



Chimney Fires

Takeaways from November 14th Drill



— Understanding a chimney fires

— Specialized Tools

— Interior Crew

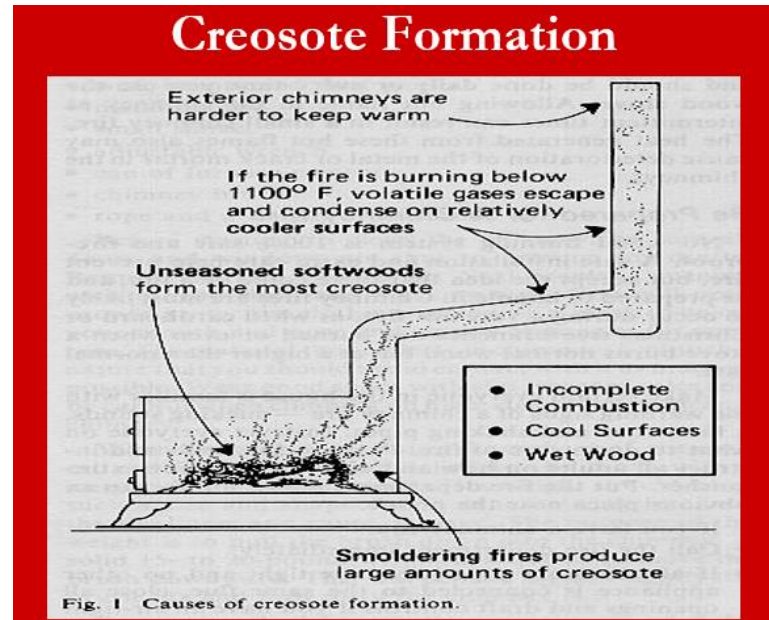
— Exterior Crew



Understand Chimney Fires

Characteristics

- Burns explosively
- Noisy, low rumble
- Turbulent Smoke
- Very high temps
- Cracks in thimble
- Cracks in flue pipe
- Smoke damage
- Roof /Attic damage
- Chimney damage

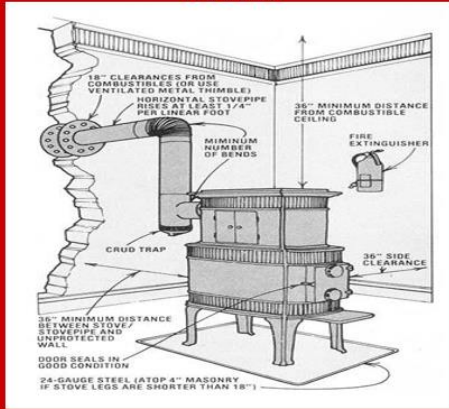


Damaged Chimneys

- 2000 degrees F will start to break down masonry work
- Brick and mortar integrity will fail
- Cracks in Terracotta lining will form
- Metal Chimneys – high heat will warp seams and crack welds



