

# Technical and Dimensional Data

---

# Saf-T Vent<sup>®</sup> SC Plus

3"/5" & 4"/7" Concentric Reduced Clearance  
Double Wall

for Special Gas Vent and/or  
Sealed Combustion Systems

Also For Venting Listed Gas or Oil Fired Appliances  
Listed as Suitable For Venting With Type L Systems

---



Tested and Listed to  
UL 1738/ULC S636  
UL641 & ULC/ORD-CC441  
by Underwriters Laboratories, Inc

**heatfab<sup>®</sup>**

5030 Corporate Exchange Blvd  
Grand Rapids, MI 49512  
Call (800) 772-0739  
Fax (800) 972-1421  
Canada Sales: 888-735-5475

[www.heatfab.com](http://www.heatfab.com)

# Saf-T Vent® SC Plus

DOUBLE WALL SPECIAL GAS VENT

---

## TABLE OF CONTENTS

CATEGORY	PART DESCRIPTION	PAGE
Introduction		3
Accessories	Vertical / Horizontal In-Line Drain Section	4
	Condensate Drain Tube Kit	4
Adapters	Single Wall Adapter / Appliance Adapter	5
	Air Intake Tee	5
Elbows	45° Elbow	6
	90° Elbow	6
Straight Lengths	6" Length	7
	1' Length	7
	2' Length	7
	3' Length	7
	Adjustable Length	7
Supports & Hanger	Vertical Support Leg	8
	0" Clearance Support Clamp	8
	1" Clearance Support Clamp	8
	Outer Jacket Support Clamp	8
Termination Accessories	Firestop / Support / Wall Plate	9
	Tall Cone Flashing / Support	9
	Storm Collar	9
	Horizontal Termination Adapter	10
	Vertical Termination Adapter	10
Terminations	Tee Termination with Screen	11
	Mitered Termination with Screen	11
	Elbow Termination with Screen	11
	Screen Termination	12
	Rain Cap	12

# Saf-T Vent® SC Plus

DOUBLE WALL SPECIAL GAS VENT

---

## Introduction:

Saf-T Vent SC Plus is an advanced concentric vent system designed for zero clearance installation in residential and light commercial applications. The inner wall is constructed from 316L Stainless Steel. The outer wall is 409 stainless steel, providing durability and a lasting finish.

The double-wall construction of Saf-T Vent SC Plus allows the system to be fully enclosed by combustible materials at zero or one-inch clearance depending on layout and flue gas temperature. Saf-T Vent SC Plus is UL and CUL Listed to UL 1738 / ULC S636 (File MH16161). It may be used on negative, neutral, and positive pressure systems up to eight (8) inches w.c.

**As a Special Gas Vent system:** Saf-T Vent SC Plus is approved for use on ANSI Category I, II, III, and IV Gas-Burning Appliances and certain Direct Vent appliances. Saf-T Vent SC Plus is appropriate for use on appliances that specify an AL 29-4C venting system.

**As a Sealed Combustion system:** The unique concentric design of Saf-T Vent SC Plus also allows it to function as a pipe-in-a-pipe vent. Products of combustion are exhausted out through the inner wall while combustion air is drawn in through the outer wall. An appliance can be direct-vented with only a single penetration through the building structure. **This application must be approved by the Appliance Manufacturer.**

**Note regarding sealant:** Saf-T Vent SC Plus includes an integral seal and does not require sealant. However, sealant may be necessary when connecting Saf-T Vent SC Plus components directly to certain appliance flue collars and to the gasket-less Saf-T Vent GC Plus/GC 316 vent system.

For applications up to 550°F/288°C, approved sealants include GE RTV 106, Dow Corning 736, and SGV 550.

For applications up to 300°F/149°C, approved sealants include GE RTV 106, Dow Corning 732, and SGV 550.

