

# INSTALLATION INSTRUCTIONS

## Combustion Air System



Combustion Air System (CAS) brings in outside air for Pellet, Corn, Oil, and Biofuel appliances. Used with PelletVent Pro systems.

# PELLETVENT PRO

**DuraVent**  
A member of M&G Group

COMPLETE VENTING SOLUTIONS

**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 COMBUSTION AIR SYSTEM BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS AND THE INSTRUCTIONS OF THE RELATED VENTING OR CHIMNEY SYSTEMS.**

**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.**

**The Combustion Air System (CAS) is a system designed to bring in outside combustion air directly into a pellet-burning stove or appliance, while still venting the exhaust gases safely.**

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

I welcome any comments regarding matters pertaining to our DuraVent products.

I welcome any ideas, input or complaints and I'll make sure that someone responds directly back to you.

Send your emails to:  
[president@duravent.com](mailto: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](mailto:techsupport@duravent.com)

Sincerely,  
*Steve Eberhard, President and CEO  
M&G DuraVent, Inc.*

## Combustion Air System

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# PELLETVENT PRO

The Combustion Air System (CAS) is a system designed to bring in outside combustion air directly into your pellet, corn, oil, and biofuel stove or appliance, while still venting the exhaust gases safely into a listed vent or chimney. The CAS system is available for PelletVent Pro vent system.

## CLEARANCES

Always follow the required clearance to combustibles for the vent or chimney system you are installing. PelletVent Pro vent requires a minimum of 1" clearance from combustibles. Never fill any required clearance space with insulation or any other materials. Combustible materials include, but are not limited to, lumber, plywood, sheetrock, plaster and lath, furniture, curtains, electrical wiring, and building insulation.

## PERMITS

Contact your local Building Official or Fire Official regarding permits, restrictions, and installation inspections in your area.

## EQUIPMENT & MATERIALS

Drill / Driver  
Hammer  
Caulking Gun  
Plumb Bob  
Screwdrivers (Phillips & Standard)  
Tin Snips  
Saber or Keyhole Saw  
Level  
Non-hardening Waterproof Sealant  
Dependable Ladder  
Tape Measure  
Proper Gloves and Shoes  
Eye Protection  
#8, 2-1/2" & 1-1/2" Wood Screws  
Materials You May Need:  
8-Penny Nails, Roofing Nails

## INSTALLATION NOTES

Proper planning for your Combustion Air System installation will result in greater safety, efficiency, and convenience, as well as saving time and money. You must use only authorized Simpson Dura-Vent CAS parts and related vent or chimney components to maintain a safe, approved system. Do not mix parts or try to match with other products or use improvised solutions. Do not install damaged or modified parts. Practice good workmanship. Sloppy work could jeopardize your vent's or chimney's safety. Keep electrical wiring and building insulation away from all chimneys and vents. When deciding the location of your installation, try to avoid modifications to roof beams and other structural components of the building. If you have any questions, contact either your dealer or Simpson Dura-Vent directly.

## APPLIANCE RECOMMENDATIONS

Always follow the appliance manufacturer's installation instructions.

**Installation:** Install your stove or appliance as described by the appliance manufacturer. Be sure to maintain all required clearances.

**Fuels:** Connect only one appliance per chimney or vent.

**Operation:** Follow the appliance safety manual for maximum efficiency and safety. Do not over fire the appliance. Any damage to the appliance, chimney, or vent can possibly void your warranties and cause a fire hazard.

