EXCELDirect® Aluminum Flex
DIRECT VENT RELINING SYSTEM

IMPORTANT

Read these instructions thoroughly before beginning your installation. Installations that do not conform to these instructions will void the manufacturer's warranty and increase the risk of a vent related fire.

Do not begin until you have carefully read the appliance installation instructions.

Contact local building or fire officials about restrictions and installation inspection in your area.

APPLICATION

WARNING: Do not vent solid fuel or oil burning appliances or any system that could be converted to those fuels.

EXCELDirect® is a certified venting system designed to be used only with certified direct vent gas fired appliances. The direct vent gas appliance must be certified for use with the ICC EXCELDirect® venting system. Verify that EXCELDirect® is listed for use with the appliance model you have selected.

RULES OF SAFETY AND TOOL CHECKLIST

WARNING: Always maintain required clearances to combustible materials as required by the manufacturer's installation instructions.

Installation of damaged parts, modified parts or parts not approved by ICC will result in loss of warranty and poses a serious fire, health or other safety hazard.

Tools and equipment you may need for your installation: Eye protection, Gloves, Tape Measure, Extension cord, Marking pencil, Nails, Stud sensor, Square, Circular saw, Hand saw, Drill, Drill bits, - Keyhole saw, Ladder, Level, Pliers, Caulking gun, Hi temp. Silicone sealant, Hammer, Screwdrivers, Screws, Plumb Bob, Cold Chisel.

1. Wear gloves when handling metal parts with sharp edges.
2. Wear safety glasses.
3. Electrical tools must be grounded.
4. If a ladder is required, it must be in good condition, installed on a firm surface, and leveled.
5. When cutting a wall, floor or ceiling, be careful not to damage wiring, gas or water pipes. If these elements need to be relocated, work should be done by a qualified person.

EXCELDirect® has been tested and listed to the following:
- UL 2112 Standard by Underwriters Laboratories inc. (Listing #MH300439)
- Conforms to ANSI Z21 Std for Direct vent gas appliances and UL Std 2112 by INTERTEK. (ETL Listing # 4005717)
- Certified to CSA Std for Direct vent gas appliances by INTERTEK. (ETL Listing # 4005717)

EXCEL Flexible liner has been tested and listed to the ULCS635, ULCS640 and UL1777 Standards by INTERTEK

Keep these installation and operating instructions in a safe location for future reference.

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Common Installation Examples

This setup in USA only

Approved Parts List (download a complete parts catalog at www.icc-rsf.com)

Part Code	Description
TM-ALK33 / TM-ALK43	Standard 3"x3" or 4"x3" Co-linear Kit
TM-ALT33 / TM-ALT43	Traditional 3"x3" or 4"x3" Co-linear Kit
TM-ALC4	Masonry Chimney Conversion Kit
TC-ALØ30 / TC-ALØ50	Aluminum Flex Roll (Flex Only) in 3" or 4" diameter 30' or 50' long
TM-IVT	Insert Vertical Termination (fits 3x3 or 4x3 outlets)
TM-CT3 / TM-CT4	Traditional Co-linear Chimney Cap 3x3 or 4x3 outlets
PM-PCT	Traditional Masonry Adapter Cap (approved for DV in USA only)
TM-ØSVT	Vertical Termination (4x6$^5/_8$ or 5x8)
TM-4SVTS	Rain / Wind Shield for SVT & IVT
TM-CTS	Rain / Wind Shield for CT3, CT4 & PCT cap
TM-4CAA	Co-Axial to Co-Linear Appliance Adapter
TM-CTA / TM-CTA4	Co-linear Termination Adapter 3x3 or 4x3
TM-CFAAØ	Flex Liner Connector (3" or 4")
TF-MFR	Universal Flashing for Round Caps
TF-MFC	Clay Tile Flashing for Round Caps
TF-MF	Masonry Chimney Flashing (stainless)
TF-CTF	Universal Flashing for Traditional Caps
TF-CTFC	Clay Tile Flashing for Traditional Caps
TM-HC	Hose Clamp Bracket for Clay Tile Flashings
TM-IVTP	Prefab Chimney Top Adapter for IVT
TM-MA	Masonry Adapter (USA Only)
TM-MTA	Masonry Termination Adapter (USA Only)

Masonry Chimney Inspection

The installer must inspect the masonry chimney to ensure it is suitable for relining. It must be clear of obstructions and cleaned thoroughly of soot and creosote if it has been previously used to vent solid fuel. If necessary, have the chimney inspected by a qualified technician for structural integrity.

