

Specifications

Applications

DirectVent Pro is a unitized, coaxial (concentric) venting system designed for use with direct vent gas or propane stoves, heaters, and fireplaces.

Materials and Construction

.020" aluminum inner wall.
.018" galvanized steel outer wall.
Painted outer walls made of laser-welded .018" galvalume steel. Caps also available in stainless steel and copper.
Outer pipe brings combustion air to the appliance. Inner pipe exhausts flue gases to the outside. Gaskets or sealants not required (unless specified by the appliance manufacturer).

Clearances

Specified by the appliance manufacturer.

Diameters

4" x 6 5%" and 5" x 8".

Listings

DirectVent Pro, in combination with the gas appliance, has been tested and listed as a decorative gas appliance system or as a direct vent heater system by a major testing agency, such as UL, CSA, or Warnock Hersey. Check with your appliance manufacturer for approval.

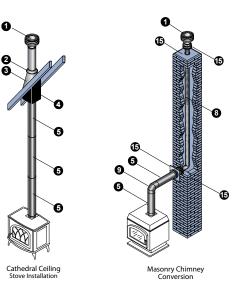
DirectVent Pro

Stunning design and Engineered Excellence® utilizing state-of-the art manufacturing. DirectVent Pro features tight inner connections for superb performance, with no gaskets or sealants required (unless specified by the appliance manufacturer). All black pipe lengths, pipe extensions, and elbows feature laser-welded outer wall seams for a sleek finish. Low-profile locks and no hems or beads allow for a beautiful product that looks elegant in any interior.

Engineered Excellence® with innovation and style...DirectVent Pro. DuraVent's direct vent is specified exclusively by nearly every major stove and fireplace manufacturer in the U.S. and Canada, with the largest choice of termination caps for direct vent available.

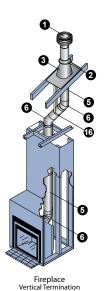


Typical Installations

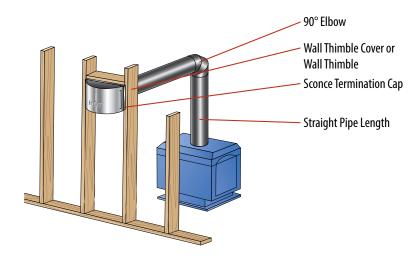


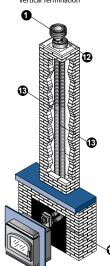
| Insta | Installation Key | | | | | | |
|-------|--------------------------------|----|---------------------------------|--|--|--|--|
| 1 | Vertical Termination Cap | 9 | 90° Elbow | | | | |
| 2 | Storm Collar | 10 | Horizontal Termination Cap | | | | |
| 3 | Flashing | 11 | Snorkel Termination Cap | | | | |
| 4 | Cathedral Ceiling Support Box | 12 | Colinear Kit | | | | |
| 5 | Pipe | 13 | 3" or 4" Flex | | | | |
| 6 | 45° Elbow | 14 | Co-Axial to Co-Linear Connector | | | | |
| 7 | Class A Chimney Conversion Kit | 15 | Masonry Chimney Conversion Kit | | | | |
| 8 | 4" Flex | 16 | Elbow Strap | | | | |

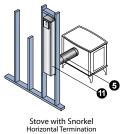
 \bullet Refer to our Typical Venting Installation drawings to select the appropriate component parts for your installation.

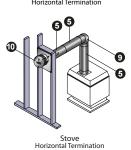












Planning Your Installation

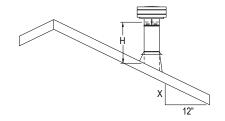
| 1 | For vertical gas stove installations, measure the height from the stove outlet to the ceiling to determine the length of black pipe required. Select a ceiling support/wall thimble cover or a cathedral ceiling support box. |
|---|---|
| 2 | To determine the length of galvanized pipe required, measure the ceiling thickness and the vertical rise in an attic or second story. Firestops are required at each floor level beyond the first floor ceiling support/wall thimble cover or cathedral ceiling support box. If an offset is required to avoid obstructions, use a pair of 45° elbows. For proper support, use elbow straps with offsets. Use wall straps for long vertical runs. Attic Insulation Shield is required in attic. |
| 3 | Measure the roof pitch. Select the proper flashing and storm collar. Determine the minimum height above the roof. |
| 4 | For horizontal installations, check the appliance manufacturer's instructions for minimum rise and maximum horizontal run. A snorkel termination may be used if height restrictions prevent adequate rise above the appliance. Select the appropriate Horizontal Termination Cap (see appliance manufacturer installation instructions). To protect vinyl siding, select vinyl siding standoff. Check appliance manufacturer's instructions for wall thimble and firestop requirements. |

Design Recommendation

The following design recommendations are general guideline to assist in the design and selection of venting components for your installation. Always follow DuraVent Installation instructions enclosed with the cap or support box before installing your chimney system. Installation instructions can be viewed online at www.duravent.com, under Catalogs and Instructions. Important: Check the manufacturer's rating plate and instruction manual to confirm that the DuraVent direct vent system is approved for use on the brand name appliance you have selected.

- The inner and outer pipe diameters should match the outlet size of the appliance.
- Check the appliance manufacturer's installation instructions to confirm which types of vent configurations are permitted (i.e. horizontal, vertical, chimney reline, etc.). Also, check for any venting restrictions such as maximum horizontal run, minimum and maximum vertical rise, maximum offset, etc.
- Be fire safe! Maintain at least the minimum clearances (air-space) between the vent pipe and nearby combustibles, as specified in the appliance manufacturer's installation instructions. Use proper support and bracing. Follow local building codes and have your venting system inspected.

Vent Termination Chart



| | Minimum Height | | | | | |
|---------------------|----------------|--------|--|--|--|--|
| Roof Pitch | Feet | Meters | | | | |
| Flat to 7/12 | 1 | 0.30 | | | | |
| Over 7/12 to 8/12 | 1.5 | 0.46 | | | | |
| Over 8/12 to 9/12 | 2 | 0.61 | | | | |
| Over 9/12 to 10/12 | 2.5 | 0.76 | | | | |
| Over 10/12 to 11/12 | 3.25 0.99 | | | | | |
| Over 11/12 to 12/12 | 4 | 1.22 | | | | |
| Over 12/12 to 14/12 | 5 | 1.52 | | | | |

Horizontal Termination Kit A



Kit includes: 90° black Elbow, Ceiling Support/Wall Thimble Cover, 24″ black Pipe, and 8 $\frac{1}{2}$ ″ black Pipe Extension. Termination cap not included. For 4″ x 6 $\frac{5}{8}$ ″ direct vent.

