



CATALOGUE

SEPTEMBER 1998

RESIDENTIAL TYPE B GAS VENT

MODEL E/R 3" – 8"



TYPE B GAS VENT SIZING INFORMATION

In Canada, to calculate B-Vent sizing, refer to Gas Sizing Charts located in the Natural Gas Installation Code CAN/CGA B149.1 and/or the requirements of the local authorities having jurisdiction.

In U.S.A. to calculate B-Vent sizing, refer to Gas Sizing Charts located in the National Fuel Gas Code ANSI Z223.1 (NFPA 54) and/or the requirements of the local authorities having jurisdiction.



ECCO MANUFACTURING RESERVES THE RIGHT TO MAKE CHANGES IN THE PRODUCTS AND
PRODUCT SPECIFICATIONS WITHOUT NOTICE.



TYPE B GAS VENT

CERTIFICATION

- Listed by Underwriters Laboratories of Canada, File Number CMH 609.
- Listed by Underwriters Laboratories Inc., U.S.A., File Number MH 12111.



APPLICATIONS

- ECCO Type B Gas Vent is a prefabricated metal vent to be used for venting approved gas burning equipment as specified by the authorities having jurisdiction and not for incinerators or heating appliances requiring connection to chimneys. Temperatures at the outlet of the appliance draft hood shall not exceed 470°F (245°C).

MATERIALS

- The vent consists of factory made parts, designed to be assembled without requiring field fabrication.
- The inner conduit and Rain Caps consist of an aluminum alloy of Type 1100 or Type 3003.
- The outer casing consists of Galvalume steel conforming to the latest revision of ASTM A792, AZ150.
- Vent accessories consist of Galvanized steel conforming to the latest revision of ASTM A653.

INSTALLATION

- Every 30 feet of vent height requires at least one Support Plate and Ring Assembly.
- The vent shall extend at least 2 feet above the highest point where it passes through a flat roof and at least 2 feet higher than any part of the building within a horizontal distance of 10 feet.
- The vent shall extend at least 2 feet above the highest point where it passes through a pitch roof of 9/12 pitch or less and at least 2 feet higher than any other obstruction within a horizontal distance of 10 feet.
- Clearance to combustible materials shall not be less than 1 inch.
- Except for installation in single and two family dwellings, gas vents which extend through any storey above that on which the connected appliance is located are to be provided with enclosures having a fire resistance rating equal to, or greater than, that of the floor or roof assemblies through which they pass.
- To ensure a safe and proper installation, install the vent using all the parts as specified in the *Installation Instructions*.
- Bird screens may be susceptible to blockage through freezing moisture in areas of low ambient temperature. Consult authority having jurisdiction.

LOCKING INDENTATION

- assures strong and rigid connection

POSITIVE CONNECT INDICATOR

- ensures installer has achieved complete connection

INSIDE CONDUIT OF ALUMINUM

- resists corrosion

1/4" INSULATING AIR SPACE

- eliminates condensation, while keeping the outer casing cool

OUTSIDE CASING OF GALVALUME

- provides strength and durability

LOCKING TABS

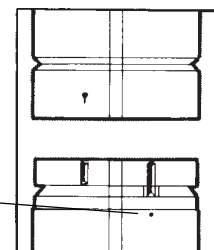
- assures positive connection

ROLL FORMED FINISH

- eliminates sharp edges
- integrates the inner and outer pipe as one unit

PUNCH MARK

- to align with locking tabs for disassembly



For proper assembly align seams.

