

Summary

1. WARNING: Fireplace and chimney systems will only draft properly when they are installed according to the instructions, in an appropriate location and with the proper chimney height. Installing the fireplace according to the manufacturers instructions, choosing an appropriate location, and choosing an appropriate chimney height are the responsibility of the designer and the building contractor.

Tightly insulated and sealed homes, two story interior spaces and high vaulted ceilings can cause negative air pressures within the house which can impair drafting performance. HVAC return air ducts near the fireplace opening will adversely affect the fireplace drafting performance.

It is the responsibility of the designer, the building contractor and their mechanical contractor to determine that the building's internal air pressures are conducive to positive fireplace drafting.

Avoid placing any fireplace in an area near tall trees, tall buildings, or high land masses. These structures can reduce ambient air flow pressure as well as produce down drafts, either of which can impair fireplace drafting performance.

Earthcore Industries L.L.C. does not warrant drafting and is not responsible for it.

2. Fireplace Curing Instructions:

It is critical that the refractory elements in the Isokern firebox and smoke dome components be dry before firing of the unit. Moisture left in the Isokern components from exposure during storage and shipping, as well as moisture from the installation phase, must be eliminated before the unit is put to its intended use.

The first step in reducing the ambient moisture is to be sure that the completed fireplace rest in a dried-in setting for a minimum of 28 days after construction of the unit is complete.

The next step in curing the fireplace is to be sure that the first five or six fires are of short duration.

The first fire of the unit can take place once the minimum twenty-eight day drying period has passed. This fire should be especially short.

Start the first fire slowly with a small amount of paper and kindling (small dry wood splits or twigs) and a maximum load of four to six pounds of dry firewood, estimated to be no more than two or three logs each of about three inches (3") to four inches (4") diameter.

The first fire should burn for no more than thirty to sixty minutes and then allowed to go out. Do not refuel the fireplace during the first lighting.

A cooling off period of twenty-four hours, at a minimum, should follow the first fire.

The second fire should be the same as the first fire.

A twenty-four hour cooling off period must be observed following second lighting.

After first and second fire, continue use of the unit with three or four small fires of short duration (sixty minutes or so) and small fuel loads.

After these first five or six small fires of short duration, normal use of the fireplace can proceed. For normal use the maximum recommended fuel load is twelve to sixteen pounds of dry firewood at a time. This fuel load is considered to be approximately three to five cured hardwood logs of about three inches (3") to six inches (6") in diameter. As the fire burns down, refueling should be only one or two logs added at a time.

Important: Do not burn construction debris or trash of any kind in the fireplace.

It is not uncommon for construction debris and refuse to be burned in a fireplace by site personnel on a project that is under construction, this activity must be avoided.

It is the responsibility of the building contractor to insure that the required dry-in period is met and that the required lighting sequence is performed by the owner or by the owner's agent.

3. Log grates are required for burning solid fuel in the Isokern fireplace. Grates allow for easy air flow up through the burning logs thus creating a more complete and efficient burning of the fuel.

4. How to Build a Fire:

First set the fireplace damper in the full open position. Begin laying the fire by placing several pieces of wadded up paper directly on the log grate. Place kindling (small splits of dry pine or other dry softwood) on top of the paper, enough to loosely cover the paper. Next arrange several small, dry hardwood or softwood logs or log splits on top of the kindling layer.

Finally, arrange two or three larger hardwood logs (oak, hickory, etc.) or log splits on top of the stack. Ignite the paper at the bottom of the stack. The burning paper will ignite the kindling which will, in turn, set the remaining fuel on fire.

Be sure to stack all firewood in such a way that it will settle into the log grate as the paper and kindling layers are burned away. Additional logs can be set onto the fire as each fueling burns down.

Ideally, fuel logs should be of a hardwood species that have been air dried for one year or longer. Use of cured or uncured pine logs and uncured hardwood logs for fuel should be avoided. Pine logs and uncured hardwood logs will tend to smolder and burn at relatively low temperatures producing high levels of soot and creosote.