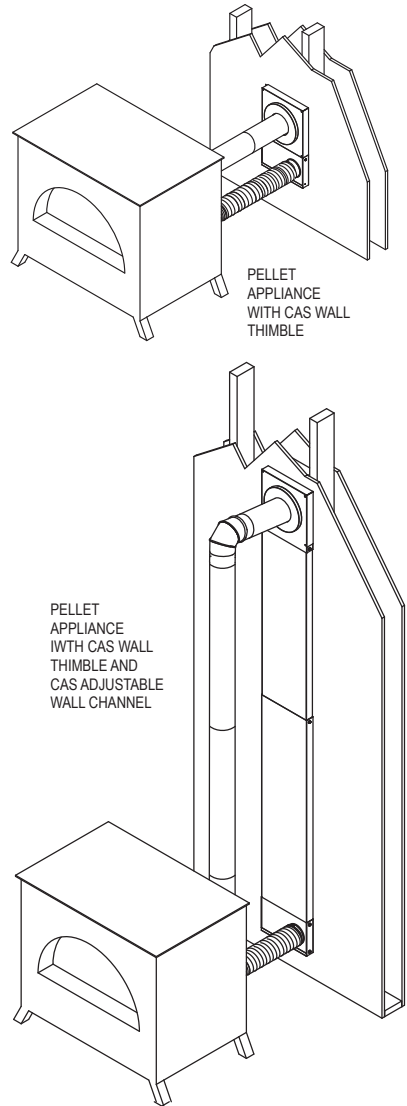
**Fuels:** Only burn approved fuels as specified by your appliance manufacturer's instructions. Do not burn driftwood, plastic, or chemically treated wood such as railroad ties. They are corrosive to your vent system.

## PELLETVENT PRO CAS INSTALLATION

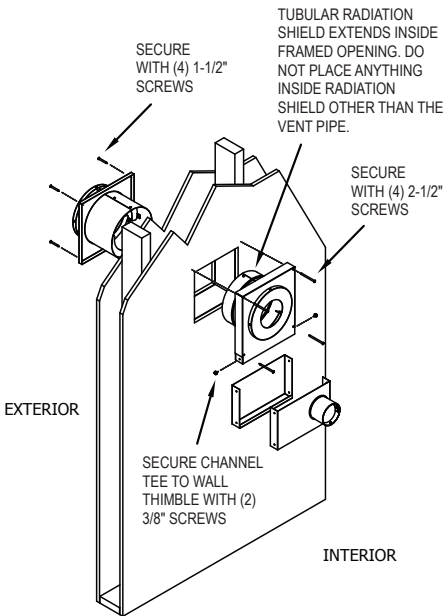
The Simpson Dura-Vent's CAS system for PelletVent Pro can be used for horizontal (through-the-wall) installations; the CAS system cannot be used with vertical (through-the-ceiling) installations. The CAS system is designed to connect to the stove's air-inlet while still safely venting the exhaust. Figure 1 shows two typical styles of installation using the CAS system for PelletVent Pro, the first goes directly out the back of the unit using the Wall Thimble, the second uses the Wall Channel and the Wall Thimble for when vertical rise is needed.

**Step 1.** Locate both the air-inlet and the vent exhaust outlet on the pellet-burning appliance. The CAS system for PelletVent can only be installed if your appliance has an air-inlet used for combustion.

**Step 2.** Determine the location of the CAS Wall Thimble. The CAS Wall Thimble should be located between wall studs and to allow a convenient connection for the air inlet of the appliance. Avoid cutting wall studs if possible. Depending on your installation, you may or may not need to use the Adjustable Wall Channel. The Adjustable Wall Channel is used for installations where the wall penetration is higher on the wall than the flex length can reach. If using the CAS Adjustable Wall Channel, position the CAS Wall Thimble so that the channel will be positioned directly behind the appliance. If the CAS Adjustable Wall Channel is not used, make sure the CAS Wall Thimble is positioned so the intake-air flex can reach the air inlet of the appliance (**Fig 1**).

