



Model # K-AWD:

# Applewood Cookstove



Tested and listed by OMNI-Test  
Laboratories Inc.  
Portland OR, USA

Safety tested to UL 1482-2022  
Report # 0123WS015S

## INSTALLATION AND OPERATING INSTRUCTIONS

### SAVE THESE INSTRUCTIONS

# Welcome to the Kuma family

Kuma is a modified version of the Greek word Kauma that means:  
Burning, Glow, Heat (especially of the sun).

We would like to take the time to say thank you for purchasing a Kuma stove. We know that there are many choices in hearth products, and we appreciate that you chose a Kuma for your wood fire cooking and energy independence. Our mission is to provide you with a quality product that will last a lifetime.

You may have noticed a portion of the Bible enclosed in your owner's packet. It is a small gift for you. Our faith in Jesus Christ is very important to us and we have that faith because there is hope in heaven. That hope comes from the message of truth that is found in this New Testament.

Thank you for allowing us the opportunity to warm your house and may God bless you.

Sincerely,  
Mark & Lynnette Freeman  
Founders - **Kuma Stoves.**

***Please read this entire manual before you install and use your new cook stove.  
Failure to follow instructions may result in property damage, bodily injury, or  
even death.***

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## WARNING

- 🔥 If this stove is not properly installed, a house fire can occur. For your protection, follow the installation instructions provided. We recommend contacting local building or fire officials regarding restrictions and installation inspection requirements in your area. **We also recommend that your Kuma stove be installed by a properly trained and licensed installer, preferably an NFI (National Fireplace Institute) expert.**
- 🔥 **DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.**
- 🔥 **Do not burn garbage or flammable fluids such as gasoline, naphtha or engine oil.** Do not use charcoal lighter fluid or similar liquids to start or “freshen up” a fire in this stove. Keep all such fluids well away from the stove while in use. Storing these fluids near a stove could cause a fire.
- 🔥 **DO NOT CONNECT TO ANY AIR DISTRIBUTION OR DUCT SYSTEM.**
- 🔥 **DO NOT OVERFIRE.** If any part of the stove or chimney glows, the stove is in an over fire condition. If this happens, shut the air control off immediately. Over firing can cause damage.
- 🔥 **WARNING: DO NOT INSTALL IN A SLEEPING ROOM OF A MOBILE HOME.**
- 🔥 **An improperly drafting stove can cause smoke and carbon monoxide to enter the home. Smoke detectors and carbon monoxide monitors are recommended to be installed in the same room as this stove.**
- 🔥 **CAUTION: THE STRUCTURAL INTEGRITY OF THE FLOOR, WALLS, ROOF/CEILING, AND VAPOR BARRIERS MUST BE MAINTAINED.**
- 🔥 **DO NOT USE SINGLE WALL PIPE OR CONNECTOR PIPE FOR ANY CHIMNEY APPLICATION, EXTERIOR OR THROUGH THE WALL OR CEILING.** Single wall pipe may only be used as a connection between the stove and an approved masonry or stainless steel chimney. **Single wall pipe may not be used as a connector in mobile homes.**
- 🔥 When installing into an existing masonry or metal chimney, examine the chimney system carefully. If you have any questions, seek professional advice. We recommend having existing chimneys cleaned and inspected by a qualified professional prior to the installation of your new stove.
- 🔥 **NOTE ALL MINIMUM CLEARANCE REQUIREMENTS TO COMBUSTIBLES.** Installation must comply with minimum clearances as listed in this manual. **Clearances may only be reduced by means approved by the regulatory authority.**
- 🔥 Do not operate this stove with the door in an open position, except for cracking open during start-up. Continued operation with the door open can cause overheating of the unit, and expose embers to nearby combustibles.
- 🔥 **Do not operate with broken glass. Do not abuse glass such as striking or slamming the door.**
- 🔥 This stove must be connected to a minimum 6” diameter listed chimney that complies with U.L. type 103HT factory built chimney or a code approved masonry chimney. When installing into masonry chimneys, a U.L. 1777 approved liner must be installed. **TO BE IN-STALLED AS A FREESTANDING COOK STOVE WITH THE CLEARANCES IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. NOT TO BE INSTALLED IN ANY FACTORY-BUILT FIREPLACE.**
- 🔥 When connecting single wall or double wall connector pipe to the stove and chimney, use 3 screws per pipe joint including 3 screws securing the pipe to the stove. Depending on the type of double wall pipe you are using, it may also be necessary to fasten it at the chimney.
- 🔥 Use only approved components for Chimney and Connector. Field fabricated or “makeshift” components are not allowed and can cause a fire.
- 🔥 When connecting this stove to a masonry chimney, make sure you observe all applicable clearances including walls, ceilings and other combustible material. A masonry chimney must be minimum 6” diameter and constructed with a liner according to NFPA code 211. If you have any questions about the condition or the code compliance of your masonry chimney, please speak with a qualified professional.
- 🔥 **HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.**
- 🔥 **DO NOT PUT WOOD OR ANY COMBUSTIBLE MATERIAL IN THE STORAGE AREA UNDER THE STOVE.**

# SECTION 2 - SPECIFICATIONS

## CERTIFICATION TAG

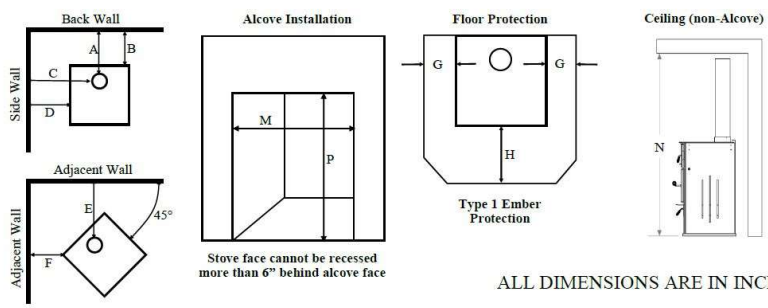
Installation	Clearance	Connector	A	B	C	D	E	F	G	H	M	N	P
Residential	Standard	Single Wall	7	5	15.75	7.5	9.75	2	3.25	16		84	
Residential or Mobile home	Reduced	Double Wall	6.5	5	15.25	7.5	9.25	2	3.25	16		72	
Alcove	Reduced	Double Wall	6.5	5	15.25	7.5			3.25	16	38		60

INSTALL AND USE ONLY IN ACCORDANCE WITH KUMA STOVES INSTALLATION AND OPERATION INSTRUCTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA. REFER TO INSTALLATION INSTRUCTIONS FOR PRECAUTIONS REQUIRED FOR PASSING A CHIMNEY THROUGH A COMBUSTIBLE WALL OR CEILING.

