

## CORN-BURNING BEST PRACTICES



A major reason for accelerated vent corrosion from burning corn is due to acidic condensate forming in the system. When operating your corn-burning appliance, always follow the appliance manufacturer's installation and operating instructions. In addition, Simpson Dura-Vent offers these recommendations to help minimize condensate formation in the vent:

### **Fuel:**

Be sure to follow the recommendations of the appliance manufacturer for the type of corn fuel to use. However, the moisture content of corn contributes significantly to condensate in the vent. The lower the moisture content of the corn, the less condensate you are likely to have in the vent. While corn with a moisture content of 15% may be allowed in the appliance, using a fuel with lower moisture content will help reduce condensate formation.

### **Vent Runs:**

Condensate is more likely to form in longer vents because the exhaust temperature cools further away from the appliance. If the exhaust cools to a certain point, moisture in the exhaust condenses in the vent, which can lead to accelerated vent corrosion. Keep the vent for corn-burning appliances short wherever possible to maintain hot flue gas temperatures and keep moisture suspended in the exhaust. If a longer horizontal vent or taller vertical vent is needed, it is recommended that the vent run inside the building envelope or inside a chase enclosure to minimize the vent's exposure to cold temperatures. Be sure to follow all-applicable building codes and the requirements of the vent and appliance manufacturers.

### **Appliance Operation:**

Always operate your appliance in accordance with the appliance manufacturer's recommendations. However, operating the appliance at its lowest setting has a greater chance for condensate to form in the vent due to the low exhaust temperature. In order to help reduce condensate from forming inside the vent system, operate the appliance at higher temperatures when colder weather is encountered. Higher operation settings provide for warmer flue temperatures, which help to keep moisture suspended in the flue gases.

### **Inspection and Maintenance:**

When burning corn, be sure to inspect the appliance and vent often to determine if there has been any corrosion or damage to the system. Be sure to keep the venting system clean, including the tee cap (if applicable). The ash that results from burning corn can trap condensate in the tee cap and inside the vent, hastening corrosion to the system if left unchecked.

# SIMPSON DURA-VENT