**Seal weather exposed joints of the outer jacket with foil tape or an exterior grade silicone sealant.**

## Material Thickness:

Inner Vent Diameter	Wall Thickness – Inner Vent	Outer Jacket Diameter	Wall Thickness – Outer Jacket
3"	0.015" (28 ga)	5"	0.018" (26 ga)
4"		7"	

# Saf-T Vent® SC Plus

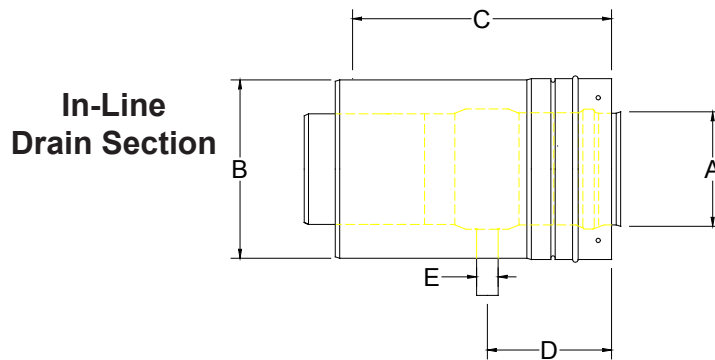
DOUBLE WALL SPECIAL GAS VENT

## Accessories:

**Vertical/Horizontal In-Line Drain Section** — Use to drain away condensate from the vent system.

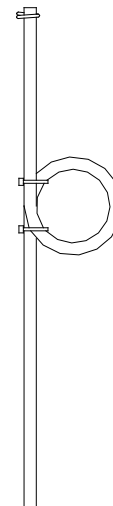
The unique design of this part allows it to be installed in a horizontal, vertical or inclined orientation. Continuous horizontal runs in excess of 30 feet require a condensate drain. Drains may also be required by the manufacturer. High temperature silicone rubber tubing is available separately, see below.

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length	DIM - D Drain Location	DIM - E Drain Diameter (OD)
SC03DRN	3	5	6.7	3.3	0.5
SC04DRN	4	7	6.7	3.3	0.5



**Condensate Drain Tube Kit** — This kit contains a length of high temperature silicone rubber tubing, a clamp, and two cable ties. The silicone tubing is rated for 500°F, and is translucent to allow inspection of the P-trap. Larger diameter drains can be plumbed directly into a drain system.

Part Number:	7000TUBE	5 feet of 3/8" diameter tubing
	7000TUBE-10	10 feet of 3/8" diameter tubing
	7001TUBE	10 feet of 1/2" diameter tubing