COOK STOVE, SOLID FUEL TYPE, ALSO FOR USE IN MOBILE HOMES. FOR USE WITH SOLID FUEL ONLY. USE ONLY SEASONED CORDWOOD. DO NOT CONNECT THIS UNIT TO A FLUE SERVICING ANOTHER APPLIANCE. DO NOT USE GRATE OR ELEVATE FIRE - BUILD WOOD FIRE DIRECTLY ON FIREBRICK. REPLACE GLASS ONLY WITH 5mm CERAMIC.

USE ONLY LISTED CHIMNEY SYSTEMS THAT ARE 6" DIAMETER U.L. 103 TYPE HT, ALL FUEL, OR SOLID FUEL. MASONRY CHIMNEY SHOULD BE LISTED TO UL 1777. USE ONLY 24 MSG BLACK OR 25 MSG BLUED STEEL SINGLE WALL CONNECTOR FOR STANDARD CLEARANCE. USE ONLY LISTED DOUBLE WALL CONNECTOR FOR REDUCED CLEARANCE, MOBILE HOMES, AND ALCOVES. SEE DIAGRAMS FOR STANDARD AND REDUCED CLEARANCE DIMENSIONS. USE ONLY U.L. 1618 TYPE 1 (EMBER PROTECTION) OR TYPE 2 (R-VALUE 1.0) HEARTH PAD OR EQUIVALENT. SEE DIAGRAM FOR HEARTH DIMENSIONS. TO BE INSTALLED AS A FREESTANDING COOKSTOVE WITH THE CLEARANCES IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. NOT TO BE INSTALLED IN ANY FACTORY-BUILT FIREPLACE.

This cookstove needs periodic inspection and repair for proper operation. Consult the owner's manual for further information.



MANUFACTURED BY:  
**KUMA STOVES INC**  
 50145 N OLD HWY 95  
 RATHDRUM ID 83858



**MODEL NAME:** APPLEWOOD      **Serial Number**

Safety tested to UL 1482-2022 Report #'s 0123WS0155



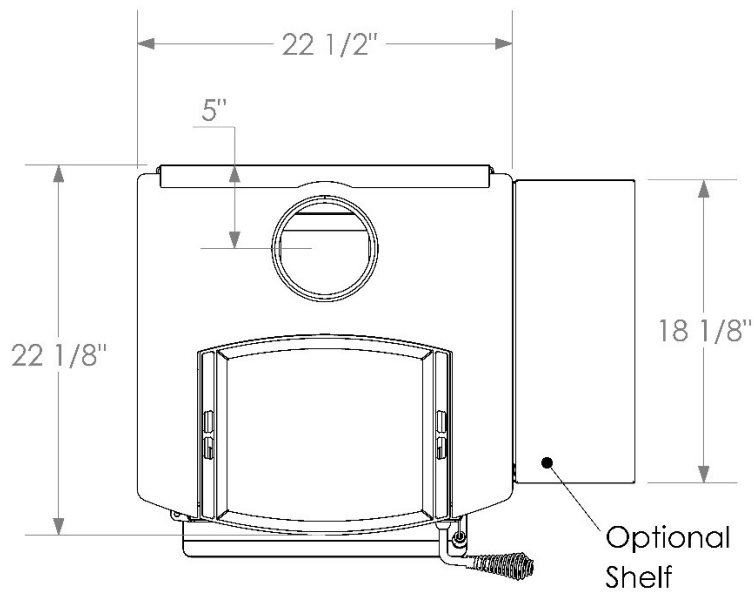
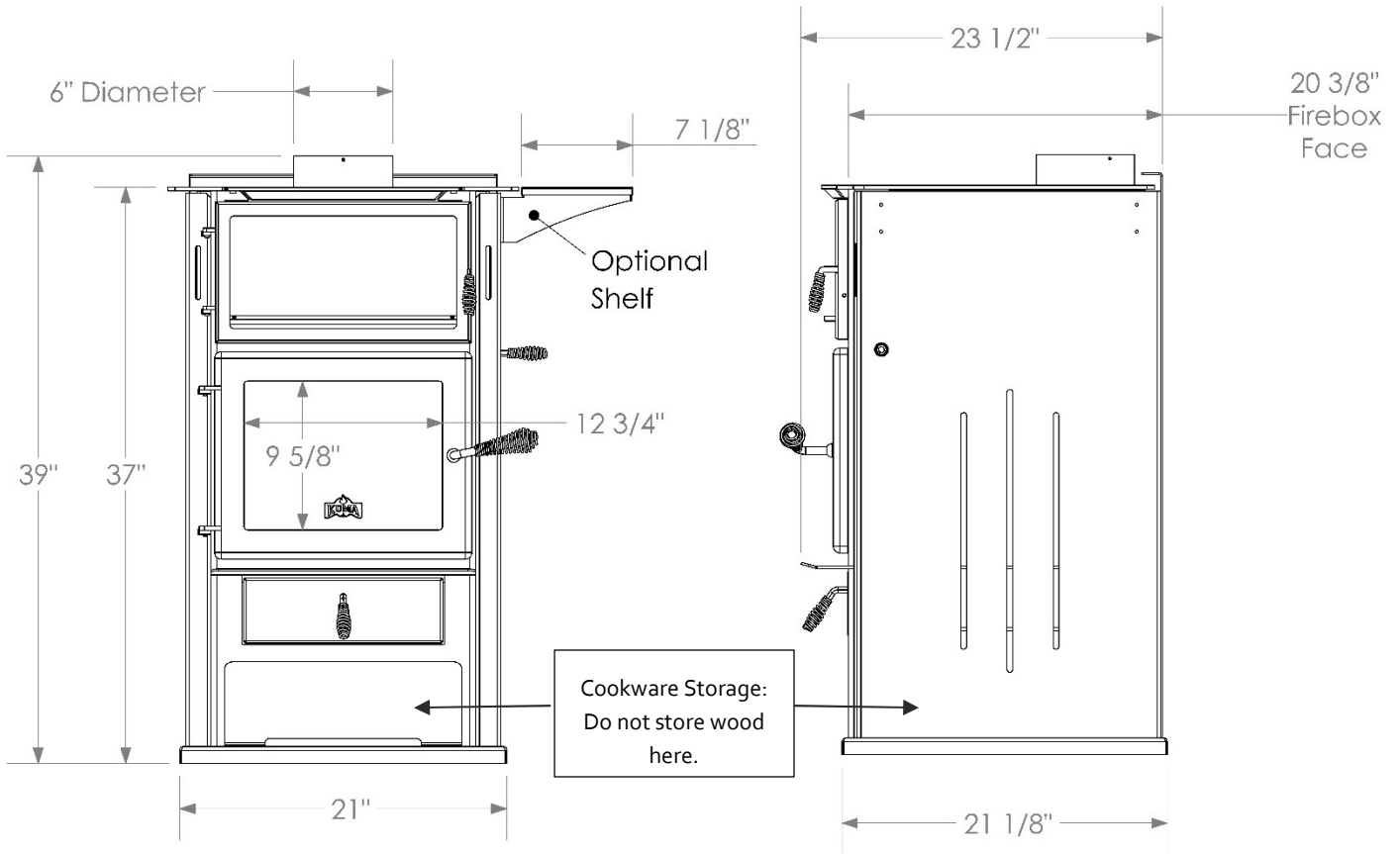
**CAUTION:** HOT WHILE IN OPERATION - DO NOT TOUCH - KEEP CHILDREN AND CLOTHING AWAY - CONTACT MAY CAUSE SKIN BURNS. SEE NAMEPLATE AND INSTRUCTIONS. KEEP FURNISHINGS AND OTHER COMBUSTIBLE MATERIALS A CONSIDERABLE DISTANCE FROM THE APPLIANCE. DO NOT OVERFIRE - IF STOVE OR CHIMNEY CONNECTOR GLOWS, YOU ARE OVERFIRING. INSPECT AND CLEAN CHIMNEY FREQUENTLY - UNDER CERTAIN CONDITIONS OF USE, CREOSOTE BUILDUP MAY OCCUR RAPIDLY. DO NOT PASS CONNECTOR PIPE THROUGH COMBUSTIBLE WALLS OR CEILINGS. DO NOT OBSTRUCT BENEATH THE HEATER.