Choose termination cap to complete installation.

| SIZE | ORDER# | STOCK # |
|-------------|-----------|-----------|
| 4" x 6 5/8" | 46DVA-KHA | 810001267 |

Horizontal Termination Kit C

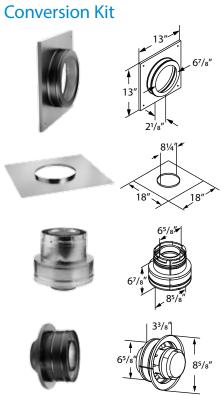


Kit includes: 90° black Elbow, Wall Thimble, Ceiling Support/Wall Thimble Cover, 24" black Pipe, and 8 $\frac{1}{2}$ " black Pipe Extension. Termination cap not included. For 4" x 6 $\frac{5}{8}$ " direct vent.

Choose termination cap to complete installation.

| SIZE | ORDER# | STOCK # |
|-------------|-----------|-----------|
| 4" x 6 5/8" | 46DVA-KHC | 810001268 |

Masonry Chimney Conversion Kit



Kit 46DVA-KMC includes: Cap Adapter, 18" x 18" Flashing, Round Ceiling Support/Wall Thimble Cover, and Retro Connector. For 4" x 6 5%" direct vent. Termination Cap and 4" flex are sold separately.

Kit 46DVA-KCT includes: Cap Adapter and an 18" x 18" Flashing.

Use with $4'' \times 6 \%''$ direct vent gas stoves. Use existing masonry chimney. Route the exhaust gases and intake air through the side of the masonry chimney.

| SIZE | ORDER# | STOCK # |
|------------|-----------|-----------|
| 4" x 6 5%" | 46DVA-KMC | 810001274 |
| 4" x 6 5%" | 46DVA-KCT | 810001275 |

Chimney Conversion Kit









Kits 46DVA-KCA, **46DVA-KCB**, and **46DVA-KCC** include: Cap Adapter and a Retro Connector. DirectVent Pro 4" x 6 5%" Termination Cap and 4" flex are sold separately.

Use with $4'' \times 6 \%''$ direct vent gas stoves. Use existing through-the-ceiling, wood-stove metal chimney. Route the exhaust gases and intake air through the existing wood-stove metal chimney.

| SIZE | ORDER# | STOCK # | Α | В | C |
|-------------|-----------|-----------|--------|--------|------|
| 4" x 6 5%" | 46DVA-KCA | 810001276 | 6 5/8" | 8 5/8" | 6 %" |
| 4" x 6 5%" | 46DVA-KCB | 810001279 | 6 5/8" | 10 ½" | 5 %" |
| 4" x 6 5/8" | 46DVA-KCC | 810001280 | 6 5/8" | 13" | 5 %" |

| 46DVA-KCA FITS: | 46DVA-KCB FITS: | 46DVA-KCC FITS: |
|---------------------|----------------------------------|--------------------|
| SDV 5"-6" DURATECH | SDV 6" DURAPLUS & 7"-8" DURATECH | SDV 7"-8" DURAPLUS |
| 6" SECURITY CHIMNEY | 8" SECURITY CHIMNEY | 7"& 8" DURAPLUS |
| 6" METALBESTOS | 7" & 8" METALBESTOS | 8" AMERICAN METALS |
| 6" JACKES-EVANS | 7" & 8" JACKES-EVANS | 8" AIR-JET |
| 6" HART & COOLEY | 7" & 8" HART & COOLEY | 8" METAL-FAB |
| 6" PRO JET | 7" & 8" PRO JET | |
| | 6" & 7" AMERICAN METALS | |
| | 6" & 7" METAL-FAB | |
| | 6" AIR-JET | |

Pipe Length



Designed for appliances tested and listed for direct vent. Features a fully unitized twist-lock construction in both $4" \times 6 \%"$ and $5" \times 8"$ vent sizes. Use of sealant is optional, unless specified by the appliance manufacturer. To calculate install length, subtract $1 \frac{1}{2}$ " for each joint. No beads or hems. Black pipe lengths feature exterior laser-welded seams.

| CIZE | | GALVA | NIZED | BLA | ACK |
|-------------|-----|----------|-----------|-----------|-----------|
| SIZE | A | ORDER# | STOCK # | ORDER# | STOCK # |
| 4" x 6 5/8" | 6" | 46DVA-06 | 810001281 | 46DVA-06B | 810001282 |
| 4" x 6 5/8" | 9" | 46DVA-09 | 810001283 | 46DVA-09B | 810001284 |
| 4″ x 6 5⁄8″ | 12" | 46DVA-12 | 810001285 | 46DVA-12B | 810001286 |
| 4" x 6 5/8" | 18" | 46DVA-18 | 810001289 | 46DVA-18B | 810001290 |
| 4" x 6 5/8" | 24" | 46DVA-24 | 810001291 | 46DVA-24B | 810001292 |
| 4" x 6 5/8" | 36" | 46DVA-36 | 810001293 | 46DVA-36B | 810001294 |
| 4" x 6 5/8" | 48" | 46DVA-48 | 810001295 | 46DVA-48B | 810001296 |
| 4″ x 6 5⁄8″ | 60" | 46DVA-60 | 810001297 | 46DVA-60B | 810001298 |
| 5" x 8" | 6" | 58DVA-06 | 810001369 | 58DVA-06B | 810001370 |
| 5" x 8" | 9″ | 58DVA-09 | 810001371 | 58DVA-09B | 810001372 |
| 5" x 8" | 12" | 58DVA-12 | 810001373 | 58DVA-12B | 810001374 |
| 5" x 8" | 18" | 58DVA-18 | 810001375 | 58DVA-18B | 810001376 |
| 5" x 8" | 24" | 58DVA-24 | 810001377 | 58DVA-24B | 810001378 |
| 5" x 8" | 36" | 58DVA-36 | 810001379 | 58DVA-36B | 810001380 |
| 5" x 8" | 48" | 58DVA-48 | 810001381 | 58DVA-48B | 810001382 |
| 5" x 8" | 60" | 58DVA-60 | 810001383 | 58DVA-60B | 810001384 |

Pipe Extension

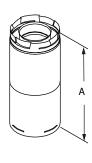


Use to add length to a straight length of DirectVent Pro. 8 ½" pipe adds 3" - 7" of length, 16" pipe adds 3" - 14 ½" of length, when used with rigid sections of pipe. Direct vent lengths feature a fully unitized, twist-lock construction. Use of sealant is optional, unless specified by the appliance manufacturer. Available in black or galvalume exterior (both feature laser-welded outer wall seams). Does not fit DirectVent GS pipe.

| SIZE | GALVANIZED | | BLACK | | ^ | EXTENSION |
|-------------|------------|-----------|------------|-----------|--------|------------|
| SIZE | ORDER# | STOCK# | ORDER# | STOCK # | A | EXTENSION |
| 4" x 6 5/8" | 46DVA-08A | 810001299 | 46DVA-08AB | 810001300 | 8 1/2" | 3" - 7" |
| 4" x 6 5/8" | 46DVA-16A | 810001287 | 46DVA-16AB | 810001288 | 16" | 3" - 14 ½" |
| 5" x 8" | 58DVA-08A | 810001385 | 58DVA-08AB | 810001386 | 8 ½" | 3" - 7" |
| 5" x 8" | 58DVA-16A | 810001387 | 58DVA-16AB | 810001388 | 16" | 3" - 14 ½" |

