# DuraVent

# SUBMITTAL RECORD

Single Wall or Double Wall AL29-4C® or 316L. Special Gas Vent for Category I, II, III and IV. Canada's Type BH Gas Vent System.

3" to 16" Diameter Vent For use on Positive, Neutral and Negative Pressures up to 15" W.C.





FNS Vent Length

FNS W2 Vent Length

# MODEL FasNSeal® & FasNSeal® W2



Listed to standards: UL-1738 ULC-S636

Report # G100215896MTL-006

Reference to the installation instructions will enable you to obtain a safe
efficient and dependable installation of this vent system. Please read and
understand these instructions before beginning your installation.

SUBMITTA	L RECORD
PREPARED FOR:	
REFERENCE:	
LOCATION:	
CONTACT:	
TELEPHONE:	FAX:
EMAIL:	
PREPARED BY:	_

Material Selection	
	FLUE (INNER WALL)
	AL29-4C
	316L

Do not alter or modify the components of this chimney system under any circumstances. Any modification or alteration of the vent system or approved accessories, including but not limited to the appliance it is connected to, may void the warranty, listings and approvals of this system and could result in an unsafe and potentially dangerous installation.

- A. Examine all components for possible shipping damage prior to installation:
- Proper joint assembly is essential for a safe installation. Follow these instructions exactly as written: Check severeness of joints upon completion of assembly;
- C. This venting system must be free to expand and contract. This venting system must be supported in accordance with these instructions;
- D. Check for unrestricted vent movement through walls, ceilings, and roof penetrations;
- E. Different manufacturers have different joint systems and adhesives. Do not mix pipe, fittings, or joining methods from different manufacturers.

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#### INTRODUCTION

DuraVent's FasNSeal® is a stainless steel vent system for Category II, III, and IV gas-fired appliances. FasNSeal is listed to UL 1738 and ULC S636 standards with a maximum rated operating temperature of 480°F (249°C) and a rated pressure of 15 in-w.c. FasNSeal must be installed by an experienced professional familiar with the operation and maintenance of heating appliances and venting. Before installing this product, examine all components for possible shipping damage and read the complete installation manual. Failure to follow proper installation procedures, including vent pitch and improper appliance connections may cause unsafe conditions. When venting Category II, III, or IV appliances, FasNSeal must be used for the entire length of the system. Different manufactures have different joint systems and adhesive requirements. Do not mix pipe, fittings, or joining methods from different manufacturers. See the DuraVent Product Catalog for a complete list of parts and products. Every vent system must be planned and installed for optimum performance and safety. The venting system must be free to expand and contract and must be supported in accordance with these instructions. (Check for unrestricted vent movement through walls, ceilings, and roof penetrations). Refer to the gas appliance manufacturer's instructions to determine venting requirements and limitations with respect to installation and use of the appliance. It is the responsibility of the installer to contact local building and fire officials concerning any installation restrictions and/ or inspection requirements that may apply. Permits may be required before starting an installation. This product must be installed in accordance with local building code requirements as well as National codes: In the US: NPFA 211 and NFPA 54/ANSI Z223.1 National Fuel Gas Code or the International Fuel Gas Code.

In Canada: CAN/CGA B149.1 Natural Gas and Propane Installation Code.

#### IMPORTANT NOTICE

The UL listing for this product is void if components other than those supplied as Listed Components are used. All warranties, stated or implied, are void if this product and the appliances to which it is connected are not installed in accordance with their respective instructions and local code requirements.

After the installation, check the entire system to make sure all joints are secure and sealed correctly. The seams and joints must be checked for gas tightness when using the venting system with Category II, III, or IV appliances. DuraVent recommends that the entire system be checked by a qualified inspector at least once annually following initial installation.

The installation must conform to the requirements of the appliance manufacturer's instructions NFPA 211, the National Fuel Gas Code, the International Fuel Gas Code, or the Canadian Gas and Propane Installation Code as well as local codes and regulations.

#### **GENERAL INSTALLATION REQUIREMENTS**

Failure to conform with these installation instructions and all applicable codes may result in catastrophic property damage, personal injury, or death. These instructions are a guide to assist a professional installer.

- Proper operation of the vent system and appliance depends on the use and correct assembly of all parts specified for a particular installation.
- Tee sections should only be incorporated in conjunction with a drain on appliances tested for use with a drain, or if allowed by the appliance manufacturer for multiple appliance connections.
- If required by the appliance manufacturer, a drain fitting must be located as close as possible to the appliance flue outlet.

Depending on the arrangement of the vent, **more than one drain may be required**. Unless a drain fitting is supplied with the appliance, install a FasNSeal Drain Fitting.

- More than one Category II, III or IV appliance may not be connected into the same vent system, unless the appliance manufacturer specifically approved such a system and the appliances are designed for multiple venting. Cat. II, III or IV appliances may not be common vented with Cat. I, natural draft appliances.
- FasNSeal must not come in contact with plumbing or electrical systems.
- Maintain rated clearances to combustibles over the entire length of the vent system. Refer to **Table 2** for clearance to combustible requirements.
- Except for installation in one or two family dwellings, a vent system that extends through any zone above that on which the connected appliance is located, shall be provided with an enclosure having a fire resistance rating equal to or greater than that of the floor or roof assemblies through which it passes.

Equivalent Length Chart							
	3" Equivalent Length	4" Equivalent Length	5" Equivalent Length				
1-ft Vent Pipe	1-ft	1-ft	1-ft				
1-ft FNS Flex	1-ft	1-ft	1-ft				
Pipe							
Rain Cap	7-ft	10-ft	13-ft				
15° Elbow	2-ft	2-ft	3-ft				
30° Elbow	2-ft	2-ft	3-ft				
45° Elbow	2-ft	3-ft	4-ft				
90° Elbow	4-ft	6-ft	8-ft				
Tee	18-ft	25-ft	33-ft				
Boot Tee	8-ft	11-ft	15-ft				
Wye	10-ft	14-ft	18-ft				

#### IMPORTANT

When Installing FasNSeal of 5" diameter or greater, any enclosures must be of non-combustible materials!

- Never install FasNSeal on an appliance that is not listed for use with a Special Gas Vent or Type BH vent.
- FasNSeal shall not be routed into, through, or within any vent, such as an existing masonry or factory-built chimney, that is connected to another appliance-with the exception of FasNSeal 80/90.
- Do not install insulation in any required clearance space around FasNSeal.

#### **IMPORTANT**

Follow appliance manufacturer's allowances for elbows.

Unenclosed requires at least one side open. Combustible material is any material made of wood, compressed paper, plant fibers, or other material that are capable of being ignited or burned. Such material shall be considered combustible even though it is flame-proofed, flame retardant treated or plastered. (Source NFPA 54/ANSI Z223.1)

If specific guidance is not offered by the appliance manufacturer as to Equivalent Vent Lengths (EVL) for venting components, the general guidelines in **Table 1** can be used.

Table 1 3

#### **FasNSeal**

Clearance to Combustibles							
Rate	d Operating	Clearance E	nclosed	Clearance Unenclosed			
Ten	nperatures	Horizontal	Vertical	Horizontal	Vertical		
	194°F (90°C) (Canada only)	C) o"		o	п		
3" - 4"	300°F (149°C)	Side: 8" (206.2 mm)		1" (25.4 mm)			
	480°F ( 249°C)	Top: 12" (304.8 mm) Bottom: 4" (101.6mm)	4" (101.6 mm)	3" (76.2 mm)	1" (25.4 mm)		
	194°F (90°C) (Canada only)	0"		0	п		
5" - 16"	300°F (149°C)	Non-Combustible	o onelocuros	3" (76.2 mm)	3" (76.2 mm)		
	480°F (249°C)	Non-Combustible enclosures		3" (76.2 mm)	3" (76.2 mm)		
	Rated Operating Temperature of 300°F (149°C) = Max Flue Gas Temperature of 375°F (190°C) Rated Operating Temperature of 480°F (249°C) = Max Flue Gas Temperature of 550°F (288°C)						

### FasNSeal W2

Clearance to Combustibles								
Rate	d Operating	Clearance	Enclosed	Clearance U	nenclosed			
Ten	nperatures	Horizontal	Vertical	Horizontal	Vertical			
	194°F (Canada only)		0"					
3" - 4"	300°F (149°C)	3"(76.2 mm)	1" (25.4 mm)	1" (25.4 mm)	1" (25.4 mm			
	400°F (204°C)	6" (152.4 mm)	1" (25.4 mm)	3" (76.2 mm)	1" (25.4 mm			
	480°F (249°C)	6" (152.4 mm)	4" (101.6 mm)	3" (76.2 mm)	1" (25.4 mm			
	194°F (Canada only)	0"						
5" - 16"	300°F (149°C)	3" (76.2 mm)	1" (25.4 mm)	1" (25.4 mm)	1" (25.4 mm			
3 - 10	400°F (204°C)	6" (152.4 mm)	1" (25.4 mm)	3" (76.2 mm)	1" (25.4 mm			
	480°F (249°C)	6" (152.4 mm)	4" (101.6 mm)	3" (76.2 mm)	3" (76.2 mm			

Table 2

#### **VENT SIZE AND LENGTH**

Refer to the appliance manufacturer's installation instructions for proper size and vent configuration. Follow any horizontal/vertical length and height limitations, minimum clearances (air space) to combustibles, or specifications for the use of Elbows, Tees, or Drain Tees. Although our Adjustable Vent Length and Wall Thimble are designed to eliminate cutting, there may be occasions when you must field cut a vent length.

**SINGLE-WALL FIELD CUTTING:** When necessary for single-wall only, cut the male end only and keep in mind that a minimum of 2" vent length is needed to obtain a seal on the female end. Make a **straight cut** to ensure the gasket is completely covered. **Sand all burrs off to avoid damaging the gasket** during installation. When these procedures are followed, FasNSeal may safely be cut in the field.

#### ADJUSTABLE VENT LENGTH

The FasNSeal Adjustable Vent Length (FSAVL) is available in all diameters and allows the installer to easily adjust the vertical or horizontal length of a vent system. Cutting, or piecing together several vent lengths can be avoided. The FasNSeal Wall Thimble (FSWT) already incorporates the FSAVL. In most system layouts, this provides enough adjustability for the horizontal vent run.

Use the FSAVL vertically for easy adjustment of the required minimum 1/4" per foot pitch.

Technical details about the stand alone FSAVL (see Figure 1 & 1a): The overall length of all FSAVL Adjustable Vent Length is 18" (1).

The female end (2) measures 2", leaving 12" to telescope into a standard vent length.

The FSAVL must penetrate no less than 4" into a standard vent length (3) to assure a good seal and structural stability. This leaves up to 12" in true axial adjustability (4).

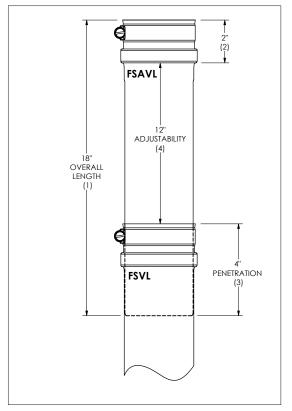


Figure 1 (single-wall)

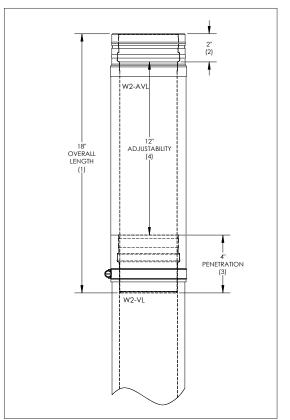


Figure 1a (double-wall)

minimum

minimum

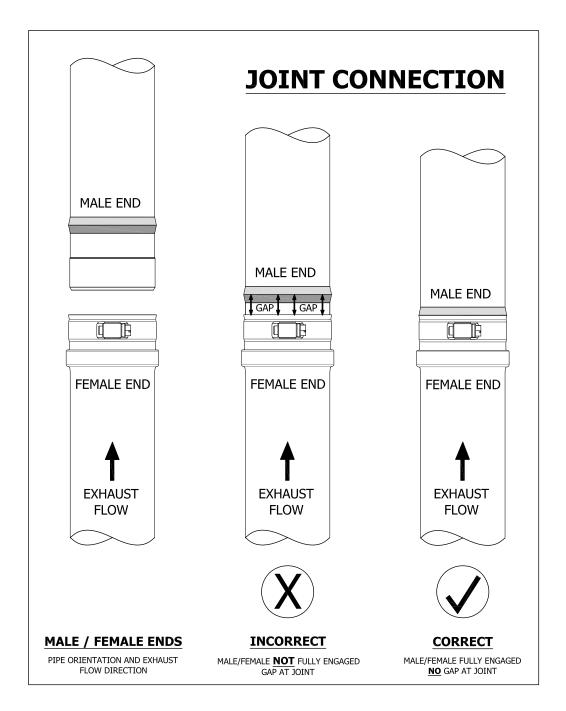


Figure 2

#### **JOINT CONNECTIONS**

The female end of each FasNSeal component incorporates a sealing gasket and a mechanical locking band. Examine all components prior to installation. Gaskets must be in proper position or flue gases could leak and result in carbon monoxide poisoning.

1. Insert the male end into the female section. Push the units together and turn them until half of the bead on the male end is covered by the flared edge of the female end. (see Figure 2 & Figure 2a). This creates the needed airtight seal for Category II, III or IV appliances. Align the seams on the vent lengths and orient them upward in all horizontal applications.

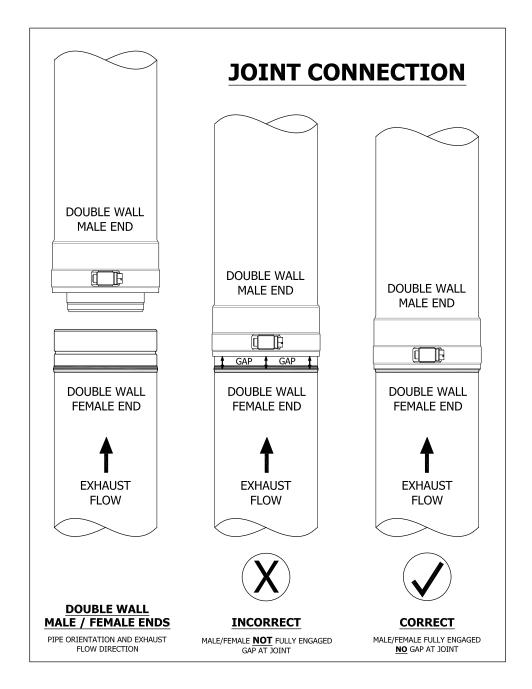


Figure 2a

**2.** Tighten the locking band with a nut driver until snug plus 1/4 turn.

Before proceeding, recheck all joints and ensure that all male sections extend to the top of the flared female end and all clamps are tightened.

#### APPLIANCE CONNECTION

Connect FasNSeal to the appliance flue collar as directed in the appliance manufacturer's instructions. If the appliance flue collar is not designed to accept FasNSeal® directly, an adapter may be available.

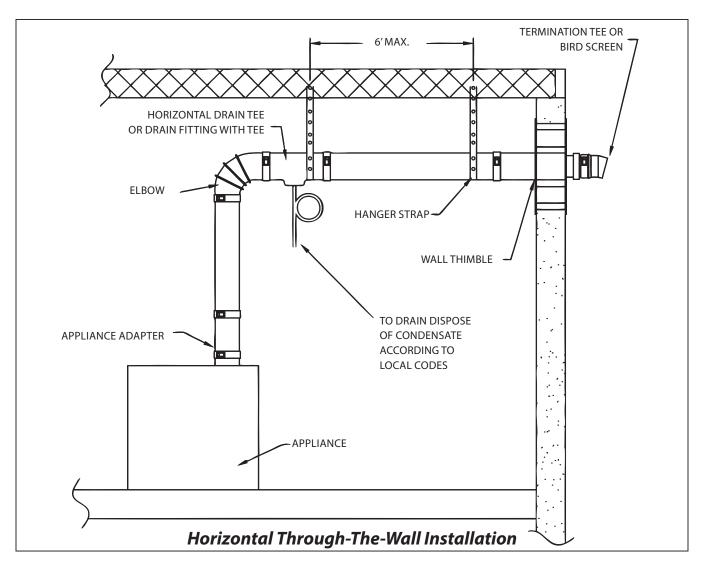


Figure 3

#### **CONDENSATE DRAINS**

If instructions or local regulations call for a condensate drain, use one of the following FasNSeal drains (FSUCD, FSDF, FSIPSDF, FSHDF, FSHDT) and plastic tubing of appropriate size.

