

Owner's Manual

Residential Factory Built Fireplace

Operation • Maintenance • Installation

FOCUS ST



Keep these instructions for future use.

RSF
WOODBURNING FIREPLACES

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Dear Customer,

The FOCUS ST incorporates technology with elegance to give you a beautiful view of the fire without compromising on heating efficiency or environmental quality.

We have designed your new FOCUS ST to be easy to install, operate and maintain. It is in your best interest to become familiar with it. Study your manual to be sure that the installation is correct, then follow the guidelines for operation and maintenance.

We at **RSF Woodburning Fireplaces** congratulate you on your choice of the FOCUS ST, and are confident that you have purchased a fireplace that is *simply, the best*.

Sincerely,

RSF Woodburning Fireplaces Team

May 2013

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SAFETY FIRST

DO'S AND DONT'S

If this fireplace is not properly installed, a house fire could result. For your safety and that of your family, follow the installation directions. Contact your local authority having jurisdiction (such as municipal building department, fire department, fire prevention bureau, etc.) regarding restrictions and installation requirements, and the need to obtain a permit.

To ANYONE using this fireplace: these **DO's** and **DONT's** are for your safety.

1. **DO** read this instruction manual before lighting your first fire.
2. **DO** burn seasoned wood fuel or densified fuel logs without any additives.
3. To avoid glass breakage, **DO NOT** slam the fireplace doors.
4. **DO NOT** ever use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or freshen up a fire in this fireplace. Keep all such liquids well away from the fireplace while it is in use.
5. **DO NOT overfire the fireplace. If the chimney connector behind the top louver glows red, you are overfiring the fireplace.**
6. **DO operate the fireplace with doors fully closed.** If a door is left partly open, gas and flame can be drawn out of the fireplace opening, creating both fire and smoke hazards.
7. **DO** keep all combustible materials (furniture, firewood, etc.) at least 4' away from the front of the fireplace.
8. **DO NOT** use a fireplace grate or other products not specified for use with this fireplace.



◆ **NOTE:** We strongly recommend that our products be installed and serviced by professionals who are certified by the National Fireplace Institute in the U.S. or by Wood Energy Technology Transfer Inc. in Canada.



CREOSOTE: FORMATION AND REMOVAL

When wood is burned slowly, it produces tar and other organic vapors which combine with the expelled moisture from the wood to form creosote. The creosote vapors can condense in the relatively cool chimney of a slow burning fire. When ignited, this creosote makes an extremely hot fire. The chimney should be inspected periodically during the heating season to see if a creosote build-up has occurred. If a significant layer of creosote has accumulated (¼" or more), it should be removed to reduce the risk of chimney fire.

❖ **WARNING: BURN DRY WOOD ONLY. DO NOT BURN: DRIFTWOOD, TREATED WOOD, COAL, GARBAGE, OR PLASTIC.**

Do not use construction scraps (e.g. 2x4 or plywood scraps) as your only supply of fuel as you can overheat and seriously damage the fireplace. We do not recommend using wax fuel logs (e.g. Duraflame) in this fireplace because it will dirty the glass. If you choose to use them, do not use more than one at a time and do not poke or stir the log while it is burning. Use only firelogs that have been evaluated for fireplace use. In Canada, they should meet the requirements of ULC/ORD-C127-M1990. Refer to the firelog warnings and caution markings prior to use.

GENERAL SPECIFICATIONS

The FOCUS ST fireplace is EPA exempt.

CONTROLLING THE HEAT OUTPUT

The FOCUS ST fireplace is not only designed to provide warm radiant heat on two sides, but also to help heat your home. Although it does not come with a draft control, you will find that you can control the intensity of the fire quite well by varying the size and placement of the logs.

For a cooler and lazy fire, load 2 to 3 large logs with the log sides facing you (not the ends) in the center of the hearth, between the andirons.

For a warmer and brighter fire, load a number of small logs with the ends facing you so that one end comes very close to the glass. Alternate the logs between both sides of the fireplace, half of the logs close to one glass while the other half of the logs are closer to the other glass. Since the combustion air is near the glass, it will create a more vigorous fire.

OPTIONS

To simplify the installation of thin non-combustible materials such as ceramic tile or sliced brick, we have designed a rock retainer kit (FO-KR). It is not designed or required for full brick or stone. Thin materials can also be installed directly on the face of the FOCUS ST using high temperature silicone as glue, without a rock retainer kit.

If you have any rooms directly above or adjacent to the room with the fireplace that you would like to heat, you may want to consider the Gravity Vent Kit (FO-V2). The gravity vent distributes hot air to these rooms without the need for a blower.

Decorative andirons (FO-A) are also an optional feature. The decorative andirons are made of cast iron and are more aesthetically appealing than the basic ones included with the fireplace. The decorative andirons are also taller, which reduces the chance of logs rolling forward.

Detailed installation instructions are included in the box with each option. These can also be obtained from our Internet Web Site: www.icc-rsf.com.

❖WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET INTO THIS FIREPLACE.

UNIT DIMENSIONS AND CLEARANCES

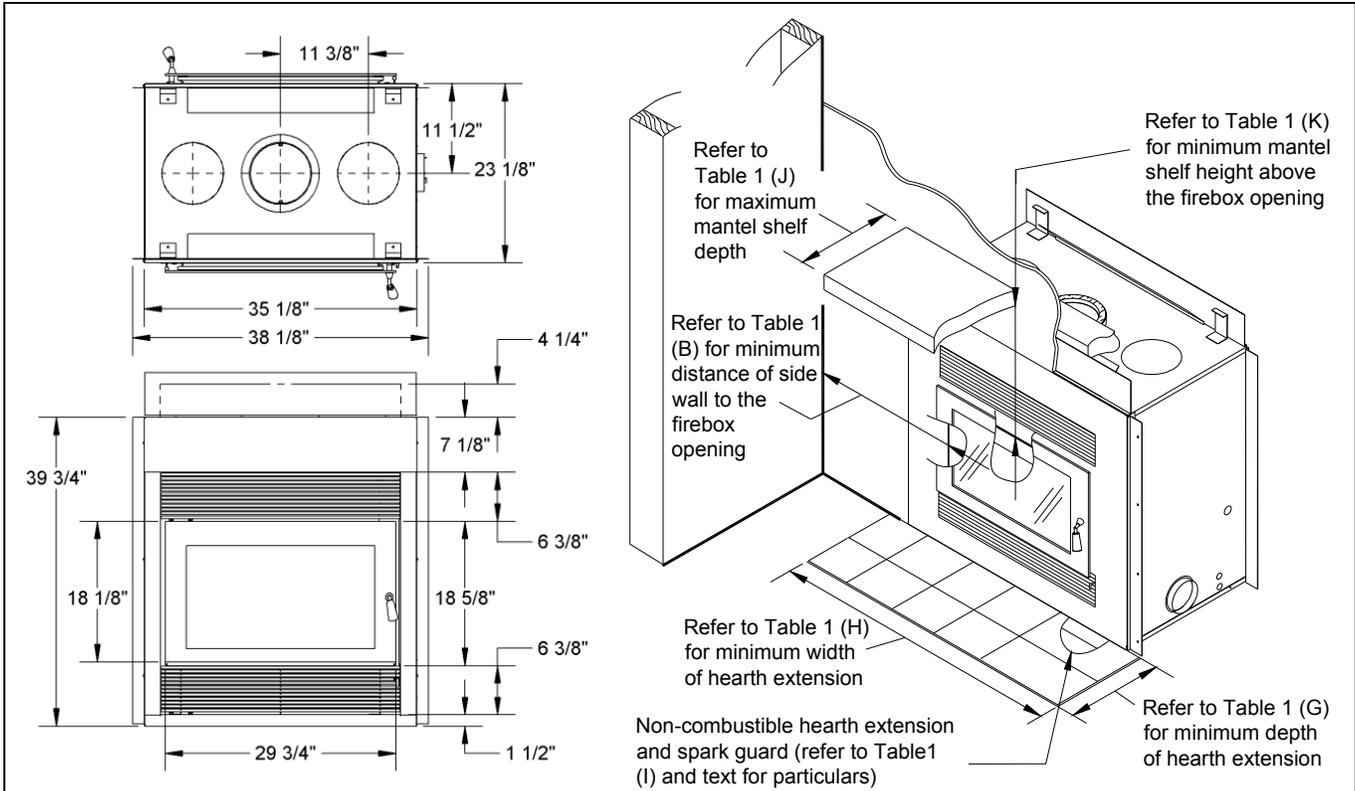


Figure 1 Dimensions and Clearances

Table 1 Dimensions and Clearances

A	Distance of combustible material from side, back and top standoffs	0" (0,0 mm)
B	Minimum distance of side wall to the side of the firebox opening, this does not allow to fully open the door. To be able to fully open the door without any interference from the side wall, it has to be pushed back at least an additional 10".	9" (229 mm)
C	Ceiling clearance: from the base of the fireplace to the ceiling	Sealed enclosure: 7' (2,13 m) Vented enclosure: 6' (1,83 m)
D	Minimum chimney height: minimum total chimney height from fireplace top to below the chimney rain cap – Refer to Table 2 on page 12 if elbows are present	12' (3,66 m)
E	Maximum chimney height: maximum total chimney height from fireplace top to below the chimney rain cap	40' (12,19 m)
F	Maximum chimney height supported by the fireplace	16' (4,88 m)
G	Minimum depth of non-combustible hearth extension: from the front of the fireplace	16" (406 mm)
H	Minimum width of non-combustible hearth extension: total width, must be centered on the firebox opening	40" (1,02 m)
I	Minimum width of the spark guard	36" (914 mm)
J	Maximum mantel shelf depth	12" (305 mm)
K	Minimum height of a combustible mantel shelf above the top of the firebox opening: to the bottom of the combustible mantel shelf (refer to the "Installation: Mantel" section for particulars)	24" (610 mm)

OPERATION

AIR CONTROLS

The FOCUS ST uses air from both inside and outside the home for combustion. The air from inside the home enters the fireplace through an opening in the bottom of both doors. The outside air enters through the outside air connection on the side of the fireplace when the outside air damper is open (see Figure 2).

