



# SUBMITTAL RECORD

Single Wall or Double Wall AL29-4C® or 316L.  
 Special Gas Vent for Category I, II, III and IV.  
 TYPE L VENT Low temperature venting system

3" to 24" Diameter Vent For use on Positive, Neutral and  
 Negative Pressures up to 35" W.C.  
 Also for venting listed gas or oil fired appliances listed for  
 venting with TYPE L low temperature venting system  
 (SSD / SSID ONLY)



MODEL SS



MODEL SSD



MODEL SSID

## MODEL Secure Seal® SS/SSD/SSID

	Listed to standards:
	UL-1738
	ULC-S636
	UL-641 } SSD / SSID ONLY
	ULC-S609 }
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.

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;
- B. 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.

SUBMITTAL RECORD	
PREPARED FOR:	
REFERENCE:	
LOCATION:	
CONTACT:	
TELEPHONE:	FAX:
EMAIL:	
PREPARED BY:	

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

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## INTRODUCTION

Secure Seal® single wall (SS) or double wall (SSD) or double wall insulated (SSID) is a special stainless steel vent system for gas fired appliances listed as Category I, II, III, and IV or in Canada as Type BH Gas Venting as noted in ULC-636, with a maximum operating temperature of 550 Degrees F (288 Degrees C), and a maximum rated positive pressure of 35" Water Column. It can also vent listed gas or oil fired appliance rated to be vent with TYPE L low temperature venting system (SSD & SSID only). Secure Seal 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. Security Chimneys International Limited recommends the system to be inspected once a year by a qualified service technician

## TESTING / LISTING INFORMATION

Security Chimney International, Ltd. Secure Seal model SS, SSD and SSID venting system is listed with Intertek Testing Services (ETL) to UL/ULC standards:

### U.S.A.

- UL-1738  
Special Gas Vent for Category I, II, III and IV appliances
- UL-641 (SSD & SSID only)  
TYPE L VENT venting listed gas or oil burning appliances



### CANADA

- ULC-S636  
Type BH Gas Vent Class I/II
- ULC-S609 (SSD & SSID only)  
TYPE L VENT venting of flue gases with temperature not exceeding 300°C from oil or gas burning appliances

This product must be installed in accordance with local building code requirements as well as National codes: USA - National Fuel Gas code ANSI-Z223.1 or NFPA Standard 54, or NFPA 211. In CANADA - CAN/CGA-B149.1 or CAN/CGA-B149.2 Propane Installation Code as applicable.

## CLEARANCES TO COMBUSTIBLES

**Table 1** shows the required MINIMUM AIRSPACE CLEARANCE TO COMBUSTIBLES. “Combustibles” include framing lumber, drywall, plywood, paneling, insulation, wiring and other building materials.

Minimum Clearance to Combustibles Single Wall SS						
Diameter	Rated operating temperature	Max. operating temperature	Enclosed (4 sides)		Unenclosed (2 sides Max.)	
			Horiz.	Vert.	Horiz.	Vert.
3” to 12”	480° F (250° C)	550° F (288° C)	N/A	N/A	2”	2”
14” to 24”	480° F (250° C)	550° F (288° C)	N/A	N/A	4”	4”
Minimum Clearance to Combustibles Double Wall SSD / SSID						
Diameter	Rated operating temperature	Max. operating temperature	Enclosed (4 sides)		Unenclosed (2 sides Max.)	
			Horiz.	Vert.	Horiz.	Vert.
3” to 12”	480° F (250° C)	550° F (288° C)	N/A	1”	1”	1”
14” to 24”	480° F (250° C)	550° F (288° C)	N/A	1”	3”	1”
3” to 12” L-VENT	480° F (250° C)	550° F (288° C)	N/A	2”	2”	2”
14” to 24” L-VENT	480° F (250° C)	550° F (288° C)	N/A	2”	3”	2”

**Table 1 - Minimum Clearances for Secure Seal®**

Auxiliary parts such as combination Roof Supports, Roof Thimble, Flashings and Wall Thimble outer shields are intended to be attached directly to the framing or to ceilings, floors, or walls in accordance with their respective instructions. These parts, which are installed in contact with wood or other combustibles, are designed and tested to assure that they do not overheat at points of contact.

### Notes:

1. Unenclosed requires at least two sides open.
2. Single Wall (SS) may be enclosed only in non-combustible enclosure.
3. Reduced clearances may be attained by using non-combustible enclosures.
4. Combustible Material is any material made of or surfaced with wood, compressed paper, plant fibers or other materials that are capable of being ignited or burned. Such material shall be considered combustible even though it is flame-proofed, fire-retardant treated, or plastered. (Source: NFPA 54/ANSI Z223.1)
5. Design any enclosure to permit inspection of the system.
6. Do not place insulation in any required clearance spaces surrounding the vent system unless these instructions suggest otherwise and the insulation is specified or supplied.
7. When using Viton caulking, follow the manufactures required drying times.

### Material Thickness

\*all seams are laser welded

Secure Seal SS		Secure Seal SSD / SSID		
Diameter	Flue	Diameter	Flue	Casing
3” to 9”	AL29-4C - .015” 316L - .015”	3” to 9”	AL29-4C - .015” 316L - .015”	441 stainless - .015”
10” to 16”	AL29-4C - .020” 316L - .019	10” to 16”	AL29-4C - .020” 316L - .019”	441 stainless - .020”
18” to 24”	AL29-4C - .024” 316L - .024”	18” to 24”	AL29-4C - .024” 316L - .024”	441 stainless - .024”

## GENERAL INSTALLATION REQUIREMENTS

When venting Category I, II, III, or IV appliances or TYPE L vented appliance, Secure Seal **must** be used for the entire length of the system. Do not mix pipe, fittings, or joining methods from different manufacturers. **See the Secure Seal 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.

- If required by the appliance manufacturer, a Drain Tee Cap 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 Tee Cap is supplied with the appliance, install a Secure Seal Drain Tee Cap.
- 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 appliance are designed for multiple venting. Cat. II, III or IV appliances MAY NOT be common vented with Cat. I, natural draft appliances. This limitation can be removed if an engineering analysis demonstrates normal and safe operation of appliances.
- Secure Seal must not come in contact with plumbing or electrical systems.
- Maintain rated clearances to combustibles over the entire length of the vent system.
- Secure Seal 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.**

## PART NUMBERS

These instructions identify major model SS-SSD-SSID parts by name and part number.

Material Code Designations	
B	Type 316 Stainless Steel
H	Type 430 Stainless Steel
K	Type 441 Stainless Steel
P	Type 439 Stainless Steel
U	Type AL29-4C Stainless Steel

### Example:

**SSD 36” length with inside diameter 14” made of AL29-4C inner flue and SS441 outer casting.**

SSD	14	L36	UK
Model	Dia.	Part	Material

**SS 30° elbow with inside diameter 22” made of 316L.**

SS	22	E30	B
Model	Dia.	Part	Material

**SSD wall support for 8” diameter chimney made of stainless 439.**

SSD	8	WSHD	P
Model	Dia.	Part	Material

# TYPICAL INSTALLATION

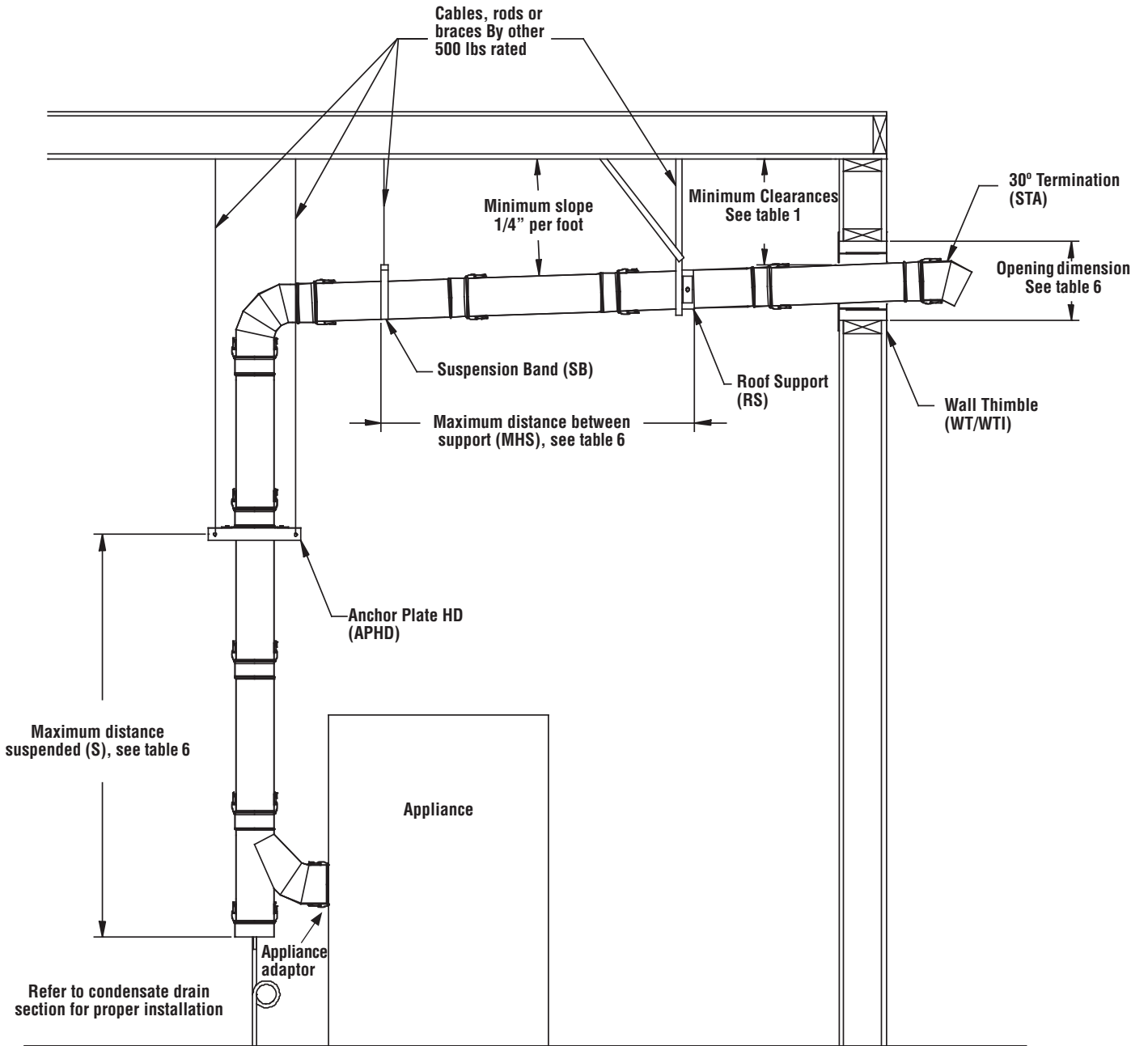
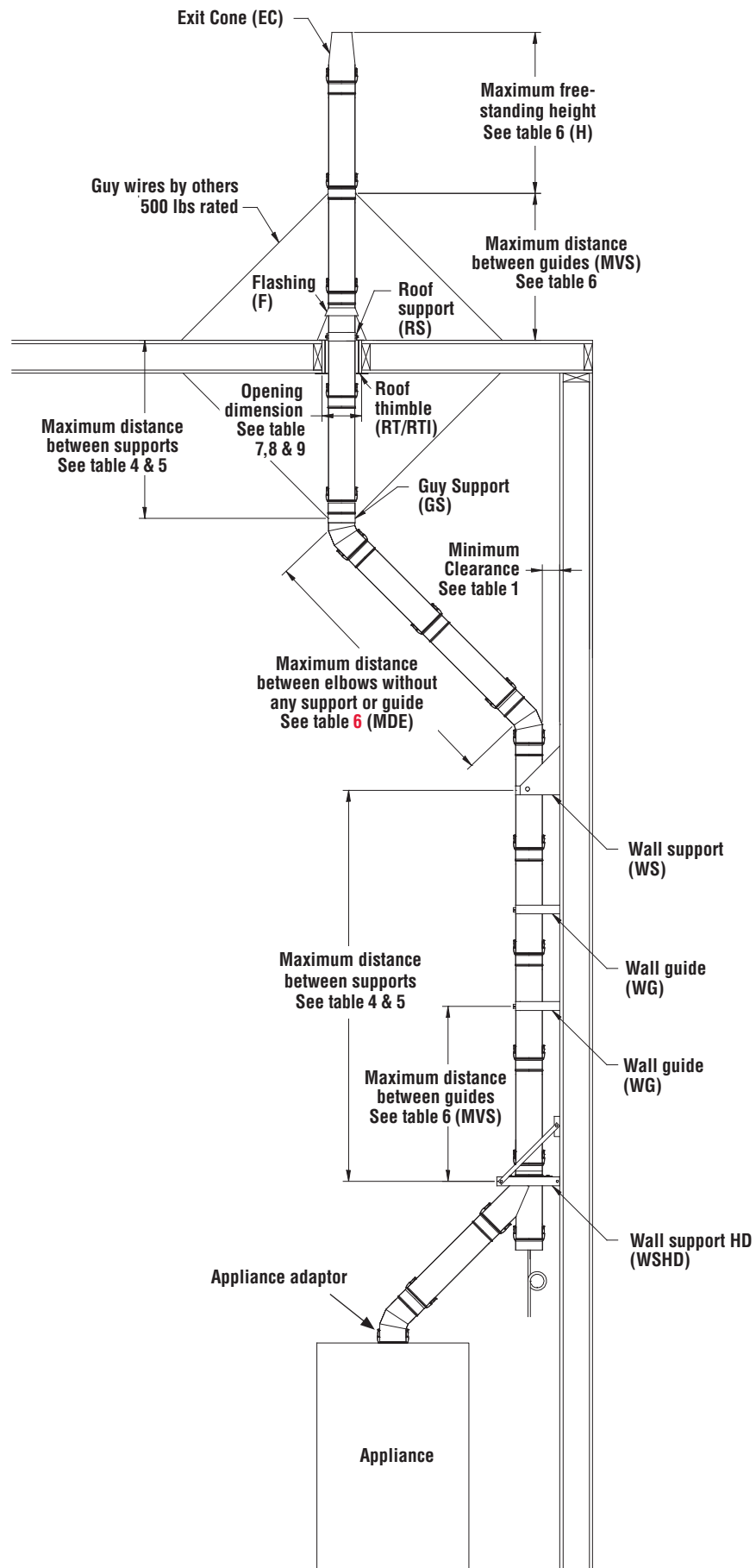


Figure 1 - Horizontal

**TYPICAL INSTALLATION**

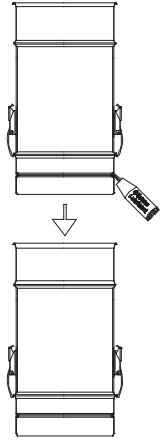


**Figure 2 - Vertical**

## CHIMNEY AND FITTING JOINT ASSEMBLY

All components have a male and female end, the male end has the gasket. The installation orientation is indicated on the labeling of each chimney section with an arrow. The arrow indicated the direction of the flow.

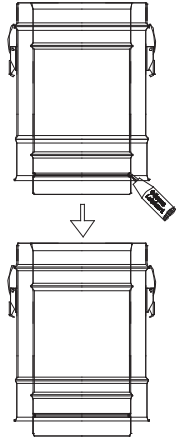
### Secure Seal® SS



1. Add a thin film of silicone lubricant on the o-ring.

2. Insert the male end into the female end.

### Secure Seal SSD / SSID



3. Close the clips to secure the joint.

NOTE:  
Clips are self-locking

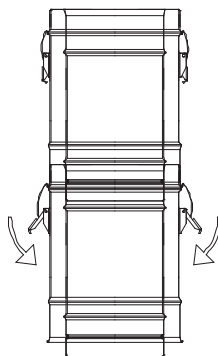
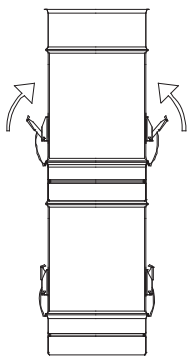


Figure 3 - Joint assembly steps

To open clips, push the secondary catch while pulling up the lever

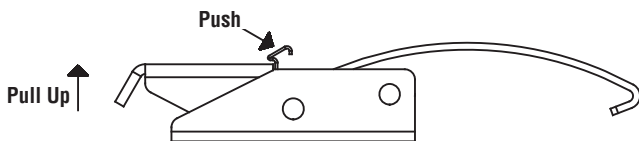


Figure 4 - Opening clips

ASSEMBLY JOINT SS/SSD/SSID LUBE REQUIREMENT	
Inside diameter	Qty (oz)
3"	0.1
4"	0.1
5"	0.1
6"	0.1
7"	0.1
8"	0.2
9"	0.2
10"	0.2
12"	0.3
14"	0.3
16"	0.3
18"	0.4
20"	0.4
22"	0.5
24"	0.5

Table 2

## CHIMNEY WEIGHT

Chimney weight is given in pounds per foot of each diameter. It is important to know the weight of the chimney section for chimney support or guiding. Chimney weight (**table 3**) along with the maximum chimney height (**table 4**) is necessary to calculate the proper anchor strength needed with supports.

CHIMNEY WEIGHT IN LB/FT			
INSIDE DIAMETER	SS	SSD	SSID
3"	0.7	1.7	2.1
4"	0.9	2.1	2.6
5"	1.1	2.6	3.0
6"	1.3	3.0	3.4
7"	1.5	3.4	3.9
8"	1.7	3.8	4.3
9"	1.9	4.3	N/A
10"	2.1	4.7	5.5
12"	2.6	6.2	7.0
14"	3.6	7.7	8.2
16"	4.1	8.7	9.3
18"	4.6	9.8	10.3
20"	5.1	10.8	11.3
22"	5.7	11.8	12.4
24"	6.2	12.8	N/A

Table 3 - Chimney weight

Example: Model Secure Seal SSD 6" diameter section of 25 feet in length from **table 3**, weight in lb/ft = 3. Total length 3 x 25 = 75lbs.

## SUPPORT METHODS AND HEIGHT

- Several support and guiding methods are used to anchor a chimney against upward, downward and angular placement.
- These supports and guides prevent bending stresses on the chimney elbows and joints.
- Certain limitations apply for proper installation of supports and guides. See **tables 4 and 5**.
- See **figure 1 and 2** for typical installations.

MAXIMUM CHIMNEY HEIGHTS AND SUPPORT METHOD FOR <b>MODEL SS</b>							
Inside dia.	Anchor Plate (AP)	Anchor Plate HD (APHD)	Anchor Plate Length (APL)	Wall Support (WS)	Wall Support HD (WSHD)	Roof support (RS)	Guy support (GS)
3"	200	200	200	100	200	100	250
4"	200	200	200	100	200	100	250
5"	195	195	195	97.5	195	97.5	225
6"	190	190	190	95	190	95	190
7"	185	185	185	92.5	185	92.5	160
8"	180	180	180	90	180	90	140
9"	175	175	175	87.5	175	87.5	130
10"	170	170	170	85	170	85	115
12"	160	160	160	80	160	80	90
14"	150	150	150	75	150	75	65
16"	140	140	140	70	140	70	60
18"	130	130	130	65	130	65	55
20"	120	120	120	60	120	60	50
22"	110	110	110	55	110	55	45
24"	100	100	100	50	100	50	40
MAXIMUM CHIMNEY HEIGHTS AND SUPPORT METHOD FOR <b>MODEL SSD</b>							
Inside dia.	Anchor Plate (AP)	Anchor Plate HD (APHD)	Anchor Plate Length (APL)	Wall Support (WS)	Wall Support HD (WSHD)	Roof support (RS)	Guy support (GS)
3"	100	100	100	50	100	50	115
4"	100	100	100	50	100	50	115
5"	97.5	97.5	97.5	48.75	97.5	48.75	95
6"	95	95	95	47.5	95	47.5	80
7"	92.5	92.5	92.5	46.25	92.5	46.25	70
8"	90	90	90	45	90	45	65
9"	87.5	87.5	87.5	43.75	87.5	43.75	55
10"	85	85	85	42.5	85	42.5	50
12"	80	80	80	40	80	40	40
14"	75	75	75	37.5	75	37.5	30
16"	70	70	70	35	70	35	27
18"	65	65	65	32.5	65	32.5	25
20"	60	60	60	30	60	30	22
22"	55	55	55	27.5	55	27.5	21
24"	50	50	50	25	50	25	20

**Table 4 - Dimensions are in feet**

MAXIMUM CHIMNEY HEIGHTS AND SUPPORT METHOD FOR <b>MODEL SSID</b>							
Inside dia.	Anchor Plate (AP)	Anchor Plate HD (APHD)	Anchor Plate Length (APL)	Wall Support (WS)	Wall Support HD (WSHD)	Roof support (RS)	Guy support (GS)
3"	95	95	95	47.5	95	47.5	80
4"	95	95	95	47.5	95	47.5	80
5"	92.5	92.5	92.5	46.25	92.5	46.25	70
6"	90	90	90	45	90	45	65
7"	87.5	87.5	87.5	43.75	87.5	43.75	55
8"	85	85	85	42.5	85	42.5	50
9"	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10"	80	85	85	42.5	85	42.5	40
12"	75	75	75	37.5	75	37.5	30
14"	70	70	70	35	70	35	27
16"	65	65	65	32.5	65	32.5	25
18"	60	60	60	30	60	30	22
20"	55	55	55	27.5	55	27.5	21
22"	50	50	50	25	50	25	20
24"	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Table 5 - Dimensions are in feet**

SUPPORT AND GUIDE SPACING FOR <b>MODEL SS</b>						
Inside diameter	MVS		MHS	MDE	H	S
	Interior	Exterior				
3"	10	8	12	12	10	50
4"	10	8	12	12	10	100
5"	10	8	12	12	10	100
6"	10	8	12	12	10	100
7"	10	8	12	12	10	100
8"	10	8	12	12	10	100
9"	10	8	12	12	10	100
10"	10	8	12	12	10	100
12"	10	8	12	12	10	100
14"	10	8	12	12	10	100
16"	10	8	12	12	10	100
18"	10	8	12	12	10	100
20"	10	8	12	12	10	100
22"	10	8	12	12	10	100
24"	10	8	12	12	10	100

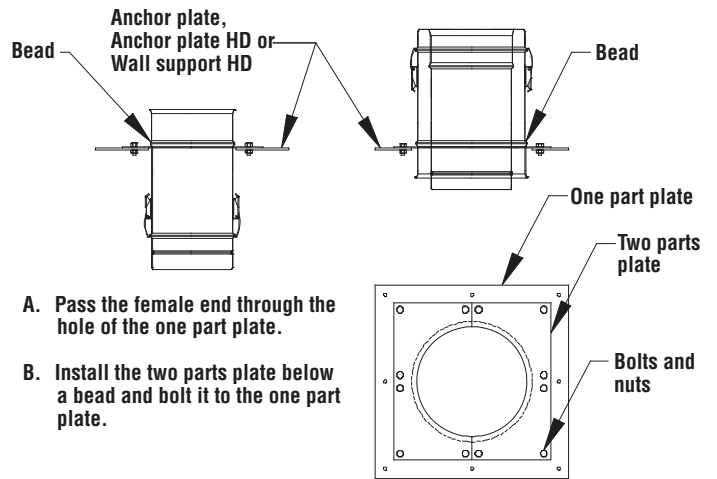
SUPPORT AND GUIDE SPACING FOR <b>MODEL SSD &amp; SSID</b>						
Inside diameter	MVS		MHS	MDE	H	S
	Interior	Exterior				
3"	10	8	12	12	10	50
4"	10	8	12	12	10	50
5"	10	8	12	12	10	50
6"	10	8	12	12	10	50
7"	10	8	12	12	10	50
8"	10	8	12	12	10	50
9"	10	8	12	12	10	50
10"	10	8	12	12	10	50
12"	10	8	12	12	10	50
14"	10	8	12	12	10	50
16"	10	8	12	12	10	50
18"	10	8	12	12	10	50
20"	10	8	12	12	10	50
22"	10	8	12	12	10	50
24"	10	8	12	12	10	50

**Table 6 - Dimensions are in feet**

MVS : Maximum Vertical Spacing between Guides/Supports  
MHS: Maximum Horizontal Spacing between Guides/Supports  
MDE: Maximum Distance between Elbows  
H: Maximum Freestanding Height above the Roof  
S: Maximum Suspended Length

**\*Important Notes:**

1. For Anchor Plate (AP) / Anchor Plate Heavy Duty (APHD) / Wall Support Heavy Duty (WSHD), the support must be installed below a bead. See **figure 5**.
2. For Wall Support (WS) / Roof Support (RS) , the support can be installed anywhere on the part.
3. For Anchor plate length, the support is already integrated to a length. Directly attached to the building structure or supported by non combustible structural elements (not included). No other installation is required than the standard installation for a regular length.