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“U.S. ENVIRONMENTAL PROTECTION AGENCY This unit is not a certified residential wood heater. The primary use for this unit is for cooking or baking.”

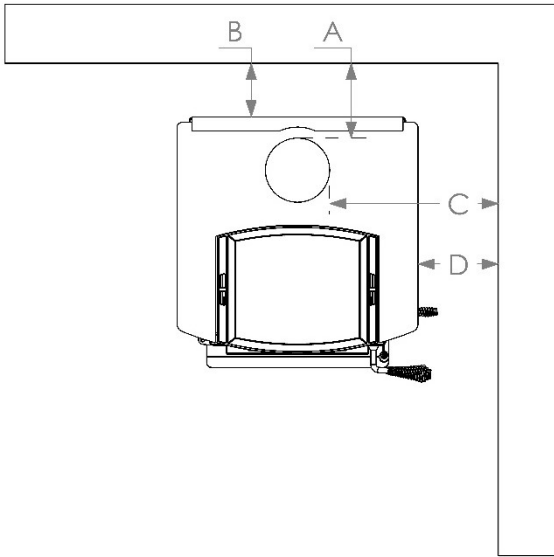
# APPLEWOOD DIMENSIONAL DRAWINGS

All dimensions are in inches.



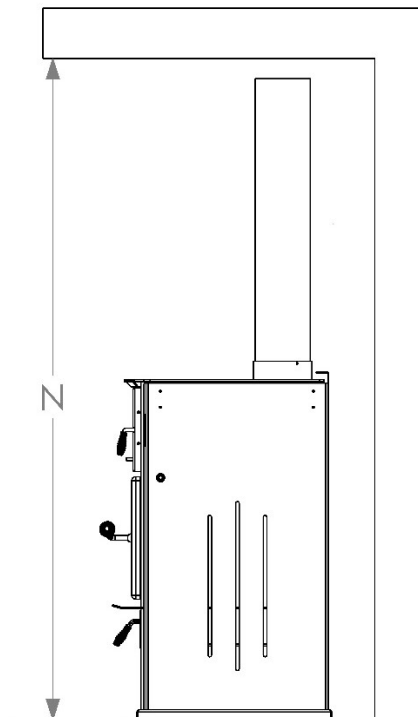
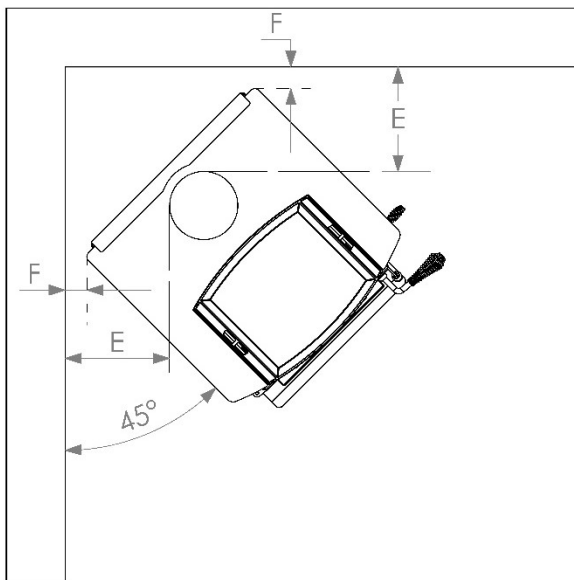
## MINIMUM CLEARANCE REQUIREMENTS

Pipe clearances are measured to the outside diameter of the pipe. Stove clearances are measured to the top plate of the stove. Pipe diameter will vary by brand so when planning your installation, **make sure the stove clearances AND the pipe clearances are equal to or greater than the minimum clearances.** Always follow local building codes. These clearances may be reduced only by using approved methods found in NFPA 211. If you are installing the optional side shelves, all clearances to the stove remain the same as measured to the top plate of the stove. You cannot install the stove at minimum corner clearance with the side shelves attached: this is a physical impossibility. The side shelves can be installed with zero clearance to the walls.

