



AES Technical Bulletin

Soot and Fly Ash

Product models covered: All models of Biomass/Corn/Wood pellet Magnum appliances.

Topic: This technical bulletin will be addressing soot and fly ash in the home, what to look for, and some causes and affects, needed information, and how repairs or replacements are handled so that normal operation can be resumed.

What to look for:

When you notice soot or fly ash collecting on the interior or exterior of the home, this is not a defect of the unit, but can be caused by a number of factors;

- The quality of the fuel.
 - Wet and/or dirty fuel. Make sure your fuel is under 15% moisture and cleaned.
- The venting was not sealed properly, improper venting, location of venting, lack of maintenance of venting.
 - Check with you local dealer or installer to assure that your venting is properly installed. Follow maintenance guidelines stated in the owner's manual.
- The unit is being cleaned, while it is running, with the door open.
 - Never clean a unit when it is running, always follow the guidelines stated in the owner's manual.
- Using a common shop vacuum will blow dirt, etc. around the home and it might contribute to this but it may not be the root cause.
 - Always have your dealer check the unit out for proper operation to make sure that there is nothing mechanical wrong with the appliance. An ash vac is specifically designed for ash and can be purchased from your dealer.
- There is no make up air in the home.
 - Balancing the home to provide adequate fresh air will allow the appliance to operate and burn clean. It is important that you have this checked when installing a solid fuel appliance.
- Incomplete combustion caused by no outside air hooked to the unit.
 - Negative pressure and poor air quality exists in more than 80 percent of homes today. This will seriously affect the operation of the appliance and cause excessive buildup in the venting.
- The home has been updated, insulated and sealed up, the home would draw fly ash or soot out of the venting or into the home when the unit is cleaned. Negative Pressure in the home (see Technical Bulletin T-0037).
 - This can be easily corrected by checking the venting and making the needed changes. It is imperative that the dealer or installer check the unit out for proper operation to make sure that there is nothing mechanical wrong with the appliance and then determine the homes need for proper fresh air.
- Improper or poor maintenance of the appliance (not emptying the ash pan, not cleaning the venting).
 - Follow the maintenance guidelines stated in the owner's manual.
- Improper or poor operation of the appliance, not enough air, doors are left open.
 - If you are having trouble learning how to operate the unit, contact your local dealer for instruction.