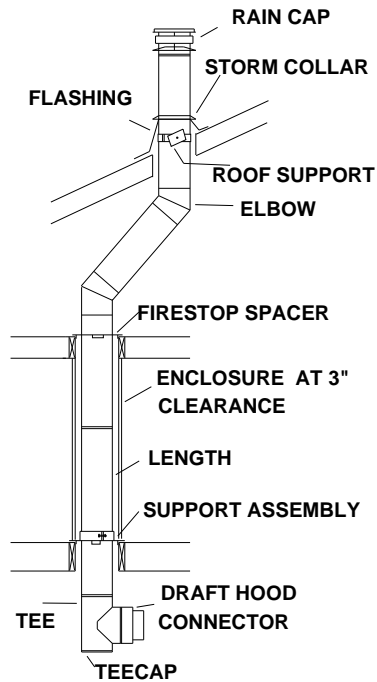


Fig. 1

### Offset:

1) Avoid the use of offsets if possible, as they reduce the vent's draft capacity. Maximum distance between elbows is 15 ft.

2) Offset vents must be re-supported above the second elbow with an Interior Offset Support or Roof Support. A roof support's band is clamped around the vent and screwed to the casing with four #8 x 3/8" screws. Its brackets are adjusted to the roof pitch and are screwed to the roof with #8 x 1 1/2" screws or 1 1/2" spiral nails. **Utilize all 18 (9 per side) screw/nail locations.** The Roof Support will safely support 10 ft. of vent. The Interior Offset Support band is clamped around the vent and screwed to the vent casing. The straps are then nailed to the joists.

### Attic Insulation Shield (AIS)

Where Model DFS enters and attic space, the vent should be protected from the known fire hazards of insulation or combustible materials. An enclosure can be built around the vent or an Attic Insulation Shield can be installed to ensure the minimum air space is maintained. For proper installation, the attic opening should be fully framed. The square base of the AIS is placed on the framed opening around the vent, and the AIS spacer tabs seated within the framed opening. Nail the AIS base to the framing with at least 2 nails per side. The AIS allows for a depth of insulation up to 10 inches.

### Roof Assembly:

- 1) With the vent protruding up through the roof, slide the flashing down the vent until its base sits on the roof.
- 2) Place upper side of the base under the shingles and lower side over shingles. Nail flashing to the roof with roofing nails. Seal around the flashing with the appropriate roofing mastic.
- 3) Slide a storm collar down to the flashing top and seal it with silicone.
- 4) Top off the vent with a rain cap. The rain cap fits on the vent male collar and fastens with a clockwise twist.
- 5) If the vent terminates higher than 6 feet above the roof line, it requires additional support from guy wires or roof brace poles.

### Connecting to Model DF (10" thru 24"):

It is permissible to adapt/connect Model DFS to Model DF for the purpose of common venting smaller appliances.

This is made possible by the use of specially designed Increases which consist of a standard DFS coupler at the inlet and a standard DF coupler at the outlet and can be obtained in any combination of sizes needed. (See Fig. 2)

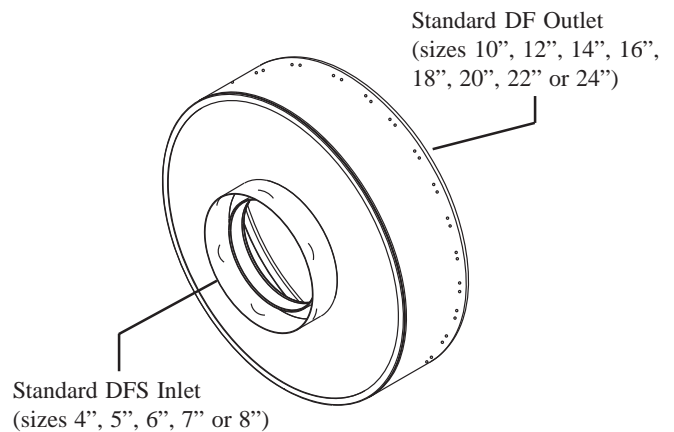


Fig. 2  
DFS to DF Increase

### Maintenance:

Have the vent cleaned and inspected **at least once a year**, preferably by a certified professional.

The UL label or listed marking on a product is the only evidence provided by Underwriters Laboratories Inc. to identify products which have been produced under the Listing and Follow-Up Services.