# When an internal condensate drain is NOT part of the appliance:

- **1.** A Universal Condensate Drain (UCD) or a Tee with a drain fitting (DF) is strongly recommended. Install this drain as close as possible to the appliance flue collar.
- **2.** A condensate drain is required for every 30 feet of horizontal vent and at the bottom of a vertical stack.

- **3.** Use the Drain length for a straight horizontal run. Rotate the fitting so that the drain tube is as vertical as possible.
- **4.** Use a Tee at a transition from horizontal to vertical, and attach the Drainfitting to the appropriate branch of the tee.
- **5.** A trap loop must be formed into the drain hose and must be a diameter that is at least four times the appliance's rated stack pressure in inches of water column or minimum 3 inches. Secure the loop with a cable tie.
- **6.** Flue gas condensate can have a low (3 to 5) PH level, follow all local and national codes and regulations for the draining of acidic condensate.

7. In cold climate, do not install a condensate drain on the exterior of the building. Doing so may result in dangerous icy conditions on surfaces near the drain and may cause damage to the vent system and the building exterior. DuraVent will NOT be held liable for any injury or property damage due to formation of ice.

# HORIZONTAL, THROUGH THE WALL INSTALLATION

- For a typical Horizontal Through the Wall installation, refer to **Figure 3**. When venting through a sidewall, terminate the system not less than 12" (.3m) above the ground and above the snow line in geographical areas where snow accumulates. The termination area must be kept clear of snow and ice at all times.
- Terminate the system at least 7' (2.1m) above a public walkway or driveway, no less than 6' (1.8m) from the combustion air intake of any appliance or 3' (.9m) from any other building opening, gas utility meter, service regulator or the like. It also shall terminate at least 3' (.9m) above any forced air inlet within 10' (3.1m) and shall terminate at least 4' (1.2m) below, 4' horizontally from or 1' (.3m) above any door, window, or gravity air inlet into any building as provided in the National Fuel Gas Code ANSI Z223.1/NFPA 54 or the International Fuel Gas Code. Proper judgement may require greater distances depending on the size of the equipment installed or to allow for snow drifting or falling from overhead roofs or trees. The termination should be far enough away from trees, shrubs or decorative items to prevent damage.

- A horizontal installation shall have a slope (upwards away from the appliance for Category II, III, or IV appliances) of no less than 1/4" (6.4mm) every 12" (305mm) to prevent collection of condensates, formation of ice build up, or blockage at any location within the assembly. Refer to appliance manufacturer's installation instructions for further details regarding the installation of condensate drain fittings and the pitch of the system.
- Use non-combustible hanger straps a minimum of every 6' (1.8m) to support the vent system from ceiling joints or other solid structures.

#### Do not puncture the vent system!

- 1. Determine the location and install the Wall Thimble so that a continuous minimum slope of 1/4" per foot is maintained in any horizontal portion of the vent system. Condensate must flow freely and may not be retained in any part of the vent system.
- 2. Cut the opening for the Wall Thimble to allow the spacer tabs protruding from the outer plate to sit comfortably within the opening. (See Figure 4, Wall Thimble Installation diagram). The opening for the single wall thimble will be 5" larger than the vent diameter and for a W2 wall thimble the opening will be 6" larger than the vent diameter. (See Table 3)



#### **IMPORTANT**

The total vent length from the appliance flue collar to the outside termination shall not be greater than specified in the appliance manufacturer's instructions.

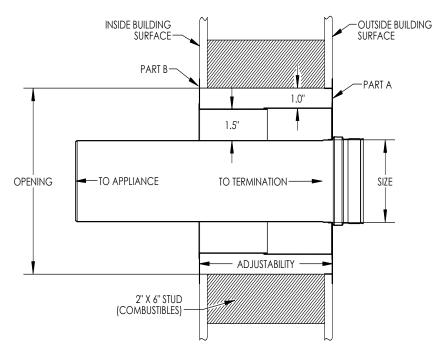


Figure 4 Wall Thimble Installation

- **3.** Position Part A into the opening so that the gasketed end of the Wall Thimble is located on the outside of the structure.
- **4.** Apply a bead of silicone between the two surfaces and around the edges before nailing or screwing the plate on Part A to the outside of the structure.
- **5.** From the inside, slide the sleeve of Part B onto the sleeve of Part A until Part B's plate is flush against the inside structure surface. Fasten with screws or nails. 6. Use a Termination Tee or a Birdscreen to finish the system's exterior.
- 7. When the vent system must pass through an interior wall, use a FasNSeal Wall Pass Through (FSWPT). Cut the same size hole for the FSWPT as was cut for the Wall Thimble and install using the same method.
- **8.** Assemble FasNSeal from the appliance towards the Wall Thimble. Refer to "Joint Connections" in these installation instructions for procedure.

Do not drill through or penetrate any part of the vent system.

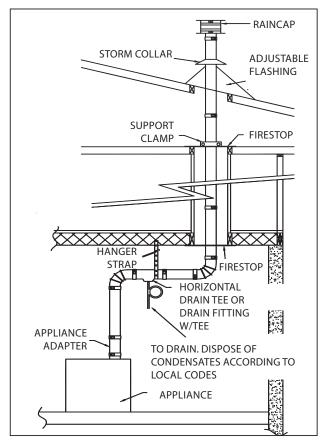
### **IMPORTANT**

When terminating through a non-combustible wall, with W2, the wall thimble is optional.

SIZE	ORDER#	OPENING (SQ. or RND)	ADJUSTABILITY
3"	FSWT3	8"	4.25" - 8.50"
4''	FSWT4	9"	4.25" - 8.50"
5"	FSWT5	10"	4.25" - 8.50"
6"	FSWT6	11"	5.75" - 11.50"
7"	FSWT7	12"	5.75" - 11.50"
8"	FSWT8	13"	5.75" - 11.50"
9"	FSWT9	14"	5.75" - 11.50"
10"	FSWT10	15"	5.75" - 11.50"
12"	FSWT12	1 <i>7</i> "	5.75" - 11.50"
14"	FSWT14	19"	5.75" - 11.50"
16"	FSWT16	21"	5.75" - 11.50"

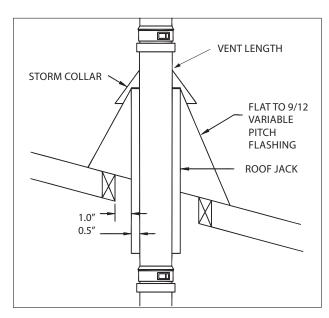
Table 3

When the vent system must pass through an interior wall, use a Wall Pass Through (FSWPT). Cut the same size hole for the FSWPT as was used for the FSWT and install using the same steps.



## Vertical Through the Roof Installation

Figure 5



Vertical Termination
Figure 6

# VERTICAL, THROUGH THE ROOF INSTALLATION

- For a typical Vertical Through the Roof installation, refer to **Figures 5 and 6.** Terminate the system 6' (1.8m) from the combustion air intake of any appliance.
- Terminate the system at least 3' (.9m) from any other building opening, gas utility meter, service regulator or the like
- Terminate the system at least 2' (.61m) above the roof line and
- any wall or vertical structure closer than 8' (2.4m). Additional support is required for systems that extend more than 6' (1.8m) above the roof line.
- Enclose residential exterior vent systems below the roof line or use FasNSeal® W2 to limit condensation and protect against mechanical failure.
- Install a Wall Bracket after every transition from horizontal to a vertical run of over 10' (3.05m), a minimum of every 12' (3.66m) of vertical run, and after any offset in the vertical run.
- Unless FasNSeal is installed in a fire rated shaft, a fire stop and support is required when penetrating through each floor/ceiling level (**See Figure 5**). A Firestop is not needed at the roof level.
- The total equivalent vent length from appliance flue collar to the termination shall not be greater than specified in the appliance manufacturer's installation instructions.
- A FasNSeal Rain Cap or any other provision as required by the appliance manufacturer.
- **1.** Locate the path for the vent system.
- **2.** Cut and frame openings in floors and ceilings to accommodate Firestops.
- **3.** Cut the opening in the roof for the Roof Jack. Cut the opening so that a minimum distance of 1"/25.4 mm is between the Roof Jack and any combustibles.

- **4.** When installing on a pitched roof, place the Roof Flashing under the roofing material up slope from the vent and above the roofing material below the vent. Seal as required.
- **5.** When installing single-wall product, install a Roof Jack into the Roof Flashing to ensure proper ventilation.
- **6.** Now begin installing FasNSeal from the appliance upward.
- 7. Once FNS reaches the roof line, slide the Storm Collar onto the vent length. Install vent length through the Roof Jack if needed and Flashing. Slide the Storm Collar down to rest on the Flashing, then seal as required. Add additional vent lengths as needed, attach Rain Cap, then tighten all connections.
- **8.** To inspect the vent system, loosen the locking band and remove the Rain Cap.

# FASNSEAL EXTERIOR WALL BRACKETS PRE-INSTALLATION

- 1. Wall Brackets must be securely fastened to a solid member of the building using appropriate fasteners Tapcon screws for solid masonry, wood screws for wood framing or sheet metal screws for structural steel.
- 2. A Wall Bracket must be installed after any transition from horizontal to a vertical run of 10 feet or more, after every 12 feet of vertical run or after any offset in a vertical run.

#### INSTALLATION

- **1.** Use the Wall Bracket as a template for marking the hole locations on the wall surface.
- 2. If the Wall Bracket is secured to a masonry structure, drill 3/16 pilot holes for 1/4" Tapcon screws.

- **3.** If the Wall Bracket is secured to a steel structure, drill and tap holes for 1/4-20 screws.
- **4.** If the Wall Bracket is secured to a wood structure, it may be helpful to pre-drill for #8 wood screws.
- **5.** Always install a 1" diameter washer between each fastener and Wall Bracket.
- **6.** Securely attach the Wall Bracket using the appropriate fasteners to the wall.
- **7.** Tighten Wall Bracket to FasNSeal tubing using 45-50 in/lb torque.

#### VENT LENGTH WITH SUPPORT PLATE

The purpose of the Vent Length with Support Plate is to provide an anchor point at the bottom of a vertical run or an additional way to brace a horizontal run. (See Table 4)

#### INSTALLATION

- **1.** Always follow appliance manufacturer's installation instructions for proper appliance setup and venting requirements.
- **2.** Use at the bottom most section of a vertical run.

# VENTING THROUGH A MASONRY CHIMNEY WITH RIDGID FASNSEAL

Supporting a FasNSeal vertical stack through a masonry chimney presents a series of challenges not faced by other vertical installations. The narrow and enclosed space of a chimney prevents easy access to most of the chimney interior. Installing wall brackets or other types of support can be nearly impossible.

As an alterative method to supporting installations that pass through a masonry chimney, a series of tension wires and FasNSeal support clamps can be used. Refer to Figure 7 for a typical installation. It is critical to use enough clamps and proper bracing to safely support the weight of the entire vertical stack. DuraVent, also recommends the use of a FasNSeal drain fitting at the base of the vent. In all situations, it is important to make sure that all workmanship meets and/or exceeds jurisdictional requirements. Contact the local building inspector regarding codes or regulations that might be applicable to your installation. These instructions are based on an installation through a typical masonry chimney. Consult the DuraVent Engineering Department, at 800-835-4429 or via e-mail at techsupport@duravent. com, if your installation has any significant variations.

# Maximum Chimney Height in Feet for Vent Length with Support Plate

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Dia	Order #	Stock #	FS Vent Length with Support Plate
3″	FSSP3	810013336	200
4"	FSSP4	810013337	200
5"	FSSP5	810014720	195
6"	FSSP6	810012891	190
7″	FSSP7	810012892	185
8″	FSSP8	810012893	180
9"	FSSP9	810012894	175
10"	FSSP10	810012895	170
12"	FSSP12	810012896	160
14"	FSSP14	810012897	150
16"	FSSP16	810012898	140
Dia	Order #	Stock #	W2 Vent Length with Support Plate
3"	W2-SP3	810014721	100
4"	W2-SP4	810014722	100
5"	W2-SP5	810014723	97.5
6"	W2-SP6	810012899	95
7"	W2-SP7	810012900	92.5
8"	W2-SP8	810012901	90
9"	W2-SP9	810012902	87.5
10"	W2-SP10	810012903	85
12"	W2-SP12	810012904	80
14"	W2-SP14	810012905	75
16"	W2-SP16	810012906	70

**Table 4** 

# BEFORE BEGINNING THE INSTALLATION

Before beginning an installation within a masonry chimney, a steel support plate must be constructed in order to anchor the supporting tension wires. This plate is not supplied by DuraVent. The thickness of the plate will vary depending on the amount of weight being supported. A hole ½" larger than the outside diameter of the vent will provide some lateral stability to the system. Additional ¼" threaded holes will have to be drilled around the vent for the anchors. These smaller holes should be evenly spaced around the diameter of the central hole. Refer to **Figure 8** for the recommended pattern.

Install ¼" eye bolts with washers and nuts. These will be used to anchor the tension wires to the support plate.

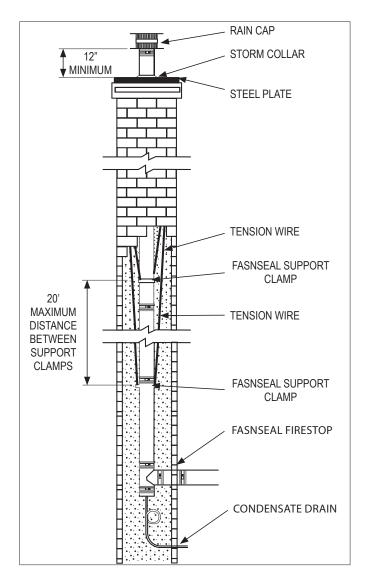


Figure 7

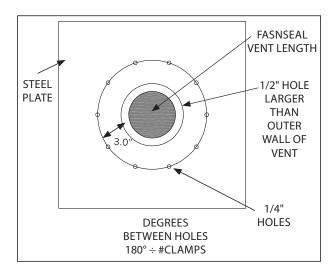


Figure 8

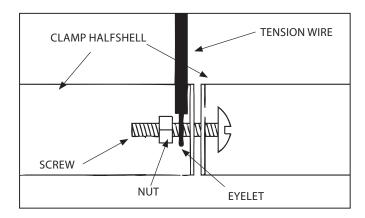


Figure 9

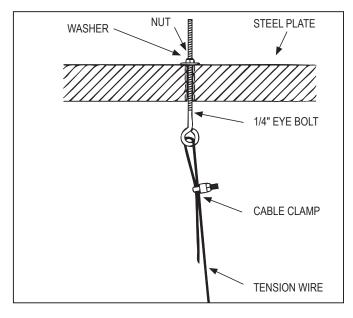


Figure 10

#### IMPORTANT

The loads, plate and cable thickness, as well as the eyelet sizes specified in these instructions are representative and must be calculated for each individual application.

Be sure to remember to connect the condensate drain at the bottom of the stack. Condensates must be directed to a safe point of discharge.

- **1.** Inspect and verify the structural integrity of the chimney and chimney cap. The weight of the vent will be resting on the chimney and an unstable chimney may shift and/or collapse.
- 2. Install a FasNSeal support clamp at the base of the vent stack. The first support clamp should be located directly below the upper joint on the bottom most straight vent length (Figure 7). Refer to Figure 9 for the proper method of securing tension wires to the FasNSeal support clamp. Do not fasten the cable between the clamp half-shells. This will prevent the clamp from gripping the vent stack properly.
- **3.** Gradually lower the vent stack into the chimney. Secure additional FasNSeal support clamps, ensuring that they are fastened tightly around the vent. Each support clamp beyond the first must be rotated. To calculate the angle of rotation, divide 180 by the total number of support clamps required.
- **4.** Once the vent stack has been lowered into the chimney, install a steel support plate over the top of the chimney. Run the tension wires through the anchors as shown in **Figure 10**.
- **5.** Install a FasNSeal storm collar on top of the steel support plate. Use silicone to seal around the base of the collar as well as the around the diameter of the vent. The breaching through which the horizontal vent passes can be covered and sealed with a FasNSeal firestop.
- **6.** Install a FasNSeal rain cap to terminate the venting system.