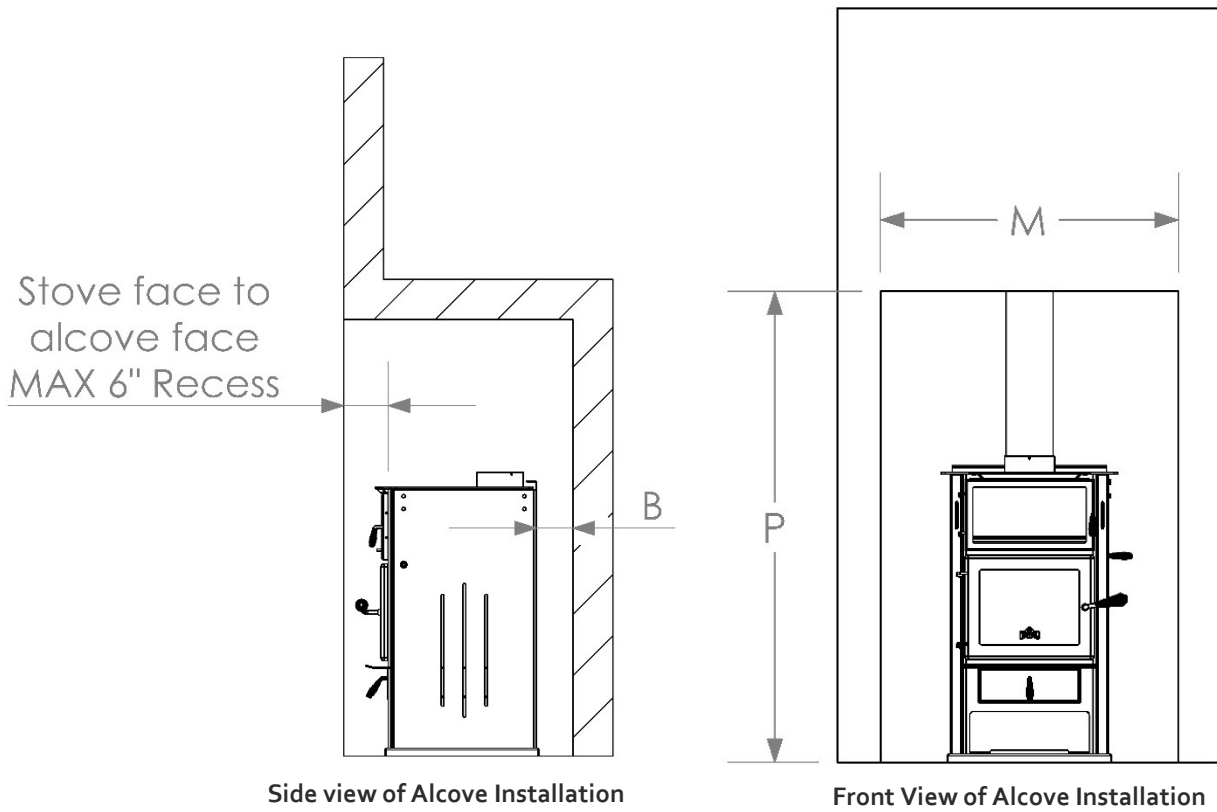


	Minimum Clearance with single-wall pipe	Minimum clearance with double-wall pipe
A	7	6.5
B	5	5
C	15.75	15.25
D	7.5	7.5
E	9.75	9.25
F	2	2
N*	84	72

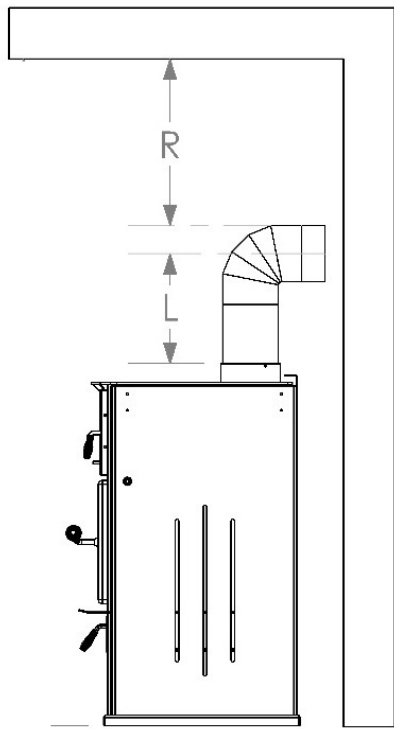
\*vertical heights lower than 72" are only allowed if you follow the additional clearance requirements for alcoves below.



## ADDITIONAL CLEARANCE REQUIREMENTS FOR ALCOVE INSTALLATIONS



## ADDITIONAL CLEARANCE REQUIREMENTS FOR WALL EXIT INSTALLATIONS



	Minimum Clearance with single-wall pipe	Minimum clearance with double-wall pipe
B	Not Allowed: Must use double wall for alcove installation	5
L	12	12
M	Not Allowed: Must use double wall for alcove installation	38
P	Not Allowed: Must use double wall for alcove installation	60 (72 if wall exit)
R	18	Follow pipe manufacturer's instructions.



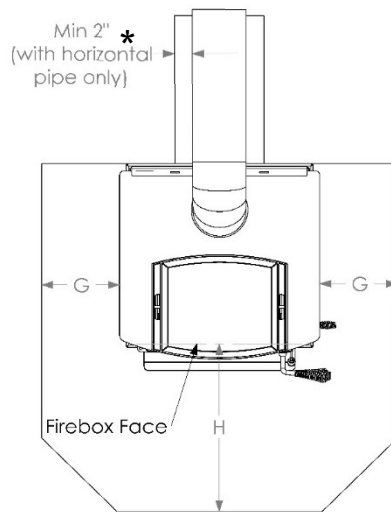
SECTION 3 – INSTALLATION INSTRUCTIONS



- 🔥 It is highly recommended that this stove is installed by a qualified professional certified by the National Fireplace Institute.
- 🔥 The structural integrity of the floor, walls and ceiling/roof must be maintained. Use additional bracing if required. Never cut a load bearing wall or engineered truss.
- 🔥 NEVER INSTALL A STOVE IN A SLEEPING ROOM
- 🔥 This stove is heavy: Get help from another person and use proper lifting techniques

**FLOOR PROTECTION REQUIREMENTS**

Floor protection must be non-combustible. Floor protection must be underneath the stove and extend to the sides and front of the stove as shown below. Side protection (G) is measured to the top plate of the stove. Front protection (H) is measured to the firebox face of the stove.