Adjustable Pipe



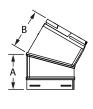


Use of sealant is optional, unless specified by the appliance manufacturer. Available in black or galvalume exterior (both feature laser-welded outer wall seams).

| | SIZE | GALVANIZED | | BLACK | | ۸ | INSTALLED |
|------|-------------|------------|-----------|-------------|-----------|-----------|---------------|
| SIZE | | ORDER# | STOCK # | ORDER# | STOCK # | Α | INSTALLED |
| | 4" x 6 5/8" | 46DVA-17TA | 810001301 | 46DVA-17TAB | 810001302 | 11"- 17" | 9 ½" - 15 ½" |
| | 4" x 6 5/8" | 46DVA-24TA | 810001305 | 46DVA-24TAB | 810007037 | 17" - 24" | 15 ½" - 22 ½" |
| | 5" x 8" | 58DVA-17TA | 810001389 | 58DVA-17TAB | 810006048 | 11"- 17" | 9 ½" - 15 ½" |
| | 5" x 8" | 58DVA-24TA | 810001390 | | | 17" - 24" | 15 ½" - 22 ½" |

30° Elbow





Use to offset obstructions as needed. Fully unitized, twist-lock construction. Elbows swivel, allowing the lock to remain fully engaged while aligning to the desired direction. The angle will remain fixed at 30°.

| SIZE | GALVAI | NIZED | Λ | В |
|-------------|-----------|-----------|--------|--------|
| | ORDER# | STOCK# | Α | В |
| 4" x 6 5/8" | 46DVA-E30 | 810001307 | 5 1/4" | 4 7/8" |
| 5" x 8" | 58DVA-E30 | 810001391 | 6 1/8" | 5 ½" |

45° Elbow



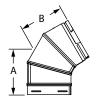


Use to offset obstructions as needed. Fully unitized, twist-lock construction. Elbows swivel, allowing the lock to remain fully engaged while aligning to the desired direction. The angle will remain fixed at 45°.

| CIZE | GALVAI | NIZED | BL/ | ACK | Λ | D |
|------------|-----------|-----------|------------|-----------|--------|-------|
| SIZE | ORDER# | STOCK# | ORDER# | STOCK# | A | В |
| 4" x 6 5%" | 46DVA-E45 | 810001308 | 46DVA-E45B | 810001309 | 5 1/4" | 47/8" |
| 5" x 8" | 58DVA-E45 | 810001393 | 58DVA-E45B | 810001394 | 6 1/8" | 5 ½" |

60° Elbow



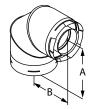


Use to offset obstructions as needed. Fully unitized, twist-lock construction. Elbows swivel, allowing the lock to remain fully engaged while aligning to the desired direction. The angle will remain fixed at 60°.

| SIZE | GALVAI | NIZED | ۸ | В | |
|-------------|-----------|-----------|--------|--------|--|
| | ORDER# | STOCK# | А | | |
| 4" x 6 5/8" | 46DVA-E60 | 810001310 | 4 1/4" | 43/8" | |
| 5" x 8" | 58DVA-E60 | 810001392 | 4 1/4" | 4 3/8" | |

90° Elbow



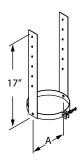


Use to offset obstructions as needed. Fully unitized, twist-lock construction. Elbows swivel, allowing the lock to remain fully engaged while aligning to the desired direction. The angle will remain fixed at 90°.

| CIZE | GALVAI | NIZED | BLA | ACK | Δ | D |
|-------------|-----------|-----------|------------|-----------|--------|--------|
| SIZE | ORDER# | STOCK # | ORDER# | STOCK # | A | В |
| 4" x 6 5/8" | 46DVA-E90 | 810001311 | 46DVA-E90B | 810001312 | 6 ½" | 6 ½" |
| 5" x 8" | 58DVA-E90 | 810001395 | 58DVA-E90B | 810001396 | 7 3/8" | 7 3/8" |

Elbow Strap



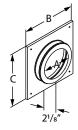


Use for supporting vent pipe between offsets.

| SIZE | ORDER# | STOCK # | А |
|-------------|----------|-----------|--------|
| 4″ x 6 5⁄8″ | 46DVA-ES | 810001313 | 6 5/8" |
| 5" x 8" | 58DVA-ES | 810001397 | 8" |

Ceiling Support/ Wall Thimble Cover



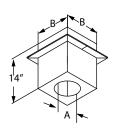


Use as a decorative cover for horizontal (through-wall) installations or for flat ceiling installations. Fits over the Wall Thimble face plate. Comes with an insulation ring to reduce air infiltration where the pipe slips through the thimble. Painted black.

| SIZE | ORDER# | STOCK # | А | В | С |
|-------------|----------|-----------|--------|-----|-----|
| 4" x 6 5/8" | 46DVA-DC | 810001314 | 6 %" | 13" | 13" |
| 5" x 8" | 58DVA-DC | 810001398 | 8 1/4" | 13" | 13" |

Cathedral Ceiling Support Box



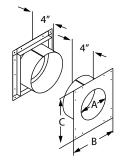


Use to pass through ceiling and support pipe. May be used on vaulted or flat ceilings. Painted black. Trim and clamp included.

| SIZE | ORDER# | STOCK # | А | В |
|------------|----------|-----------|--------|---------|
| 4" x 6 5%" | 46DVA-CS | 810001315 | 6 %" | 10 %" |
| 5" x 8" | 58DVA-CS | 810001399 | 8 1/4" | 10 5/8" |

Wall Thimble



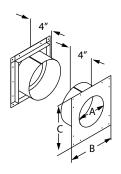


Provides a complete wall-pass-through and firestop. Use with Square Horizontal Cap only. May be required in Canada. Refer to the appliance manufacturer's installation instructions for requirements.

| SIZE | ORDER# | STOCK # | А | В | С |
|------------|----------|-----------|--------|-------|-------|
| 4" x 6 5%" | 46DVA-WT | 810001316 | 6 3/4" | 11" | 12" |
| 5" x 8" | 58DVA-WT | 810001400 | 8 1/4" | 12 ½" | 12 ½" |

Wall Thimble - Small



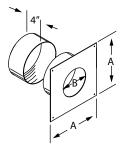


Provides a complete wall-pass-through and firestop. Use with Round Horizontal Cap, Sconce Cap, and H2 Horizontal Cap only. May be required in Canada. Refer to the appliance manufacturer's installation instructions for requirements.

