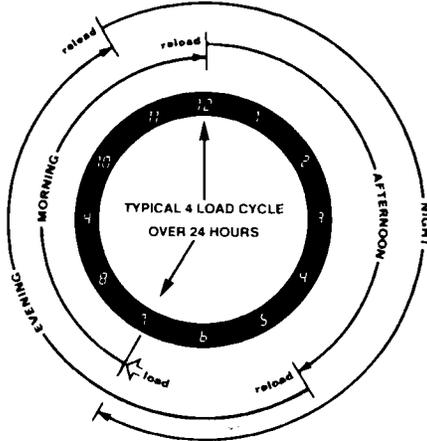


4. Fuel Load Geometry

Avoid loading only one or two pieces of wood on a coal bed - most often they will not burn completely because heat is given up faster than it is produced. A minimum of three pieces is needed to form a sheltered pocket of glowing coals which sustains the fire. A loosely-stacked load of wood (in a crisscross arrangement) burns fast; a tightly-packed load of wood burns more slowly.



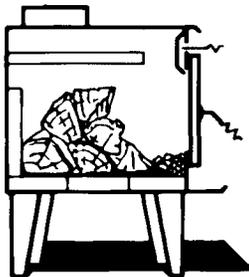
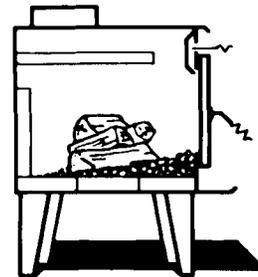
5. The Firing Cycle

Don't expect perfectly steady heat output from your stove. Wood burns best in cycles. A firing cycle is the time between the ignition of a fresh load of wood and its consumption to a coal bed. Each firing cycle should provide between four hours and eight hours of heating.

Plan the cycles to match your household routine. For example, if someone is home all day, use four cycles: morning, noon, evening, and before bed. If the house is empty during the day, use three cycles: morning, late afternoon, and before bed. Adjust the amount of wood used for each cycle so that only enough coals are left to ignite the next load. Always load at least an hour before bed so you have time to flash the load before turning the air control down for an overnight burn.

6. The Flash Fire Technique

A flash fire is a small amount of wood burned quickly. It is useful when you don't need much heat or when someone is available to tend the fire. The flash fire eliminates the smoldering fires that are common in spring and fall. To build a flash fire, rake the charcoal towards the air inlets and load at least three small pieces of wood on and behind it. The pieces should be stacked loosely in a crisscross arrangement. Open the air inlet to produce a bright, hot fire. The air supply can be reduced slightly as the fire progresses, but never enough to extinguish the flames. When only charcoal is left, the air supply can be reduced further to avoid cooling the coalbed.



7. The Extended Fire

To achieve a longer-lasting fire, rake the coals towards the air inlets and use larger pieces of wood placed compactly in the firebox. Placing the pieces close together prevents the heat and flame from penetrating the load and saves the buried pieces for later in the burn cycle. Open the air inlets fully and leave them open for between 30 and 45 minutes, depending on the load size. When the outer surface of the pieces has a thick layer of charcoal, reduce the air control setting, but not enough to extinguish the flames.

8. Removing Ashes (for appliances without grates)

When you follow the suggestions for raking of the coalbed, you will find that ashes accumulate at the front of the firebox. After an overnight fire, the remaining live coals are found at the back of the firebox, furthest from the air inlets. The ash at the front of the firebox can be removed without disturbing the coalbed. After a small amount of ash is removed, the coals can be raked and the stove loaded. Most modern appliances operate best when a small amount of ash is removed each morning before the first fire of the day is built.

