

DirectVent Pro[®]

Unitized, co-axial venting system for direct vent gas or propane stoves, and fireplaces.

CVS[®]

Venting System for Category II, III, and IV gas appliances.
Listed to UL-1738 and ULC S636.



Specifications

Applications

Concentric Venting System (CVS)

(direct vent or two-pipe system) for use with condensing natural gas or propane Categories II, III and IV appliances or Canada's Type BH Gas Vent Systems, (having a maximum rated operating temperature of 500°F).

For use with Stoves and inserts of Type L gas, pellet, oil, corn and biofuel (Rated to a continuous use flue temperature up to 570°F).

CVS can be used on a wide range of appliances, including: gas boilers, warm air furnaces, water heaters, unit heaters, tankless water heaters, pellet stoves, direct vent gas or propane stoves, heaters, and fireplaces.

Materials and Construction

Unitized concentric construction. Inner: Laser-welded super-ferritic stainless steel .012"

Outer: Laser-welded, paintable, galvalume .018"

Silicone O-ring seals on inner liner and outer wall. Precision twist-lock connection on outer wall.

Clearances

CVS is listed to 0" clearance as a double wall vent system for Category II, III, and IV appliances, for flue temperature of up to 400°F for horizontal enclosures, and up to 480°F for vertical enclosures.

CVS must maintain 1" clearance to combustibles when used with pellet fuel.

When CVS is used as a concentric/direct vent system on gas, the clearance to combustibles are specified by the appliance manufacturer.

Listings

Listed to UL 1738 (DGSH.MH25700) and ULC S636 (DGSH7.MH25700). Pressure rated to 10" W.C.

Listed to UL 641 (DFTX.MH8381), ULC S609 (DFTX7.MH8381), and ULC/ORD 441 (DFVAC.MH21150).

Listings continued...

Listed in combination with gas appliances, has been tested and listed as a decorative gas appliance system or as a direct vent heater system. Check with your appliance manufacture for approval.

Diameter

3" inner and 5" outer.

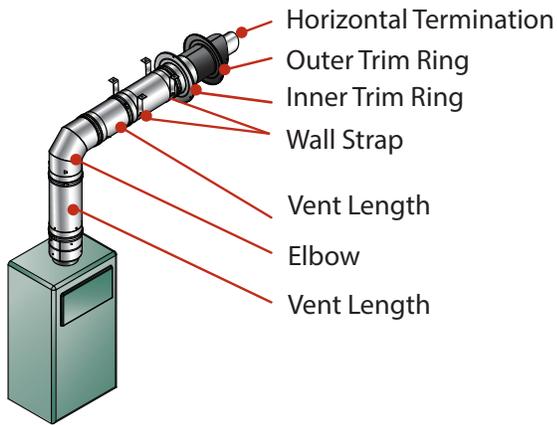
CVS Concentric Venting System

An economical venting solution for condensing and non-condensing appliances, the Concentric Venting System (CVS) features a UL1738 approved super-ferritic stainless steel inner wall. The proprietary twist-lock connection eliminates use of clamps or mechanical fasteners and saves installation time. Only one penetration is needed through the roof or the wall for both exhaust and combustion air. Multiple pipe lengths and telescoping pipes eliminate field cutting of pipe. CVS is the only concentric vent system to incorporate o-rings on the inner wall and outer casing to prevent exhaust or combustion air leakage.

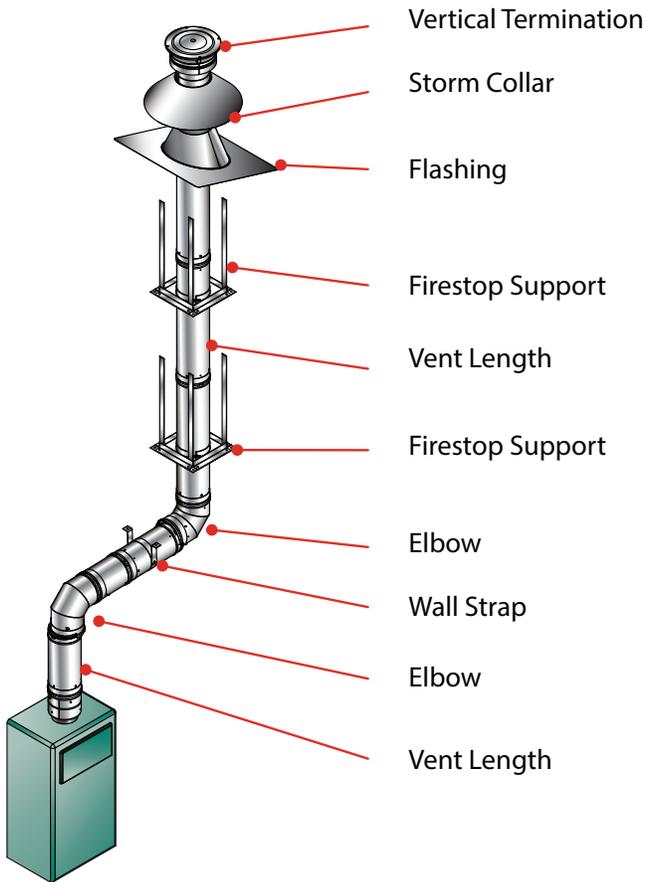
The built-in condensate management system prevents standing condensation. The Concentric Venting System is a fully sealed, gas tight system to deliver superior performance with the heating unit.