| SIZE | ORDER# | STOCK # | А | В | С |
|------------|-----------|-----------|--------|-----|-----|
| 4" x 6 5%" | 46DVA-WTS | 810001317 | 63/4" | 11" | 11" |
| 5" x 8" | 58DVA-WTS | 810001401 | 8 1/4" | 11" | 11" |

Universal Wall Thimble



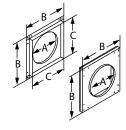


Provides a complete wall-pass-through and interior firestop. Features an adjustable sleeve for an exact fit. Eliminates visible trim on exterior or wall near cap. Sized to fit all DuraVent DirectVent Pro's termination caps. Works well for smaller square and sconce termination caps.

| SIZE | ORDER# | STOCK # | А | В |
|------------|-----------|-----------|-----|--------|
| 4" x 6 5%" | 46DVA-WTU | 810001318 | 11" | 6 3/4" |
| 5" x 8" | 58DVA-WTU | 810001402 | 11" | 8 1/8" |

Wall Firestop



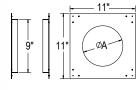


For horizontal (through-wall) installations. Refer to the appliance manufacturer's installation instructions for requirements.

| SIZE | ORDER# | STOCK # | А | В | С |
|------------|-----------|-----------|--------|-----|-----|
| 4" x 6 5%" | 46DVA-WFS | 810001319 | 6 3/4" | 12" | 10" |
| 5" x 8" | 58DVA-WFS | 810001403 | 8 1/4" | 12" | 10" |

Wall Firestop 2



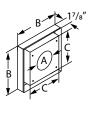


For horizontal (through-wall) installations. Refer to the appliance manufacturer's installation instructions for requirements.

| SIZE | ORDER# | STOCK # | А |
|------------|------------|-----------|--------|
| 4" x 6 5%" | 46DVA-WFS2 | 810013110 | 6 3/4" |
| 5" x 8" | 58DVA-WFS2 | 810013111 | 8 1/4" |

Vinyl Siding Standoff

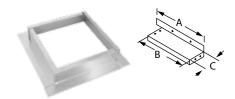




Use as a heat shield on structures with vinyl siding, or other temperature sensitive materials, to help prevent warping and or melting of the material. Use only on horizontal terminations and on any irregular surfaced siding (ie: ship lap siding, shake shingle siding) so cap is not imbedded in the siding. Sized for Square Horizontal Cap.

| SIZE | ORDER# | STOCK # | А | В | C |
|-------------|-----------|-----------|--------|-------|-------|
| 4" x 6 5/8" | 46DVA-VSS | 810001320 | 6 3/4" | 17 ½" | 13 ½" |
| 5" x 8" | 58DVA-VSS | 810001404 | 8 1/4" | 19 %" | 15 ¾" |

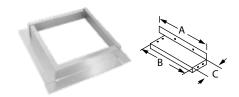
Vinyl Siding Standoff Kit



Use as a heat shield on structures with vinyl siding, or other temperature sensitive materials, to help prevent warping and or melting of the material. Use only on horizontal terminations and on any irregular surfaced siding (ie: ship lag siding, shake shingle siding) so cap is not imbedded in the siding. Kit includes 4-pieces; sized for Square Horizontal Cap only. Stainless steel (SS), and Copper (C) available.

| SIZE | ORDER# | STOCK # | А | В | С |
|------------|--------------|-----------|---------|---------|----|
| 4" x 6 5%" | 46DVA-VSK | 810001321 | 15 1/4" | 13 ¼" | 3" |
| 4" x 6 5%" | 46DVA-VSK-SS | 810001322 | 15 ¼" | 13 ¼" | 3" |
| 4" x 6 5%" | 46DVA-VSK-C | 810001326 | 15 1/4" | 13 1/4" | 3" |
| 5" x 8" | 58DVA-VSK | 810001405 | 15 1/4" | 13 ¼" | 3" |
| 5" x 8" | 58DVA-VSK-SS | 810001407 | 15 1/4" | 13 1/4" | 3" |
| 5" x 8" | 58DVA-VSK-C | 810001406 | 15 1/4" | 13 1/4" | 3" |

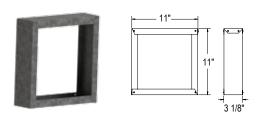
Vinyl Siding Standoff Kit: Small



Use as a heat shield on structures with vinyl siding, or other temperature sensitive materials, to help prevent warping, and or melting of the material. Use only on horizontal terminations and on any irregular surfaced siding (ie: ship lag siding, shake shingle siding) so cap is not imbedded in the siding. Kit includes 4-pieces; sized for Sconce Cap, Round Horizontal Cap, and H2 Horizontal Cap only. Stainless steel (SS) and Copper (C) available. Use for 4" x 6 %" and 5" x 8" diameters.

| SIZE | ORDER# | STOCK # | А | В | С |
|-------------|---------------|-----------|-------|-------|----|
| 4" x 6 5/8" | 46DVA-VSKS | 810001323 | 12 %" | 10 %" | 3" |
| 4" x 6 5/8" | 46DVA-VSKS-SS | 810001325 | 12 %" | 10 %" | 3" |
| 4" x 6 5/8" | 46DVA-VSKS-C | 810001327 | 12 %" | 10 %" | 3" |

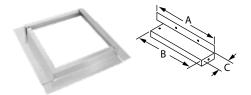
Vinyl Siding Standoff Box



Use as a heat shield on structures with vinyl siding, or other temperature sensitive materials, to help prevent warping, and or melting of the material. Use only on horizontal terminations and on any irregular surfaced siding (ie: ship lag siding, shake shingle siding) so cap is not imbedded in the siding. Sized for Sconce Cap, Round Horizontal Cap, and H2 Horizontal Cap only. Factory assembled. Use for $4" \times 6\%"$ and $5" \times 8"$ diameters.

| SIZE | ORDER# | STOCK # |
|----------------------|---------|-----------|
| 4" x 6 5%" & 5" x 8" | DVA-BVS | 810012706 |

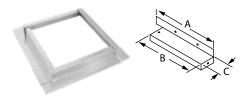
Counter Flashing



Prevents water intrusion into stucco-sided homes. Allows the installer to apply siding material (ie: stucco, brick, etc) over the flanges up to the sides of the flashing for a water-tight seal. Kit includes 4-pieces; sized for Square Horizontal Cap only.

| SIZE | ORDER# | STOCK # | Α | В | С |
|-------------|-------------|-----------|---------|-------|----|
| 4" x 6 5/8" | 46DVA-CFK | 810001339 | 15 1/4" | 13 ¼" | 2" |
| 4" x 6 5/8" | 46DVA-CFK-S | 810001342 | 15 1/4" | 13 ¼" | 2" |
| 5" x 8" | 58DVA-CFK | 810001417 | 17 %" | 15 %" | 2" |

