

Prefabricated Fireplace Inspections *For* Home Inspectors



Skip Walker
CREIA, MCI
ASHI, ACI



Skip Walker

- FIRE SERVICE Certified, FP-102
- CREIA Master Inspector
- ASHI ACI
- ICC Residential Combination Dwelling Inspector
- ICC California Residential Building Inspector
- Past President, SV ASHI
- Past Education Chair, SV ASHI/CREIA
- CREIA Inspector of the Year, 2011
- CREIA Board of Directors, 2009-2012t
- CREIA State Secretary, 2010
- Published 20+ Inspection Related Articles

Overview

- **CREIA Standards of Practice**
- **Fireplace Inspection Standards / NFPA 211**
- **Fire 101/Combustion**
- **How Fireplaces Work**
- **Building Codes**
- **Fireplace System Types**
- **Where Things to Go Wrong**
- **Questions!**

CREIA Standards Of Practice

- ***Fireplaces and Chimneys***

- ***A. Items to be inspected:***

- ***Chimney exterior***

- ***Spark arrestor***

- ***Firebox***

- ***Damper***

- ***Hearth extension***

- ***B. The inspector is not required to:***

- ***Inspect chimney interiors***

- ***Inspect fireplace inserts, seals, or gaskets***

- ***Operate any fireplace or determine if a fireplace can be safely used***

Standards Of Practice

- Report on Components and Conditions
 - ◆ Use The ***Correct*** Terminology
- We Need To Report “What” It Is
- We Do Not Need to Determine Why It Is

Standards Of Practice

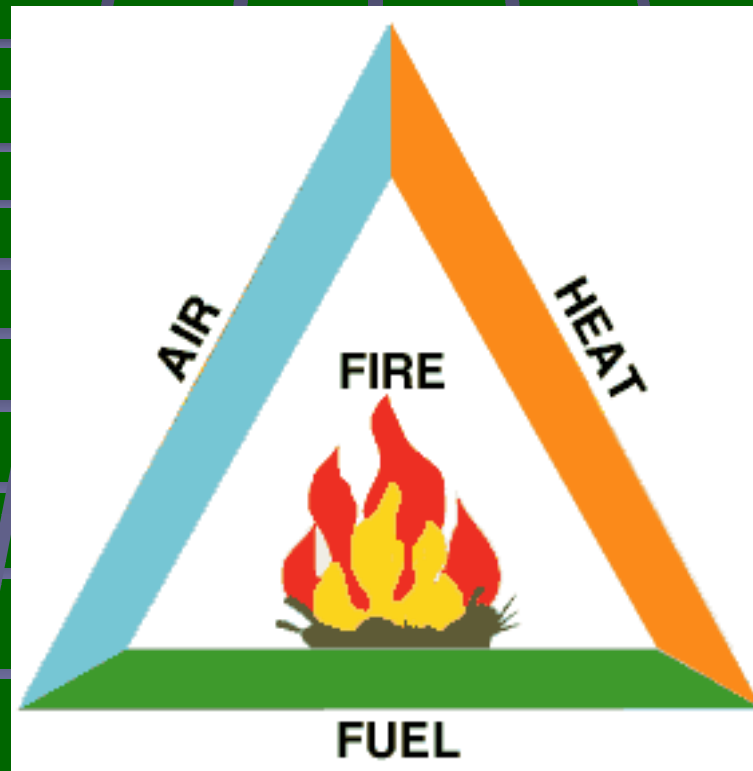
- It Is Best to Avoid Drawing Conclusions
 - There Are Always Multiple Possibilities
 - It is Seldom Clear cut
- *Understanding The Why Does Help Us Defer With Certainty*

Fireplace Inspection Standards

- NFPA 211 - Level I
 - ◆ Basic – Similar To A Home or Sweep Inspection
- NFPA 211 - Level II
 - ◆ More In-Depth – No Destructive Testing
 - ◆ May Use a Camera
 - ◆ May Involve Calculations
- NFPA 211 - Level III
 - ◆ Very Invasive – Destructive Testing Generally Involved

Fire 101/Combustion

- **The Old Concept of The Fire Triangle Is Not Totally Accurate**



Fire 101/Combustion

- For Ignition to Occur and Become Self Sustaining 4 Elements Are Required:
 - ◆ **Oxygen**
 - ◆ **Fuel**
 - ◆ **Heat**
 - ◆ **Self Sustained Chemical/Chain Reaction**
- **Wood Has a Thermal Content of 8000-9000 BTU's/Lbs.**
- **Ignition Temperature = 450-525 F**
 - Ray Bradbury's Novel Fahrenheit 451, 451 is Ignition Temperature of Paper

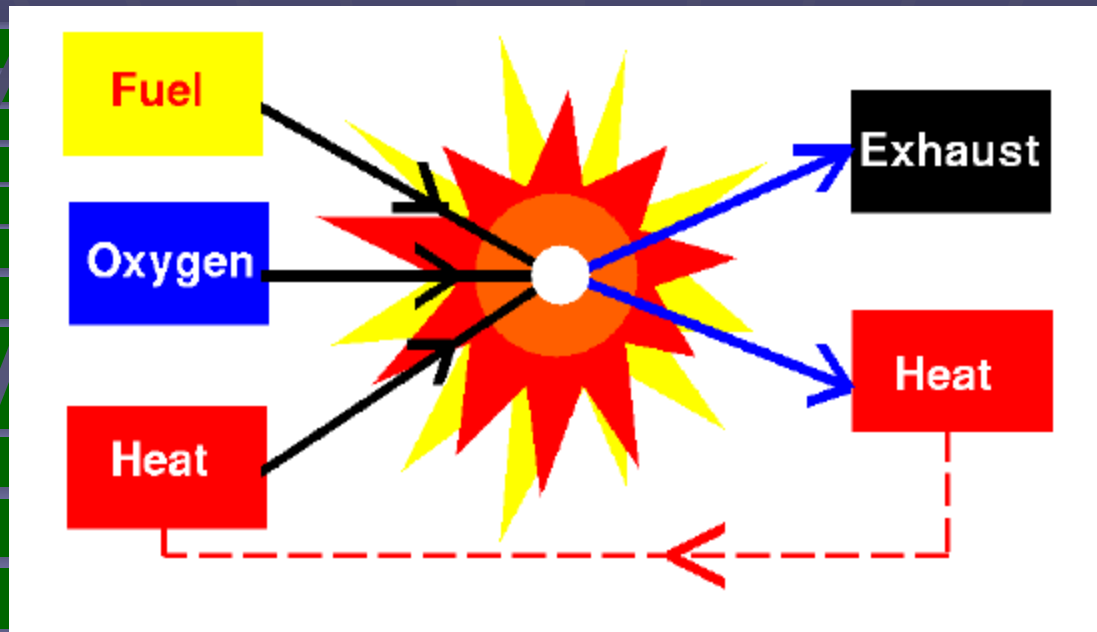
Fire 101/Combustion



Fire Tetrahedron

All Elements Must Be Present To Have A Self Sustaining Fire

Fire 101/Combustion



To Be Safe, All Aspects Of A Fire Must Be Controlled

Fire 101/Combustion

When You Use A Fireplace
You Are Intentionally Setting A Fire
Inside Your House

There Is No Such Thing As Minor Details

Fire 101/Combustion

- **Pyrolysis/Pyrolytic Decomposition**
- **Long Term Exposure to Sub-Ignition Levels of Heat**
- **Degrades the Wood/Breaks Down The Molecular Structure**
- **This In Turn Lowers The Ignition Temperature**

Fire 101/Combustion

Until One Night..... You Get *Ignition*



Fire 101/Combustion

Pyrolysis Can Take Decades

*This Is Why Proper Clearances to
Combustibles Are Critical*

Sometimes Makes A Sound Like Running Water In A Wall

Fire 101/Combustion

- **Smoke Is NOT Smart**

- ◆ Like Water – It Travels the Path of Least Resistance

- **Wood Smoke Is Unhealthy To Breathe**

- ◆ Similar Make Up To Cigarette Smoke
- ◆ Smoke Entry Into Living Space Is Dangerous
- ◆ Increasingly – Local AQ Districts View It Similar to Second Hand Cigarette Smoke

Fire 101/Combustion

- **Wood Smoke Chemical Make-Up**
 - **PM 2.5**
 - **Small Particulate Matter**
 - **Penetrates Deep Into Lungs**
 - **Irritant That Causes Lung Scarring**

Fire 101/Combustion

- **Wood Smoke Chemical Make-Up**
 - **Formaldehyde**
 - **Dioxin**
 - **Carbon Monoxide**
 - **A Number of Known Carcinogens**
 - **Polycyclic Aromatic Hydrocarbons (PAH)**
 - ◆ **Suspected Carcinogens**
 - **Nitrogen Oxides**
 - ◆ **Causes Lung Tissue Damage/Scarring**

Fire 101/Combustion

- **Wood Smoke Chemical Make-Up**
 - Interferes With Lung Development in Infants/Children
 - Increases Risk of Respiratory Infections in Children
 - Depresses Immune System
 - Interferes With Lung Cleansing Functions
 - Average Fireplace Generates PAH's Equivalent to 95 Packs of Cigarettes *Per Hour*

Fire 101/Combustion

- **The Bottom Line:**
 - ***Smoke from a Fireplace is Unhealthy***
 - ***Smoke Entry into the Living Space is a Reportable Condition***

How They Work

- Fireplaces Look Simple – But Are Actually Pretty Complicated Systems
- All Fireplaces Operate On The Same Principles

• *Now Let's Look at the Basic Operating Principles*

How They Work

- *In the Real World, Some Fireplaces That Should Work Don't and Some That Shouldn't Do....*

How They Work

Fireplaces Require Three
Separate But
Equally Important
Components to Work
Properly.....