Typical Installations



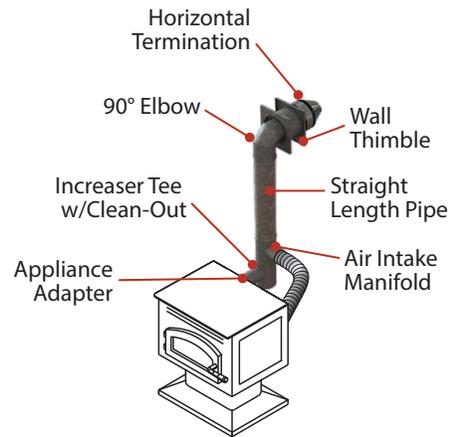
Horizontal Gas Installation



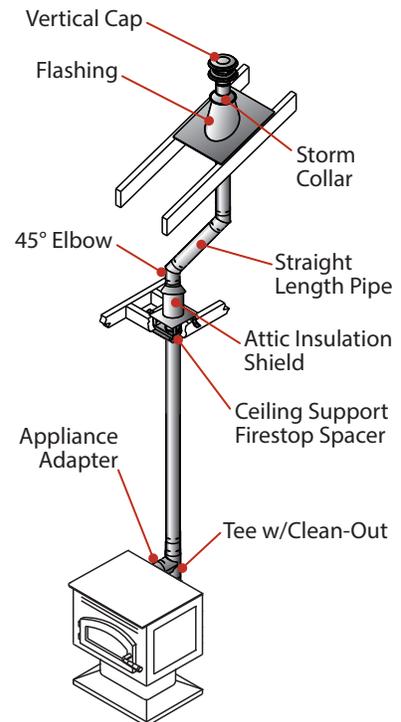
Vertical Gas Installation

Advantages of Concentric

A concentric (or direct-vent, or two-pipe) system maintains indoor air quality by reducing drafts with one penetration, and allows for better humidity level control inside a dwelling. Concentric venting brings to the heating appliance outdoor air as combustion air through an air-tight, sealed system that is safe.



Horizontal Pellet Installation



Vertical Pellet Installation

Planning Your Installation

1	For vertical gas stove installations, measure the height from the stove outlet to the ceiling to determine the length of black pipe required. Select a ceiling support/wall thimble cover or a cathedral ceiling support box.
2	To determine the length of galvanized pipe required, measure the ceiling thickness and the vertical rise in an attic or second story. Firestops are required at each floor level beyond the first floor ceiling support/wall thimble cover or cathedral ceiling support box. If an offset is required to avoid obstructions, use a pair of 45° elbows. For proper support, use elbow straps with offsets. Use wall straps for long vertical runs. Attic Insulation Shield is required in attic.
3	Measure the roof pitch. Select the proper flashing and storm collar. Determine the minimum height above the roof.
4	For horizontal installations, check the appliance manufacturer's instructions for minimum rise and maximum horizontal run. A snorkel termination may be used if height restrictions prevent adequate rise above the appliance. Select the appropriate Horizontal Termination Cap (see appliance manufacturer installation instructions). To protect vinyl siding, select vinyl siding standoff. Check appliance manufacturer's instructions for wall thimble and firestop requirements.

Design Recommendation

The following design recommendations are general guideline to assist in the design and selection of venting components for your installation. Always follow DuraVent Installation instructions enclosed with the cap or support box before installing your chimney system. Installation instructions can be viewed online at www.duravent.com, under Catalogs and Instructions.

Important: Check the manufacturer's rating plate and instruction manual to confirm that the DuraVent direct vent system is approved for use on the brand name appliance you have selected.