**Figure 5 - Position of support**

**HORIZONTAL INSTALLATION REQUIREMENTS**

- 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. Less distance is permitted if specified in the appliance's installation instructions. 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 and NFPA 54. See **figure 6**. Proper judgment may require greater distances depending on the side of the equipment installed or to allow for snow drifting or falling from falling from overhead roofs or trees. The termination should be far enough away from trees, shrubs, or decorative items to prevent damage.
- The total horizontal vent length from the appliance flue collar to the outside termination shall be in accordance with the appliance manufacturer's instructions.



## MAINTAIN PROPER SLOPE

- Install with a continuous 1/4" per foot (minimum) slope, as is required by the National Fuel Gas Code for all gas-fired appliances.
- Vent systems for condensing appliances must have a continuous 1/4" per foot (minimum) slope toward the appliance or a condensate drain. Always check the appliance manufacturer's instructions for proper drain requirements.
- Secure Seal® offers a range of tees and elbows that are built incorporating a 2 degree slope, we recommend that you use these to generate your slope.
- Some appliances require the venting system to be sloped toward the horizontal termination.
- Remember, if you raise the appliance or lower the ceiling you must adjust the slope of the vent to maintain the 1/4" per foot minimum.

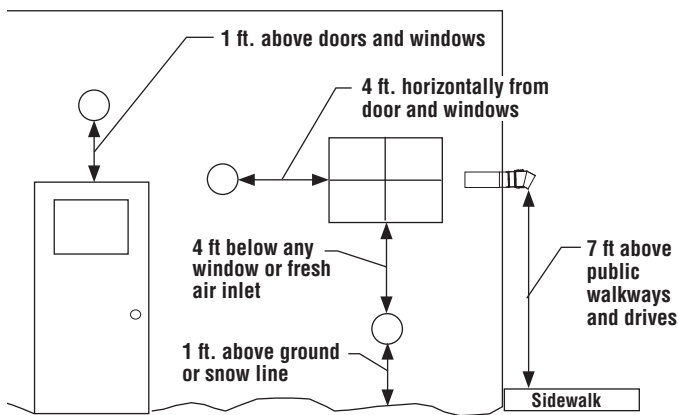


Figure 6 - Horizontal termination requirements

## VERTICAL INSTALLATION REQUIREMENTS

1. The vent system must terminate at least 3 feet above the roof line and at least 2 feet higher than any portion of the building within 10 feet. See **figure 7**. This limitation can be removed if an engineering analysis demonstrates normal and safe operation of appliance.
2. When terminated at a height of more than 10 feet, the stack must be supported by a Guy Section.
3. The vent system must terminate with one of the Secure Seal® terminations.

### Except;

- a) Category I appliances (natural draft) must use a Rain Cap. It is optional on Category II. This limitation can be removed if an engineering analysis demonstrates normal and safe operation of appliance.
  - b) Vent systems without provisions for draining rain water must use a Rain Cap.
  - c) Terminations or approved mechanical vent devices specified or provided by the appliance manufacturer are permitted.
4. The total continuous distance of the vent system from the appliance flue collar to the termination shall not exceed that specified in the appliance manufacturer's installation instructions. When venting natural draft appliances the termination must be at least 5 feet above the topmost draft hood. Otherwise a listed mechanical draft inducing device is required. This limitation can be removed if an engineering analysis demonstrates normal and safe operation of appliance.
  5. In general, systems installed in cold climates perform best, and condensation is reduced, when the system is fully enclosed by some part of the building structure or by using insulated SSID venting system.
  6. In cold climates 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/or the building exterior. Security Chimneys will NOT be held liable for any personal injury or property damage due to any formation of ice.
  7. Vertical supports are required after every transition to vertical. Vertical supports are also required after every offset elbow.
  8. Unless Secure Seal is installed in a fire rated shaft, a roof thimble and support is required when penetration fire rated floors, walls or ceilings.

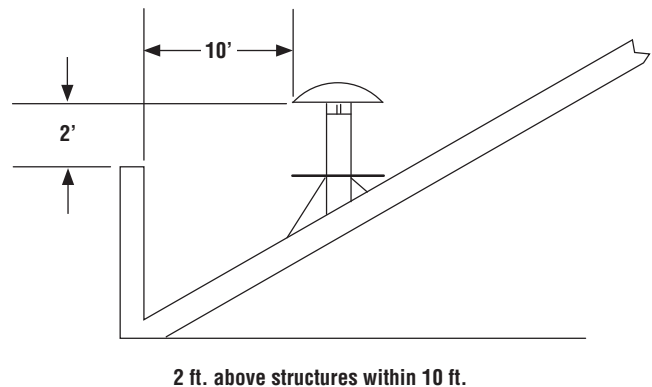


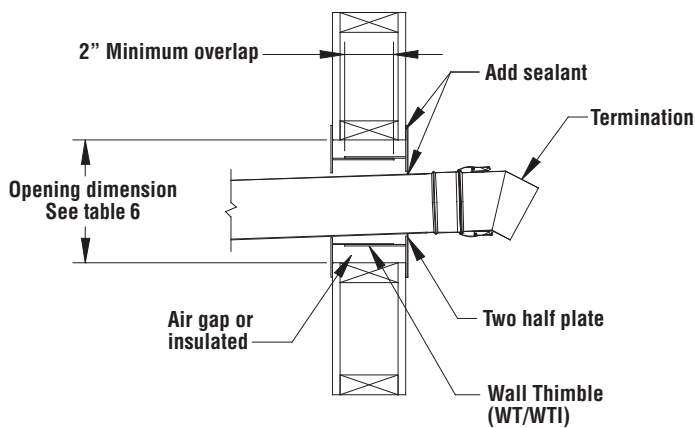
Figure 7 - Vertical installation requirements

## WALL PENETRATION

1. Prior to installation, determine proper location of wall thimble (WT) or wall thimble insulated (WTI) so that a minimum slope of 1/4" (6mm) per foot is maintained in the horizontal section of vent to ensure proper flow of condensation.
2. Prepare the wall by cutting a square opening. See **table 6** for opening dimension.
3. Install the wall thimble by inserting the larger of the two parts on the appliance (interior side). See **figure 8**.
4. Next, apply a bead of sealant around the edges of the exterior (smaller of the two parts) wall thimble component. Then install this part of the wall thimble by inserting the smaller collar into the other component from the previous step.

**NOTE: The two horizontal cylinders of the thimble must engage a minimum of two inches.**

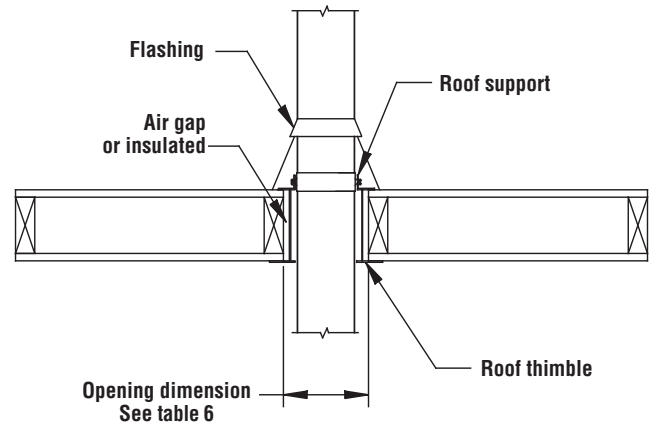
5. Fasten both sides of the wall thimble using screws or nails.
6. Once the thimble is installed, Secure Seal® vent pipe can be inserted into the thimble.
7. Close the gap between the thimble and the vent by installing the two half plate and fasten it using screws or nails.
8. Install horizontal termination to complete the assembly.
9. Once assembly is completed, apply a bead of high-temp sealant around the pipe and the exterior two half plates of the thimble to protect against weather.
10. The air gap is filled with insulation when using the insulated wall thimble (WTI).



**Figure 8 - Wall penetration**

## ROOF / FLOOR PENETRATION

1. A roof thimble (RT) or roof thimble insulated (RTI) for cold climate must be installed every time the vent system passes through a floor or roof.
2. Prepare the roof / floor by cutting a square opening. See **table 6**.
3. Install the roof thimble. You may cut the radiation sleeve if it is too long. See **figure 9**.
4. For roof installation, install a flashing.



**Figure 9 - Roof penetration**

## CONDENSATE DRAINS

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

1. A Drain length (DL) or a Tee with a drain tee cap (DTC) 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 Drain Tee Cap to the appropriate branch of the tee.
5. A condensate drain tube kit is available to direct the condensate to an appropriate location. 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. Security Chimneys™ will NOT be held liable for any injury or property damage due to formation of ice.

OPENING DIMENSIONS FOR WALL/ROOF PENETRATION FOR MODEL SS				
Inside diameter	Wall Thimble (WT)	Wall Thimble Insulated (WTI)	Roof Thimble (RT)	Roof Thimble Insulated (RTI)
3"	8x8	9x9	7x7	11x11
4"	9x9	10x10	8x8	12x12
5"	10x10	11x11	9x9	13x13
6"	11x11	12x12	10x10	14x14
7"	12x12	13x13	11x11	15x15
8"	13x13	14x14	12x12	16x16
9"	14x14	15x15	13x13	17x17
10"	15x15	16x16	14x14	18x18
12"	17x17	18x18	16x16	20x20
14"	22x22	22x22	22x22	22x22
16"	24x24	24x24	24x24	24x24
18"	26x26	26x26	26x26	26x26
20"	28x28	28x28	28x28	28x28
22"	30x30	30x30	30x30	30x30
24"	32x32	32x32	32x32	32x32

Table 7 - Dimensions are in inches

OPENING DIMENSIONS FOR WALL/ROOF PENETRATION FOR MODEL SSID				
Inside diameter	Wall Thimble (WT)	Wall Thimble Insulated (WTI)	Roof Thimble (RT)	Roof Thimble Insulated (RTI)
3"	10x10	11x11	7x7	11x11
4"	13x13	14x14	10x10	14x14
5"	14x14	15x15	11x11	15x15
6"	15x15	16x16	12x12	16x16
7"	16x16	17x17	13x13	17x17
8"	17x17	18x18	14x14	18x18
9"	N/A	N/A	N/A	N/A
10"	19x19	20x20	16x16	20x20
12"	22x22	22x22	18x18	22x22
14"	24x24	24x24	20x20	24x24
16"	26x26	26x26	22x22	26x26
18"	28x28	28x28	24x24	28x28
20"	30x30	30x30	26x26	30x30
22"	32x32	32x32	28x28	32x32
24"	N/A	N/A	N/A	N/A

Table 9 - Dimensions are in inches

OPENING DIMENSIONS FOR WALL/ROOF PENETRATION FOR MODEL SSD				
Inside diameter	Wall Thimble (WT)	Wall Thimble Insulated (WTI)	Roof Thimble (RT)	Roof Thimble Insulated (RTI)
3"	12x12	13x13	9x9	13x13
4"	11x11	12x12	8x8	12x12
5"	12x12	13x13	9x9	13x13
6"	13x13	14x14	10x10	14x14
7"	14x14	15x15	11x11	15x15
8"	15x15	16x16	12x12	16x16
9"	16x16	17x17	13x13	17x17
10"	17x17	18x18	14x14	18x18
12"	19x19	20x20	16x16	20x20
14"	22x22	22x22	18x18	22x22
16"	24x24	24x24	20x20	24x24
18"	26x26	26x26	22x22	26x26
20"	28x28	28x28	24x24	28x28
22"	30x30	30x30	26x26	30x30
24"	32x32	32x32	28x28	32x32

Table 8 - Dimensions are in inches

**INSTALLING SECURE SEAL® AS A LINER IN A MASONRY CHIMNEY OR AS A LINER IN AN EXISTING VENT**

\* Stainless Steel Wire Rope (by others) is to be used to hang the vent system from the top of the masonry chimney or from the top of the existing vent.

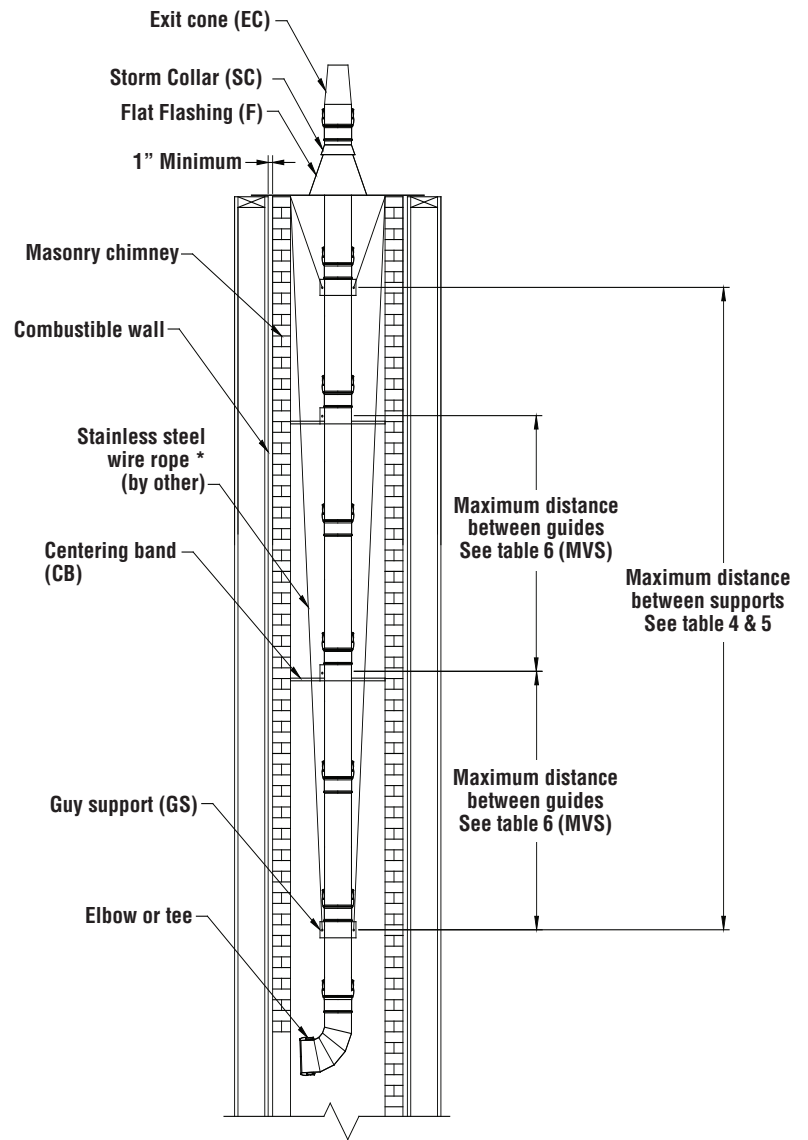
- The stainless wire rope is attached to the Guy Support Band and is secured with cable clamps (by others).
- The Stainless Steel Wire Rope is secured in a similar manner to the top platform of the masonry chimney or existing vent.
- Use the appropriate size of Stainless Steel Wire Rope to accommodate the required total loads of the vent system.

It may be necessary to fabricate a platform (at top of chimney / vent - by others).

Consult Security Chimneys International for guidelines.

**DO NOT USE GALVANIZED WIRE ROPE.**

Note: When installed as a liner in a masonry chimney or to reline an existing vent no other appliance can be vented into the same chimney or vent.



**Figure 10 - Installing Secure Seal as a liner**

**ADJUSTABLE LENGTH**

For installations that requires non-standard vent lengths, Secure Seal® Adjustable Length (AL) should be used.

The part consists of an inner conduit that slips into the downstream part and over the upstream part, a collar holds the conduit in place and an outer shell (for double wall only). See figure 11 for installation steps.

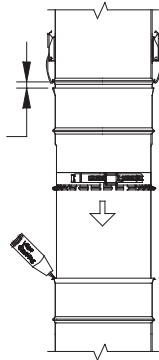
**Note:** The inner conduit may be cut to desired length to limit interference with downstream part.

ADJUSTABLE LENGTH SS/SSD CAULKING REQUIREMENT	
Inside diameter	Qty (oz)
3"	0.2
4"	0.3
5"	0.4
6"	0.5
7"	0.6
8"	0.7
9"	0.8
10"	0.9
12"	1.0
14"	1.2
16"	1.4
18"	1.5
20"	1.7
22"	1.9
24"	2.1

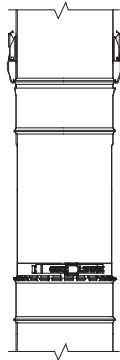
Table 10

**Secure Seal SS**

1. Keep a play about 1/8" to 1/4" to allow thermal expansion
2. Apply a 1/8" to 1/4" bead (may vary) of Viton caulking to fill the gap between the adjustable length inner wall and the female end of the standard part. Please allow 24-36 hours for Viton to cure."

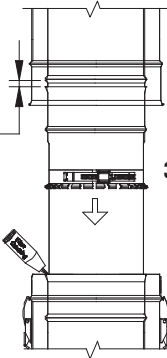


3. Slide the collar down over the female end of the downstream part and tighten the collar

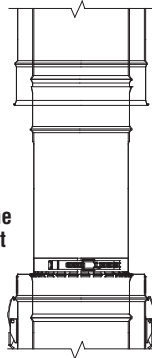


**Secure Seal SSD**

1. Keep a play about 1/8" to 1/4" to allow thermal expansion
2. Apply a 1/8" to 1/4" bead (may vary) of Viton caulking to fill the gap between the adjustable length inner wall and the female end of the standard part. Please allow 24-36 hours for Viton to cure.



3. Slide the collar down over the female end of the downstream part and tighten the clamp



4. Install the outer shell over end of downstream part and under the end of upstream part and tighten the clamps. Need to cut outer shell to correct length.

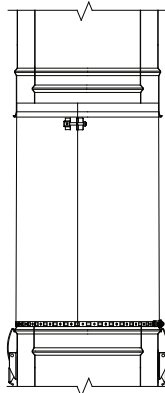


Figure 11 - Adjustable length installation steps

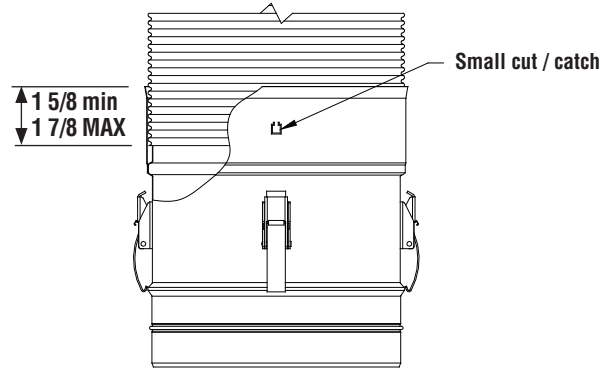
**SECURE SEAL FLEX**

**\*IMPORTANT NOTE**

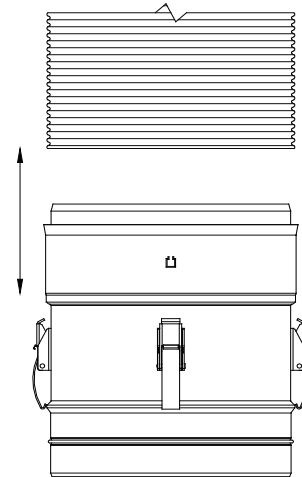
When installing Secure Seal Flex, the direction of exhaust flow is always from the appliance. There is an arrow printed on each section of liner and component that will point in the direction of the exhaust gas. If the inner liner is installed correctly the proper direction can be determined by running 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.

**Attaching adapters to SECURE SEAL FLEX liner**

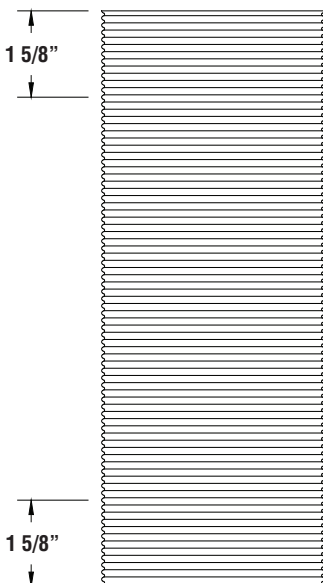
- 1- The adapter without the latches is the Female Flex Adapter and designed for the top of the flex liner. The Adapter with the latches and the black Viton O-ring is the Male Flex Adapter and is designed for the bottom of the flex liner. If cutting the liner on the field is required, make sure the cut is square.
- 2- Make a mark on both ends of liner at 1 5/8" from each end. (Figure 12a) That mark will act as a reference point when the adapters are fully seated onto the flex liner. (Figure 12b)
- 3- To be sure everything is right before putting the sealant between both tubes, do a dry fit test by pushing the liner into the adapter until it reach the bottom between the inner tube and the outer tube, then remove it. (Figure 13)
- 4- Add the sealant S-650 in the channel of the Male Flex Adapter. Put enough sealant so the channel gap is evenly covered all around. (Figure 14)
- 5- Push the adapter on the liner (the inner tube fits inside the liner and the outer tube fits outside the liner) all the way in. (Figure 15)
- 6- Push the little natches. (Figure 16)
- 7- Repeat steps 3 through 6 for the other end with the female flex adapter or the flex to flex adapter.
- 8- Before installation, cure for a minimum of 24 hours or follow the cure time called out by the silicone manufacturer.



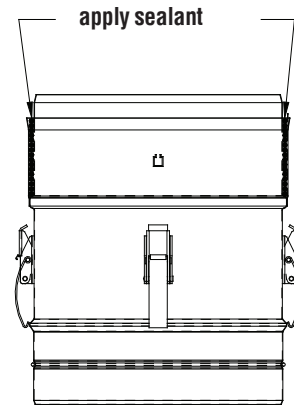
**Figure 12b - Flex Adapter small cut / catch**



**Figure 13 - Flex Adapter dry fit test**



**Figure 12a - Secure Seal Flex liner**



**Figure 14 - Flex Adapter apply sealant**

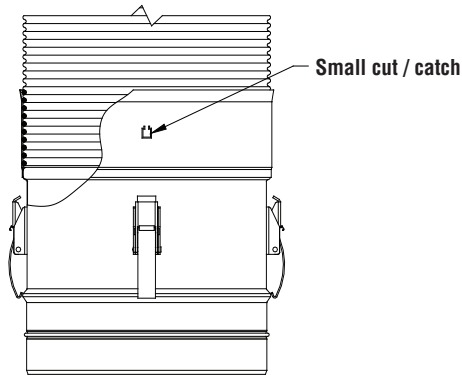


Figure 15 - Flex Adapter, seating flex

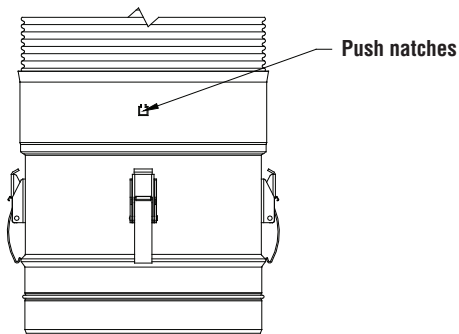


Figure 16 - Flex Adapter push natch to lock

#### BASIC SECURE SEAL FLEX LINER INSTALLATION

- 1- Determine the required location and opening in the masonry chimney. For a basic Secure Seal Flex installation the opening must be large enough for the mortar sleeve and Male Flex Adapter and the Secure Seal Flex to easily pass through. If a Tee application is necessary, a larger hole may be required.
- 2- Make sure the Secure Seal Flex is supported at the bottom of the chimney. Refer to **Figure 10** for guiding and support installation in the masonry chimney.
- 3- The Secure Seal 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 Secure Seal Flex liner above the Male Flex Adapter. Doing this will reduce the chance of breaking the seal between the Secure Seal Flex and the Male Flex Adapter.
- 4- The Secure Seal Flex must stay within the masonry chimney; however the Elbow or other Secure Seal components will extend beyond the masonry chimney. (**Figure 16**)
- 5- It is strongly recommended to use a drain between the Male Flex Adapter and the appliance (refer to **Condensate Drains** section).

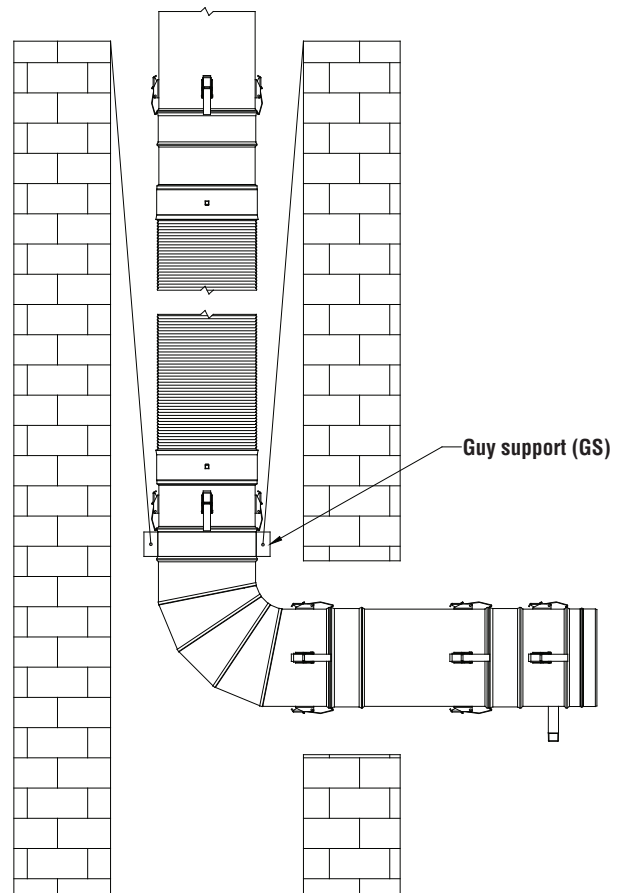


Figure 17 - Secure Flex Adapter Elbow in masonry

#### MAINTENANCE INSTRUCTIONS

As with all vents, the Secure Seal vent system should be inspected at least annually for the presence of deposits or debris and any accumulation should be removed. The vent system should also be inspected at regular periods for signs of leakage of condensate or combustion products at any joints.


