# Parts Catalog Technical and Dimensional Data

# Heatfab Saf-T Vent® SC 316

Concentric Double Wall 316L Stainless Steel Special Gas Vent Sealed Combustion

For Venting Residential & Commercial Applications

Sealed Combustion Appliances

Category I,II,III,IV Appliances

For Use on Negative, Neutral and Positive Pressures (up to 8" W.C.)

Tested and Listed to UL 1738 (Special Gas Vent), ULC-S636 (Type BH Gas Vent), and Oil: UL 641, ULC S609 and ULC/ORD-441

Sizes: 3"/5" and 4"/7" Diameters (ID/OD)



Tested and Listed UL 1738, ULC S636 UL 641, ULC-609 and ULC/ORD-441 by Underwriters Laboratories, Inc.



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### Introduction:

Saf-T Vent SC 316 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 grade 409 stainless steel.

The double-wall construction of Saf-T Vent SC 316 allows the system to be fully enclosed by combustible materials at zero or one-inch clearance depending on layout and flue gas temperature.

**As a Special Gas Vent system:** Saf-T Vent SC 316 is approved for use on ANSI Category I, II, III, and IV Gas-Burning Appliances and certain Direct Vent appliances.

As a Sealed Combustion system: The unique concentric design of Saf-T Vent SC 316 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 316 includes an integral seal and does not require RTV sealant. However, sealant may be necessary when connecting Saf-T Vent SC 316 components directly to certain appliance flue collars and to the gasket-less Saf-T Vent GC vent system.

### Accessories:

**RTV Sealant** — In order to have a UL Listed system, Saf-T Vent SC parts without a factory adhered gasket/seal must be installed with one of the following approved RTV sealants:

Maximum Appliance Flue Gas Temperature	U.L. Listed Heatfab Sealant	Size	U.L Listed Heatfab Sealant Part Number
	Silicone	2.8 oz.	7000RTV
550° F		10 oz.	7000RTVL
	Viton/FKM	12 oz.	7000FKM

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

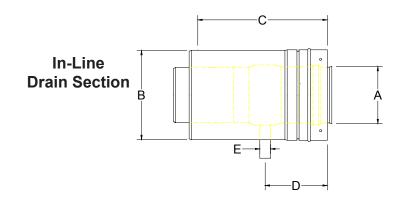
### Material Thickness:

Inner Vent Diameter	Wall Thickness – Inner Vent	Outer Jacket Diameter	Wall Thickness – Outer Jacket
3"	0.015" (29.55)	5"	0.018" (26.55)
4"	0.015" (28 ga)	7"	0.018" (26 ga)

#### 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-316	3	5	6.7	3.3	0.5
SC04DRN-316	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.

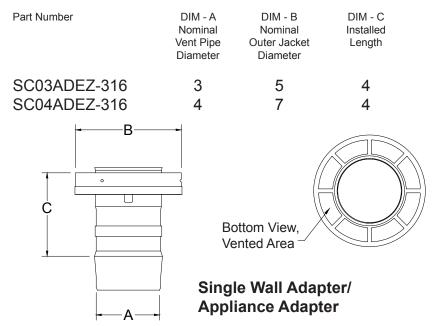
Part Number:

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

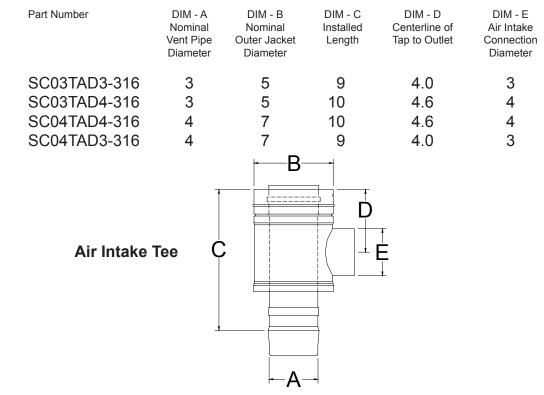


#### Adapters:

**Single Wall Adapter/Appliance Adapter** — Use to transition from single-wall to Saf-T Vent SC 316. The male end connects to Saf-T Vent 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.