- The inner and outer pipe diameters should match the outlet size of the appliance.
- Check the appliance manufacturer's installation instructions to confirm which types of vent configurations are permitted (i.e. horizontal, vertical, chimney reline, etc.). Also, check for any venting restrictions such as maximum horizontal run, minimum and maximum vertical rise, maximum offset, etc.
- Be fire safe! Maintain at least the minimum clearances (air-space) between the vent pipe and nearby combustibles, as specified in the appliance manufacturer's installation instructions. Use proper support and bracing. Follow local building codes and have your venting system inspected.

Concentric Vent System

Vent Length



Features fully unitized, twist-lock construction in 3" diameters. It can be used in both vertical and horizontal installations. Stainless steel welded seam inner wall, combined with a galvalume welded seam outer wall. Inner and outer are sealed with O-Ring gaskets. Galvalume or painted black outer finish. To calculate installed length, subtract 1 1/2" from each length of pipe.

SIZE	ORDER #	STOCK #	A
3" x 5"	35CVS-06	810009344	6"
3" BLACK	35CVS-06B	810013254	6"
3" x 5"	35CVS-12	810005795	12"
3" BLACK	35CVS-12B	810013255	12"
3" x 5"	35CVS-24	810005796	24"
3" BLACK	35CVS-24B	810013256	24"
3" x 5"	35CVS-36	810005797	36"
3" BLACK	35CVS-36B	810013257	36"

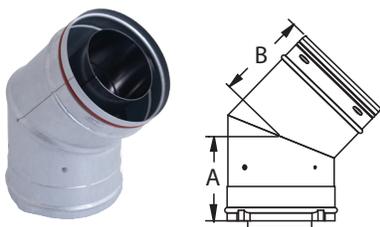
Telescoping Adjustable Length



Use to add length to straight lengths of CVS pipe. Amount of adjustable length listed in chart. Requires at least 1/2" overlap for a secure connection.

SIZE	ORDER #	STOCK #	A
3" x 5"	35CVS-12TA	810009642	9" - 12"
3" x 5"	35CVS-18TA	810009464	12" - 18"
3" BLACK	35CVS-18TAB	810013258	12" - 18"

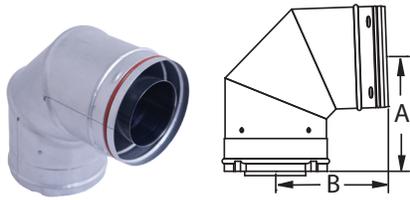
45° Elbow



Offsets obstructions as needed. Allows for better condensate management and less back pressure. Sloped at 44° to direct condensate back to the appliance.

SIZE	ORDER #	STOCK #	A	B
3" x 5"	35CVS-E45	810009346	4"	4 1/4"
3" BLACK	35CVS-E45B	810013259	4"	4 1/4"

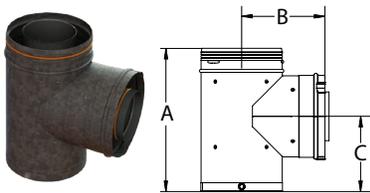
90° Elbow



Use to go from horizontal to vertical runs or vertical to horizontal runs. Use to turn vent 90°. Sloped at 88° to direct condensate back to the appliance.

SIZE	ORDER #	STOCK #	A	B
3" x 5"	35CVS-E90	810009464	5 3/4"	5 1/2"
3" BLACK	35CVS-E90B	810013258	5 3/4"	5 1/2"

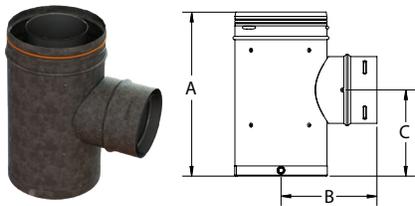
Tee w/ Cleanout



Use for a 90° offset. Tee has a 3x5 CVS connection for the branch. Includes removable clean out. Additional pipe cannot be used below the Tee Body.

SIZE	ORDER #	STOCK #	A	B	C
3" x 5"	35CVS-T	810012811	9"	5 1/4"	4 5/8"
3" BLACK	35CVS-TB	810012812	9"	5 1/4"	4 5/8"

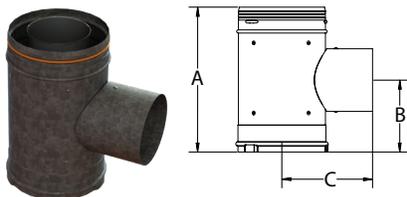
Increaser Tee w/ Cleanout



Use for a 90° offset. Tee has a 3" Pellet connection for the branch, which increases to 3x5 at the Tee Body. Includes removable clean out. Additional pipe cannot be used below the Tee Body. Use to transition between PelletVent Pro venting and CVS.

