
**The Ultimate in Radiant Heating Systems**

# CF-2100 SERIES FIREPLACES

# OPERATING INSTRUCTIONS

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**Crossfire Fireplaces**
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# OPERATING INSTRUCTIONS

## INITIAL BURN

It is important to break in your Crossfire Fireplace before using it on a regular basis. This procedure should be followed when the fireplace is new and when the fireplace has not been used for a long period (such as over the summer).

The Crossfire modular core can absorb a tremendous amount of moisture from the humidity in the air. Therefore, it is important to burn the fireplace with small amounts of wood until the core is dried out.

The following procedure is recommended for a cold start:

- Ensure the chimney damper is in the open position
- Load the firebox approximately ¼ way up with dry wood, finely split
- Place kindling on top of the wood pile along with 6 pieces of rolled up newspaper
- Light the newspaper at the top of the firebox and close the door
- Repeat this procedure in the morning and night and this will ensure proper curing of your fireplace.

This procedure is known as a "**Top Down Fire**" and is a very effective way of starting a fire in your masonry heater. Because of the paper on the top, this technique of starting a fire will ensure an instant heat within the chimney system to create a draft.

## GLASS

The airwash system built into the door frame is designed to ensure a maintenance free viewing area. It is important to clean out the ash inside of the firebox prior to each fire. At least once a month the ash should be vacuumed out underneath the sloped plate at the base of the door frame. When the door face is opened and when looking at the bottom of the frame, there is a sloped plate which slopes toward the center of the firebox. On the left and right sides of this plate, there are holes cut into the frame. It is important to keep the ash out of these holes because it restricts the air supply to the top of the door frame. This will cause insufficient air wash over the glass and the glass will become dirty.

Wood, paper and other combustibles should not be placed against the glass.

If used daily, the glass should be cleaned once a week with a wet SOS pad to remove any marks on the glass.

## DAMPER SETTINGS

Hot, fast, clean burning fires are preferred for your fireplace. Load the firebox with the large wood on the bottom, kindling in the middle and paper at the top (the Top Down Fire described earlier). Light the paper and let the fire burn from the top down. This technique will give you the hottest, fullest fire possible. The refractory core will absorb as much heat as possible during the burn for radiation back to the room later.

After the fire is completely out, the damper must be closed. This type of operation will ensure the highest efficiency.

For a lazy, slower burning fire, simply close the chimney damper slightly to slow the draft.

Do not close the damper completely during a fire because the system will smoke and some of this smoke will end up in the home.

If you do not want the heat storage in the system, leave the damper open after the fire has gone out. This will allow air to circulate through your heater and cool down the core.

When using the fireplace for heating the home, the most efficient way of firing is to space the fires about 10-12 hours apart. This will give a more even heating cycle.

## PROPER INSTALLATION and CLEARANCES

The fireplace must be installed in accordance with the instructions with the Crossfire Installation Manual and in accordance with the local building codes.

A minimum of 8” clearance is required from the brick face surrounding the core to any combustible product. This includes furniture, drapery, plants, etc.

## ASH REMOVAL

Once a year the cleanout door at the base of the chimney must be removed and the fly ash must be vacuumed out from the base of the system. This means you will need 6’ of vacuum hose to reach the far side. Inspect with a flashlight when finished to make sure all fly ash is removed.

## TROUBLE SHOOTING

### Draft Problems

- A problem with draft would be recognized by significant amounts of smoke in the firebox that does not clear out. If this occurs, ensure the 6" air supply has no obstructions. Check to ensure the chimney damper is fully open. If necessary, inspect the chimney for any obstructions.
- Do not use a flue cap.
- Check cleanout doors for air leaks.
- A cold outside chimney can cause draft problems. Warm the chimney by lighting a paper through the cleanout at the base of the chimney if necessary.
- Insufficient chimney height. Crossfire fireplaces require a minimum chimney inside diameter of 6 ½" x 6 ½". Note: a 6" x 6" will not work.

### Chimney Dampers

Dampers are used to reduce heat loss after the fire is out.

DO NOT close the damper while there are glowing embers in the firebox. Carbon monoxide gas can be forced into the home if the damper is closed too early. Carbon monoxide gas is a colorless, odorless gas that can be fatal. A carbon monoxide detector, placed near any combustion appliance is always recommended.

Please note that the Crossfire damper supplied with your fireplace has a 7% by-pass opening built into the chimney damper. This is a code requirement.

### Poor Combustion Efficiency

The Crossfire, when properly burned, reaches combustion efficiencies of over 90%. These efficiencies can be reduced for any of the following reasons:

- Insufficient chimney height
- Insufficient air supply
- Incorrect damper position
- Wet wood
- Large logs. (3" to 4" diameter is recommended)
- Severe offsets in the chimney

Poor combustion will create excessive smoke from the chimney system and this can create creosote problems.

**Negative Pressure Within a Chimney**

Negative pressure within the chimney will hinder the movement of smoke up the chimney. This can be caused by:

- Damp, cool weather
- A lack of combustion air to the firebox
- Household exhaust fans such as central vacuums or range hoods
- Leaky chimney cleanout doors.

**Glass Replacement**

The Crossfire door is equipped with the Ceramic Glass which can only be broken by high impact or misuse. DO NOT slam the door or strike the glass.

When closing the door, make sure the logs are not in contact with the glass.

**Warnings**

- DO NOT use chemicals to start the fire
- DO NOT burn garbage or flammable fluids in the Crossfire
- DO NOT burn treated lumber
- DO NOT store fuel near the fireplace
- DO NOT operate the fireplace with the door open

- DO burn only dried wood

**Cracking**

Hairline cracks are normal in refractory materials and are not a cause for concern. If a large crack occurs, it should be filled with refractory cement to seal the joint.

If a crack occurs in the facing material, contact your installer.

**QUESTIONS?**

Contact us directly at 1-800-865-8784.