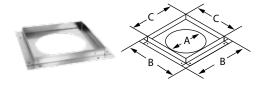
Counter Flashing: Small



Prevents water intrusion into stucco-sided homes. Allows the installer to apply siding material (ie: stucco, brick, etc) over the flanges up to the sides of the flashing for a water-tight seal. Kit includes 4-pieces; sized for $4'' \times 6 \%''$ Sconce Cap, Round Horizontal Cap, and H2 Horizontal Cap only. Also available in stainless steel (S). Use for $4'' \times 6\%''$ and $5'' \times 8''$ diameters.

| SIZE | ORDER# | STOCK # | А | В | С |
|------------|--------------|-----------|---------|-------|----|
| 4" x 6 5%" | 46DVA-CFKS | 810001341 | 12 %" | 10 %" | 2" |
| 4" x 6 5%" | 46DVA-CFKS-S | 810001340 | 12 7/8" | 10 %" | 2" |

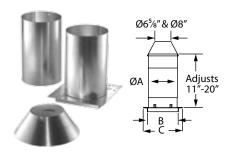
Ceiling Firestop



Required for multi-story vertical installations at the second floor and any subsequent floors. 4" x 6 %" style may vary.

| SIZE | ORDER# | STOCK # | А | В | С |
|------------|----------|-----------|--------|-------|-------|
| 4" x 6 5%" | 46DVA-FS | 810001328 | 6 3/4" | 11" | 9" |
| 5" x 8" | 58DVA-FS | 810001408 | 8 1/4" | 12 ½" | 10 ½" |

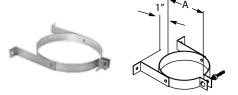
Attic Insulation Shield



Required for installations that pass through an attic to prevent insulation and debris from accumulating near the vent. Provides 1" clearance to combustibles. Includes base with tube, extension tube, and collar.

| SIZE | ORDER# | STOCK # | А | В | С |
|------------|----------|-----------|--------|------------------------------------|-----|
| 4" x 6 5%" | 46DVA-IS | 810001329 | 8 3/4" | 8 15/16" | 11" |
| 5" x 8" | 58DVA-IS | 810001409 | 10 ¾" | 10 ¹⁵ / ₁₆ " | 13" |

Wall Strap



Use to support vent pipe. Provides 1" clearance. Recommend installing Wall Straps at 4-foot intervals on vertical runs.

| SIZE | ORDER# | STOCK # | А |
|-------------|----------|-----------|--------|
| 4" x 6 5/8" | 46DVA-WS | 810001330 | 6 5/8" |
| 5" x 8" | 58DVA-WS | 810001410 | 8" |

Restrictor Disk

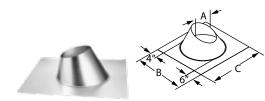




Use only in accordance with specific appliance manufacturer's installation instructions to restrict incoming combustion air.

| SIZE | ORDER# | STOCK # | А | В |
|------------|----------|-----------|--------|--------|
| 4" x 6 5%" | 46DVA-RD | 810001331 | 5 1/4" | 4 %16" |
| 5" x 8" | 58DVA-RD | 810001411 | 7" | 6" |

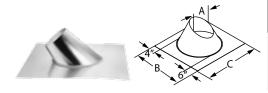
Adjustable Roof Flashing



Use to weather proof the penetration of vent pipe through the roof. Storm Collar required. Select roof flashing based on pitch of roof. For pitches of 0/12 - 6/12. Made of galvalume.

| SIZE | ORDER# | STOCK # | А | В | С |
|------------|----------|-----------|--------|-------|-------|
| 4" x 6 5%" | 46DVA-F6 | 810001332 | 6 3/4" | 19 ¼" | 19 ¼" |
| 5" x 8" | 58DVA-F6 | 810001412 | 8 1/2" | 21 ½" | 21 ½" |

Steep Roof Flashing

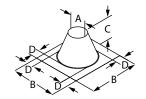


Use to weather proof the penetration of vent pipe through the roof. Storm Collar required. For roof pitches of 7/12 - 12/12. Made of galvalume.

| SIZE | ORDER# | STOCK # | А | В | С |
|-------------|-----------|-----------|--------|-------|---------|
| 4" x 6 5/8" | 46DVA-F12 | 810001333 | 63/4" | 21 ½" | 19 1/4" |
| 5" x 8" | 58DVA-F12 | 810001413 | 8 1/2" | 23 ½" | 21 ½" |

Flat Roof Flashing

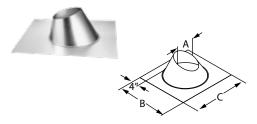




Use to weather proof the penetration of vent pipe through the roof. Storm Collar required. Use on flat roofs, chase enclosures, or masonry chimney. Made of galvalume.

| SIZE | ORDER# | STOCK # | А | В | С | D |
|-------------|----------|-----------|--------|-------|-----|----|
| 4" x 6 5/8" | 46DVA-FF | 810001334 | 6 3/4" | 21 ½" | 12" | 4" |
| 5" x 8" | 58DVA-FF | 810001414 | 8 1/2" | 23 ½" | 12" | 4" |

Dead Soft Aluminum Flashings



Use with metal or tile roofs. Available in sizes $4" \times 6 \%"$ and $5" \times 8"$, in 0/12 - 6/12 (shown) and 7/12 - 12/12 styles. Made of malleable dead soft aluminum. Refer to roof flashings tables (previous page) for dimensions.

| SIZE | STYLE | ORDER# | STOCK # | А | В | С |
|-------------|------------|-------------|-----------|--------|---------|-----|
| 4" x 6 5/8" | 0/12-6/12 | 46DVA-F6DS | 810001335 | 6 3/4" | 27 ½" | 24" |
| 4" x 6 5/8" | 7/12-12/12 | 46DVA-F12DS | 810001336 | 8 3/4" | 22" | 25" |
| 5" x 8" | 0/12-6/12 | 58DVA-F6DS | 810001415 | 8 ½" | 29 ½" | 24" |
| 5" x 8" | 7/12-12/12 | 58DVA-F12DS | 810001416 | 8 1/2" | 24 3/4" | 27" |

Storm Collar

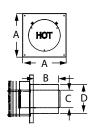


Use to maintain a weather tight resistant seal between the pipe and the flashing.

| SIZE | ORDER# | STOCK # | А | В |
|------------|----------|-----------|--------|-------|
| 4" x 6 5%" | 46DVA-SC | 810001343 | 6 5/8" | 10 %" |
| 5" x 8" | 58DVA-SC | 810001419 | 8" | 12" |

Round Horizontal Termination Cap



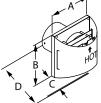


Use for through-the-wall termination. Check installation instructions for restrictions on horizontal cap terminations, such as minimum distance from windows and doors. Available in aluminum only. Check with appliance manufacturer for approval.