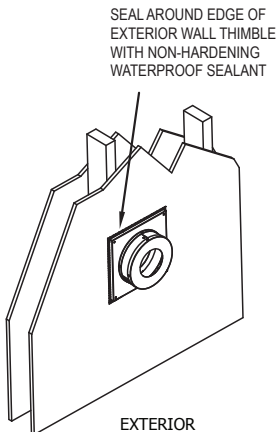


**Figure 1**



**Figure 2**

**Step 3.** Install the CAS Wall Thimble. Cut and frame a 7-1/2" x 7-1/2" opening in the wall at the location determined for the CAS Wall Thimble. Inside the home, install the black-painted interior portion of the CAS Wall Thimble into the opening, centered within the framing. Make sure the air-inlet channel faces downwards. Secure the interior portion of the CAS Wall Thimble with (4) 2-1/2" long wood screws. On the exterior of the home, install the non-painted exterior portion of the CAS Wall Thimble. The tubular radiation shield of the exterior portion slides into the radiation shield of the interior portion within the framed opening. Important: Be sure the air-inlet openings of the outer half of the wall thimble face downwards to prevent rain and snow infiltration (**Fig 2**). Secure the exterior portion of the CAS Wall Thimble to the wall with (4) 1-1/2" wood screws. Seal the perimeter edge of the Wall Thimble where it meets the wall with a waterproof sealant (**Fig 3**). Important: Do not place anything inside the Wall Thimble other than PelletVent pipe. The space around the vent pipe inside the Thimble must remain empty to prevent overheating the Wall Thimble and to enable proper air flow to the appliance.



**Figure 3**

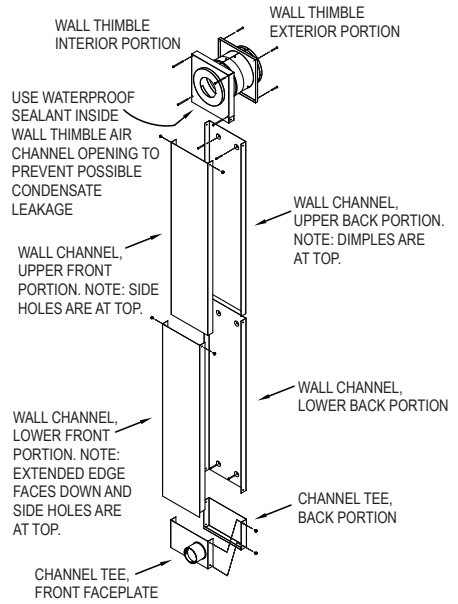
The CAS Wall Thimble can accommodate up to 6-1/2" thick walls. If installed in a thicker wall, a field-fabricated extension tube for the radiation shield must be installed. The extension tube can be made out of minimum of 26 gauge galvanized steel. The CAS Wall Thimble must have a continuous connection between the interior and exterior portions of the CAS Wall Thimble (**Fig 4**).

**Step 4.** Install the CAS Adjustable Wall Channel, if needed. If the Adjustable Wall Channel is not needed for the installation, skip this step and continue with Step 5. If the Wall Thimble is installed above the appliance, the

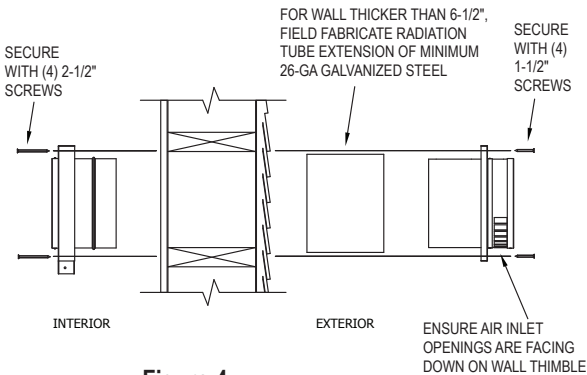
Adjustable Wall Channel is needed to extend from the Wall Thimble down to the appliance.

Determine the distance from the Wall Thimble to the appliance. The Adjustable Wall Channel can only be installed in a vertical direction and can adjust from 36" to 70".