Outside Air Control

Setting the outside air control lever towards the floor will completely open the outside air damper and allow fresh air into the fireplace. Because outside air is generally colder and denser, it will help to start the fire. In some cases, fresh air will help compensate for negative pressure problems within the house; however it will not prevent the fireplace from smoking in a severely depressurized house.

If you do not open the outside air damper while burning wood in the fireplace, the fire may be starved for air.

This Outside Air Control should be closed when the fireplace is not burning to prevent cold outside air from entering the home.

FUEL

All modern high efficiency fireplaces and woodstoves are designed to burn best with seasoned cordwood. Seasoned wood can be defined as wood that has been cut, split and let dry under cover for a minimum of 6 months, preferably a year or more. Dry seasoned wood generally contains less than 20% moisture content. Attempting to burn fuel with a high moisture content will be difficult and result in lower efficiency, increased creosote buildup and dark deposits on the glass. It's possible to burn a very large amount of wood, and get very little heat if the wood is wet.

The type of wood you select is also important. All types of wood give off more or less the same number of BTU's per pound. Since softer woods are less dense than hardwoods it is possible to put more weight of hardwood in the firebox; in other words all woodburning appliances will burn longer and more evenly with hardwoods. Never burn scrap, garbage, treated wood or driftwood as they produce much more pollution and can corrode the firebox and chimney as well. Burning large amounts of paper, cardboard, mill ends or construction waste can easily over fire and damage the fireplace or even ignite a chimney fire if the flue is dirty.

FIRST FIRES

You will experience a slow start-up during the first few fires. The refractory bricks lining the firebox contain moisture from manufacturing and require a few hot fires to evaporate the moisture. While there is still moisture in the bricks, they will be black with smoke deposits. When the moisture has dissipated, the bricks will turn white. Unlike cast iron stoves, there is no need to cure the fireplace itself by starting with small fires and progressively larger ones. Feel free to light a large fire from the very start.

You will experience a slight odor during the first few fires. This odor comes from curing paint and oil burning off the metal. The odor may be strong enough to set off your smoke detector. Open the doors and windows to allow the room to properly ventilate.

LIGHTING

Make sure that the outside air damper is open.

Start by laying your fire starter and kindling. Traditional fire starter is crumpled newspaper; make sure to use enough to light the kindling (5-6 pieces should do). Next lay the kindling crisscrossed over the newspaper. Using

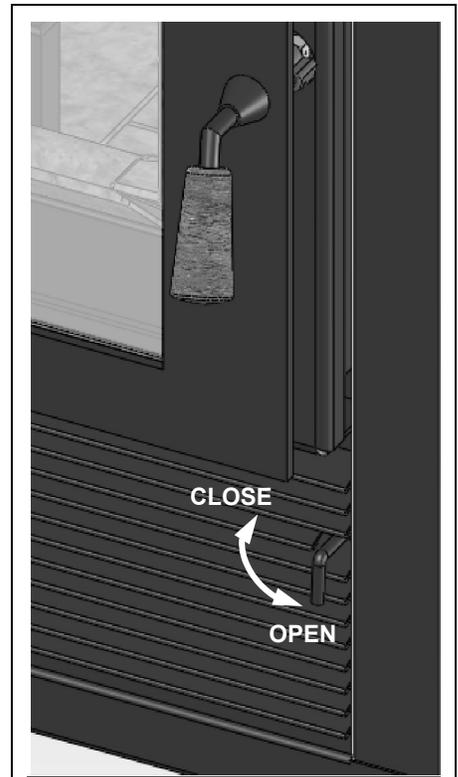


Figure 2 Outside Air Control

plenty of kindling ensures that the chimney will heat up quickly and establish a strong draft, **never use any flammable liquids**. Light the paper and partially close one of the doors, but don't shut it completely. If the door is positioned correctly you will see air rushing into the fireplace, this will help the lighting process.

Once the kindling is lit and sustaining fire, you can add some small pieces of seasoned cordwood. Use the andirons on either sides to help position the cordwood so as not to flatten and smother the fire you've just created. Always add at least 3 pieces of cordwood. Position your cordwood in a manner that the fire will hit several pieces as it rises and has air gaps to flow through. Continue to leave one of the doors slightly open until the cordwood is lit. Close the door completely when the fire is established, if the fire goes out you've shut the door too early.

❖ **WARNING: DO NOT USE A GRATE OR ELEVATE THE FIRE.**

❖ **WARNING: MAKE SURE TO KEEP THE FIRE BEHIND THE ANDIRONS. REPLACE THE LOGS IF THEY FALL AGAINST THE GLASS.**

CONTROLLING THE FIRE

For a cooler and lazy fire, load 2 to 3 large logs with the log sides facing you (not the ends) in the center of the hearth, between the andirons.

For a warmer and brighter fire, load a number of small logs with the ends facing you so that one end comes very close to the glass. Alternate the logs between both sides of the fireplace, half of the logs close to one glass while the other half of the logs are closer to the other glass. Since the combustion air is near the glass, it will create a more vigorous fire.

REFUELING

The doors should be opened slowly to keep smoke from spilling into your room. If you have a problem with smoke spillage, check to see that all kitchen and bathroom fans have been shut off. They can cause negative pressure in the house which pulls smoke out of the fireplace.

TROUBLESHOOTING PROBLEMS

If smoke comes into the house when the door is opened:

- You may have opened the door too quickly and created a suction of air into the room, this can be avoided by opening the door more slowly.
- Ensure your chimney is clean and your chimney cap is not plugged. Chimney caps with screens are more likely to become clogged with creosote buildup.
- Make sure you have adequate chimney height for your system. Refer to the Chimney section of this booklet and make sure to take altitude, and number of elbows into consideration.
- Check to see if fans in the home are running, particularly a kitchen range hood, or bathroom exhaust fan. This can affect the pressure in the home.
- Try opening a window near the fireplace a little, this will equalize the pressure in the home and should correct a draft problem. Once proper draft is established the window can be closed.
- Make sure you've used enough kindling to establish a hot fire quickly. The most likely time that smoke will enter the home is during the lighting process.

MAINTENANCE

GENERAL CLEANING

The high heat paint and plating can be cleaned with a soft damp cloth. Use a mild detergent and water. Do not use abrasive cleaners.

PAINT

You can touch up the face of the FOCUS ST with *Stove Bright* Metallic Black high temperature paint which is available at most fireplaces dealers. Follow the directions outlined on the spray can. **DO NOT** attempt to paint the

fireplace while it is still warm. Keep the spray can away from any source of heat or open flame. Ensure that there is adequate ventilation in the room from the time you start painting until the paint is dry. *Stove Bright* is available in a wide range of colors if you want to change the color of your FOCUS ST.

We recommend that you take the time to protect or remove any item that you do not want to paint such as: the door glass, the fireplace surroundings, etc. The glass can be removed from the door but the gasket will have to be replaced.

GLASS CLEANING

In a slow combustion fireplace, temperatures are not always high enough to keep the glass perfectly clean. A good hot fire once a day usually cleans off most of the deposits that have accumulated. Remember: the drier the wood, the cleaner the glass. A word of caution: although heat will not break the glass, impact can. Be careful not to hit the glass.

❖ **WARNING: NEVER CLEAN THE GLASS WITH AN ABRASIVE CLEANER. USE ONLY A CLEANER RECOMMENDED BY YOUR DEALER. NEVER CLEAN THE GLASS WHILE IT IS HOT, A SERIOUS BURN CAN RESULT. THERE ARE A NUMBER OF EXCELLENT WOOD STOVE GLASS CLEANERS AVAILABLE WHICH ARE FAR SUPERIOR TO REGULAR GLASS AND OVEN CLEANERS FOR WOOD STOVE APPLICATIONS.**

CHIMNEY CLEANING

Check the chimney for creosote buildup every week or so until experience shows how often you need to clean it. A buildup of ¼" or more should be cleaned before more creosote accumulates. Use an 8" round brush.

DISPOSAL OF ASHES

Remove the ashes before they become too deep, before you have a spillage problem when you open any door.

The ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials pending final disposal. If the ashes are disposed of by burial, or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

DOOR ADJUSTMENT

To check for a proper door seal, insert a sheet of paper between the door and the front of the fireplace and then latch the door shut. Pull gently but firmly on the sheet of paper. If the paper either tears or is hard to retrieve, the adjustment is correct. Repeat this procedure along all sides of the door.

The most important factor for controlling the burn rate of the FOCUS ST is a good seal on the door gasket. If the door gasket is worn or damaged to the point where the seal is not adequate as described above, then remove and replace the gasket. Replacement kits are available from your RSF dealer.

The door latch is progressive, the more your turn the handle the tighter the seal on the right side of the door. Beware not to always over tighten the door latch; this will result in premature failure of the door gasket or cause undue stress on the door handle.

If needed, the hinges can be adjusted to improve the alignment of the door latch with respect to the hole in the fireplace facing, and for easy installation/removal of the door.

