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UNDERSTANDING YOUR MASONRY FIREPLACE

Firebox: The firebox is where you actually build the fire. It is built of a special fire brick which is set with a high temperature mortar. They vary in size but must be built in proportion to the flue passage size.

Damper: Many people refer to the damper as the flue, which is incorrect. The damper is the assembly that opens and closes the flue to keep cold air out and heat in when fireplace is not in use. It is usually located (at top) of the inside of the firebox.

Smoke Chamber: Above your damper you have an area called the smoke chamber. Most fireboxes are at least 30" wide or greater while the flue is mostly around 12"-18". The smoke chamber is the area that takes it from being the width of the firebox and gradually transitions it to the width of the flue. The smoke chamber should be sealed smooth (technical term Parged) with Chamber-tech 2000 or a product similar. The height of the smoke chamber should be the same as the width of the firebox. Here is an example: if your firebox is 33" wide, your smoke chamber height should be 33" tall.

Flue: The flue is the passage way up inside the chimney. When built it is normally lined with a refractory clay tile. These clay tiles are mortared together with the first one starting on top of the smoke chamber and the last one extending out the top of the chimney at least 2". The flue tiles are orange in color and on a properly lined chimney, should be visible, sticking out the top of the chimney. There are various sizes of these tiles: (8x8, 9x13, 13x13, 13x17, and 17x17) depending on the size of the firebox opening.

Cap: The cap is the cover that bolts onto the top of the clay flue lining at the top of the chimney, it is made of a nonferrous metal, preferably stainless steel. It keeps out rain, snow, and various animals.

Crown: The crown is the concrete slab that is formed and poured at the top of the chimney. It should over-hang the brick or stone construction of the chimney and have a drip edge to shed water off the top and protect the masonry construction.

Flashing: The flashing goes between the masonry and wood roof structure to keep water from entering the home around the chimney.