# BASIC FASNSEAL FLEX LINER INSTALLATION

- 1. Determine the required location and opening in the masonry chimney. For a basic FasNSeal Flex installation the opening must be large enough for the mortar sleeve and Male Flex Adapter to easily pass through. If a Tee application is necessary, a larger hole may be required. (See Tee Installation Section)
- **2.** Make sure the union of the Male Flex Adapter and the FasNSeal Flex is supported at the bottom of the chimney.
- 3. The flex liner must be installed from the top of the masonry chimney. To prevent damage, one person should feed the liner through the chimney and another person should pull the liner from the bottom. To ease the installation, you can attach a rope to the FasNSeal Flex liner above the Male Flex Adapter. Doing this will reduce the chance of breaking the seal between the FasNSeal Flex and the Male Flex Adapter.
- **4.** The FasNSeal Flex must stay within the masonry chimney; however the Elbow or other FasNSeal components will extend beyond the masonry chimney. (**Figure 11**)
- **5.** It is strongly recommended to use either a Universal Condensate Drain or Tee with Condensate Fitting right off the Male Adapter coming out of the chimney.

# WHEN USING FASNSEAL FLEX FOLLOW THE INSTRUCTIONS BELOW.

#### **IMPORTANT**

When installing FasNSeal Flex the direction of exhaust flow is away from the appliance. There is an arrow printed on each section of liner and components that will point in the direction of the exhaust gas. If the liner is installed correctly the proper direction can be determined by running your fingernails up the inside wall of the liner. If the direction is correct your nails will catch at the seams of the inner wall. If it is incorrect your nails will slide smoothly across the inner surface.

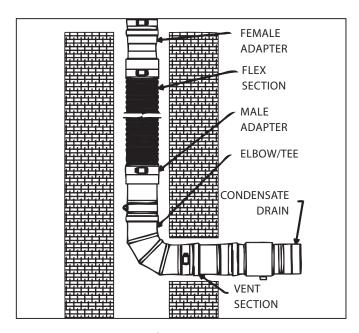


Figure 11

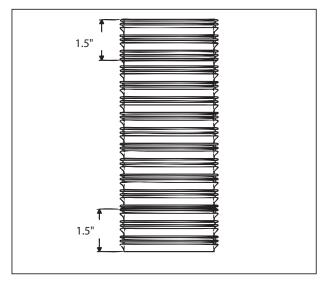


Figure 12

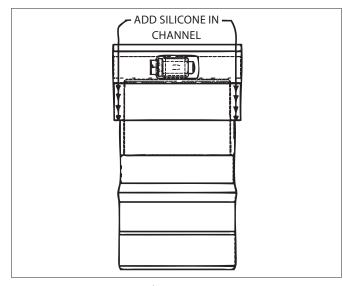


Figure 13

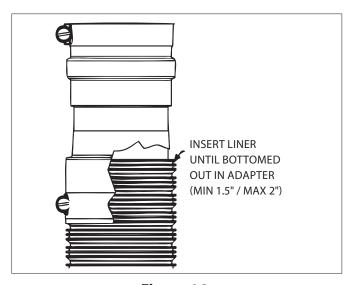


Figure 14

# ATTACHING ADAPTERS TO FASNSEAL FLEX LINER

- 1. The adapter with the blue gasket is the Female Flex Adapter and designed for the top of the flex liner. The Adapter without the blue gasket is the Male Flex Adapter and is designed for the bottom of the flex liner. If field cutting the liner make sure the cut is square.
- 2. Make 4 marks on both ends of liner 90° apart 1 ½" from each end as shown in **Figure 12**. These marks will act as the reference point for when the adapters are fully seated onto the flex liner.
- **3.** Do a dry fit by pushing the liner into the adapters until it bottoms out.
- **4.** Apply RTV 500 silicone in the channel of the Male Flex Adapter adapter (between the inner and outer tubes) as seen in **Figure 13**.
- **5.** Place adapter on liner (the inner tube fits inside the liner and the outer tube fits outside the line). The adapter when properly seated will cover marks made on liner in **step 1 (Figure 14).**
- 6. Tighten clamp
- **7.** Repeat steps **3 through 5** for other end.
- **8.** Before installation, let cure for a minimum. of 24 hours or follow the cure time called out by the silicone manufacturer.

# MULTIPLE FLEX VENTS IN ONE CONDUIT

Multiple FasNSeal Flex vent systems may be installed within one conduit. Listed 2"-4" DuraVent components must be used, and the conduit (if pre-existing) must be inspected and deemed sound. Upper supports may be field supplied, the listing requires: Min. thickness of 24 ga (0.024") SS, no larger than 18" Dia or 18" max. length rectangle, **See Table 5** for max. number of liners per support.

The listing requires clearance holes no larger than 5-1/8" Dia. and spacing 3- 1/4" apart or as listed in **Table 5.** The upper support plate (with a flange for B vent and factory built chimney, **Figure 15**) must be affixed to the top of the conduit via. screws. Anchor bolts must be used when attaching a flat support plate to the top of Masonry or other chase (not shown). Support plate must be weathertight. Use non-hardening sealant as required. Attach Flex Adapter to FasNSeal Flex as detailed earlier in these instructions. Secure the tall cone storm collar(FSSC) directly underneath the gasket relief on the Flex Adapter as shown in Figure 15. In fully assembled condition the storm collar will rest flush against the support plate and be sealed using non-hardening sealant as required. Install and secure Vent Length(s) and termination\*. Additional support is required for systems extending more than 2' above the support plate. The lower portion of the vent system must be supported and firestopped as detailed earlier in these instructions.

\* 2" Installs – Use Black UV Protected PolyPro Pipe and bird guard for the termination. Remove the locking band and insert pipe into the flex adapter (sized to accept PolyPro Pipe) and tighten clamp. Replace the gasket with a bird guard.

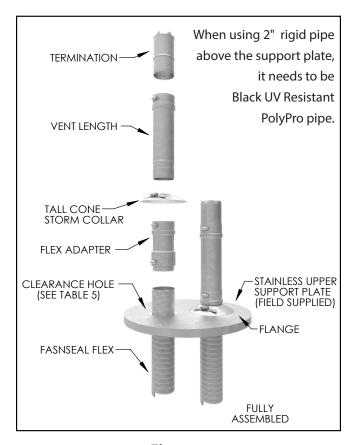


Figure 15

Size	# of Liners	Clearance Hole Diameter	Min. Clearance Hole Spacing
2"	2, 3, or 4	3.25"	3.25"
3"	2, 3, or 4	4"	3"
4"	2 or 3	5"	3"

Table 5

# TEE INSTALLATION INSTRUCTIONS

- **1.** If a tee is needed lower down the liner as in **Step 3** of the previous section to the proper location, even with the opening in the chimney.
- **2.** Attach the appropriate drain fitting to the bottom of the Tee Body.
- **3.** Be sure to remember to connect the condensate drain at the bottom of the stack. See previous section on Condensate Drains for instructions.

#### **FASNSEAL FLEX TERMINATIONS**

For the standard vertical termination installations see previous section vertical, through the roof installation or follow steps below.

- **1.** Slide the Top Plate over the Flex Liner and seal the Top Plate to the masonry chimney using a bead of non-hardening sealant around the top of the chimney and underside of the Top Plate (**Figure 16**).
- 2. Leave at least 4 additional inches of FasNSeal Flex to allow the Rain Cap to sufficiently grab the liner.
- **3.** Slip the Storm Collar portion of the Rain Cap over the liner, position it over the Top Plate and tighten draw band. Reassemble Rain Cap (**Figure 17**).

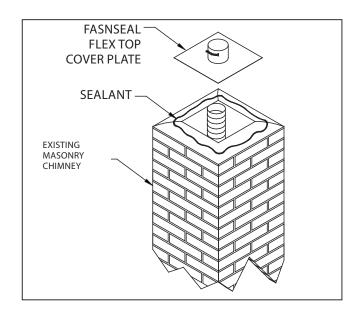


Figure 16

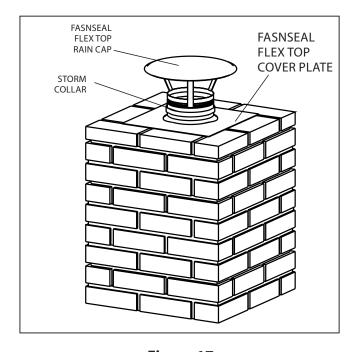


Figure 17

# THE FASNSEAL VENT KIT IS DESIGNED FOR SIDEWALL VENTING OF INSTANTANEOUS TANKLESS WATER HEATERS AND WALL HUNG BOILERS.

This kit contains three easy to install parts that provide the ability to vent through any combustible wall. The Vent Kit is compatible with standard FasNSeal (FNS) products.

Be sure to read these instructions completely, and those of the appliance itself, before proceeding with the installation of this kit.

Local codes and regulations may be applicable and should always be adhered to.

Proper joint assembly is essential for a safe installation. Failure to follow these instructions and good sound installation practices can lead to risk of pipe breakage, fire and carbon monoxide poisoning.

#### KIT COMPONENTS:

The following items are included in the box for this kit:

- Wall thimble termination
- Telescoping 90-degree elbow
- 12-inch long appliance adapter for the FSWMK4 or a 12-inch standard vent length for the FSWMKB3
- Installation Instructions

#### **GENERAL REQUIREMENTS**



conform to any of these requirements

may violate local, state, or national codes and create conditions that may cause catastrophic property damage or personal injury.

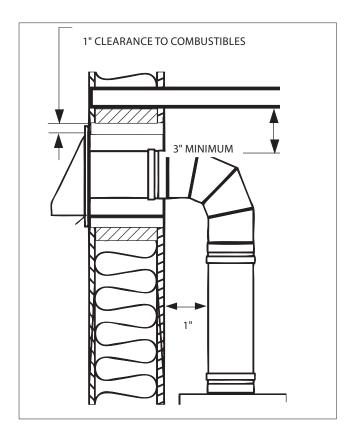


Figure 18

- Proper operation of the vent system and appliance depends on the use and correct assembly of all parts specified by DuraVent for a particular installation.
- If required by the appliance manufacturer, a drain fitting must be located as close as possible to the appliance flue outlet.
- More than one appliance may not be connected into the same vent kit termination.
- FNS must avoid any contact with plumbing or electrical systems.
- Proper clearances to combustibles must be maintained over the entire length of the system (refer to Figure 18).
- Never install FNS on an appliance that is not listed for use with a Special Gas Vent or Type BH vent.
- Additional FNS vent lengths can be installed for extended runs. The overall equivalent length of the system shall not exceed the specifications of the appliance manufacturer's instructions.
- Horizontal vent runs shall have a slope of no less than ¼ inch (6.4mm) every 12 inches (305mm) to prevent collection

of condensates.

- The termination should be away from trees, shrubs, or decorative items as flue gases could cause damage.
- The venting system must be free to expand and contract.
- Check for unrestricted vent movement through walls, ceilings, and roof penetrations.

- Different Manufacturers Have Different Joint Systems and Adhesives. Do Not Mix Pipe, Fittings, or Joining Methods from Different Manufacturers.
- Clearances must be increased in applications exceeding 400 degree outlet temperatures.

# GENERAL TERMINATION GUIDELINES:

**NOTICE:** The following is to be used as a guideline only. Check with the Code enforcement office in your area for specific termination requirements. A mechanical draft vent system, excluding direct-vent appliances, shall terminate at least 4 feet (1219 mm) below, 4 feet (1219 mm) horizontally from, or 1 foot (305 mm) above any door, window, or gravity air inlet into any building. The bottom of the vent terminal shall be located at least 12 inches (305 mm) above grade. In geographical areas where snow accumulates, terminate the system at least 12 inches above the snow line. The termination must be kept clear of snow and ice at all times. Do not terminate over public walkways or over an area where condensate or vapor could create a nuisance or hazard or could be detrimental to the operation of regulators, relief valves. or other equipment.

# FASNSEAL VENT KIT INSTALLATION INSTRUCTIONS

- **1.** Examine all components for possible shipping damage prior to installation.
- 2. Determine the location and cut an opening for the wall thimble (refer to Figure 19).
- Position Part A into the opening so that angled hood is located on the outside of the structure.
- Apply a bead of silicone between the structure and mounting plate before nailing or screwing Part A to the outside surface of the building.
- From the inside, slide the sleeve of Part B onto the sleeve of Part A until the plate of Part B is flush against the inside wall. Fasten with screws or nails.

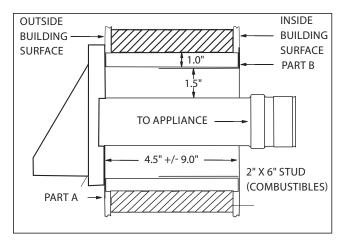


Figure 19

- 3. Slide the 12-inch long appliance adapter or 12-inch standard vent length over one end of the elbow. Insert the other end of the elbow into the wall thimble.
- For kit FSWMK4 pull the appliance adapter over the vent collar and secure it with the built-in locking band. For kit FSWMKB3 insert the male end of the standard vent length into appliance collar and secure it with the built-in locking band.
- Adjust the elbow to achieve the desired pitch.
- Fasten the locking band located on the wall thimble using 1/4" drive rachet with 5/16 socket.

When installing the elbow, it is important to make sure that each end is inserted past the silicone gasket. To ensure the elbow fully engages each gasket, at least two inches of the elbow must be inserted. This minimum requirement is met as soon as the double lines etched into the ends of the elbow are covered (refer to **Figure 20**).

If you are unable to install the elbow past the indicated lines, additional vent lengths must be installed. Prior to initial start up, check the entire system to ensure all joints are secured and sealed correctly. The seams and joints must be checked for gas tightness when using the venting system with Category III or IV appliances and for free movement of flap. DuraVent recommends that a qualified inspector check the entire system at least once annually following the initial installation.

The installation must conform to the requirements of the appliance manufacturer's instructions, the National Fuel Gas Code, and local codes and regulations.

#### **IMPORTANT NOTICE**

The UL listing for this product is void if components other than those supplied as Listed Components are used. All warranties, stated or implied, are void if this product and the appliances to which it is connected are not installed in accordance with their respective instructions and local code requirements.

After the installation, check the entire system to make sure all joints are secure and sealed correctly. The seams and joints must be checked for gas tightness when using the venting system with Category II, III or IV appliances. DuraVent recommends that the entire system be checked by a qualified inspector at least once annually following initial installation.

The installation must conform to the requirements of the appliance manufacturer's instructions, the National Fuel Gas Code and local codes and regulations.

