### **Installation Instructions**



Converting a Class-A Metal Chimney or Masonry Chimney to a Direct Vent System

PRO

# **DuraVent**

# A MAJOR CAUSE OF VENT RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF THE UTMOST IMPORTANCE THAT DIRECTVENT PRO BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

#### NOTE:

Read through all of these instructions before beginning your installation. Failure to install as described in this instruction will void the manufacturer's warranty, and may have an effect on your homeowner's insurance and UL listing status. Keep these instructions for future reference.

#### Dear Customer, Installer, or End User:

We welcome any comments regarding matters pertaining to our DuraVent products. We welcome any ideas, input or complaints to help improve our product offering. Send your emails to: president@duravent.com

If you are searching for tech support or product information, please phone us at 800-835-4429.

Or email us at: techsupport@duravent.com

#### **CONVERTING CLASS A METAL OR MASONRY CHIMNEY TO A DIRECT VENT**

For the most up-to-date installation instructions, see www.duravent.com

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**DuraVent** 

#### INSTALLATION INSTRUCTIONS FOR CONVERTING A CLASS-A METAL CHIMNEY OR MASONRY CHIMNEY TO A DIRECT VENT SYSTEM

These instructions apply to the DuraVent Direct Vent Conversion Kits for factory-built Class A metal chimneys and masonry chimneys. These venting systems, in combination with the gas appliance, have been tested and listed by a major testing agency such as UL, AGA, Omni or Warnock Hersey. Check the manufacturer's rating plate and instruction manual to confirm that a DuraVent Direct Vent Chimney Conversion system is approved for use on the brand name appliance you have selected.

#### **IMPORTANT**

Read all instructions carefully before starting the installation. Failure to follow these instructions may create a fire or other safety hazard, and will void the warranty. Be sure to check the appliance manufacturer's installation instructions for specific venting and clearance to combustible requirements, which may vary from one appliance to another.

#### INSTALLATION PRECAUTIONS

The DuraVent Direct Vent System is an engineered product that has been designed and tested for use with an approved list of direct vent gas appliances. The DuraVent warranty will be voided, and serious fire, health, or other safety hazards may result from any of the following actions:

- Installation of any damaged Direct Vent component.
- Unauthorized modification of the Direct Vent System
- Installation of any component part not manufactured or approved by DuraVent.

 Installation other than as instructed by DuraVent and the appliance manufacturer.
Consult your local building codes before beginning the installation.

Have the existing installation inspected by a qualified chimney sweep or professional installer, prior to converting to direct vent. The existing chimney system must be in serviceable condition, and functionally sound. The direct vent conversion described herein applies only to factory-built metal ceiling-supported type systems and masonry through-the-wall type systems. Note: You cannot install a Conversion Kit in a through-the-wall type factory-built metal chimney.

#### **GENERAL**

Two different types of direct vent conversion systems are described here. One is through an existing factory built metal chimney going through the ceiling. The other is through the wall of an existing masonry chimney. Follow the appropriate directions for your situation. A typical direct vent conversion of a factory built metal chimney is shown in Figure 1. The concept of direct vent conversion is to connect an adapter to an Underwriters Laboratories listed 4-inch diameter aluminum flex pipe (DuraVent's DuraFlex is an example of an UL listed flex pipe). This is then passed this down through the center of the existing metal chimney system. Three sizes of Top Adapters are available which should fit most sizes and makes of metal chimney systems. The Retro Connector (909B) is then attached to the bottom of the flex pipe. Both the Top Adapter, and the Retro Connector are attached to the existing chimney with sheet metal screws. The appliance is then connected to the chimney with appropriate black direct vent pipe, and an adjustable length section.

A typical conversion of an existing masonry chimney is shown in *Figure 6*. For installation through the wall of an existing masonry