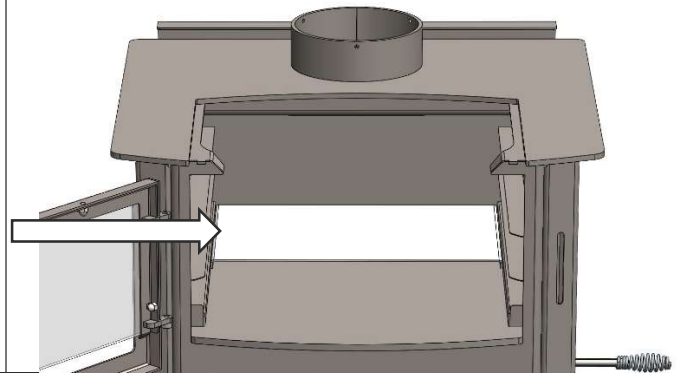
G	H	Type
3.25"	16"	Type 1 (ember protection) No insulation R-value required.

**\*Through Wall Installations: Hearth must extend underneath and 2" to either side of the horizontal connector pipe.**

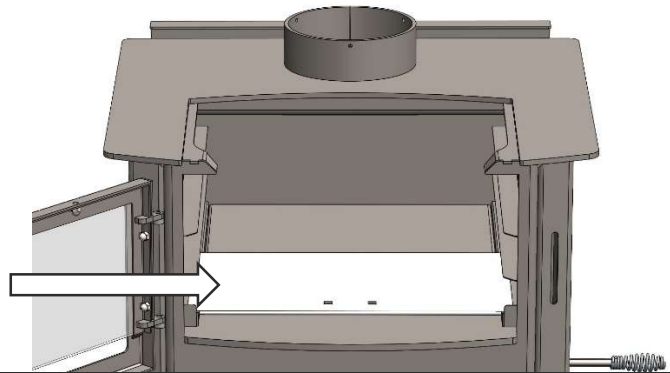
## OVEN ASSEMBLY

Your stove comes almost fully assembled and screwed down to the wooden shipping crate. Using a 5/16" socket wrench, remove the 4 screws from base of the stove. Place the stove onto your hearth taking care not to scratch the hearth. **It is recommended that you wait until after you have your 1<sup>st</sup> fire and cure the paint before you assemble the oven parts (see section 4).** Open the box located in the base of the stove and complete the oven assembly as follows:

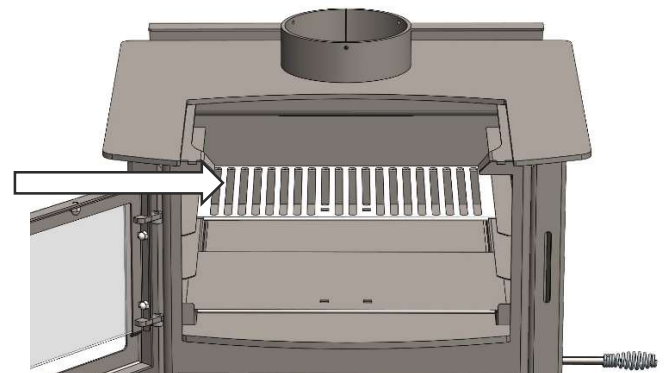
Place the rear shield on the bottom of the oven at the back. The shield fits between the side wall of the oven with the flanges facing down.



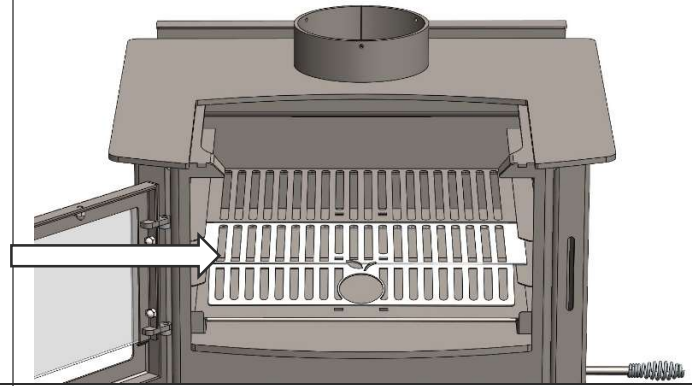
Place the front sliding heat shield on the bottom of the oven at the front. Orient the 2 square cut-outs towards the front of the oven. You can then use the oven tool to slide the shield forward and backwards. Slide the shield all the way to the front of the oven for baking and home heating. Slide the shield backwards to expose the high-heat zone of the oven for boiling or frying.



Slide the rear rack to the back of the oven on the lower oven rail. You can move the racks to the upper rail anytime that you would like.

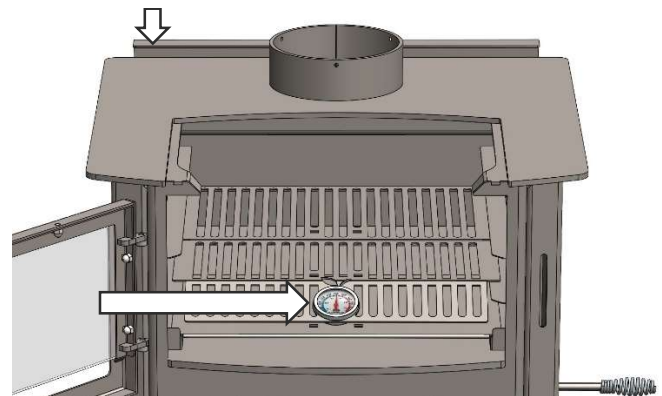


Slide the front rack onto the lower oven rail (in front of the rear rack). You can move the racks to the upper rail anytime that you would like.