HANGER PROVISION

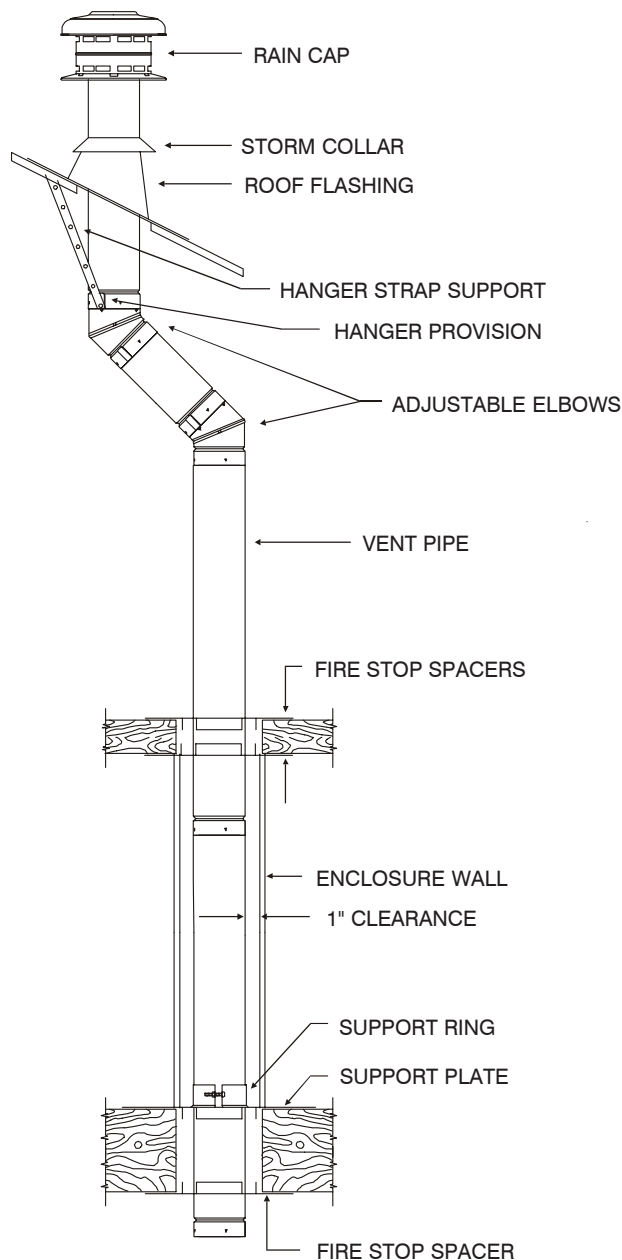
- provided on every vent pipe and elbow
- offers added convenience for installer
- allows insertion of hanger strap to assist in supporting vent



TYPE B GAS VENT SPECIFICATIONS

MODEL E/R 3" – 8"

INSTALLATION INSTRUCTIONS



NOTE: In Canada, connection to appliance and vent sizing to be in accordance with the NATURAL GAS INSTALLATION CODE, CAN/CGA-B149.1 or the PROPANE INSTALLATION CODE, CAN/CGA-B149.2 and/or the requirements of the local authorities having jurisdiction.

In U.S.A., connection to appliance and vent sizing to be in accordance with the NATIONAL FUEL GAS CODE, ANSI Z223.1 (NFPA 54), and/or the requirements of the local authorities having jurisdiction.



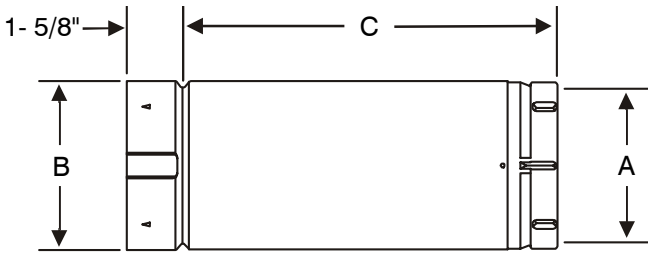
- 1) Find the best possible location for the vent, considering the location of the appliance to be vented.
- 2) At the Support Plate location, nail 2 headers between the joists with 3 1/4" nails on each side. The center distance of the headers is to be 16" x 12 1/4".
- 3) Center the Support Plate over the floor joists with Spacer Flanges down. Nail down onto joists and headers with 2 1/4" nails. (The standard Support Plate is designed to provide 1" clearance to combustible construction.) Every 30 feet of vent height requires at least one Support Plate and Ring Assembly.
- 4) Determine the location of the Support Ring on the Vent Pipe so that the correct vent height can be obtained. Clamp and fasten with the screws provided.
- 5) A Strap Release has been provided on the bottom end of the vent to assist in installations where Hanger Strap is permitted for supporting the vent. The folded portion of the strap must not extend past the release provided. The Vent can be assembled with the Strap in place.
- 6) To join Vent Pipes:
3", 4", 5" Align the seams, slide the upper vent over the lower vent and rotate the upper vent 1/4 turn to the left.
6", 7", 8" Align the seams, slide the upper vent over the lower vent and snap the lock into place.
To disassemble the vent, locate the punch mark on the bottom vent and rotate the top vent counter clockwise (to the right) until the locking tabs snap over the stops and are aligned with the punch marks. The vent can then be pulled apart.
- 7) Correctly assembled Pipes will have the bottom end of the vent meeting the step of the adjoining vent. Make sure locking tabs are securely locked behind locking edge. If not, take a screwdriver and push tabs into place. Above the roof line, use only pipes marked "FOR INTERIOR USE OR EXTERIOR USE ABOVE THE ROOF LINE".
- 8) Fire Stop Spacers are required below and above each floor and ceiling level penetrated by the vent. Nail the Fire Stop Spacers securely over each framed opening.
- 9) Nail down the Roof Flashing in a manner to drain off water.
- 10) Caulk over the Flashing and set the Storm Collar tightly over it.
- 11) Secure the Rain Cap by pushing down until snap-in head is locked. To remove the cap, grip the skirt with both hands and pull upwards with a rocking motion.
- 12) The portion of the vent which may extend through accessible spaces shall be enclosed (allowing minimum 1" clearance to combustibles) to avoid personal contact with the vent and damage to it.
- 13) Should the Vent Pipes require dismantling, simply locate a punch mark on the bottom vent and rotate the top vent to the right until the locking tabs snap over the stops. The vent can then be pulled apart.
- 14) When adjusting Elbows for offset applications, grasp both inner conduit and outer casing and the Elbows will turn freely.