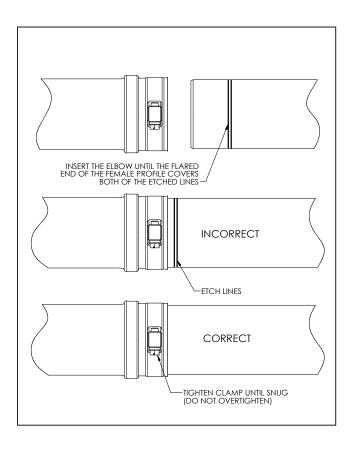


Figure 20

# FasNSeal® - Single-Wall

# Vent Length



Use to vent category II, III and IV appliances. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK#	Α	В
3"	FSVL603	810003091	4"	6"	8"	FSVL2408	810003346	22"	24"
3″	FSVL1203	810003092	10"	12"	8″	FSVL3608	810003347	34"	36"
3″	FSVL1803	810003093	16"	18"	9″	FSVL609	810003388	4"	6"
3″	FSVL2403	810003094	22"	24"	9″	FSVL1209	810003389	10"	12"
3"	FSVL3603	810003095	34"	36"	9″	FSVL1809	810003390	16"	18"
4"	FSVL604	810003142	4"	6"	9″	FSVL2409	810003391	22"	24"
4"	FSVL1204	810003143	10"	12"	9″	FSVL3609	810003392	34"	36"
4"	FSVL1804	810003144	16"	18"	10″	FSVL610	810003426	4"	6"
4"	FSVL2404	810003145	22"	24"	10″	FSVL1210	810003427	10"	12"
4"	FSVL3604	810003146	34"	36"	10″	FSVL1810	810003428	16"	18"
5″	FSVL605	810003200	4"	6"	10″	FSVL2410	810003429	22"	24"
5"	FSVL1205	810003201	10"	12"	10"	FSVL3610	810003430	34"	36"
5"	FSVL1805	810003202	16"	18"	12″	FSVL612	810003467	4"	6"
5"	FSVL2405	810003203	22"	24"	12″	FSVL1212	810003468	10"	12"
5"	FSVL3605	810003204	34"	36"	12″	FSVL1812	810003469	16"	18"
6"	FSVL606	810003255	4"	6"	12″	FSVL2412	810003470	22"	24"
6"	FSVL1206	810003256	10"	12"	12"	FSVL3612	810003471	34"	36"
6"	FSVL1806	810003257	16"	18"	14"	FSVL614	810003508	4"	6"
6"	FSVL2406	810003258	22"	24"	14"	FSVL1214	810003509	10"	12"
6"	FSVL3606	810003259	34"	36"	14"	FSVL1814	810003510	16"	18"
7"	FSVL607	810003301	4"	6"	14"	FSVL2414	810003511	22"	24"
7"	FSVL1207	810003302	10"	12"	14"	FSVL3614	810003512	34"	36"
7"	FSVL1807	810003303	16"	18"	16″	FSVL616	810003543	4"	6"
7″	FSVL2407	810003304	22"	24"	16″	FSVL1216	810003544	10"	12"
7"	FSVL3607	810003305	34"	36"	16″	FSVL1816	810003545	16"	18"
8″	FSVL608	810003343	4"	6"	16″	FSVL2416	810003546	22"	24"
8″	FSVL1208	810003344	10"	12"	16″	FSVL3616	810003547	34"	36"
8"	FSVL1808	810003345	16"	18"					

# Adjustable Vent Length



Use to add length to straight length of FasNSeal pipe. Adds 2"–14" of length. Requires at least 4" overlap for a secure connection.

Available in Custom Lengths.

\*Available in 316L Stainless Steel\*

Ì	SIZE	ORDER#	STOCK #	SIZE	ORDER#	STOCK #
	3″	FSAVL3	810003097	9"	FSAVL9	810003393
	4"	FSAVL4	810003148	10"	FSAVL10	810003431
	5″	FSAVL5	810003205	12"	FSAVL12	810003472
	6"	FSAVL6	810003260	14"	FSAVL14	810003513
	7″	FSAVL7	810003306	16″	FSAVL16	810003548
	8"	FSAVL8	810003348			

# 2° Adjustable Vent Length



Use to facilitate for the 2° pitched required in horizontal runs.

\*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	SIZE	ORDER#	STOCK#
3"	FSAVL03-2	810003099	9"	FSAVL09-2	810003395
4"	FSAVL04-2	810003150	10"	FSAVL10-2	810003433
5"	FSAVL05-2	810003207	12"	FSAVL12-2	810003474
6"	FSAVL06-2	810003262	14"	FSAVL14-2	810003515
7"	FSAVL07-2	810003308	16"	FSAVL16-2	810003550
8"	FSAVL08-2	810003350			

### FasNSeal Flex



Use to vent Category II,III and IV gas burning appliances. Listed to UL 1738. Can only be used in vertical or near vertical runs. **Custom lengths are available for 3"-12" diameters.** Minimum length of 10' for custom orders. Maximum length of 50' for 3" - 9" diameter custom orders and 25' for 10" and 12" diameter custom orders. Must be ordered in 10' increments. Use with FasNSeal components only.

orue	ileu III I	) IIIGI EII	161115. 05	e willi re	asivotai	compon	ents only	/-
SIZE	2	0′	2	5′	31	0′	3.	5′
JIZL	Order #	Stock #	Order #	Stock #	Order #	Stock #	Order #	Stock #
3″	3FSFLEX-20	810003100	3FSFLEX-25	810003101	3FSFLEX-30	810003102	3FSFLEX-35	810003103
4"	4FSFLEX-20	810003151	4FSFLEX-25	810003152	4FSFLEX-30	810003153	4FSFLEX-35	810003154
5″	5FSFLEX-20	810003208	5FSFLEX-25	810003209	5FSFLEX-30	810003210	5FSFLEX-35	810003211
6"	6FSFLEX-20	810003263	6FSFLEX-25	810003264	6FSFLEX-30	810003265	6FSFLEX-35	810003266
7″	7FSFLEX-20	810003309	7FSFLEX-25	810003310	7FSFLEX-30	810003311	7FSFLEX-35	810003312
8″	8FSFLEX-20	810003351	8FSFLEX-25	810003352	8FSFLEX-30	810003353	8FSFLEX-35	810003354
SIZE	5	0′	10	00′	12	.5′	20	0′
SIZE	Order #	Stock #	Order #	Stock #	Order #	Stock #	Order #	Stock #
3″							3FSFLEX-200	810003104
4″							4FSFLEX-200	810003155
5″					5FSFLEX-125	810003212		
6″			6FSFLEX-100	810003267				
8″	8FSFLEX-50	810003355						
SIZE	CUS <sup>-</sup>	ТОМ	SIZE	CUS <sup>-</sup>	ТОМ			
SIZE	ORDER#	STOCK #	SIZE	ORDER#	STOCK #			
3"	3FSFLEX-XX	810003105	8"	8FSFLEX-XX	810003356			
4"	4FSFLEX-XX	810003156	9"	9FSFLEX-XX	810003396			
5"	5FSFLEX-XX	810003213	10"	10FSFLEX-XX	810003434			
6"	6FSFLEX-XX	810003268	12"	12FSFLEX-XX	810003475			
7"	7FSFLEX-XX	810003314						

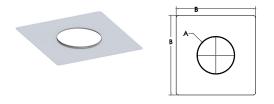
### FasNSeal Flex Rain Cap



#### Terminates FS Flex with support.

SIZE	ORDER#	STOCK#	А	В	SIZE	ORDER#	STOCK #	A	В
2″	FSFLEXRC2	810013324	7 %"	6¾"	7"	FSFLEXRC7	810013293	14 %"	6 ¾"
3″	FSFLEXRC3	810013289	7 5%"	6"	8"	FSFLEXRC8	810013294	15 %"	7"
4″	FSFLEXRC4	810013290	8 5%"	6"	9"	FSFLEXRC9	810013295	16 %"	7 ¾"
5″	FSFLEXRC5	810013291	10 5%"	6 ½"	10"	FSFLEXRC10	810013296	18 5/8"	8"
6"	FSFLEXRC6	810013292	11 %"	6 ½"	12"	FSFLEXRC12	810013297	20 %"	8"

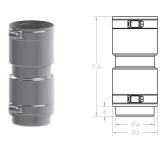
#### FasNSeal Flex Top Cover Plates



#### Supports FSFLEXRC Terminations.

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK#	A	В
2"	FSFLEXTP2	810013325	2 ½"	16"	7"	FSFLEXTP7	810013330	7 3/10"	18"
3″	FSFLEXTP3	810013326	3 3/10"	18"	8"	FSFLEXTP8	810013331	8 3/10"	18"
4"	FSFLEXTP4	810013327	4 3/10"	18"	9"	FSFLEXTP9	810013332	9 3/10"	18"
5″	FSFLEXTP5	810013323	5 3/10"	18"	10″	FSFLEXTP10	810013333	10 3/10"	18"
6"	FSFLEXTP6	810013329	6 3/10"	18"	12"	FSFLEXTP12	810013334	12 3/10"	18"

#### FasNSeal Flex Coupler



Used to connect two (2) lengths of FasNSeal Flex together.

\*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK #	A	В
2″	FSAFLEXC-2	810010308	1 13/16"	2 3/8"	7"	FSAFLEXC-7	810012817	6 13/16"	7 3/8"
3″	FSAFLEXC-3	810012560	3"	3 ½"	8"	FSAFLEXC-8	810012564	7 13/16"	8 3/8"
4″	FSAFLEXC-4	810012561	3 13/16"	4 3/8"	9"	FSAFLEXC-9	810012565	8 13/16"	9 5/16"
5″	FSAFLEXC-5	810012562	4 13/16"	5 3%"	10"	FSAFLEXC-10	810012566	9 13/16"	10 5/16"
6″	FSAFLEXC-6	810012563	5 13/16"	6 3/8"	12"	FSAFLEXC-12	810012567	11 13/16"	12 5/16"

# Male Flex Adapter

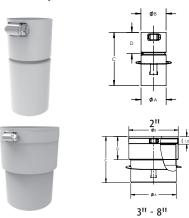


Use to connect FasNSeal rigid Vent Pipe to FasNSeal Flex at base of masonry chimney or bottom termination.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	А	В	SIZE	ORDER#	STOCK#	А	В
3″	FSASMM-3	810003140	2 13/16"	3 5/16"	8"	FSASMM-8	810003386	7 13/16"	8 5/16"
4"	FSASMM-4	810003198	3 13/16"	4 5/16"	9"	FSASMM-9	810003424	8 13/16"	9 5/16"
5″	FSASMM-5	810003247	4 13/16"	5 5/16"	10"	FSASMM-10	810003465	9 13/16"	10 5/16"
6″	FSASMM-6	810003299	5 13/16"	6 5/16"	12"	FSASMM-12	810003506	11 13/16"	12 5/16"
7″	FSASMM-7	810003341	6 13/16"	7 5/16"					

# PolyPro Rigid to FasNSeal Flex Adapter

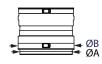


Use to connect FasNSeal Flex to PolyPro rigid Vent Pipe at the bottom of the system. \*Available in 316L Stainless Steel\*

SIZE	ORDER #	STOCK #	А	В	С	D
2″	FSASMM-PP-2	810009850	2 1/16"	2 1/16"	5"	2"
3″	FSASMM-PP-3	810010261	3 3/16"	3 ½"	6"	3"
4″	FSASMM-PP-4	810010262	3 15/16"	4 1/16"	6"	3"
5″	FSASMM-PP-5	810010263	5 1/8"	5 1/16"	6"	3"
6"	FSASMM-PP-6	810010264	5 15/16"	6 1/16"	6"	3"
8″	FSASMM-PP-8	810010265	7 15/16"	8 7/16"	7"	3"

# Female Flex Adapter





Use to connect FasNSeal Flex to FasNSeal rigid Vent Pipe at the top of the system. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	Α	В	SIZE	ORDER#	STOCK#	Α	В
3"	FSASMF-3	810003141	2 13/16"	3 3/16"	8"	FSASMF-8	810003387	7 13/16"	8 1/5"
4"	FSASMF-4	810003199	3 13/16"	43/16"	9"	FSASMF-9	810003425	8 13/16"	9 1/5"
5″	FSASMF-5	810003248	4 13/16"	5 3/16"	10"	FSASMF-10	810003466	9 13/16"	10 3/16"
6"	FSASMF-6	810003300	5 13/16"	6 3/16"	12"	FSASMF-12	810003507	11 3/16"	12 3/16"
7″	FSASMF-7	810003342	6 13/16"	7 3/16"					

**Test Port** 



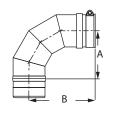


Use to test for proper appliance operation without penetrating the vent wall. Easy access to perform flue gas analysis. More options available, see Universal Adapter w/Test Port in FasNSeal Appliance Adapter section. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	SIZE	ORDER#	STOCK #
3″	FSTP03	810003135	9″	FSTP09	810003422
4"	FSTP04	810003196	10"	FSTP10	810003463
5″	FSTP05	810003245	12"	FSTP12	810003504
6"	FSTP06	810003297	14"	FSTP14	810003541
7"	FSTP07	810003339	16"	FSTP16	810003575
8″	FSTP08	810003384			

90° Elbow





Use to go from horizontal to vertical runs or vertical to horizontal runs. Use to turn vent 90°. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK#	А	В
3″	FSELB9003	810003106	4"	6"	9"	FSELB9009	810003397	7″	9"
4"	FSELB9004	810003157	4 1/2"	6 1/4"	10"	FSELB9010	810003435	7 ½"	9 3/8"
5″	FSELB9005	810003214	5"	6 3/4"	12"	FSELB9012	810003476	8 ½"	10 1⁄4"
6"	FSELB9006	810003269	5 ½"	7 ½"	14"	FSELB9014	810003516	9 ½"	11 3/8"
7″	FSELB9007	810003315	6 1/8"	7 %"	16"	FSELB9016	810003551	11"	12 ½"
8″	FSELB9008	810003357	6 ½"	8 1/4"					

### 88° Elbow

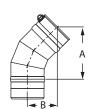


Use to transition from a vertical to a horizontal run. Stabilizes a 2° pitch towards the condensate drain for good condensate management. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK #	А	В
3"	FSELB8803	810003107	4"	6"	9"	FSELB8809	810003398	7″	9"
4"	FSELB8804	810003158	4 1/2"	6 1/4"	10"	FSELB8810	810003436	7 ½"	9 3/8"
5"	FSELB8805	810003215	5"	6 ¾"	12"	FSELB8812	810003477	8 ½"	10 1/4"
6"	FSELB8806	810003270	5 ½"	7 ½"	14"	FSELB8814	810003517	9 ½"	11 3/8"
7″	FSELB8807	810003316	6 1/8"	7 %"	16"	FSELB8816	810003552	11"	12 ½"
8"	FSELB8808	810003358	6 ½"	8 1/4"					

45° Elbow





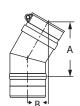
Offsets obstructions as needed. Allows for better condensate management and less back pressure.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	А	В	SIZE	ORDER#	STOCK#	А	В
3″	FSELB4503	810003108	5 3/8"	3″	12"	FSELB4512	810003478	8 ½"	4 1/4"
4"	FSELB4504	810003159	5 5%"	3 1/8"	14"	FSELB4514	810003518	9 1/4"	4 5/8"
5″	FSELB4505	810003216	6"	3 1/4"	16"	FSELB4516	810003553	10"	4 1/8"
6"	FSELB4506	810003271	6 3/8"	3 3/8"					
7"	FSELB4507	810003317	6 3/4"	3 ½"					
8″	FSELB4508	810003359	7 1/8"	3 5/8"					
9"	FSELB4509	810003399	7 ½"	3 %"					
10"	FSELB4510	810003437	7 %"	4"					

### 30° Elbow





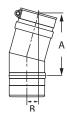
Offsets obstructions as needed. Allows for better condensate management and less back pressure.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	A	В	SIZE	ORDER#	STOCK#	А	В
3″	FSELB3003	810003109	4 1/8"	1 %"	9"	FSELB3009	810003400	7″	2 ½"
4"	FSELB3004	810003160	5 1/8"	1 %"	10"	FSELB3010	810003438	6 ½"	2 1/4"
5"	FSELB3005	810003217	5 1/4"	2"	12"	FSELB3012	810003479	7″	2 ½"
6"	FSELB3006	810003272	5 ½"	2"	14"	FSELB3014	810003519	7 ½"	2 ½"
7"	FSELB3007	810003318	5 %"	2"	16"	FSELB3016	810003554	8 1/8"	2 3/4"
8"	FSELB3008	810003360	6 1/8"	2 1/8"					

### 15° Elbow



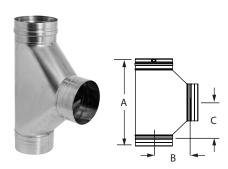


Offsets obstructions as needed. Allows for better condensate management and less back pressure.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK #	А	В
3″	FSELB1503	810003110	4 3/8"	7/8"	9"	FSELB1509	810003401	5 1/4"	1″
4"	FSELB1504	810003161	4 ½"	1″	10"	FSELB1510	810003439	5 1/4"	1″
5″	FSELB1505	810003218	4 5/8"	7/8"	12"	FSELB1512	810003480	5 ½"	1″
6"	FSELB1506	810003273	4 3/4"	7/8"	14"	FSELB1514	810003520	5 3/4"	1″
7″	FSELB1507	810003319	4 %"	1"	16"	FSELB1516	810003555	6 1/8"	1″
8″	FSELB1508	810003361	5 1/8"	1″					