How They Work

*There is One Part
Science.....*

How They Work

One Part Art....

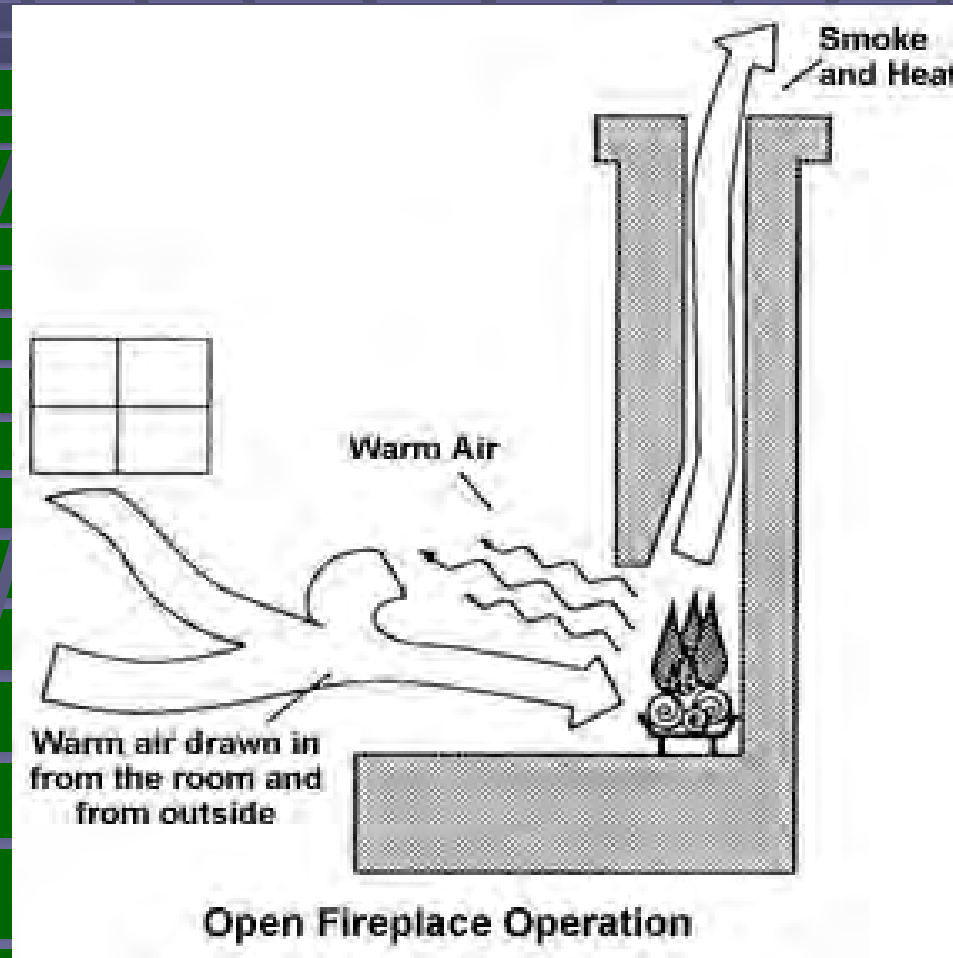
How They Work

One Part Black Magic....

How They Work

- Fireplaces Are Negative Pressure Systems
- Fire Creates Upward Flow in Flue/Draft
- Draft Creates Slight Negative Pressure in Firebox
- Living Space Has Slight Positive Pressure Relative to Firebox
- Air Is Drawn Into Firebox to Feed Combustion Process

How They Work



How They Work

Exterior Air Pressure Must
Be Neutral to Negative
Relative to Interior Living
Space

Basic System Categories

- Site Built Masonry/Cast In-Place
- Premanufactured/Zero Clearance
- Decorative Gas Appliances/DGA
- Free Standing/Wood Stoves
- Precast Concrete/Rampart
- Insert Units

Basic System Categories

- Today We Will Focus on:
 - Premanufactured/Zero Clearance
 - Decorative Gas Appliances/DGA
 - Insert Units

Premanufactured Fireplaces

- Prefabricated Off Site/Assembled On Site
- Engineered Systems
- Listed System/UL 127
- Sometimes Referred to as Zero Clearance Systems

Premanufactured Fireplaces

- Prefabricated System Code Requirements
- CRC 2013 Chapter 10
 - Sections R1004 Factory Built Fireplaces and R1005 Factory Built Chimney's
 - And Exterior Air Supplies R1006
 - *Your Local Codes/Ordinances May Vary But Should Not Be Less Strict*

Premanufactured Fireplaces

- **R1004.1 General.** Factory-built fireplaces shall be *listed* and *labeled* and shall be installed in accordance with the conditions of the *listing*. Factory-built fireplaces shall be tested in accordance with UL 127.
- **R1004.2 Hearth extensions.** Hearth extensions of *approved* factory-built fireplaces shall be installed in accordance with the *listing* of the fireplace. The hearth extension shall be readily distinguishable from the surrounding floor area.

Premanufactured Fireplaces

- **R1004.3 Decorative shrouds.** Decorative shrouds shall not be installed at the termination of chimneys for factory-built fireplaces except where the shrouds are listed and *labeled* for use with the specific factory-built fireplace system and installed in accordance with the manufacturer's installation instructions.

Premanufactured Fireplaces

- **R1004.4 Unvented gas log heaters.** An unvented gas log heater shall not be installed in a factory-built fireplace unless the fireplace system has been specifically tested, *listed* and *labeled* for such use in accordance with UL 127.
- **IMPORTANT NOTE:**
- **CMC Overrides This Section! Unvented Gas Appliances of Any Kind Are Not Allowed**

Premanufactured Fireplaces

- **R1005.1 Listing.** Factory-built chimneys shall be *listed* and *labeled* and shall be installed and terminated in accordance with the manufacturer's installation instructions.
- **R1005.2 Decorative shrouds.** Decorative shrouds shall not be installed at the termination of factory-built chimneys except where the shrouds are *listed* and *labeled* for use with the specific factory-built chimney system and installed in accordance with the manufacturer's installation instructions.

Premanufactured Fireplaces

- **R1005.3 Solid-fuel appliances.** Factory-built chimneys installed in *dwelling units* with solid-fuel-burning *appliances* shall comply with the Type HT requirements of UL 103 and shall be marked “Type HT and “Residential Type and Building Heating *Appliance* Chimney.”

Premanufactured Fireplaces

- **Exception:** Chimneys for use with open combustion chamber fireplaces shall comply with the requirements of UL103 and shall be marked “Residential Type and Building Heating *Appliance* Chimney.” Chimneys for use with open combustion chamber *appliances* installed in buildings other than *dwelling units* shall comply with the requirements of UL 103 and shall be marked “Building Heating *Appliance* Chimney” or “Residential Type and Building Heating *Appliance* Chimney.”

Premanufactured Fireplaces

- **R1005.4 Factory-built fireplaces.** Chimneys for use with factory-built fireplaces shall comply with the requirements of UL 127.
- **R1005.5 Support.** Where factory-built chimneys are supported by structural members, such as joists and rafters, those members shall be designed to support the additional load.

Premanufactured Fireplaces

- **R1005.6 Medium-heat appliances.** Factory-built chimneys for medium-heat *appliances* producing flue gases having a temperature above 1,000°F (538°C), measured at the entrance to the chimney shall comply with UL 959.

Premanufactured Fireplaces

- **R1006.1 Exterior air.** Factory-built or masonry fireplaces covered in this chapter shall be equipped with an exterior air supply to assure proper fuel combustion unless the room is mechanically ventilated and controlled so that the indoor pressure is neutral or positive.
- **R1006.1.1 Factory-built fireplaces.** Exterior *combustion air* ducts for factory-built fireplaces shall be a *listed* component of the fireplace and shall be installed according to the fireplace manufacturer's instructions.