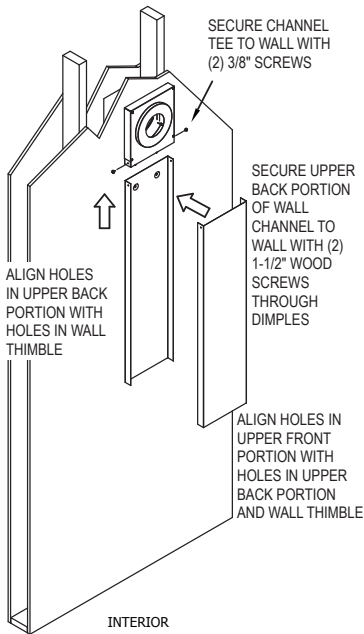
The Adjustable Wall Channel is composed of 4 parts: Upper Back portion, Upper Front portion, Lower Back portion, and Lower Front portion (**Fig 5**). It is highly recommended that you use waterproof sealant inside the Wall Thimble's air inlet channel to prevent possible condensate leakage. First, place the Upper Back portion inside the opening of the Wall Thimble. Align the Upper Back piece so the dimples are at the top and the holes on the sides match up with the holes on the sides of the Wall Thimble. Be sure to allow a small gap on both sides as the Upper Front portion fits inside the Wall Thimble, installed next. Secure the Upper Back piece to the wall using (2) 1-1/2" wood screws through the dimple standoffs against the wall (**Fig 6**).



**Figure 5**



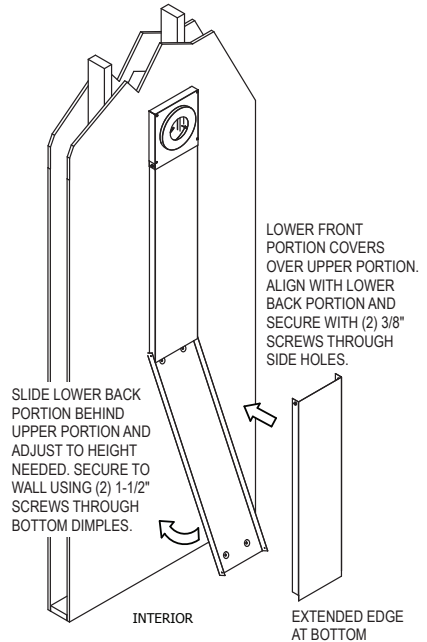
**Figure 4**



**Figure 6**

Second, install the Upper Front portion by sliding the top end into the Wall Thimble. The Upper Front portion will install over the Upper Back portion, but inside the Wall Thimble. Align the holes on the sides with the holes in the Wall Thimble and secure in place with (2) 3/8" black screws provided (**Fig 6**).

Next, install the Lower Back portion by sliding it behind the Upper Back portion (**Fig 7**). The bottom wall portion will fit on the outside of the Upper Front portion. Adjust its position to the desired length of your installation. Remember to account for the height of the Channel Tee (installed in Step 5) when determining the correct length for your installation. Secure the bottom wall portion against the wall with (2) 1-1/2" wood screws through the bottom two dimples.

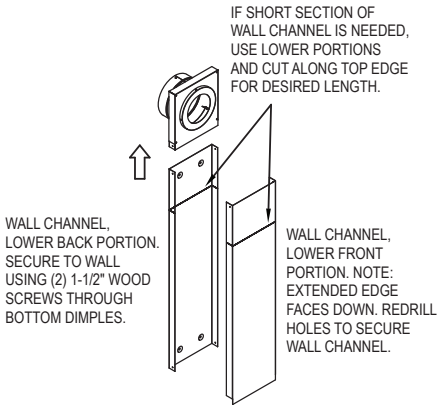


**Figure 7**

Finally, install the Lower Front portion over the Lower Back and Upper Front portions (**Fig 7**). The notched end of the Lower Front portion must face downward, and the holes on the sides of the Lower Front portion will be at the top. Secure the Lower Front portion with (2) 3/8" black screws in the two side holes. Pre-drill the holes in the other portions, where needed.

If a Channel shorter than 36" is required for your installation, the Adjustable Wall Channel install can be cut using tin snips. Use only the Lower Back and Lower Front portions, and trim the upper ends only for both portions (**Fig 8**). Cutting the other ends will prevent the Channel Tee from fitting properly. For this installation, the Lower Back and Lower Front portions will fit on the outside (not within) of the opening in the Wall Thimble. The holes on the sides of the Wall Channel will need to