♦ **NOTE:** An improperly adjusted door seal can have a significant effect on the performance and durability of the fireplace. A poorly adjusted door can result in reduced efficiency, over firing, excessive wood consumption and premature fireplace failure.

LOUVERS

All louvers are factory installed. On occasion, you may need to remove either one. Just follow the steps below.

All louvers are held in place by two bolts located approximately one third of the length from either side of the louvers, below the bottom fin and by a magnet in the center at the top of the louvers.

To remove either louver:

1. Using a ¼" wrench, loosen both bolts below the bottom fin of the louver.
2. Grasp the louver close to the center and pull to disengage the magnet at the top of the louver.
3. Pull the louver straight out.

For the bottom louver which houses the outside air control, make sure the outside air control lever is in closed position (horizontal). Pull the left side of the louver out while pivoting around the right bolt. Pull out gently the right side of the louver.

To reinstall the louver, follow the above steps in the reverse sequence. Please note, only one louver has a cutout for the outside air control. Make sure to reinstall it in the appropriate bottom louver opening.

INSTALLATION

Before you begin, check with your local authority having jurisdiction (such as municipal building department, fire department, fire prevention bureau, etc.) regarding restrictions and installation requirements, and the need to obtain a permit.

♦ **NOTE:** We recommend that you remove the doors until after all finishing work is completed around the fireplace. This will reduce the possibility of scratches, vandalism, or damage to the finish caused by drywall dust, muriatic acid, plaster, cement, paint or any other harmful spray or liquid.

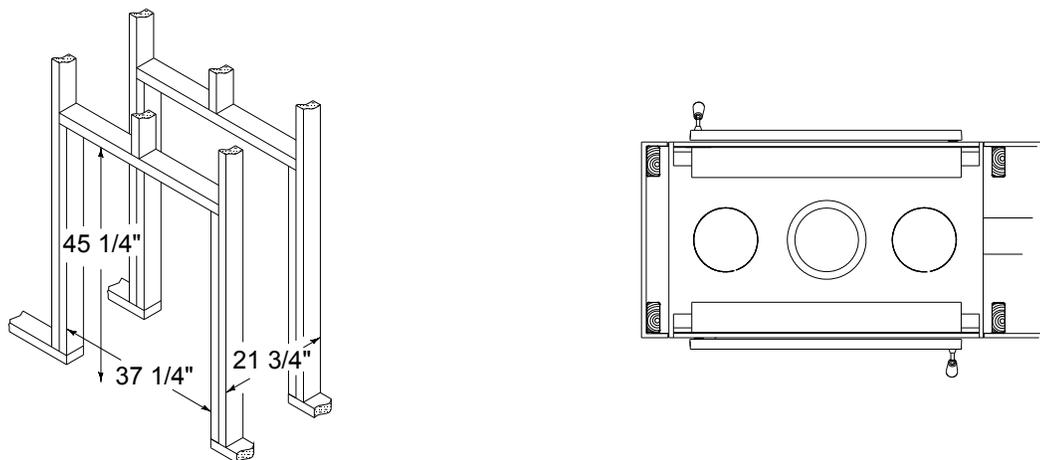
LOCATION

Your FOCUS ST fireplace may be installed without any special floor reinforcement (see Figure 3). We recommend that you take the time to plan your entire installation (fireplace, chimney, and options) before beginning the actual installation (refer to Figure 4).

Dimensions of the fireplace along with clearances are shown in Figure 1 and Table 1.

❖ **WARNING: IF THIS FIREPLACE IS NOT PROPERLY INSTALLED, A HOUSE FIRE CAN RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION INSTRUCTIONS AND CLEARANCES. DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.**

1. Note the location of roof and floor joists. Try to choose a location that does not require cutting them.
2. If at all possible, run the chimney up through the inside of the house. If it must be run outside, it should be enclosed in an insulated enclosure (see Installation: Chase Enclosure). Remember, a cold chimney causes poor draft.



The framing dimensions are larger than required for ease of installation.

Figure 3 FOCUS ST Framing Example

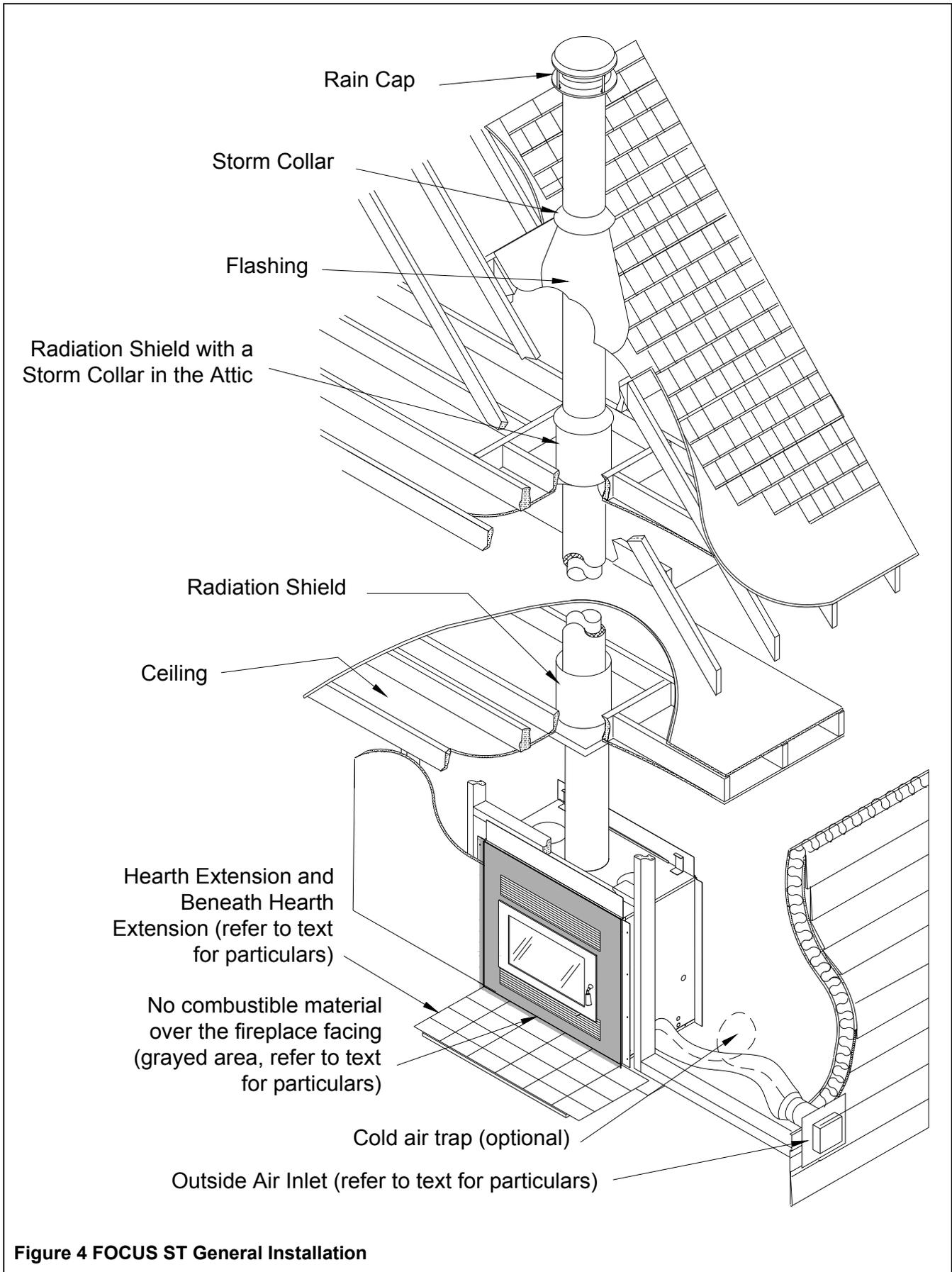


Figure 4 FOCUS ST General Installation

CEILING CLEARANCE

Ceiling clearance is the distance from the base of the fireplace to the ceiling. If you vent the fireplace enclosure, you can then have a lower ceiling clearance as specified in Table 1 (C) for a vented enclosure.

For a vented enclosure, you **MUST** install regular venting 3"x10" grilles or larger into holes cut within 1" of both the floor and the ceiling, to allow room air to circulate through the fireplace enclosure and reduce heat buildup. These venting grilles may be placed vertically or horizontally.

Under no circumstances should the distance between the ceiling firestop and the base fireplace be less than the dimension specified in Table 1 (C).

STANDOFF INSTALLATION

Before you begin installing your fireplace, you **MUST** install the standoffs provided on both sides of the fireplace and on the top. Please refer to Figure 5 to position them adequately. The bent edge of the standoffs should be aligned flush with the front of the fireplace facing.

Once the standoffs are in place, make sure to seal the ¼" gap between the fireplace and the top standoffs with a high temperature sealant. **DO NOT** fill the gap behind the sealant with insulation or any other material.

SECURING THE FIREPLACE IN PLACE

Once the fireplace is in its final location, take the time to attach it to the floor. Secure the fireplace to the floor with at least two of the brackets that affixed the fireplace to the crate. If possible, try to have at least one, if not two, of the brackets screwed into the floor joists with 2" wood screws.

OUTSIDE AIR DUCT

After the fireplace is correctly positioned, connect the outside air inlet to the outside (see Figure 6).

Use an insulated aluminium flexible duct rated at over 200°F (93°C). The duct should not exceed 12' vertical rise above the base of the unit. We suggest using the 4" RSF outside air kit (FO-INT).

The air inlet should always be at least 5' below the chimney cap and must never terminate in attic spaces.