TYPE B GAS VENT SPECIFICATIONS

MODEL E/R 3" – 8"

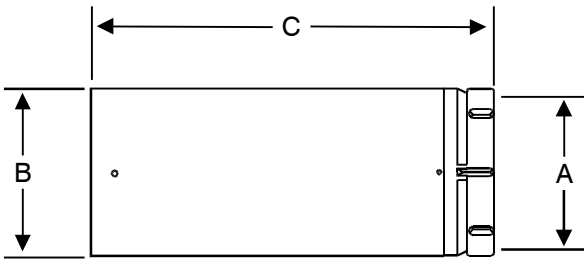
VENT PIPE — VP



		LENGTH						
		60"	48"	36"	24"	18"	12"	6"
SIZE A	B	C	C	C	C	C	C	C
3"	3 1/2"	58 3/8"	46 3/8"	34 3/8"	22 3/8"	16 3/8"	10 3/8"	4 3/8"
4"	4 1/2"	58 3/8"	46 3/8"	34 3/8"	22 3/8"	16 3/8"	10 3/8"	4 3/8"
5"	5 1/2"	58 3/8"	46 3/8"	34 3/8"	22 3/8"	16 3/8"	10 3/8"	4 3/8"
6"	6 1/2"	58 3/8"	46 3/8"	34 3/8"	22 3/8"	16 3/8"	10 3/8"	4 3/8"
7"	7 1/2"	58 3/8"	46 3/8"	34 3/8"	22 3/8"	16 3/8"	10 3/8"	4 3/8"
8"	8 1/2"	58 3/8"	46 3/8"	34 3/8"	22 3/8"	16 3/8"	10 3/8"	4 3/8"

Note: Dimension C is installed length.

VENT PIPE ADJUSTABLE — VPA

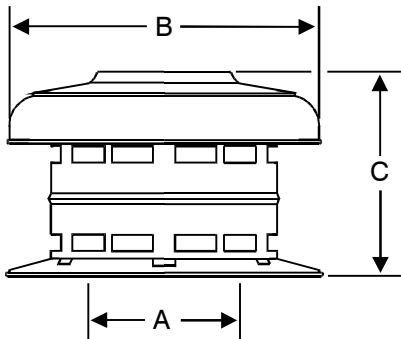


SIZE A	B	LENGTH C	
3"	3 5/8"	12"	18"
4"	4 5/8"	12"	18"
5"	5 5/8"	12"	18"
6"	6 5/8"	12"	18"
7"	7 5/8"	12"	18"
8"	8 5/8"	12"	18"

Note:

- 12" lengths adjust from 4" to 10".
- 18" lengths adjust from 4" to 16".
- Includes sheet metal screws.

RAIN CAP — RC



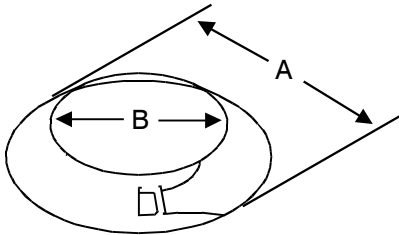
SIZE A	B	C
3"	8"	6 1/8"
4"	9 3/8"	6 1/8"
5"	10 3/4"	7"
6"	12 3/8"	7"
7"	14"	7 3/4"
8"	15 5/8"	7 3/4"



TYPE B GAS VENT SPECIFICATIONS

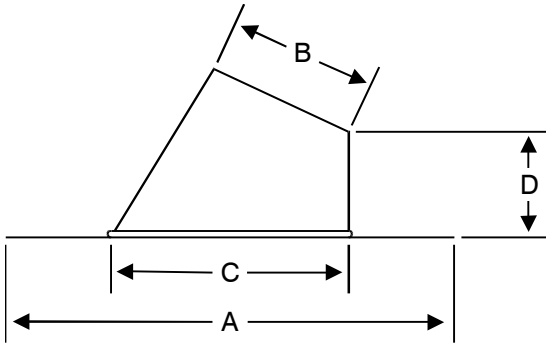
MODEL E/R 3" – 8"