### Wide Mouth Boot Tee

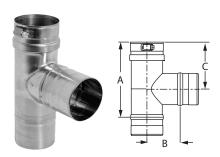


Use to transition from horizontal to vertical. Provides improved flue gas flow with angled gradual transitions. Can also be used as a manifold connection to gang boilers into a common vent.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	С
4"	FSWBT4	810003164	15 ¾"	7"	6 1/10"
5"	FSWBT5	810003220	16 ¾"	7 ½"	7 3/10"
6"	FSWBT6	810003275	17 ¾"	8"	7 %10"
7"	FSWBT7	810003321	18 ¾"	8 1/2"	8 3/10"
8"	FSWBT8	810003363	19 ¾"	9"	8 1/10"
9"	FSWBT9	810003403	20 ¾"	9 ½"	9 3/10"
10"	FSWBT10	810003441	21 ¾"	10"	9 1/10"
12"	FSWBT12	810003482	23 ¾"	11"	10 %10"
14"	FSWBT14	810003522	25 ¾"	12"	11 1/10"
16"	FSWBT16	810003557	27 ¾"	13"	12 1/10"

#### Standard Tee

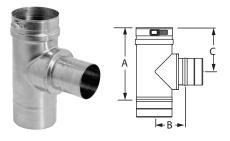


Use for a 90° offset, or to combine connections from two or more appliances into a common vent. Can also use as a condensate management point when used in conjunction with drain fitting. All Standard Tees are completely welded.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	A	В	С	SIZE	ORDER#	STOCK #	Α	В	С
3"	FST3	810003111	7"	3"	4 ½"	9"	FST9	810003402	14"	6"	8"
4"	FST4	810003162	8"	3 ½"	5"	10"	FST10	810003440	14"	6 ½"	8"
5″	FST5	810003219	10"	4"	6"	12"	FST12	810003481	16"	7"	9"
6"	FST6	810003274	10"	4 1/2"	6"	14"	FST14	810003521	20"	8 ½"	11"
7"	FST7	810003320	12"	5"	7"	16"	FST16	810003556	22"	9 ½"	12"
8"	FST8	810003362	14"	5 ½"	8"						

### **Branch Tee**

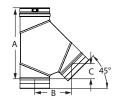


Use as a Tee increaser or as a manifold connection to gang boilers into a common vent. **Available in custom** size combinations.

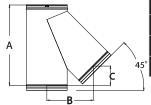
SIZE	ORDER#	STOCK #	А	В	С
4" x 4" x 3"	FST04B03	810003112	8 1/10"	3 ½"	5"
5" x 5" x 3"	FST05B03	810003113	8 1/10"	4"	5 3/5"
6" x 6" x 5"	FST06B05	810003222	10 1/5"	4 1/2"	5 3/4"

# Single-Wall Wye









12" - 16" Diameters

Use in place of any DuraVent tee for a 45° angle instead of 90°; can be used as a manifold connection to gang multiple boilers into a common vent.

SIZE	ORDER#	STOCK#	А	В	C
6"	FSWYE06	810005506	14 ½"	7 ½"	3 1/8"
7"	FSWYE07	810007017	16 <sup>1</sup> / <sub>3</sub> "	8 3/5"	3 ½"
8″	FSWYE08	810005507	18"	9 7/10"	4 "
9″	FSWYE09	810005508	19 7/10"	10 7/10"	$4^{2}/5''$
10"	FSWYE10	810005509	21 <sup>2</sup> /5"	11 13/16"	4 15/16"
12"	FSWYE12	810005510	24 15/16"	14"	5 13/16"
14"	FSWYE14	810007018	28 3/10"	16 <sup>1</sup> /8"	$6^{3}/5''$
16"	FSWYE16	810009330	31 1/5"	18 1/5"	7 ½"

# Single-Wall Increaser Wye



12" - 16" Diameters

Use in place of any tee for a 45° angle instead of 90°. The branch has a smaller diameter, so it can be used to increase to a larger diameter as a manifold connection to gang multiple boilers into a common vent. Maximum diameter increase is 6". **Available in custom size combinations.** 

SIZE	ORDER#	STOCK #	A	В	С
6"x 8"	FSWYE0608	810012530	15 %"	9 1/4"	3 %"
6"x 10"	FSWYE0610	810012531	16"	10 5/8"	3 5/8"
6"x 12"	FSWYE0612	810012556	17 1/8"	12 ½"	4"
8"x 10"	FSWYE0810	810012532	18 3/4"	11 %"	4 3/8"
8"x 12"	FSWYE0812	810012533	19 3/8"	12 3/4"	4 1/2"
8"x 14"	FSWYE0814	810012557	20"	14 1/4"	4 5/8"
10"x 12"	FSWYE1012	810010236	22 1/4"	13 ½"	5 1/8"
10"x 14"	FSWYE1014	810012534	22 %"	15"	5 3/8"
10"x 16"	FSWYE1016	810010311	23 ½"	16 3/8"	5 ½"
12"x 14"	FSWYE1214	810010055	25 %"	15 %"	6 1/8"

# Tee Cap





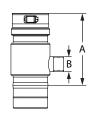
Use to cap Standard Tee, Branch Tee or Boot Tee. Remove Tee Cap to inspect the system; clean out debris or collected condensate.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	SIZE	ORDER#	STOCK #
3″	FSTC3	810003114	9"	FSTC9	810003405
4"	FSTC4	810003168	10"	FSTC10	810003443
5″	FSTC5	810003224	12"	FSTC12	810003484
6"	FSTC6	810003277	14"	FSTC14	810003524
7"	FSTC7	810003323	16"	FSTC16	810003559
8″	FSTC8	810003365			

### **Universal Condensate Drain**







Use to properly manage corrosive condensates common with high efficiency gas appliances. For best results, install close to the appliance. Can be used horizontally, vertically, or any angle in between. The top photo shows the 3"-5" diameters with 5/8" straight tube; the bottom photo shows 6"-16" diameters with a 1" IPS Fitting.

SIZE	ORDER#	STOCK #	А	В
3"	FSUCD3	810003115	6 2/5"	5/8"
4"	FSUCD4	810003169	6 2/5"	5/8"
5"	FSUCD5	810003225	6 2/5"	5/8"
6"	FSUCD6	810003278	6 2/5"	1 1/4"
7"	FSUCD7	810003324	6	1 1/4"
8"	FSUCD8	810003366	6 2/5"	1 1/4"
9″	FSUCD9	810003406	6	1 1/4"
10"	FSUCD10	810003444	6 2/5"	1 1/4"
12"	FSUCD12	810003485	6	1 ¼"
14"	FSUCD14	810003525	6 2/5"	1 1/4"
16"	FSUCD16	810003560	6 2/5"	1 1⁄4″

# **Drain Fitting**



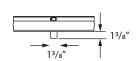


Use instead of Tee Cap to manage condensates at the bottom of a vertical run. For vent systems larger than 5", use an IPS Drain Fitting.

SIZE	ORDER#	STOCK#
3″	FSDF3	810003116
4"	FSDF4	810003170
5″	FSDF5	810003226

### **IPS Drain Fitting**





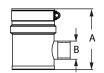
Use to connect iron drain pipe to flow acidic condensates to a neutralization tank before disposal. Uses 1" NPT thread.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	SIZE	ORDER#	STOCK #
3″	FSIPSDF03	810003117	9″	FSIPSDF09	810003407
4"	FSIPSDF04	810003171	10"	FSIPSDF10	810003445
5″	FSIPSDF05	810003227	12"	FSIPSDF12	810003486
6"	FSIPSDF06	810003279	14"	FSIPSDF14	810003526
7"	FSIPSDF07	810003325	16"	FSIPSDF16	810003561
8″	FSIPSDF08	810003367			

# Horizontal Drain Fitting







Use to manage condensates in horizontal runs. Optimal when ganging multiple appliances into a common vent. The top photo shows the 3"-5" diameters with 5/8" straight tube; the bottom photo shows 6"-16" diameters with a 1" IPS Fitting.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	А	В
3"	FSHDF03	810003118	3 ½"	5/8"
4"	FSHDF04	810003172	3 ½"	5/8"
5"	FSHDF05	810003228	3 ½"	5/8"
6"	FSHDF06	810003280	4 3/8"	1 ¼"
7"	FSHDF07	810003326	$4^{3}/8''$	1 ¼"
8"	FSHDF08	810003368	4 3/8"	1 1⁄4″
9″	FSHDF09	810003408	$4^{3}/8''$	1 ¼"
10″	FSHDF10	810003446	4 3/8"	1 ¼"
12"	FSHDF12	810003487	$4^{3}/8''$	1 ¼"
14"	FSHDF14	810003527	4 3/8"	1 ¼"
16"	FSHDF16	810003562	4 3/8"	1 1/4"

### Horizontal Drip Tee



Use to manage condensate in horizontal runs.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	A	В	С
3"	FSHDT3	810003119	6"	1 ½"	3/8"
4"	FSHDT4	810003173	6"	1 ½"	3/8"

### 23° Bird Screen





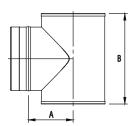
Use for 3" to 16" through-the-wall termination. Deters rain and other elements from entering the vent system. Check installation instructions for restrictions on horizontal terminations, such as minimum distance from windows and doors.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	A
3″	FSBS3	810014823	3 1/10"
4″	FSBS4	810014825	4 1/5"
5″	FSBS5	810003229	4 1/5"
6″	FSBS6	810003281	5 3/5"
7"	FSBS7	810003327	6 2/5"
8″	FSBS8	810003369	7 1/10"
9″	FSBS9	810003409	7 %10″
10"	FSBS10	810003447	8 7/10"
12"	FSBS12	810003488	10 1/5"
14"	FSBS14	810003528	11 1/10"
16"	FSBS16	810003563	13 1/5"

### **Termination Tee**





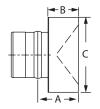
Use for standard and high-wind through-the-wall terminations. Check installation instructions for restrictions on horizontal terminations, such as minimum distance from windows and doors.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В
3″	FSTT3	810003121	3″	6"
4"	FSTT4	810003175	3 1/2"	7"
5″	FSTT5	810003230	4"	8"
6"	FSTT6	810003282	4 1/2"	9"
7″	FSTT7	810014714	5"	10"
8″	FSTT8	810005266	5 ½"	11"
9″	FSTT9	810014786	6"	12"
10"	FSTT10	810009492	6 ½"	13"
12"	FSTT12	810014798	7 ½"	15"
14"	FSTT14	810014800	8 1/2"	17"
16″	FSTT16	810014815	9 ½"	19"

#### **Termination Box**





Use for horizontal through-the-wall terminations. Check installation instructions for restrictions on horizontal terminations, such as minimum distance from windows and doors.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	С
3"	FSTB3	810003122	2 3/10"	2"	5"
4"	FSTB4	810003176	2 3/10"	2"	6"

# Wall Thimble w/ Termination Damper



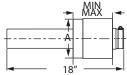
Use for horizontal through-the-wall terminations. Check installation instructions for restrictions on horizontal cap terminations, such as minimum distance from windows and doors. Accommodates wall thickness of  $4\,1/4$ " to  $8\,1/2$ ". Damper prevents backdraft of cold air to appliance.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	A
3"	FSWTT3	810003123	6"
4"	FSWTT4	810003177	7″
5"	FSWTT5	810005425	8"

#### Wall Thimble w/ AVL





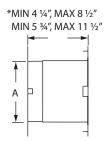
Use for through-the-wall termination. Fits between standard wall studs. 3"-5" diameters accommodates wall thickness of 4 1/4" to 8 1/2". 6"-16" diameters accommodate wall thickness of 5 3/4" to 11 1/2". AVL pipe allows for adjustability in length variance.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	A
3″	FSWT3	810003124	6"
4"	FSWT4	810003178	7"
5″	FSWT5	810003231	8"
6"	FSWT6	810003284	9"
7"	FSWT7	810003328	10"
8″	FSWT8	810003371	11"
9″	FSWT9	810003410	12"
10″	FSWT10	810003448	13"
12"	FSWT12	810003489	15"
14"	FSWT14	810003529	17"
16"	FSWT16	810003564	19"

### Wall Pass Through





Use for through-the-wall termination. Fits between standard wall studs. 3"-5" diameters accommodates wall thickness of 4  $\frac{1}{4}$ " to 8  $\frac{1}{2}$ ". 6"-16" diameters accommodate wall thickness of 5  $\frac{3}{4}$ " to 11  $\frac{1}{2}$ ".

/2 .							
SIZE	ORDER #	STOCK #	А	SIZE	ORDER#	STOCK#	А
3"	FSWPT3	810003125	6"	9″	FSWPT9	810003411	12"
4"	FSWPT4	810003179	7"	10"	FSWPT10	810003449	13"
5"	FSWPT5	810003232	8"	12"	FSWPT12	810003490	15"
6"	FSWPT6	810003285	9"	14"	FSWPT14	810003530	17"
7"	FSWPT7	810003329	10"	16"	FSWPT16	810003565	19"
8″	FSWPT8	810003372	11"				

### Wall Thimble Sleeve Extension

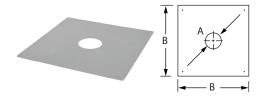




Use to add 6" of length to Wall Pass Through and Wall Thimble for thicker walls.

SIZE	ORDER#	STOCK #	А
3"	FSWTE3	810003126	6"
4"	FSWTE4	810003180	7"
5"	FSWTE5	810003233	8"
6"	FSWTE6	810003286	9"
7"	FSWTE7	810003330	10"
8"	FSWTE8	810003373	11"
9"	FSWTE9	810003412	12"
10"	FSWTE10	810003450	13"
12"	FSWTE12	810003491	15"
14"	FSWTE14	810003531	17"
16"	FSWTE16	810003566	19"

# Firestop/Flat Flashing



Use when penetrating floor levels.

SIZE	ORDER#	STOCK #	Α	В	SIZE	ORDER#	STOCK #	Α	В
3″	FSFS3	810003127	3 2/5"	15"	9″	FSFS9	810003413	9 2/5"	22"
4″	FSFS4	810003181	4 2/5"	15"	10"	FSFS10	810003451	10 3/5"	22"
5″	FSFS5	810003234	5 2/5"	17"	12"	FSFS12	810003492	12 3/5"	24"
6″	FSFS6	810003287	6 2/5"	17"	14"	FSFS14	810003532	14 2/5"	26"
7"	FSFS7	810003331	7 2/5"	19"	16"	FSFS16	810003567	16 <sup>2</sup> /s"	28"
8″	FSFS8	810003374	8 2/5"	19"					

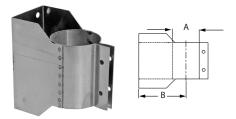
# **Support Clamp**



Use to support vertical and horizontal runs using threaded rod. Recommended every 10' on vertical runs and every 6' in horizontals. Use additional Support Clamps as needed.

SIZE	ORDER#	STOCK #	А	SIZE	ORDER#	STOCK#	Α
3″	FSCL3	810003128	1½″	9″	FSCL9	810003414	1 ½"
4"	FSCL4	810003182	1 ½"	10"	FSCL10	810003452	1 ½"
5″	FSCL5	810003288	1½″	12"	FSCL12	810003493	1 ½"
6"	FSCL6	810003288	1½"	14"	FSCL14	810003533	1 ½"
7"	FSCL7	810003332	1½″	16"	FSCL16	810003568	1 ½"
8"	FSCL8	810003375	1 ½"				

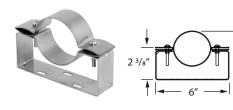
### Wall Bracket



Use to support vent pipe or tee sections. Provides proper clearance to combustibles.