A 4" diameter duct can be used if the total duct run is less than 25'. For longer runs, use 5" diameter duct. Both 4" and 5" connecting sleeves are provided with the fireplace.

1. Find a convenient location for the combustion air duct and outside air inlet. The outside air inlet can be above or below floor level.
2. Make a 4 ¼" (5 ¼" if using a 5" diameter duct) hole in the outside wall of the house. Push the outside air inlet in from the outside. Seal the joint between the air inlet and the outside wall with an appropriate sealant.
3. Place the insulated flexible duct over the round sleeve on the outside air inlet. At both ends, carefully pull back the insulation and plastic cover, exposing the flexible duct. Then at each end, attach the duct with metal

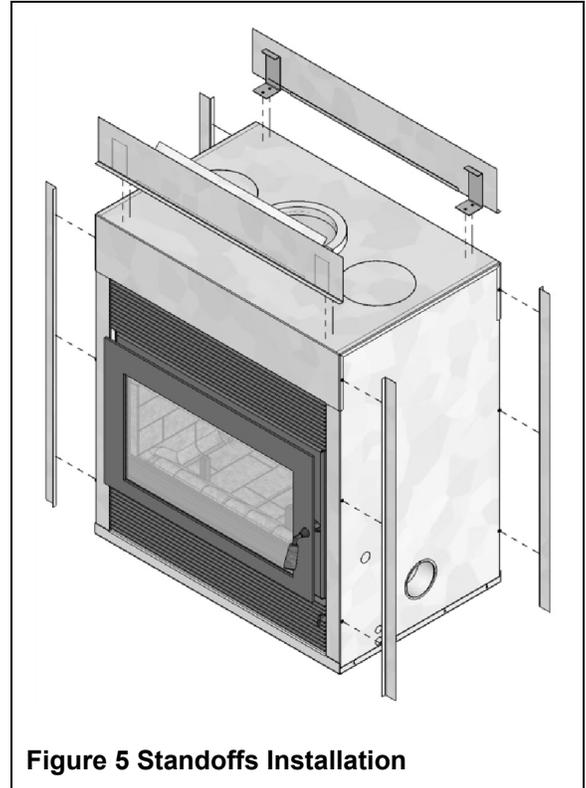


Figure 5 Standoffs Installation

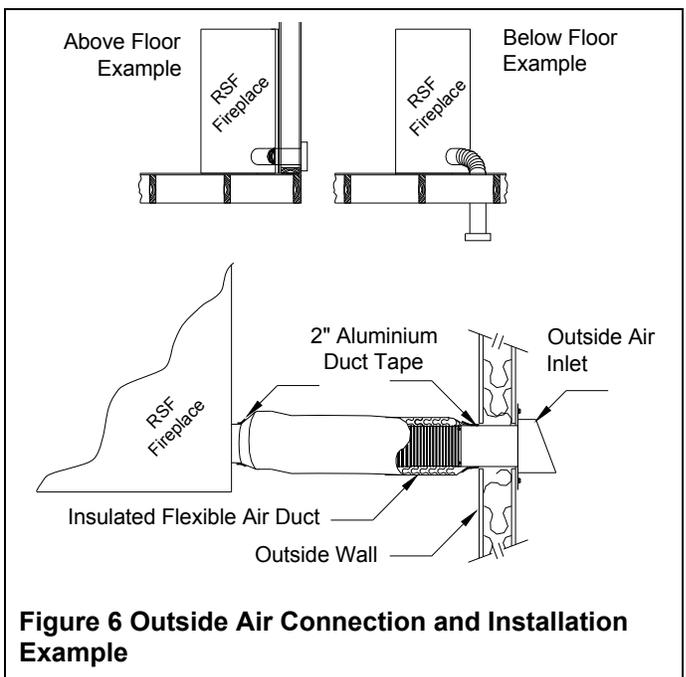


Figure 6 Outside Air Connection and Installation Example

screws to the inlet and tube. Carefully push the insulation and cover back over the duct. Tape the plastic cover in place with 2" aluminium duct tape.

❖ **CAUTION: WHEN RUNNING THE DUCT AROUND CORNERS, BE SURE TO PREVENT CRIMPING THE DUCT IN A WAY THAT WOULD RESTRICT THE COMBUSTION AIRFLOW.**

CHIMNEY

This fireplace is certified for use with 8" ICC Model EXCEL chimney only. Please refer to Table 1 (D-E) for the minimum and maximum chimney heights permitted with the FOCUS ST fireplace.

We recommend that the minimum height be increased by approximately 1' for every 2000' elevation above sea level. Every 15°, 30° or 45° elbow also increases the minimum height by 1'. For example, if you are living 6000' above sea level, your chimney should terminate at least 15' from the top of the fireplace (12' + 3' for the 6000'). See Table 2 for more precise recommended flue heights.

Table 2 Minimum Recommended Flue Heights In Feet From The Top Of The Fireplace

Elevation (ft)	Number Of Elbows						
	0	2 x 15°	4 x 15°	2 x 30°	4 x 30°	2 x 45°	4 x 45°
0 - 1000	12'	13'	14'	15'	18'	16'	20'
1000 - 2000	12'6"	13'6"	14'6"	15'6"	19'	16'6"	20'
2000 - 3000	13'	14'	15'	16'	19'6"	17'	21'6"
3000 - 4000	13'6"	14'6"	15'6"	17'	20'	18'	22'6"
4000 - 5000	14'	15'	16'	17'6"	21'	18'6"	23'
5000 - 6000	14'6"	15'6"	17'	18'	21'6"	19'	24'
6000 - 7000	15'	16'	17'6"	18'6"	22'	20'	24'6"
7000 - 8000	15'6"	16'6"	18'	19'	23'	20'6"	25'6"
8000 - 9000	16'	17'	18'6"	20'	24'	21'	26'6"
9000 - 10000	16'6"	17'6"	19'	20'6"	24'6"	22'	27'

CHIMNEY INSTALLATION

Make sure to read the EXCEL Chimney installation manual concerning requirements for supports, bracing, anchors, etc. The EXCEL installation manual is available from your dealer or from our web site: www.icc-rsf.com. Refer to Table 1 (F) for the maximum chimney height that can be supported by the top of the fireplace.

❖ **WARNING: THE CLEARANCE BETWEEN THE CHIMNEY AND COMBUSTIBLE MATERIAL MUST BE 2" OR MORE. DO NOT FILL THIS AREA WITH INSULATION.**

1. Cut and frame the required holes in the floor(s), ceiling(s) and roof where the chimney will pass through. The rough opening in the framing is 14" square (the opening can be slightly larger, but NEVER smaller).
2. From below, install a radiation shield in each floor through which the chimney passes. At the attic level, install a radiation shield and a storm collar as shown in Figure 7.

❖ **WARNING: A RADIATION SHIELD MUST BE INSTALLED UNDER EACH FLOOR WHERE THE CHIMNEY PASSES THROUGH.**

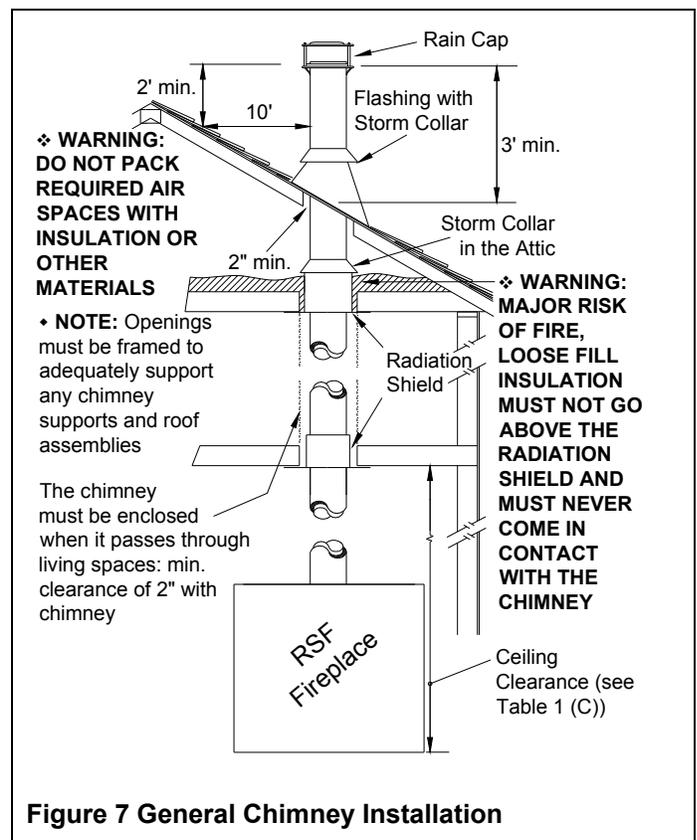


Figure 7 General Chimney Installation

- Place the first chimney length on the fireplace. Secure the chimney length to the fireplace with the three screws provided. Assemble the rest of the chimney.

The chimney must extend at least 3' above its point of contact with the roof and at least 2' higher than any wall, roof, or building within 10' of it. If the chimney is higher than 5' above the roof, it must be secured using a roof brace.

- Put the roof flashing into place. Seal the joint between the roof and the flashing with roofing tar or an exterior sealant. For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Secure the flashing to the roof using roofing nails or roofing screws.