STORM COLLAR — SC



SIZE	A	B
3"	6 1/4"	3 1/2"
4"	7 1/4"	4 1/2"
5"	8 1/4"	5 1/2"
6"	9 1/4"	6 1/2"
7"	10 1/4"	7 1/2"
8"	11 1/4"	8 1/2"

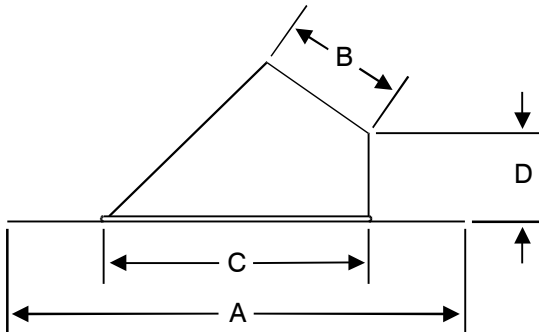
ADJUSTABLE ROOF FLASHING 1/12 – 7/12 PITCH — AF



SIZE	A	B	C	D
3"	15" × 15"	3 5/8"	7"	4"
4"	16" × 16"	4 5/8"	8"	4"
5"	17" × 17"	5 5/8"	9"	4"
6"	18" × 18"	6 5/8"	10"	4"
7"	19 1/2" × 19 1/2"	7 5/8"	11 1/2"	4"
8"	20 1/2" × 20 1/2"	8 5/8"	12 1/2"	4"

Note: Soldered roof flashings available upon request.

ADJUSTABLE ROOF FLASHING 8/12 – 12/12 PITCH — AFS



SIZE	A	B	C	D
3"	18" × 18"	3 5/8"	9 3/8"	4"
4"	19 1/2" × 19 1/2"	4 5/8"	10 5/8"	4"
5"	20 3/4" × 20 3/4"	5 5/8"	12"	4"
6"	21 3/8" × 21 3/8"	6 5/8"	13 3/8"	4"
7"	23" × 23"	7 5/8"	15"	4"
8"	24 3/8" × 24 3/8"	8 5/8"	16 3/8"	4"

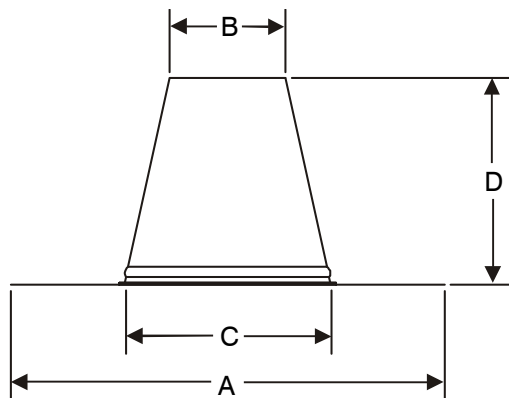
Note: Soldered roof flashings available upon request.



TYPE B GAS VENT SPECIFICATIONS

MODEL E/R 3" – 8"

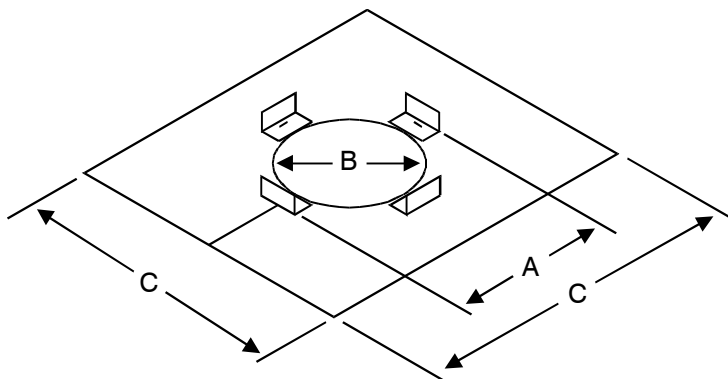
FLAT ROOF FLASHING — FF



SIZE	A	B	C	D
3"	16" × 16"	3 5/8"	8"	10"
4"	16" × 16"	4 5/8"	8"	10"
5"	18" × 18"	5 5/8"	10"	10"
6"	18" × 18"	6 5/8"	10"	10"
7"	20" × 20"	7 5/8"	12"	10"
8"	20" × 20"	8 5/8"	12"	10"

Note: All seams are soldered.