Important: Do not throw, toss, jam, kick or otherwise force logs into the fireplace.

Summary

WARNING: Never use gasoline, gasoline type lantern fuel, kerosene, charcoal lighter fluid or other similar liquids to start or “freshen up” the fire in this or any fireplace.

WARNING: If processed solid fuel firelogs are used, do not poke or stir the logs while they are burning. Use only firelogs that have been evaluated for the application in fireplace and refer to firelog warnings and caution markings on packaging prior to use.

5. Avoid over-firing. Some examples of over-firing are:

- a. Burning of scrap lumber, construction debris, pine branches and brush or cardboard boxes;
- b. Burning small diameter twigs, branches or any other small sized combustible materials in quantities which exceed the volume of the normal log fire;
- c. Use of artificial wax base logs, trash or other chemicals or chemically treated combustibles.

WARNING: Over-firing can permanently damage this fireplace system.

6. Fireplace Doors and Screens:

This fireplace has not been tested for use with doors. To reduce the risk of fire or injury, do not install doors. Operable doors are acceptable and if doors are required by the local authority having jurisdiction, then doors must be kept in the fully open position when the fireplace is in operation. Isokern does not limit the use of fireplace screens.

7. Disposal of Ashes:

It is recommended that the firebox be cleaned of excessive ashes before each use. It is necessary to remove ashes from the open front of the fireplace. To do so, proceed in the following manner:

Allow the fire to go out and the ashes to cool for at least six to eight hours.

After the cooling period, carefully pick up the ashes from the firebox with a small, metal fireplace shovel or other metal scoop and place them in a metal container with a tight fitting lid.

If possible do not sweep the ashes as this will stir them into the air and disperse them into the room.

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

8. Inspection and Cleaning:

At least twice a year in warm climates or monthly during the heating season in colder climates, thoroughly inspect the fireplace and chimney system. Chimneys must be installed so that access is provided for inspection and cleaning. The chimney should be inspected monthly during the heating season.

Inspect the entire flue from the top down for obstructions such as birds’ nests, leaves, etc. Such obstructions must be removed.

Check spark arrestor screens for clear flow of smoke every two to four weeks during the heating season. Inspect the flue periodically during the heating season for the presence of soot and creosote build up. If creosote or soot has accumulated, it should be removed to reduce the risk of chimney fire.

Have your chimney cleaned by a professional chimney sweep if you have doubts about your ability to do it. Use a plastic, wood or steel brush to clean the chimney. Scrub the spark arrestor/chimney cap with a wire brush. Remove any chimney cap for flue cleaning from the top. Open the damper in the firebox for cleaning access from below.

Clean the inner portion of the flue by using a flexible handled chimney cleaning brush.

For straight run flue the proper size brush can be pulled up through the flue from the firebox with the damper open.

If the chimney has an offset chimney section, brush cleaning from the chimney top down to the offset/return and then from the firebox up to the offset section is the proper method.

In either case, cover the fireplace opening with a damp sheet (sealed to the opening with masking tape) before brush cleaning. Do not remove sheet until the soot has settled. It is advised to vacuum loosened soot. Do not sweep loosened soot as sweeping will disperse soot into the air and about the room.

WARNING: Do not use chemical fireplace and chimney cleaners that are poured on a hot fire. These can be dangerous and generally work only on the flue section nearest the fire, leaving the rest of the flue unaffected.

9. Exterior Maintenance:

Annually, at a minimum, check all metal flashings and weather seals around the exterior chimney where it penetrates the roof surface; inspect any chimney top spark arrestors, metal cowlings and weather hoods to make sure they are secure and weather tight.

Seal any cracks or gaps in chimney-to-roof flashings to prevent possible roof and chimney chase leaks. Inspect any cement chimney cap or clay chimney pot terminations to make sure they are not diverting water into the structure. Seal any suspected cracks or gaps in these masonry components.