If the chimney is enclosed to the roof:

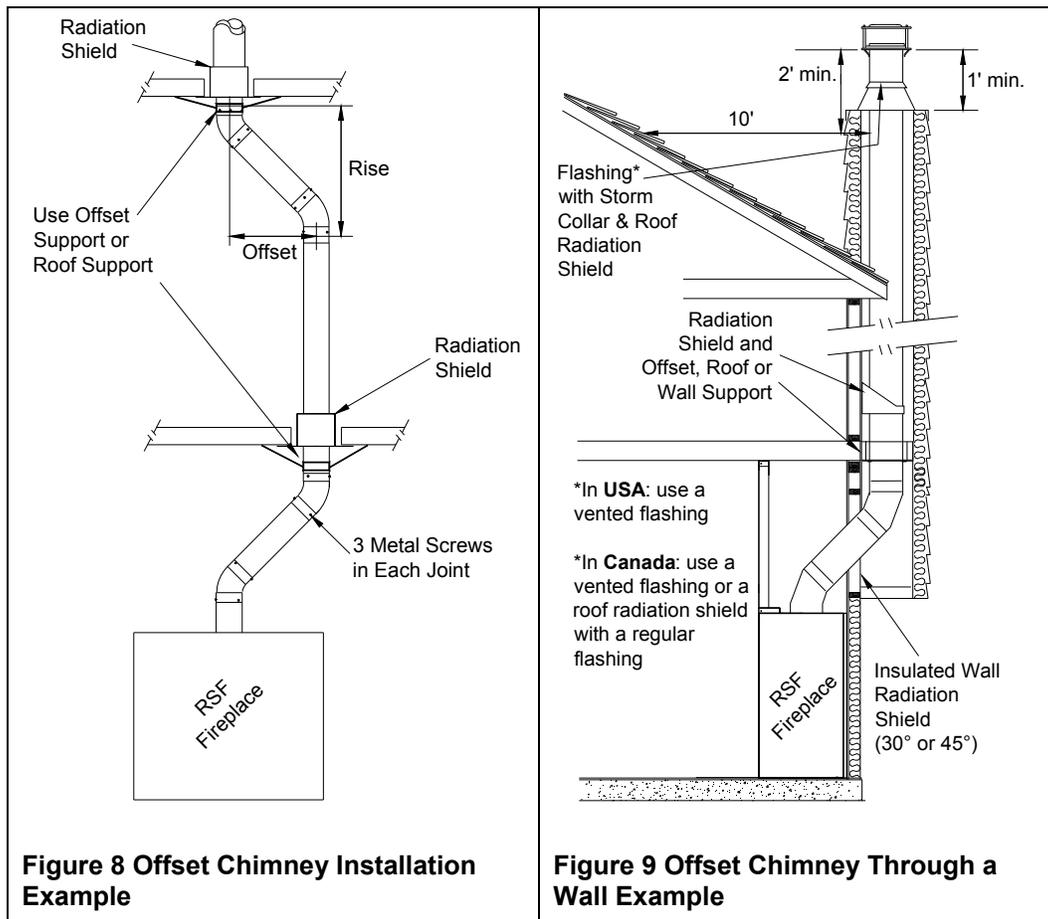
- In **USA**: use a vented flashing;
- In **Canada**: use a vented flashing, or a roof radiation shield with a regular flashing.

❖ **WARNING: DO NOT BLOCK ANY OF THE OPENINGS IN THE VENTED FLASHING WITH SEALANT, CAULKING OR ANY OTHER MATERIALS.**

- Place the storm collar over the chimney and flashing. Place a bead of clear or grey exterior sealant around the chimney below the storm collar, pull the storm collar through the sealant and seal it once again on the top with the exterior sealant (**DO NOT use roofing tar**).
- Fit the rain cap on the chimney. Secure it tightly in place with the screws provided.

OFFSET CHIMNEY

An elbow may be installed directly on top of the fireplace if required. See the detailed offset charts in the EXCEL chimney installation manual. Use the offset option if you need to clear a joist or pass around a cupboard. See Figure 8 and Figure 9 for examples.



- Maximum offset angle:
 - In **USA**: 30°;
 - In **Canada**: 45°.
- Maximum number of elbows: four, resulting in two offsets and returns.

Install the fireplace and chimney as described earlier. When you require an elbow, proceed as follows:

1. Install the required elbow. Turn it in the desired direction, and fasten it to the chimney length with 3 metal screws provided at the joints.
2. Install enough lengths to obtain the desired offset. Secure each joint with 3 metal screws. Refer to the offset charts provided with the EXCEL chimney installation manual for exact offset dimensions.
3. Use another elbow to return the chimney to the vertical direction.
4. Install a roof support, a wall support, or an offset support above each offset to support the weight of the chimney (elbows are not designed to support the chimney above an offset). The support can be installed anywhere practical along the vertical course of the chimney as long as it is above the offset. Offsets longer than 8' should be supported at 6' intervals with additional offset supports.

CHASE ENCLOSURE

If the chimney runs up the outside of the house, we recommend that it be enclosed in a chase structure. The chase should be constructed in such a way that it is an extension of the home. It should be well insulated between the footings and the floor of the home to prevent heat loss. If the climate in your area is mild, insulate the chase at least to the first firestop. If the climate in your area is very cold, insulate the chase to the top to keep the chimney warmer, increase the draft, and reduce creosote buildup. We also recommend to insulate the ceiling of the chase just as if it were in the attic space. This will prevent cold air from dropping down through the chase and into the room where the fireplace is installed (see Figure 10).

Some local codes require that the walls be insulated, vapor sealed and sheathed with a fire rated gypsum board (see Figure 10). We strongly recommend this procedure for all installations to prevent cold drafts from originating in the fireplace enclosure. If you follow this procedure, we recommend that you do not insulate the wall above the front of the fireplace.

♦ **REMEMBER:** Check local codes concerning installation requirements and restrictions in your area.

MASONRY CHIMNEY

Installing your FOCUS ST fireplace with a masonry chimney still requires using EXCEL chimney from the top of the fireplace to where it will connect to a listed liner that will run up inside the masonry chimney (see Figure 11).

The stainless steel liner should be fitted inside the clay liner all the way to the top of the masonry chimney. It is not meant to replace the clay liner. You can use either the EXCEL liner or any other listed liner to ULC-S635, ULC-S640 or UL-1777.

Special care is to be taken to make sure that you have a good solid connection between the EXCEL chimney and the liner. A masonry adapter (FO-FDM8) was designed specifically for that purpose and is available from your RSF dealer. It will attach to the liner with 3 stainless steel rivets (provided) and to the EXCEL chimney with 3 screws (provided).

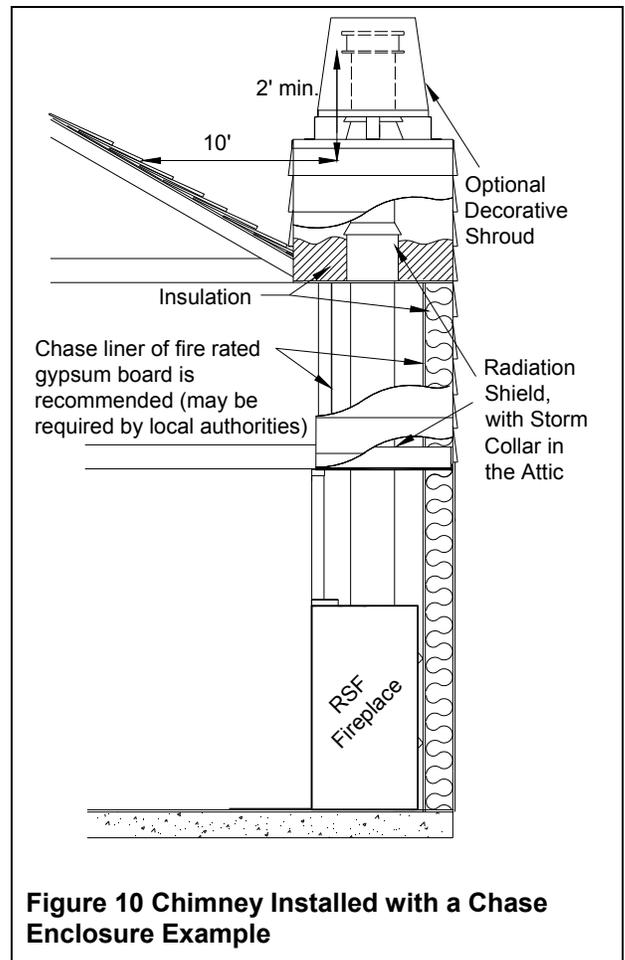


Figure 10 Chimney Installed with a Chase Enclosure Example

After mortaring in place, the connection between the EXCEL chimney and the liner should not be visible in order to isolate the heat released through the liner from the fireplace enclosure.

As depicted in Figure 11, you must install at least one 18" length of EXCEL chimney after the EXCEL chimney elbow. The uppermost part of the EXCEL chimney - where it enters the masonry chimney - must be a minimum of 12" from the ceiling.

♦ **NOTE:** If the ceiling is high enough, you can install one or more EXCEL chimney lengths directly on the fireplace before the elbow.

If you use a flexible liner, make sure to be careful when cleaning to ensure that the stainless steel flexible liner is not dislodged in any way.