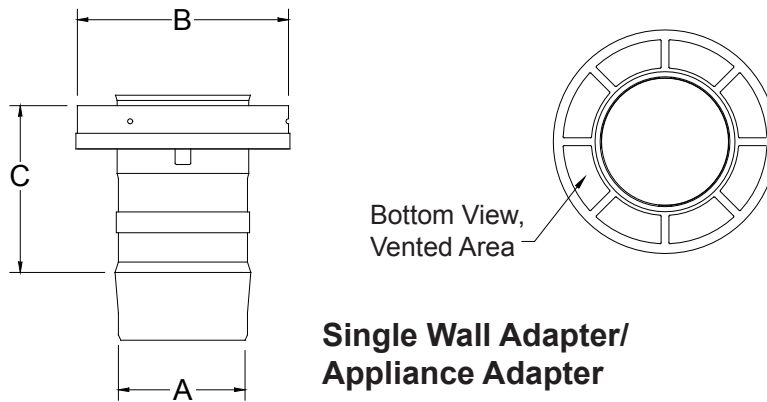
# Saf-T Vent® SC Plus

DOUBLE WALL SPECIAL GAS VENT

## Adapters:

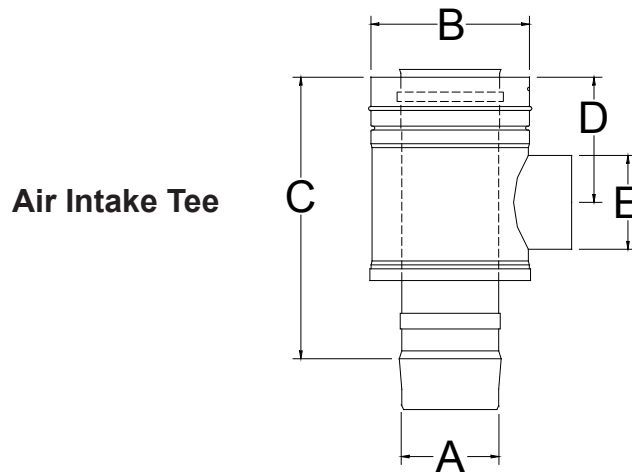
**Single Wall Adapter/Appliance Adapter** — Use to transition from single-wall to Saf-T Vent SC Plus. The male end connects to Saf-T Vent EZ Seal Plus/EZ 316 or Saf-T Vent appliance adapters and flue collars. The outer diameter collar is vented and must not be blocked during installation or operation.

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length
SC03ADEZ	3	5	4
SC04ADEZ	4	7	4



**Air Intake Tee** — Use to begin a Sealed Combustion system. The male end connects to Saf-T Vent EZ Seal Plus/EZ 316 or Saf-T Vent appliance adapters and flue collars. The tap on the outer wall should be connected to the combustion air inlet on the appliance using materials specified by the appliance manufacturer.

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length	DIM - D Centerline of Tap to Outlet	DIM - E Air Intake Connection Diameter
SC03TAD3	3	5	9	4.0	3
SC03TAD4	3	5	10	4.6	4
SC04TAD4	4	7	10	4.6	4
SC04TAD3	4	7	9	4.0	3



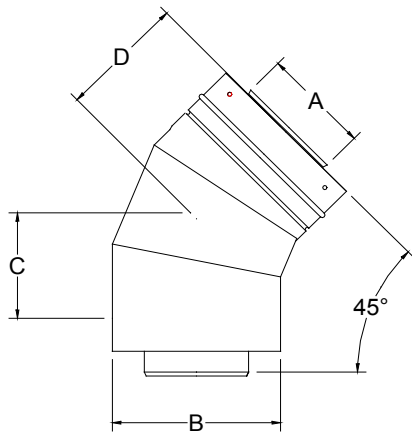
# Saf-T Vent® SC Plus

## DOUBLE WALL SPECIAL GAS VENT

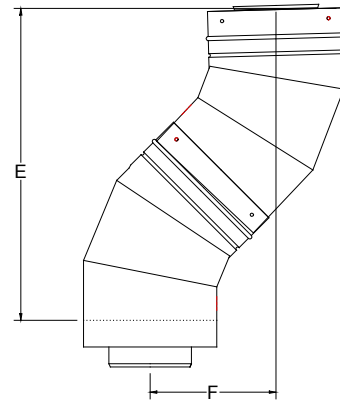
### Elbows:

**45° Elbow** — Use to achieve offsets or changes in the direction of the vent system. The degree of these welded seam elbows is not adjustable.

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Rise	DIM - D Run	DIM - E Combined Installed Height	DIM F Offset
SC03E45	3	5	3.1	3.7	11.60	4.8
SC04E45	4	7	3.3	4.3	13.03	5.3