Premanufactured Fireplaces

- Sometimes Referred to as

Temporary Fireplaces

- ***They Have A Service Life***
 - Generally **20-25 Years**

Premanufactured Fireplaces

- Service Life Assumes:
 - No Extreme Environmental Conditions
 - “Normal” Use

Premanufactured Fireplaces

- What Does UL 127 Mean?
 - It is a Standard Test Procedure
 - The Fireplace is Installed In An Enclosure
 - Inside the Enclosure Are Heat Sensors
 - The Fireplace is Burned for Prescribed Periods
 - The Sensors Must Not Get Hotter Than XXX Degrees During Test

Premanufactured Fireplaces

- What Does UL 127 Testing Mean?
 - The UL 127 Test is Performed with the Components Sent by the Manufacturers
 - So the Certification is Only Valid for Systems Installed Using Those Exact Pieces
 - Substituting Component Negates the Listing

Premanufactured Fireplaces

- A Few Random Fine Print Disclaimers:
 - Use **SOLID WOOD only for fuel**. It is best to use dry and well seasoned hardwood. Soft woods tend to burn very quickly. Solid scrap construction lumber produces excessive sparks. **DO NOT use** treated wood, **artificial wax based logs**, charcoal, coal, trash, driftwood or woods that have been dipped in tar, pitch, pine tar, creosote, etc. Wood products made with synthetic binders, such as plywood, produce abnormally high temperatures and sputtering, smoking fires.

Premanufactured Fireplaces

- A Few Random Fine Print Disclaimers:
 - **DO NOT use a fireplace insert** or any other product not specified by Superior for use with this fireplace
 - ALL Say This.....

Premanufactured Fireplaces

- A Few Random Fine Print Disclaimers:
- This fireplace is not intended to heat an entire home or be used as a primary heat source. It is designed to ensure homeowner comfort by providing supplemental heat to the room

Premanufactured Fireplaces

- A Few Random Fine Print Disclaimers:
- Never modify or alter your fireplace system in any way. To do so may create a potential fire hazard and void the Limited Warranty

Premanufactured Fireplaces

- A Few Random Fine Print Disclaimers:
 - Keep any combustible furniture or decorative pillows at least **36"** from the fireplace opening
 - DO NOT permanently place furniture or other items such as decorative pillows within **60"** of the fireplace front face

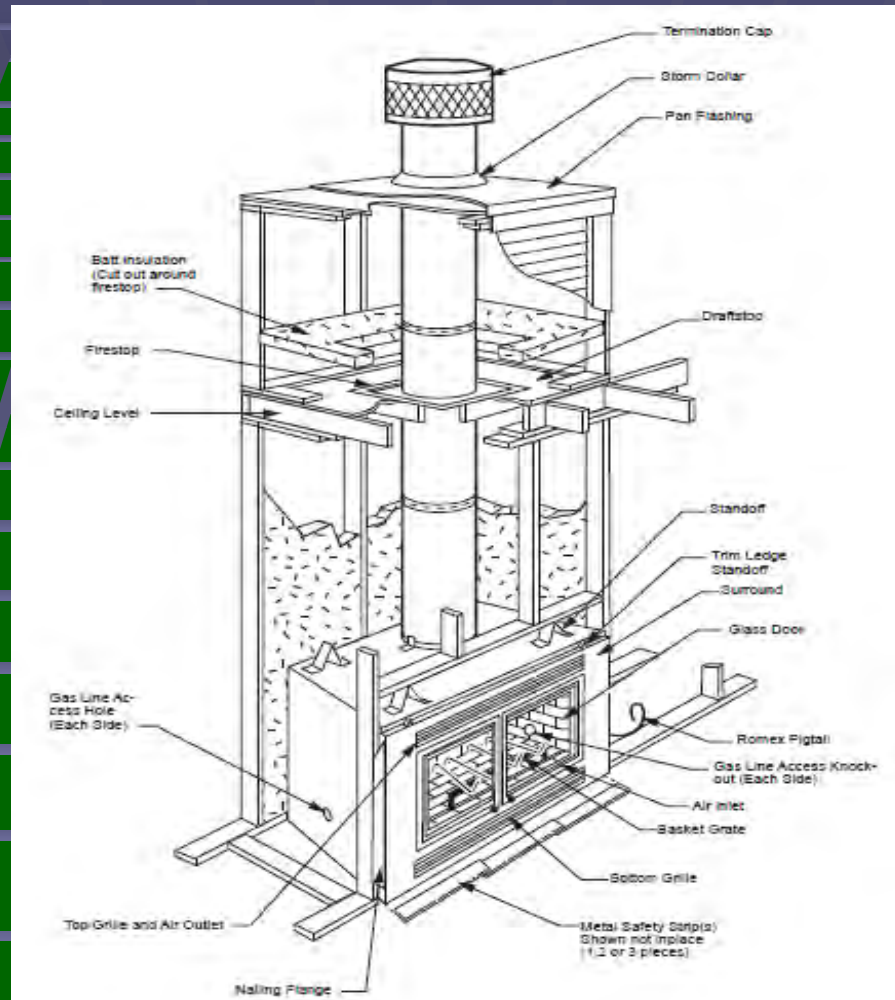
Premanufactured Fireplaces

- A Few Random Fine Print Disclaimers:
- MHSC warranty will be voided by and MHSC disclaims any responsibility for the following actions:
- **Installation and/or use of any component part not manufactured or approved by MHSC in combination or assembly with a MHSC fireplace system, notwithstanding any independent testing laboratory or other third party approval of such component parts or accessory.**
- *Any such action may possibly cause a fire hazard.*

Premanufactured Fireplaces

- A Few Random Fine Print Disclaimers:
 - Your fireplace can be fitted with **beautiful** twin pane doors. Model TPA doors are available for use with these fireplace. Use Model 36 doors with 36 inch fireplaces and Model 42 doors with 42 inch fireplaces. Model TPA doors are easily fitted to the fireplace opening. Model TPA-BB doors have a beautiful bright brass finish
 - **To ensure warranty and to prevent a potential fire hazard, do not use any other doors on these appliances**

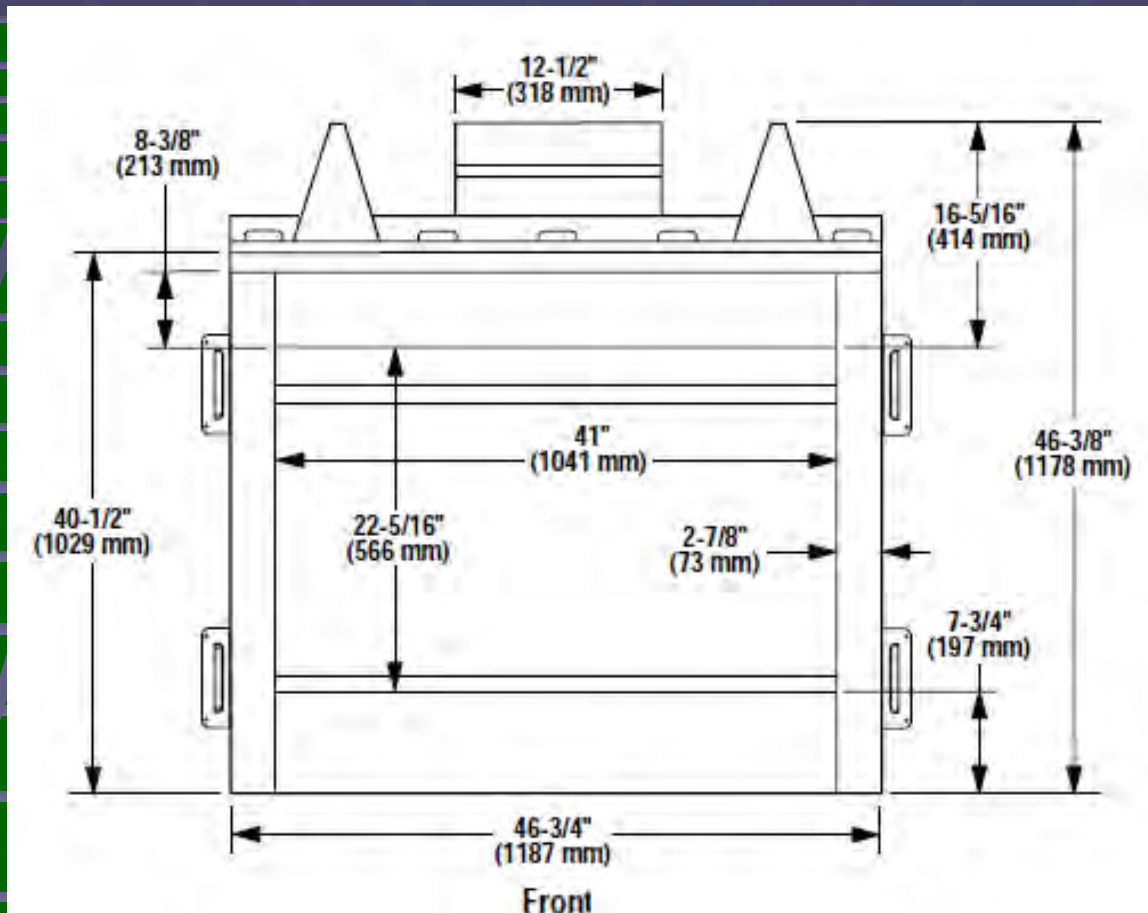
Premanufactured Fireplaces



Premanufactured Fireplaces

- Installation Issues
- Much Will Not Be Visible
- Use Special Care When You Have Visibility
- Attics
- Adjacent Areas
- Gaps/Voids at the Face

Premanufactured Fireplaces



Premanufactured Fireplaces

IMPORTANT: UNDER NO CIRCUMSTANCES CAN THE FIREPLACE TOP SPACERS (FIGURE 10) BE REMOVED OR MODIFIED, NOR MAY YOU NOTCH THE HEADER TO FIT AROUND OR BE INSTALLED LOWER THAN THE SPACERS. THE HEADER MAY BE IN DIRECT CONTACT WITH THE TOP SPACERS BUT MAY NOT BE SUPPORTED BY THEM.