SIZE	ORDER#	STOCK#	А	В	SIZE	ORDER#	STOCK #	Α	В
3″	FSWB3	810003129	3"	3 ½"	9″	FSWB9	810003415	9"	6 ½"
4"	FSWB4	810003183	4"	4"	10"	FSWB10	810003453	10"	7"
5"	FSWB5	810003236	5"	4 ½"	12"	FSWB12	810003494	12"	8"
6"	FSWB6	810003289	6"	5"	14"	FSWB14	810003534	14"	9"
7"	FSWB7	810003333	7"	5 ½"	16"	FSWB16	810003569	16"	10"
8″	FSWB8	810003376	8"	6"					

# Adjustable Wall Bracket

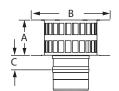


Use to support vent pipe in lateral and horizontal runs. Assist in achieving proper pitch for condensate management. Adjusts up to 3".

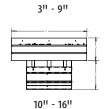
SIZE	ORDER#	STOCK #
3″	FSAWB03	810003130
4"	FSAWB04	810003184

# Rain Cap





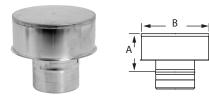




Use to terminate above the roof line. When terminating above 12" vent diameter use a Termination Cone.

SIZE	ORDER#	STOCK #	А	В	С
3″	FSRC3	810003131	3 ½"	6 1/5"	1″
4"	FSRC4	810003185	4 ½"	8 %10"	1″
5″	FSRC5	810003237	5 1/5"	11 3/10"	1″
6″	FSRC6	810003292	6 1/5"	13 ½"	1″
7"	FSRC7	810003334	7 1/5"	15 <del>1</del> /s"	1″
8″	FSRC8	810003377	8 1/5"	18"	1″
9″	FSRC9	810003416	10"	20 3/10"	1″
10"	FSRC10	810012600	5"	16 ¾"	5 3/8"
12"	FSRC12	810009873	6"	20"	5 5/8"
14"	FSRC14	810009874	7"	23 ½"	6"
16"	FSRC16	810009875	8"	26 ¾"	6 1/3"

# Severe Weather Rain Cap

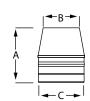


Use where high winds and horizontal rain are present. For vertical termination only. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	A	В
4"	FSSWRC04	810003186	6"	7 1/10"

#### **Termination Cone**





Use for vertical termination. Creates static back pressure to adjust harmonics. Venturi effect increases velocity of flue gases. Reduced opening provides for a smaller cross section to deter rain from entering the system. Additional cones available in 1" or 2" reduction in diameter. \*Available in 316L Stainless Steel\*

SIZE	ORDER #	STOCK #	А	В	С
5" x 4"	FSCN0504	810003244	6	4"	5"
12" x 10"	FSCN1210	810003496	6	10"	12"
14" x 12"	FSCN1412	810003535	6 3/5"	12"	14"
16" x 14"	FSCN1614	810003570	6 2/5"	14"	16"

# Storm Collar



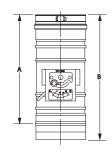


Use to create a weather tight seal between the pipe and flashing.

SIZE	ORDER#	STOCK #	SIZE	ORDER#	STOCK #
3″	FSC3	810003132	9″	FSC9	810003419
4″	FSC4	810003188	10"	FSC10	810003460
5″	FSC5	810003239	12"	FSC12	810003501
6"	FSC6	810003293	14"	FSC14	810003538
7"	FSC7	810003336	16"	FSC16	810003572
8″	FSC8	810003381			

# Fixed Blade Damper





Use to ensure optimum pressures through an appliance. The Damper will aid in the proper operation and efficiency of the appliance by preventing higher than desired draft readings.

SIZE	ORDER#	STOCK #	A	В
6"	FSFBD06	810009495	13 1/5"	15 1/5"
8″	FSFBD08	810009497	13 1/5"	15 1/5"
10"	FSFBD10	810009499	13 1/5"	15 1/5"
12"	FSFBD12	810009500	13 1/5"	15 1/5"
14"	FSFBD14	810009501	18 ½"	20 ½"
16"	FSFBD16	810009502	18 ½"	20 ½"

<sup>\*</sup>Available in 316L Stainless Steel. Add a "B" to the end of the ORDER # (EX: FSVL603B)\*

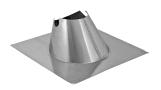
#### Variable Pitch Roof Jack

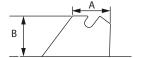


Use as a heat shield within the flashing. Maintains center-line and clearance to combustibles.

SIZE	ORDER#	STOCK#	Α	SIZE	ORDER#	STOCK #	Α
3"	FSVRJ3	810003133	4"	9″	FSVRJ9	810003420	10"
4"	FSVRJ4	810003189	5"	10"	FSVRJ10	810003461	11"
5"	FSVRJ5	810003240	6"	12″	FSVRJ12	810003502	13"
6"	FSVRJ6	810003294	7″	14"	FSVRJ14	810003539	15"
7"	FSVRJ7	810003337	8"	16"	FSVRJ16	810003573	17"
8"	FSVRJ8	810003382	9"				

# Variable Pitch Roof Flashing





Use to create a weather-tight penetration where the vent pipe passes through the roof. Roof Jack and Storm Collar required. 3"-16"0 accommodates flat to 9/12 roof pitch.

SIZE	ORDER#	STOCK#	Α	В	SIZE	ORDER#	STOCK#	Α	В
3″	FSVPF3	810003134	5"	7"	9″	FSVPF9	810003421	11"	7"
4"	FSVPF4	810003190	6"	7"	10"	FSVPF10	810003462	12"	7"
5"	FSVPF5	810003241	7"	7"	12"	FSVPF12	810003503	14"	7"
6"	FSVPF6	810003295	8"	7"	14"	FSVPF14	810003540	16"	7"
7"	FSVPF7	810003338	9"	7"	16"	FSVPF16	810003574	18"	7"
8″	FSVPF8	810003383	10"	7"					

### Tall Cone Roof Jack

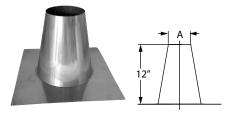




Use as a heat shield within the flashing. Maintains center-line and clearance to combustibles. Use with Tall Cone Flashings.

SIZE	ORDER#	STOCK#	A	SIZE	ORDER#	STOCK#	Α
3″	FSRJ3	810005286	4"	9"	FSRJ9	810005290	10"
4"	FSRJ4	810005287	5"	10"	FSRJ10	810005291	11"
5"	FSRJ5	810005288	6"	12"	FSRJ12	810005292	13"
6"	FSRJ6	810005289	7"	14"	FSRJ14	810005293	15"
7"	FSRJ7	810007023	8"	16"	FSRJ16	810005294	17"
8"	FSRJ8	810005434	9"				

# Tall Cone Flashing

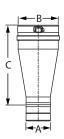


Use to create a weather-tight penetration where the vent passes through a flat roof. Roof Jack and Storm Collar required.

SIZE	ORDER#	STOCK#	A	SIZE	ORDER#	STOCK#	А
3″	FSAF3	810005257	4 1/3"	9"	FSAF9	810005263	10 1/3"
4"	FSAF4	810005258	5 1/3"	10"	FSAF10	810005264	11 1/3"
5"	FSAF5	810005259	6 1/3"	12"	FSAF12	810005269	13 1/3"
6"	FSAF6	810005260	7 1/3"	14"	FSAF14	810005270	15 1/3"
7"	FSAF7	810005261	8 1/3"	16"	FSAF16	810005271	17 1/3"
8"	FSAF8	810005262	9 1/3"				

### **Tapered Increaser**



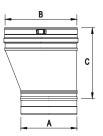


Use to increase vent diameter. Creates a smooth transition for an undisruptive flow. Additional sizes available up to a maximum of 10" diameter change. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	Α	В	C
3" x 4"	FS0304TI	810003136	3"	4"	6 1/10"
4" x 5"	FS0405TI	810003191	4"	5"	6 %10"

#### **Eccentric Increaser**



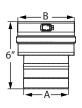


Use to transition to a larger diameter pipe. Prevents condensate puddling when used on horizontal runs. Aids in reducing formation of condensates. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	С
3" x 4"	FS0304EI	810003137	6"	8"	10 3/8"
4" x 5"	FS0405EI	810003193	4"	5"	7 3/25"
4" x 7"	FS0407EI	810014817	4"	7"	11 %"
5" x 9"	FS0509EI	810014819	5"	9"	14 3/8"
7" x 9"	FS0709EI	810014821	7"	9"	8 %"

### Stepped Increaser





Use to increase vent diameter when space constraints are an issue. More increasers available, contact customer service for information.

SIZE	ORDER#	STOCK #	А	В
3" x 4"	FS34I	810003138	3"	4"
4" x 5"	FS45I	810003195	4"	5"

<sup>\*</sup>Available in 316L Stainless Steel. Add a "B" to the end of the ORDER # (EX: FSVL603B)\*

### **Tapered Reducer**



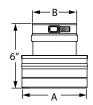
Use to reduce vent diameter. Creates a smooth transition for an undisruptive flow. Additional sizes available, but reductions are limited to a maximum of 2" reduction in diameter.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	С
4" x 3"	FS0403TR	810003192	4"	3"	6 1/10"
5" x 4"	FS0504TR	810003242	5"	4"	6 %10"

# Stepped Reducer



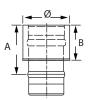


Use to reduce vent diameter when space constraints are an issue. **Available in custom size combinations.** 

SIZE	ORDER#	STOCK#	Α	В
4" x 3"	FS43R	810003194	4"	3"
5" x 4"	FS54R	810003243	5"	4"

# **Double-Wall Adapter**





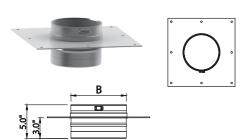
Use to transition from a single-wall pipe to double-wall pipe. To transition from double-wall to single-wall, please reference single-wall adapter available in double-wall FasNSeal section.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	Α	В	SIZE	ORDER#	STOCK #	А	В
3"	FSA-SWDW3	810003139	4"	3"	9″	FSA-SWDW9	810003423	4"	3″
4"	FSA-SWDW4	810003197	4"	3"	10"	FSA-SWDW10	810003464	4"	3"
5"	FSA-SWDW5	810003246	4"	3"	12"	FSA-SWDW12	810003505	4"	3"
6"	FSA-SWDW6	810003298	4"	3"	14"	FSA-SWDW14	810003542	4"	3"
7"	FSA-SWDW7	810003340	4"	3"	16"	FSA-SWDW16	810003576	4"	3"
8"	FSA-SWDW8	810003385	4"	3"					

## Vent Length with Support Plate

Use to provide an anchor point at the bottom of a vertical run or an additional way to brace a horizontal run.



SIZE	ORDER#	STOCK#	В	С	SIZE	ORDER #	STOCK #	В	С
3″	FSSP3	810013336	3″	10"	9″	FSSP9	810012894	9"	16"
4"	FSSP4	810013337	4"	11"	10″	FSSP10	810012895	10"	17"
5"	FSSP5	810014720	5"	12"	12"	FSSP12	810012896	12"	19"
6"	FSSP6	810012891	6"	13"	14"	FSSP14	810012897	14"	21"
7"	FSSP7	810012892	7"	14"	16"	FSSP16	810012898	16"	23"
8″	FSSP8	810012893	8"	15"					

#### Standard Wall Mount Kit



Kit includes: Wall Thimble w/ Termination, Adjustable 90° Elbow, and Universal Appliance Adapter.

Use to vent wall mounted boilers or tankless water heaters. Terminates through-the-wall only. Available in 3", 4" and 5" vent diameters. Adjust vertically from 16 1/2" to 21" and horizontally from 8" to 12 1/2". 3"& 4" compatible with most gas-burning appliances. 5" compatible with tankless.

SIZE	ORDER #	STOCK #
3″	FSWMKB3	810003070
4"	FSWMK4	810003071
5"	FSWMK5	810003072

#### Severe Weather Kit



Kit includes: Wall Thimble w/ Termination Tee, Adjustable 90° Elbow, and Universal Appliance Adapter w/Condensate Drain and Back Draft Preventer.

Use to vent wall mounted boilers or tankless water heaters. Use in areas of extreme wet and cold weather. Designed to prevent appliance freeze-up while maintaining an obstruction free exhaust. Available in 4" vent diameters, compatible with most 4" exhaust gas appliances. Add a 90° Elbow and Vent Length on the outside of the house to clear high snow lines.

SIZE	ORDER#	STOCK #
4"	FSSWWMK4	810003075

### Variable Pitch Flashing Kit



Kit includes: Rain Cap, Storm Collar, Roof Jack, and Roof Flashing. (\*VPKA Kit includes: a Universal Appliance Adapter w/ Condensate Drain).

Use to terminate through-the-roof vent systems. Kit accommodates flat to 9/12 roof pitch.

SIZE	ORDER#	STOCK #	SIZE	ORDER#	STOCK #
3″	FSVPK3	810003056	9″	FSVPK9	810003062
4"	FSVPK4	810003057	10"	FSVPK10	810003063
4"	FSVPKA4*	810003067	12"	FSVPK12	810003064
5"	FSVPK5	810003058	14"	FSVPK14	810003065
6"	FSVPK6	810003059	16"	FSVPK16	810003066
7"	FSVPK7	810003060			
8″	FSVPK8	810003061			

<sup>\*</sup>Available in 316L Stainless Steel. Add a "B" to the end of the ORDER # (EX: FSVL603B)\*

#### 90° Bird Screen Wall Mount Kit



Kit includes: 90° Bird Screen Termination, Wall Thimble, Adjustable 90° Elbow, and Universal Appliance Adapter.

Use to vent wall mounted boilers or tankless water heaters. 3" kit adjusts vertically from 14  $\frac{1}{2}$ " to 19" and horizontally from 9" to 13  $\frac{1}{2}$ ". 4" kit adjusts vertically from 14" to 18  $\frac{1}{2}$ " and horizontally from 9" to 13  $\frac{1}{2}$ ". Compatible with all Rheem gas appliances. 3" kit requires a FSA-RI-4.2 Adapter.

SIZE	ORDER#	STOCK #
3"	FSWMKEB3	810003073
4"	FSWMKE4	810003074

#### Ceiling Mounted Heater Vent Kit



Kit includes Termination Tee, Wall Thimble w/Adjustable Vent Length, (2) 12" Vent Lengths, and Universal Appliance Adapter.

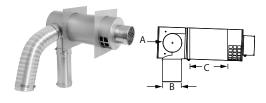
\*FSCMK04CD includes Universal Appliance Adapter with Condensate Drain.

#### \*4" kits Available in 316L Stainless Steel\*

Use to vent ceiling mounted heaters, through-the-wall termination only.

SIZE	ORDER#	STOCK #
3″	FSCMK3	810003068
4"	FSCMK04	810016433
* 4"	FSCMK04CD	810003069

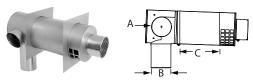
#### Universal Concentric Kit



Use for through-the-wall termination with direct vent wall mounted gas appliances. Features an adjustable right and left hand air intake snout and accommodates wall thickness of 10" - 18". Check installation instructions for restrictions on horizontal termination, such as minimum distance from windows and doors.

SIZE	ORDER#	STOCK#	А	В	С
4"	FSEDVWMT04U	810003081	4"	4"	10" - 18"
5″	FSEDVWMT05U	810003084	5"	5"	10" - 18"

#### Wall Mount Concentric Kit

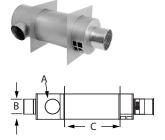


Use for through-the-wall termination with direct vent wall mounted gas appliances. Features a fixed right or left hand air intake snout and accommodates a maximum of 8" wall thickness.

Check installation instructions for restrictions on horizontal termination, such as minimum distance from windows and doors.

SIZE	ORDER#	STOCK #	А	В	С
4"	FDVWMT0403RH	810003077	4"	3"	8" max.
4"	FDVWMT0403LH	810003078	4"	3"	8" max.
4"	FDVWMT04RH	810003079	4"	4"	8" max.
4"	FSEDVWMT04LH	810003080	4"	4"	8" max.

#### Remote Concentric Kit

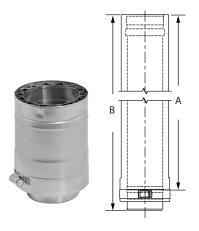


Use for through-the-wall termination with direct vent gas appliances located away from the wall. Check installation instructions for restrictions on horizontal termination, such as minimum distance from windows and doors.