Your oven thermometer needs to stay outside the oven unless you are baking. When baking, place the thermometer in the circle cut-out of the front rack. When you are not baking, there is a knock-out on the back left corner of the stovetop that is designed to store the thermometer. remove this knock-out with a screwdriver and hammer if you would like to use this location. Otherwise, the thermometer can be stored below the oven or placed anywhere on the cooktop to gauge the temperature of the griddle area. The oven area can get very hot when not baking: **Do not exceed 550° oven temperature with the thermometer in the oven: The thermometer will discolor and become difficult to read.**

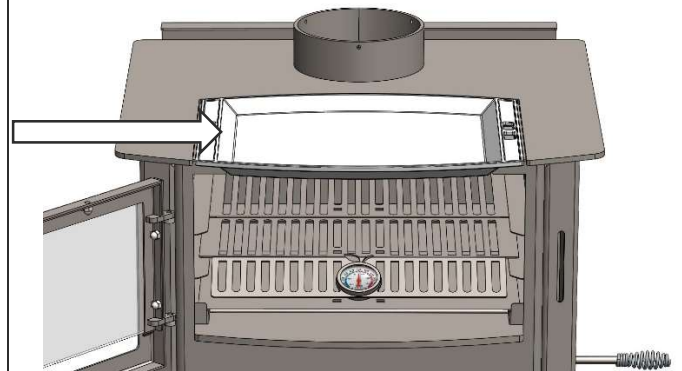
Thermometer Storage area



Place the griddle on the top of the oven. The griddle can also be slid down onto the oven rails to move it closer to the heat.

The griddle, racks and front heat shield can be removed to expose the high heat boiling zone of the stove.

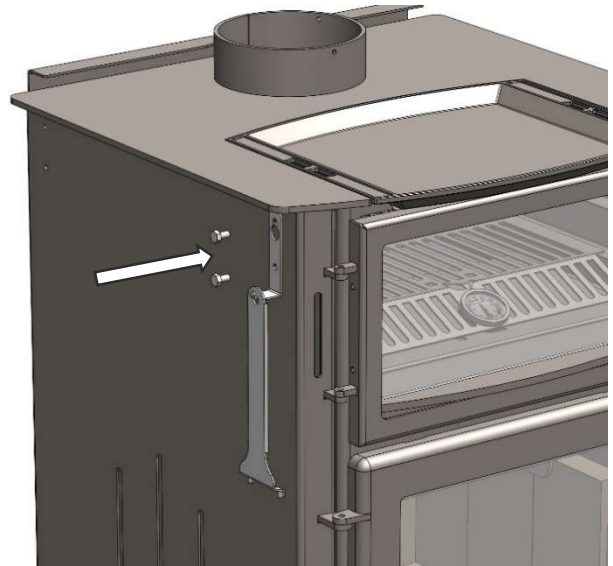
Configure the stove prior to starting a fire so that you do not have to handle these components while hot. **See section 5 for more information on cooking with the stove.**



**If you are installing the optional side shelves, follow the instructions that come with the shelves prior to installing the tool hook.**

There are threaded holes provided to install the tool hook on the left side of the stove at either the front or the back corner. Use the bolts provided and a 7/16" wrench to install the tool hook. Firmly press the small decorative rivet caps into the remaining 6 holes.

Hang the oven tool on the hook.

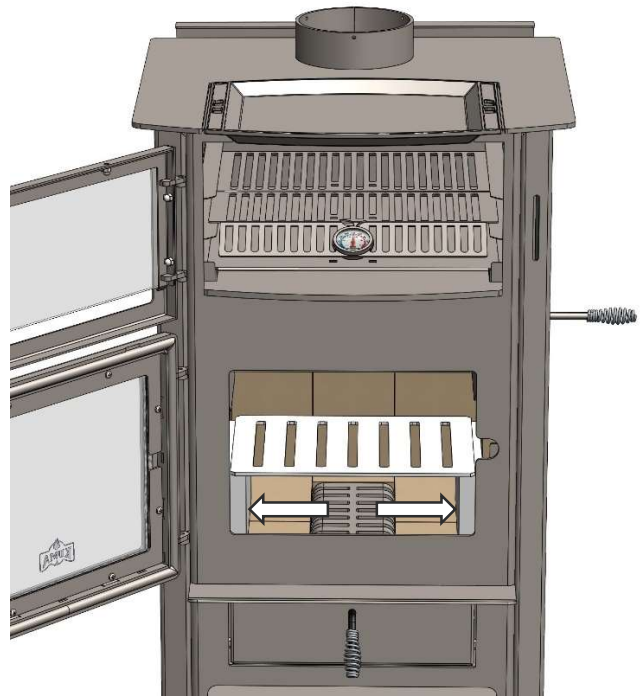


The grill plate is used for grilling over hot coals inside the firebox of the stove. To use the grill plate, place the 2 bricks against the sides of the firebox as shown. Build a fire and let it burn down to hot coals then place the plate on top of the bricks.

It is recommended that you build a fire between the bricks before placing the plate and grilling.

**ALWAYS CLOSE THE DOOR WHEN NOT ACTIVELY TENDING YOUR FIRE. DO NOT LEAVE THE DOOR OPEN ON THE STOVE.**

Remove the grill plate and bricks when not using.



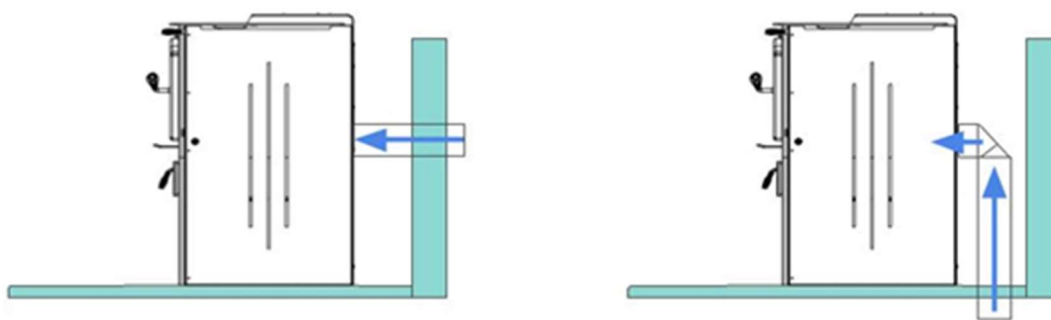
## SAFETY STANDARDS

The safety standards referenced in this manual are easy to find online. Products that meet these standards will be readily available from your dealer. Refer to this glossary of terms for a better understanding of these standards:

Standard	Description
UL 103	Covers the safety requirements for factory-built (metal) chimneys that vent wood stoves. Chimney manufacturers can either comply with a 1700° or a 2100° flue-gas temperature test.
UL 103HT	Chimney manufacturers that choose to comply with the 2100° flue-gas temperature test will receive the designation of a 103HT chimney system. HT stands for High Temperature. <b>Virtually all modern wood stoves will require this type of chimney.</b>
UL 1777	Covers the safety requirements for chimney liners that are installed into masonry chimneys. Your chimney liner will meet the safety requirements of UL 1777 only if the installation instructions for the liner are followed.
NFPA 211	A publication put out by the National Fire Protection Association that details the proper installation of wood stoves, chimneys, fireplaces, and venting systems.