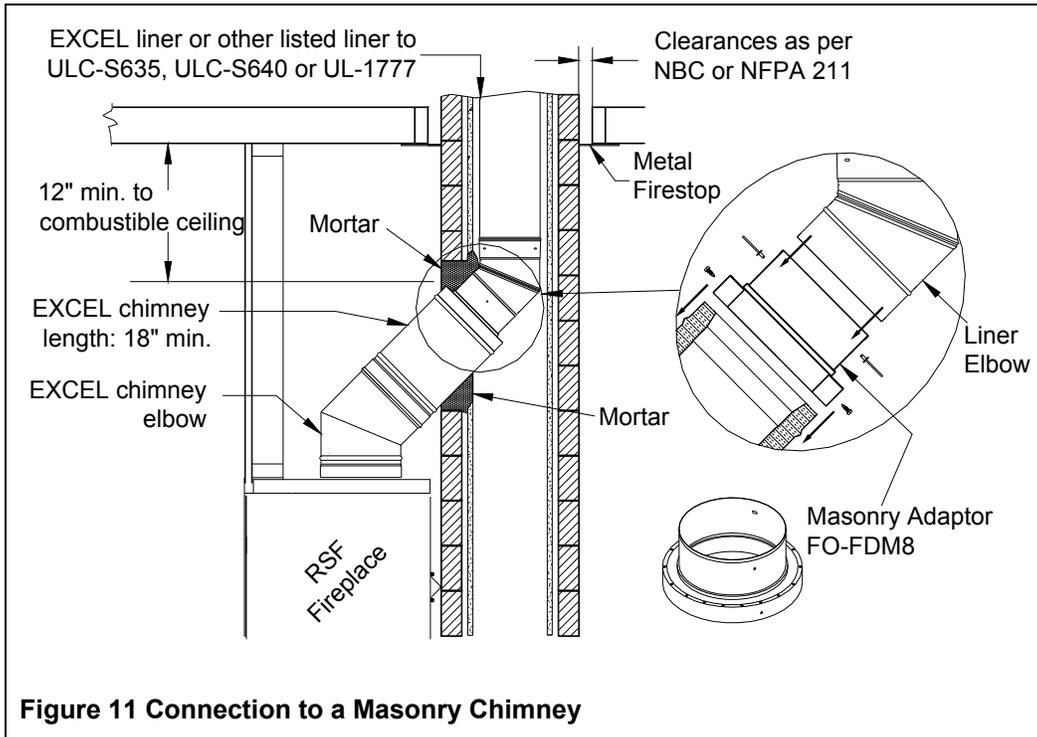


Figure 11 Connection to a Masonry Chimney

Using an Existing Masonry Chimney

❖ **WARNING: IF YOU ARE CONSIDERING USING AN EXISTING CHIMNEY, IT MUST FIRST BE THOROUGHLY INSPECTED BY AN AUTHORITY HAVING JURISDICTION TO DETERMINE THE FOLLOWING:**

1. The masonry chimney is well constructed and fully lined, in accordance with Local Building Codes and the National Building Code of Canada (NBC) or National Fire Protection Association chimney standard (NFPA 211).
2. It has been thoroughly cleaned of any soot or creosote residue and inspected to determine that it is in good working condition.
3. There is no insulation of any type in contact with the masonry chimney and there is no insulation stuffed anywhere in the chimney.
4. All the necessary clearances around the masonry chimney, along the complete run of the chimney, are respected as per NBC or NFPA 211. If the masonry chimney is enclosed in drywall, openings will probably be required in order to verify clearances at all points.
5. The masonry chimney will only be used for the fireplace and no other appliance.

If major repairs are required to meet the above conditions, a new chimney should be constructed.

To make the hole through the masonry chimney and make the connection to the fireplace, we recommend that you follow these steps:

1. Sight-in and mark the outline of where the EXCEL chimney will penetrate the masonry chimney.

- Using a large ($\frac{3}{4}$ " - 2") masonry drill bit, drill a hole exactly in the center of the oval outline. With a masonry hammer and drill, slowly enlarge the hole to the size required. Remember to work from the center out. Be especially careful with the clay liner behind the brick because three sides of it must stay in place.
- Bring the stainless steel liner down from the top of the chimney.

If you are using a rigid liner you will need enough room to secure an elbow to it with at least two screws or rivets.

If it is difficult to install rigid stainless steel liner in the existing masonry chimney or for a masonry chimney with less than 10"x10" inside, a listed stainless steel flexible liner can be used along with a flexible/rigid adaptor (LM-8LAF) available from your RSF dealer.

- Install the liner elbow and masonry adaptor on the lower end of the liner.
- Move the fireplace forward enough to install the EXCEL chimney on the fireplace (elbow and length) then move the fireplace back into position as you connect the masonry adaptor to the EXCEL chimney.

Using a New Masonry chimney

Since the masonry chimney is not build yet, we recommend that you position your fireplace, install the EXCEL chimney on it and connect to the first length of liner before building the chimney as explained above and shown in Figure 11. The liner sections can easily be installed as the layers of brick are being placed. Since this is a new chimney, we recommend that you build it to the right size so you do not have to ovalize the liner.

♦ **REMEMBER:** The stainless steel liner should be fitted inside the clay liner all the way to the top of the masonry chimney. It is not meant to replace the clay liner.

FRAMING

The enclosure walls can be framed with any suitable materials (2"x4" or 2"x6" studs, plywood, gypsum board, etc.). Because of the high heat output potential of the FOCUS ST, combustible materials must NOT go closer to the fireplace than the standoffs, on the top, back and sides.

You may also completely cover the top of a FOCUS ST as long as you maintain all fireplace standoff clearances and the 2" clearances around the chased chimney. The 2" clearance around the chimney must be open from the fireplace up to the ceiling. See Figure 12 for an example of a close clearance installation.

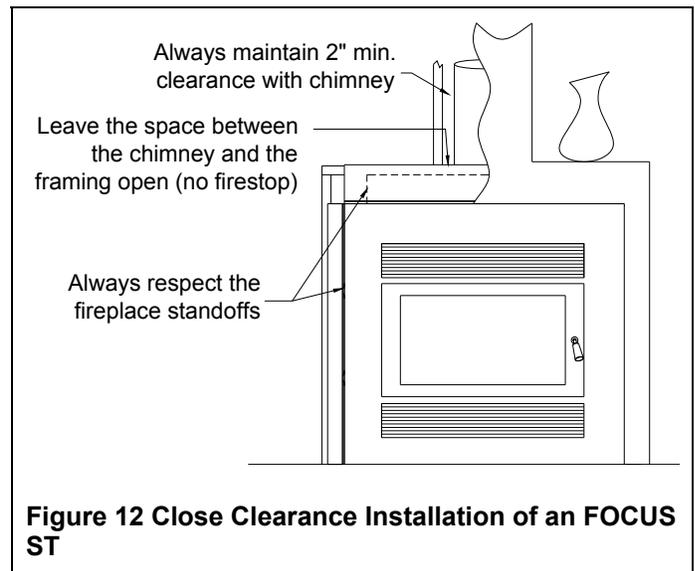
COVERING THE FIREPLACE FACING

Facing materials (see Figure 4) **MUST BE NON-COMBUSTIBLE** such as metal, brick, slate or ceramic tile. Gypsum board is NOT an acceptable facing material. Gypsum board cannot get closer to the fireplace than the side and top standoffs.

Facing this fireplace can be as simple as using cement boards that will be painted or gluing ceramic tiles with high temperature silicone sealant. Make sure to maintain a distance around the doors that will allow them to open. Do not cover or block any part of the louvers or the openings on each side of the firebox.

HEARTH EXTENSION

The area immediately in front of the fireplace must be protected by a non-combustible material such as brick, tile, stone, or slate. Refer to Table 1 (G-H) for the depth and width the hearth protection should extend beyond the front and both sides of the door opening (see Figure 1). There is no minimum thickness required for the hearth extension.



BENEATH HEARTH EXTENSION

If the FOCUS ST is installed on a non-combustible floor, the spark guard is not required.

Install the spark guard provided (5" x 36" piece of sheet metal) halfway under the fireplace and halfway under the hearth extension and centered on the door opening. The spark guard will extend 2½" beneath the fireplace. This will make certain that sparks cannot lodge in this area and start a fire.

If you are preparing a raised installation, you will need a custom made spark guard, either a "Z" shaped spark guard or a right angle spark guard (see Figure 13). The Z-shaped spark guard must be used if the height between the bottom of the fireplace and the top of the non-combustible flooring of the hearth extension is less than or equal to 2½". The height of the Z-shaped spark guard must equal the distance between the floor and the base of the unit and go under the hearth extension and the fireplace by at least 2½". If the unit is installed higher than 2½" from the top of the flooring, a right angle spark guard is necessary. The sides of the right angle spark guard should be at least 2½" x 2½" and must be covered with non-combustible material. Any custom-made spark guard must have the minimum width specified in Table 1 (I), and be installed centered on the door opening.

♦ **NOTE:** Custom-made spark guards are site built.

MANTEL

For combustible mantel shelves, please see Table 1 (J-K) for the maximum depth of the mantel shelf and their clearance requirements. See Figure 1 for an example.

Combustible mantel posts, of any depth, can be installed on either side of the fireplace as long as they respect the same minimum distance as the side wall (see Table 1 (B)).

Masonry and other non-combustible mantel shelves can be placed directly above the top of the fireplace facing or higher. If a non-combustible mantel is desired at a height lower than the minimum height for a combustible mantel, the wall framing & facing material used between the top of the metal fireplace face and the bottom of the mantel shelf must be non-combustible.

REFRACTORY BRICK INSTALLATION

The refractory bricks for the FOCUS ST fireplace are placed in the firebox at the factory. If, for any reason, they should need to be replaced, the following order should be observed (see Figure 14). To remove any of the refractory bricks, just follow the installation procedure in the reverse sequence. Refer to Figure 14 to adequately identify which refractory brick is the right and which is the left at each step of the installation.