SIZE	ORDER#	STOCK #	А	В	С
3"	FDVMT03	810003085	3"	3"	11" max.
4"	FDVWT04	810003083	4"	4"	11" max.
4"	FDVWT0403	810003082	3"	4"	11" max.

# FasNSeal W2° - Double-Wall

# Vent Length

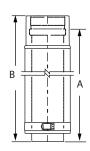


Used for venting special gas burning Categories II, III and IV appliances. To calculate O.D. add 1" to vent diameter.

SIZE	ORDER#	STOCK#	А	В	SIZE	ORDER#	STOCK#	А	В
3"	W2-603	810003656	4"	6"	8"	W2-2408	810003763	22"	24"
3"	W2-1203	810003657	10"	12"	8"	W2-3608	810003764	34"	36"
3"	W2-1803	810003658	16"	18"	9″	W2-609	810003783	4"	6"
3"	W2-2403	810003659	22"	24"	9″	W2-1209	810003784	10"	12"
3″	W2-3603	810003660	34"	36"	9″	W2-1809	810003785	16"	18"
4"	W2-604	810003677	4"	6"	9″	W2-2409	810003786	22"	24"
4"	W2-1204	810003678	10"	12"	9″	W2-3609	810003787	34"	36"
4"	W2-1804	810003679	16"	18"	10"	W2-610	810003803	4"	6"
4"	W2-2404	810003680	22"	24"	10"	W2-1210	810003804	10"	12"
4"	W2-3604	810003681	34"	36"	10″	W2-1810	810003805	16"	18"
5″	W2-605	810003698	4"	6"	10″	W2-2410	810003806	22"	24"
5″	W2-1205	810003699	10"	12"	10″	W2-3610	810003807	34"	36"
5″	W2-1805	810003700	16"	18"	12″	W2-612	810003828	4"	6"
5″	W2-2405	810003701	22"	24"	12″	W2-1212	810003829	10"	12"
5″	W2-3605	810003702	3"	36"	12″	W2-1812	810003830	16"	18"
6"	W2-606	810003719	4"	6"	12″	W2-2412	810003831	22"	24"
6"	W2-1206	810003720	10"	12"	12″	W2-3612	810003832	34"	36"
6"	W2-1806	810003721	16"	18"	14"	W2-614	810003853	4"	6"
6"	W2-2406	810003722	22"	24"	14"	W2-1214	810003854	10"	12"
6"	W2-3606	810003723	34"	36"	14"	W2-1814	810003855	16"	18"
7″	W2-607	810003740	4"	6"	14"	W2-2414	810003856	22"	24"
7″	W2-1207	810003741	10"	12"	14"	W2-3614	810003857	34"	36"
7″	W2-1807	810003742	16"	18"	16"	W2-616	810003876	4"	6"
7″	W2-2407	810003743	22"	24"	16″	W2-1216	810003877	10"	12"
7″	W2-3607	810003744	34"	36"	16″	W2-1816	810003878	16"	18"
8″	W2-608	810003760	4"	6"	16"	W2-2416	810003879	22"	24"
8"	W2-1208	810003761	10"	12"	16"	W2-3616	810003880	34"	36"
8″	W2-1808	810003762	16"	18"					

# Adjustable Vent Length



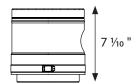


Use to add variable length to your straight length of FasNSeal pipe. Adds 2"–14" of length. Requires at least 4" overlap for a secure connection. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	А	В	SIZE	ORDER#	STOCK#	Α	В
3″	W2-AVL3	810003661	2"-14"	18"	9"	W2-AVL9	810003788	2"-14"	18"
4"	W2-AVL4	810003682	2"-14"	18"	10"	W2-AVL10	810003808	2"-14"	18"
5″	W2-AVL5	810003703	2"-14"	18"	12"	W2-AVL12	810003833	2"-14"	18"
6"	W2-AVL6	810003724	2"-14"	18"	14"	W2-AVL14	810003858	2"-14"	18"
7"	W2-AVL7	810003745	2"-14"	18"	16"	W2-AVL16	810003881	2"-14"	18"
8"	W2-AVL8	810003765	2"-14"	18"					

#### **Test Port**





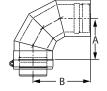
Use to test for proper appliance operation without penetrating the vent wall. Easy access to perform flue gas analysis.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER #	STOCK#	SIZE	ORDER#	STOCK#
3″	W2-TP03	810013163	9″	W2-TP09	810013169
4"	W2-TP04	810013164	10"	W2-TP10	810013170
5″	W2-TP05	810013165	12"	W2-TP12	810013171
6"	W2-TP06	810013166	14"	W2-TP14	810013172
7"	W2-TP07	810013167	16"	W2-TP16	810013173
8″	W2-TP08	810013168			

#### 90° Elbow

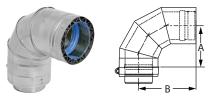




Use to go from horizontal to vertical runs or vertical to horizontal runs. Use to turn vent 90°. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK #	А	В
3″	W2-9003	810003662	4"	6"	9"	W2-9009	810003789	7″	9"
4"	W2-9004	810003683	4 ½"	6 1/4"	10"	W2-9010	810003809	7 ½"	9 3/8"
5″	W2-9005	810003704	5"	6 ¾"	12″	W2-9012	810003834	8 ½"	10 1/4"
6″	W2-9006	810003725	5 ½"	7 ½"	14"	W2-9014	810003859	9 ½"	11 3/8"
7″	W2-9007	810003746	6 1/8"	7 %"	16″	W2-9016	810003882	11"	12 ½"
8″	W2-9008	810003766	6 ½"	8 1/4"					

### 88° Elbow

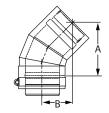


Use to transition from a vertical to a horizontal run. Facilitates a 2° pitch towards the condensate drain for good condensate management. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK#	А	В
3"	W2-8803	810003663	4"	6"	12"	W2-8812	810003835	8 ½"	10 1/4"
4"	W2-8804	810003684	4 ½"	6 2/5"	14"	W2-8814	810003860	9 ½"	11 ¾"
5″	W2-8805	810003705	5"	6 3/4"	16"	W2-8816	810003883	11"	12 ½"
6"	W2-8806	810003726	5 ½"	7 ½"					
7″	W2-8807	810003747	6 1/8"	7 7/8"					
8″	W2-8808	810003767	6 ½"	8 1/4"					
9"	W2-8809	810003790	7"	9"					
10"	W2-8810	810003810	7 ½"	9 3/8"					

45° Elbow





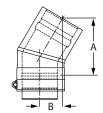
Offsets obstructions as needed. Allows for better condensate management and less back pressure.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	Α	В	SIZE	ORDER#	STOCK#	Α	В
3″	W2-4503	810003664	5 3/8"	3"	9"	W2-4509	810003791	7 ½"	3 %"
4"	W2-4504	810003685	5 5%"	3 1/8"	10"	W2-4510	810003811	7 %"	4"
5"	W2-4505	810003706	6"	3 1/4"	12"	W2-4512	810003836	8 ½"	4 1/4"
6"	W2-4506	810003727	6 3/8"	3 3/8"	14"	W2-4514	810003861	9 1/4"	4 5/8"
7"	W2-4507	810003748	6 ¾"	3 ½"	16"	W2-4516	810003884	10"	4 1/8"
8"	W2-4508	810003768	7 1/8"	3 5/8"					

### 30° Elbow



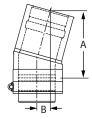


Offsets obstructions as needed. Allows for better condensate management and less back pressure.

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK#	А	В
3″	W2-3003	810003665	4 %"	1 %"	9"	W2-3009	810003792	7"	2 ½"
4"	W2-3004	810003686	5 1/8"	1 %"	10"	W2-3010	810003812	6 ½"	2 1/4"
5″	W2-3005	810003707	5 1/4"	2"	12"	W2-3012	810003837	7″	2 ½"
6″	W2-3006	810003728	5 ½"	2"	14"	W2-3014	810003862	7 ½"	2 ½"
7″	W2-3007	810003749	5 %"	2"	16"	W2-3016	810003885	8 1/8"	2 ¾"
8"	W2-3008	810003769	6 1/8"	2 1/8"					

#### 15° Elbow





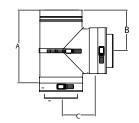
Offsets obstructions as needed. Allows for better condensate management and less back pressure.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK #	А	В
3"	W2-1503	810003666	4 3/8"	7/8"	9"	W2-1509	810003793	5 1/4"	1"
4"	W2-1504	810003687	4 ½"	1"	10"	W2-1510	810003813	5 1/4"	1″
5"	W2-1505	810003708	4 5/8"	7/8"	12"	W2-1512	810003838	5 ½"	1″
6"	W2-1506	810003729	4 3/4"	7/8"	14"	W2-1514	810003863	5 ¾"	1″
7"	W2-1507	810003750	47/8"	1″	16"	W2-1516	810003886	6 1/8"	1″
8"	W2-1508	810003770	5 1/8"	1″					

#### Standard Tee





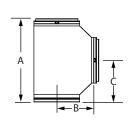
Use for a 90° offset, to combine connections from two or more appliances into a common vent or as a condensate management point when used in conjunction with drain fitting. All Standard Tees have completely welded inner walls.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER #	STOCK#	А	В	С	SIZE	ORDER#	STOCK #	А	В	С
3″	W2-T3	810003667	7 3/10"	4 1/2"	3"	9"	W2-T9	810003794	13 3/10"	7 3/10"	6"
4"	W2-T4	810003688	8 3/10"	4 1/5"	3 ½"	10"	W2-T10	810003814	14 3/10"	7 1/5"	6 ½"
5″	W2-T5	810003709	9 3/10"	5 3/10"	4"	12"	W2-T12	810003839	16 3/10"	9"	7"
6"	W2-T6	810003730	10 3/10"	5 1/5"	4 1/2"	14"	W2-T14	810003864	20 3/10"	11"	8 ½"
7″	W2-T7	810003751	11 3/10"	6 3/10"	5"	16"	W2-T16	810003887	22 3/10"	12"	9 ½"
8"	W2-T8	810003771	12 3/10"	6 1/5"	5 ½"						

#### Wide Mouth Boot Tee



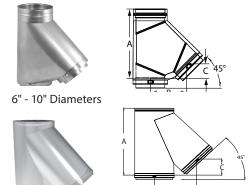


Use to transition from horizontal to vertical with improved flue gas flow with angled gradual transitions. Can also be used as a manifold connection to gang boilers into a common vent.

Completely welded inner walls.

SIZE	ORDER#	STOCK#	А	В	С	SIZE	ORDER#	STOCK#	А	В	С
4"	W2-WBT4	810003689	15 ¾"	7"	6 %10"	9"	W2-WBT9	810003795	20 ¾"	9 ½"	9 4/10"
5"	W2-WBT5	810003710	16 ¾"	7 ½"	7 1/10"	10"	W2-WBT10	810003815	21 ¾"	10"	9 %10"
6"	W2-WBT6	810003731	17 ¾"	8"	7 %10"	12"	W2-WBT12	810003840	23 ¾"	11"	10 %10"
7"	W2-WBT7	810003752	18 ¾"	8 ½"	8 4/10"	14"	W2-WBT14	810003865	25 ¾"	12"	11 1/10"
8"	W2-WBT8	810003772	19 ¾"	9"	8 1/10"	16"	W2-WBT16	810003888	27 ¾"	13"	12 %10"

# Double-Wall Wye

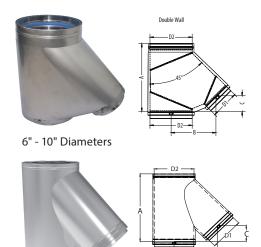


Use in place of any DuraVent tee for a 45° angle instead of 90°; can be used as a manifold connection to gang multiple boilers into a common vent.

SIZE	ORDER#	STOCK#	A	В	С
6″	W2-WYE06	810004863	14 ½"	7 ½"	3 1/8"
7″	W2-WYE07	810007021	16 <sup>1</sup> / <sub>3</sub> "	8 3/5"	3 ½"
8″	W2-WYE08	810004864	18"	9 7/10"	4 "
9″	W2-WYE09	810007022	19 7/10"	10 7/10"	$4^{2}/5''$
10"	W2-WYE10	810004865	21 <sup>2</sup> /5"	11 13/16"	4 15/16"
12"	W2-WYE12	810004866	24 15/16"	14"	5 13/16"
14"	W2-WYE14	810004867	28 <sup>3</sup> /10"	16 <sup>1</sup> /8"	6 <sup>3</sup> /s"
16"	W2-WYE16	810009327	31 13/16"	18 <sup>1</sup> /5"	7 1/2"

## Double-Wall Increaser Wye

12" - 16" Diameters



Use in place of any tee for a 45° angle instead of 90°. The branch has a smaller diameter, so it can be used to increase to a larger diameter as a manifold connection to gang multiple boilers into a common vent. Maximum diameter increase is 6". **Available in custom size combinations.** 

SIZE	ORDER #	STOCK#	A	В	С
6"x 8"	W2-WYE0608	810012570	15 ¾"	9 1/4"	3 3/8"
6"x 10"	W2-WYE0610	810012571	16"	10 %"	3 5%"
6"x 12"	W2-WYE0612	810012572	17 1/8"	12 ½"	4"
8"x 10"	W2-WYE0810	810012573	18 ¾"	11 3/8"	43/8"
8"x 12"	W2-WYE0812	810012574	19 3/8"	12 ¾"	4 1/2"
8"x 14"	W2-WYE0814	810012575	20"	14 1/4"	4 5%"
10"x 12"	W2-WYE1012	810012576	22 1/4"	13 ½"	5 1/8"
10"x 14"	W2-WYE1014	810012577	22 %"	15"	5 3%"
10"x 16"	W2-WYE1016	810012578	23 ½"	16 3/8"	5 ½"
12"x 14"	W2-WYE1214	810012579	25 %"	15 %"	6 1/8"

# Tee Cap

12" - 16" Diameters





Use to cap Standard Tee, Branch Tee or Boot Tee. Remove Tee Cap to inspect the system; clean out debris.

SIZE	ORDER#	STOCK #	A	SIZE	ORDER#	STOCK #	A
3"	W2-TC3	810003668	3 ½"	9"	W2-TC9	810003796	3 ½"
4"	W2-TC4	810003690	3 ½"	10"	W2-TC10	810003817	3 ½"
5″	W2-TC5	810003711	3 ½"	12"	W2-TC12	810003841	3 ½"
6"	W2-TC6	810003732	3 ½"	14"	W2-TC14	810003866	3 ½"
7″	W2-TC7	810003753	3 ½"	16"	W2-TC16	810003889	3 ½"
8"	W2-TC8	810003774	3 1/2"				

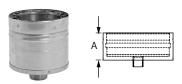
### **Drain Fitting**



Use instead of Tee Cap to manage condensates at the bottom of a vertical run. For vent systems larger than 5", use an IPS Drain Fitting. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	A	В
3″	W2-DF3	810003670	3 ½"	5/8"
4"	W2-DF4	810003692	3 ½"	5/8"
5″	W2-DF5	810003713	3 ½"	5/8"

# **IPS Drain Fitting**

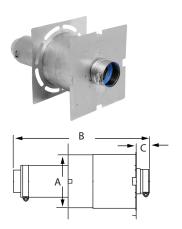


Use to connect iron drain pipe to flow acidic condensates to a neutralization tank before disposal. Uses 1" NPT thread.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	А	SIZE	ORDER#	STOCK#	А
3"	W2-IPSDF03	810003671	3 ½"	9″	W2-IPSDF09	810003798	3 ½"
4"	W2-IPSDF04	810003693	3 ½"	10"	W2-IPSDF10	810003818	3 ½"
5"	W2-IPSDF05	810003714	3 ½"	12"	W2-IPSDF12	810003843	3 ½"
6"	W2-IPSDF06	810003734	3 ½"	14"	W2-IPSDF14	810003868	3 ½"
7"	W2-IPSDF07	810003755	3 ½"	16"	W2-IPSDF16	810003890	3 ½"
8"	W2-IPSDF08	810003775	3 ½"				

#### Wall Thimble w/ AVL



Use for through-the-wall termination. Fits between standard wall studs. 3"-5" diameters accommodates wall thickness of 4  $\frac{1}{4}$ " to 8 $\frac{1}{2}$ ". 6"-16" diameters accommodate wall thickness of 5  $\frac{3}{4}$ " to 11  $\frac{1}{2}$ ". AVL pipe allows for adjustability in length variance.