Flexible Liner Installation

1. Measure the height from the appliance outlet to the top of the chimney. If additional flex is needed, a Flex Liner Connector (CFAA) can be used to connect multiple lengths of flex. If the flex is too long, it could sag below the appliance outlet which could result in a potential fire hazard.

2. Identify both ends of a length of flex as the air intake or the exhaust so that it can be easily identified later.

3. Attach the Nose Cone (NC) to the end of a length of flex by tightening the hose clamp around the flex. Attach a piece of rope to the loop on the nose cone and have one person feed the liner down the masonry chimney while another person pulls on the rope from below to guide the flex to the appliance.

4. Remove the Nose Cone and line up the flex with the appliance outlet. Ensure the flex does not sag below the point where it connects to the appliance outlet or it could trap hot gas and potentially become a fire hazard.

5. Temporarily secure the flex at the top of the chimney, leaving 2-3 inches of excess flex to connect to the termination.
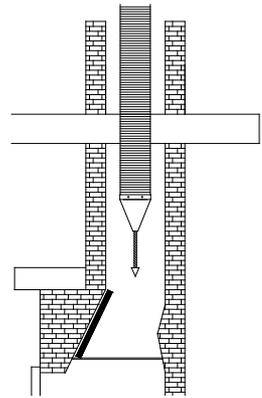
6. Repeat steps 2-4 for the second length of flex.

Figure 1

Flex liner

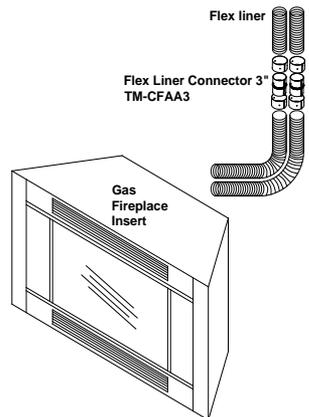Flex Liner Connector 3"
TM-CFAA3

Gas Fireplace Insert

Figure 2

7. On the roof, slide the flashing over the flex lengths. If the flashing is too large, it can be cut to fit the shape and size of the chimney top. Ensure the surface is level.

8. Attach the two sections of flex to the termination cap or adapter with screws. Take note of which flex liner is connected to the air intake and exhaust.

9. Secure the flashing to the surrounding masonry with a non-hardening sealant and masonry fasteners. If it is necessary to extend the height of the vent above the top of the chimney, a Co-linear Termination Adapter (CTA) is required, see Figure 5 and use rigid EXCELDirect® for the extension.

10. Secure the termination to the flashing with screws.

11. At the appliance, connect the two flex liners to the two outlets at the back using sheet metal screws. Ensure the correct flex liner is connected to the exhaust and air intake. Depending on the type of connection your appliance has, it may be necessary to use a Co-axial to Co-linear Appliance Adapter (4CAA) to make the connection. Screw the Co-axial to Co-linear Appliance Adapter to the back of the appliance with the screws provided.

12. Move the appliance into its final position. Once in place, verify that the flex is not sagging below the connection point on the appliance.
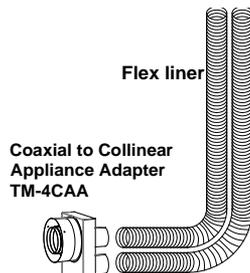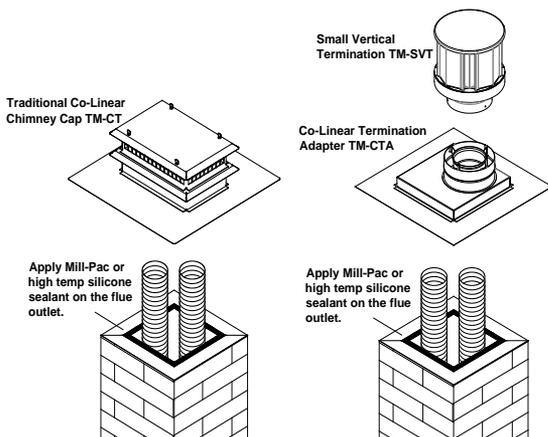
Figure 3

Figure 4   **Figure 5**

Operation and Maintenance

When using a Direct Vent gas appliance, we recommend that your vent system is examined annually by a qualified service company for the following:

1. Signs of corrosion on components exposed to the elements.
2. That the supports, flashing and storm collar are properly in place.
3. Remove any debris accumulating around the cap such as birds' nests.