If the vent system incorporates a drain hose from either a Drain length or a Drain tee cap, the hose must be inspected periodically to ensure that water is in the trap loop. If a proper trap loop is not maintained, exhaust from the connected appliances may accumulate in the building area.

**SS, SSD / SSD SECURE SEAL® CHIMNEY LABELS**

The labels supplied for product identification are shown here and indicates the flow of the flue gases in the venting system.

SPECIAL GAS VENT FOR CATEGORY I, II, III, IV AND TYPE BH CLASS I, II  
 CONDUIT D'ÉVACUATION POUR CATÉGORIE I, II, III, IV ET TYPE BH CLASS I, II  
**AL29-4C**  
**TYPE L LOW-TEMPERATURE OIL OR GAS VENTING SYSTEM (SSD/SSID ONLY)**  
 MAX TEMP 550°F / 288°C OR 570°F/300°C (L-VENT)  
 Ø3" TO Ø24" / Ø3" À Ø24"  
 FOR INTERIOR AND EXTERIOR USE  
 RATED FOR USE AT MAXIMUM 35 INCH WATER COLUMN INTERNAL PRESSURE  
 WHEN USED IN POSITIVE PRESSURE APPLICATION  
 CLASSÉ POUR UNE UTILISATION A PRESSION POSITIVE INTERNE MAXIMALE DE 35 POUCES DE COLONNE D'EAU

**LISTED/HOMOLOGUÉ**  
**UL-1738**  
**ULC-S636**  
**UL-641 (SSD/SSID)**  
**ULC-S609 (SSD/SSID)**




**Intertek**  
**4002244**

**WARNING**  
 RISK OF CARBON MONOXIDE (CO) POISONING AND RISK OF FIRE IF IMPROPERLY INSTALLED. FOLLOW ALL CAUTIONS, WARNINGS AND INSTRUCTIONS REGARDING INSTALLATION OF VENT PIPE SYSTEM.  
**AVERTISSEMENT**  
 RISQUE D'EMPOISONNEMENT AU MONOXIDE DE CARBONE (CO) SI MAL INSTALLÉ. LIRE ATTENTIVEMENT LES INSTRUCTIONS D'INSTALLATION FOURNIES AVEC CE PRODUIT.

**MODEL Secure Seal® SS / SSD / SSID**

MINIMUM CLEARANCE TO COMBUSTIBLE - SINGLE WALL SS						
DÉGAGEMENT MINIMAL AUX MATÉRIEAUX COMBUSTIBLES - PAROI SIMPLE SS						
Dia.	Rated Operating Temperature	Maximum Temperature	Enclosed / Fermé (4 sides/côtés)		Unenclosed / Ouvert (2 sides/côtés)	
			Horizontal	Vertical	Horizontal	Vertical
			3" - 12"	480°F (249°C)	550°F (288°C)	N/A
14" - 24"	480°F (249°C)	550°F (288°C)	N/A	N/A	4"	4"
MINIMUM CLEARANCE TO COMBUSTIBLE - DOUBLE WALL SSD / SSID						
DÉGAGEMENT MINIMAL AUX MATÉRIEAUX COMBUSTIBLES - PAROI DOUBLE SSD / SSID						
Dia.	Rated Operating Temperature	Maximum Temperature	Enclosed / Fermé (4 sides/côtés)		Unenclosed / Ouvert (2 sides/côtés)	
			Horizontal	Vertical	Horizontal	Vertical
			3" - 12"	480°F (249°C)	550°F (288°C)	N/A
14" - 24"	480°F (249°C)	550°F (288°C)	N/A	1"	3"	1"
3" - 12" (L-Vent)	480°F (249°C)	550°F (288°C)	N/A	2"	2"	2"
14" - 24" (L-Vent)	480°F (249°C)	550°F (288°C)	N/A	2"	3"	2"



**security** Chimneys  
 SECURITY CHIMNEYS INTERNATIONAL  
**Cheminées** Sécurité  
 LAVAL, QC CANADA NP314 REV.8

SPECIAL GAS VENT FOR  
 CATEGORY I, II, III, IV  
 AND TYPE BH CLASS I, II  
 CONDUIT D'ÉVACUATION POUR  
 CATÉGORIE I, II, III, IV  
 ET TYPE BH CLASS I, II  
 TYPE L (SSD/SSID)

**LISTED/HOMOLOGUÉ**  
**UL-1738**  
**ULC-S636**  
**UL-641 (SSD/SSID)**  
**ULC-S609 (SSD/SSID)**



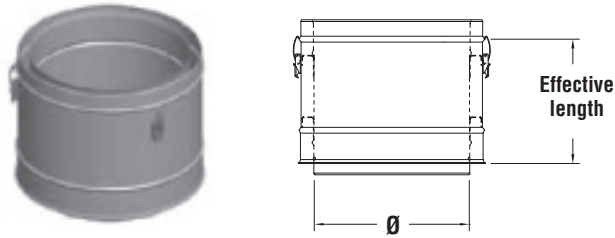
**Intertek**  
**4002244**

**MODEL Secure Seal® SS/SSD/SSID**  
**Accessories / Accessoires**

**security** SECURITY CHIMNEYS INTERNATIONAL  
**Cheminées** LAVAL, QC, CANADA NP315 REV.5



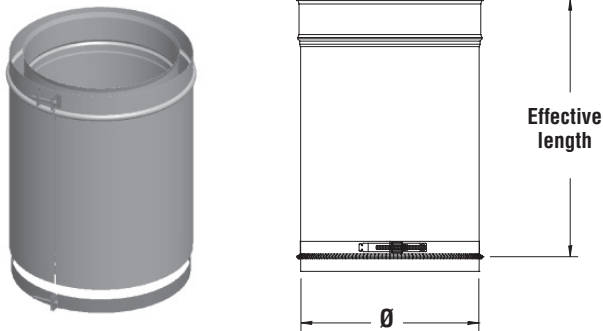
## SSD / SSID VENT LENGTHS



SSD & SSID Lengths			
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID
3 to 24	6-5/8	SSDØL9	SSIDØL9
3 to 24	9-5/8	SSDØL12	SSIDØL12
3 to 24	15-5/8	SSDØL18	SSIDØL18
3 to 24	21-5/8	SSDØL24	SSIDØL24
3 to 24	33-5/8	SSDØL36	SSIDØL36

NOTE: SSID 9" and 24" not available.

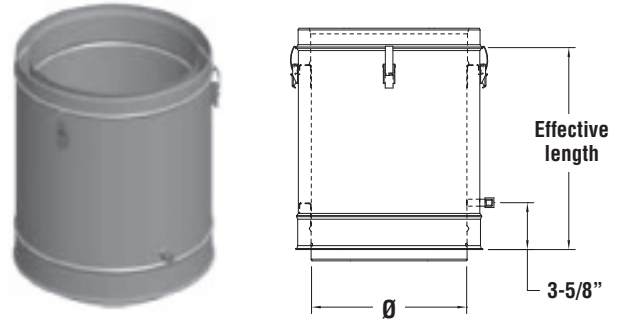
Figure 18



SSD & SSID Adjustable Lengths			
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID
3 to 24	3 to 5	SSDØAL9	SSIDØAL9
3 to 24	3 to 14	SSDØAL18	SSIDØAL18
3 to 24	3 to 22	SSDØAL24	SSIDØAL24
3 to 24	3 to 32	SSDØAL36	SSIDØAL36

NOTE: SSID 9" and 24" not available.

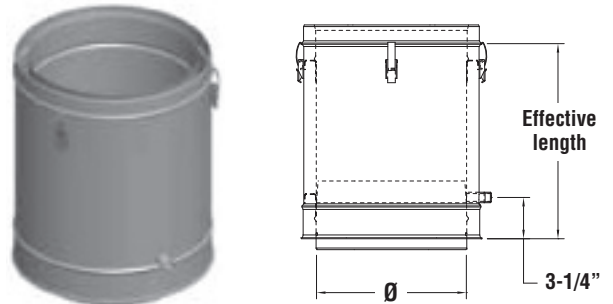
Figure 19



SSD & SSID Test Port Lengths			
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID
3 to 24	6-5/8	SSDØTPL	SSIDØTPL
Drain Ø4-Ø24, 1/4 NPT, 1/2 O.D.			

NOTE: SSID 9" and 24" not available.

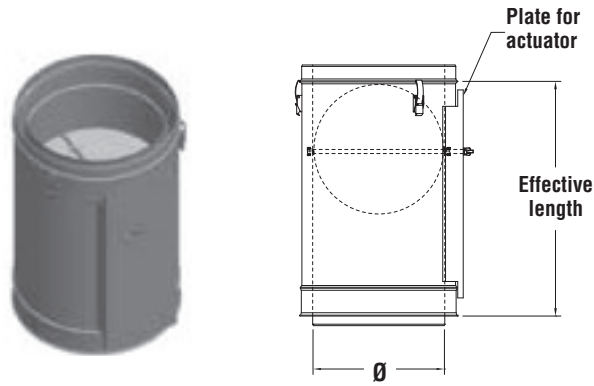
Figure 20



SSD & SSID Drain Lengths				
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	6-5/8	SSDØDL	SSIDØDL	0.25
Drain Ø4-Ø10, 1/4 NPT, 1/2 O.D. Drain 12-Ø24, 1/2 NPT, 5/8 O.D.				

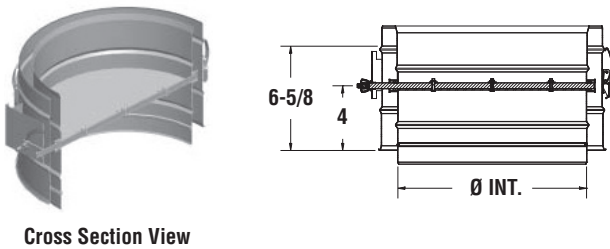
NOTE: SSID 9" and 24" not available.

Figure 21



SSD & SSID Damper Lengths				
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	15-5/8	SSDØDAMP	SSIDØDAMP	0.60-9999

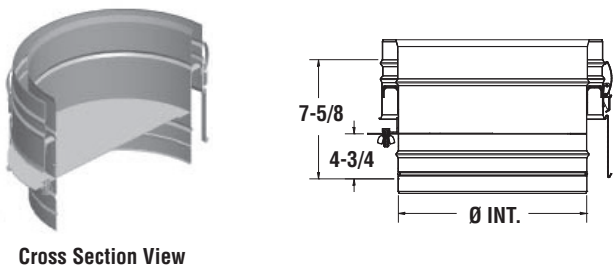
Figure 22 NOTE: SSID 9" and 24" not available.



Cross Section View

SSD & SSID Damper Length Short Manual				
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	6-5/8	SSDØDAMPS	SSIDØDAMPS	0 to 9999

Figure 23 NOTE: SSID 9" and 24" not available.

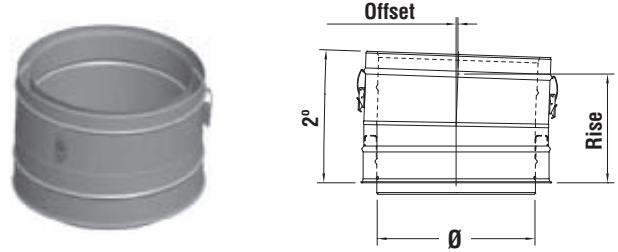


Cross Section View

SSD & SSID Vent Flow Regulator				
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	5-7/8	SSDØVFR	SSIDØVFR	0 to 9999

Figure 24 NOTE: SSID 9" and 24" not available.

## SSD & SSID VENTING ELBOWS

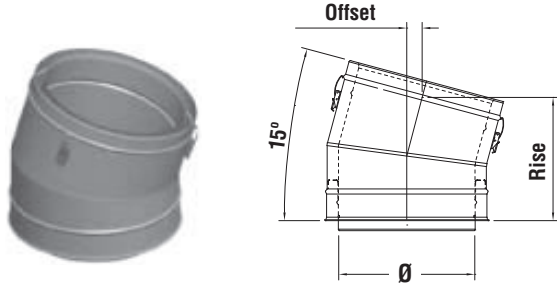


SSD 2-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSD	K Factor
3	1/8	7-3/4	SSD3E2	.04
4	1/8	7-3/4	SSD4E2	.04
5	1/8	7-3/4	SSD5E2	.04
6	1/8	7-7/8	SSD6E2	.04
7	1/8	7-7/8	SSD7E2	.04
8	1/8	7-7/8	SSD8E2	.04
9	1/8	8	SSD9E2	.04
10	1/8	8	SSD10E2	.04
12	1/8	8	SSD12E2	.04
14	1/8	8-1/8	SSD14E2	.03
16	1/8	8-1/4	SSD16E2	.03
18	1/8	8-1/4	SSD18E2	.03
20	1/8	8-3/8	SSD20E2	.03
22	1/8	8-3/8	SSD22E2	.03
24	1/8	8-1/2	SSD24E2	.03

Figure 25

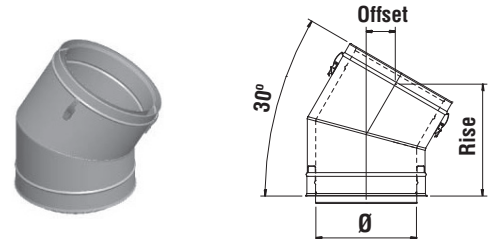
SSID 2-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSID	K Factor
3	1/8	7-3/4	SSID3E2	.04
4	1/8	7-3/4	SSID4E2	.04
5	1/8	7-3/4	SSID5E2	.04
6	1/8	7-7/8	SSID6E2	.04
7	1/8	7-7/8	SSID7E2	.04
8	1/8	7-7/8	SSID8E2	.04
9	N/A	N/A	N/A	N/A
10	1/8	8	SSID10E2	.04
12	1/8	8	SSID12E2	.04
14	1/8	8-1/8	SSID14E2	.03
16	1/8	8-1/4	SSID16E2	.03
18	1/8	8-1/4	SSID18E2	.03
20	1/8	8-3/8	SSID20E2	.03
22	1-3/4	8-3/8	SSID22E2	.03
24	N/A	N/A	N/A	N/A

Figure 26 NOTE: SSID 9" and 24" not available.



SSD 15-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSD	K Factor
3	1	8-3/4	SSD3E15	.31
4	1	8-3/4	SSD4E15	.31
5	1	8-3/4	SSD5E15	.30
6	1-1/8	9	SSD6E15	.30
7	1-1/8	9-3/8	SSD7E15	.29
8	1-1/4	9-5/8	SSD8E15	.29
9	1-1/4	9-7/8	SSD9E15	.28
10	1-1/4	10-1/8	SSD10E15	.28
12	1-3/8	10-5/8	SSD12E15	.27
14	1-3/8	11-1/8	SSD14E15	.27
16	1-1/2	11-5/8	SSD16E15	.26
18	1-1/2	12-1/8	SSD18E15	.26
20	1-5/8	12-5/8	SSD20E15	.26
22	1-5/8	13-1/4	SSD22E15	.26
24	1-3/4	13-3/4	SSD24E15UK	.26

Figure 27



SSD 30-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSD	K Factor
3	2-3/8	9-5/8	SSD3E30	.61
4	2-3/8	9-5/8	SSD4E30	.61
5	2-3/8	9-5/8	SSD5E30	.60
6	2-5/8	10-1/8	SSD6E30	.59
7	2-3/4	10-5/8	SSD7E30	.58
8	2-7/8	11-1/8	SSD8E30	.57
9	3	11-5/8	SSD9E30	.56
10	3-1/8	12-1/8	SSD10E30	.55
12	3-3/8	13-1/8	SSD12E30	.54
14	3-5/8	14-1/8	SSD14E30	.54
16	3-7/8	15-1/8	SSD16E30	.53
18	4-1/8	16-1/8	SSD18E30	.52
20	4-1/2	17-1/8	SSD20E30	.52
22	4-3/4	18-1/8	SSD22E30	.51
24	5	19-1/8	SSD24E30UK	.51

Figure 29

SSID 15-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSID	K Factor
3	1-1/8	9	SSID3E15UK	.31
4	1-1/8	9	SSID4E15UK	.31
5	1-1/8	9-3/8	SSID5E15UK	.30
6	1-1/4	9-5/8	SSID6E15UK	.30
7	1-1/4	9-7/8	SSID7E15UK	.29
8	1-1/4	10-1/8	SSID8E15UK	.29
9	N/A	N/A	N/A	N/A
10	1-3/8	10-5/8	SSID10E15UK	.28
12	1-3/8	11-1/8	SSID12E15UK	.27
14	1-1/2	11-5/8	SSID14E15UK	.27
16	1-1/2	12-1/8	SSID16E15UK	.26
18	1-5/8	12-5/8	SSID18E15UK	.26
20	1-5/8	13-1/4	SSID20E15UK	.26
22	1-3/4	13-3/4	SSID22E15UK	.26
24	N/A	N/A	N/A	N/A

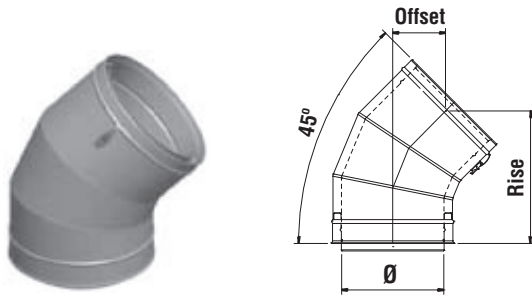
Figure 28

NOTE: SSID 9" and 24" not available.

SSID 30-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSID	K Factor
3	2-5/8	10-1/8	SSID3E30UK	0.61
4	2-5/8	10-1/8	SSID4E30UK	0.61
5	2-3/4	10-5/8	SSID5E30UK	0.60
6	2-7/8	11-1/8	SSID6E30UK	0.59
7	3	11-5/8	SSID7E30UK	0.58
8	3-1/8	12-1/8	SSID8E30UK	0.57
9	N/A	N/A	N/A	N/A
10	3-3/8	13-1/8	SSID10E30UK	0.55
12	3-5/8	14-1/8	SSID12E30UK	0.54
14	3-7/8	15-1/8	SSID14E30UK	0.54
16	4-1/8	16-1/8	SSID16E30UK	0.53
18	4-1/2	17-1/8	SSID18E30UK	0.52
20	4-3/4	18-1/8	SSID20E30UK	0.52
22	5	19-1/8	SSID22E30UK	0.51
24	N/A	N/A	N/A	N/A

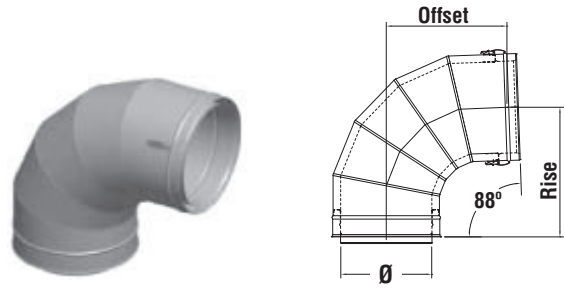
Figure 30

NOTE: SSID 9" and 24" not available.



SSD 45-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSD	K Factor
3	3-7/8	10-1/8	SSD3E45	.26
4	3-7/8	10-1/8	SSD4E45	.26
5	3-7/8	10-1/8	SSD5E45	.22
6	4-1/4	10-7/8	SSD6E45	.17
7	4-1/2	11-1/2	SSD7E45	.16
8	4-7/8	12-1/4	SSD8E45	.14
9	5-1/8	13	SSD9E45	.13
10	5-3/8	13-5/8	SSD10E45	.12
12	6	15-1/8	SSD12E45	.11
14	6-5/8	16-1/2	SSD14E45	.11
16	7-1/8	17-7/8	SSD16E45	.10
18	7-3/4	19-3/8	SSD18E45	.09
20	8-3/8	20-3/4	SSD20E45	.08
22	8-7/8	22-1/8	SSD22E45	.08
24	9-1/2	23-5/8	SSD24E45	.08

Figure 31



SSD 88-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSD	K Factor
3	8-3/8	9-1/4	SSD3E88	.54
4	8-3/8	9-1/4	SSD4E88	.54
5	8-3/8	9-1/4	SSD5E88	.48
6	9-1/4	10-1/4	SSD6E88	.42
7	10-1/4	11-1/4	SSD7E88	.39
8	11-1/4	12-1/4	SSD8E88	.37
9	12-1/4	13-1/4	SSD9E88	.34
10	13-1/8	14-1/4	SSD10E88	.32
12	15-1/8	16-1/4	SSD12E88	.29
14	17	18-1/4	SSD14E88	.27
16	19	20-1/4	SSD16E88	.25
18	20-7/8	22-1/4	SSD18E88	.24
20	22-7/8	24-1/4	SSD20E88	.23
22	24-3/4	26-1/4	SSD22E88	.21
24	26-5/8	28-1/4	SSD24E88	.20

Figure 33

SSID 45-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSID	K Factor
3	4-1/4	10-7/8	SSID3E45	0.26
4	4-1/4	10-7/8	SSID4E45	0.26
5	4-1/2	11-1/2	SSID5E45	0.22
6	4-7/8	12-1/4	SSID6E45	0.17
7	5-1/8	13	SSID7E45	0.16
8	5-3/8	13-5/8	SSID8E45	0.14
9	N/A	N/A	N/A	N/A
10	6	15-1/8	SSID10E45	0.12
12	6-5/8	16-1/2	SSID12E45	0.11
14	7-1/8	17-7/8	SSID14E45	0.11
16	7-3/4	19-3/8	SSID16E45	0.1
18	8-3/8	20-3/4	SSID18E45	0.09
20	8-7/8	22-1/8	SSID20E45	0.08
22	9-1/2	23-5/8	SSID22E45	0.08
24	N/A	N/A	N/A	N/A

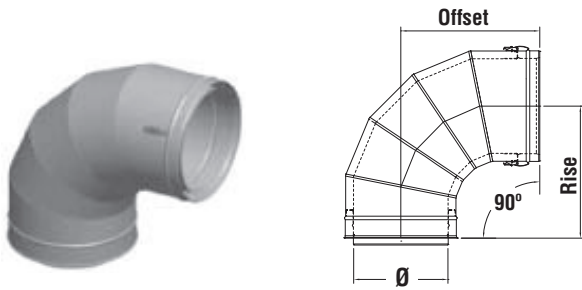
Figure 32

NOTE: SSID 9" and 24" not available.

SSID 88-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSID	K Factor
3	9-1/4	10-1/4	SSID3E88	0.54
4	9-1/4	10-1/4	SSID4E88	0.54
5	10-1/4	11-1/4	SSID5E88	0.48
6	11-1/4	12-1/4	SSID6E88	0.42
7	12-1/4	13-1/4	SSID7E88	0.39
8	13-1/8	14-1/4	SSID8E88	0.37
9	N/A	N/A	N/A	N/A
10	15-1/8	16-1/4	SSID10E88	0.32
12	17	18-1/4	SSID12E88	0.29
14	19	20-1/4	SSID14E88	0.27
16	20-7/8	22-1/4	SSID16E88	0.25
18	22-7/8	24-1/4	SSID18E88	0.24
20	24-3/4	26-1/4	SSID20E88	0.23
22	26-5/8	28-1/4	SSID22E88	0.21
24	N/A	N/A	N/A	N/A

Figure 34

NOTE: SSID 9" and 24" not available.