1. Insert the baffle (1) into the firebox. The baffle is quite heavy and must be lifted to the top of the firebox. A small jack or 2"x4" lengths can be used to hold it at the top of the firebox temporarily. Make sure to orient the baffle correctly. The side with the most holes should point towards the floor of the fireplace.
2. While supporting the baffle as high as it will go, place the left and right side refractory bricks (both right (2) and both left (3)) as shown in Figure 14.

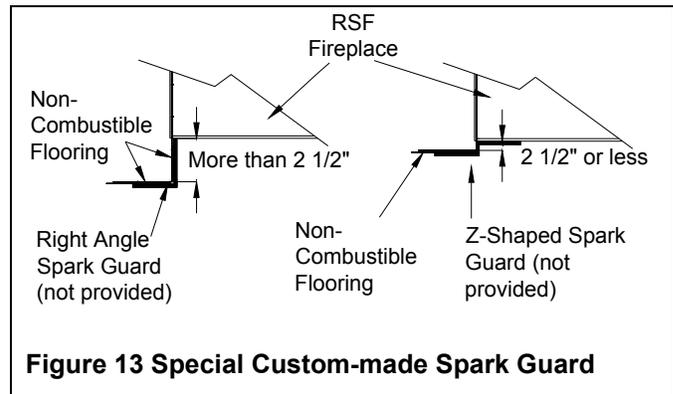


Figure 13 Special Custom-made Spark Guard

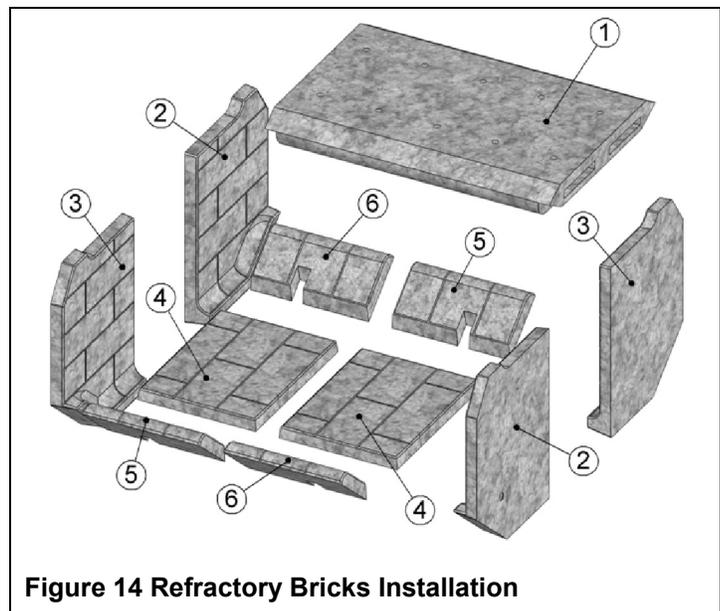


Figure 14 Refractory Bricks Installation

3. A 1" diameter round gasket (replacement part #14.10.4) is required between the baffle and the side refractory bricks. Lay the gasket along the top of the side refractories where it will contact the baffle, then lower the baffle so that it is supported by the sides and is sitting on the gasket to create a seal.
4. Install both bottom refractory bricks (both (4)).
5. Install the front refractory bricks (both right (6) and both left (5) as shown in Figure 14.

These refractory have been designed specifically for the FOCUS ST and no modifications are required to ensure a proper fit.

GAS LOG INSTALLATION

The FOCUS ST can be converted to use a vented gas log set as long as you make the modifications to the fireplace as explained below. You can use any gas log set up to a maximum of 40,000 BTU/h that is listed to ANSI Z21.60/CSA 2.26.

Remember that the installation of the gas line should be done by qualified personnel. All gas installations should be in accordance with local ordinances and the appropriate Gas Code.

❖ WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET INTO THIS FIREPLACE.

We do not require any minimum clearances between the side or the top of the firebox and the gas log set. However, any clearances stated by the gas log set manufacturer must be maintained. You may install the gas valve inside the firebox if the gas log set manufacturer allows this in its installation instructions, and if the required clearances are met.

To convert the FOCUS ST please carefully follow the following steps:

1. There is a 1 ¼" hole on both sides of the fireplace, about 12 ¾" up from the bottom of the fireplace. The gas line must come into the fireplace through one of these holes. Choose the side of installation that is more convenient to you.
2. There are a few parts that you need to remove from the FOCUS ST to be able to accommodate a gas firelog. Make sure to store them for safekeeping, you will need to reinstall them all if you ever intend to burn wood again in your FOCUS ST:
 - Remove both bottom refractory bricks from the firebox.
3. You will need to drill four 1" diameter holes on the bottom of the firebox. They should be aligned, parallel to the doors and half way between both doors. They should be 6" spaced apart, center to center, and centered between both side refractory bricks.
4. The right side refractory bricks (bricks (2) in Figure 14) already have a hole to allow the gas line through. You only need to clean out the gray sealant out of the hole on the selected installation side to be able to pass the gas line through and into the firebox.
5. Make sure to leave the four holes completely open, this will bring air to the gas log.
6. Proceed with the installation of the gas log as per the gas log manufacturer installation instructions. Make sure to carefully read and follow the gas log installation instructions. Make sure also to respect all clearances stated by the gas log manufacturer.

❖ WARNING: THE MAXIMUM GAS OUTPUT ALLOWED IN THE FOCUS ST IS 40,000 BTU/H. THE GAS LOG HAS TO BE LISTED TO ANSI Z21.60/CSA 2.26.

When operating an FOCUS ST with a gas log installed, make sure to follow the gas log manufacturer operating instructions.

LISTING LABEL

The listing label is glued to the bottom of the fireplace. Just remove the bottom louver.

LISTED FACTORY BUILT FIREPLACE
MODEL: FOCUS ST
 CONFORMS TO UL STD 127
 CERTIFIED TO ULC STD S610 & ULC STD S627

FOYER PRÉFABRIQUÉ
MODELE: FOCUS ST
 CONFORME À UL STD 127
 CERTIFIÉ À ULC STD S610 & ULC STD S627

DO NOT REMOVE THIS LABEL / NE PAS ENLEVER CETTE ÉTIQUETTE

SERIAL NO. / NO DE SÉRIE

INSTALL AND USE ONLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS. *DO NOT OBSTRUCT* COMBUSTION AIR INLET. A FIREPLACE INSTALLED WITHOUT OUTSIDE PROVISION AIR COULD STARVE OTHER FUEL BURNING APPLIANCES OF COMBUSTION, VENTILATION AND DILUTION AIR AS A RESULT OF FIREPLACE OPERATION. DO NOT USE A FIREPLACE INSERT OR OTHER PRODUCTS NOT SPECIFIED FOR USE IN THIS PRODUCT. OPERATE WITH THE DOOR FULLY CLOSED ONLY.

INSTALLER ET UTILISER SELON LES INSTRUCTIONS D'INSTALLATION ET DE FONCTIONNEMENT DU MANUFACTURIER. *NE PAS OBSTRUER* L'ENTRÉE D'AIR COMBURANT. D'AUTRES APPAREILS DE CHAUFFAGE À COMBUSTIBLE RISQUERAIENT DE MANQUER D'AIR DE COMBUSTION, DE VENTILATION ET DE DILUTION SI LE FOYER FONCTIONNE SANS ENTRÉE D'AIR EXTÉRIEUR. NE PAS UTILISER D'ENCASTRABLE OU AUTRES PRODUITS NON SPÉCIFIÉS POUR UTILISATION AVEC CE PRODUIT. FAIRE FONCTIONNER LE FOYER AVEC LA PORTE COMPLÈTEMENT FERMÉE SEULEMENT.

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

SIDEWALL	9 IN. / 229 MM FROM FIREBOX OPENING
*HEIGHT OF MANTEL - 12 IN. (305 MM) DEEP	24 IN. / 610 MM FROM FIREBOX OPENING
UNIT TOP, BACK, SIDES AND BOTTOM	0 IN. / 0 MM TO SPACERS

* SEE INSTALLATION INSTRUCTIONS FOR OTHER MANTEL HEIGHTS VS DEPTHS. COMBUSTIBLE MATERIALS ARE NOT PERMITTED ON FACE OF UNIT. COMBUSTIBLE FLOOR MUST BE PROTECTED AS SPECIFIED IN THE INSTALLATION INSTRUCTION MANUAL.

COMPONENTS REQUIRED FOR INSTALLATION:
 USE 4 IN. OR 5 IN. (102 OR 130 MM) DIAMETER FLEXIBLE DUCT AND COMBUSTION AIR INLET ASSEMBLY. USE THE **ICC MODEL 8 IN. (203 MM) EXCEL CHIMNEY** AND LISTED COMPONENTS AS PER INSTALLATION INSTRUCTIONS.

REFER TO MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS FOR OPTIONAL COMPONENTS: GRAVITY VENT SYSTEM, MASONRY CHIMNEY ADAPTER.

REPLACE GLASS ONLY WITH 5MM CERAMIC GLASS. OPERATE ONLY WITH FIREBRICK IN PLACE. FOR USE WITH SOLID WOOD FUEL ONLY. DO NOT OVERFIRE UNIT. WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE RISK OF FIRE OR INJURY, DO NOT INSTALL AN UNVENTED GAS LOG SET INTO THE FIREPLACE.