| SIZE | ORDER# | STOCK # | А | В | С | D |
|-------------|------------|-----------|-----|--------|----------|--------|
| 4" x 6 5/8" | 46DVA-HRCS | 810001344 | 11" | 5 3/4" | 4" | 6 5/8" |
| 5" x 8" | 58DVA-HRCS | 810001420 | 11" | 5 3/4" | 4 15/16" | 8 1/8" |

Sconce Termination Cap





Use for horizontal through-the-wall termination. Check installation instructions for restrictions on horizontal cap terminations, such as minimum distance from windows and doors. Available in aluminum, stainless steel (S), and copper (C). Check with appliance manufacturer for approval. Patented.

| SIZE | ORDER# | STOCK # | А | В | С | D |
|-------------|-------------|-----------|----------|-----|-------|---------|
| 4" x 6 5/8" | 46DVA-HSC | 810001345 | 11 1/16" | 11" | 63/8" | 12 3/8" |
| 4" x 6 5/8" | 46DVA-HSC-S | 810001346 | 11 1/16" | 11" | 63/8" | 12 ¾" |
| 4" x 6 5/8" | 46DVA-HSC-C | 810001347 | 11 1/16" | 11" | 63/8" | 12 3/8" |
| 5" x 8" | 58DVA-HSC | 810001421 | 11 1/16" | 11" | 63/8" | 12 3/8" |
| 5" x 8" | 58DVA-HSC-S | 810001422 | 11 1/16" | 11" | 63/8" | 12 3/8" |
| 5" x 8" | 58DVA-HSC-C | 810001423 | 11 1/16" | 11" | 63/8" | 12 3/8" |

High-Wind Sconce Termination Cap

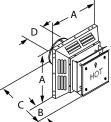


Use for horizontal through-the-wall termination. Provides improved performance in high wind conditions. Check installation instructions for restrictions on horizontal cap terminations, such as minimum distance from windows and doors. Available in aluminum, stainless steel (S), and copper (C). Check with appliance manufacturer for approval. Patented. Includes heat deflector that may be required by appliance manufacturer.

| SIZE | ORDER# | STOCK # | А | В | С | D |
|-------------|--------------|-----------|----------|-----|--------|---------|
| 4" x 6 5/8" | 46DVA-HSCH | 810001348 | 11 1/16" | 11" | 6 3/8" | 12 3/8" |
| 4" x 6 5/8" | 46DVA-HSCH-S | 810001349 | 11 1/16" | 11" | 63/8" | 12 3/8" |
| 4″ x 6 5⁄8″ | 46DVA-HSCH-C | 810001350 | 11 1/16" | 11" | 63/8" | 12 3/8" |
| 5" x 8" | 58DVA-HSCH | 810001424 | 11 1/16" | 11" | 63/8" | 12 3/8" |
| 5" x 8" | 58DVA-HSCH-S | 810001425 | 11 1/16" | 11" | 63/8" | 12 3/8" |
| 5" x 8" | 58DVA-HSCH-C | 810001426 | 11 1/16" | 11" | 63/8" | 12 3/8" |

Square Horizontal Termination Cap





Use for standard and high-wind through-the-wall termination. Check installation instructions for restrictions on horizontal cap terminations, such as minimum distance from windows and doors. Available in aluminum, stainless steel (S), and copper (C).

| SIZE | ORDER# | STOCK # | A | В | C | D |
|-------------|------------|-----------|-------|------|---------|--------|
| 4" x 6 5%" | 46DVA-HC | 810001351 | 13 ½" | 6 %" | 12 ½" | 6 5/8" |
| 4″ x 6 5⁄8″ | 46DVA-HC-S | 810001352 | 13 ½" | 6 %" | 12 ½" | 6 5/8" |
| 4″ x 6 5⁄8″ | 46DVA-HC-C | 810001353 | 13 ½" | 6 %" | 12 1/2" | 6 5/8" |
| 5" x 8" | 58DVA-HC | 810001427 | 16" | 6 %" | 12 1/2" | 8 1/8" |
| 5" x 8" | 58DVA-HC-S | 810001428 | 16" | 6 %" | 12 1/2" | 8 1/8" |
| 5" x 8" | 58DVA-HC-C | 810001429 | 16" | 6 %" | 12 1/2" | 8 1/8" |

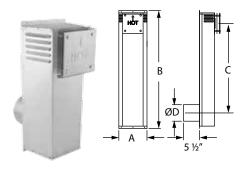


Use for standard and high-wind through-the-wall termination. Provides improved performance in high wind conditions. Features an adjustable air intake and interchangeable shroud (shroud is included and required for all installations). Check installation instructions for restrictions on horizontal cap terminations, such as minimum distance from windows and doors. Available with aluminum shroud. Check with appliance manufacturer for approval and air throttle setting. May be painted at installation to match the wall. Patent Pending.

| Termination Cap with AL Shroud | | | | | | | |
|--------------------------------|---------------|-------------|-----------------|--|--|--|--|
| SIZE | ORDER# | STOCK # | Α | | | | |
| 4″ x 6 5⁄8″ | 46DVA-H2 | 810012624 | 63/4" | | | | |
| 5" x 8" | 58DVA-H2 | 810012625 | 8 1/8" | | | | |
| Alterna | te / Replacen | nent Shroud | | | | | |
| SIZE | ORDER# | STOCK # | Material | | | | |
| 4" x 6 %" & 5" x 8" | DVA-TR-AL | 810013071 | Aluminum | | | | |
| 4 X 0 78 & 5 X 8 | DVA-TR-SS | 810013072 | Stainless Steel | | | | |
| | | | | | | | |



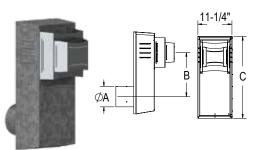
Snorkel Termination Cap



Use for horizontal through-the-wall termination when a vertical rise is desired in the system to meet appliance manufacturer recommended minimum heights. Do not enclose in the wall or install below grade.

| SIZE | ORDER# | STOCK # | А | В | С |
|------------|-------------|-----------|-----|---------|-----|
| 4" x 6 5%" | 46DVA-SNK14 | 810001355 | 10" | 23 ¾" | 14" |
| 4" x 6 5%" | 46DVA-SNK36 | 810001356 | 10" | 45 3/4" | 36" |
| 5" x 8" | 58DVA-SNK14 | 810001430 | 10" | 23 ¾" | 14" |
| 5" x 8" | 58DVA-SNK36 | 810001431 | 10" | 45 3/4" | 36" |

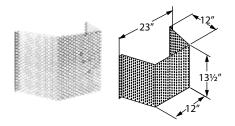
Snorkel H2 Termination Cap



Use for horizontal through-the-wall termination when a vertical rise is desired in the system to meet appliance manufacturer recommended minimum heights. Do not enclose in the wall or install below grade. Provides improved performance in high wind conditions. Features an adjustable air intake and interchangeable shroud (shroud is included and required for all installations). Check with appliance manufacturer for approval and air throttle setting. Patent Pending.