SIZE	ORDER #	STOCK #	A	B	C
3" x 5"	35CVS-T3	810012708	9"	5 1/4"	4 5/8"
3" BLACK	35CVS-T3B	810012709	9"	5 1/4"	4 5/8"

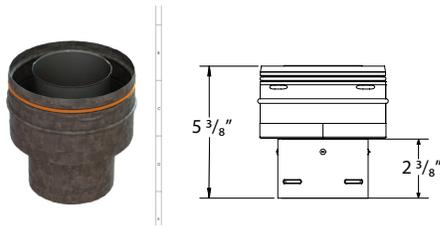
Air Intake Manifold



A direct vent Air Manifold allows outside fresh air for combustion to be brought to the stove. 3" aluminum flex is attached to the manifold and connected to the stove intake.

SIZE	ORDER #	STOCK #	A	B	C
3" x 5"	35CVS-TI	810012809	8 1/2"	5 1/4"	4 1/4"
3" BLACK	35CVS-TIB	810012810	8 1/2"	5 1/4"	4 1/4"

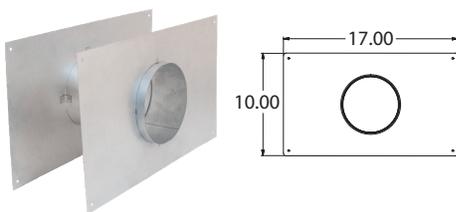
Pellet Adapter



Use to transition between PelletVent Pro venting and CVS.

SIZE	ORDER #	STOCK #
3" x 5"	35CVS-X3PVP	810012807
3" BLACK	35CVS-X3PVPB	810012808

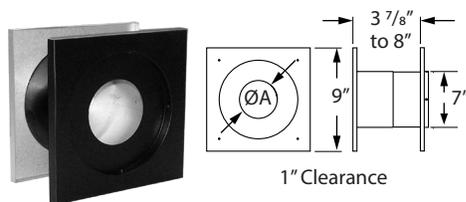
Wall Thimble



Use for through-the-wall installations. Fits between standard wall studs. Can only be used in a Gas Application.

SIZE	ORDER #	STOCK #
3" x 5"	35CVS-WT	810009468

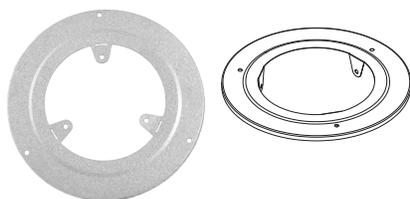
Wall Thimble



Use for through-the-wall installations. Fits between standard wall studs. Comes with an insulation ring to reduce air infiltration where the pipe slips through the thimble.

SIZE	ORDER #	STOCK #	A
3" x 5"	35CVS-WTP	810012921	5 3/8"

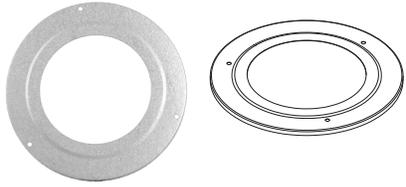
Interior Trim Plate



Conceals gap between pipe and wall cut out on the interior of a building. Bend tabs to secure. Neoprene ring reduces air infiltration where pipe slips through. Can only be used in a Gas Application.

SIZE	ORDER #	STOCK #
3" x 5"	35CVS-TRI	810005801

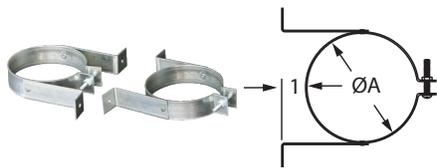
Exterior Trim Plate



Conceals gap between pipe and wall cut out on the exterior of a building. Secures to wall. Can only be used in a Gas Application.

SIZE	ORDER #	STOCK #
3" x 5"	35CVS-TRO	810005802

Wall Strap



Use to provide support for offsets and horizontal runs. Recommended every 4' to support vertical vent.

SIZE	ORDER #	STOCK #	A
3" x 5"	35CVS-WS	810009467	5 1/8"

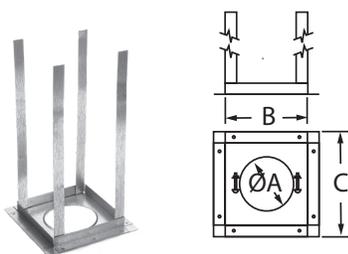
Universal Condensate Drain



Use to properly manage corrosive condensates common with high efficiency gas appliances. Port connects to 3/8" drain hoses.