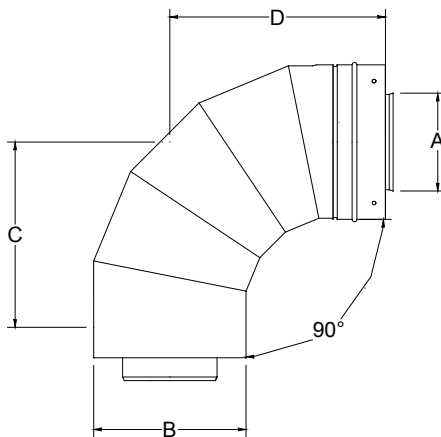


**45° Elbow**

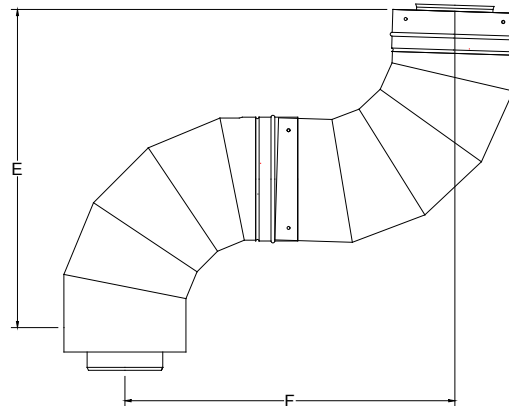


**90° Elbow** — Use to achieve offsets or changes in the direction of the vent system. The degree of these welded seam elbows is not adjustable.

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Rise	DIM - D Run	DIM - E Combined Installed Height	DIM F Offset
SC03E90	3	5	6.1	7.0	13.1	13.25
SC04E90	4	7	6.8	7.75	14.5	14.50



**90° Elbow**



# Saf-T Vent® SC Plus

DOUBLE WALL SPECIAL GAS VENT

## Straight Lengths:

Install vent with a continuous pitch of 1/4" per foot, sloping upward toward the termination (unless otherwise specified by the appliance manufacturer). It is important to provide adequate support to a Saf-T Vent SC Plus system. Refer to installation instructions for support specifications.

### 6" Length

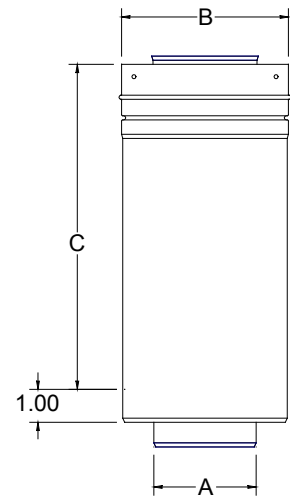
Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length
SC03L6	3	5	3.88
SC04L6	4	7	3.88

### 1' Length

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length
SC03L12	3	5	9.88
SC04L12	4	7	9.88

### 2' Length

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length
SC03L24	3	5	21.88
SC04L24	4	7	21.88



### 3' Length

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length
SC03L36	3	5	35.38
SC04L36	4	7	35.38

## Straight Length

### Adjustable Length

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length
SC03AJ	3	5	12.5 - 19.5
SC04AJ	4	7	12.5 - 19.5

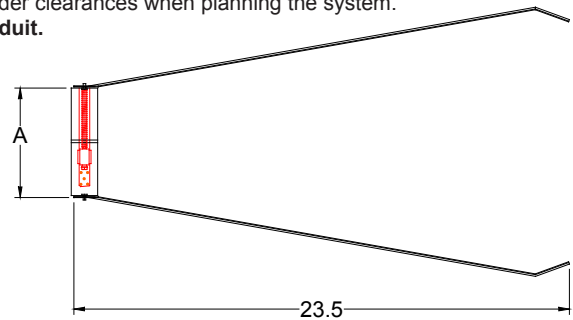
# Saf-T Vent® SC Plus

## DOUBLE WALL SPECIAL GAS VENT

### Supports:

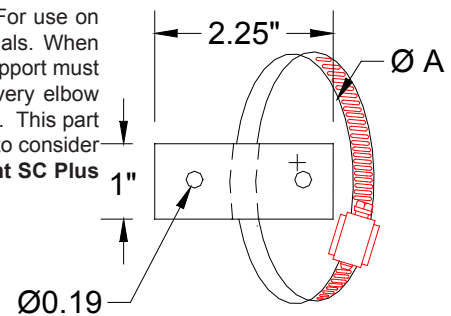
**Vertical Support Leg** — For use on vertical systems to provide support. The 20-gauge stainless steel support legs can be used below or above the roof, and can be used in pairs for extra stabilization. Hardware to attach the support to the structure is not provided; attach using best construction methods. Be sure to consider clearances when planning the system. **Never drill or screw through the Saf-T Vent SC Plus inner vent conduit.**

