

Chimney Lining Systems & Direct Vent





Z-FLEX® Aluminum Liner Kits and Connectors

Aluminum Chimney Gas Liner Kits GAS APPLICATIONS

Z-FLEX[®] Aluminum Chimney Liner Kits come complete with everything needed to quickly and easily install a professional venting system.

Z-FLEX[®] liner is manufactured using a dead soft aluminum strip which is spirally wound and mechanically joined together forming an air-tight and leakproof Triple Lock[™] seam.

Z-FLEX^{*'}s specially designed corrugations provide excellent flexibility while maintaining superior crush strength. The result is a clearly superior product offering incredible longevity.





Aluminum Liner Kit Includes:

2-Ply Aluminum Liner Chimney Flashing Rain Cap Mortar Collar 3 Screws Part No.: 2GACKIT Dia.: _____ | Lgth.:_____ Dia.: 3", 4", 5", 6", 7", 8", 10" Lengths: 15ft. - 50ft.

- Patented Triple Lock® design for strength
- Right sized packaging to lower shipping costs
- Best available materials/alloys

- 40+ years of manufacturing experience
- "Immediate" availability (24-72 hour lead time)
- Listed by Underwriters Laboratories



Z-FLEX Insul-liner®

Pre-Insulated Chimney Liner for Category 1 Natural Draft Gas Heating Equipment & Gas Fireplaces

- Insul-Liner® is another "simple solution" from Z-FLEX®. The National Fuel Gas Code (NFPA 54, ANSI Z223.1) recommends that liners be insulated in certain situations.
- A good rule of thumb is to use an insulated liner in exterior chimneys or when a brick chimney has no clay liner at all. The insulation will keep the flue gases warm to prevent condensation. Also refer to the equipment manufacturer's instructions for their recommendations.
- Insul-Liner[®] replaces B-Vent when relining a masonry chimney.
- Insul-Liner® is insulated at the factory and protected with an outer aluminum jacket. This eliminates the time needed to insulate on the job site and prevents damage to the insulation during installation. Simply remove from the box and install

Insul-liner® Kit Includes:

Insulated Aluminum Liner Chimney Flashing Rain Cap Mortar Collar 3 Screws Part No.: 2GIAKXX Dia.:____ | Lgth.:_ Dia.: 3", 4", 5", 6", 7", 8" Lengths: 15'



Insul-liner[®] Gas Fireplace Kit Includes:

Insulated Aluminum Liner Chimney Flashing Rain Cap Fireplace Connector 3 Screws Part No.: 2GIAFKX Dia.:____ | Lgth.:_ Dia.: 4", 5", 6" Lengths: 15ft.





Fireplace Connector Gas Fireplace Kits only. Part No.: 2ZSCPRP Dia.: Dia.: 3", 4", 5", 6", 7", 8"



Nose Cone Part No.: 2NCXXXX Dia.:____ Dia.: 3", 4", 5", 6", 7", 8", 10"



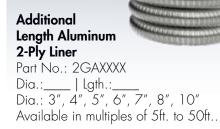


Dia.: Dia.: 3", 4", 5", 6", 7", 8", 10" Custom sizes available. Used to attach two lengths of vent.

Liner Coupling



Dia.: Dia.: 3", 4", 5", 6", 7", 8", 10" Connects any B-Vent to Z-FLEX® liner.





Z-FLEX® Features and Benefits

Z-Flex[®] Triple Lock[®] - Manufactured from 316Ti, titanium stabilized, nickel, chromium, molybdenum stainless steel. Excellent resistance to the corrosive effects of flue gases. Suitable for extended periods at elevated temperatures without compromising corrosion resistance. A superior 29-4C grade stainless steel option is also available for conditions requiring greater resistance to acidic attack.

Construction - Triple Lock® Joint System; acknowledged to be the best available for strength and longevity. Stainless steel strip is spirally wound and mechanically joined together forming an air tight and leak-proof **Triple Lock®** seam. The corrugated outer wall provides crush protection during installation. The thin walled corrugated construction conducts heat quickly, aiding draft and discouraging the buildup of soot and other potentially corrosive residue.