Premanufactured Fireplaces

- Firebox:
 - Annular Spaces Sealed/Gas Pipe
 - Refractory Panel Condition
 - Damage to Metal Enclosure
 - Log Grate
 - Damper & Controls

Premanufactured Fireplaces

- Annular Spaces Sealed/Gas Pipe:
 - All Require Sealing Penetrations
 - Rock Wool or HT Fireplace Caulk
 - Voids Can Draw/Convect Hot Gases & Embers into Chase

**IMPORTANT: REPACK INSULATION MATERIAL
IN SQUARE HOLE AROUND GAS LINE, INTERIOR
AND EXTERIOR OF FIREPLACE, TO SEAL.**

Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces

Refractory Panel Condition:

- Small Cracks and Pitting Generally OK
- Repair/Replacement Manufacturer Driven
- Some Allow Patching with HT Mortar
- Some Require Replacement
 - ◆ Replacement Requirements Always as a Set
 - ◆ Manufacturers Parts Only

Premanufactured Fireplaces

Lennox Hearth/Home Refractory Panel Repair/Replacement Instructions:

Proper care and “burn-in” of the firebox will prolong the period of enjoyment without extensive maintenance. For the first few uses, build small fires – not roaring infernos. The materials used in the refractories contain and absorb moisture. It is important to “cure” the refractories by building only modest fires. Under normal usage, it is expected that hairline cracks will appear in the refractory surface. These hairline cracks do not affect the safe operation of the fireplace.

Refractories should be replaced when:

- 1. The crack opens more than 1/4".**
- 2. Pitting in the surface is extensive and pits become deeper than 3/16".**
- 3. Any piece of refractory larger than 2" in radius and 3/16" deep becomes dislodged.**

If conditions 1, 2 or 3 occur, the refractory should be replaced.

Premanufactured Fireplaces

Damage to Metal Firebox Enclosure:

- Some Deflection/Deformation Allowed
 - ◆ Too Much Can Trigger Replacement:
 - ◆ Significant Deformation
 - ◆ Damage to Metal
 - ◆ Significant Rusting – Especially At Flue Collar
 - ◆ Unsealed Openings/Improper Modifications

Premanufactured Fireplaces



Premanufactured Fireplaces

Log Grate:

- Remember – All Components MUST BE Approved
 - ◆ System Was Tested For A Max BTU
 - ◆ Using Larger Grates Allows Larger Fires
 - ◆ Larger Fires Likely Exceed The BTU Rating
 - ◆ Over Firing Causes Refractory Panel Damage and Firebox Deformation

Premanufactured Fireplaces



Grate from Home Depot

Premanufactured Fireplaces

Damper & Controls:

- Operational
 - ◆ Full Open – Most Important to Avoid Smoking
 - ◆ Full Close – Mainly Energy Issue
 - ◆ Not Substitutions/Modifications
 - ◆ Gas Log Installed – Damper Stop
 - ◆ Log Starter – Stop Not Mandated

Premanufactured Fireplaces

Flues:

- Residential Systems

-  UL 103

-  Sub 1000°F

-  Can Be Multi-Fuel

-  Can't Mix in Same Flue

-  Dual Wall, Triple Wall, Class-A

Premanufactured Fireplaces

Flues:

● UL 103

Low Heat – Sub 1000°F

Listed

Installed as a System

No Mix and Match Unless Approved

Premanufactured Fireplaces

Flues:

- Residential Systems

-  UL 103

-  Sub 1000°F

-  Can Be Multi-Fuel

-  Can't Mix in Same Flue

-  Dual Wall, Triple Wall, Class-A

Premanufactured Fireplaces

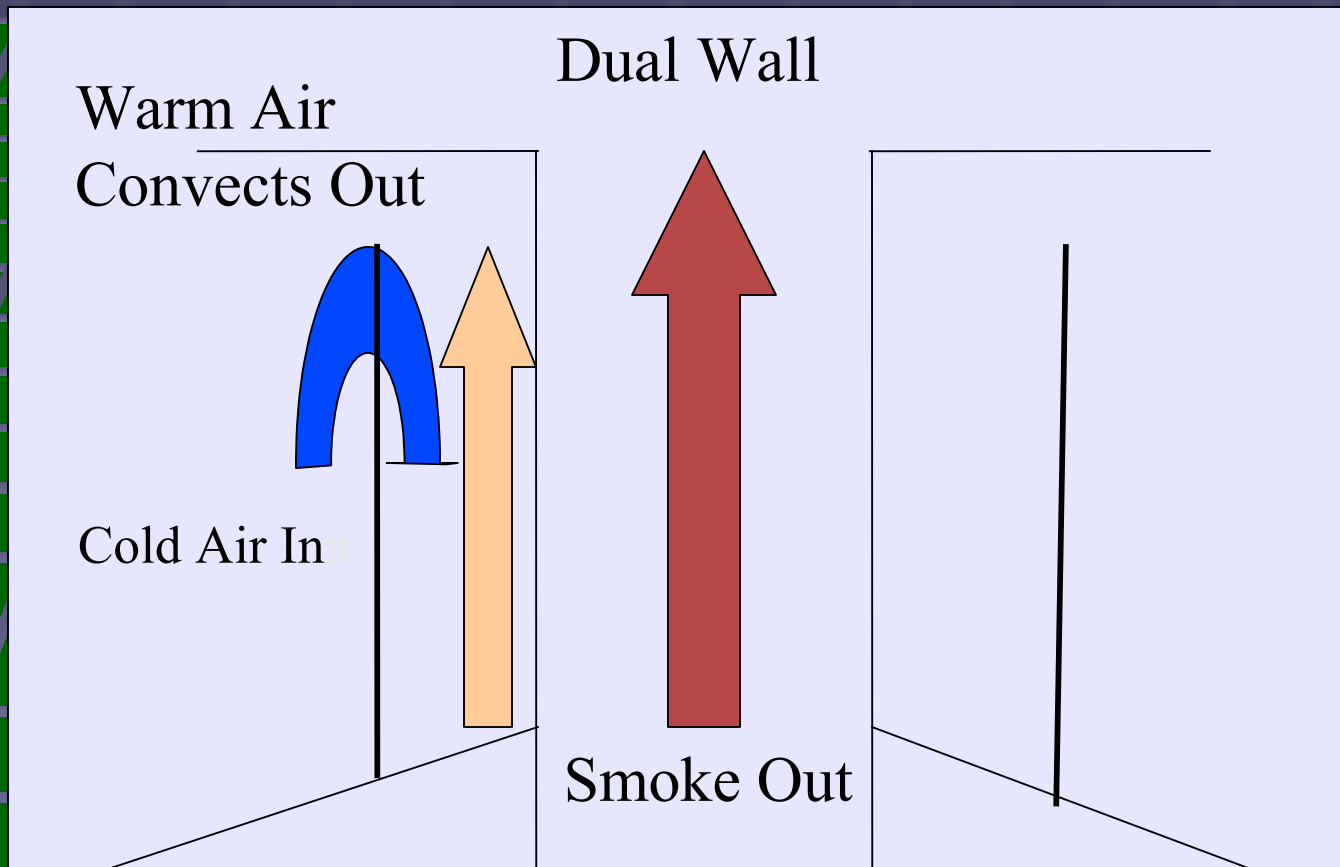


Premanufactured Fireplaces

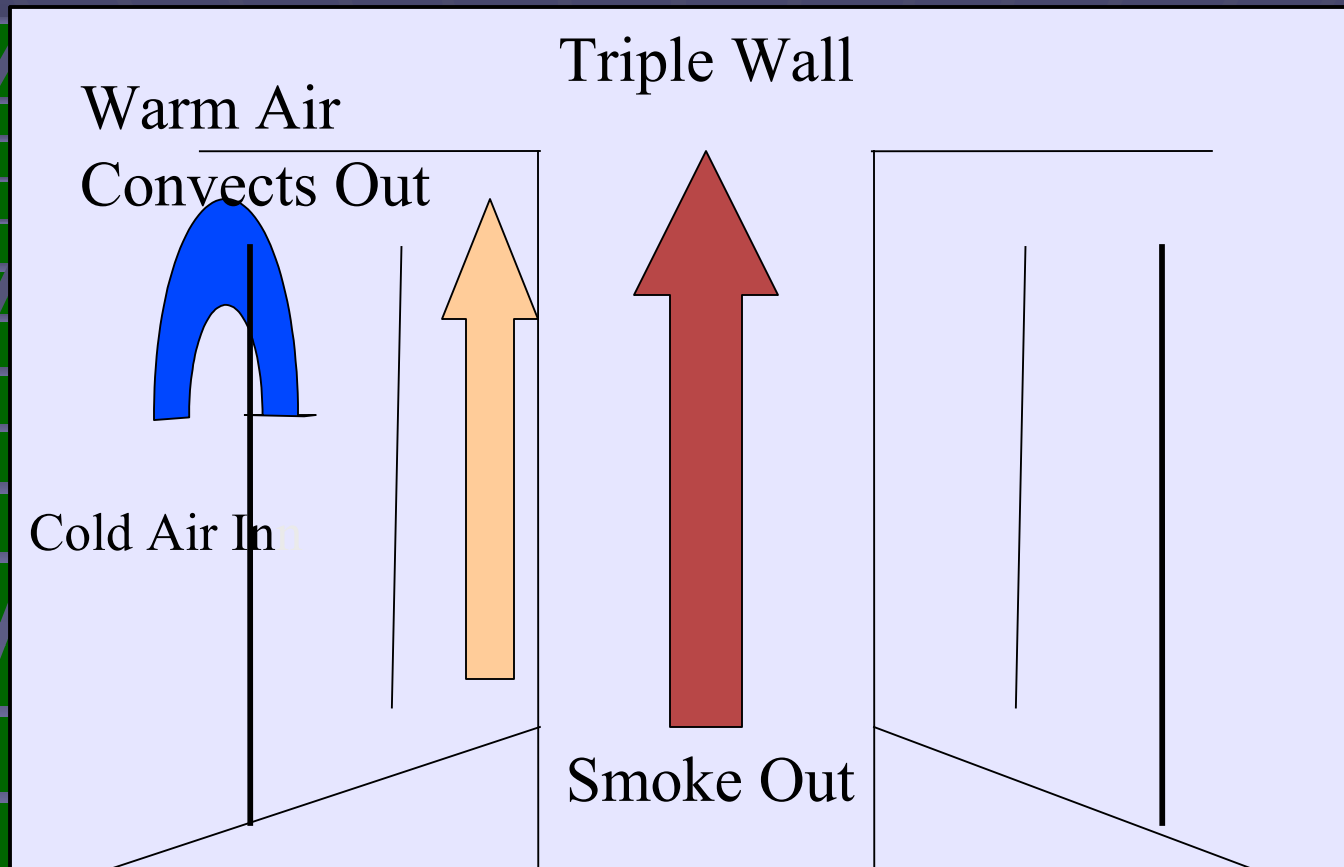
Dual Wall



Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces

Flue Issues:

- Always Try to Look Up!
 - ◆ Connections
 - ◆ Beware Re-Roofs
 - ◆ Firebox Looks “Used”/Flue Very Clean
 - ◆ Unusual Metal Color
 - ◆ Vertical Seams Popped/Deformed
 - ◆ Possible Prior Flue Fire

Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces



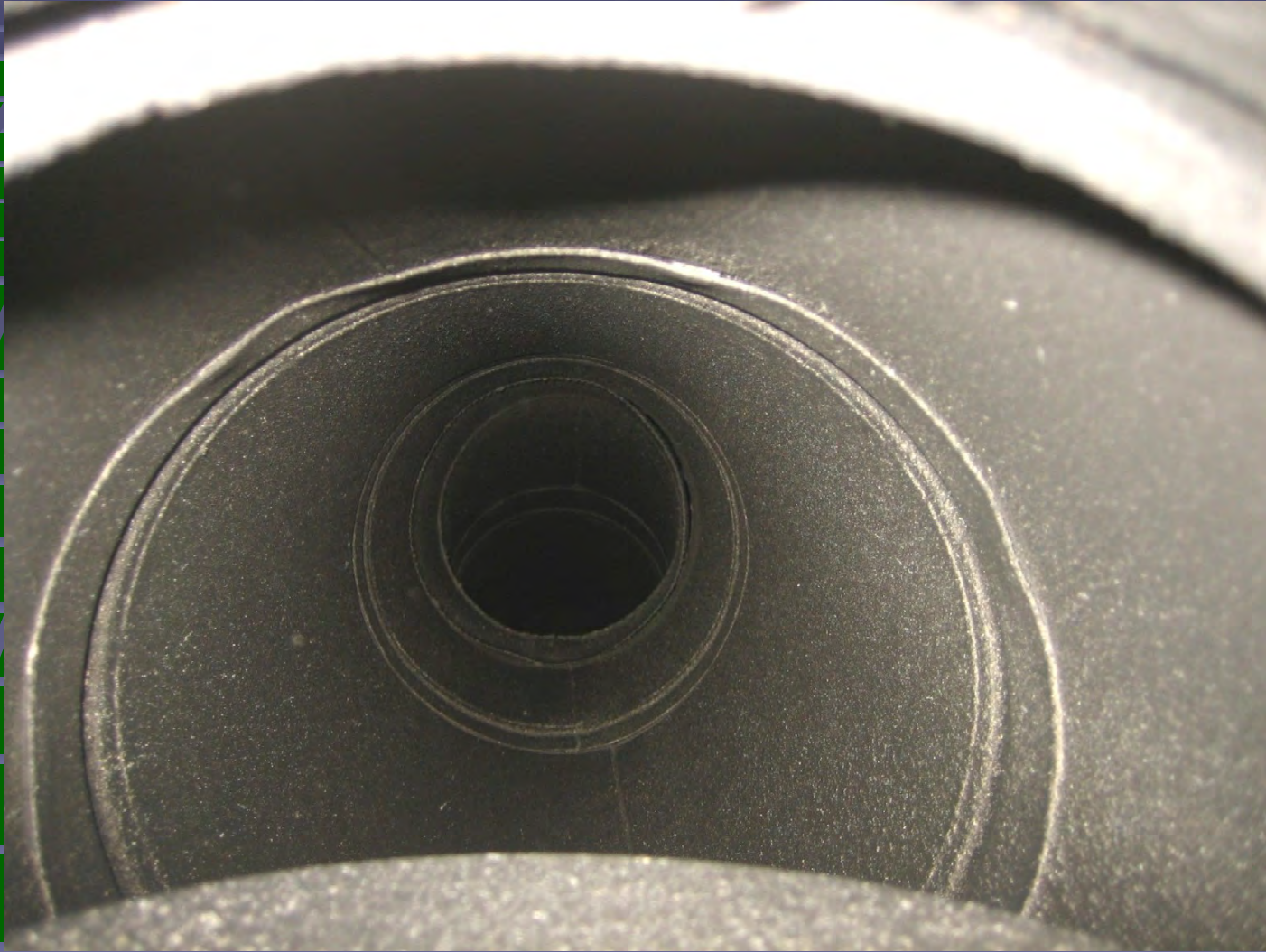
Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces

Class-A



Premanufactured Fireplaces

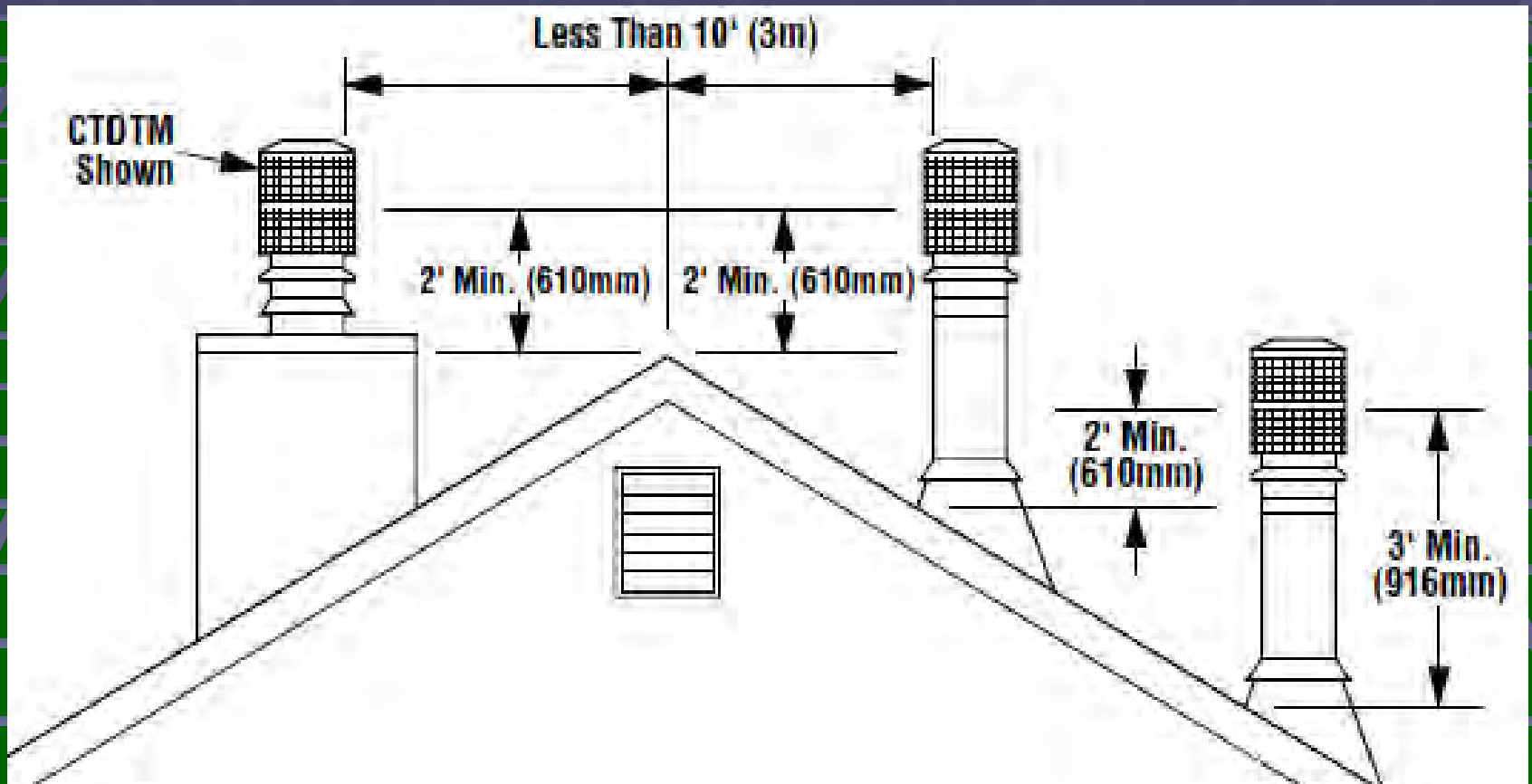
- Termination Caps
 - ◆ Not Weather Caps
 - ◆ Listed/Manufacturer Specific
 - ◆ Improper Caps/Modifications Can Cover Air Intakes
 - ◆ Causes Dangerous Flue Overheating
 - ◆ Shroud Must Be Listed