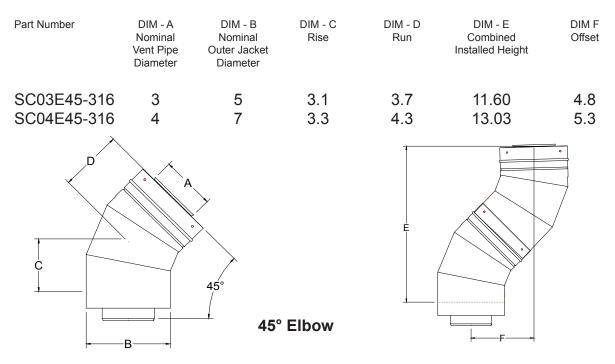


**Air IntakeTee** — Use to begin a Sealed Combustion system. The male end connects to Saf-T EZ 316 or Saf-T Vent appliance adapters and flue collars. The tap on the outer wall should be connected to the combustion air inlet on the appliance using materials specified by the appliance manufacturer.



#### 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.



**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
SC03E90-316 SC04E90-316	3 4	5 7	6.1 6.8	7.0 7.75	13.1 14.5	13.25 14.50
	D 90°		Elbow		F	

#### **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 316 system. Refer to installation instructions for support specifications.

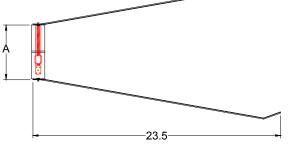
6" Length Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length	
SC03L6-316	3	5	3.88	
SC04L6-316	4	7	3.88	
1' Length Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length	+B+
SC03L12-316	3	5	9.88	
SC04L12-316	4	7	9.88	
2' Length Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length	C
SC03L24-316	3	5	21.88	
SC04L24-316	4	7	21.88	
<b>3' Length</b> Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length	Straight Length
SC03L36-316	3	5	35.38	
SC04L36-316	4	7	35.38	
Adjustable Ler Part Number	DIM - A Nominal Vent Pipe Diameter	DIM - B Nominal Outer Jacket Diameter	DIM - C Installed Length	
SC03AJ-316	3	5	12.5 - 19.5	
SC04AJ-316	4	7	12.5 - 19.5	

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#### 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 inner flue bearing conduit.** 

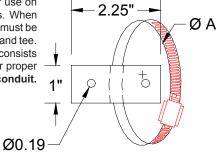
Hose Clamp Diameter
5.2 7 2



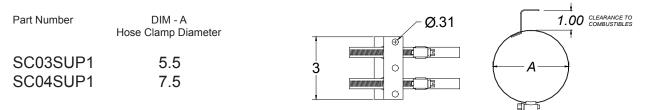
#### 0" Clearance Horizontal / Vertical Support Clamp — For use on

horizontal or vertical systems to provide support at zero clearance to combustible materials. When any horizontal run of Saf-T Vent SC 316 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 inner flue bearing 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 316 systems that require 1 inch clearance to combustible materials. When any horizontal run of Saf-T Vent SC 316 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 inner flue bearing conduit.



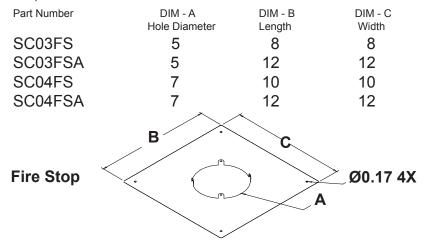


**Outer Jacket Support Clamp** — For use on horizontal systems to provide support at the required 6-foot intervals. May be used singly as a saddle to rest the vent in and hung from two rods or cables. Use in pairs by clamping around the outer jacket and suspend from a single rod or cable. Support clamps 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 halfshells and two ¼-20 nuts and bolts. Never drill or screw through the inner flue bearing conduit.

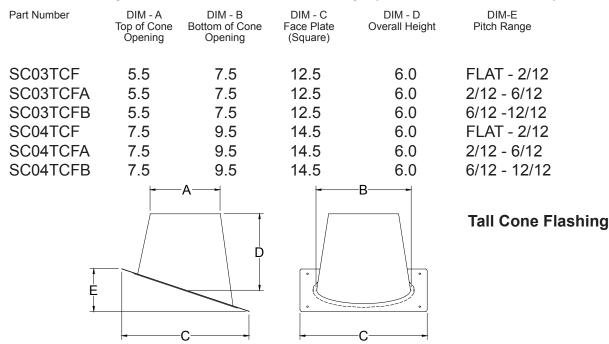


#### **Termination Accessories:**

**Fire Stop / Support / Wall Plate**— A fire stop may be required anytime Saf-T Vent SC 316 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.