#### TYPICAL FACTORY-BUILT METAL-CHIMNEY CONVERSION

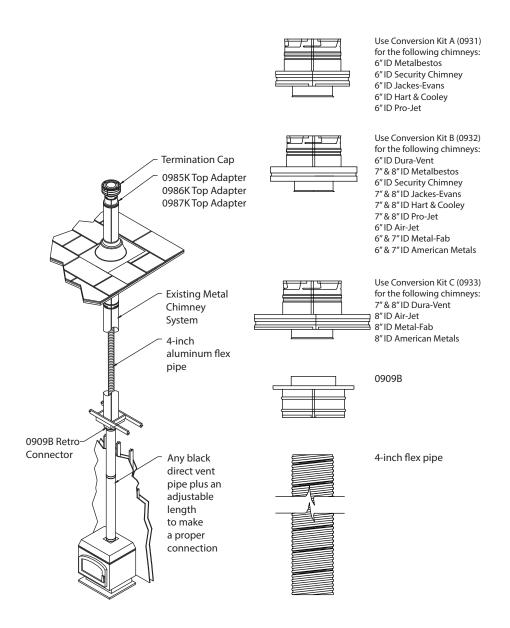


Figure 1

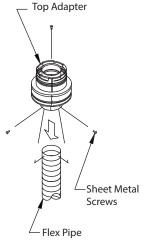
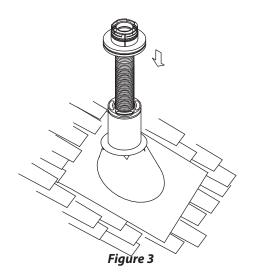


Figure 2



chimney, a Top Adapter (985K) and Flashing are used at the top of the masonry chimney. The 4-inch aluminum liner is connected to the adapter and is passed down the chimney and out through the masonry wall. This is attached to the Retro Connector (909B) which is in turn, attached to the masonry wall and is then connected to the direct vent pipe leading to the appliance.

#### INSTALLATION INSTRUCTIONS FOR CONVERTING A FACTORY BUILT METAL CHIMNEY

**Step 1.** Remove the existing chimney cap.

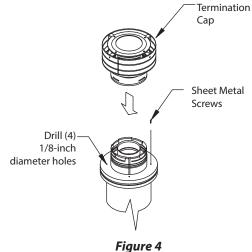
**Step 2.** Measure the distance from the top end of the chimney to the bottom of the ceiling support box, add 3 inches to this measurement, and cut a section of 4-inch flex pipe to that length (the flex should already be extended to its nominal length).

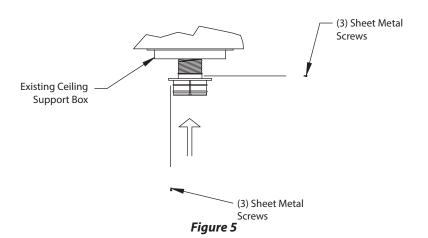
**Step 3.** Connect the end of the flex pipe section to the underside of the Top Adapter you have selected, using (3) sheet metal screws. *(Figure 2.)* 

**Step 4.** Pass the flex pipe down through the center of the chimney system, and center the adapter on the top of the chimney pipe. Drill (4) 1/8-inch diameter holes through the adapter, and into the chimney top. Insure that you are in fact, drilling into the metal on the chimney. Twist-lock the Termination Cap (980 or 991) onto the Adapter. *(Figures 3 and 4.)* 

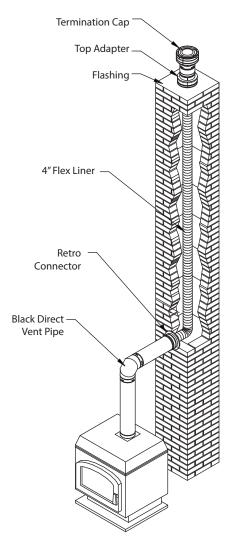
**Step 5.** Pull the flex pipe down through the ceiling support box, until it protrudes approximately 3 inches. Connect the flex pipe to the Retro Connector by slipping it into the 4-3/4-inch diameter sleeve on the top side of the Connector. Use (3) Sheet Metal Screws, to assemble these two parts.

**Step 6.** Push the flex pipe back up into the ceiling support box, center the Retro Connector, and attach it to the support box, or decorative sleeve for double wall solid packed pipe, with the Sheet Metal Screws furnished. The holes in the Retro Connector are pre-punched. (*Figure 5.*)





## TYPICAL MASONRY CHIMNEY CONVERSION



#### Figure 6

## INSTALLATION INSTRUCTIONS FOR CONVERTING A MASONRY CHIMNEY

**Important:** The existing masonry flue opening needs to have an area of at least a 35-sqr-in. to insure proper intake / exhaust flow.

**Step 1.** Before cutting any holes, assemble the desired sections of black direct vent pipe to determine the center of the masonry penetration.