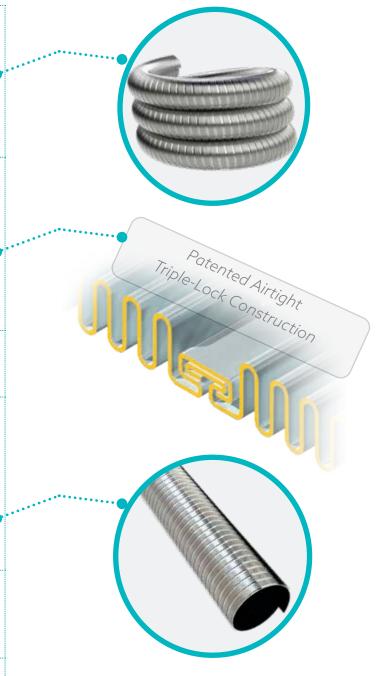
Dimensions - Available in a range of sizes suiting all applications, from 2" to 24" diameter. Supplied in standard lengths up to 50 ft.

Triple Lock® Smoothcore Construction - Twin Strip (2 ply) construction. The corrugated outer wall provides crush resistance during installation. The inner wall is smooth, permitting the smooth flow of flue gases and impeding the build up of soot and other potentially corrosive residue. The inner and outer walls are joined by a **Triple Lock® Joint System**; acknowledged to be the best available for strength and longevity.

Approval - Z-Flex[®] Triple Lock[®] Chimney Liner Systems are listed and labelled by Underwriters Laboratories to UL1777 and ULC S635, Chimney Lining Systems for existing Masonry and Factory Built Chimneys. Warranty - Lifetime Limited Warranty.

When to Z-FLEX[®] a Chimney

- When a masonry chimney has no liner at all
- When damage to existing chimney lining is evident
- When retrofit appliance has fan-assisted combustion and is vented alone



- When additional or replacement equipment is installed or an appliance is converted to gas from another fuel
- When the existing chimney is oversized relative to heating requirement

Smoothcore Triple Lock® Liner eliminates turbulence inherent with corrugated liners, improving draft. Resists corrosive attack by not impeding the flow of condensate down the liner. Less opportunity for soot to accumulate.







Z-FLEX[®] Stainless Steel Chimney Kits Everything you need to get the job done right

Triple Lock® Stainless Steel ALL FUEL APPLICATIONS

- **Z-FLEX**[®] Stainless Steel Chimney Liner Kits come complete with everything you need to quickly and easily install a professional venting system.
- Patented Airtight Triple Lock[®] Construction
 Ideal for use with gas, oil, pellets and wood. (For use with coal, see warranty). The
 patented Triple Lock[®] construction is tested and listed by U.L. Triple Lock[®] is accepted
 by industry as the strongest joint system available.
- Manufactured from special high temperature and acid 316Ti resistant stainless.
- **Z-FLEX***'s specially designed corrugations provide excellent flexibility while maintaining superior crush strength. The result is a clearly superior product offering incredible longevity.



All Fuel Insert Kit Includes:

Stainless Steel Liner Chimney Flashing Rain Cap Stove Adaptor Part No.:2OILKTX_I Dia.:____ | Lgth.:____ Dia.: 3"-24" | Lengths: 50ft.



Smoothcore Kit Includes: Smoothcore Stainless Steel Liner Chimney Flashing Rain Cap Z-Lok Tee Part No.: 2ZFSCKIT Dia.: _____ | Lgth.:____ Dia.: 5"-8" | Lengths: 50ft.



Universal All Fuel Kit Includes:

Stainless Steel Liner Chimney Flashing Rain Cap Dripless Connector Rigid Stacking Tee Part No.:2ZFLKTO Dia.:_____ | Lgth.:____ Dia.: 3"-24" | Lengths: 50ft.



ellet Wood

ISTED

1777 635

Triple Lock® Stainless Steel Flex Liner & Accessories ALL FUEL APPLICATIONS



Triple Lock[®] Stainless Steel Flex Liner

Part No.: 2ZLSSXX Dia.:____ | Lgth.:_ Part No.: 2ZL294C Dia.:____ | Lgth.:____ Dia.: 2" - 24" Lengths: Up to 50 ft. or multiples of 5 ft.

Triple Lock[®] Smoothcore Flex Liner

Part No.: 2ZLSCXX Dia.:____ | Lgth.:_ Dia.: 5" - 8" Lengths: 5 ft. to 20 ft. **Heavy Wall** Flex Liner Part No.: 2ZLMHLXX Dia.:____ Lgth.:__ Dia.: 3" – 8"

5 ft.



4" Flex Ready Pellet Tee with 3" Branch Part No.: 2ZPT43 Connects Z-Flex to solid fuel inserts where space is minimal.