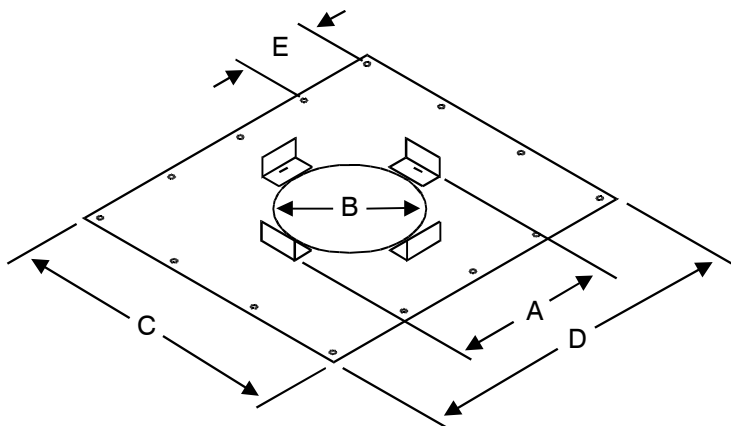
FIRE STOP SPACER — FS



SIZE	A	B	C
3"	5 5/8" × 5 5/8"	3 5/8"	13"
4"	6 5/8" × 6 5/8"	4 5/8"	13"
5"	7 5/8" × 7 5/8"	5 5/8"	13"
6"	8 5/8" × 8 5/8"	6 5/8"	13"
7"	9 5/8" × 9 5/8"	7 5/8"	13"
8"	10 5/8" × 10 5/8"	8 5/8"	13"

Note: Fire Stop Spacers are required above and below each floor and ceiling level penetrated by the vent.

SUPPORT PLATE — SP



SIZE	A	B	C	D	E
3"	5 5/8" × 5 5/8"	3 5/8"	13"	17"	4"
4"	6 5/8" × 6 5/8"	4 5/8"	13"	17"	4"
5"	7 5/8" × 7 5/8"	5 5/8"	13"	17"	4"
6"	8 5/8" × 8 5/8"	6 5/8"	13"	17"	4"
7"	9 5/8" × 9 5/8"	7 5/8"	13"	17"	4"
8"	10 5/8" × 10 5/8"	8 5/8"	13"	17"	4"

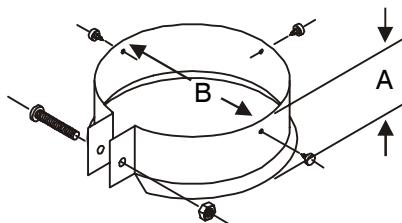
Note: Support Plate and Support Ring required for every 30 feet of vent height.



TYPE B GAS VENT SPECIFICATIONS

MODEL E/R 3" – 8"

SUPPORT RING — SR



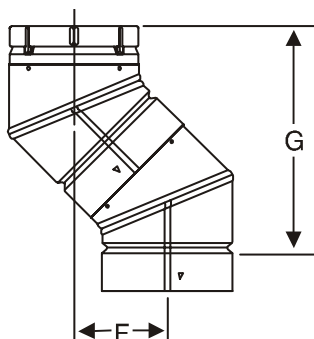
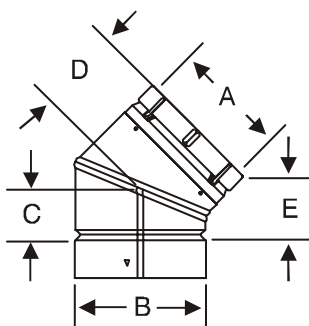
SIZE	A	B
3"	2"	3 1/2"
4"	2"	4 1/2"
5"	2"	5 1/2"
6"	2"	6 1/2"
7"	2"	7 1/2"
8"	2"	8 1/2"

Note:

- Includes Sheet Metal Screws and Assembly Bolt for installation.
- Support Plate and Support Ring required for every 30 feet of vent height.

45° ELBOW — 45EL

OFFSET



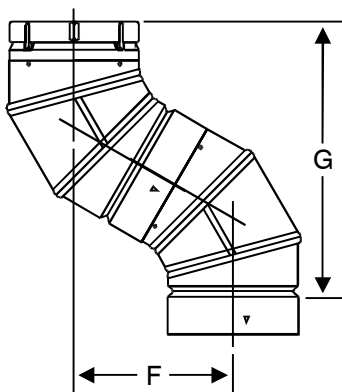
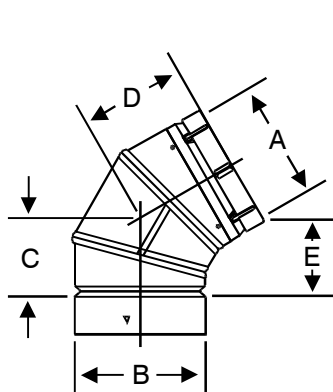
SIZE A	B	C	D	E	F	G
3"	3 1/2"	1 3/4"	3"	2 3/8"	3 1/4"	8 3/8"
7"	7 1/2"	3"	4 1/4"	3 3/8"	5"	11 7/8"
8"	8 1/2"	3 1/4"	4 1/2"	3 3/8"	5 1/2"	12 5/8"

Note:

- Adjustable 0° to 45°.
- 2-piece construction.
- Dimension G is installed length.