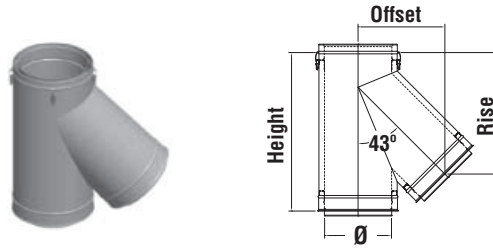
SSD 90-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSD	K Factor
3	8-1/2	9-1/8	SSD3E90	.54
4	8-1/2	9-1/8	SSD4E90	.54
5	8-1/2	9-1/8	SSD5E90	.48
6	9-1/2	10-1/8	SSD6E90	.42
7	10-1/2	11-1/8	SSD7E90	.39
8	11-1/2	12-1/8	SSD8E90	.37
9	12-1/2	13-1/8	SSD9E90	.34
10	13-1/2	14-1/8	SSD10E90	.32
12	15-1/2	16-1/8	SSD12E90	.29
14	17-1/2	18-1/8	SSD14E90	.27
16	19-1/2	20-1/8	SSD16E90	.25
18	21-1/2	22-1/8	SSD18E90	.24
20	23-1/2	24-1/8	SSD20E90	.23
22	25-1/2	26-1/8	SSD22E90	.21
24	27-1/2	28-1/8	SSD24E90	.20

Figure 35

SSID 90-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code SSID	K Factor
3	9-1/2	10-1/8	SSID3E90	.54
4	9-1/2	10-1/8	SSID4E90	.54
5	10-1/2	11-1/8	SSID5E90	.48
6	11-1/2	12-1/8	SSID6E90	.42
7	12-1/2	13-1/8	SSID7E90	.39
8	13-1/2	14-1/8	SSID8E90	.37
9	N/A	N/A	N/A	N/A
10	15-1/2	16-1/8	SSID10E90	.32
12	17-1/2	18-1/8	SSID12E90	.29
14	19-1/2	20-1/8	SSID14E90	.27
16	21-1/2	22-1/8	SSID16E90	.25
18	23-1/2	24-1/8	SSID18E90	.24
20	25-1/2	26-1/8	SSID20E90	.23
22	27-1/2	28-1/8	SSID22E90	.21
24	N/A	N/A	N/A	N/A

Figure 36 NOTE: SSID 9" and 24" not available.

## SSD & SSID VENTING TEES



SSD 43-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	16-1/2	8-1/4	13-3/8	SSD3T43	0.4
4	16-1/2	8-1/4	13-3/8	SSD4T43	0.4
5	18-1/2	8-7/8	14-3/8	SSD5T43	0.4
6	19-1/2	9-5/8	15-3/8	SSD6T43	0.4
7	20-1/2	10-1/4	16-1/4	SSD7T43	0.4
8	22-1/2	11-5/8	18	SSD8T43	0.4
9	23-1/2	12-1/4	18-7/8	SSD9T43	0.4
10	25-1/2	13	19-3/4	SSD10T43	0.4
12	28-1/2	15	22-3/8	SSD12T43	0.4
14	31-1/2	16-3/8	24-1/4	SSD14T43	0.4
16	33-1/2	18-1/2	26-1/4	SSD16T43	0.4
18	38-1/4	20-1/2	29-3/8	SSD18T43	0.4
20	42-1/4	23-7/8	33-1/2	SSD20T43	0.4
22	45-1/4	23-7/8	33-7/8	SSD22T43	0.4
24	51-1/4	27-7/8	38-1/2	SSD24T43	0.4

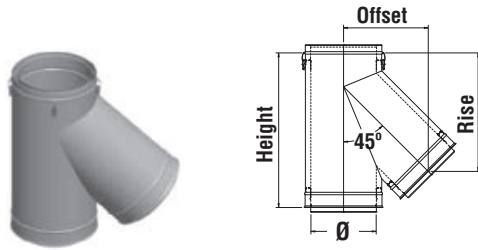
Available with smaller snout and custom height.

Figure 37

SSID 43-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	19-1/2	9-5/8	15-3/8	SSID3T43	0.4
4	19-1/2	9-5/8	15-3/8	SSID4T43	0.4
5	20-1/2	10-1/4	16-1/4	SSID5T43	0.4
6	22-1/2	11-5/8	18	SSID6T43	0.4
7	23-1/2	12-1/4	18-7/8	SSID7T43	0.4
8	25-1/2	13	19-3/4	SSID8T43	0.4
9	N/A	N/A	N/A	N/A	N/A
10	28-1/2	15	22-3/8	SSID10T43	0.4
12	31-1/2	16-3/8	24-1/4	SSID12T43	0.4
14	33-1/2	18-1/2	26-1/4	SSID14T43	0.4
16	38-1/4	20-1/2	29-3/8	SSID16T43	0.4
18	42-1/4	23-7/8	33-1/2	SSID18T43	0.4
20	45-1/4	23-7/8	33-7/8	SSID20T43	0.4
22	51-1/4	27-7/8	38-1/2	SSID22T43	0.4
24	N/A	N/A	N/A	N/A	N/A

Available with smaller snout and custom height.

Figure 38 NOTE: SSID 9" and 24" not available.



SSD 45-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	16-1/2	8-1/4	13-1/4	SSD3T45	.04
4	16-1/2	8-1/4	13-1/4	SSD4T45	.04
5	18-1/2	9-1/4	14-1/8	SSD5T45	.04
6	19-1/2	9-7/8	15-1/8	SSD6T45	.04
7	20-1/2	10-5/8	16	SSD7T45	.04
8	22-1/2	12	17-5/8	SSD8T45	.04
9	23-1/2	12-3/4	18-1/2	SSD9T45	.04
10	25-1/2	13-1/2	19-1/2	SSD10T45	.04
12	28-1/2	15-5/8	22	SSD12T45	.04
14	31-1/2	17	23-7/8	SSD14T45	.04
16	33-1/2	19-1/8	26-3/8	SSD16T45	.04
18	38-1/4	21-1/4	28-7/8	SSD18T45	.04
20	42-1/4	24-3/4	32-7/8	SSD20T45	.04
22	45-1/4	24-3/4	33-1/4	SSD22T45	.04
24	51-1/4	28-7/8	37-3/4	SSD24T45	.04

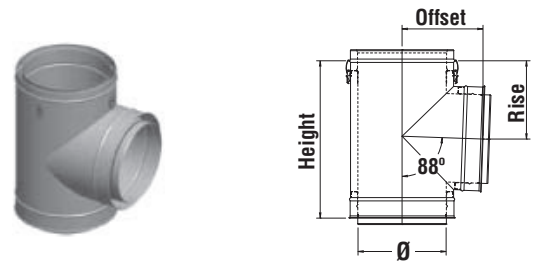
Available with smaller snout and custom height.

Figure 39

SSID 45-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	19-1/2	9-7/8	15-1/8	SSID3T45	.04
4	19-1/2	9-7/8	15-1/8	SSID4T45	.04
5	20-1/2	10-5/8	16	SSID5T45	.04
6	22-1/2	12	17-5/8	SSID6T45	.04
7	23-1/2	12-3/4	18-1/2	SSID7T45	.04
8	25-1/2	13-1/2	19-1/2	SSID8T45	.04
9	N/A	N/A	N/A	N/A	N/A
10	28-1/2	15-5/8	22	SSID10T45	.04
12	31-1/2	17	23-7/8	SSID12T45	.04
14	33-1/2	19-1/8	26-3/8	SSID14T45	.04
16	38-1/4	21-1/4	28-7/8	SSID16T45	.04
18	42-1/4	24-3/4	32-7/8	SSID18T45	.04
20	45-1/4	24-3/4	33-1/4	SSID20T45	.04
22	51-1/4	28-7/8	37-3/4	SSID22T45	.04
24	N/A	N/A	N/A	N/A	N/A

Available with smaller snout and custom height.

Figure 40 NOTE: SSID 9" and 24" not available.



SSD 88-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	13-1/2	7	6-5/8	SSD3T88	1.21
4	13-1/2	7	6-5/8	SSD4T88	1.21
5	14-1/2	8	7-1/4	SSD5T88	1.21
6	15-1/2	8	7-5/8	SSD6T88	1.21
7	16-1/2	9	8-1/4	SSD7T88	1.21
8	17-1/2	9	8-5/8	SSD8T88	1.21
9	18-1/2	10	9-1/4	SSD9T88	1.21
10	19-1/2	10	9-5/8	SSD10T88	1.21
12	21-1/2	11	10-5/8	SSD12T88	1.21
14	23-1/2	12	11-5/8	SSD14T88	1.21
16	25-1/2	13	12-5/8	SSD16T88	1.21
18	27-1/2	14	13-5/8	SSD18T88	1.21
20	29-1/2	15	14-5/8	SSD20T88	1.21
22	31-1/2	16	15-5/8	SSD22T88	1.21
24	33-1/2	17	16-5/8	SSD24T88	1.21

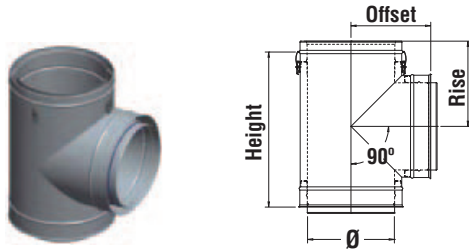
Available with smaller snout and custom height.

Figure 41

SSID 88-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	15-1/2	8	7-5/8	SSID3T88	1.21
4	15-1/2	8	7-5/8	SSID4T88	1.21
5	16-1/2	9	8-1/4	SSID5T88	1.21
6	17-1/2	9	8-5/8	SSID6T88	1.21
7	18-1/2	10	9-1/4	SSID7T88	1.21
8	19-1/2	10	9-5/8	SSID8T88	1.21
9	N/A	N/A	N/A	N/A	N/A
10	21-1/2	11	10-5/8	SSID10T88	1.21
12	23-1/2	12	11-5/8	SSID12T88	1.21
14	25-1/2	13	12-5/8	SSID14T88	1.21
16	27-1/2	14	13-5/8	SSID16T88	1.21
18	29-1/2	15	14-5/8	SSID18T88	1.21
20	31-1/2	16	15-5/8	SSID20T88	1.21
22	33-1/2	17	16-5/8	SSID22T88	1.21
24	N/A	N/A	N/A	N/A	N/A

Available with smaller snout and custom height.

Figure 42 NOTE: SSID 9" and 24" not available.



SSD 90-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	13-1/2	7	6-1/2	SSD3T90	1.21
4	13-1/2	7	6-1/2	SSD4T90	1.21
5	14-1/2	8	7	SSD5T90	1.21
6	15-1/2	8	7-1/2	SSD6T90	1.21
7	16-1/2	9	8	SSD7T90	1.21
8	17-1/2	9	8-1/2	SSD8T90	1.21
9	18-1/2	10	9	SSD9T90	1.21
10	19-1/2	10	9-1/2	SSD10T90	1.21
12	21-1/2	11	10-1/2	SSD12T90	1.21
14	23-1/2	12	11-1/2	SSD14T90	1.21
16	25-1/2	13	12-1/2	SSD16T90	1.21
18	27-1/2	14	13-1/2	SSD18T90	1.21
20	29-1/2	15	14-1/2	SSD20T90	1.21
22	31-1/2	16	15-1/2	SSD22T90	1.21
24	33-1/2	17	16-1/2	SSD24T90	1.21

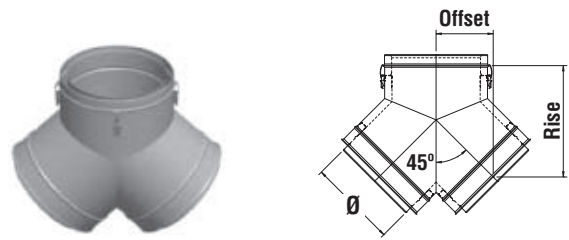
Available with smaller snout and custom height.

Figure 43

SSID 90-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	15-1/2	8	7-1/2	SSID3T90	1.21
4	15-1/2	8	7-1/2	SSID4T90	1.21
5	16-1/2	9	8	SSID5T90	1.21
6	17-1/2	9	8-1/2	SSID6T90	1.21
7	18-1/2	10	9	SSID7T90	1.21
8	19-1/2	10	9-1/2	SSID8T90	1.21
9	N/A	N/A	N/A	N/A	N/A
10	21-1/2	11	10-1/2	SSID10T90	1.21
12	23-1/2	12	11-1/2	SSID12T90	1.21
14	25-1/2	13	12-1/2	SSID14T90	1.21
16	27-1/2	14	13-1/2	SSID16T90	1.21
18	29-1/2	15	14-1/2	SSID18T90	1.21
20	31-1/2	16	15-1/2	SSID20T90	1.21
22	33-1/2	17	16-1/2	SSID22T90	1.21
24	N/A	N/A	N/A	N/A	N/A

Available with smaller snout and custom height.

Figure 44 NOTE: SSID 9" and 24" not available.



SSD 90-Degree Tee Y				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	5	10-3/8	SSD3TY90	0.6
4	5	10-3/8	SSD4TY90	0.6
5	5-5/8	11-1/8	SSD5TY90	0.6
6	5-5/8	11-1/8	SSD6TY90	0.6
7	6-3/8	11-3/4	SSD7TY90	0.6
8	6-3/8	11-3/4	SSD8TY90	0.6
9	7-1/8	13-1/2	SSD9TY90	0.6
10	7-1/8	13-1/2	SSD10TY90	0.6
12	7-3/4	14-1/4	SSD12TY90	0.6
14	8-1/2	15-7/8	SSD14TY90	0.6
16	9-1/4	17-5/8	SSD16TY90	0.6
18	9-7/8	18-3/8	SSD18TY90	0.6
20	10-5/8	21	SSD20TY90	0.6
22	11-3/8	21-3/4	SSD22TY90	0.6
24	12	22-1/2	SSD24TY90	0.6

Available with smaller snout.

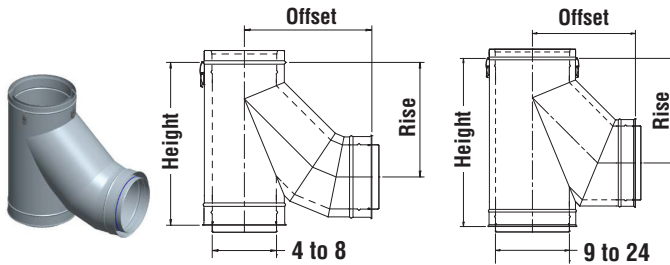
Figure 45

SSID 90-Degree Tee Y				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	5-5/8	11-1/8	SSID3TY90	0.6
4	5-5/8	11-1/8	SSID4TY90	0.6
5	6-3/8	11-3/4	SSID5TY90	0.6
6	6-3/8	11-3/4	SSID6TY90	0.6
7	7-1/8	13-1/2	SSID7TY90	0.6
8	7-1/8	13-1/2	SSID8TY90	0.6
9	N/A	N/A	N/A	N/A
10	7-3/4	14-1/4	SSID10TY90	0.6
12	8-1/2	15-7/8	SSID12TY90	0.6
14	9-1/4	17-5/8	SSID14TY90	0.6
16	9-7/8	18-3/8	SSID16TY90	0.6
18	10-5/8	21	SSID18TY90	0.6
20	11-3/8	21-3/4	SSID20TY90	0.6
22	12	22-1/2	SSID22TY90	0.6
24	N/A	N/A	N/A	N/A

Available with smaller snout.

Figure 46 NOTE: SSID 9" and 24" not available.

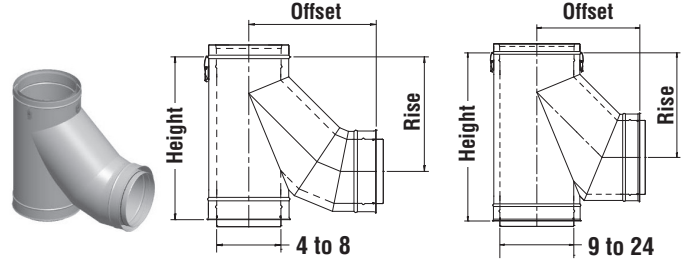




SSD Lateral Secure Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	14-3/8	11-5/8	10	SSD3BT	0.55
4	14-3/8	11-5/8	10	SSD4BT	0.55
5	16-3/8	12-1/4	11	SSD5BT	0.55
6	17-3/8	13-3/4	12-1/4	SSD6BT	0.55
7	19-3/8	14-3/4	13-1/4	SSD7BT	0.55
8	20-3/8	16	14-3/8	SSD8BT	0.55
9	23-3/8	14-1/4	14-1/4	SSD9BT	0.55
10	25-3/8	15-1/4	15-1/4	SSD10BT	0.55
12	27-3/8	16-7/8	17	SSD12BT	0.55
14	30-3/8	18-7/8	18-7/8	SSD14BT	0.55
16	33-3/8	20-3/4	20-3/4	SSD16BT	0.55
18	38-1/8	22-1/2	22-1/2	SSD18BT	0.55
20	42-1/8	24-3/8	24-3/8	SSD20BT	0.55
22	45-1/8	26-1/4	26-1/4	SSD22BT	0.55
24	51-1/8	28	28-1/8	SSD24BT	0.55

Available with smaller snout and custom height.

Figure 47



SSD Lateral Secure Tee 88-Degree					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	14-3/8	11-5/8	10-1/4	SSD3BT88	0.55
4	14-3/8	11-5/8	10-1/4	SSD4BT88	0.55
5	16-3/8	12-1/4	11-3/8	SSD5BT88	0.55
6	17-1/2	13-3/4	12-3/4	SSD6BT88	0.55
7	19-3/8	14-7/8	13-3/4	SSD7BT88	0.55
8	20-3/8	16-1/8	15	SSD8BT88	0.55
9	23-3/8	14-1/2	15-1/4	SSD9BT88	0.55
10	25-3/8	15-3/8	16-1/8	SSD10BT88	0.55
12	28-3/8	17	17-7/8	SSD12BT88	0.55
14	31-3/8	19-1/8	20-1/8	SSD14BT88	0.55
16	33-3/8	21	22	SSD16BT88	0.55
18	38-3/8	22-7/8	24	SSD18BT88	0.55
20	42-1/8	24-3/4	26	SSD20BT88	0.55
22	45-1/8	26-5/8	28	SSD22BT88	0.55
24	51-1/8	28-1/2	29-7/8	SSD24BT88	0.55

Available with smaller snout and custom height.

Figure 49

SSID Lateral Secure Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	17-3/8	13-3/4	12-1/4	SSID3BT	0.55
4	17-3/8	13-3/4	12-1/4	SSID4BT	0.55
5	19-3/8	14-3/4	13-1/4	SSID5BT	0.55
6	20-3/8	16	14-3/8	SSID6BT	0.55
7	23-3/8	14-1/4	14-1/4	SSID7BT	0.55
8	25-3/8	15-1/4	15-1/4	SSID8BT	0.55
9	N/A	N/A	N/A	N/A	N/A
10	27-3/8	16-7/8	17	SSID10BT	0.55
12	30-3/8	18-7/8	18-7/8	SSID12BT	0.55
14	33-3/8	20-3/4	20-3/4	SSID14BT	0.55
16	38-1/8	22-1/2	22-1/2	SSID16BT	0.55
18	42-1/8	24-3/4	24-3/8	SSID18BT	0.55
20	45-1/8	26-1/4	26-1/4	SSID20BT	0.55
22	51-1/8	28	28-1/8	SSID22BT	0.55
24	N/A	N/A	N/A	N/A	N/A

Available with smaller snout and custom height.

Figure 48

NOTE: SSID 9" and 24" not available.

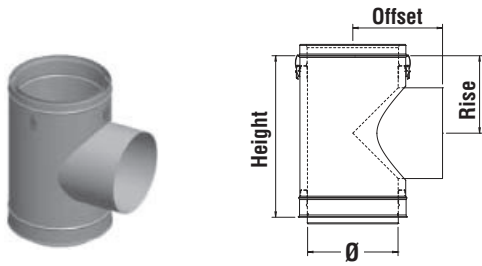
SSID Lateral Secure Tee 88-Degree					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	17-1/2	13-3/4	12-3/4	SSID3BT88	0.55
4	17-1/2	13-3/4	12-3/4	SSID4BT88	0.55
5	19-3/8	14-7/8	13-3/4	SSID5BT88	0.55
6	20-3/8	16-1/8	15	SSID6BT88	0.55
7	23-3/8	14-1/2	15-1/4	SSID7BT88	0.55
8	25-3/8	15-3/8	16-1/8	SSID8BT88	0.55
9	N/A	N/A	N/A	N/A	N/A
10	28-3/8	17	17-7/8	SSID10BT88	0.55
12	31-3/8	19-1/8	20-1/8	SSID12BT88	0.55
14	33-3/8	21	22	SSID14BT88	0.55
16	38-3/8	22-7/8	24	SSID16BT88	0.55
18	42-1/8	24-3/4	26	SSID18BT88	0.55
20	45-1/8	26-5/8	28	SSID20BT88	0.55
22	51-1/8	28-1/2	29-7/8	SSID22BT88	0.55
24	N/A	N/A	N/A	N/A	N/A

Available with smaller snout and custom height.

Figure 50

NOTE: SSID 9" and 24" not available.





SSD Barometric Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	13-1/2	5	6-1/2	SSD3BMT	0.2
4	13-1/2	5	6-1/2	SSD4BMT	0.2
5	14-1/2	5	7	SSD5BMT	0.2
6	15-1/2	6	7-1/2	SSD6BMT	0.2
7	16-1/2	7	8	SSD7BMT	0.2
8	17-1/2	8	8-1/2	SSD8BMT	0.2
9	18-1/2	9	9	SSD9BMT	0.2
10	19-1/2	10	9-1/2	SSD10BMT	0.2
12	21-1/2	12	10-1/2	SSD12BMT	0.2
14	23-1/2	14	11-1/2	SSD14BMT	0.2
16	25-1/2	16	12-1/2	SSD16BMT	0.2
18	27-1/2	18	13-1/2	SSD18BMT	0.2
20	29-1/2	20	14-1/2	SSD20BMT	0.2
22	31-1/2	22	15-1/2	SSD22BMT	0.2
24	33-1/2	24	16-1/2	SSD24BMT	0.2

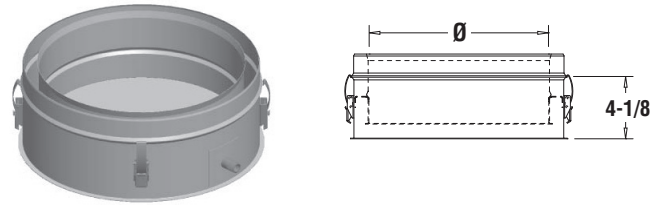
Available with smaller snout and custom height.

Figure 51

SSID Barometric Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	15-1/2	6	7-1/2	SSID3BMT	0.2
4	15-1/2	6	7-1/2	SSID4BMT	0.2
5	16-1/2	7	8	SSID5BMT	0.2
6	17-1/2	8	8-1/2	SSID6BMT	0.2
7	18-1/2	9	9	SSID7BMT	0.2
8	19-1/2	10	9-1/2	SSID8BMT	0.2
9	N/A	N/A	N/A	N/A	N/A
10	21-1/2	12	10-1/2	SSID10BMT	0.2
12	23-1/2	14	11-1/2	SSID12BMT	0.2
14	25-1/2	16	12-1/2	SSID14BMT	0.2
16	27-1/2	18	13-1/2	SSID16BMT	0.2
18	29-1/2	20	14-1/2	SSID18BMT	0.2
20	31-1/2	22	15-1/2	SSID20BMT	0.2
22	33-1/2	24	16-1/2	SSID22BMT	0.2
24	N/A	N/A	N/A	N/A	N/A

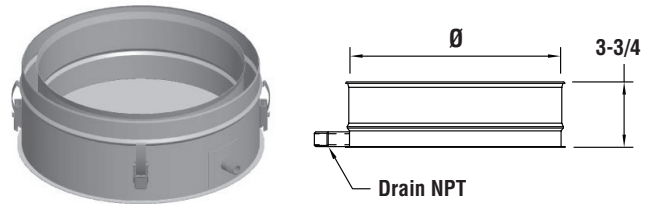
Available with smaller snout and custom height.

Figure 52 NOTE: SSID 9" and 24" not available.



SSD & SSID Tee Cap			
Ø (in.)	Height (in.)	Product Code SSD	Product Code SSID
3 to 24	4-1/8	SSDØTC	SSIDØTC

Figure 53

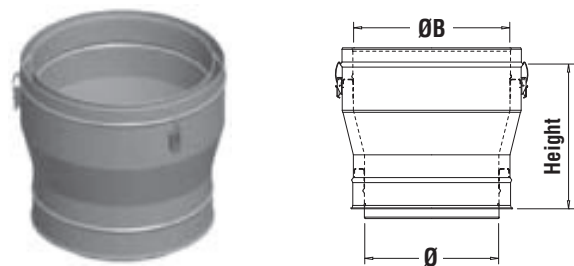


SSD & SSID Drain Tee Cap			
Ø (in.)	Height (in.)	Product Code SSD	Product Code SSID
3 to 24	4-1/8	SSDØDTC	SSIDØDTC

Drain Ø4 – Ø10, 1/4 NPT, 1/2 O.D  
Drain Ø12 – Ø24, 3/8 NPT, 5/8 O.D

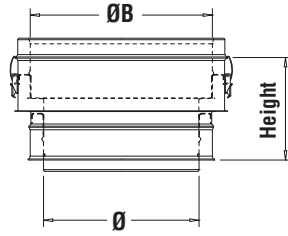
Figure 54

## SSD & SSID VENTING ACCESSORIES



SSD & SSID Tapered Increaser					
Ø (in.)	ØB Available (in.)	Height (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 9	Ø+1	12-1/8	SSDØTIN(ØB)	SSIDØTIN(ØB)	0.05
3 to 22	Ø+2	13-1/8	SSDØTIN(ØB)	SSIDØTIN(ØB)	0.10
3 to 9	Ø+3	14-1/8	SSDØTIN(ØB)	SSIDØTIN(ØB)	0.15
3 to 20	Ø+4	15-1/8	SSDØTIN(ØB)	SSIDØTIN(ØB)	0.20
3 to 7	Ø+5	16-1/8	SSDØTIN(ØB)	SSIDØTIN(ØB)	0.25
3 to 18	Ø+6	17-1/8	SSDØTIN(ØB)	SSIDØTIN(ØB)	0.30

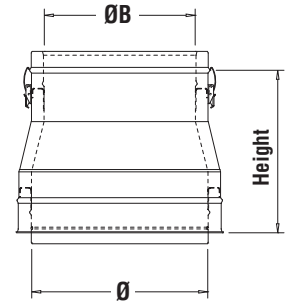
Figure 55 NOTE: SSID 9" and 24" not available.