Z-Lok Tee

Part No.: 2ZFTJ Dia.:____ Dia.: 3" - 8" Flex ready tool-less connection.



(Fully welded) Part No.: 2ZOA30 Dia.: Dia.: 3" - 10"

Lengths: Up to 50 ft. or multiples of



45° Fixed Offset Adaptor (Fully welded) Part No.: 2ZOA45 Dia.: Dia.: 3" - 10"



30° Flex Ready Swivel Offset Adaptor

Part No.: 2ZOA30_ _A Dia.:____ Dia.: 3″ – 8″ Flex ready tool-less connection.



90° Flex Ready **Swivel Offset** Adaptor Dia.:___



Part No.: 2ZOA90_ _A Dia.: 3" - 10"



Triple Lock® Stainless Steel Flex Liner & Accessories ALL FUEL APPLICATIONS

Z-Max[®] Deluxe Rain Cap & Flashing

Rain Cap: 2ZMRCS Flashing: 2AFCS_ with 13"x13" base Flashing: 2AFCX_ with 18"x18" base Dia.:

Dia.: 3" - 10"

Z-Max[®] Rain Cap prevents moisture and debris entering the chimney. Pre-stressed base plate provides greater strength under snow load conditions. For use with flexible liner. Spark arrester meets California code.



Extension for Z-Max[®] Raincap

Part No.: 2ZMEXTŌ Dia.: 4" - 8" 18" extension



Dripless Type "C" Connector Part No.: 2CNNTRC

Dia.:___ Dia.: 3" - 24" Used to connect Z-FLEX® Liner to stove-pipe, fireplace insert or other liner component.



Stove Adaptor Part No.: 2CNNS_



Dia.:____ Dia.: 4" - 10" Used to connect flexible liner to insert *6" insert to 5" liner reducer available.

Insulating Blanket w/Protective **Cloth Wrap & Gear Clamps**

Part No.: 2INSKIT Dia.:___ Sold in 5,10, 25 ft kits. 1, 2, 3, 4 ft lengths. Includes 2 gear clamps per 5ft. section. 1/4", 8lb. ceramic fiber insulation with high temperature protective cloth wrap. Resists damage during installation.

Nose Cone

Part No.: 2NCXXXX Dia.:____ Dia.: 3" - 24" To attach to liner, attach rope to cone and pull rope down chimney.



Stainless Steel Offset Box



Part No.: 2ZFOFFSET 6" only Used to connect flex liner to insert. One piece design. 6" center to center offset.



2" Fresh Air Kit for Pellet Stoves Kit includes: 1 - 2" x 5ft. Aluminum 1 ply duct 1 - 2" intake hood w/screen 2 - 2" gear clamps Part No.: 2FAKIT0205



4" Fresh Air Kit for Pellet Stoves Kit includes: 1 - 4" x 5ft. Aluminum 1 ply duct 1 - 4" intake hood w/screen 2 - 4" gear clamps Part No.: 2FAKIT0405d

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Rigid Liner & Accessories ALL FUEL APPLICATIONS



Increaser

Increaser Part No. 2IN___ R___ X___ Available diameters 3"-4", 4"-5", 5"-6", 6"-7", 6"-8", 7"-8", 8"-10". Used to increase the liner size to accommodate a range of flue sizes, appliances and installations.

Note flow direction.



Base Tee Adapter Part No.: 2ZRBTA Dia.: ____ Dia.: 4" - 8" Adapts base tee branch to stove pipe. Large end/Large end.

Stainless Steel Self-Drilling Screws Part No.: 2SSSCREW





Oval Liner System All Fuel Applications

Flexible S/S Full Oval

Part No.: 2ZLSSOX Dia.: ____ | Lgth.: ____ Dia.: 6", 7", 8", 10" Note: Oval accessories available.



| Z-Flex [®] Stainless Steel Liner Oval Dimensions (Approximate) | | | |
|----------------------------------------------------------------------------|-------------------------------------------------------------------|--|--|
| Round Size | Oval Size O.D. | | |
| 5″ | 4 ¼″ x 7 ¾″ | | |
| 6″ | 4 ½" x 8 3/8" | | |
| 7" | 4 ³ / ₄ " x 9 ¹ / ₂ " | | |
| 8″ | 5″ × 11″ | | |



Flexible S/S Oval To Round

Part No.: 2ZLSSOR Dia.:____ | Lgth.:___ Dia.: 6", 7", 8", 10" 5 ft to 10 ft available. Oval accessories available



OV:____ | Dia.:____ Dia.: 6", 7", 8", 10" Used to join Z-FLEX® Oval Liner to Oval T-Section and Oval to Oval Liner or when going through a fireplace adapter.