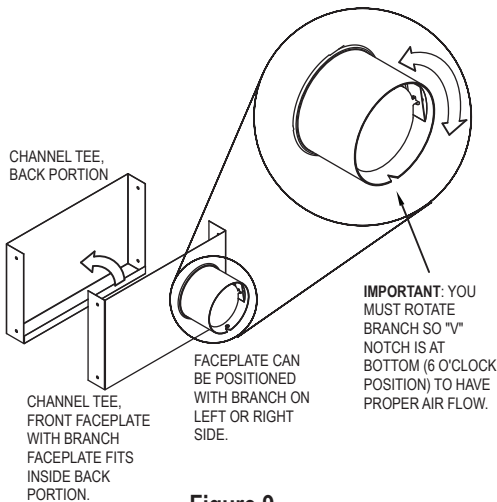




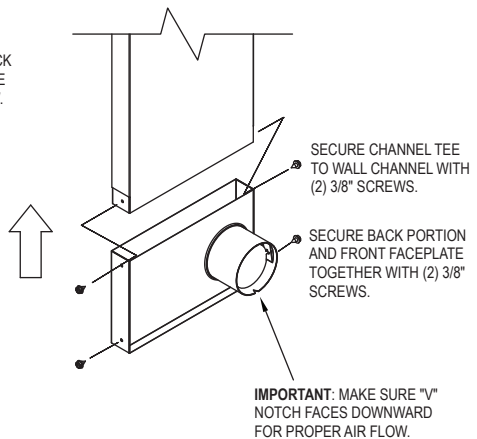
**Figure 8**

be pre-drilled in order to use the (2) 3/8" black screws needed to secure Wall Channel to Wall Thimble.

**Step 5. Install Channel Tee.** The Channel Tee is installed into the bottom of the Wall Thimble or the Adjustable Wall Channel, depending on your installation. The Channel Tee is in two parts, the front faceplate with branch and the back portion (**Fig 9**). The front portion is the faceplate of the Channel Tee and has the branch and damper that allows the air to flow from the Thimble to the flex. The back portion fits against the wall and holds the front portion securely in place. The branch can be switched to the left or right side depending on which side of your appliance the air-inlet is located.



**Figure 9**



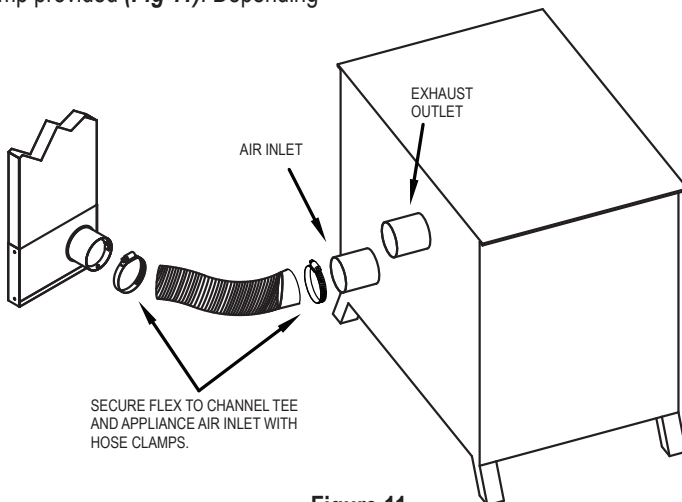
**Figure 10**

**Important:** Regardless which side the branch is located it is important that the branch be rotated into the proper orientation. The branch must be rotated so that the “V”-notch is at the bottom (6 o’clock position), allowing the damper to remain closed when at rest (**Fig 9**). The damper is to ensure the air flows from the Wall Thimble or Channel into the appliance, and not in the other direction.

After choosing which side the branch will be on, insert the front faceplate into the back portion of the Channel Tee. The sides and bottom edge of the front faceplate fit inside the back portion (**Fig 9 & 10**). It is highly recommended that waterproof sealant be used inside the Channel Tee where the front faceplate meets the back portion to prevent any possible leakage of condensate that may occur. Install the Channel Tee itself by sliding it over the bottom of the Wall Thimble or Adjustable Wall Channel. Secure the Channel Tee in place with (2) 3/8” black screws on both sides (**Fig 10**).