Premanufactured Fireplaces

The minimum installed height of the completed fireplace system is 16'0" (4.8 m) for 36" and 42" models and 17'6" for 50" models. The maximum system height is 80'0" (24.38 m).

To determine the number of chimney sections and chimney components required, follow these steps:

Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces

Dual Wall Pipe – Metal Cap Replaced
And Covered Vent System



Metal Chase Cap Replaced – Dual Wall Flue Vent
System Covered

Premanufactured Fireplaces



Uncle Buck Was Here

Premanufactured Fireplaces

Class-A Termination



Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces

- Attics
 - ◆ Clearances
 - ◆ Fire-Stops
 - ◆ Dislodged/Disconnected Flues
 - ◆ Beware Re-Roofs
 - ◆ Firebox Visibility
 - ◆ Chases

Premanufactured Fireplaces



Premanufactured Fireplaces



Premanufactured Fireplaces

- Especially Problematic
 - ◆ Fireplace Xtrodinair
 - ◆ EPA Phase 2/Low Mass
 - ◆ Catalytic Converters
 - ◆ Connection to Unit Made Using a
- One-Size-Fits All Collar and Silicon
 - ◆ Silicon Seal Fails Resulting in Fire

Premanufactured Fireplaces



Premanufactured Fireplaces



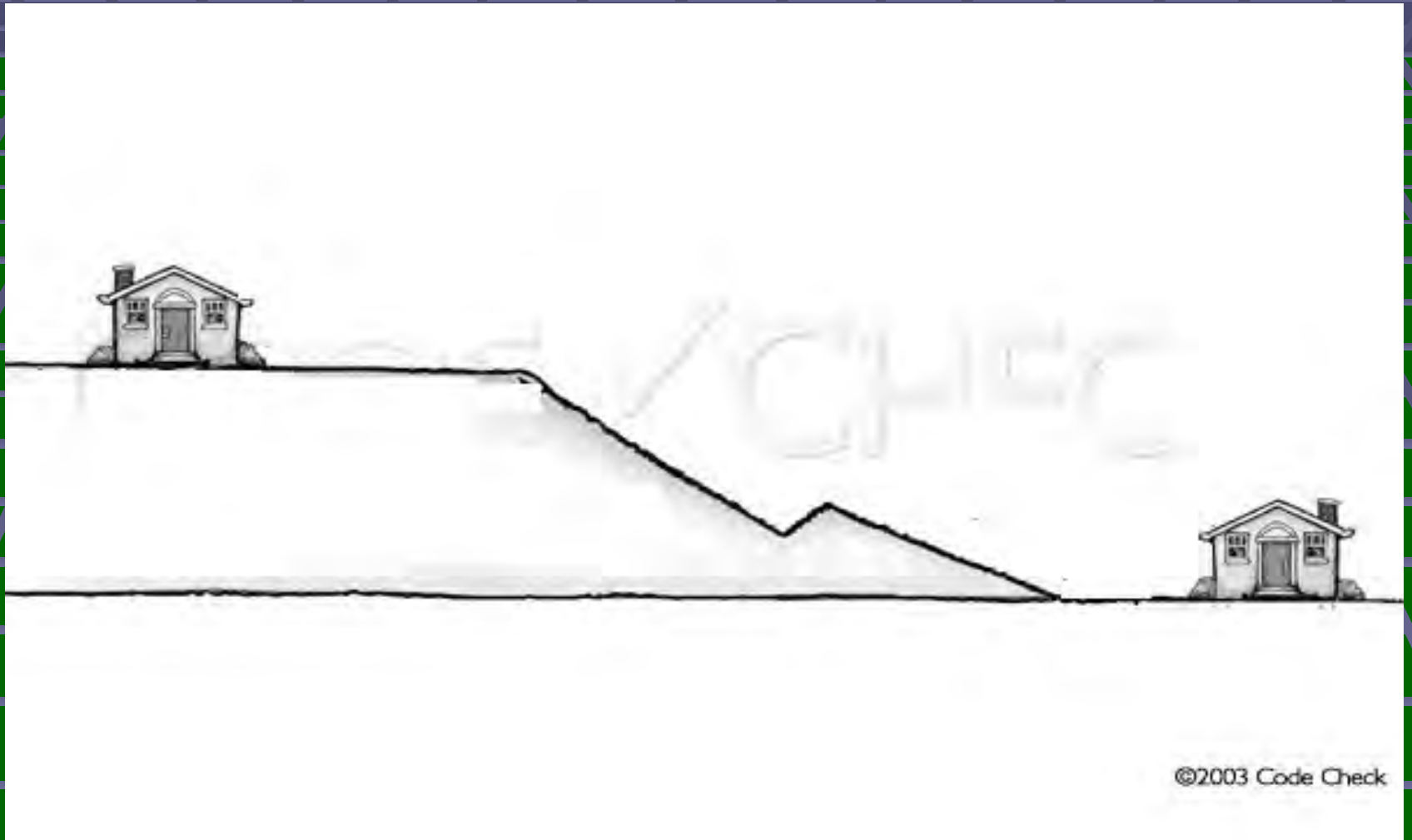
Why Fireplaces Don't Work

- Internal Environmental Conditions
- Internal Issues/Influences
- Installation Defects/Issues