Dia.: 6", 7", 8", 10"





Round to Oval Adapter Part No.: 2ZRROAX Dia.: Dia.: 6", 7", 8", 10"



Flat Flashing Oval 6" Part No.: (2ZSCO1806) 18 X 18 Dia.:___ Dia.: 6", 7", 8", 10"

Oval Raincap with Spark Arrestor Part No.:(2ZMRCOV__) Dia.: Dia.: 6", 7", 8", 10"





Co-Linear FLEXIBLE DIRECT VENT System

A completely sealed system that does not compromise indoor air quality Designed for use when converting existing wood-burning fireplaces into gas fireplaces

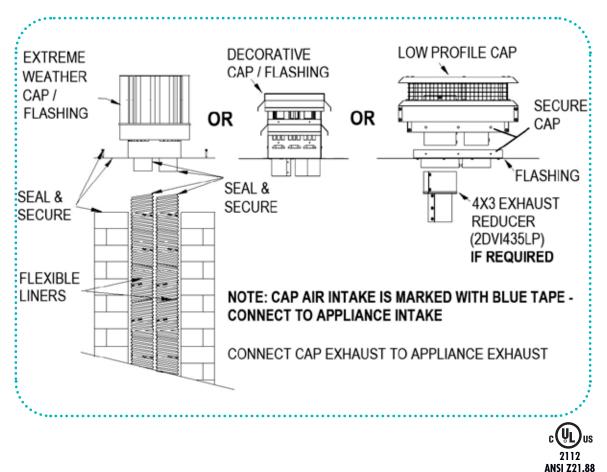
In terms of safety, efficiency and versatility, **Direct Vent Fireplaces** have several advantages over traditional fireplaces.

Using indoor air for combustion can de-pressurize the living space and potentially pull harmful flue gases back into the home.

Direct Vent Systems use outdoor air instead of indoor air for combustion.

Outside air is drawn in for combustion, while flue gas is exhausted outside.

As hot air exits the pipe, the natural flow of heat creates a convection loop as cooler, denser air is pulled back to the burner.



CSA 2.33



Co-Linear FLEXIBLE DIRECT VENT System

Direct Vent Insert Kits include:

Two (2) Triple Lock[®] Gas Liners for flue exhaust and outside combustion air, with an extreme weather, decorative or low profile co-linear termination.

Extreme Weather Kit



Model DVI-X Direct Vent Co-Linear Flexible Liner Kit with Extreme Weather Cap/Flashing *Kit includes:*

- Chimney Liners (Exhaust and Intake)
- Extreme Weather Cap/Flashing
- Self-tapping Screws

Decorative Kit



Model DVI-D Direct Vent Co-Linear Flexible Kit with Decorative Cap/Flashing Kit includes:

- Chimney Liners (Exhaust and Intake)
- Decorative Cap/Flashing
- Self-tapping Screws

Low Profile Kit



د(**ای**)

Model DVI-LP Direct Vent Co-Linear Flexible Kit with Low Profile Cap Kit includes:

- Chimney Liners (Exhaust and Intake)
- Low Profile Cap.
- Flashing
- Self-tapping Screws
- 4 x 3 Reducer (2DVI4335LP)

Safety - Direct Vent Systems exhaust flue gases outdoors while bringing adequate combustion air to fireplace.

Tigher homes lack ventilation air necessary for complete combustion of burning fuels. Incomplete combustion yields carbon monoxide an invisible, oderless, colorless gas which if not properly vented and exposed in high enough concentrations can be fatal or cause permanent injury.

Efficiency - As Direct Vent Systems draw cold combustion air directly from outdoors to fireplace instead of from the living space, heated air from the living space does not need to be replaced by cold drafts through windows and doors resulting in a higher system efficiency. **Quality** - Z-Flex Triple Lock[®], regarded as the strongest flexible duct construction method in the industry; provides piece of mind that flue gases are being safely vented outside the living space through continuous length flexible gas vent. In addition, computer added design and construction methods help produce aesthetically pleasing and efficient system components.