DÉGAGEMENTS MINIMUMS AUX MATIÈRES COMBUSTIBLES

MUR DE CÔTÉ	9 PO. / 229 MM DE L'OUVERTURE DE LA BOÎTE À FEU
*HAUTEUR DE LA TABLETTE - 12 PO. (305 MM) DE PROFOND	24 PO. / 610 MM DE L'OUVERTURE DE LA BOÎTE À FEU
DESSUS, ARRIÈRE, CÔTÉS ET BASE DE L'APPAREIL	0 PO. / 0 MM DES CALES

* VOIR LE LIVRET D'INSTALLATION POUR AUTRES HAUTEURS VS PROFONDEURS DE LA TABLETTE. LES MATÉRIAUX COMBUSTIBLES NE SONT PAS PERMIS SUR LA FAÇADE DE L'APPAREIL. UN PLANCHER COMBUSTIBLE DOIT ÊTRE PROTÉGÉ SUIVANT LES SPÉCIFICATIONS DU LIVRET D'INSTRUCTIONS.

PIÈCES REQUISES POUR L'INSTALLATION:
 TUYAU FLEXIBLE DE 4" OU 5" (102 OU 130 MM) DE DIAMÈTRE ET PRISE D'ENTRÉE D'AIR. UTILISER UNE **CHEMINÉE EXCEL 8" (203 MM) DE DIAMÈTRE DE ICC** ET SES COMPOSANTS HOMOLOGUÉS SELON LES INSTRUCTIONS D'INSTALLATION.

VOIR LES INSTRUCTIONS D'INSTALLATION DU MANUFACTURIER POUR LES COMPOSANTS OPTIONNELS: SYSTÈME D'ÉVENT PAR GRAVITÉ, ADAPTEUR DE CHEMINÉE DE MAÇONNERIE.

LE REMPLACEMENT D'UNE VITRE DOIT SE FAIRE AVEC UNE VITRE CÉRAMIQUE DE 5 MM D'ÉPAISSEUR SEULEMENT. OPÉRER UNIQUEMENT AVEC LES PIERRES RÉFRACTAIRES EN PLACE. POUR UTILISATION AVEC DU BOIS SEULEMENT. NE PAS SURCHAUFFER L'APPAREIL.

MADE IN CANADA

WOODBURNING FIREPLACES

DATE MANUFACTURED / DATE DE FABRICATION

MANUFACTURED BY / FAIT PAR ICC, 400 J-F KENNEDY, ST-JEROME
 QUEBEC, CANADA, J7Y 4B7

MADE IN CANADA

WOODBURNING FIREPLACES

930213-00

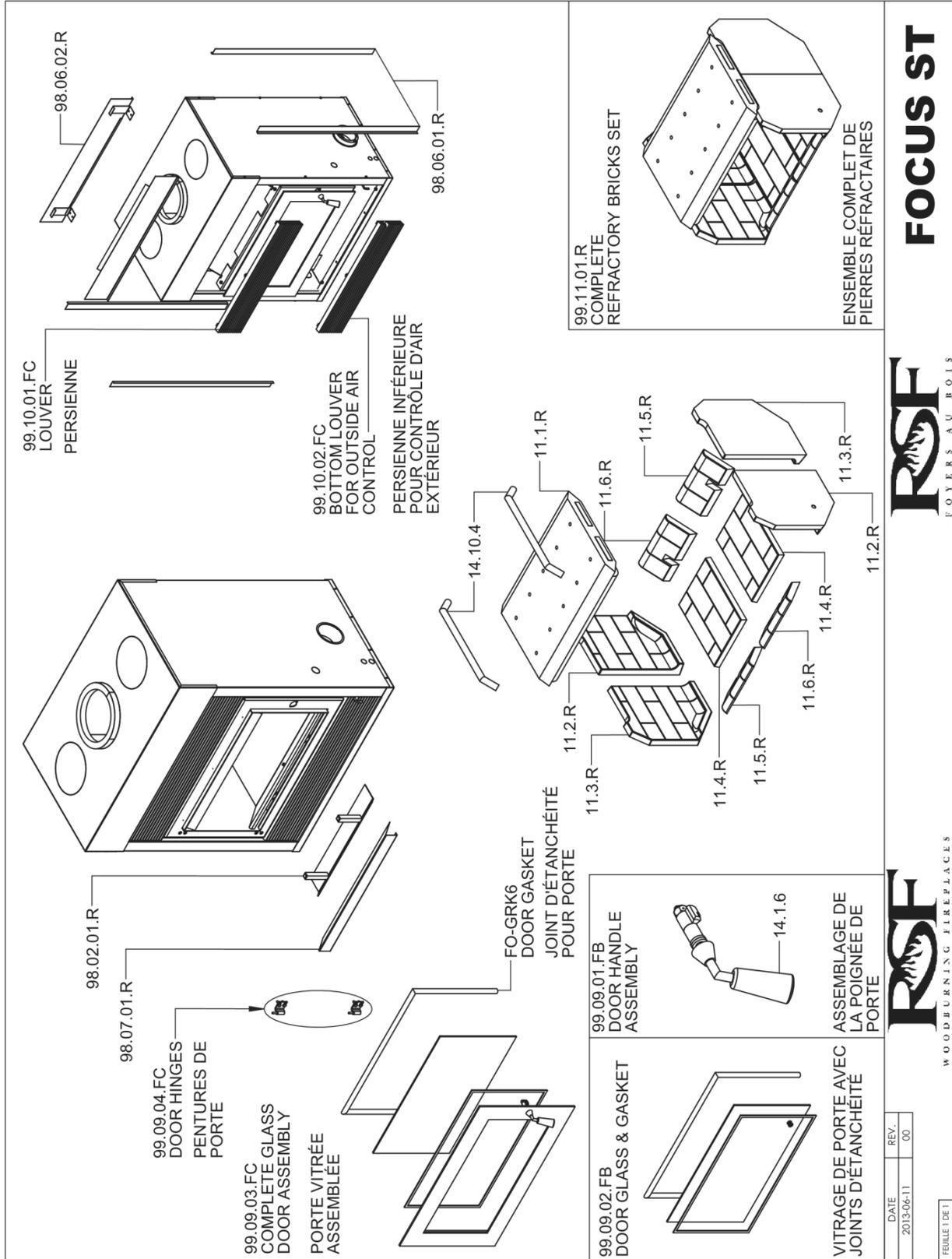
FABRIQUÉ AU CANADA

COMPLETE OPTIONS LIST

		Electricity required
FO-A	Decorative Andirons	
FO-DUCT5	Insulated Duct 5 feet	
FO-GRK6	Gasket Replacement Kit	
FO-FDM8	Masonry Chimney Adapter 8"	
FO-INT	Outside air kit 4" diameter	
FO-KR	Rock Retainer Kit	
FO-V2	Gravity Vent Kit	

REPLACEMENT PARTS

Use only genuine RSF parts. The use of any substitutes will void the warranty and may put your safety at risk.



FOCUS ST

RSF
FOYERS AU BOIS

RSF
WOODBURNING FIREPLACES

DATE	REV.	00
2013-06-11		
FEUILLE 1 DE 1		



LIMITED WARRANTY

30 Years Limited Warranty

All RSF Woodburning Fireplaces models are warranted against defects in material and workmanship for a period of 30 years, subject to the following conditions:

During the first year **RSF Woodburning Fireplaces** will repair or replace, at our option, any parts which upon examination by an authorized **RSF Woodburning Fireplaces** representative, are found to be defective, except the parts listed in the EXCLUSIONS portion of this warranty. **RSF Woodburning Fireplaces** will also pay reasonable labor costs for the repair work.

During the second through fifth years **RSF Woodburning Fireplaces** will repair or replace, at our option, any parts which upon examination by an authorized **RSF Woodburning Fireplaces** representative, are found to be defective, except the parts listed in the EXCLUSIONS portion of this warranty. **RSF Woodburning Fireplaces** shall not be responsible for any labor costs associated with this repair work.

During the sixth through thirtieth years **RSF Woodburning Fireplaces** will provide replacement parts, if available, at 50% of the published retail price, except for the parts listed in the EXCLUSIONS portion of this warranty. **RSF Woodburning Fireplaces** shall not be responsible for any labor costs associated with this repair work.

EXCLUSIONS:

- Electrical components are warranted for one year only.
- Glass and plating.
- Damage due to normal wear and tear, such as paint discoloration, worn gaskets, eroded or cracked refractory components.
- Repairs or replacements necessitated by vandalism, neglect, abuse, over-firing, improper fuel or fuel loads, or failure to adequately service the unit, as stated in the owner's manual.
- Repairs or replacements (particularly charges for travel and labor) not authorized by **RSF Woodburning Fireplaces** in advance.

LIMITATIONS:

- All items found to be defective will be replaced or repaired upon return of the defective part to an authorized **RSF Woodburning Fireplaces** dealer. **RSF Woodburning Fireplaces** will not be responsible for freight costs related to shipping replacement parts.
- Any complete fireplace, or part thereof, that is replaced or serviced under this warranty, will be warranted for a period not exceeding the remaining term of the original warranty.
- This warranty is not transferable.
- This warranty does not apply to damage to the appliance while in transit.
- This warranty does not apply if the installation does not conform to the installation requirements in the owner's manual.

RSF Woodburning Fireplaces is free of liability for any damages caused by the appliance, as well as material and labor charges incurred in the removal or re-installation of any **RSF Woodburning Fireplaces** fireplace under this warranty. Incidental or consequential damages are not covered by this warranty.

The remedies set forth herein are exclusive, and the liability of the seller shall not exceed the price of the fireplace or part thereof upon which the liability is based.

This warranty is expressly in lieu of all other warranties expressed or implied, including the warranties of merchantability and fitness for use and all other obligations or liabilities on the part of **RSF Woodburning Fireplaces**.