SSD & SSID Step Increaser					
Ø (in.)	ØB Available (in.)	Height (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 22	5 to 24	8	SSDØSIN(ØB)	SSIDØSIN(ØB)	$KØ = (1-\beta^2)^2$ $KØB = KØ/\beta^4$ $\beta = Ø/ØB$

Figure 56

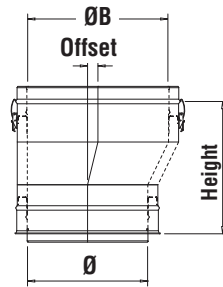
NOTE: SSID 9" and 24" not available.



SSD & SSID Tapered Reducer					
Ø (in.)	ØB Available (in.)	Height (in.)	Product Code SSD	Product Code SSID	K Factor
5 to 10	Ø-1	12-7/16	SSDØTRD(ØB)	SSIDØTRD(ØB)	0.07
6 to 24	Ø-2	13-7/16	SSDØTRD(ØB)	SSIDØTRD(ØB)	0.09
6 to 12	Ø-3	14-7/16	SSDØTRD(ØB)	SSIDØTRD(ØB)	0.11
8 to 24	Ø-4	15-7/16	SSDØTRD(ØB)	SSIDØTRD(ØB)	0.13
9 to 24	Ø-5	16-7/16	SSDØTRD(ØB)	SSIDØTRD(ØB)	0.15
10 to 24	Ø-6	17-7/16	SSDØTRD(ØB)	SSIDØTRD(ØB)	0.17

Figure 59

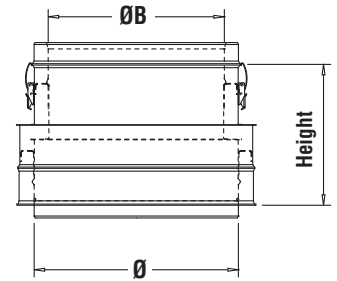
NOTE: SSID 9" and 24" not available.



SSD & SSID Eccentric Tapered Increaser						
Ø (in.)	ØB Available (in.)	Height (in.)	Offset (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 9	Ø+1	12-1/2	1/2	SSDØETIN(ØB)	SSIDØETIN(ØB)	0.05
3 to 22	Ø+2	13-1/2	1	SSDØETIN(ØB)	SSIDØETIN(ØB)	0.10
3 to 9	Ø+3	14-1/2	1-1/2	SSDØETIN(ØB)	SSIDØETIN(ØB)	0.15
3 to 20	Ø+4	15-1/2	2	SSDØETIN(ØB)	SSIDØETIN(ØB)	0.20
3 to 7	Ø+5	16-1/2	2-1/2	SSDØETIN(ØB)	SSIDØETIN(ØB)	0.25
3 to 18	Ø+6	17-1/2	3	SSDØETIN(ØB)	SSIDØETIN(ØB)	0.30

Figure 57

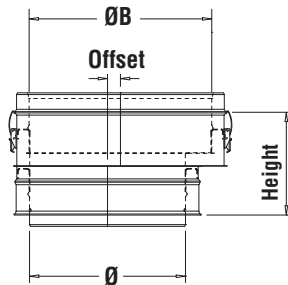
NOTE: SSID 9" and 24" not available.



SSD & SSID Step Reducer					
Ø (in.)	ØB Available (in.)	Height (in.)	Product Code SSD	Product Code SSID	K Factor
5 to 24	3 to 22	8	SSDØSRD(ØB)	SSIDØSRD(ØB)	$KØB = 0.5 (1-\beta^2)$ $KØ = KØB/\beta^4$ $\beta = ØB/Ø$

Figure 60

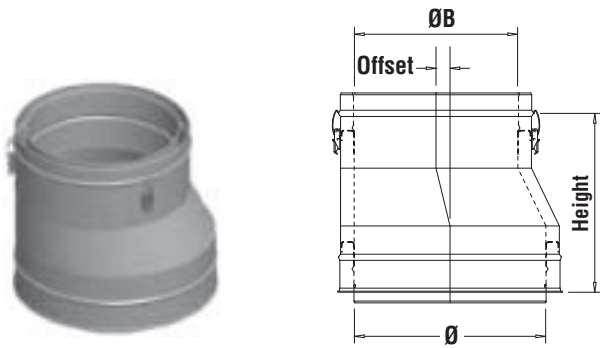
NOTE: SSID 9" and 24" not available.



SSD & SSID Eccentric Step Increaser						
Ø (in.)	ØB Available (in.)	Height (in.)	Offset (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 22	5 to 24	8	(ØB-ØA)/2	SSDØESIN(ØB)	SSIDØESIN(ØB)	$KØ = (1-\beta^2)^2$ $KØB = KØ/\beta^4$ $\beta = Ø/ØB$

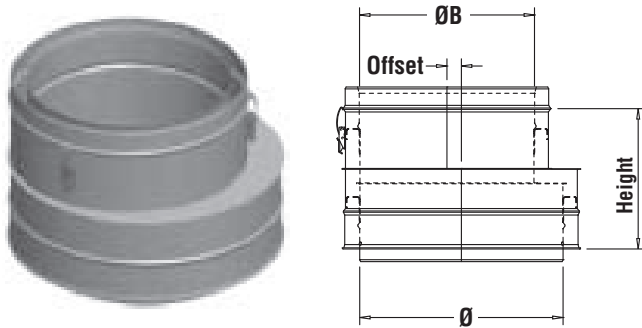
Figure 58

NOTE: SSID 9" and 24" not available.



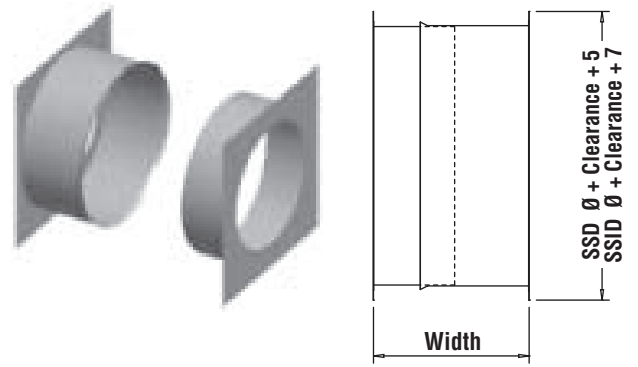
SSD & SSID Eccentric Tapered Reducer						
Ø (in.)	ØB Available (in.)	Height (in.)	Offset (in.)	Product Code SSD	Product Code SSID	K Factor
5 to 10	Ø-1	12-1/2	1/2	SSDØETRD(ØB)	SSIDØETRD(ØB)	0.07
6 to 24	Ø-2	13-1/2	1	SSDØETRD(ØB)	SSIDØETRD(ØB)	0.09
6 to 12	Ø-3	14-1/2	1-1/2	SSDØETRD(ØB)	SSIDØETRD(ØB)	0.11
8 to 24	Ø-4	15-1/2	2	SSDØETRD(ØB)	SSIDØETRD(ØB)	0.13
9 to 24	Ø-5	16-1/2	2-1/2	SSDØETRD(ØB)	SSIDØETRD(ØB)	0.15
10 to 24	Ø-6	17-1/2	3	SSDØETRD(ØB)	SSIDØETRD(ØB)	0.17

Figure 61 NOTE: SSID 9" and 24" not available.



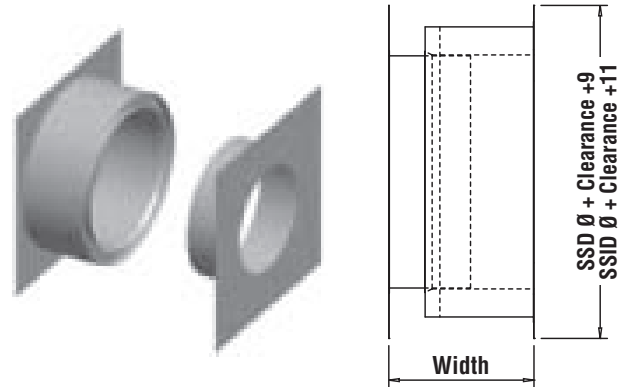
SSD & SSID Eccentric Step Reducer			
Ø (in.)	ØB Available (in.)	Height (in.)	Offset (in.)
5 to 24	3 to 22	8	$(\text{ØA} - \text{ØB})/2$
Product Code SSD		Product Code SSID	
SSDØESRD(ØB)		SSIDØESRD(ØB)	
K Factor			
$K\text{ØB} = 0.5 (1 - \text{ }^2)$ $K\text{Ø} = K\text{ØB} / \text{ }^4 = \text{ØB} / \text{Ø}$			

Figure 62 NOTE: SSID 9" and 24" not available.



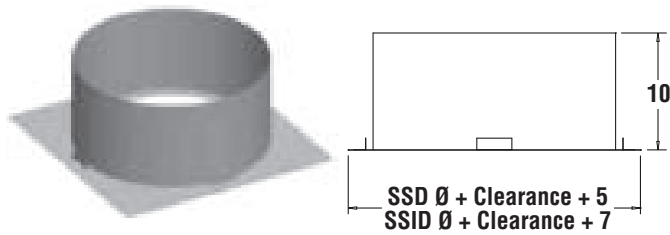
SSD & SSID Wall Thimble			
Ø (in.)	Width (in.)	Product Code SSD	Product Code SSID
3 to 24	9 to 17	SSDØWT	SSIDØWT

Figure 63 NOTE: SSID 9" and 24" not available.



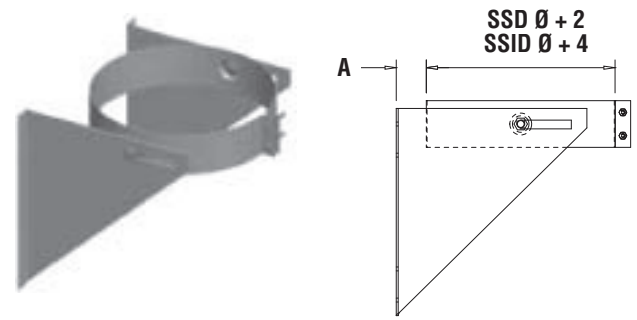
SSD & SSID Wall Thimble Insulated			
Ø (in.)	Width (in.)	Product Code SSD	Product Code SSID
3 to 24	9 to 17	SSDØWTI	SSIDØWTI

Figure 64 NOTE: SSID 9" and 24" not available.



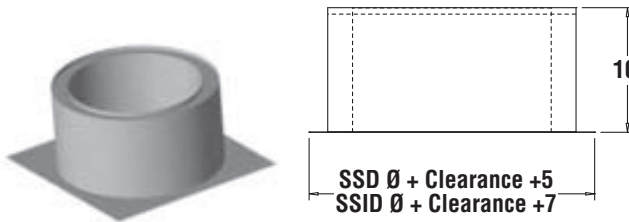
SSD & SSID Roof Thimble			
Ø (in.)	Width (in.)	Product Code SSD	Product Code SSID
3 to 24	10	SSDØRT	SSIDØRT

Figure 65 NOTE: SSID 9" and 24" not available.



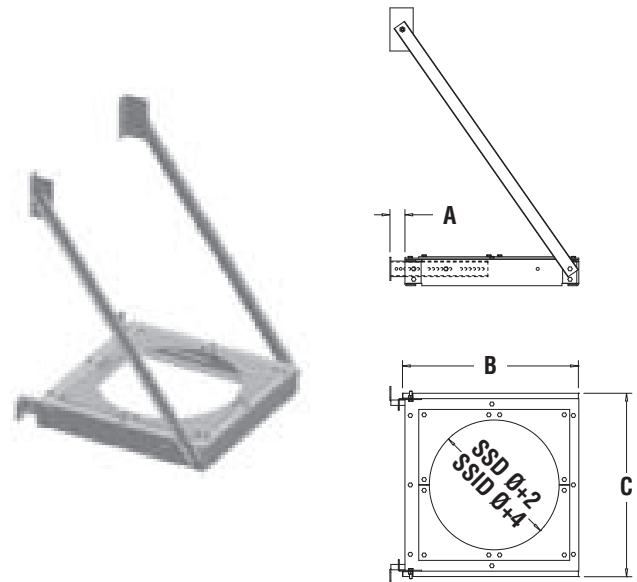
SSD & SSID Wall Support			
Ø (in.)	A (in.)	Product Code SSD	Product Code SSID
3 to 24	1 to 3	SSDØWS	SSIDØWS

Figure 69 NOTE: SSID 9" and 24" not available.



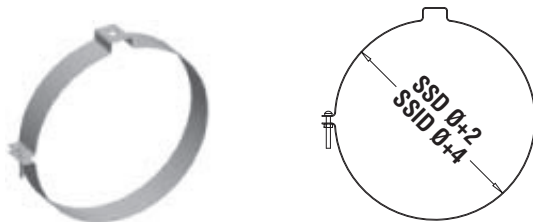
SSD & SSID Roof Thimble Insulated			
Ø (in.)	Width (in.)	Product Code SSD	Product Code SSID
3 to 24	10	SSDØRTI	SSIDØRTI

Figure 66 NOTE: SSID 9" and 24" not available.



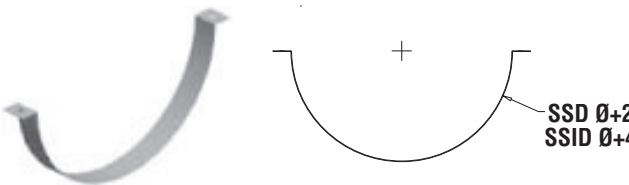
SSD Wall Suort HD				
Ø (in.)	A (in.)	B (in.)	C (in.)	Product Code
3	1-1/2 to 6-1/2	9	12	SSD3WSHD
4	1-1/2 to 6-1/2	9	12	SSD4WSHD
5	1-1/2 to 6-1/2	10	12	SSD5WSHD
6	1-1/2 to 6-1/2	11	12	SSD6WSHD
7	1-1/2 to 6-1/2	12	14	SSD7WSHD
8	1-1/2 to 6-1/2	13	14	SSD8WSHD
9	1-1/2 to 6-1/2	14	14	SSD9WSHD
10	1-1/2 to 6-1/2	15	16	SSD10WSHD
12	1-1/2 to 6-1/2	17	16	SSD12WSHD
14	1-1/2 to 6-1/2	19	22	SSD14WSHD
16	1-1/2 to 6-1/2	21	22	SSD16WSHD
18	1-1/2 to 6-1/2	23	26	SSD18WSHD
20	1-1/2 to 6-1/2	25	30	SSD20WSHD
22	1-1/2 to 6-1/2	27	30	SSD22WSHD
24	1-1/2 to 6-1/2	29	30	SSD24WSHD

Figure 70



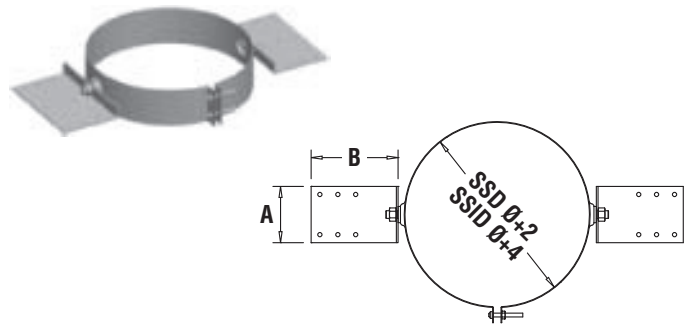
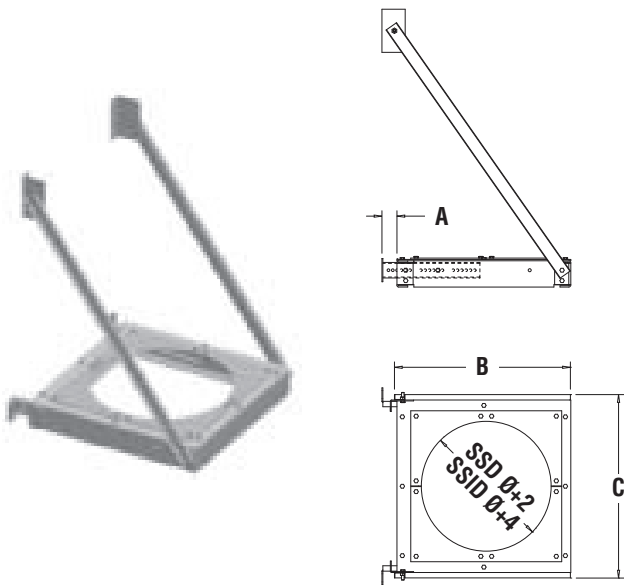
SSD & SSID Suspension Band		
Ø (in.)	Product Code SSD	Product Code SSID
3 to 24	SSDØSB	SSIDØSB

Figure 67 NOTE: SSID 9" and 24" not available.



SSD & SSID Cradle Support		
Ø (in.)	Product Code SSD	Product Code SSID
3 to 24	SSDØCS	SSIDØCS

Figure 68 NOTE: SSID 9" and 24" not available.

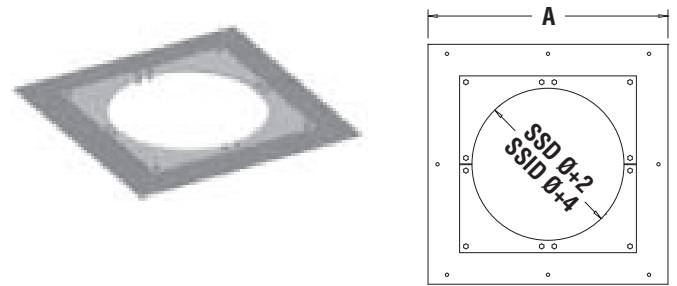


SSD & SSID Roof Support				
Ø (in.)	A (in.)	B (in.)	Product Code SSD	Product Code SSID
3 to 24	6-1/2	7-5/8	SSDØRS	SSIDØRS

Figure 73 NOTE: SSID 9" and 24" not available.

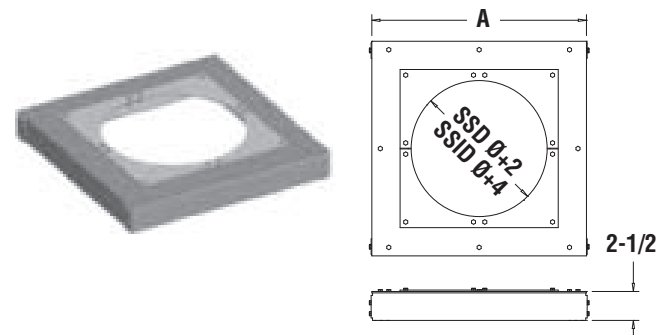
SSID Wall Support HD				
Ø (in.)	A (in.)	B (in.)	C (in.)	Product Code
3	1-1/2 to 6-1/2	11	12	SSID3WSDH
4	1-1/2 to 6-1/2	11	12	SSID4WSDH
5	1-1/2 to 6-1/2	12	14	SSID5WSDH
6	1-1/2 to 6-1/2	13	14	SSID6WSDH
7	1-1/2 to 6-1/2	14	14	SSID7WSDH
8	1-1/2 to 6-1/2	15	16	SSID8WSDH
9	N/A	N/A	N/A	N/A
10	1-1/2 to 6-1/2	17	16	SSID10WSDH
12	1-1/2 to 6-1/2	19	22	SSID12WSDH
14	1-1/2 to 6-1/2	21	22	SSID14WSDH
16	1-1/2 to 6-1/2	23	26	SSID16WSDH
18	1-1/2 to 6-1/2	25	30	SSID18WSDH
20	1-1/2 to 6-1/2	27	30	SSID20WSDH
22	1-1/2 to 6-1/2	29	30	SSID22WSDH
24	N/A	N/A	N/A	N/A

Figure 71 NOTE: SSID 9" and 24" not available.



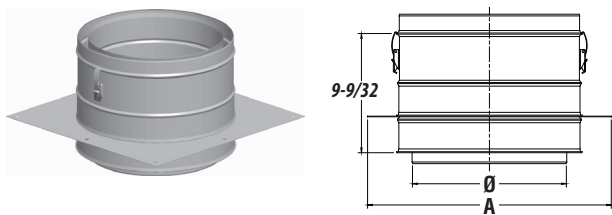
SSD & SSID Anchor Plate			
Ø (in.)	A (in.)	Product Code SSD	Product Code SSID
3 to 24	Ø+7	SSDØAP	SSIDØAP

Figure 74 NOTE: SSID 9" and 24" not available.



SSD & SSID Anchor Plate HD			
Ø (in.)	A (in.)	Product Code SSD	Product Code SSID
3 to 24	Ø+7	SSDØAPHD	SSIDØAPHD

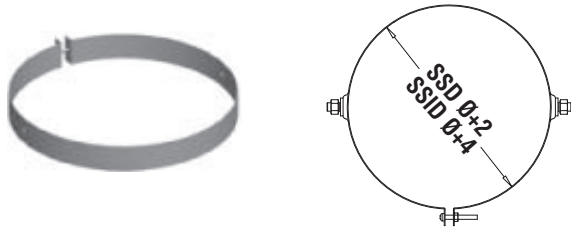
Figure 75 NOTE: SSID 9" and 24" not available.



SSD Anchor Plate Length (APL)		
Ø (in.)	A (in.)	Product Code
3 to 24	Ø + 7	SSDØAPL

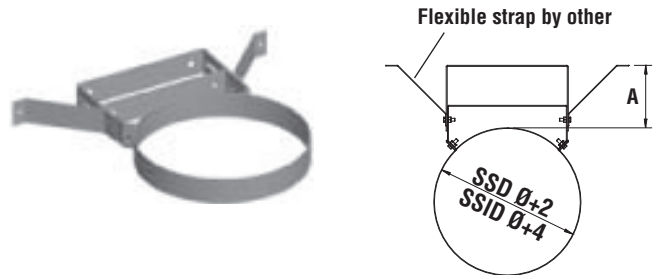
SSID Anchor Plate Length (APL)		
Ø (in.)	A (in.)	Product Code
3 to 22	Ø + 9	SSIDØAPL

Figure 72 NOTE: SSID 9" and 24" not available.