Part Number	DIM - A Hose Clamp Diameter
SC03VSL	5.2
SC04VSL	7.2



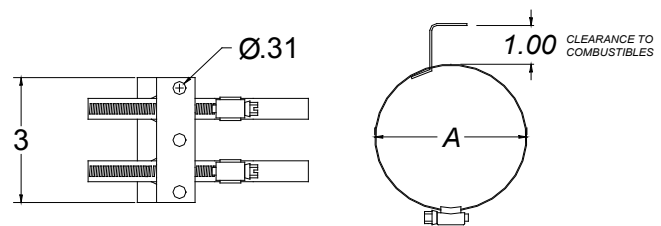
**0" Clearance Horizontal / Vertical Support Clamp** — For use on horizontal or vertical systems to provide support at zero clearance to combustible materials. When any horizontal run of Saf-T Vent SC Plus extends for more than 6 feet, a horizontal support must be installed. Subsequent supports are required after every additional 6 feet and every elbow and tee. Attach the bracket to the structure using appropriate hardware (not provided). This part consists of a hose clamp and an 18-gauge stainless steel mounting bracket. Be sure to consider proper pitch when planning the system. **Never drill or screw through the Saf-T Vent SC Plus inner vent conduit.**

Part Number	DIM - A Hose Clamp Diameter
SC03SUP	5.5
SC04SUP	7.5



**1" Clearance Support Clamp** — Provides support to Saf-T Vent SC Plus systems that require 1 inch clearance to combustible materials. When any horizontal run of Saf-T Vent SC Plus extends for more than 6 feet, a horizontal support must be installed. Subsequent supports are required after every additional 6 feet and every elbow and tee. Be sure to consider clearances and proper pitch when planning the system. **Never drill or screw through the Saf-T Vent SC Plus inner vent conduit.**

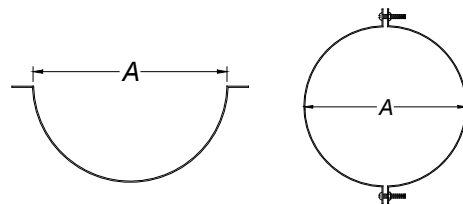
Part Number	DIM - A Hose Clamp Diameter
SC03SUP1	5.5
SC04SUP1	7.5



### 1" Clearance Support Clamp

**Outer Jacket Support Clamp** — For use on horizontal systems to provide support at the required 6-foot intervals. May be used singly as a saddle to rest the vent in and hung from two rods or cables. Use in pairs by clamping around the outer jacket and suspend from a single rod or cable. Support clamps by themselves do not maintain the necessary clearances to combustible materials; be sure to consider clearances and proper pitch when planning the system. Support clamps are sold in pairs, with two half-shells and two ¼-20 nuts and bolts. **Never drill or screw through the Saf-T Vent SC Plus inner vent conduit.**