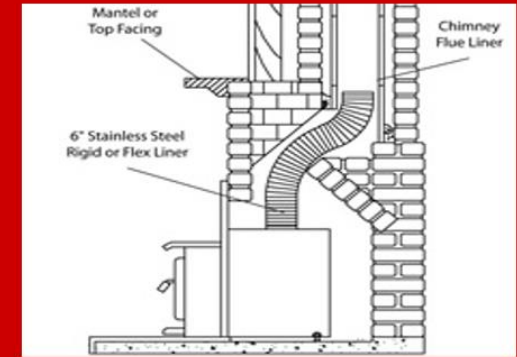
Anatomy of a Wood Burning Stove



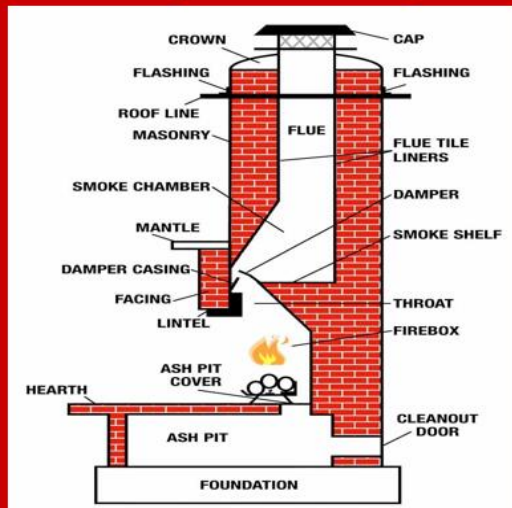
Configurations You May Encounter



Anatomy of a Wood Burning Stove Insert

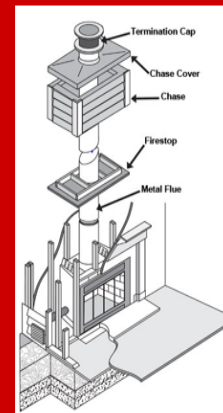


Anatomy of a Fireplace

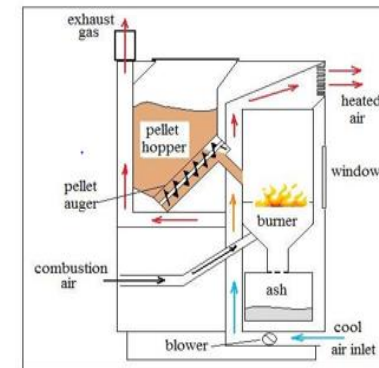


Pre-Fab Chimneys

- Check for extension
 - Top of stove
 - Along metal flue / welds
 - At Fire stop
 - Within Chase and Chase Cover
 - At the termination Cap



Anatomy of a Pellet Stove



Wood Pellet Stove Diagram

—斧— Exterior Roof Crew —斧—

Roof Crew

- Wear full personal protective equipment (PPE) and self-contained breathing apparatus (SCBA).
- Keep constant communication with interior crew
- Ensure ladder is properly set up and secure before climbing
- Set the roof ladder
- Cautiously remove the chimney cap, bird screens, or spark arrestors with a screw driver.
- Inspect the chimney using the mirror.
- If there is fire, drop the chimney bombs down. When they reach the firebox, the bag will burst and the normal draft will carry the powder up to extinguish the creosote.
- Lower the weight down to break through any obstructions
- Slowly lower the chains while spinning them to knock the creosote from the walls onto the firebox.



Tips for firefighters working on the roof:

- *Roofs may be pitched and difficult to access. Be sure to set a roof ladder.*
- *There may be ice and snow on an already dangerous roof.*
- *Consider the extra weight; limit the number of firefighters on the roof.*
- *Do not look directly into the chimney. Visually inspect the flue with a mirror.*



Interior Crew

Interior Crew



- Advance a hoseline to the front door.
- Wear full personal protective equipment (PPE) and self-contained breathing apparatus (SCBA).
- Keep constant communication with exterior crew
- Inspect the firebox and as much of the chimney in the inside of the home as possible.
- Place fire-retardant salvage covers in front of the fireplace
- Place the wood and ashes from the firebox in metal salvage bucket, bring it outside, unload the contents, and hose it down.
- Briefly open the draft stop and completely discharge a dry-chemical extinguisher upward. (Beware. This method will add oxygen to the fire and temporarily accelerate it. It will also be messy, so be sure to put salvage covers and tarps down before doing so).
- If the interior of the house is filled with smoke, perform horizontal ventilation using a positive pressure fan.

Be sure to

- Send a recon team to each floor and the attic to check for extension.
- Use a TIC on each floor.
- Check the CO levels one more time before terminating the incident
- Look for discoloration or surface materials, smoke coming from cracks, outlets, lighting fixtures, or roof coverings.



Specialized Tools

Interior Tools

- Metal Can with Lid
- fire-retardant salvage covers
- Mirror
- Fire Tongs
- Fire Box Shovel
- Fire Retardant Gloves
- Dry-Chemical Extinguisher



Exterior Tools

- Plastic Carrying bucket
- Screw Driver
- Mirror
- Lowering cable
- Weight
- Chains
- Fire Retardant Gloves
- Dry-Chemical bombs



****Note****

These Tools are found in the metal can and should be cleaned and returned after use.



Additional Interior Tools

Thermal Imaging Camera



Thermal Imaging Camera



Water Extinguisher



Set of Irons



Additional Exterior tools

Extension Ladder



Roof Ladder