45°/60° ELBOW — 45EL

OFFSET



SIZE A	B	C	D	E	F	G
4"	4 1/2"	3"	4 1/4"	3 1/8"	6 1/4"	10 3/4"
5"	5 1/2"	3 1/4"	4 5/8"	3 1/4"	6 3/4"	11 3/4"
6"	6 1/2"	3 1/2"	5"	3 1/4"	7 3/8"	12 1/2"

Note:

- Adjustable 0° to 60°.
- 3-piece construction.
- Dimension G is installed length.

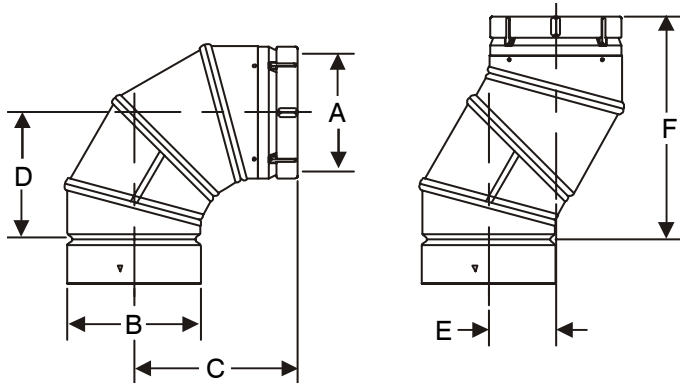


TYPE B GAS VENT SPECIFICATIONS

MODEL E/R 3" – 8"

90° ELBOW — 90EL

OFFSET

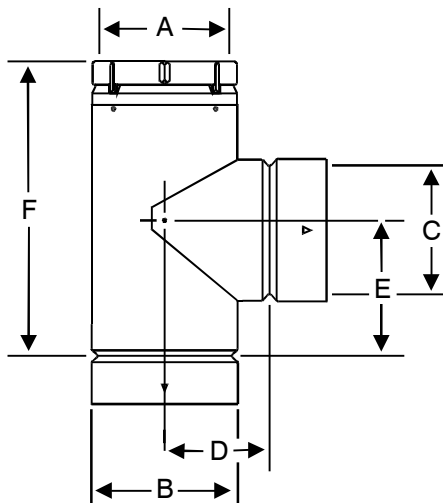


SIZE A	B	C	D	E	F
3"	3 1/2"	5 1/4"	4"	2"	7 3/8"
4"	4 1/2"	6"	4 5/8"	2 1/4"	8 5/8"
5"	5 1/2"	6 5/8"	5"	2 1/2"	9 3/8"
6"	6 1/2"	6 5/8"	5"	2 3/4"	9 3/4"
7"	7 1/2"	7 1/2"	7 1/2"	3"	11 1/4"
8"	8 1/2"	8 1/4"	6 5/8"	3"	11 3/4"

Note:

- Adjustable 0° to 90°.
- Dimension F is installed length.

DOUBLE WALL TEE — DWT

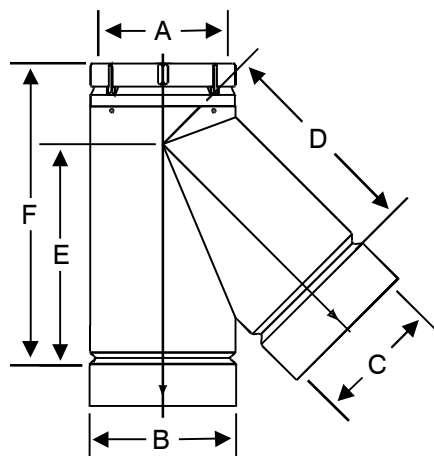


SIZE A	B	C	D	E	F
3"	3 1/2"	3"	2 3/4"	2 3/4"	7 1/16"
4"	4 1/2"	4"	3 1/4"	3 1/4"	8 1/16"
5"	5 1/2"	5"	3 3/4"	3 3/4"	9 1/16"
6"	6 1/2"	6"	4 1/4"	4 1/4"	10 1/16"
7"	7 1/2"	7"	5	4 3/4"	11 1/16"
8"	8 1/2"	8"	5 3/4"	5 1/4"	12 1/16"

Note:

- Dimension F is installed length.
- Stub dimension C may vary according to customer requirements.
- Tee Cap not included.