Nominal Vent Diameter	Part Number	DIM - A Nominal Diameter
3	4527SS	5
4	4727SS	7





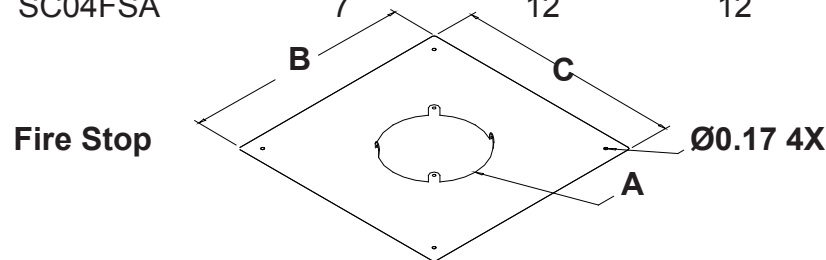
# Saf-T Vent® SC Plus

DOUBLE WALL SPECIAL GAS VENT

## Termination Accessories:

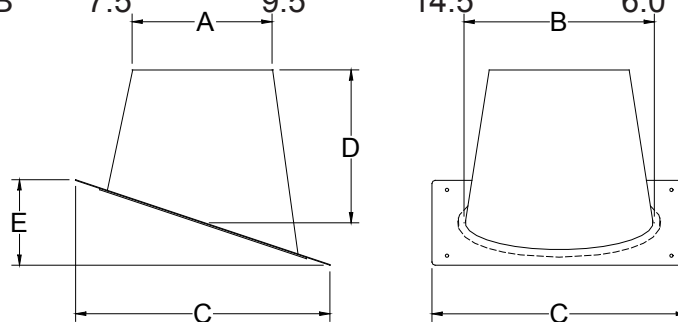
**Fire Stop / Support / Wall Plate**—A fire stop may be required anytime Saf-T Vent SC Plus penetrates combustible floors, walls, or ceilings. Remove any insulating material from the floor, wall, or ceiling cavity for at least 1 inch around the vent. Review fire codes and consult with local building code officials to determine the necessity for a firestop. This part provides added support when used at the bottom of a vertical chase. Hardware is supplied to attach the firestop to the vent. Mounting hardware is not provided.

Part Number	DIM - A Hole Diameter	DIM - B Length	DIM - C Width
SC03FS	5	8	8
SC03FSA	5	12	12
SC04FS	7	10	10
SC04FSA	7	12	12



**Tall Cone Flashing / Support**—Use as a vertical roof penetration and support for flat roof installations. This part **must** be installed with a 5 inch diameter storm collar (ordered separately). Hardware is not included with the tall cone flashing; attach to structure using best construction methods. The tall cone flashing may be used with a roof curb if necessary.

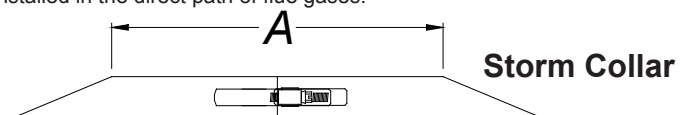
Part Number	DIM - A Top of Cone Opening	DIM - B Bottom of Cone Opening	DIM - C Face Plate (Square)	DIM - D Overall Height	DIM-E Pitch Range
SC03TCF	5.5	7.5	12.5	6.0	FLAT- 2/12
SC03TCFA	5.5	7.5	12.5	6.0	2/12 - 6/12
SC03TCFB	5.5	7.5	12.5	6.0	6/12 -12/12
SC04TCF	7.5	9.5	14.5	6.0	FLAT - 2/12
SC04TCFA	7.5	9.5	14.5	6.0	2/12 - 6/12
SC04TCFB	7.5	9.5	14.5	6.0	6/12 - 12/12



**Tall Cone Flashing**

**Storm Collar** —For use with the Tall Cone Flashing (sold separately) or other roof flashings to provide support to vertical installations. The storm collar may be tightened and sealed around the vent to prevent water from entering the building. It may also be used as a decorative shield to cover holes where the vent penetrates interior concrete and masonry walls. This part is made from Type 304 stainless steel and should not be installed in the direct path of flue gases.