SIZE	ORDER #	STOCK #	Α	В	С
3″	W2-WT3	810003672	6"	18"	1 1/5"
4"	W2-WT4	810003694	7"	18"	1 1/5"
5″	W2-WT5	810003715	8"	18"	1 1/5"
6"	W2-WT6	810003735	9"	18"	1 1/5"
7"	W2-WT7	810003756	10"	18"	1 1/5"
8″	W2-WT8	810003776	11"	18"	1 1/5"
9″	W2-WT9	810003799	12"	18"	1 1/5"
10"	W2-WT10	810003819	13"	18"	1 1/5"
12"	W2-WT12	810003844	15"	18"	1 1/5"
14"	W2-WT14	810003869	17"	18"	1 1/5"
16"	W2-WT16	810003892	19"	18"	1 1/5"

<sup>\*</sup>Available in 316L Stainless Steel. Add a "B" to the end of the ORDER # (EX: FSVL603B)\*

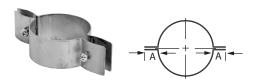
#### Wall Thimble Sleeve



When installing FasNSeal W2 with this component use 1" larger diameter, (e.g. 10" vent system, use 11" size).

SIZE	ORDER#	STOCK #	А	В
3″	FSWTE3	810003126	6"	9"
4"	FSWTE4	810003180	7"	9"
5″	FSWTE5	810003233	8"	9"
6"	FSWTE6	810003286	9"	9"
7"	FSWTE7	810003330	10"	9"
8″	FSWTE8	810003373	11"	9"
9″	FSWTE9	810003412	12"	9"
10"	FSWTE10	810003450	13"	9"
12"	FSWTE12	810003491	15"	9"
14"	FSWTE14	810003531	17"	9"
16"	FSWTE16	810003566	19"	9"

# **Support Clamp**

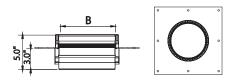


Use to support vertical and horizontal runs. Recommended every 10' in the vertical run. Use additional Support Clamps as needed. When installing FasNSeal W2 with this component use 1" larger diameter, (e.g. 10" vent system, use 11" size).

SIZE	ORDER#	STOCK #	А	SIZE	ORDER#	STOCK#	Α
4"	FSCL4	810003182	1½″	10"	FSCL10	810003452	1 ½"
5″	FSCL5	810003235	1 ½"	11"	FSCL11	810003825	1 ½"
6"	FSCL6	810003288	1 ½"	13"	FSCL13	810003849	1 ½"
7"	FSCL7	810003332	1 ½"	15"	FSCL15	810003873	1 ½"
8″	FSCL8	810003375	1½″				
9″	FSCL9	810003414	1½″				

# Vent Length with Support Plate

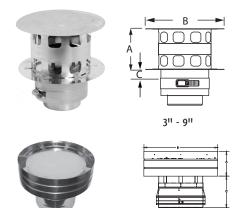




Use to provide an anchor point at the bottom of a vertical run or an additional way to brace a horizontal run.

SIZE	ORDER#	STOCK #	В	С	SIZE	ORDER #	STOCK #	В	C
3"	W2-SP3	810014721	4"	10"	9″	W2-SP9	810012902	10"	16"
4"	W2-SP4	810014722	5"	11"	10"	W2-SP10	810012903	11"	17"
5"	W2-SP5	810014723	6"	12"	12"	W2-SP12	810012904	13"	19"
6"	W2-SP6	810012899	7"	13"	14"	W2-SP14	810012905	15"	21"
7"	W2-SP7	810012900	8"	14"	16"	W2-SP16	810012906	17"	23"
8″	W2-SP8	810012901	9"	15"					

# Rain Cap

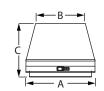


Use where pipe terminates above the roof line. When terminating larger than 12" vent diameter use a Termination Cone.

SIZE	ORDER#	STOCK#	А	В	С
3″	W2-RC3	810003673	3 ½"	6 4/5"	1″
4"	W2-RC4	810003695	4 1/2"	8 %10"	1″
5″	W2-RC5	810003716	5 1/5"	11 3/10"	1″
6"	W2-RC6	810003736	6 4/5"	13 ½"	1″
7"	W2-RC7	810003757	7 4/5"	15 1/5"	1″
8″	W2-RC8	810003777	8 4/5"	18"	1″
9″	W2-RC9	810003800	10"	20 3/10"	1″
10"	W2-RC10	810012601	5"	16 ¾"	5 3/8"
12"	W2-RC12	810009880	6"	20"	5 11/16"
14"	W2-RC14	810009881	7"	23 ½"	6"
16"	W2-RC16	810009882	8"	26 ¾"	6 1/3"

#### **Termination Cone**





10" - 16"

Use for vertical termination. Creates static back pressure to adjust harmonics. Venturi effect increases velocity of flue gases. Reduced opening provides for a smaller cross section to deter rain from entering the system. **Available in custom size combinations.** 

SIZE	ORDER#	STOCK #	А	В	С
8" x 6"	W2-CN0806	810003778	8"	6"	6 3/8"
14" x 12"	W2-CN1412	810003870	14"	12"	6 3/8"

# Stepped Increaser





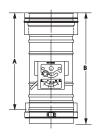
Use to increase vent diameter when space constraints are an issue. **Available in custom size combinations.** 

\*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	A	В
4" x 5"	W2-45I	810003696	4"	5"
8" x 9"	W2-89I	810003779	8"	9"

# **Fixed Blade Damper**





Use to ensure optimum pressures through an appliance. The Damper will aid in the proper operation and efficiency of the appliance by preventing higher than desired draft readings.

SIZE	ORDER#	STOCK #	A	В
6"	W2-FBD06	810009507	13 1/5"	15 1/5"
8"	W2-FBD08	810009509	13 1/5"	15 1/5"
10"	W2-FBD10	810009511	13 1/5"	15 1/5"
12"	W2-FBD12	810009512	13 1/5"	15 1/5"
14"	W2-FBD14	810009513	18 ½"	20 ½"
16"	W2-FBD16	810009514	18 ½"	20 ½"

<sup>\*</sup>Available in 316L Stainless Steel. Add a "B" to the end of the ORDER # (EX: FSVL603B)\*

### **Tapered Increaser**





Use to increase vent diameter. Creates a smooth transition for an undisruptive flow. Additional sizes available up to a maximum of 10" diameter change. \*Available in 316L Stainless Steel\*

SIZE	ORDER #	STOCK #	А	В
3" x 4"	W2-0304TI	810003674	3"	4"
3" x 6"	W2-0306TI	810003675	3"	6"

#### **Eccentric Increaser**





Use to transition to a larger diameter pipe. Adjusts the systems center point to offset from obstructions. Aids in reducing formation of condensates on horizontal runs. FasNSeal W2 has a 10" max change in diameter. Additional sizes available up to a maximum of 10" diameter change.

\*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK #	А	В
8" x 10"	W2-0810E1	810003781	8"	10"

# Stepped Reducer





Use to reduce vent diameter when space constraints are an issue. **Available in custom size combinations.** 

SIZE	ORDER#	STOCK#	A	В
7" x 5"	W2-75R	810003758	7"	5"
12" x 10"	W2-1210R	810003847	12"	10"

# **Tapered Reducer**



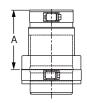


Use to reduce vent diameter. Creates a smooth transition for an undisruptive flow. FasNSeal W2 has a 10" max change in diameter. Additional sizes available up to a maximum of 10" diameter change. \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	Α	В
8" x 7"	W2-0807TR	810003780	8"	7"
10" x 7"	W2-1007TR	810003822	10"	7″

# Single-Wall Adapter



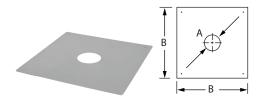


Use to transition from double-wall pipe to single-wall pipe. To transition from single-wall to double-wall, please reference double-wall adapter available in single-wall FasNSeal section.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	А	SIZE	ORDER#	STOCK #	А
3"	FSA-DWSW3	810003676	4"	9″	FSA-DWSW9	810003801	4"
4"	FSA-DWSW4	810003697	4"	10"	FSA-DWSW10	810003821	4"
5"	FSA-DWSW5	810003717	4"	12"	FSA-DWSW12	810003846	4"
6"	FSA-DWSW6	810003737	4"	14"	FSA-DWSW14	810003871	4"
7"	FSA-DWSW7	810003759	4"	16"	FSA-DWSW16	810003893	4"
8″	FSA-DWSW8	810003782	4"				

# Firestop/Flat Flashing

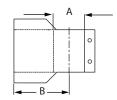


Use when penetrating floor levels. When installing double-wall with this component use 1" larger diameter, (e.g. 10" vent system, use 11" size).

SIZE	ORDER#	STOCK #	Α	В	SIZE	ORDER#	STOCK#	Α	В
4"	FSFS4	810003181	4 1/4"	15"	11"	FSFS11	810003823	11 <sup>2</sup> / <sub>5</sub> "	24"
5″	FSFS5	810003234	5 3/5"	17"	12"	FSFS12	810003492	12 2/5"	24"
6"	FSFS6	810003287	6	17"	13"	FSFS13	810003848	13 3/5"	26"
7"	FSFS7	810003331	7 2/5"	19"	14"	FSFS14	810003532	14 2/5"	26"
8″	FSFS8	810003374	8 2/5"	19"	15"	FSFS15	810003872	15 3/5"	28"
9″	FSFS9	810003413	9 2/5"	22"	16"	FSFS16	810003567	16 <sup>2</sup> /s"	28"
10"	FSFS10	810003451	10 3/5"	22"					

#### Wall Bracket



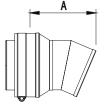


Use to support vent pipe or tee sections. Provides proper clearance to combustibles. When installing FasNSeal W2 with this component use 1" larger diameter, (e.g. 10" vent system, use 11" size).

SIZE	ORDER#	STOCK #	А	В	SIZE	ORDER#	STOCK #	А	В
4"	FSWB4	810003183	4"	4"	11"	FSWB11	810003826	11"	7 ½"
5″	FSWB5	810003236	5"	4 ½"	12"	FSWB12	810003494	12"	8"
6"	FSWB6	810003289	6"	5"	13"	FSWB13	810003850	13"	8 1/2"
7"	FSWB7	810003333	7"	5 ½"	14"	FSWB14	810003534	14"	9"
8″	FSWB8	810003376	8"	6"	15"	FSWB15	810003874	15"	9 1/2"
9″	FSWB9	810003415	9"	6 ½"	16"	FSWB16	810003569	16"	10"
10"	FSWB10	810003453	10"	7″					

#### 23° Bird Screen





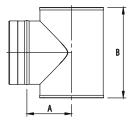
Use for 3" to 16" through-the-wall termination. Deters rain and other elements from entering the vent system. Check installation instructions for restrictions on horizontal terminations, such as minimum distance from windows and doors.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	Α
3"	W2-BS3	810016418	4 10"
4"	W2-BS4	810016420	5 2/5"
5"	W2-BS5	810013201	5 1/10"
6"	W2-BS6	810013202	8"
7"	W2-BS7	810013203	9 1/5"
8″	W2-BS8	810013204	9 2/5"
9″	W2-BS9	810013205	10"
10"	W2-BS10	810013206	11 1/5"
12"	W2-BS12	810013207	13"
14"	W2-BS14	810013208	19 3/5"
16"	W2-BS16	810013209	19 1/5"

### **Termination Tee**





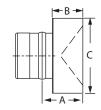
Use for standard and high-wind through-the-wall terminations. Check installation instructions for restrictions on horizontal terminations, such as minimum distance from windows and doors.

#### \*Available in 316L Stainless Steel\*

SIZE	ORDER#	STOCK#	A	В
3″	FSTT3	810003121	3"	6"
4"	FSTT4	810003175	3 ½"	7"
5″	FSTT5	810003230	4"	8"
6"	FSTT6	810003282	4 1/2"	9"
7″	FSTT7	810014714	5"	10"
8″	FSTT8	810005266	5 ½"	11"
9″	FSTT9	810014786	6"	12"
10"	FSTT10	810009492	6 ½"	13"
12"	FSTT12	810014798	7 ½"	15"
14"	FSTT14	810014800	8 1/2"	17"
16″	FSTT16	810014815	9 ½"	19"

### **Termination Box**





Use for horizontal through-the-wall terminations. Check installation instructions for restrictions on horizontal terminations, such as minimum distance from windows and doors.

SIZE	ORDER#	STOCK #	A	В	С
3"	FSTB3	810003122	2 3/10"	2"	5"
4"	FSTB4	810003176	2 3/10"	2"	6"

#### Storm Collar



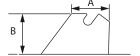


Use to create a weather tight seal between the pipe and flashing. When installing FasNSeal W2 with this component use 1" larger diameter, (e.g. 10" vent system, use 11" size).

SIZE	ORDER#	STOCK#	SIZE	ORDER#	STOCK#
4"	FSC4	810003188	9″	FSC9	810003419
5″	FSC5	810003239	10"	FSC10	810003460
6"	FSC6	810003293	11"	FSC11	810003827
7"	FSC7	810003336	13"	FSC13	810003852
8"	FSC8	810003381	15"	FSC15	810003875

# Variable Pitch Roof Flashing

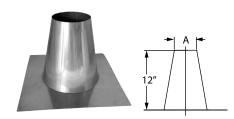




Use to create a weather-tight penetration where the vent pipe passes through the roof. Storm Collar required. When ordering Flashings for FasNSeal W2 product the flashing diameter and vent diameter are the same. ie. W2-3610 requires a FSVPF10. Accommodates flat to 9/12 roof pitch.

SIZE	ORDER#	STOCK#	А	В	SIZE	ORDER#	STOCK#	А	В
4"	FSVPF4	810003190	6"	7″	9″	FSVPF9	810003421	11"	7"
5"	FSVPF5	810003241	7″	7"	10"	FSVPF10	810003462	12"	7"
6"	FSVPF6	810003295	8"	7"	12"	FSVPF12	810003503	14"	7"
7"	FSVPF7	810003338	9"	7"	14"	FSVPF14	810003540	16"	7"
8"	FSVPF8	810003383	10"	7″	16"	FSVPF16	810003574	18"	7"

# Tall Cone Flashing



Use to create a weather-tight penetration where the vent pipe passes through a flat roof. Storm Collar required. When ordering Flashings for FasNSeal W2 product the flashing diameter and vent diameter are the same. ie. W2-3610 requires a FSVPF10.

SIZE	ORDER#	STOCK#	А	SIZE	ORDER#	STOCK#	А
3″	FSAF3	810005257	4 1/3"	9"	FSAF9	810005263	10 1/3"
4"	FSAF4	810005258	5 1/3"	10"	FSAF10	810005264	11 1/3"
5"	FSAF5	810005259	6 1/3"	12"	FSAF12	810005269	13 ⅓"
6"	FSAF6	810005260	7 1/3"	14"	FSAF14	810005270	15 1/3"
7"	FSAF7	810005261	8 1/3"	16"	FSAF16	810005271	17 ⅓"
8"	FSAF8	810005262	9 1/3"				

#### WARRANTY

This product has a 15 year limited warranty. Please read the warranty to be familiar with its coverage.

Retain this manual. File it with your other documents for future reference.

#### PRODUCT REFERENCE INFORMATION

Please contact DuraVent for the phone number of your nearest DuraVent dealer who will answer your questions or address your concerns.

Normally, all parts should be ordered through your DuraVent distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering repair parts, always give the following information:

- 1. The model number of the vent system.
- 2. The part number.
- 3. The description of the part.
- 4. The quantity required.
- 5. The installation date of the chimney system.

If you encounter any problems or have any questions concerning the installation or application of this system, please contact your dealer.



877 Cotting Court • Vacaville, CA • 95688 800-835-4429; www.DuraVent.com

DuraVent reserves the right to make changes at any time, without notice, in design, materials, specifications, prices.

Consult your local distributor for chimney system code information.