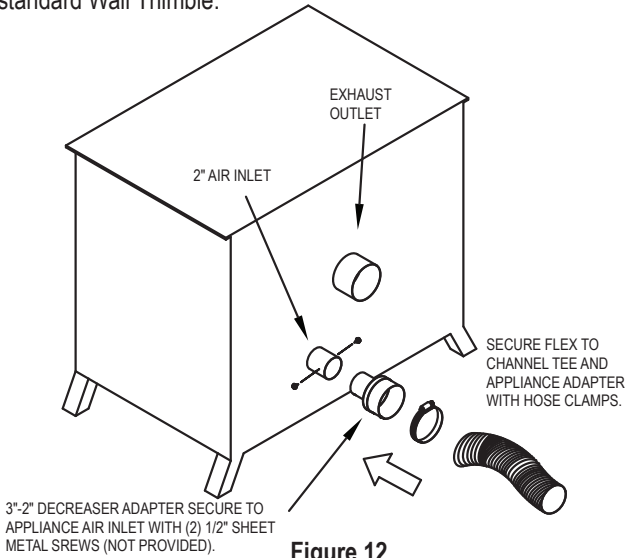
**Step 6.** Connect flex. Install the flex section over the Channel Tee branch and secure with the hose clamp provided (**Fig 11**). Depending

on your appliance, the method of attaching the flex to the appliance’s air-inlet may differ. If your appliance allows the flex to slip over the air-inlet, then slip the flex over the inlet and secure it using one of the hose clamps provided. If the appliance has a 2” air-inlet opening, you can use a 3”-2” reducer adapter that is available. Slide the flex onto the 3” end and secure with a hose clamp. Insert the 2” end into the appliance’s air-inlet and secure with at least (2) 1/2” or 5/8” sheet metal screws (**Fig 12**). If your appliance will not accept either of these connections, a Universal Adapter that can bolt onto the back of the appliance is also available. The Universal Adapter connects to the flex using a hose clamp on one end, and mounts over the appliance’s air-inlet using (8) sheet metal screws (**Fig 13**). The Universal Adapter can fit air-inlets up to 4-3/4” square. It is recommended that when using the Universal Adapter, that you seal it against your appliance using waterproof sealant.

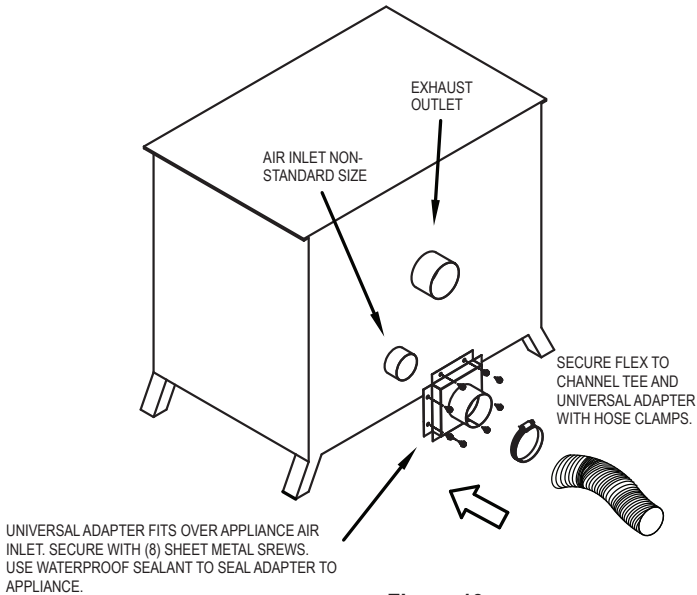


**Figure 11**

**Step 7.** Install PelletVent Pro vent. Install the PelletVent Pro vent pipe in accordance with the complete PelletVent Pro Installation Instructions, L550, using the CAS Wall Thimble instead of the standard Wall Thimble.



**Figure 12**



**Figure 13**

## M&G DURAVENT LIMITED LIFETIME WARRANTY

M&G DuraVent, Inc. ("DuraVent") provides this limited lifetime warranty for all of its products to the original purchaser, with the exception of Ventinox (lifetime), 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. Com, biofuels, 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 APPLY TO 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](http://www.duravent.com)  
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