**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.

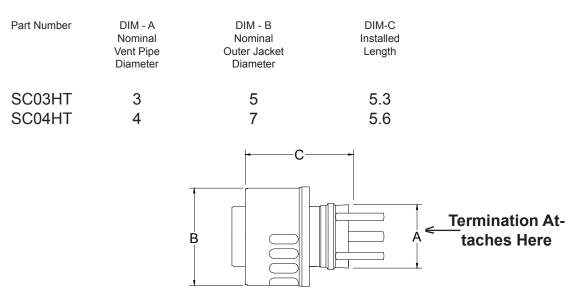


**Storm Collar** — For use with the Tall Cone Flashing (sold separately) or other roof flashings to provide support to vertical installations. The storm collar may be tightened and sealed around the vent to prevent water from entering the building. It may also be used as a decorative shield to cover 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	 — A——	Storm Collar
3	4526SS	5		
4	4726SS	7		

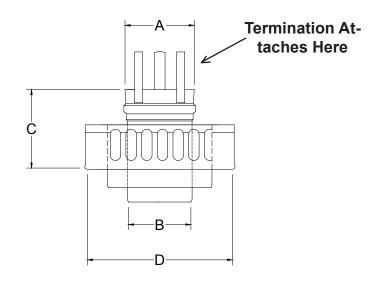
#### **Terminations:**

**Horizontal Termination Adapter**— Use to complete the Saf-T Vent SC 316 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.

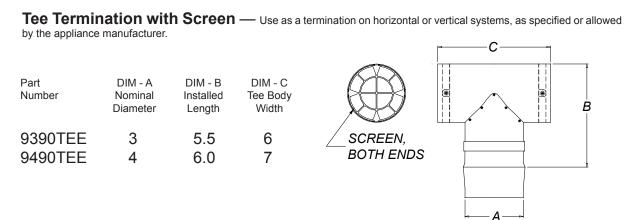


**Vertical Termination Adapter** — Use to complete the Saf-T Vent SC 316 system on vertical installations. Standard Saf-T Vent terminations connect directly to the adapter. The screened openings release excess heat from the system and must not be blocked. On Sealed Combustion systems the screened openings 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	/	3.8	9.1

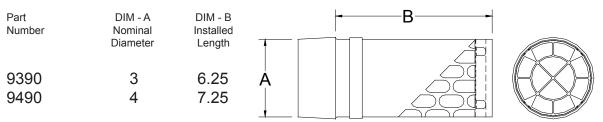


#### Terminations:



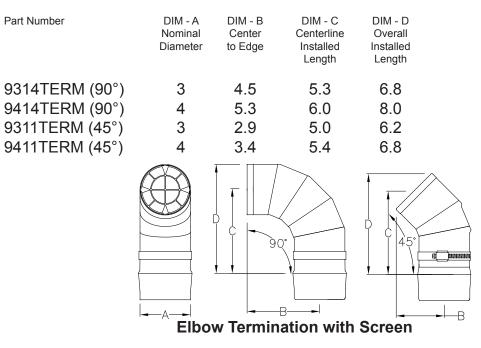
### **Tee Termination with Screen**

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



### **Mitered Termination with Screen**

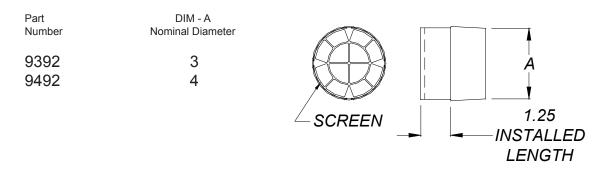
**Elbow Termination with Screen** — Use as a termination on horizontal or vertical systems, as specified or allowed by the appliance manufacturer.



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#### **Terminations:**

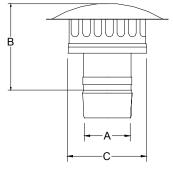
Screen Termination — Use as a termination on horizontal or vertical systems, as specified or allowed by the appliance manufacturer.



### Screen Termination

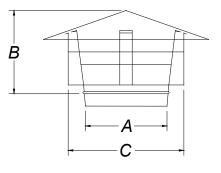
Rain Cap — Use as a termination on vertical systems. Category I and II appliances require a raincap or other device to prevent rainwater from entering the vent. Vent systems for positive pressure appliances may omit the raincap if there are other provisions for draining rainwater from the system. The 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 & I
SC04RC	4	6.3	7	Category III & I





IV Only, if system has drain. IV Only, if system has drain.



**Rain Cap** 



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