Versatility - Direct Vent Systems are easy to install. Continuous length Triple Lock® Flexible Gas Vent provides only two connection points; Insert and Termination. The Flexible Venting is quickly and easily routed through straight or offset existing masonry chimneys. Extreme Weather and Decorative Terminations are available for any installation.

Co-Linear FLEXIBLE DIRECT VENT System

| Z-Flex Direct Vent Systems | | | |
|----------------------------|----------------------------------------------|--------------|-------------|
| Part ID | Description | Exhaust size | Intake size |
| 2DVI335D | DV Co-Linear 3/3 Decorative Kit X 35 Ft | 3 in. | 3 in. |
| 2DVI335LP | DV Co-Linear 3/3 Low Profile Kit X 35 Ft | 3 in. | 3 in. |
| 2DVI335X | DV Co-Linear 3/3 Extreme Weather Kit X 35 Ft | 3 in. | 3 in. |
| 2DVI435D | DV Co-Linear 4/3 Decorative Kit X 35 Ft | 4 in. | 3 in. |
| 2DVI435LP | DV Co-Linear 4/3 Low Profile Kit X 35 Ft | 4 in. | 3 in. |
| 2DVI435X | DV Co-Linear 4/3 Extreme Weather Kit X 35 Ft | 4 in. | 3 in. |
| | | | |

Safety Issues

Since the federal government required modern heating equipment to achieve higher efficiencies in 1992, safely venting them has become more of a challenge. Today's more efficient equipment produces lower flue gas temperatures than pre-1992 equipment. The low temperature flue gas provides little natural draft in chimneys and is more likely to condense into an acidic, and corrosive, solution. The result can cause property damage, personal injury, or death. The natural laws of physics that control this phenomenon pertain to all gas and oil fired equipment. Our three major product lines; chimney liners, special gas vent (AL29-4C®* stainless steel), and flexible vent connectors are all designed to prevent flue gas condensation or protect against its corrosive effects. Most of the products **Z-FLEX*** has developed are now recommended or required by the following national codes and testing agencies:

1992 National Fuel Gas Code

Venting Tables for sizing Chimney Liners and Vent Connectors when adding or replacing equipment. Insulated Connectors required in attics and other "cold" spaces.

1997 NFPA 31

"Installation of Oil Burning Equipment" Venting Tables for sizing Chimney Liners.

International Approval Services (Formerly AGA)

June, 1996 – IAS requires all Category III gas boilers and furnaces to use a UL 1738 approved vent system (as **Z-VENT®**). July, 1998 – IAS requires all Category III gas residential unit heaters to use a UL 1738 approved vent system(as **Z-VENT®**).



Coaxial FLEXIBLE Direct Vent Kits

- Z-Flex[®] DVK Kits are designed to ease gas burning fireplace or insert installations
- Allows for a completely sealed system that does not compromise indoor air quality
- Kit includes two TRIPLE LOCK® flexible vents, one for flue exhaust, the other for combustion air
- Available in coaxial vertical extreme weather, horizontal round or square termination options



Model DVK-VX Coaxial Flexible Direct Vent Kit with Vertical Extreme Weather Termination *Kit also includes:*

- Coaxial Flexible Vent
- Spacers & Supports
- Fire Stop/Insulation Shield
- Insulation Collar
- Rigid Pipe with Roof SupportFlashing for O° to 30° Pitched Roof
- Flashing for 0° to 30° Pitched Ro
 Storm Collar/Support
- Self-Drilling Screws

Model DVK-HR Coaxial Flexible Direct Vent Kit with Horizontal ROUND Termination *Kit also includes:* • Coaxial Flexible Vent

- Spacers & Supports
- Self-Drilling Screws

Model DVK-HT Coaxial Flexible Direct Vent Kit with Horizontal SQUARE Termination *Kit also includes:*

- Coaxial Flexible Vent
- Spacers & Supports
 Salf Drilling Screwe
- Self-Drilling Screws

Description 2DVK(305,306,406,407,4.507.5,507,508,608,710,811)(05,10,20,40)VX Direct Vent Kit Vertical Extreme Weather Termination 2DVK(305,306,406,407,4.507.5,507,508,608,710,811)(05,10,20,40)VX Direct Vent Kit Vertical Extreme Veather Termination 2DVK(305,306,406,407,4.507.5,507,508,608,710,811)(05,10,20,40)VX Direct Vent Kit Horizontal ROUND Termination 2DVK(305,306,406,407,4.507.5,507,508,608,710,811)(05,10,20,40)HT Direct Vent Horizontal ROUND Termination