Nominal Vent Diameter	Part Number Nominal Diameter	DIM - A
3	4526SS	5
4	4726SS	7



**Storm Collar**

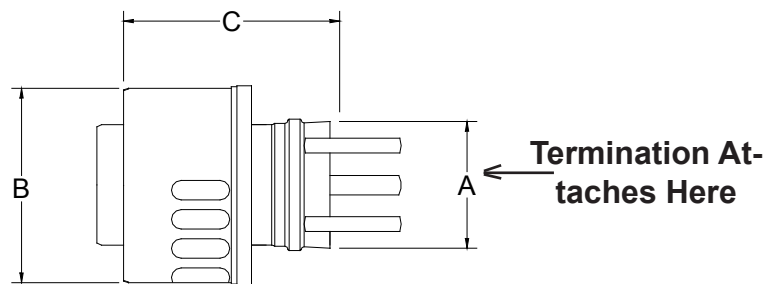
# Saf-T Vent® SC Plus

## DOUBLE WALL SPECIAL GAS VENT

### Terminations:

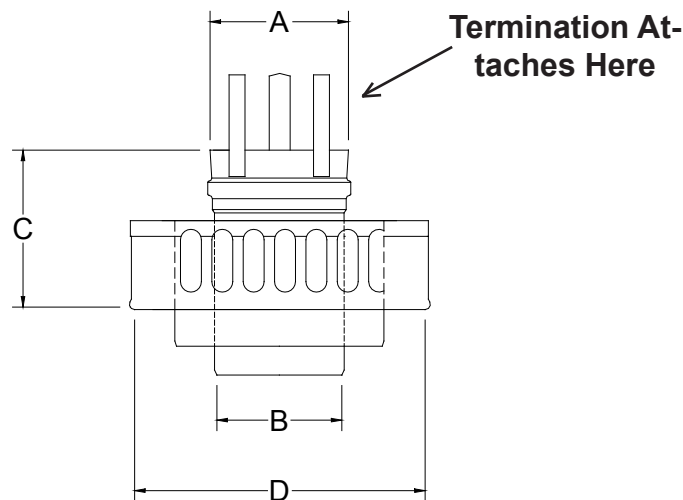
**Horizontal Termination Adapter**— Use to complete the Saf-T Vent SC Plus system after penetrating an exterior wall. Standard Saf-T Vent terminations connect directly to the adapter. The screened openings release excess heat from the system and must not be blocked. On Sealed Combustion systems the screened openings supply combustion air to the appliance.

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM-C Installed Length
SC03HT	3	5	5.3
SC04HT	4	7	5.6



**Vertical Termination Adapter** — Use to complete the Saf-T Vent SC Plus system on vertical installations. Standard Saf-T Vent terminations connect directly to the adapter. The screened openings release excess heat from the system and must not be blocked. On Sealed Combustion systems the screened openings supply combustion air to the appliance.

Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length	DIM - D Diameter Protective Band
SC03VT	3	5	3.8	7.1
SC04VT	4	7	3.8	9.1



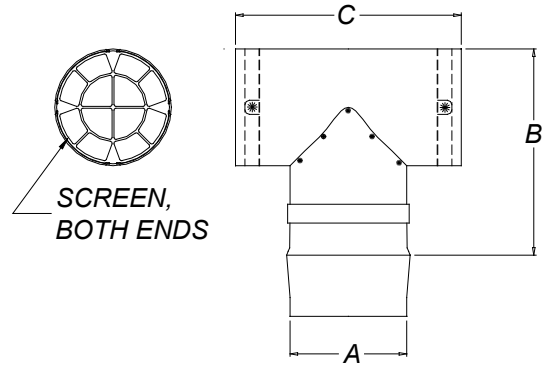
# Saf-T Vent® SC Plus

DOUBLE WALL SPECIAL GAS VENT

## Terminations:

**Tee Termination with Screen** — Use as a termination on horizontal or vertical systems, as specified or allowed by the appliance manufacturer.

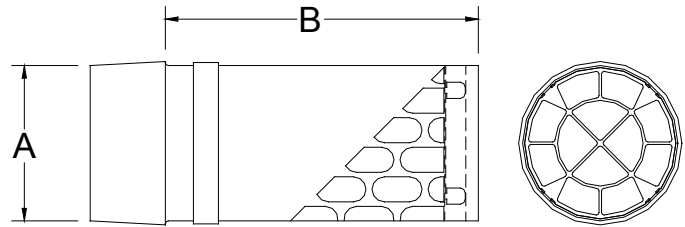
Part Number	DIM - A Nominal Diameter	DIM - B Installed Length	DIM - C Tee Body Width
9390TEE	3	5.5	6
9490TEE	4	6.0	7



### Tee Termination with Screen

**Mitered Termination with Screen** — Use as a termination on horizontal or vertical systems, as specified or allowed by the appliance manufacturer.