**Step 2.** Once the center point of the penetration has been determined, cut a 6" diameter hole in the masonry. Be careful, if the hole is too large, the Retro Connector might not mount properly, and if the hole is too small, then the appliance might starve for intake air. If there is a frame wall in front of the masonry wall, cut and frame a 10" clear square opening in wall (centered around the 6" masonry opening). If there is sheet rock only (no studs) in front of the masonry, the 10" clear opening is still needed, but does not need to be framed. This allows the Retro

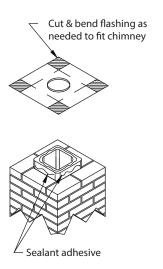


Figure 7

Connector to mount directly on the masonry and provide clearance to the combustibles. **Refer to Figure 11.** 

**Step 3.** Secure the Flashing (705C) to the top of the masonry chimney using a bead of non-hardening sealant-adhesive. If the Flashing is larger than the top of the chimney, then cut and fold flashing as needed to fit chimney. **See Figure 7.** 

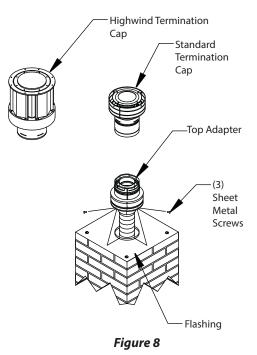
**Step 4.** To determine the length of flex required, measure from 3" above the top of the Flashing down to the level of the opening. Add to this measurement the distance from the center of the chimney to out through the wall. Cut a piece of 4-inch flex to this length (the flex should already be extended to its nominal length).

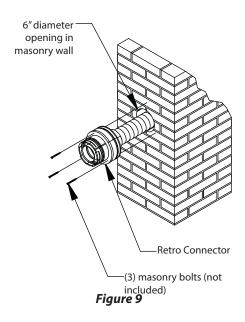
**Step 5.** Connect the 4-inch flex liner to the Top Adapter (985K) using (3) sheet metal screws. *Refer to Figure 2.* 

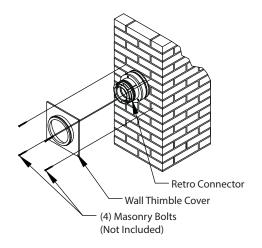
**Step 6.** Feed the 4-inch flex liner through the Flashing into the chimney. Continue to feed the liner out through the opening in the masonry wall.

**Step 7.** Secure the Top Adapter to the Flashing. Use (3) sheet metal screws through the side of the adapter into the flange on the Flashing, as shown in *Figure 8*. Twist lock the Termination Cap (980 or 991) on to the Top Adapter.

**Step 8.** Attach the flex to the Retro Connector. Use (3) sheet metal screws to attach the flex liner to the Connector. **See Figure 9.** Mount the Retro Connector to the masonry wall using masonry bolts. Redrill larger holes on connector as needed. Be careful to insure that the connector is centered in the opening and the mounting holes line up with the masonry wall.







**Step 9.** Slide the Wall Thimble Cover (940) over the Retro Connector and secure with masonry bolts. (*Figure 10*) If you have a framed wall in front of the masonry, use wood screws to mount the Wall Thimble Cover to the framed wall, over the Retro Connector and the 10" square framed opening. (*Figure 11*) If needed, add a section of direct vent pipe to the Retro Connector in order to extend through the opening in the Wall Thimble Cover.

**Step 10.** The connection between the appliance and the Retro Connector may be completed with section of black direct vent pipe, together with adjustable length pipe section.

Figure 10

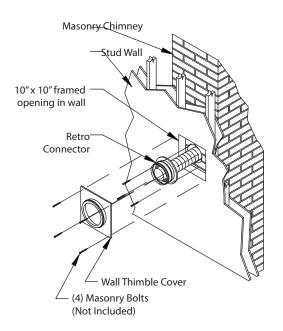


Figure 11

#### **DURAVENT WARRANTY**

DuraVent, Inc. ("DuraVent") provides this limited lifetime warranty for all of its products to the original purchaser, with the exception of Ventinox® (lifetime), PolyPro® (ten years), DuraBlack® (five years) and all Termination Caps (five years). Subject to the limitations set forth below, DuraVent warrants that its products will be

free from substantial defects in material or manufacturing, if properly installed, maintained and used. This Warranty is non-transferable with the exception of Ventinox which is transferable from the original homeowner to the buyer of the home for a period of ten (10) years. This warranty does not cover normal wear and tear, smoke damage or damage caused by chimney fires, acts of God, or any product that was: (1) purchased other than from an authorized DuraVent dealer, retailer or distributor; (2) modified or altered; (3) improperly serviced, inspected or cleaned; or (4) subject to negligence or any use not in accordance with the printed materials provided with the product as determined by DuraVent. This limited lifetime warranty applies only to parts manufactured by DuraVent.