Why Fireplaces Don't Work

- External Environmental Conditions
- Terrain/Trees
- Adjacent Walls/Structures

Why Fireplaces Don't Work



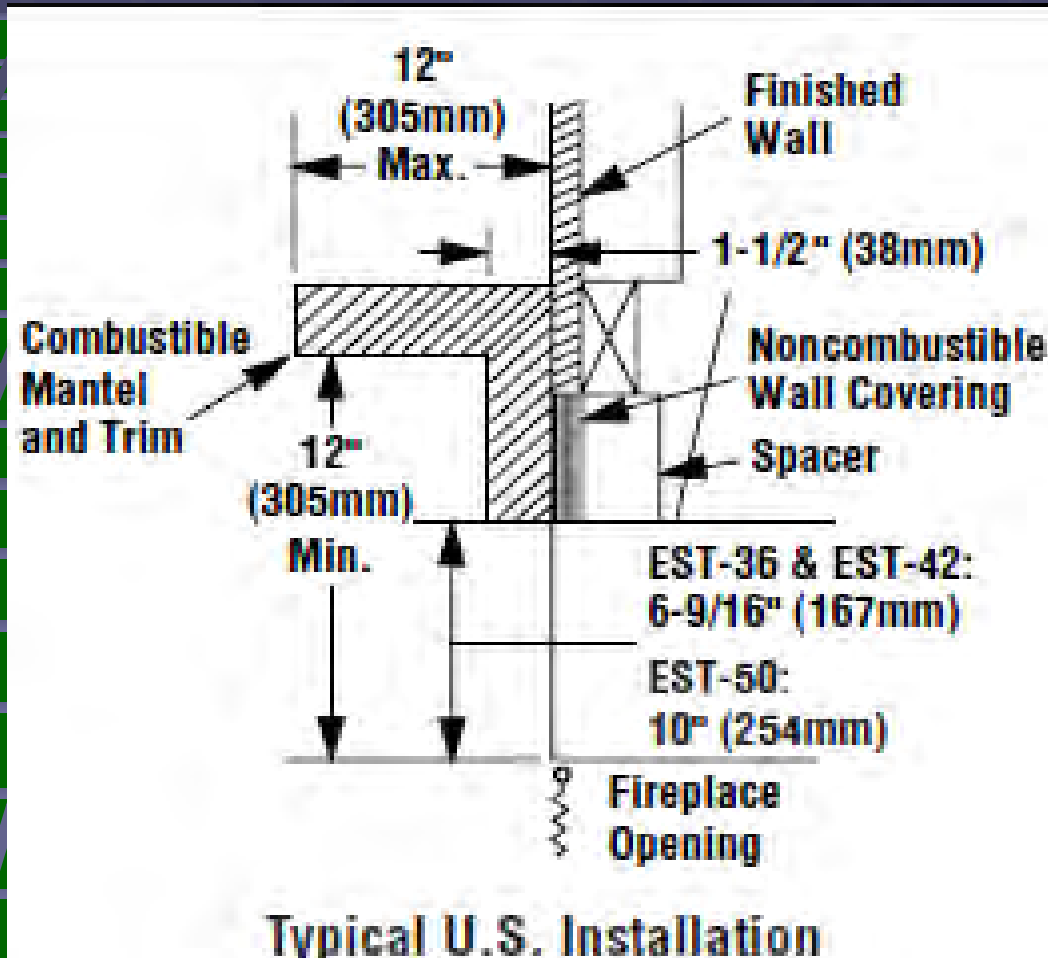
Why Fireplaces Don't Work

- Interior Environmental Conditions
 - Room Size/Layout
 - Influence of Exhaust Fans
 - ◆ Kitchen, Bath, Whole House, Clothes Dryers, Etc
 - Tight Construction
 - ◆ Can Cause House to Go Negative Pressure
- Air Equalize Though Flue Or Other Building Opening

Why Fireplaces Don't Work



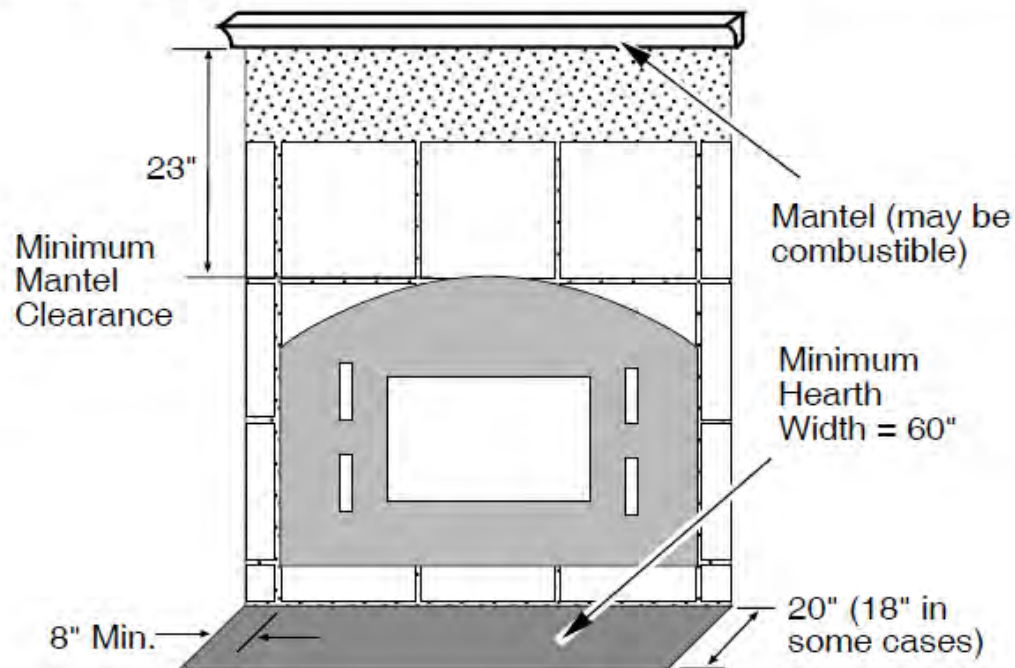
Why Fireplaces Don't Work



Why Fireplaces Don't Work

Mantel Requirements

- The optional mantel must be a minimum 23" above the top of the faceplate (61" above the base). See Figure 29.
- The mantel must not extend more than 8-1/2" in front of the faceplate.
- Mantel side columns that extend more than 3/4" beyond the faceplate must maintain an 18" clearance to the faceplate.



Why Fireplaces Don't Work

- Prefab Installation Defects/Issue
 - Smoking
 - ◆ Shouldn't Smoke, But Can
 - ◆ Negative Pressure
 - ◆ Short Flue
 - ◆ Tall Flue/Excessive Offsets

Why Fireplaces Don't Work

- Framing Clearances
- Hearth/Mantle Surround
 - ◆ All Clearances are Model Specific
 - ◆ Re-Faced Surrounds - Beware
- Roof Clearances
- Premanufactured Units
- Chase/Fire-Blocks

Why Fireplaces Don't Work



Why Fireplaces Don't Work



Why Fireplaces Don't Work



Stains Under Mantel

Why Fireplaces Don't Work



This One Smokes – Flue Was Short

Why Fireplaces Don't Work



Smoke Stains – Whats The Likely Reasons?

Why Fireplaces Don't Work



Why Fireplaces Don't Work

Operating Warnings:

WARNING: FIREPLACE SHOULD BE OPERATED ONLY WITH DOORS FULLY OPEN OR DOORS FULLY CLOSED. IF DOORS ARE LEFT PARTLY OPEN, GAS AND FLAME MAY BE DRAWN OUT OF THE FIREPLACE OPENING, CREATING RISKS OF BOTH FIRE AND SMOKE.

Why Fireplaces Don't Work

- **OPERATING INSTRUCTIONS**
- *Important note:*
 - *Do not keep the door open while the fireplace is lit.*

Gas Log Lighters

- **LOG LIGHTERS**
- **G2433.1 (603.1) General.** Log lighters shall be tested in accordance with CSA 8 and shall be installed in accordance with the manufacturer's installation instructions.
- **NOTE:**
- ***Log Lighters Are Not Classified as Gas Appliances. SO Technically, Damper Stops Are Not Required.***
- ***Personally, I Always Recommend Them***

Vented Gas Log Sets

- The gas log burner system is designed to burn like wood with a yellow smoky flame. For this reason the **gas log set must be burned only in a fully vented, non-combustible fireplace with the damper completely open** and the chimney free of any obstructions or restrictions. The fireplace must be designed and approved to burn wood. The **minimum permanent, free opening provided by the fireplace chimney must be 8" in diameter (50 square inches)**. The realistic yellow flame **produces carbon monoxide and soot**. Under normal conditions these products are exhausted up the chimney. If fumes or soot from the gas burning are evident in the room when the damper is fully open, it indicates that the fireplace draft is defective. Do not operate your gas log set until the fireplace draft is corrected.

Vented Gas Log Sets

DAMPER STOP (Optional)

Attach the damper stop clamp to the fireplace damper blade. Position the clamp to prevent full closure of the fireplace damper blade.

(See Figure 1)

If the damper stop provided does not fit, the installer shall install a permanent damper stop that will keep the damper open a minimum of 3".

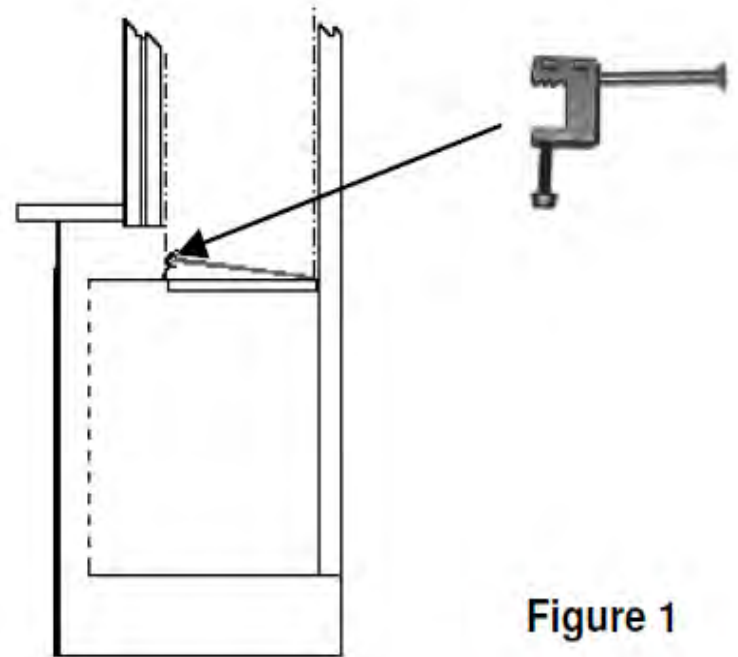


Figure 1

Unvented Gas Log Sets

- Fireplace Must Be Specifically Listed For Them
 - Must Withstand Excessive Moisture
 - Who Thought These Were A Good Idea?
- CA Codes:

CMC 924.1/924.1.1 Ex 2: Unvented fuel-burning room heaters shall not be installed, used, maintained, or permitted to exist in a Group R Occupancy.