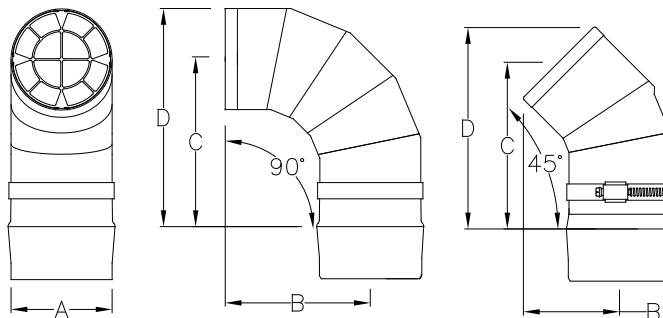
Part Number	DIM - A Nominal Diameter	DIM - B Installed Length
9390	3	6.25
9490	4	7.25



### Mitered Termination with Screen

**Elbow Termination with Screen** — Use as a termination on horizontal or vertical systems, as specified or allowed by the appliance manufacturer.

Part Number	DIM - A Nominal Diameter	DIM - B Center to Edge	DIM - C Centerline Installed Length	DIM - D Overall Installed Length
9314TERM (90°)	3	4.5	5.3	6.8
9414TERM (90°)	4	5.3	6.0	8.0
9311TERM (45°)	3	2.9	5.0	6.2
9411TERM (45°)	4	3.4	5.4	6.8



### Elbow Termination with Screen

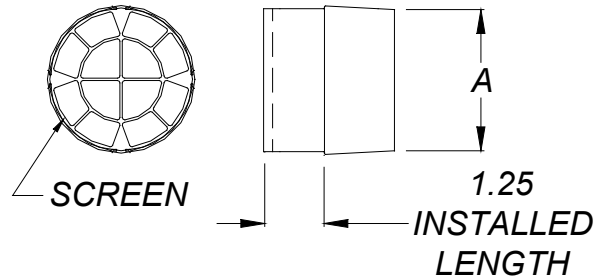
# Saf-T Vent<sup>®</sup> SC Plus

## DOUBLE WALL SPECIAL GAS VENT

### Terminations:

**Screen Termination** — Use as a termination on horizontal or vertical systems, as specified or allowed by the appliance manufacturer.

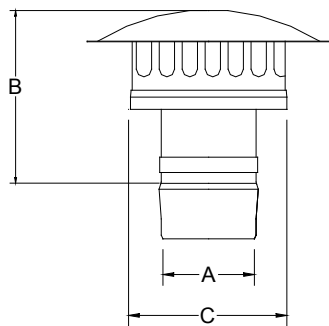
Part Number	DIM - A Nominal Diameter
9392	3
9492	4



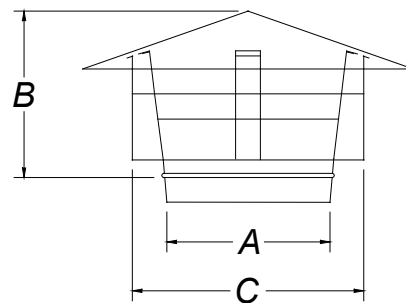
### Screen Termination

**Rain Cap** — Use as a termination on vertical systems. Category I and II appliances require a raincap or other device to prevent rainwater from entering the vent. Vent systems for positive pressure appliances may omit the raincap if there are other provisions for draining rainwater from the system. The raincap may also be used as a horizontal termination.

Part Number	DIM - A Nominal Diameter	DIM - B Cap Height	DIM - C Outer Band	APPLICATION
5300CI	3	8.5	8	All Categories
5400CI	4	8.5	9	All Categories
SC03RC	3	5.5	5	Category III & IV <b>Only</b> , if system has drain.
SC04RC	4	6.3	7	Category III & IV <b>Only</b> , if system has drain.



SC\_\_RC



Rain Cap

5\_00CI