DuraVent provides the following warranties for its products: One Hundred Percent (100%) of the purchase price or MSRP at time of purchase, whichever is lower, for 15 years from the date of purchase, and Fifty Percent (50%) thereafter, except for the following limitations: Ventinox liner and components in wood, oil, wood pellet, and gas installations are warranted at One Hundred Percent (100%) for the lifetime of the original homeowner; Ventinox 316 liner and components for coal burning installations which are warranted One Hundred Percent (100%) for ten years; all Termination Caps and DuraBlack® are warranted at One Hundred Percent (100%) for five years, and at Ten Percent (10%) thereafter.

All warranty obligations of DuraVent shall be limited to repair or replacement of the defective product pursuant to the terms and conditions applicable to each product line. These remedies shall constitute DuraVent's sole obligation and sole remedy under this limited warranty. This warranty provides no cash surrender value. The terms and conditions of this limited lifetime warranty may not be modified, altered or waived by any action, inaction or representation, whether oral or in writing, except upon the express, written authority of an executive officer of DuraVent.

#### VENTINOX WARRANTY CONDITIONS

Liner and Component warranties contained herein are subject to the following conditions: (1) The Liner and Components must be installed according to DV's installation instructions; (2) The Liner and Components are used only to line or reline chimneys venting residential appliances for which the liner was intended; and (3) documented annual inspection of the Liner and Components and maintenance as deemed necessary, beginning one year after the date of installation and continuing throughout the warranty period, by a Nationally Certified Chimney Sweep or Ventinox® installer. The Liner and Components warranty is further subject to compliance with the following requirements throughout the warranty period: The chimney must have a chimney cap and chemical chimney cleaners must not be used when cleaning the Liner or Components. Plastic-bristle flue cleaning brushes are recommended. Corn, bio-fuels, driftwood or other wood containing salt, preservative-treated lumber, plastic and household trash or garbage, or wood pellets containing such materials must not be burned in the appliance or fireplace. In case of a chimney fire, the chimney must be inspected and approved by a certified Chimney Sweep before reuse. After each annual inspection, maintenance, and cleaning, the certified Chimney Sweep must fill out and date the appropriate section of the warranty card provided with the chimney liner.

#### LIMITATIONS ON INTERNET SALES:

Notwithstanding any other terms or conditions of this limited lifetime warranty, DuraVent provides no warranty for the following specific products if such products are both: (a) purchased from an Internet seller; and (b) not installed by a qualified professional installer. DuraTech\*, DuraPlus HTC\*, PelletVent Pro\*, FasnSeal\*, and DuraVent's relining products including DuraLiner\*, DuraFlex\* 304, DuraFlex\* 316, DuraFlex\* Pro, DuraFlex\* SW, and Ventinox\*. For purposes of this warranty, a trained professional installer is defined as one of the following: licensed contractors with prior chimney installation experience, CSIA Certified Chimney Sweeps, NFI Certified Specialists, or WETT Certified Professionals.

DuraVent reserves the right to inspect defective product to determine if it qualifies for replacement under the terms of this limited lifetime warranty. All warranty claims must be submitted with proof of purchase. Labor and installation costs are not covered under this warranty. To obtain warranty service contact DuraVent promptly at DuraVent Warranty Service, 902 Aldridge Rd., Vacaville CA 95688, or call 800-835-4429.

WHERE LAWFUL, DuraVent DISCLAIMS ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL DURAVENT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES OR DIRECT OR INDIRECT LOSS OF ANY KIND, INCLUDING BUT NOT LIMITED TO PROPERTY DAMAGE AND PERSONAL INJURY. DuraVent'S ENTIRE LIABILITY IS LIMITED TO THE PURCHASE PRICE OF THIS PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLYTO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.

For the most up-to-date installation instructions, see www. duravent.com REV 3.30.2011

Manufactured in Vacaville CA and Albany NY



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