NOTE: *We Really Don't Like These.....*

Inserts in Prefabricated Fireplaces

- To Be “OK” They Must Best Tested With Each Other
- That DID NOT Happen
 - Actually There is One Pair
- So, It Is Wrong 99.99999999% of the Time

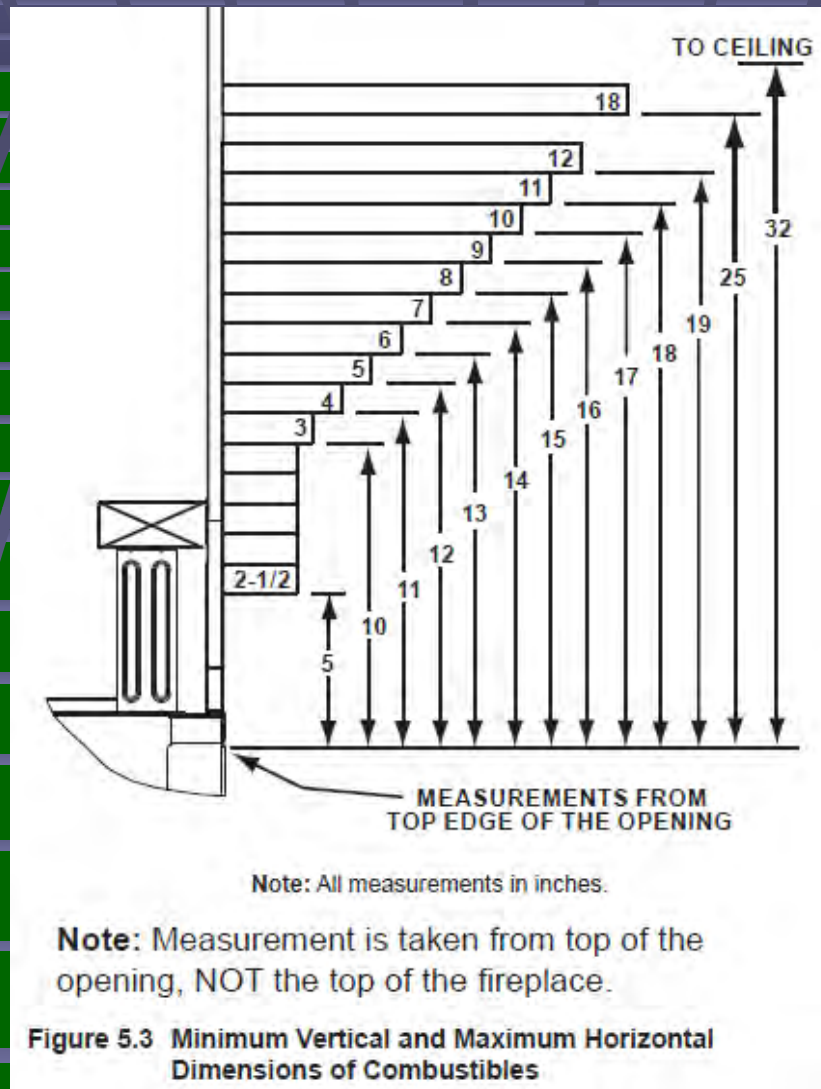
Decorative Gas Fireplaces

- **SECTION G2434 (604)**
- **VENTED GAS FIREPLACES (DECORATIVE APPLIANCES)**
- **G2434.1 (604.1) General.** Vented gas *fireplaces* shall be tested in accordance with ANSI Z21.50, shall be installed in accordance with the manufacturer's installation instructions and shall be designed and equipped as specified in Section G2432.2.
- **G2434.2 (604.2) Access.** Panels, grilles, and access doors that are required to be removed for normal servicing operations shall not be attached to the building.

Decorative Gas Fireplaces

- **Decorative Gas Appliances**
- **No Solid Fuels**
- **Generally Vented Using Type-B/L or DV**
- **Can Produce Significant BTU's**
- **Mantle/Surround Clearances Can Exceed Solid Fuel**

Decorative Gas Fireplaces



Inspection Comments

A complete view of the chimney flue is not possible. I recommend that the flue and or fireplace system be fully inspected and video inspected as part of an NFPA Level II or equivalent inspection prior to removal of transaction contingencies and or prior. Interested parties should consult with a qualified fireplace specialist for additional information and or further evaluation.

The background features a 3D perspective grid. The floor is a vibrant green, and the ceiling is a deep purple. The grid lines are a light, muted purple color, creating a sense of depth and space.

Questions?

Contact Information

Skip Walker

Walker Property Evaluation Services

HomeInspection@sanbrunocable.com

650-873-4224

Colorful Examples



Colorful Examples



Colorful Examples



Colorful Examples



Colorful Examples



Colorful Examples



Colorful Examples



Colorful Examples



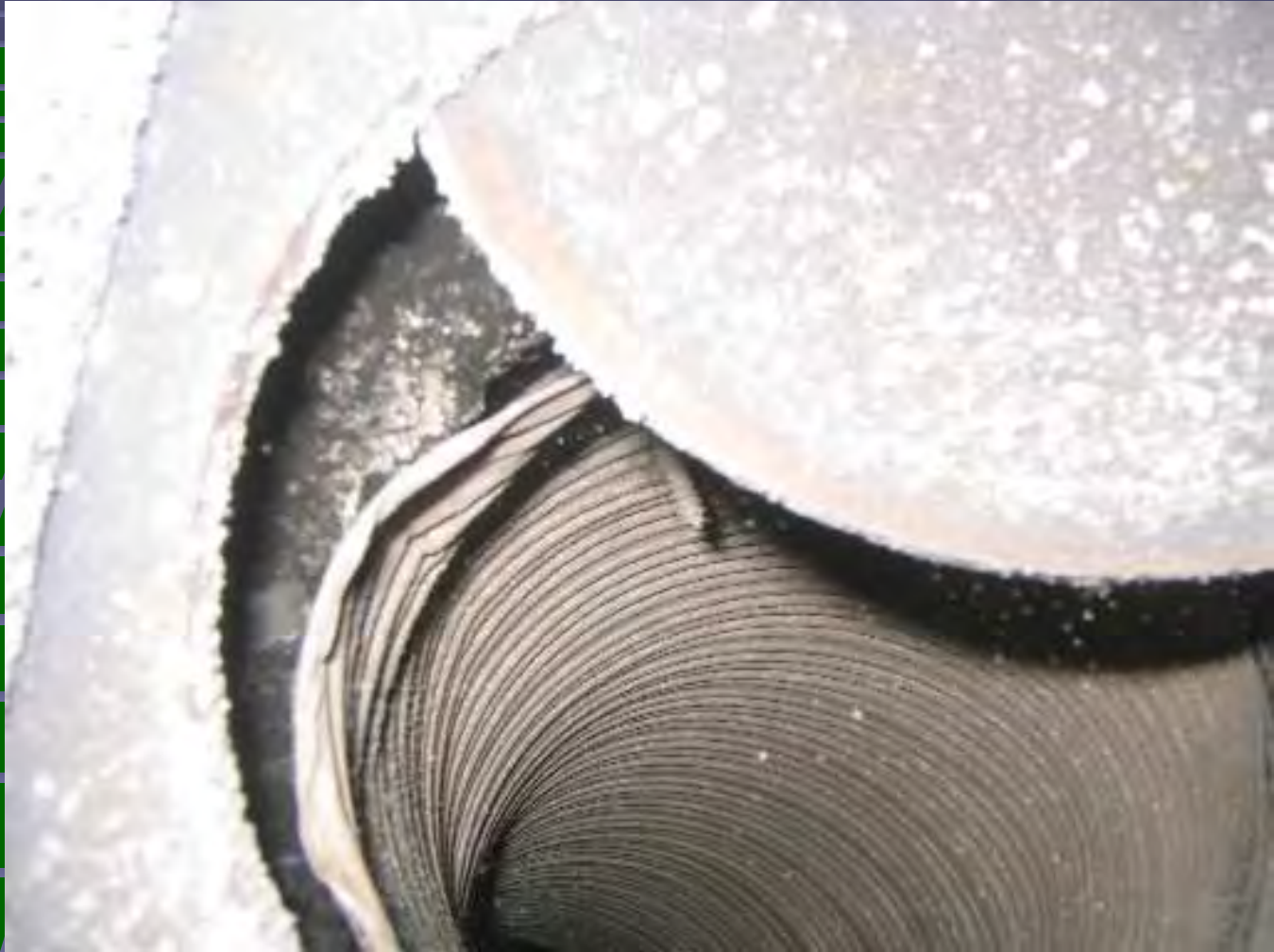
Colorful Examples



Colorful Examples



Colorful Examples



Colorful Examples