*Select appropriate coaxial vent diameters in inches; (305,306,406,407,4.507.5, 507, 508, 608, 710, 811) and length in feet; (05,10,20,40) when ordering, additional lengths available upon request

Coaxial FLEXIBLE Direct Vent Kits

DVK Kits



Typical Vertical Installation: 2DVK-VX



Typical Horizontal Installation: 2DVK-HR

Accessory Kits

Coaxial Flexible Extension Kit

Part No's 2DVK (305, 306, 406, 407, 4.507.5, 507,508, 608, 710, 811) 20X Coaxial Flexible Coupling 20 Ft. Coaxial Flexible Vent Spacers & Supports Sealant & Self-drilling Screws

Coaxial Flexible Coupling Kit

Part No's 2DVK (305, 306, 406, 407, 4.507.5, 507, 508, 608, 710, 811)C Coaxial Flexible Coupling Sealant & Self-drilling Screws

Coaxial Flexible Spacer Kit (10/kit) Part No's for wire spacers: 2DVK (35, 36, 46, 47, 57, 58, 68, 710, 811)S

Adaptor DV 4/6.625 to Flex 4/7 Kit Part No: 2DVK407A or Adaptor DV 5/8 to Flex 5/8 Kit Part No 2DVK508A Adaptor Sealant & Self-drilling Screws

Coaxial Flexible Support Kit (5/kit) Part No's: 2DVK (05, 06, 07, 07.5, 08, 10, 11)SUP

Wall Thimble (for 4" to 7" thick walls) Part No's: 2DVK (05, 06, 07, 07.5, 08, 10, 11)WT

Wall Thimble Extended (for 6" to 11" thick walls) Part No's: 2DVK (05, 06, 07, 07.5, 08, 10, 11) WTE

Siding Standoff Part No's: 2DVK (05, 06, 07, 07.5, 08, 10, 11)SS

Fire Stop Part No's: 2DVK (05, 06, 07, 07.5, 08, 10, 11)FS Fire stop sealant is field supplied

Fire Stop/Insulation Shield & Insulation Collar Kit Part No's: 2DVK (05, 06, 07, 07.5, 08, 10, 11)FSIS Fire stop sealant is field supplied

Flashing 30 to 45 Degree Pitched Roofs Part No's: 2DVK (05, 06, 07, 07.5, 08, 10, 11)F

Rigid Extension Pipe Kit Part No's: 2DVKRE (35, 36, 46, 47, 4.57.5, 58, 68, 710, 811) 30" Long Rigid Exterior & Flexible Inner Pipe with Male Connector Guy Band

Sealant & Self-Drilling Screws

Sealant Part No: 2DVKS

Z-FLEX[®] The Flexible Venting Solutions Specialist

Z-FLEX[®], part of the Novaflex Group of companies, is the leading manufacturer of specialty venting systems for furnaces, boilers, water heaters, oil heaters, fireplaces, and more.

Z-FLEX[®] has been providing flexible answers to gas oil, pellet and wood venting applications for over 45 years. We have pioneered flexible chimney liner solutions and gas vent (AL 29-4C[®]).* A variety of innovations in materials and construction have led to products that deliver:

- Superior performance and increased efficiency
- Easier handling and faster, simpler installation
- Greater reliability, safety and increased service life

To that, we add responsive customer service and expert technical support.

The NovaFlex Group[®] is a privately held company committed to continuous advancement in venting, HVAC, hose and connector solutions. NovaFlex[®] has one of the broadest product ranges available in the hose and ducting marketplace as well as in the HVAC, Industrial Venting and Hose Industries and in Commercial Exhaust Venting Systems.

The information provided within is for informational purposes only. We have made every effort to ensure the accuracy of the provided information and assume no responsibility for any loss or damage due to errors or omissions or to the use or misuse of any information supplied. It is impossible to test all products under all conditions to which they might be subjected in the field. It is therefore the buyer and/or end users' responsibility to test all products under the conditions prior to installation. All improvements, all specifications are subject to change without prior notice. It is the buyer and/or end users' responsibility to review our complete **Terms and Conditions of Sale** located on our web sites at: <u>www.novaflex.com</u> | <u>www.flexmaster.com</u>.

*AL 29-4C[®] is a registered trademark of ATI Properties, Inc.



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