DOUBLE WALL WYE — DWW



SIZE A	B	C	D	E	F
3"	3 1/2"	3"	5 1/2"	5 1/4"	8 3/8"
4"	4 1/2"	4"	6 3/4"	6 5/8"	9 7/8"
5"	5 1/2"	5"	7 7/8"	7 1/2"	11"
6"	6 1/2"	6"	9"	8 7/8"	12 5/8"
7"	7 1/2"	7"	10 1/4"	10"	13 3/4"
8"	8 1/2"	8"	11 1/2"	11 1/4"	15 3/8"

Note:

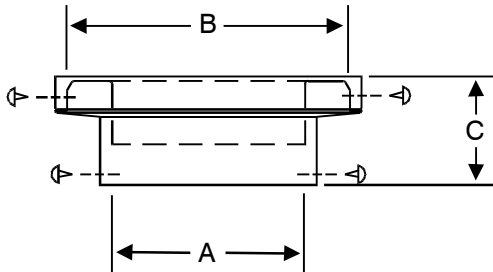
- Stub dimension C may vary according to customer requirements.
- If an Increasing Wye is required, use a standard Wye and an Increaser.



TYPE B GAS VENT SPECIFICATIONS

MODEL E/R 3" – 8"

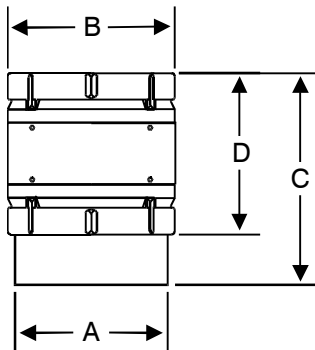
INCREASER — INC



SIZE A	B	C
3"	4"	2 1/4"
3"	5"	2 1/4"
4"	5"	2 1/4"
4"	6"	2 1/4"
5"	6"	2 1/4"
5"	7"	2 1/4"
6"	7"	2 1/4"
6"	8"	2 1/4"
7"	8"	2 1/4"

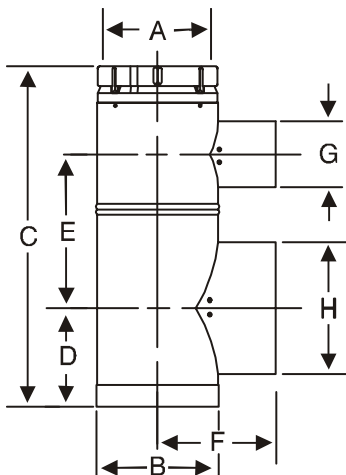
Note: Includes Sheet Metal Screws for installation.

DRAFT HOOD CONNECTOR — DHC



SIZE A	B	C	D
3"	3 1/2"	7"	5 1/2"
4"	3 1/2"	7"	5 1/2"
5"	3 1/2"	7"	5 1/2"
6"	3 1/2"	7"	5 1/2"
7"	3 1/2"	7"	5 1/2"
8"	3 1/2"	7"	5 1/2"

SINGLE WALL BASE TEE — SWT



SIZE A	B	C	D	E	F
5"	5 1/2"	15 1/4"	5 1/4"	6 1/2"	5 1/2"
6"	6 1/2"	15 1/4"	5 1/4"	6 1/2"	6"
7"	7 1/2"	15 1/4"	5 1/4"	6 1/2"	6 1/2"
8"	8 1/2"	17 1/2"	6"	7 1/2"	7"

Note:

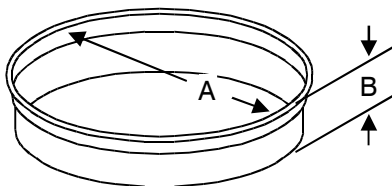
- Stub dimensions G and H may vary according to customer requirements.
- Swivel Joint allows a full 360° rotation between top and bottom of Tee.
- Factory installed Tee Cap attached to bottom of Tee.
- Also available in Aluminum if required.