| SIZE | ORDER# | STOCK # | Α | В | С |
|------------|----------------|-----------|--------|-------|-------|
| 4" x 6 5%" | 46DVA-H2-SNK14 | 810012915 | 6 3/4" | 14 ½" | 27" |
| 4" x 6 5%" | 46DVA-H2-SNK36 | 810012916 | 6 3/4" | 37" | 49 ½" |
| 5" x 8" | 58DVA-H2-SNK14 | 810012917 | 8 1/8" | 15" | 28" |
| 5" x 8" | 58DVA-H2-SNK36 | 810012918 | 8 1/8" | 37 ½" | 50 ½" |

Horizontal Windguard

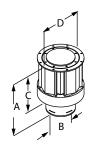


Use with through-the-wall termination cap where high winds are present. Also use as a safety heat shield to prevent children or others from coming into contact with the vent termination cap. Fits both $4" \times 6\%"$ and $5" \times 8"$ terminations.

| SIZE | ORDER# | STOCK # |
|--------------------|----------|-----------|
| 4" x 6 %" & 5"x 8" | 46DVA-WG | 810001357 |

High-Wind Termination Cap



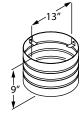


Use for vertical terminations only. Provides improved performance in high wind conditions. For vertical terminations only. Available in aluminum.

| SIZE | ORDER# | STOCK # | А | В | С | D |
|-------------|-----------|-----------|---------|--------|--------|-------|
| 4″ x 6 5⁄8″ | 46DVA-VCH | 810001359 | 12 3/8" | 6 5/8" | 7 5/8" | 10 ½" |
| 5" x 8" | 58DVA-VCH | 810001432 | 12 3/8" | 8" | 7 5%" | 10 ½" |

Vertical Wind Guard



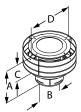


Use only with High Wind Termination Cap when additional wind protection is needed. Fits both $4'' \times 6\%''$ and $5'' \times 8''$ terminations.

| SIZE | ORDER# | STOCK # |
|------------|-----------|-----------|
| 4" x 6 5%" | 46DVA-VWG | 810001358 |

Low-Profile Termination Cap





Use for vertical terminations only. Check the appliance manufacturer's instructions to determine which caps are approved for use with their appliance. Available in aluminum and stainless steel (S).

| SIZE | ORDER# | STOCK # | А | В | С | D |
|-------------|------------|-----------|--------|-------|--------|-------|
| 4" x 6 5%" | 46DVA-VC | 810001360 | 8 1/4" | 6 %" | 3 1/4" | 12 ½" |
| 4" x 6 5/8" | 46DVA-VC-S | 810001361 | 8 1/4" | 6 5%" | 3 1/4" | 12 ½" |
| 5" x 8" | 58DVA-VC | 810001433 | 8 5/8" | 8″ | 7 %" | 14 ½" |
| 5" x 8" | 58DVA-VC-S | 810001434 | 8 5/8" | 8" | 7 5%" | 14 ½" |

Extended Vertical Termination Cap



Use in extremely cold climates. Similar to the Low Profile Termination Cap but taller in overall height to separate the air intake vents from the exhaust area. Refer to the appliance manufacturer's installation instructions for requirements. Available in aluminum.

| SIZE | ORDER# | STOCK # | А | В | С | D |
|-------------|-----------|-----------|-------|--------|-------|-------|
| 4" x 6 5/8" | 46DVA-VCE | 810001362 | 16 ¾" | 6 5/8" | 11 ¾" | 12 ½" |
| 5" x 8" | 58DVA-VCE | 810001435 | 16 ¾" | 8" | 11 %" | 14 ½" |

Aluminum Flex Length



Use 3" flex with the co-linear system and 4" flex with Conversion Kits. See DuraFlex AL section for more information. Flexible .010" thick 2-ply aluminum. Pricing for Aluminum Flex Length are listed under DuraFlex AL.

| SIZE | LENGTH | ORDER# | STOCK # |
|------|--------|---------|-----------|
| 3" | 35′ | 3DFA-35 | 810002988 |
| 4" | 35′ | 4DFA-35 | 810002998 |

Flex Coupling



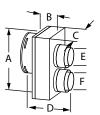


Use to join flex liner sections together. Pricing for Aluminum Flex Length are listed under DuraFlex AL.

| SIZE | ORDER# | STOCK # |
|------|---------|-----------|
| 3" | 3DFA-FC | 810002992 |
| 4" | 4DFA-FC | 810003000 |

Co-Axial To Co-Linear Appliance Connector

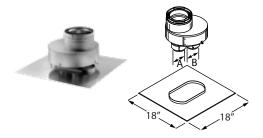




Use Co-Linear Adapter for stoves with 4" X 6 %" co-axial outlets. Refer to appliance manufacturer's installation instructions for approval. Uses aluminum flex for both intake and exhaust.

| SIZE | CONNECTOR | ORDER# | STOCK # | А | В | С | D | Е | F |
|-------------|----------------------|-------------|-----------|-------|----|------|--------|----|----|
| 4" x 6 5/8" | STANDARD | 46DVA-GCL | 810001363 | 10 ½" | 3" | 7 ½" | 7 1/8" | 3″ | 3" |
| 4" x 6 5%" | STANDARD | 46DVA-GCL34 | 810004565 | 10 ½" | 3″ | 7 ½" | 7 1/8" | 4" | 3" |
| 4" x 6 5%" | TRAVIS Industries | 46DVA-TCL | 810001364 | 10 ½" | 3" | 7 ½" | 63%" | 3″ | 3″ |
| 4" x 6 5%" | VERMONT CASTINGS | 46DVA-VCL | 810001365 | 10 ½" | 3″ | 7 ½" | 8 5/8" | 3" | 3" |

Chimney Liner Termination Kit



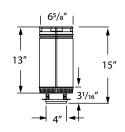
Kit includes: Termination Connector and Flashing. DirectVent Pro 4" x 6 %" Termination Caps, 3" Flex, and Co-Linear Flex Connectors are sold separately.