SIZE	ORDER #	STOCK #
3" x 5"	35CVS-CD	810009465
3" BLACK	35CVS-CDB	810013261

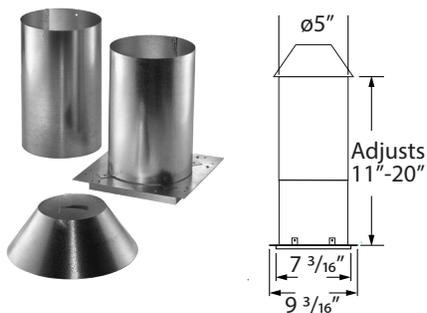
Firestop Support



Required where vent passes through ceiling. Centers pipe to provide 1" clearance. Support Clamp included. Use to support vent at ceiling level.

SIZE	ORDER #	STOCK #	A	B	C
3" x 5"	35CVS-FS	810009466	5 3/8"	7 1/4"	9 1/4"

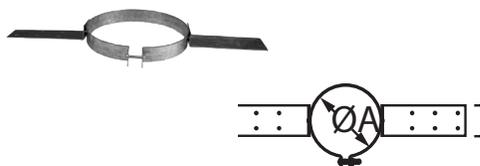
Attic Insulation Shield



Required for installations that pass through an attic to prevent insulation from accumulating near the vent. Provides 1" clearance to combustibles.

SIZE	ORDER #	STOCK #
3" x 5"	35CVS-IS	810013269

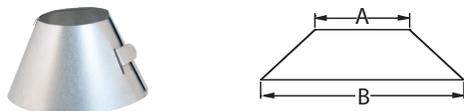
Roof Support



Use to support pipe at roof level.

SIZE	ORDER #	STOCK #	A
3" x 5"	35CVS-RS	810009641	5 1/8"

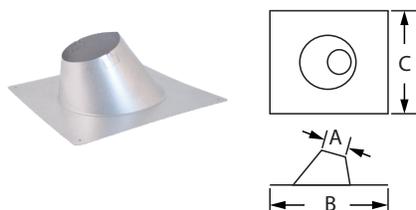
Storm Collar



Use to maintain a weather tight resistant seal between the pipe and the flashing for vertical terminations.

SIZE	ORDER #	STOCK #	A	B
3" x 5"	35CVS-SC	810009643	5 1/8"	10"

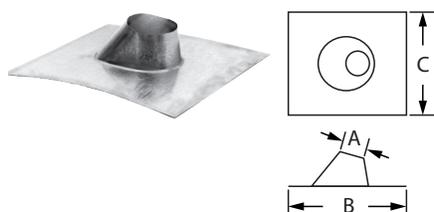
Adjustable Roof Flashing



Use to weather proof the penetration of vent pipe through the roof. Fits 1/2 - 1 1/2 roof pitches. Storm Collar required.

SIZE	ORDER #	STOCK #	A	B	C
3" x 5"	35CVS-F	810009644	5 5/8"	16"	16"

DSA Roof Flashing



Use to weather proof the penetration of vent pipe through the roof. Fits up to 7/12 roof pitch. Storm Collar required. Made of malleable dead soft aluminum.

SIZE	ORDER #	STOCK #	A	B	C
3" x 5"	35CVS-DSA	810009645	5 5/8"	23 1/8"	26 1/8"

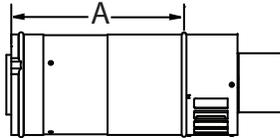
Vertical Termination



Use for vertical terminations only.

SIZE	ORDER #	STOCK #
3" x 5"	35CVS-VC	810009347

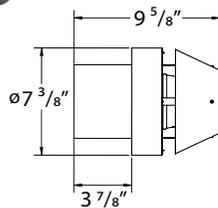
Horizontal Termination "Gas"



Use for horizontal terminations. Exterior and interior trim ring included. Termination length telescopes from 8-13". For use with Gas fuel applications.

SIZE	ORDER #	STOCK #	A
3" x 5"	35CVS-HCR	810009472	8" - 13"

Horizontal Termination "Pellet"



Use for horizontal termination only. Designed to help jet exhaust away from the wall. Comes in a fixed length.

SIZE	ORDER #	STOCK #
3" x 5"	35CVS-HC	810013270