



Empire Comfort Systems

INFORMATION BULLETIN

NUMBER: 02-1

MODELS: Vent-Free Log Sets

Purpose: This is a general information bulletin written to insure the proper installation, application, and use of vent-free log sets. There are many factors that come into play when there is an occurrence of sooting with any log set. We have compiled the following information to cover any potential issue that can create sooting. Preventative measures taken before initial start up can avoid future issues with log set.

IMPORTANT HOMEOWNERS GUIDELINES

Proper Log Placement

Log placement is critical to proper burner performance. Logs must be correctly positioned onto the burner. The photos in the owner's manual show the proper pinned position for logs on the set. Owners need to be shown proper log placement and instructed not to move the logs.

Logs must fit firmly onto the burner when positioned as shown in the photos. Misformed logs or logs with sloppy holes must be replaced

Proper Placement of Rock Wool and Decorative Lava Rack

Rock wool can be added to burners for a glowing ember effect. It must be positioned only on the front portion of the burner. The photos in the manual show the proper placement of rock wool. Do not put too many embers on burner.

Decorative lava rock or small wood pieces should never be placed on the burner. These items are only for placement on the floor of the fireplace or firebox.

Proper Primary Airflow into Burner

For proper burner operation and flame appearance, the flow of primary air into the venturi tube, located on the rear of the burner, must not be reduced. This flow of air is reduced if dirt, lint or other obstructions build-up around or inside the venturi. Any obstruction in the venturi tube area must be removed. The flow of air into the venturi is also reduced if the gas orifice isn't centered in the venturi inlet and/or is not aligned with the venturi. Any misalignment of the burner orifice may be corrected by bending the shutter cap holding the orifice to the inlet of the venturi tube.

Ceiling Fans, Portable Fans or Logs Installed Near Cold Air Returns

Ceiling fans or oscillating floor type fans need to be monitored during the operation of vent-free logs. If the air blows directly into the flame causing it to impinge on the log set, or firebox, it should be turned off or redirected. Ceiling fans could be reversed

to possibly eliminate flame impingement, and the floor fan could be redirected. Upon installation, be aware of any cold air returns or vents in the proximity of the log set. Any draft created around a vent-free log set can cause the flame to impinge on the log and create a sooting situation.

Candles

Avoid the use of scented or decorative candles while the log set is in operation. Candles produce a residue in the air that creates a soot like substance. Burning candles while the log set is operating magnifies the problem. It should be noted that candles, in general produce soot. The amount of time burned and the quantity of candles burned will determine the amount of soot produced and deposited.

Make Owners Aware of Proper Log Set Operation

Properly installed and properly maintained log sets do not deposit soot on the logs. If users see soot appear on a log call for service. Do not continue to operate the log set.

Sunken Fireplace

If installing this unit into a sunken fireplace, you must raise the floor to insure adequate airflow and guard against sooting. Raise fireplace floor using a non-combustible material, which is secure.

Glass Doors

Make sure that glass doors are open during all operations of the log set. The opening of the glass door frame should be the dimension used for the minimum front opening of the firebox.

Woodburning Fireplaces

The interior of the firebox and the chimney should be cleaned and free of all creosote before installing a gas burning log set. Creosote will soften when heated and can drop on the log set causing odors and possible sooting.