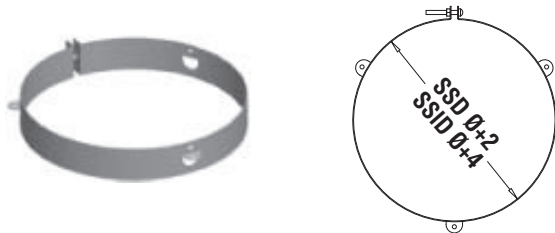
SSD & SSID Roof Brace		
Ø (in.)	Product Code SSD	Product Code SSID
3 to 24	SSDØRB	SSIDØRB

**Figure 76** NOTE: SSID 9" and 24" not available.



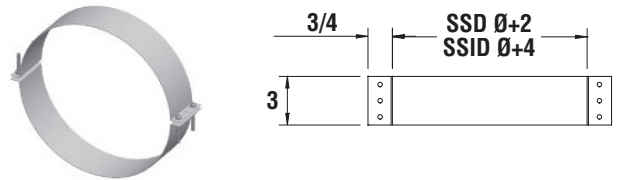
SSD & SSID Wall Guide			
Ø (in.)	A (in.)	Product Code SSD	Product Code SSID
3 to 24	1 to 4-1/2	SSDØWG	SSIDØWG

**Figure 79** NOTE: SSID 9" and 24" not available.



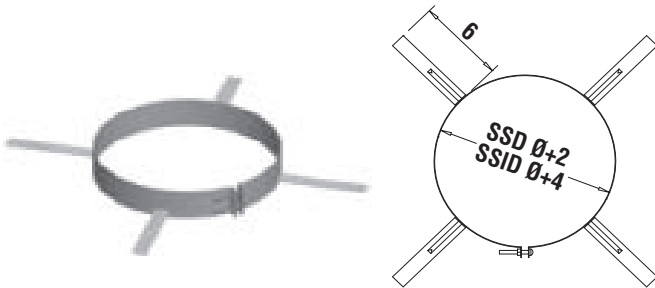
SSD & SSID Guy Wire Band		
Ø (in.)	Product Code SSD	Product Code SSID
3 to 24	SSDØGWB	SSIDØGWB

**Figure 77** NOTE: SSID 9" and 24" not available.



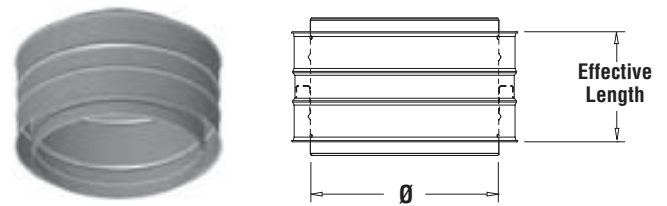
SSD & SSID Guy Support		
Ø (in.)	Product Code SSD	Product Code SSID
3 to 24	SSDØGS	SSIDØGS

**Figure 80** NOTE: SSID 9" and 24" not available.



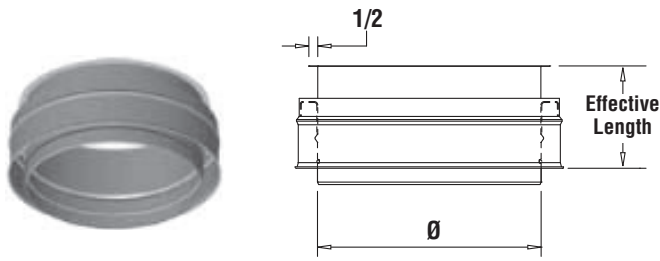
SSD & SSID Centering Band		
Ø (in.)	Product Code SSD	Product Code SSID
3 to 24	SSDØCB	SSIDØCB

**Figure 78** NOTE: SSID 9" and 24" not available.



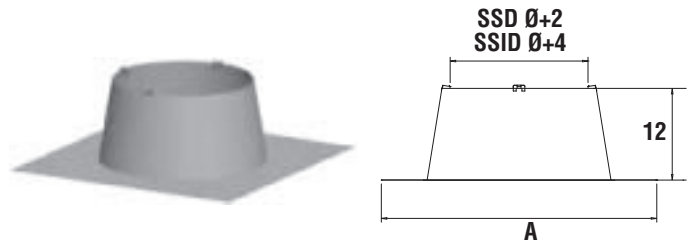
SSD & SSID Double Male Adaptor			
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID
3 to 24	7-1/8	SSDØDMAU	SSIDØDMAU

**Figure 81** NOTE: SSID 9" and 24" not available.



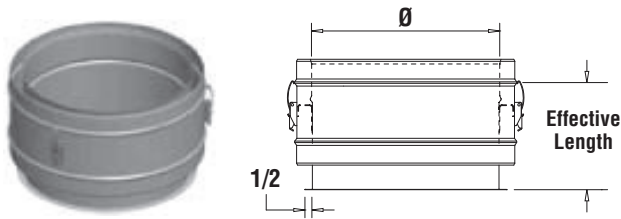
SSD & SSID Male Flange Adaptor			
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID
3 to 24	5-1/2	SSDØMFA	SSIDØMFA

Figure 82 NOTE: SSID 9" and 24" not available.



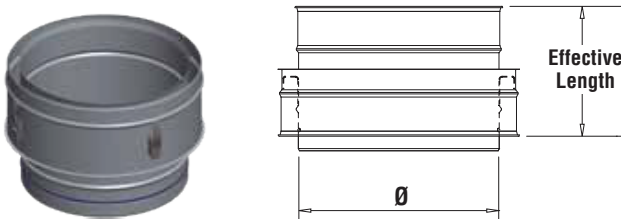
SSD Flat Flashing		
Ø (in.)	A (in.)	Product Code
3	16	SSD3F
4	16	SSD4F
5	18	SSD5F
6	26	SSD6F
7	26	SSD7F
8	28	SSD8F
9	30	SSD9F
10	30	SSD10F
12	31	SSD12F
14	34	SSD14F
16	36	SSD16F
18	38	SSD18F
20	40	SSD20F
22	42	SSD22F
24	44	SSD24F

Figure 85



SSD & SSID Female Flange Adaptor			
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID
3 to 24	6-7/8	SSDØFFA	SSIDØFFA

Figure 83 NOTE: SSID 9" and 24" not available.

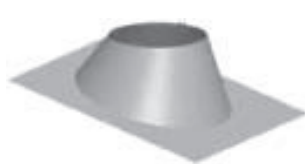


SSD & SSID to SS Adaptor			
Ø (in.)	Effective Length (in.)	Product Code SSD	Product Code SSID
3 to 24	7-7/8	SSDØSSA	SSIDØSSA

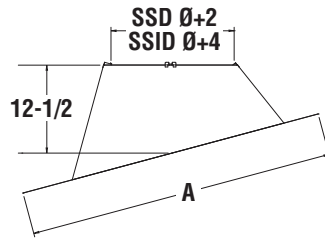
Figure 84 NOTE: SSID 9" and 24" not available.

SSID Flat Flashing		
Ø (in.)	A (in.)	Product Code
3	26	SSID3F
4	26	SSID4F
5	26	SSID5F
6	28	SSID6F
7	30	SSID7F
8	30	SSID8F
9	N/A	N/A
10	31	SSID10F
12	34	SSID12F
14	36	SSID14F
16	38	SSID16F
18	40	SSID18F
20	42	SSID20F
22	44	SSID22F
24	N/A	N/A

Figure 86 NOTE: SSID 9" and 24" not available.



Adjustable from 5° to 30°.  
Roof pitch 1/12 to 7/12.



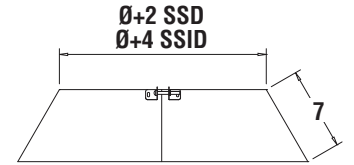
SSID Adjustable Flashing			
Ø (in.)	A (in.)	Height (in.)	Product Code
3	32	12-1/2	SSD3FA
4	32	12-1/2	SSD4FA
5	32	12-1/2	SSD5FA
6	34	12-1/2	SSD6FA
7	35-3/8	12-1/2	SSD7FA
8	36-1/2	12-1/2	SSD8FA
9	38	12-1/2	SSD9FA
10	38-1/2	12-1/2	SSD10FA
12	41	12-1/2	SSD12FA
14	43	12-1/2	SSD14FA
16	45	12-1/2	SSD16FA
18	47-1/4	12-1/2	SSD18FA
20	49-1/2	12-1/2	SSD20FA
22	51-1/2	12-1/2	SSD22FA
24	53-1/2	12-1/2	SSD24FA

Figure 87

SSID Adjustable Flashing			
Ø (in.)	A (in.)	Height (in.)	Product Code
3	34	12-1/2	SSID3FA
4	34	12-1/2	SSID4FA
5	35-3/8	12-1/2	SSID5FA
6	36-1/2	12-1/2	SSID6FA
7	38	12-1/2	SSID7FA
8	38-1/2	12-1/2	SSID8FA
9	N/A	N/A	N/A
10	41	12-1/2	SSID10FA
12	43	12-1/2	SSID12FA
14	45	12-1/2	SSID14FA
16	47-1/4	12-1/2	SSID16FA
18	49-1/2	12-1/2	SSID18FA
20	51-1/2	12-1/2	SSID20FA
22	53-1/2	12-1/2	SSID22FA
24	N/A	N/A	N/A

Figure 88

NOTE: SSID 9" and 24" not available.

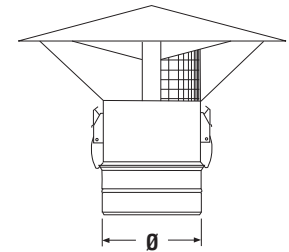


SSD & SSID Storm Collar		
Ø (in.)	Product Code SSD	Product Code SSID
3 to 24	SSDØSC	SSIDØSC

Figure 89

NOTE: SSID 9" and 24" not available.

## SSD & SSID VENTING TERMINATIONS



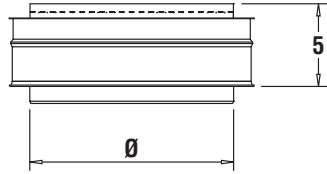
SSD Rain Cap			
Ø (in.)	Product Code SSD	Product Code with Bird Screen SSD	K Factor
3 to 24	SSDØRC	SSDØRCB	.50

SSID Rain Cap			
Ø (in.)	Product Code SSID	Product Code with Bird Screen SSID	K Factor
3 to 24	SSIDØRC	SSIDØRCB	.50

Figure 90

NOTE: SSID 9" and 24" not available.

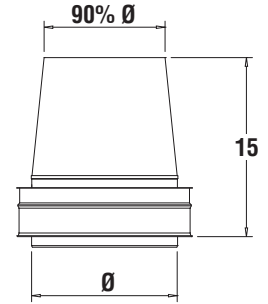




SSD & SSID Screened Termination			
Ø (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	SSDØSTU	SSIDØST	.14

Figure 91

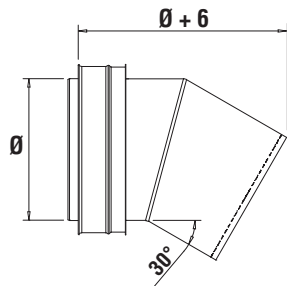
NOTE: SSID 9" and 24" not available.



SSD & SSID Exit Cone			
Ø (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	SSDØEC	SSIDØEC	.60

Figure 93

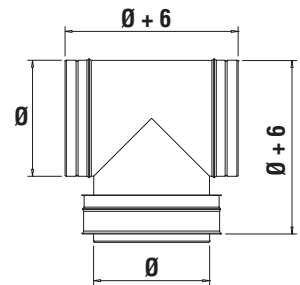
NOTE: SSID 9" and 24" not available.



SSD & SSID 30° Screen Termination			
Ø (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	SSDØSTAU	SSIDØSTA	.70

Figure 92

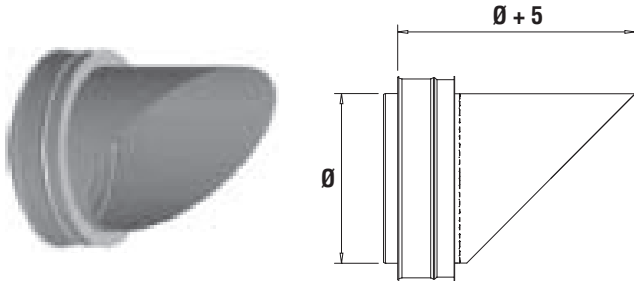
NOTE: SSID 9" and 24" not available.



SSD & SSID Termination Tee			
Ø (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	SSDØTT	SSIDØTT	.35

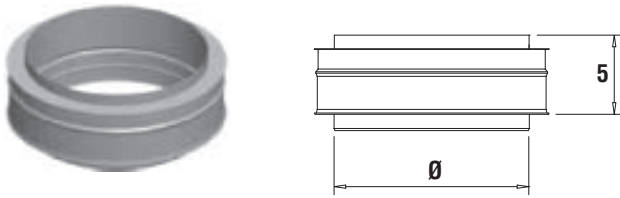
Figure 94

NOTE: SSID 9" and 24" not available.



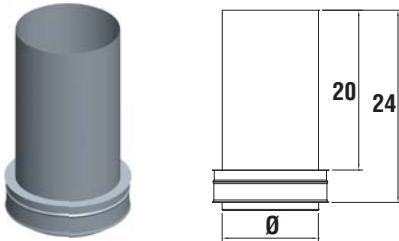
SSD & SSID Mitre Cut			
Ø (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	SSDØMCU	SSIDØMCU	.14

Figure 95 NOTE: SSID 9" and 24" not available.



SSD & SSID Closer Termination			
Ø (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	SSDØCTU	SSIDØCTU	0

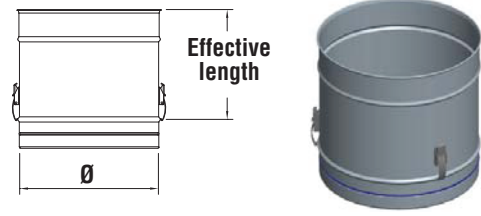
Figure 96 NOTE: SSID 9" and 24" not available.



SSD & SSID OEM Termination			
Ø (in.)	Product Code SSD	Product Code SSID	K Factor
3 to 24	SSDØEMTAU	SSIDØEMTAU	0

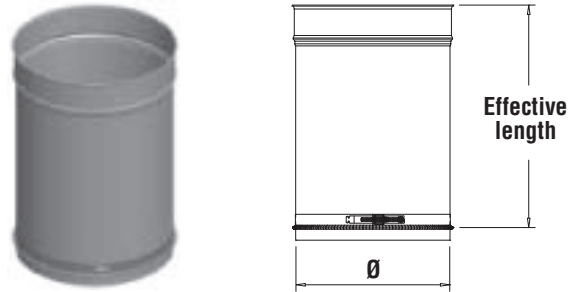
Figure 97 NOTE: SSID 9" and 24" not available.

## SS VENTING LENGTHS



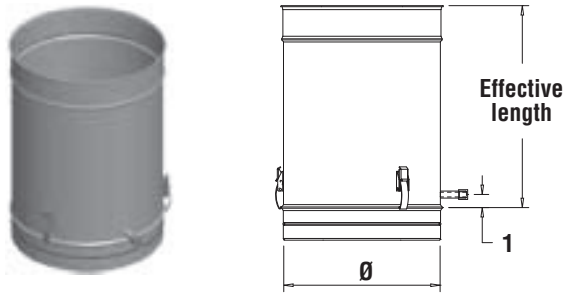
SS Lengths		
Ø (in.)	Effective Length (in.)	Product Code
3 to 24	6-1/2	SSØL9
3 to 24	9-1/2	SSØL12
3 to 24	15-1/2	SSØL18
3 to 24	21-1/2	SSØL24
3 to 24	33-1/2	SSØL36

Figure 98



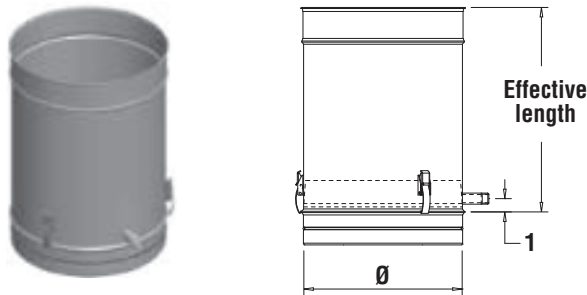
SS Adjustable Lengths		
Ø (in.)	Effective Length (in.)	Product Code
3 to 24	4 to 5	SSØAL9
3 to 24	4 to 14	SSØAL18
3 to 24	4 to 20	SSØAL24
3 to 24	4 to 32	SSØAL36

Figure 99



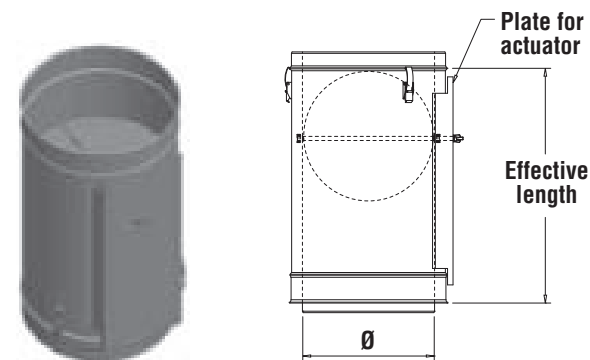
SS Test Port Lengths		
Ø (in.)	Effective Length (in.)	Product Code
3 to 24	6-1/2	SSØTPL
Drain Ø4 – Ø24, 1/4 NPT, 1/2 O.D		

Figure 100



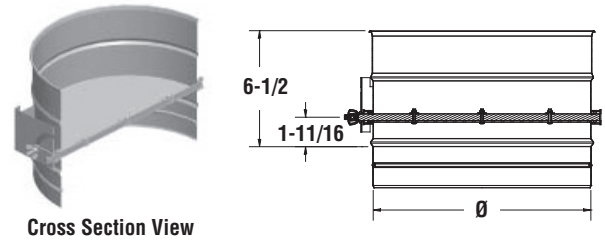
SS Drain Length			
Ø (in.)	Effective Length (in.)	Product Code	K Factor
3 to 24	6-1/2	SSØDL	0.25
Drain Ø4 – Ø10, 1/4 NPT, 1/2 O.D			
Drain Ø12 – Ø24, 1/2 NPT, 5/8 O.D			

Figure 101



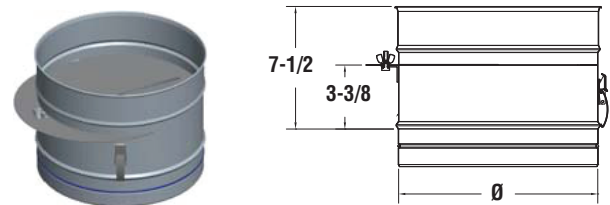
SS Damper Lengths			
Ø (in.)	Effective Length (in.)	Product Code	K Factor
3 to 24	15-1/2	SSØDAMP	0.60 to 9999

Figure 102



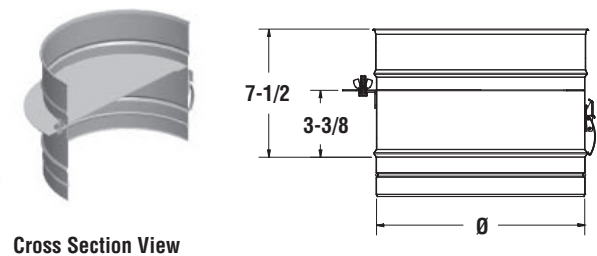
SS Damper Length Short Manual			
Ø (in.)	Effective Length (in.)	Product Code	K Factor
3 to 24	6-1/2	SSØDAMPS	0 to 9999

Figure 103



SS Damper Length Short			
Ø (in.)	Effective Length (in.)	Product Code	K Factor
3 to 24	7-1/8	SSØVFR	0 to 9999

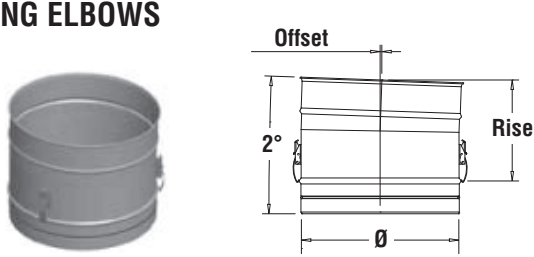
Figure 104



SS Vent Flow Regulator Damper Blade	
Ø (in.)	Product Code
3 to 24	SSØVFN
For use on Cat. I and II boilers only	

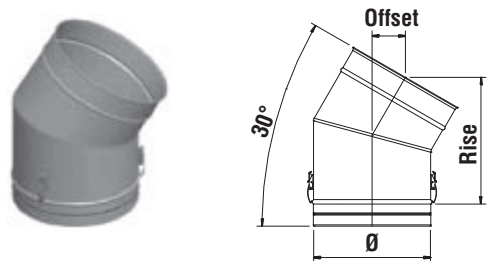
Figure 105

# SS VENTING ELBOWS



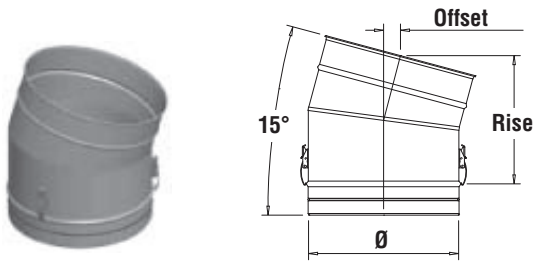
SS 2-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	1/8	7-1/8	SS3E2	0.04
4	1/8	7-1/8	SS4E2	0.04
5	1/8	7-1/4	SS5E2	0.04
6	1/8	7-1/4	SS6E2	0.04
7	1/8	7-1/4	SS7E2	0.04
8	1/8	7-1/4	SS8E2	0.04
9	1/8	7-3/8	SS9E2	0.04
10	1/8	7-3/8	SS10E2	0.04
12	1/8	7-3/8	SS12E2	0.04
14	1/8	7-1/2	SS14E2	0.03
16	1/8	7-5/8	SS16E2	0.03
18	1/8	7-5/8	SS18E2	0.03
20	1/8	7-3/4	SS20E2	0.03
22	1/8	7-3/4	SS22E2	0.03
24	1/8	7-7/8	SS24E2	0.03

Figure 106



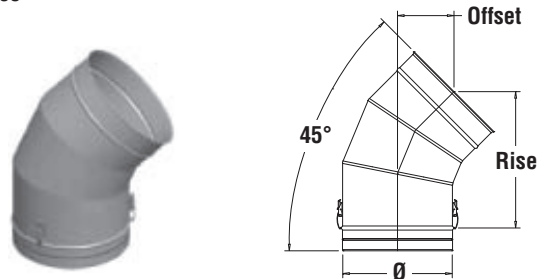
SS 30-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	2-1/8	8	SS3E30	0.61
4	2-1/4	8-1/2	SS4E30	0.61
5	2-3/8	9	SS5E30	0.60
6	2-5/8	9-1/2	SS6E30	0.59
7	2-3/4	10	SS7E30	0.58
8	2-7/8	10-1/2	SS8E30	0.57
9	3	11	SS9E30	0.56
10	3-1/8	11-1/2	SS10E30	0.55
12	3-3/8	12-1/2	SS12E30	0.54
14	3-5/8	13-1/2	SS14E30	0.54
16	3-7/8	14-1/2	SS16E30	0.53
18	4-1/8	15-1/2	SS18E30	0.52
20	4-1/2	16-1/2	SS20E30	0.52
22	4-3/4	17-1/2	SS22E30	0.51
24	5	18-1/2	SS24E30	0.51

Figure 108



SS 15-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	1	7-5/8	SS3E15	0.31
4	1	7-7/8	SS4E15	0.31
5	1-1/8	8-1/4	SS5E15	0.30
6	1-1/8	8-1/2	SS6E15	0.30
7	1-1/8	8-3/4	SS7E15	0.29
8	1-1/4	9	SS8E15	0.29
9	1-1/4	9-1/4	SS9E15	0.28
10	1-1/4	9-1/2	SS10E15	0.28
12	1-3/8	10	SS12E15	0.27
14	1-3/8	10-1/2	SS14E15	0.27
16	1-1/2	11	SS16E15	0.26
18	1-1/2	11-1/2	SS18E15	0.26
20	1-5/8	12-1/8	SS20E15	0.26
22	1-5/8	12-5/8	SS22E15	0.26
24	1-3/4	13-1/8	SS24E15U	0.26

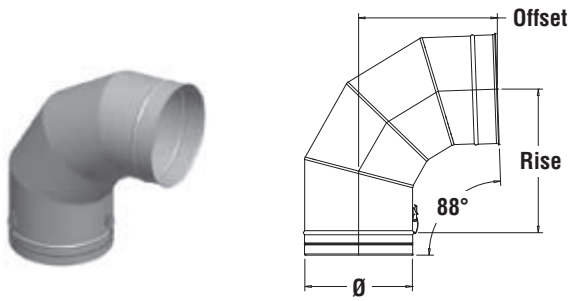
Figure 107



SS 45-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	3-3/8	8-1/8	SS3E45	0.26
4	4-1/4	10-1/4	SS4E45	0.26
5	4	9-1/2	SS5E45	0.22
6	4-1/4	10-1/2	SS6E45	0.17
7	4-1/2	10-7/8	SS7E45	0.16
8	4-7/8	11-5/8	SS8E45	0.14
9	5-1/8	12-3/8	SS9E45	0.13
10	5-3/8	13	SS10E45	0.12
12	6	14-1/2	SS12E45	0.11
14	6-5/8	15-7/8	SS14E45	0.11
16	7-1/8	17-1/4	SS16E45	0.10
18	7-3/4	18-3/4	SS18E45	0.09
20	8-3/8	20-1/8	SS20E45	0.08
22	8-7/8	21-1/2	SS22E45	0.08
24	9-1/2	23	SS24E45	0.08

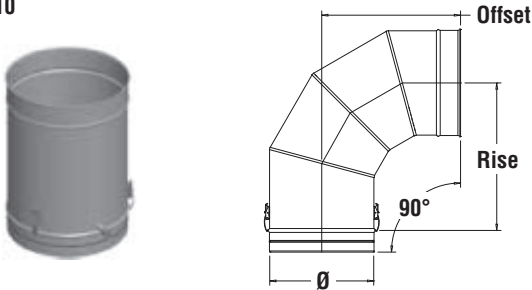
Figure 109

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.