DirectVent Pro chimney liner termination kit must be tested and listed for each appliance. Refer to stove manufacturer's installation instructions.

| SIZE | ORDER# | STOCK # | 0A | 0B |
|------------|----------|-----------|----|----|
| 4" x 6 5%" | 46DVA-GK | 810001269 | 3" | 3" |
| 4" x 6 5%" | 46DVA-CT | 810001368 | 4" | 3" |

Appliance Adapter





Attaches to appliance outlet allowing pipe to easily connect or disconnect. Vermont Castings adapter #2768.

| SIZE | ORDER# | STOCK # | |
|------------|-----------|-----------|--|
| 4" x 6 5%" | 46DVA-ADP | 810001366 | |

Reducer



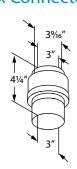


Use to reduce vent diameter. Check with appliance manufacturer for approval.

| SIZE | REDUCE TO | ORDER# | STOCK # | Α | В |
|-----------|-----------|-----------|-----------|--------|--------|
| 5" X 8" | 4" x 6 %" | 58DVA-X46 | 810001436 | 6 5/8" | 8" |
| 6" X 8 %" | 5" X 8" | 68DVS-X58 | 810006145 | 8" | 8 5/8" |

Co-Linear Flex Connector

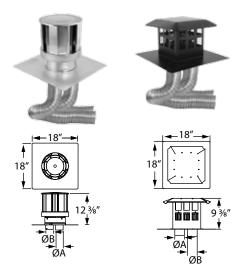




Use as a flex connector with inserts with 3" co-linear intake and exhaust ports.

| SIZE | ORDER# | STOCK # |
|------------|-----------|-----------|
| 4" x 6 5%" | 46DVA-ADF | 810001367 |

Co-Linear Kit w/ Flex



Use when installing a direct vent co-linear insert into a masonry chimney.

Kit includes: Choice of High-Wind Termination Cap or Prairie Termination Cap; and two pieces of Aluminum Flex lengths - one Red (exhaust), and one Green (air intake). See chart for diameters and lengths.

| CAP SIZE | ORDER# | STOCK # | A (RED FLEX EXHAUST) | B (AIR INTAKE) | CAP STYLE |
|------------|-------------|-----------|----------------------------|-------------------|--------------|
| 4" x 6 5%" | 46DVA-CL33 | 810001270 | 3" x 35' | 3" x 35' | HIGH-WIND |
| 4" x 6 5%" | 46DVA-CL33H | 810001271 | 3" x 35' | 3" x 4' | HIGH-WIND |
| 4" x 6 5%" | 46DVA-CL34 | 810001272 | 4" x 35' | 3" x 35' | HIGH-WIND |
| 4" x 6 5%" | 46DVA-CL33P | 810001277 | 3" x 35' | 3" x 35' | PRAIRIE |
| 4" x 6 5%" | 46DVA-CL34P | 810001278 | 4" x 35' | 3" x 35' | PRAIRIE |

Direct Vent Factory-Built Reline Kit



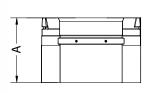
Use when installing a direct vent co-linear insert into an existing factory-built chimney.

Kit includes: High-Wind Termination Cap, Two pieces of Aluminum Flex Lengths, and 4 hose clamps.

| CAP SIZE | ORDER# | STOCK# | A (RED FLEX EXHAUST) | B (AIR INTAKE) | CAP STYLE |
|------------|---------------|-----------|----------------------------|-------------------|--------------|
| 4" x 6 5%" | 46DVA-CL33KFB | 810007970 | 3" x 35' | 3" x 35' | HIGH-WIND |
| 4" x 6 5%" | 46DVA-CL34KFB | 810009663 | 4" x 35' | 3" x 35' | HIGH-WIND |

Mounting Adapter



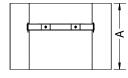


Attaches to the 5" x 8" vented fireplace, this will allow the Montigo Fireplace to use DuraVent 5" x 8" DirectVent pipe.

| SIZE | ORDER# | STOCK# | А |
|---------|-------------|-----------|---------------------------------|
| 5" x 8" | 58DVA-AD-M1 | 810013351 | 5 ¹ / ₄ " |

Termination Adapter

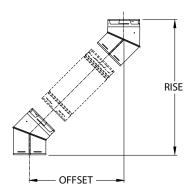




Attaches to the DuraVent DirectVent pipe, so that it can be connected to the approved Montigo Termination Cap.

| SIZE | ORDER # | STOCK# | А |
|---------|-------------|-----------|--------|
| 5" x 8" | 58DVA-AD-M2 | 810013352 | 5 1/4" |

Offset Chart



| SIZE | | 4" x 6 5/8" | | 5" x 8" | |
|---------|---------|-------------|---------|---------|---------|
| Elbow | Chimney | Offset | Rise | Offset | Rise |
| Degrees | Section | Inches | Inches | Inches | Inches |
| 30° | 0" | 3 5%" | 14 7/8" | 3 5/8" | 14 1/8" |
| 30° | 6" | 5 %" | 20 3/4" | 5 %" | 20 3/4" |
| 30° | 9″ | 7 3/8" | 21 3/8" | 7 3/8" | 21 3/8" |
| 30° | 12" | 8 1/8" | 23 1/8" | 8 1/8" | 23 1/8" |
| 30° | 18" | 11 1/8" | 29 1/8" | 11 1/8" | 29 1/8" |
| 30° | 24" | 14 1/8" | 32 | 14 1/8" | 32 |
| 30° | 36" | 20 1/8" | 44 3/4" | 20 1/8" | 44 3/4" |
| 30° | 48" | 26 1/8" | 55 1/8" | 26 1/8" | 55 1/8" |
| 30° | 60" | 32 1/8" | 65 ½" | 32 1/8" | 65 ½" |
| 45° | 0" | 5" | 13 ½" | 5 5/8" | 15 3/8" |
| 45° | 6" | 8 1/8" | 16 5/8" | 8 1/8" | 18 3/8" |
| 45° | 9″ | 10 1/4" | 18 3/4" | 10 1/8" | 20 5/8" |
| 45° | 12" | 12 3/8" | 20 1/8" | 13 | 20 1/8" |
| 45° | 18" | 16 5/8" | 25 1/8" | 16 5/8" | 22 5/8" |
| 45° | 24" | 20 1/8" | 29 3/8" | 21 3/8" | 31 1/8" |
| 45° | 36" | 29 3/8" | 37 1/8" | 29 1/8" | 39 3/8" |
| 45° | 48" | 37 1/8" | 46 3/8" | 38 1/8" | 47 1/8" |
| 45° | 60" | 46 3/8" | 54 1/8" | 46 5/8" | 55 ½" |
| 60° | 0" | 6 1/8" | 12 1/4" | 6 1/8" | 12 1/4" |
| 60° | 6" | 10 1/8" | 14 1/2" | 10 1/8" | 14 ½" |
| 60° | 9″ | 12 5/8" | 16 | 12 5/8" | 16 |
| 60° | 12" | 15 1⁄4" | 17 ½" | 15 1⁄4" | 17 ½" |
| 60° | 18" | 20 ½" | 20 1/2" | 20 ½" | 20 1/2" |
| 60° | 24" | 25 5/8" | 23 ½" | 25 5/8" | 23 ½" |
| 60° | 36" | 36 | 29 1/2" | 36 | 29 1/2" |
| 60° | 48" | 46 1/2" | 35 ½" | 46 1/2" | 35 ½" |
| 60° | 60" | 567/8" | 41 ½" | 567/8" | 41 ½" |