



Building a Fire

in your
Rumford and Kiva
Fireplace



Rumford Fireplace

Rumford fireplaces are known to be efficient and clean-burning. They were developed by Rumford in the late 18th century to save fuel and clean up the air in London. Our ancestors who heated with fireplaces soon learned how to build good fires but we moderns have had to learn those lessons over again.

Build big enough fires. Fireplaces have only one optimum burn rate and it is a little more vigorous than we have become used to in merely decorative fireplaces. Notice the fire in the picture on this page and see that the flames fill the firebox and burn off the soot in the lower half to two thirds of the firebox.

If your Rumford is fitted with glass or metal doors, open them, or lift them off their hinges and put them aside. The doors are fine for closing off the fireplace when you're not using it but they block most of the radiant heat from the fireplace. We tested the Buckley Rumford fireplace with the doors closed and without doors. It easily passed the emissions test both ways - and it heated much better without the doors.

Use well seasoned hardwood. Any wood fire needs three to five logs to maintain combustion. Fewer, bigger logs can be used if the wood is well seasoned. Many of our Rumford fireplaces are quite large, but even in our smallest Rumford, 20" logs will fit standing up on end.

Build tall tipi fires. Rumfords are tall fireplaces so take advantage by building tall fires. Stand the logs on end against the fireback, tipi style. This raises the fire and more nearly fills the tall Rumford firebox with fire to maximize the radiant heat output. A tall fire burns cleaner.

Open the damper and light the fire. Light a sheet of newspaper on top of the fire to heat up the flue and get the air in it going up. Light the newspaper inside the bundle of kindling at the top. The flame at the top of the fire burns up the smoke. As the fire burns down through the kindling, adjust the logs and add more as needed, standing on end and leaning against the fire or the fireback. Make sure the logs are split logs and not completely round.

You might have to add more newspaper on top of the fire or even poke some under the kindling to get it going. Keep the fire blazing. Don't be afraid of a brisk fire. You have a fireplace that can take it. Besides, hot fires burn efficiently, burning off most of the volatile gases driven from the wood and minimizing the build-up of creosote in the chimney.

After a few minutes adjust the logs so the fire is stable, and add another log or two on end, leaning against the fireback. The tall teepee style fire is surprisingly stable, falling in on itself as it burns.

Enjoy! If you leave the room, put a good full screen in front of the fire. Never leave the premises when you are actively burning in your fireplaces. You can adjust the heat of the fireplace by the wood you select. Fewer, larger logs will burn more slowly and put out less heat than the same amount of wood split smaller.

Add two logs and put up the screen when you go to bed at night. The fireplace will continue to heat all night and by morning the firebox will still be hot but the fire will be out

By keeping the smoke and products of combustion in the flame and hot longer, more of it burns up and the fireplace produces little smoke and little pollution.

Laying the fire, pin a sheet of newspaper against the fireback with some long sticks of kindling. Surround the newspaper with at least six or seven pieces of kindling 16" to 20" long and about 1" in diameter. Lean four or five logs on end against this cylinder of kindling, all pointing up toward the center of the throat, like a tipi. No grate is needed with a Buckley Rumford fireplace. You can build a fire right on the hearth. In fact the fire burns cleaner if you do.

and you can close the damper or doors - or rekindle the fire.

You're doing everything right if, after a few fires, the bottom half of the firebox has burned clean. There will be some smoke stains up higher where it's cooler but, if the fire bricks near the fire are burned clean, it means your fires are hot enough. If not, check the quality of your wood and/or split it smaller. After each season you should clean the flue with a professional chimney sweep. They not only clean the firebox and chimney flue but will also check to make sure that everything is in good working order to keep you safe.

Always use SPLIT logs, not whole, round logs. Round logs can diminish the heat from the fire and they take longer to catch fire and that can lead to the chimney flue cooling down too much at the top and you could have smoke back up into the room.

Be sure that your HVAC heating system is turned OFF when you start to burn in your fireplace. The heating system will take too much of the air from inside and cause the smoke to come into the room as well. Once your fire has been burning good and hot for an hour or more, you can try to have the heating system on and just be sure to check that the smoke doesn't try to come back into the room.

If you have trouble with getting the fire started you can always crack a window or a door to allow more air to get into the house

to help with the draw of smoke up and out the chimney. Another thing to remember: We live at a high elevation, 7000'+ above sea

level. It takes longer for chimneys to heat up to keep the convection that is needed to help the smoke get up and out the chimney. When you want to burn in your fireplace, be sure that you burn for several hours and can be present to monitor the fire and add logs as needed to keep it hot. Never leave a fire unattended.

Kiva Fireplace

Smoke goes where the air is warmest. The air in your chimney is colder than the air in your living room. This is especially true when the fireplace/wood stove is on an exterior wall of a house, and it is exposed to cold air. Cold air is heavier than warm air, so when you open the damper on your chimney the cold air will seek out the warm air in your room. That is why you feel a draft coming down the chimney when you open the flue.

Remove the grate from the fire box. The grate makes it difficult for the fire you start in your fireplace to get hot enough to keep the smoke going up the chimney. Build your fire very small to start. Just some kindling and a small piece of newspaper and place your kindling like a teepee up against the back of the fire box. Before you light the fire, **check that your damper is open, then** make a torch out of newspaper, light the end of it, and stick that up into your chimney. You want to heat up the air in your chimney and create 'lift' for the smoke to follow. Warming the flue creates a pressure field for the smoke to follow and once the flue is warm enough convection takes over. If you try to light a fire when outdoor temperatures are 50 degrees or above, you will have some difficulty priming/warming the flue. You should either wait for the temperatures outside to drop or spend more time priming the flue to get it hot enough for the smoke to follow.

After a few minutes of warming you are ready to light your small fire and as it burns you can begin to add additional wood to create the perfect fire. It is best to use wood that has been split to start your fire. Never try to start a fire with a solid round piece of wood. It is important to get the chimney flue hot and for it to stay that way throughout the burning process. Once you have a good bed of glowing red coals you can add a larger piece of wood as long as it does not smother the hot coals that have been created. It will take some time to get the very top flue tile hot enough to keep the movement of the smoke up and out of the chimney. If the chimney flue cools down too much the smoke will try to come back into the room. Always make sure that the wood you add is as close to the back of the firebox as possible. Your fire should burn a good two hours or more to make sure that the top flue tile stays hot enough to continue carrying the smoke up and out of the chimney. Because we are at a higher altitude it does take longer for the tiles to retain the heat needed. Also, if in fact you have a bit of smoke trying to come back into the room, simply crack a door or window to allow a bit more air to come into the house. Fire needs oxygen and if the home is very air tight, soon there won't be any air left to help the smoke go up the chimney. You do not have to leave the window or door open the entire time, just until the fire is burning strongly again.

Be sure you have a fireplace screen in front of the fire box to help keep embers from jumping out. Do not remove all the ash from the fireplace before lighting a new fire..the ash acts as a great insulator and will help start your next fire with very little paper and kindling. Do not close the damper until you are absolutely sure that all the coals and embers are completely cold.

If your home has an HVAC system it is recommended NOT to have the system running at the same time you are starting to burn in your fireplace. The forced air heating will suck as much air out of the room as possible including the air from the fireplace and can cause smoke to backup into the room.

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