SS 88-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	6-3/8	6-5/8	SS3E88	0.60
4	7-3/8	7-5/8	SS4E88	0.54
5	8-3/8	8-5/8	SS5E88	0.48
6	9-1/4	9-5/8	SS6E88	0.42
7	10-1/4	10-5/8	SS7E88	0.39
8	11-1/4	11-5/8	SS8E88	0.37
9	12-1/4	12-5/8	SS9E88	0.34
10	13-1/8	13-5/8	SS10E88	0.32
12	15-1/8	15-5/8	SS12E88	0.29
14	17	17-5/8	SS14E88	0.27
16	19	19-5/8	SS16E88	0.25
18	20-7/8	21-5/8	SS18E88	0.24
20	22-7/8	23-5/8	SS20E88	0.23
22	24-3/4	25-5/8	SS22E88	0.21
24	26-5/8	27-5/8	SS24E88	0.20

Figure 110

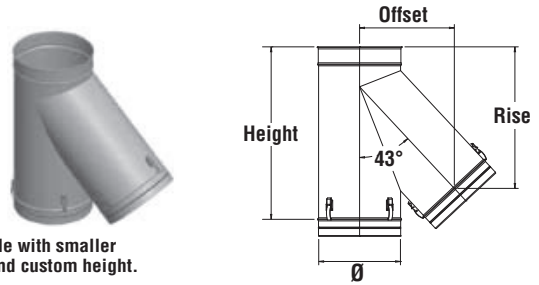


SS 90-Degree Elbow				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	6-1/2	6-1/2	SS3E90	0.54
4	7-1/2	7-1/2	SS4E90	0.54
5	8-1/2	8-1/2	SS5E90	0.48
6	9-1/2	9-1/2	SS6E90	0.42
7	10-1/2	10-1/2	SS7E90	0.39
8	11-1/2	11-1/2	SS8E90	0.37
9	12-1/2	12-1/2	SS9E90	0.34
10	13-1/2	13-1/2	SS10E90	0.32
12	15-1/2	15-1/2	SS12E90	0.29
14	17-1/2	17-1/2	SS14E90	0.27
16	19-1/2	19-1/2	SS16E90	0.25
18	21-1/2	21-1/2	SS18E90	0.24
20	23-1/2	23-1/2	SS20E90	0.23
22	25-1/2	25-1/2	SS22E90	0.21
24	27-1/2	27-1/2	SS24E90	0.20

Figure 111

NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.

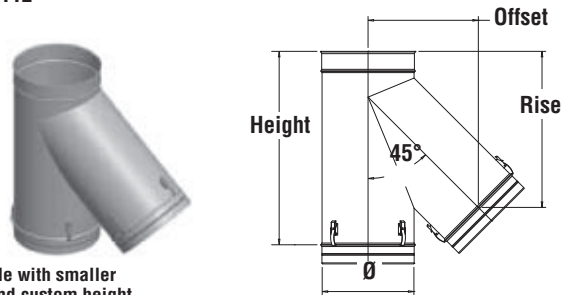
## SS VENTING TEES



Available with smaller snout and custom height.

SS 43-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	14-1/4	6-3/8	11-1/8	SS3T43	0.4
4	14-1/4	6-3/8	11-1/8	SS4T43	0.4
5	15-1/4	7-3/4	12-7/8	SS5T43	0.4
6	17-1/4	8-1/2	13-3/4	SS6T43	0.4
7	18-1/4	9-1/8	14-3/4	SS7T43	0.4
8	20-1/4	10-1/2	16-3/8	SS8T43	0.4
9	21-1/4	11-1/4	17-1/4	SS9T43	0.4
10	22-1/4	12-5/8	19	SS10T43	0.4
12	25-1/4	13-7/8	20-3/4	SS12T43	0.4
14	29-1/4	16	23-3/8	SS14T43	0.4
16	32-1/4	17-3/8	25-1/4	SS16T43	0.4
18	35	19-3/8	27-7/8	SS18T43	0.4
20	38	21-3/8	30-3/8	SS20T43	0.4
22	41	22-3/4	32-1/4	SS22T43	0.4
24	44	24-5/8	34-5/8	SS24T43	0.4

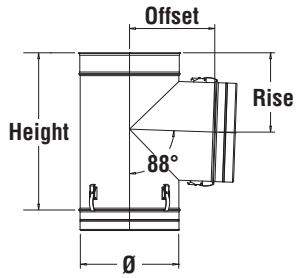
Figure 112



Available with smaller snout and custom height.

SS 45-Degree Tee				
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code
3	14-1/4	6-5/8	11	SS3T45
4	14-1/4	6-5/8	11	SS4T45
5	15-1/4	8-1/8	12-5/8	SS5T45
6	17-1/4	8-3/4	13-1/2	SS6T45
7	18-1/4	9-1/2	14-3/8	SS7T45
8	20-1/4	10-7/8	16	SS8T45
9	21-1/4	11-5/8	17	SS9T45
10	22-1/4	13	17-5/8	SS10T45
12	25-1/4	14-1/2	20-3/8	SS12T45
14	29-1/4	15-7/8	22-1/4	SS14T45
16	32-1/4	18-1/8	24-7/8	SS16T45
18	35	20-1/4	27-1/2	SS18T45
20	38	22-1/4	29-7/8	SS20T45
22	41	23-5/8	31-5/8	SS22T45
24	44	25-1/2	34	SS24T45

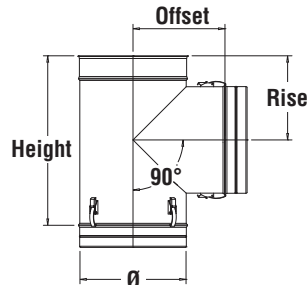
Figure 113



Available with smaller snout and custom height.

SS 88-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	11-1/4	6-3/8	5-5/8	SS3T88	1.21
4	11-1/4	6-3/8	5-5/8	SS4T88	1.21
5	12-1/4	7-3/8	6-1/4	SS5T88	1.21
6	13-1/4	7-3/8	6-5/8	SS6T88	1.21
7	14-1/4	8-3/8	7-1/4	SS7T88	1.21
8	15-1/4	8-3/8	7-5/8	SS8T88	1.21
9	16-1/4	9-3/8	8-1/4	SS9T88	1.21
10	17-1/4	9-3/8	8-5/8	SS10T88	1.21
12	19-1/4	10-3/8	9-3/4	SS12T88	1.21
14	21-1/4	11-3/8	10-3/4	SS14T88	1.21
16	23-1/4	12-3/8	11-3/4	SS16T88	1.21
18	25-1/4	13-3/8	12-3/4	SS18T88	1.21
20	27-1/4	14-3/8	13-3/4	SS20T88	1.21
22	29-1/4	15-3/8	14-3/4	SS22T88	1.21
24	31-1/4	16-3/8	15-3/4	SS24T88	1.21

Figure 114

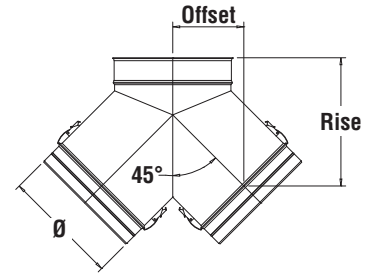


Available with smaller snout and custom height.

SS 90-Degree Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	11-1/4	6-3/8	5-1/2	SS3T90	1.21
4	11-1/4	6-3/8	5-1/2	SS4T90	1.21
5	12-1/4	7-3/8	6	SS5T90	1.21
6	13-1/4	7-3/8	6-1/2	SS6T90	1.21
7	14-1/4	8-3/8	7	SS7T90	1.21
8	15-1/4	8-3/8	7-1/2	SS8T90	1.21
9	16-1/4	9-3/8	8	SS9T90	1.21
10	17-1/4	9-3/8	8-1/2	SS10T90	1.21
12	19-1/4	10-3/8	9-1/2	SS12T90	1.21
14	21-1/4	11-3/8	10-1/2	SS14T90	1.21
16	23-1/4	12-3/8	11-1/2	SS16T90	1.21
18	25-1/4	13-3/8	12-1/2	SS18T90	1.21
20	27-1/4	14-3/8	13-1/2	SS20T90	1.21
22	29-1/4	15-3/8	14-1/2	SS22T90	1.21
24	31-1/4	16-3/8	15-1/2	SS24T90	1.21

Figure 115

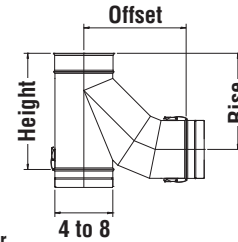
NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE.



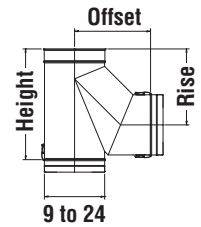
Available with smaller snout and custom height.

SS 90-Degree Tee Y				
Ø (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	4-1/2	8-1/2	SS3TY90	0.6
4	4-1/2	8-1/2	SS4TY90	0.6
5	5-1/4	10-1/8	SS5TY90	0.6
6	5-1/4	10-1/8	SS6TY90	0.6
7	6	10-7/8	SS7TY90	0.6
8	6	10-7/8	SS8TY90	0.6
9	6-5/8	12-5/8	SS9TY90	0.6
10	6-5/8	12-5/8	SS10TY90	0.6
12	7-3/8	13-1/4	SS12TY90	0.6
14	8-1/8	15	SS14TY90	0.6
16	8-3/4	16-3/4	SS16TY90	0.6
18	9-1/2	17-3/8	SS18TY90	0.6
20	10-1/4	18-1/8	SS20TY90	0.6
22	10-7/8	18-7/8	SS22TY90	0.6
24	11-5/8	20-1/2	SS24TY90	0.6

Figure 116

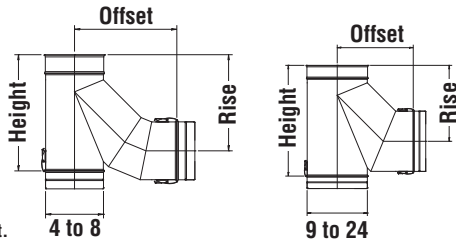


Available with smaller snout and custom height.



SS Lateral Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	10-1/8	9-1/4	8-7/8	SS3BT	0.55
4	10-1/8	9-1/4	8-7/8	SS4BT	0.55
5	12-1/8	10-1/2	10	SS5BT	0.55
6	13-1/8	11-3/4	11-1/8	SS6BT	0.55
7	15-1/8	13	12-1/4	SS7BT	0.55
8	16-1/8	14-1/4	13-3/8	SS8BT	0.55
9	18-1/8	12-1/2	12-1/2	SS9BT	0.55
10	19-1/8	13-3/8	13-3/8	SS10BT	0.55
12	22-1/8	15-1/4	15-1/4	SS12BT	0.55
14	25-1/8	17	17	SS14BT	0.55
16	28-1/8	18-7/8	18-7/8	SS16BT	0.55
18	30-7/8	20-3/4	20-3/4	SS18BT	0.55
20	33-7/8	22-1/2	22-1/2	SS20BT	0.55
22	36-7/8	24-3/8	24-3/8	SS22BT	0.55
24	39-7/8	26-1/8	26-1/4	SS24BT	0.55

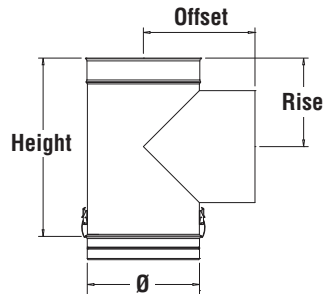
Figure 117



Available with smaller snout and custom height.

SS Lateral Tee 88-Degree					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	11-1/8	9-1/4	9-1/4	SS3BT88	0.55
4	11-1/8	9-1/4	9-1/4	SS4BT88	0.55
5	12-1/8	10-1/2	10-1/2	SS5BT88	0.55
6	14-1/8	11-3/4	11-3/4	SS6BT88	0.55
7	16-1/8	13	13	SS7BT88	0.55
8	17-1/8	14-1/4	14-1/8	SS8BT88	0.55
9	19-1/8	12-5/8	13-1/4	SS9BT88	0.55
10	20-1/8	13-1/2	14-1/4	SS10BT88	0.55
12	23-1/8	15-3/8	16-1/8	SS12BT88	0.55
14	26-1/8	17-3/8	18-1/8	SS14BT88	0.55
16	29-1/8	19-1/8	20-1/8	SS16BT88	0.55
18	31-7/8	21	22	SS18BT88	0.55
20	34-7/8	22-7/8	24	SS20BT88	0.55
22	37-7/8	24-3/4	26	SS22BT88	0.55
24	40-7/8	26-5/8	28	SS24BT88	0.55

Figure 118

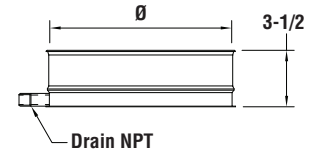


Available with smaller snout and custom height.

SS Barometric Tee					
Ø (in.)	Height (in.)	Offset (in.)	Rise (in.)	Product Code	K Factor
3	11-1/4	5	5-1/2	SS3BMT	0.2
4	11-1/4	5	5-1/2	SS4BMT	0.2
5	12-1/4	5	6	SS5BMT	0.2
6	13-1/4	6	6-1/2	SS6BMT	0.2
7	14-1/4	7	7	SS7BMT	0.2
8	15-1/4	8	7-1/2	SS8BMT	0.2
9	16-1/4	9	8	SS9BMT	0.2
10	17-1/4	10	8-1/2	SS10BMT	0.2
12	19-1/4	12	9-1/2	SS12BMT	0.2
14	21-1/4	14	10-1/2	SS14BMT	0.2
16	23-1/4	16	11-1/2	SS16BMT	0.2
18	25-1/4	18	12-1/2	SS18BMT	0.2
20	27-1/4	20	13-1/2	SS20BMT	0.2
22	29-1/4	22	14-1/2	SS22BMT	0.2
24	31-1/4	24	15-1/2	SS24BMT	0.2

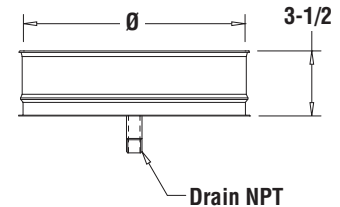
Figure 119

## SS VENTING ACCESSORIES



SS Tee Cap		
Ø (in.)	Height (in.)	Product Code
3 to 24	3-1/2	SSØTC

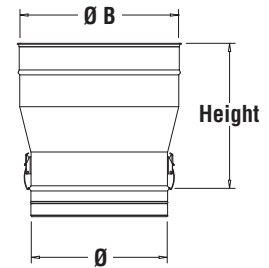
Figure 120



SS Drain Tee Cap		
Ø (in.)	Height (in.)	Product Code
3 to 24	3-1/2	SSØDTC

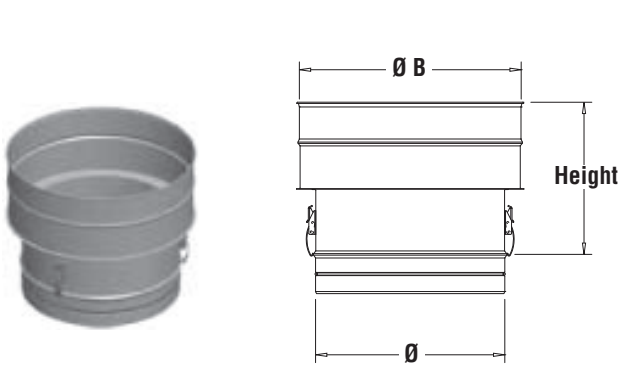
Drain Ø4 – Ø10, 1/4 NPT, 1/2 O.D  
Drain Ø12 – Ø24, 3/8 NPT, 5/8 O.D

Figure 121



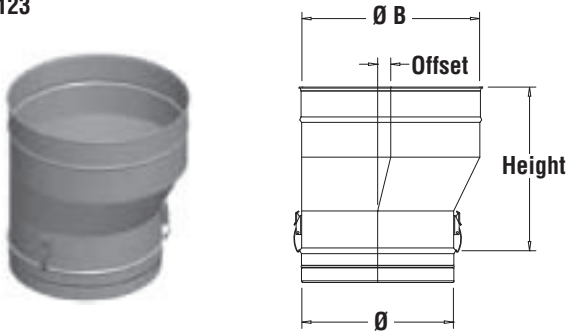
SS Tapered Increaser				
Ø (in.)	ØB Available (in.)	Height (in.)	Product Code	K Factor
3 to 9	Ø+1	11-7/8	SSØTIN(ØB)	0.05
3 to 22	Ø+2	12-7/8	SSØTIN(ØB)	0.10
3 to 9	Ø+3	13-7/8	SSØTIN(ØB)	0.15
3 to 20	Ø+4	14-7/8	SSØTIN(ØB)	0.20
3 to 7	Ø+5	15-7/8	SSØTIN(ØB)	0.25
3 to 18	Ø+6	16-7/8	SSØTIN(ØB)	0.30

Figure 122



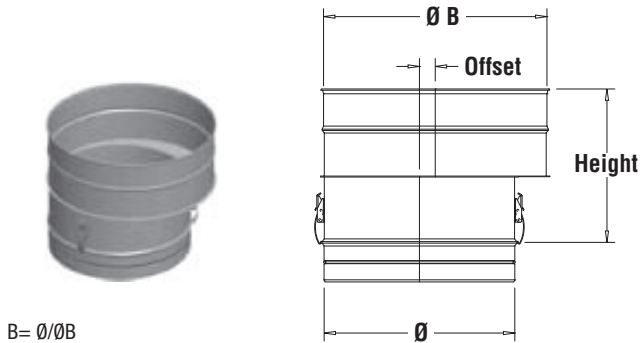
SS Step Inserter				
Ø (in.)	ØB Available (in.)	Height (in.)	Product Code	K Factor
3 to 22	5 to 24	10	SSØSIN(ØB)	$KØ = (1-B^2)^2$ $KØB = KØ/B^4$

Figure 123



SS Eccentric Tapered Inserter					
Ø (in.)	ØB Available (in.)	Height (in.)	Offset (in.)	Product Code	K Factor
3 to 9	Ø+1	12-1/4	1/2	SSØETIN(ØB)	0.05
3 to 22	Ø+2	13-1/4	1	SSØETIN(ØB)	0.10
3 to 9	Ø+3	14-1/4	1-1/2	SSØETIN(ØB)	0.15
3 to 20	Ø+4	15-1/4	2	SSØETIN(ØB)	0.20
3 to 7	Ø+5	16-1/4	2-1/2	SSØETIN(ØB)	0.25
3 to 18	Ø+6	17-1/4	3	SSØETIN(ØB)	0.30

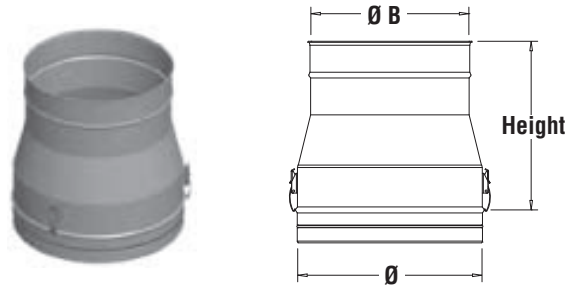
Figure 124



$B = Ø/ØB$

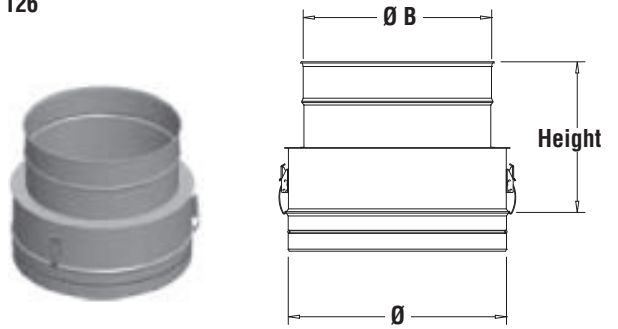
SS Eccentric Step Inserter					
Ø (in.)	ØB Available (in.)	Height (in.)	Offset (in.)	Product Code	K Factor
3 to 22	5 to 24	10	$(ØB-ØA)/2$	SSØESIN(ØB)	$KØ = (1-B^2)^2$ $KØB = KØ/B^4$

Figure 125



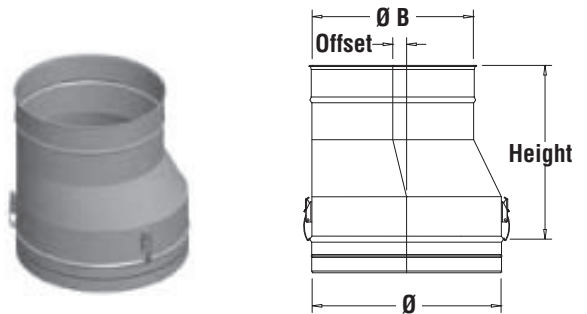
SS Tapered Reducer				
Ø (in.)	ØB Available (in.)	Height (in.)	Product Code	K Factor
5 to 10	Ø-1	11-7/8	SSØTRD(ØB)	0.07
6 to 24	Ø-2	12-7/8	SSØTRD(ØB)	0.09
6 to 12	Ø-3	13-7/8	SSØTRD(ØB)	0.11
8 to 24	Ø-4	14-7/8	SSØTRD(ØB)	0.13
9 to 24	Ø-5	15-7/8	SSØTRD(ØB)	0.15
10 to 24	Ø-6	16-7/8	SSØTRD(ØB)	0.17

Figure 126



SS Step Reducer				
Ø (in.)	ØB Available (in.)	Height (in.)	Product Code	K Factor
5 to 24	4 to 22	10	SSØSRD(ØB)	$KØ = (1-B^2)^2$ $KØB = KØ/B^4$

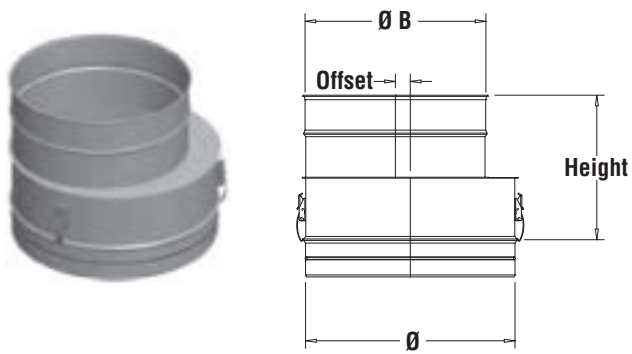
Figure 127



SS Eccentric Tapered Reducer					
Ø (in.)	ØB Available (in.)	Height (in.)	Offset (in.)	Product Code	K Factor
5 to 10	Ø+1	12-1/4	1/2	SSØETRD(ØB)	0.07
6 to 24	Ø+2	13-1/4	1	SSØETRD(ØB)	0.09
6 to 12	Ø+3	14-1/4	1-1/2	SSØETRD(ØB)	0.11
8 to 24	Ø+4	15-1/4	2	SSØETRD(ØB)	0.13
9 to 24	Ø+5	16-1/4	2-1/2	SSØETRD(ØB)	0.15
10 to 24	Ø+6	17-1/4	3	SSØETRD(ØB)	0.17

Figure 128

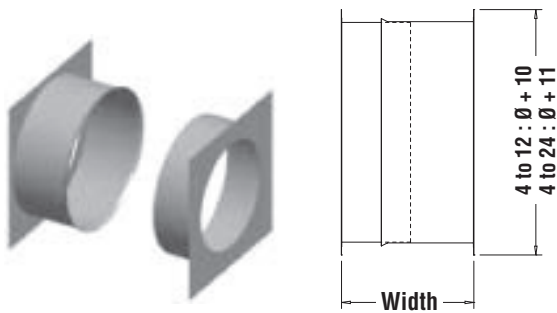




$B = \text{Ø}/\text{ØB}$

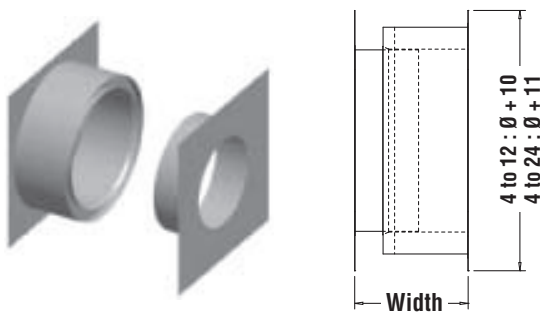
SS Eccentric Step Reducer					
Ø (in.)	ØB Available (in.)	Height (in.)	Offset (in.)	Product Code	K Factor
5 to 10	4 to 22	10	$(\text{ØA}-\text{ØB})/2$	SSØESRD(ØB)	$K\text{Ø} = (1-B^2)^2$ $K\text{ØB} = K\text{Ø}/B^4$

Figure 129



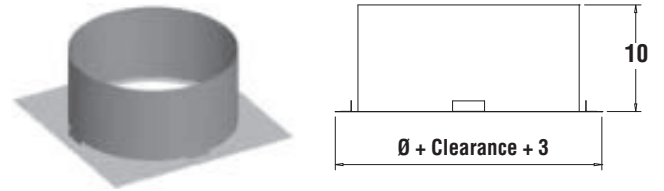
SS Wall Thimble		
Ø (in.)	Height (in.)	Product Code
3 to 24	9 to 17	SSØWT

Figure 130



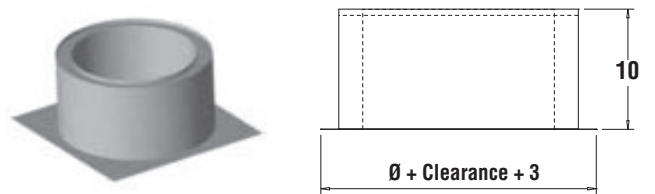
SS Wall Thimble Insulated		
Ø (in.)	Height (in.)	Product Code
3 to 24	9 to 17	SSØWTI