TYPE B GAS VENT SPECIFICATIONS

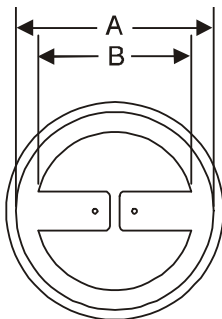
MODEL E/R 3" – 8"

SPUN TEE CAP — TC



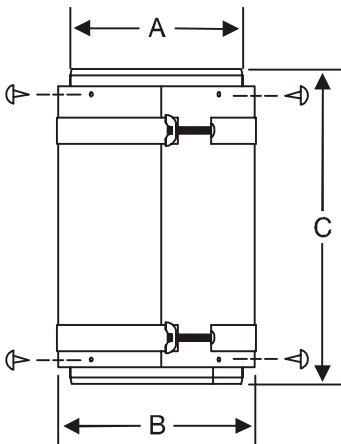
SIZE A	B
3"	1 3/4"
4"	1 3/4"
5"	1 3/4"
6"	1 3/4"
7"	1 3/4"
8"	1 3/4"

ALUMINUM TEE REDUCER C/W TAB



SIZE	A	B
4" – 3"	4"	3"
5" – 4"	5"	4"
6" – 4"	6"	4"
7" – 4"	7"	4"

B-VENT TO FLEX CONNECTOR — BF



SIZE A	B	C
3"	3 5/8"	9"
4"	4 5/8"	9"
5"	5 5/8"	9"
6"	6 5/8"	9"
7"	7 5/8"	9"
8"	8 5/8"	9"

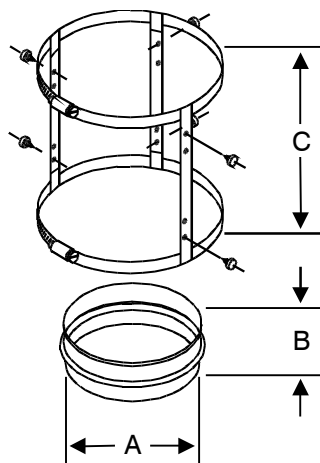
Note: Includes Sheet Metal Screws for installation.



TYPE B GAS VENT SPECIFICATIONS

MODEL E/R 3" – 8"

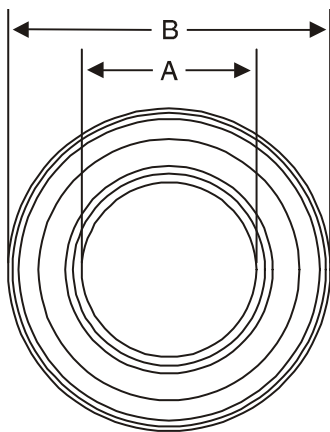
B-VENT TO B-VENT ADAPTOR — BA



SIZE A	B	C
3"	2 3/4"	6 1/2"
4"	3"	6 1/2"
5"	3"	6 1/2"
6"	3"	6 1/2"
7"	3"	6 1/2"
8"	3"	6 1/2"

Note: Includes Sheet Metal Screws for installation.

FINISH COLLAR — FC



SIZE	A	B
3"	3 5/8"	8 1/2"
4"	4 5/8"	9 1/2"
5"	5 5/8"	10 1/2"
6"	6 5/8"	11 1/2"
7"	7 5/8"	12 1/2"
8"	8 5/8"	13 1/2"

ECCO is proud to be a member of:



ASHRAE

American Society of
Heating, Refrigeration, and
Air Conditioning Engineers, Inc.



HRAI

Heating, Refrigerating
and Air Conditioning
Institute of Canada



NHRAW

Northamerican Heating,
Refrigeration &
Airconditioning
Wholesalers Association



SMACNA

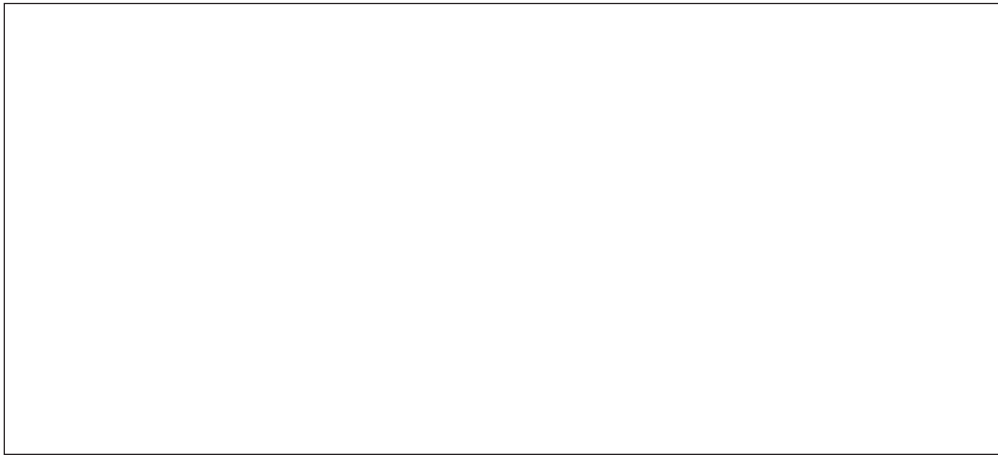
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