Figure 131



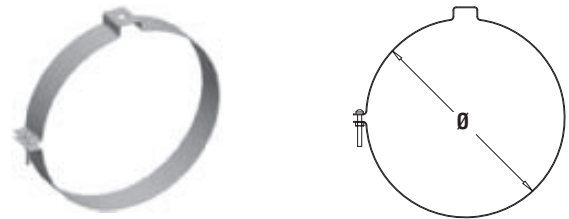
SS Roof Thimble		
Ø (in.)	Height (in.)	Product Code
3 to 24	10	SSØRT

Figure 132



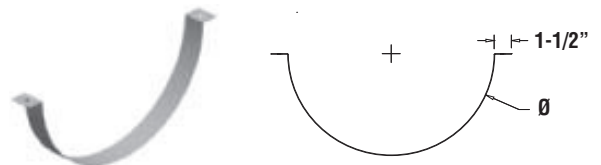
SS Roof Thimble Insulated		
Ø (in.)	Height (in.)	Product Code
3 to 24	10	SSØRTI

Figure 133



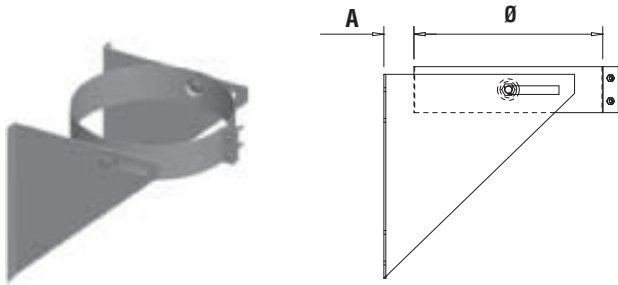
SS Suspension Band	
Ø (in.)	Product Code
3 to 24	SSØSB

Figure 134



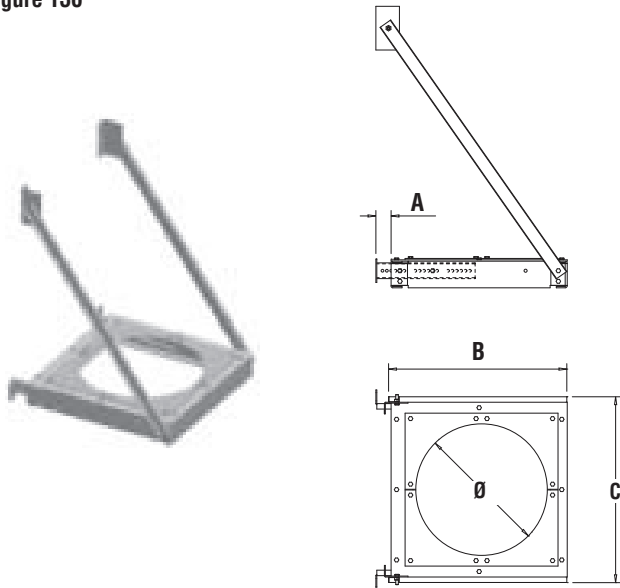
SS Cradle Support	
Ø (in.)	Product Code
3 to 24	SSØCS

Figure 135



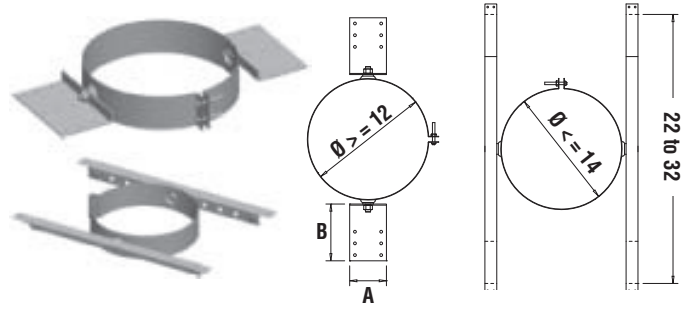
SS Wall Support		
Ø (in.)	Height (in.)	Product Code
3 to 12	2 to 5	SSØWS
14 to 24	4 to 7	SSØWS

Figure 136



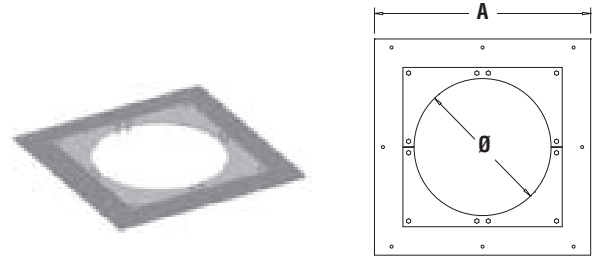
SS Wall Support HD				
Ø (in.)	A (in.)	B (in.)	C (in.)	Product Code
3	2 to 7	7	8	SS3WSHD
4	2 to 7	7	8	SS4WSHD
5	2 to 7	9	9	SS5WSHD
6	2 to 7	12	10	SS6WSHD
7	2 to 7	12	11	SS7WSHD
8	2 to 7	12	12	SS8WSHD
9	2 to 7	14	13	SS9WSHD
10	2 to 7	14	14	SS10WSHD
12	2 to 7	16	16	SS12WSHD
14	4 to 9	22	20	SS14WSHD
16	4 to 9	22	22	SS16WSHD
18	4 to 9	26	24	SS18WSHD
20	4 to 9	26	26	SS20WSHD
22	4 to 9	30	28	SS22WSHD
24	4 to 9	30	30	SS24WSHD

Figure 137



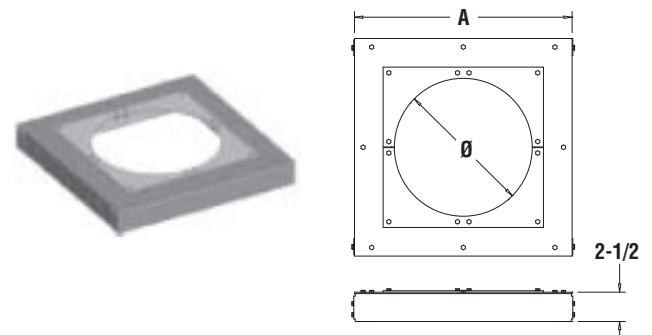
SS Roof Support			
Ø (in.)	A (in.)	B (in.)	Product Code
3 to 12	6-1/2	7-5/8	SSØRS
14 to 24	22 to 32	1-1/2	SSØRS

Figure 138



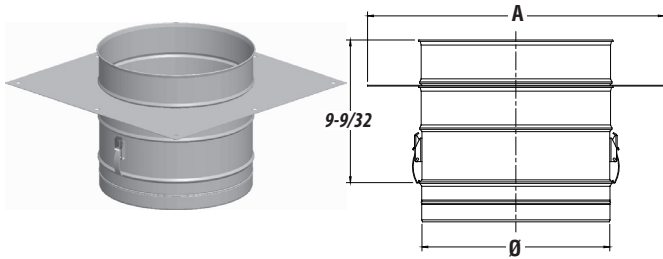
SS Anchor Plate		
Ø (in.)	A (in.)	Product Code
3 to 12	Ø+7	SSØAP
14 to 24	Ø+11	SSØAP

Figure 139



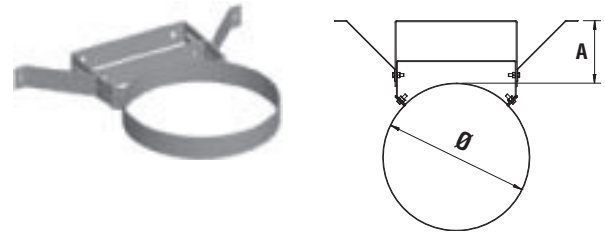
SS Anchor Plate HD		
Ø (in.)	A (in.)	Product Code
3 to 12	Ø+7	SSØAPHD
14 to 24	Ø+11	SSØAPHD

Figure 140



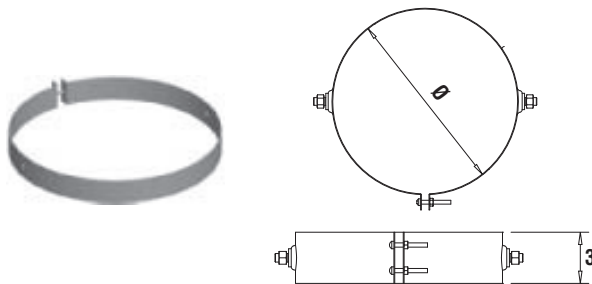
SS Anchor Plate Length (APL)		
Ø (in.)	A (in.)	Product Code
3 to 12	Ø + 7	SSØAPL
14 to 24	Ø + 11	SSØAPL

Figure 141



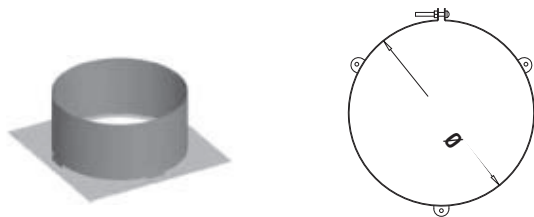
SS Wall Guide		
Ø (in.)	A (in.)	Product Code
3 to 24	2 to 5-1/2	SSØWG
14 to 24	4 to 7-1/2	SSØWG

Figure 145



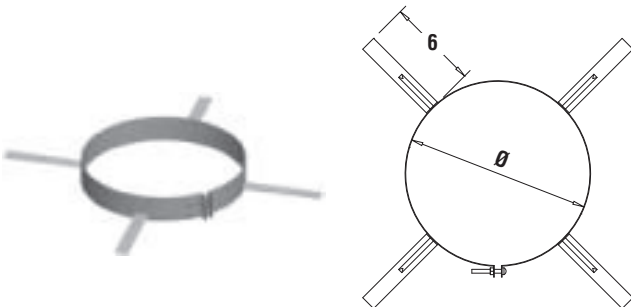
SS Roof Brace	
Ø (in.)	Product Code
3 to 24	SSØRB

Figure 142



SS Guy Wire Band	
Ø (in.)	Product Code
3 to 24	SSØGWB

Figure 143



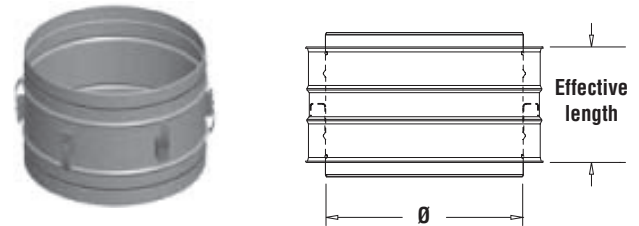
SS Centering Band	
Ø (in.)	Product Code
3 to 24	SSØCB

Figure 144



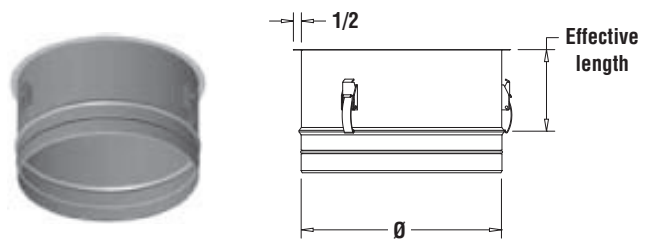
SS Guy Support	
Ø (in.)	Product Code
3 to 24	SSØGS

Figure 146



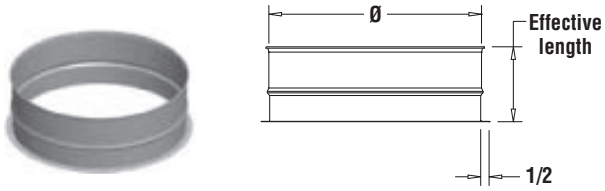
SS Double Male Adaptor		
Ø (in.)	Effective Length (in.)	Product Code
3 to 24	3-7/8	SSØDMA

Figure 147



SS Male Flange Adaptor		
Ø (in.)	Effective Length (in.)	Product Code
3 to 24	4-7/8	SSØMFA

Figure 148



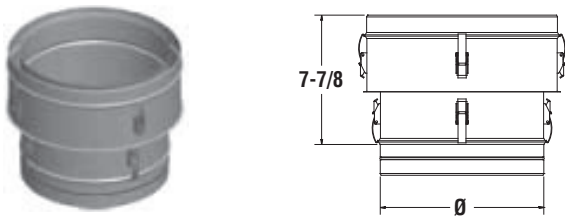
SS Female Flange Adaptor		
Ø (in.)	Effective Length (in.)	Product Code
3 to 24	4-1/4	SSØFFA

Figure 149



SS Secure-Flex Female Adapter		
Ø (in.)	Effective Length (in.)	Product Code
3 to 12	9-11/32	SSØAFF

Figure 152



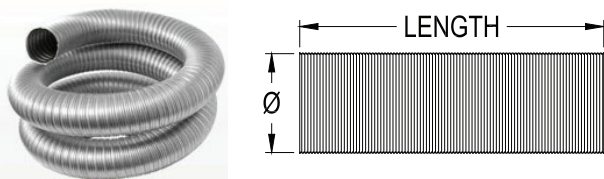
SS to SSD Adaptor		
Ø (in.)	Effective Length (in.)	Product Code
3 to 24	7-7/8	SSØSSDA

Figure 150



SS Secure-Flex Male Adapter		
Ø (in.)	Effective Length (in.)	Product Code
3 to 12	7	SSØAMF

Figure 153



SS Secure-Flex		
Ø (in.)	Flex Length (ft.)	Product Code
3 to 9	20	SSØFLX-20
	25	SSØFLX-25
	30	SSØFLX-30
	35	SSØFLX-35
4	200	SS4FLX-200
5	125	SS5FLX-125
6 & 7	100	SSØFLX-100
8	50	SS8FLX-50
3 to 12	CUSTOM	SSØFLX-XX

Figure 151



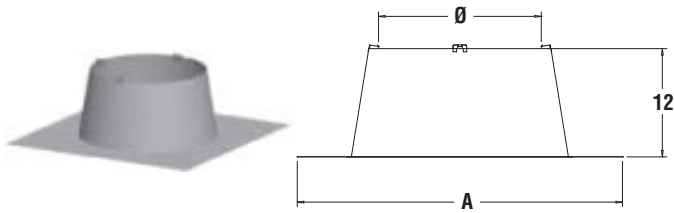
SS Secure-Flex to Secure-Flex		
Ø (in.)	Effective Length (in.)	Product Code
3 to 12	—	SSØAF

Figure 154



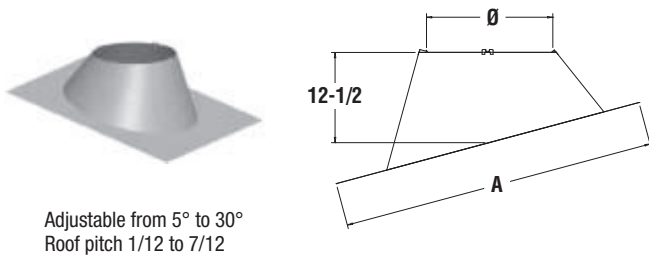
SS Storm Collar		
Ø (in.)	Effective Length (in.)	Product Code
3 to 24	6-1/4	SSØSC

Figure 155



SS Flat Flashing		
Ø (in.)	A (in.)	Product Code
3	16	SS3FH
4	16	SS4FH
5	16	SS5FH
6	16	SS6FH
7	18	SS7FH
8	26	SS8FH
9	26	SS9FH
10	28	SS10FH
12	30	SS12FH
14	31	SS14FH
16	34	SS16FH
18	36	SS18FH
20	38	SS20FH
22	40	SS22FH
24	42	SS24FH

Figure 156



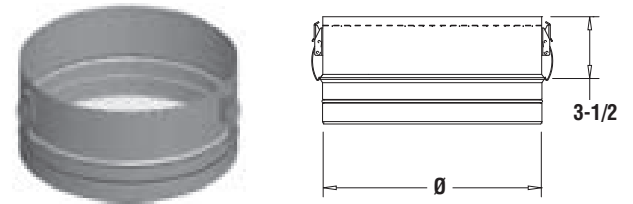
SS Adjustable Flashing			
Ø (in.)	A (in.)	Height (in.)	Product Code
3	30	12-1/2	SS3FAH
4	30	12-1/2	SS4FAH
5	30	12-1/2	SS5FAH
6	32	12-1/2	SS6FAH
7	32	12-1/2	SS7FAH
8	34	12-1/2	SS8FAH
9	35-3/8	12-1/2	SS9FAH
10	36-1/2	12-1/2	SS10FAH
12	38-1/2	12-1/2	SS12FAH
14	41	12-1/2	SS14FAH
16	43	12-1/2	SS16FAH
18	45	12-1/2	SS18FAH
20	47-1/4	12-1/2	SS20FAH
22	19-1/2	12-1/2	SS22FAH
24	51-1/2	12-1/2	SS24FAH

Figure 157



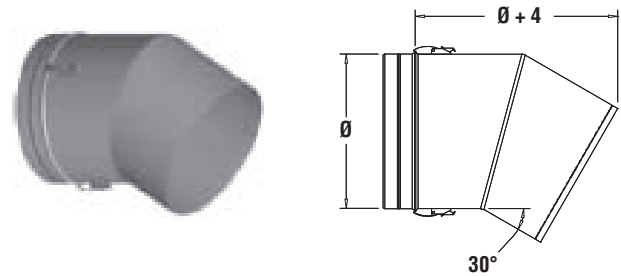
SS Rain Cap			
Ø (in.)	Product Code	Product Code with Bird Screen	K Factor
3 to 24	SS3RC	SSØRCB	.50

Figure 158



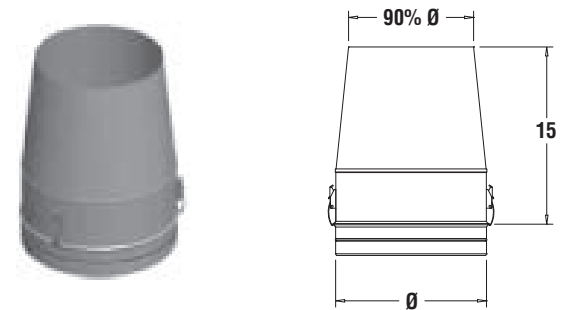
SS Screened Termination		
Ø (in.)	Product Code	K Factor
3 to 24	SSØST	.14

Figure 159



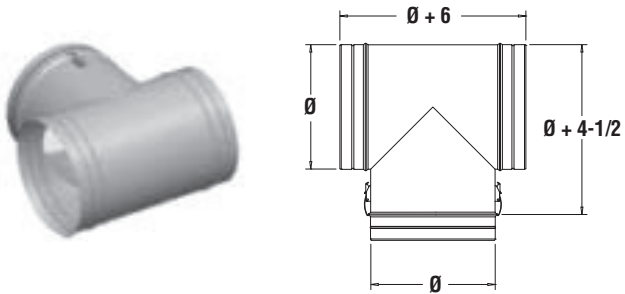
SS 30° Screen Termination		
Ø (in.)	Product Code	K Factor
3 to 24	SSØSTA	.70

Figure 160



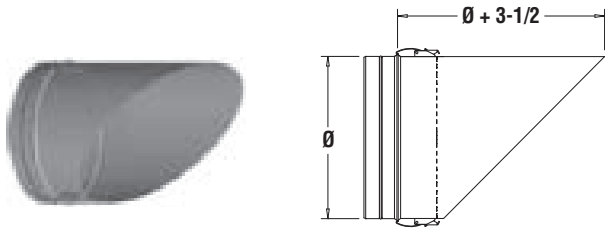
SS Exit Cone		
Ø (in.)	Product Code	K Factor
3 to 24	SSØEC	.60

Figure 161



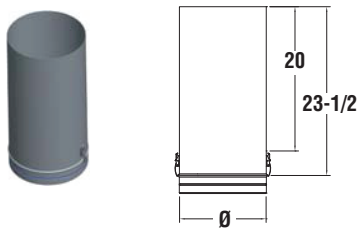
SS Termination Tee		
Ø (in.)	Product Code	K Factor
3 to 24	SSØTT	.35

Figure 162



SS Mitre Cut		
Ø (in.)	Product Code	K Factor
3 to 24	SSØMC	.14

Figure 163



SS OEM Termination		
Ø (in.)	Product Code	K Factor
3 to 24	SSØOEMTAU	0

Figure 164

## SECURITY CHIMNEYS SECURE SEAL 15 YEAR LIMITED WARRANTY

This Security Chimneys 15-year Limited Warranty warrants your Secure Seal gas vent system (Product) to be free from defects in material and workmanship at the time of manufacture. This 15-year Limited Warranty includes all components and fittings. After installation, if covered components manufactured by Security Chimneys are found to be defective in materials or workmanship during the 15-year Warranty period and while the Product remains at the site of the original installation, Security Chimneys will, at its option, replace the covered components. Security Chimneys reserves the right to replace covered components with an equivalent product and the replacement must be carried out in accordance with Security Chimneys recommendations. If replacement is not commercially practical, Security Chimneys will, at its option, refund the purchase price or wholesale price of the Security Chimneys Product, whichever is applicable. Labor or freight costs to remove or replace Security Chimneys components are not included. THERE ARE EXCLUSIONS AND LIMITATIONS to the 15-year Limited Warranty as described herein.

### **COVERAGE COMMENCEMENT DATE**

Warranty coverage begins on the date of shipment from Security Chimneys to the installation site or project-holding site, whichever is applicable.

### **EXCLUSIONS AND LIMITATIONS**

This 15-year Limited Warranty applies only if the Product is installed in the United States or Canada and only if used for the application for which it was designed and intended. The Product must be installed and maintained in accordance with the printed instructions accompanying the Product and in compliance with all applicable installation and building codes and good trade practices. Any repaired or replaced product shall be warranted for the duration of time no longer than the remaining or unexpired term of the original warranty. The warranty period is 15 years from the date of installation when used for venting listed, Category I, II, III or IV gas heating equipment or water heaters that specify this type of venting system.

**The 15-Year Limited Warranty** is extended to the purchaser subject to the following additional conditions:

- The vent system is inspected and maintained annually, beginning one year after the date of installation and continue throughout the warranty period.
- Generally accepted engineering practices have been followed to determine that sizing and material specifications are suitable for the application and environment involved.
- The components have been correctly installed in accordance with the system design and installation instructions as provided by Security Chimneys

This warranty is non-transferable and extends to the original owner only. The Product must be purchased through an Security Chimneys Agent/ Representative and proof of purchase must be provided.

Security Chimneys will not be responsible for: (a) damages caused by normal wear and tear, corrosion from salt air, accident, riot, fire, flood or acts of God; (b) damages caused by abuse, negligence, misuse, or unauthorized alteration or repair of the Product affecting its stability or performance. (c) damages caused by failing to provide proper maintenance and service in accordance with the instructions provided with the Product; (d) damages, repairs or inefficiency resulting from faulty installation or application of the Product.

This 15-year Limited Warranty covers only parts as provided herein. Security Chimneys' entire liability is limited to the purchase price of this Product. In no case shall Security Chimneys be responsible for materials, components or construction, which are not manufactured or supplied by Security Chimneys or for the labor necessary to install, repair or remove such materials, components or construction. All replacement or repair components will be shipped F.O.B. from the Security Chimneys manufacturing facility.

### **LIMITATION ON LIABILITY**

It is expressly agreed and understood that the sole obligation of Security Chimneys and the purchaser's exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified herein.

In no event shall Security Chimneys be liable for any incidental or consequential damages caused by defects in the Product, whether such damage occurs or is discovered before or after replacement or repair, and whether such damage is caused by Security Chimneys negligence.

Security Chimneys makes no expressed warranties except as stated in this 15-year Limited Warranty. The duration of any implied warranty is limited to the duration of this expressed warranty. No one is authorized to change this 15-year Limited Warranty or to create for Security Chimneys any other obligation or liability in connection with the Product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. The provisions of this 15-year Limited Warranty are in addition to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

### **INVESTIGATION OF CLAIMS AGAINST WARRANTY**

Security Chimneys reserves the right to investigate any and all claims against this 1-Year Standard and 15-year Limited Warranty and to decide, in its sole discretion, upon the method of settlement.

**Security Chimneys shall in no event be responsible for any warranty work done by a contractor that is not approved without first obtaining Security Chimneys' prior written consent.**

### **HOW TO REGISTER A CLAIM AGAINST WARRANTY**

In order for any claim under this warranty to be valid, you must contact the Security Chimneys Agent/Representative from which you purchased the Product. If you cannot contact the Agent/Representative, then you must notify Security Chimneys in writing. Security Chimneys must be notified of the claimed defect in writing within 90 days of the date of failure. Notices should be directed to the Security Chimneys Warranty Department.

## 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 Security Chimneys International for the phone number of your nearest Security Chimneys International dealer who will answer your questions or address your concerns.

Normally, all parts should be ordered through your Security Chimneys International 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.



2125 MONTEREY ST. • LAVAL, QC., CANADA • H7L 3T6  
800-667-3387; [www.securitychimneys.com](http://www.securitychimneys.com)

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Security Chimneys International Limited 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.

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