## INTAKE AIR REQUIREMENTS

There is a 4" round opening on the back panel that draws in the combustion air for the stove. The simplest air intake method is to let the stove draw in air from the room through the 4" round opening. If you are installing an outside air connection to the stove, use the outside air kit (KA-OA-1) to pipe air to the back of the stove as shown below:



**If installing outside air, it must come to the 4" hole on the back of the stove using the KA-OA-1 Outside air kit.**

## CHIMNEY AND CONNECTOR PIPE REQUIREMENTS

A properly installed and maintained venting system is critical to the safe operation of your wood stove. This stove may be connected to a 6" inside diameter factory built **all fuel chimney system** that has been safety tested to the UL-103HT standard. This stove may also be connected to a lined **masonry chimney** that meets the standards of NFPA 211.

If you are choosing the location to install a new chimney, decide on a central location in the main living area of the home. Uninhabited areas of the home such as an uninsulated basement or a garage would be an inefficient location for the stove. Also consider not placing the chimney too close to your neighbors or in a valley that would cause a nuisance or unhealthy outdoor air quality. For proper draft, the chimney must exit the roof a minimum of 3 feet and at least 2 feet above any portion of the roof that is within 10 feet of the chimney.

Minimum Flue Height Recommendations	
No offsets in the chimney	14 ft
30° or 45° offsets in the chimney	15 ft
90° offsets in the chimney	16 ft.
90° offsets with 2-3 feet of horizontal run	20 ft.
90° offsets into exterior chimney	22 ft.

## CONNECTOR PIPE

The connector pipe is the portion of the venting system that connects the stove to the chimney system. This is the portion of the venting system that is always visible from inside the home. The connector pipe must be 24ga. single wall black stove pipe or a listed double wall connector pipe. Connector pipe must be secured with 3 screws at each joint. Listed double wall connector pipe is required for mobile home installation and is recommended for all installations to improve the draft performance of the stove. It is recommended that you install a telescoping or slip connection near the stove to give easy access for cleaning the chimney and stove.

## WHEN CONNECTING TO AN ALL-FUEL CHIMNEY SYSTEM

- 🔥 For complete installation instructions, carefully follow the installation manual that came with your all fuel chimney system.
- 🔥 Your chimney must meet the UL-103HT standard. Do not mix different brands of chimney parts.
- 🔥 Do not use connector pipe to pass through an attic, closet, wall, floor or ceiling.
- 🔥 Use only prefabricated listed chimney and connector pipe. Field fabricated or "makeshift" parts could result in a chimney or house fire.
- 🔥 Inspect all chimney parts for damage. Do not use any damaged chimney parts

An all-fuel chimney system consists of prefabricated metal chimney parts that have been designed and tested for use with modern wood stoves. Examples of 103 HT chimney systems include:

- DuraTech manufactured by DuraVent
- Ultra Temp manufactured by Selkirk
- Excel manufactured by ICC Chimney
- Temp/Guard manufactured by Metal-Fab

When choosing a location for your chimney you will need to study the clearance requirements for both the stove and the chimney. Many chimney systems require a 2" air space around the pipe. **Refer to the clearance diagrams in section 2 for minimum clearances around this stove.** You will need to install supports, braces, shielding and firestops according to the chimney manufacturer's recommendations. When passing the chimney through an attic space an insulation shield must be used to ensure that no insulation can contact the chimney. For safety, the chimney must penetrate the roof a minimum of 3 feet AND must be at least 2 feet higher than any part of the roof that is within 10 feet of the chimney. For proper draft, the venting system (chimney + connector pipe) should be at least 14 feet from the stove top to the venting cap. If you live in a snowy region and you have a metal roof, consider adding snow breaks or diverters to your roof to prevent damage from sliding snow and ice. Scan to see the Kuma snow diverter engineered for metal roofs:

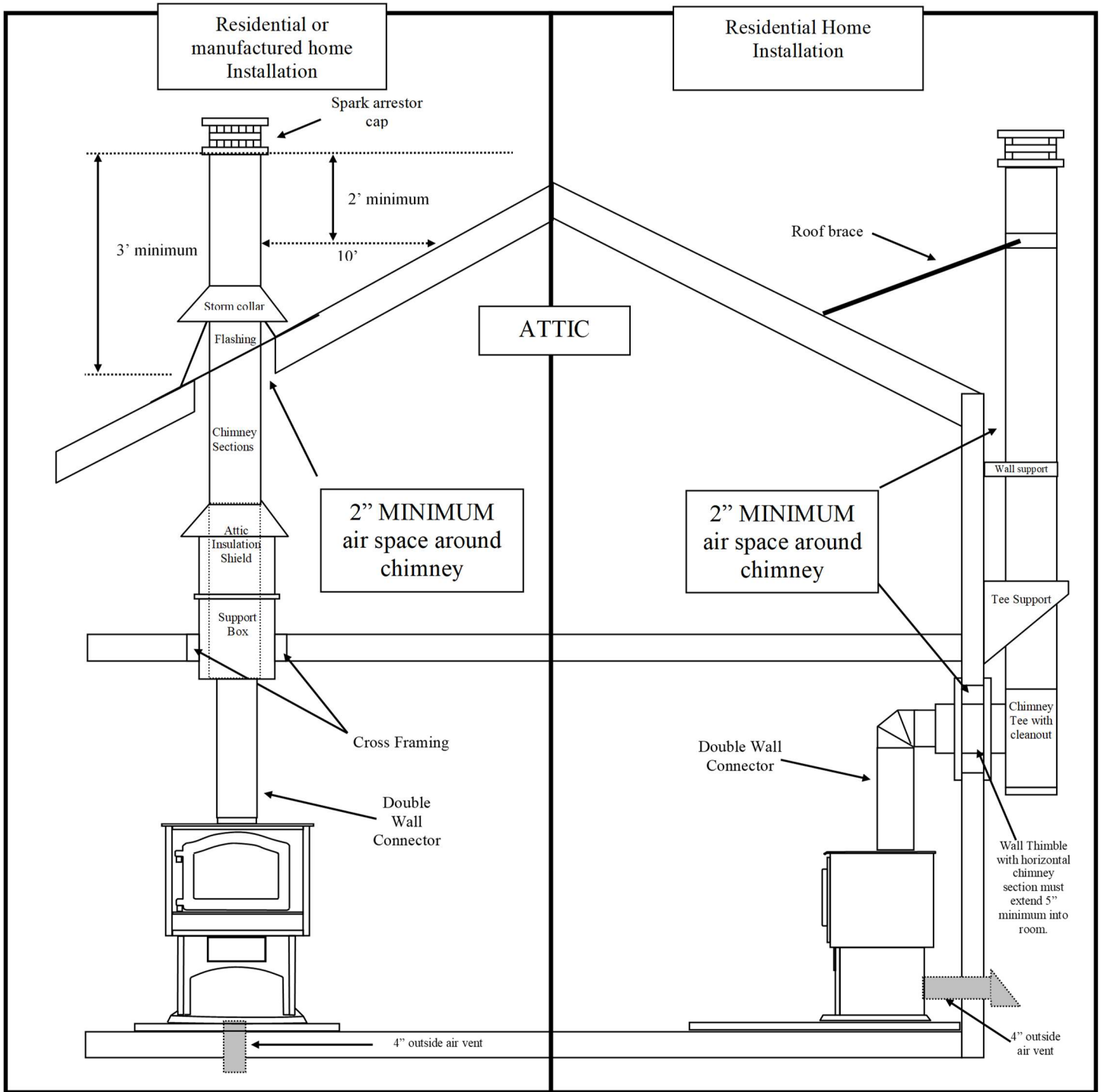


## ADDITIONAL REQUIREMENTS FOR MANUFACTURED (MOBILE) HOMES

- 🔥 CAUTION: The structural integrity of the mobile home floor, wall and ceiling/roof must be maintained.
- 🔥 WARNING: Do not install in a sleeping room of a mobile home.


- An outside air kit (KA OA 1) is required for all mobile home installations. Follow the instructions located in the box.
- A double wall connector pipe is required for all mobile homes.
- Using 8-gauge ground wire and appropriate connectors, you must drill through the hearth and connect the stove to the metal frame underneath the mobile home.
- When required by local code, you will need to fasten the stove to the floor of the mobile home.

# Typical installation of an all-fuel chimney system





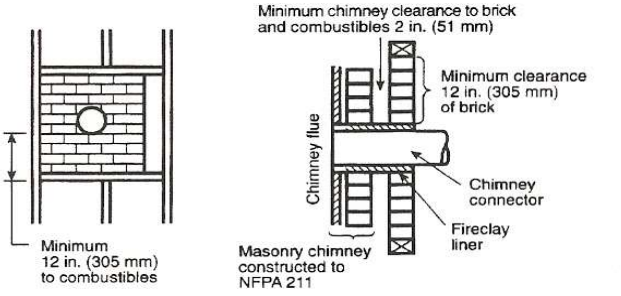
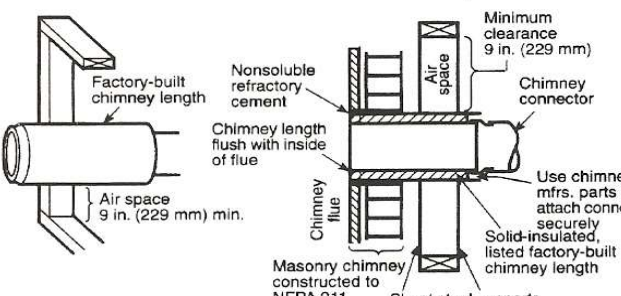
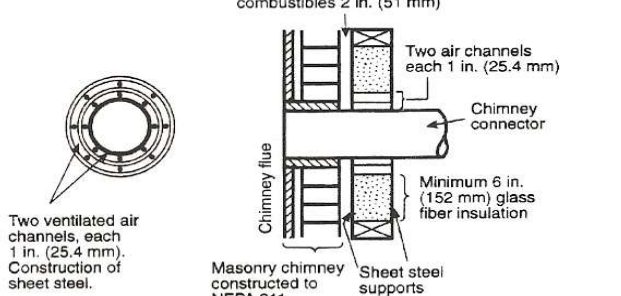
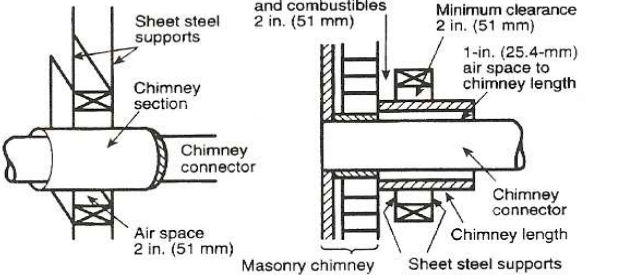
## WHEN CONNECTING TO A MASONRY CHIMNEY

 WHEN PENETRATING A COMBUSTIBLE WALL TO CONNECT TO A MASONRY CHIMNEY YOU MUST BE CERTAIN THAT THE WALL PASS THROUGH IS A SAFE AND CODE APPROVED METHOD such as the NFPA 211 standard. See Figure 6-7.5 from the **NFPA 211-2016, *Standard for Chimneys*** below

Your masonry chimney must be built according to an approved method of construction such as the NFPA 211 standard. Visit [nfpa.org](http://nfpa.org) for free access to the standard.

1. Have a certified chimney inspector clean and inspect your chimney to make sure that there are no code violations, cracks, damaged mortar joints, or blockages. If your chimney is damage or does not meet code requirements, you may need to re-line or re-build your chimney.
2. Install a flue liner that meets the type HT requirements (2100°) per the UL 1777 standard.
3. Kuma recommends that an insulated chimney liner always be installed into a masonry chimney for improved performance and ease of cleaning. Chimney liners should not be smaller than 6" diameter or the equivalent cross-sectional area of 28 square inches. Any reduction in flue size may result in smoking or poor performance.
4. Equally important to the construction of the chimney is the connection between the stove and the chimney. When passing through a combustible wall, use the following diagram to make sure that it is a safe method:

**FIGURE 6-7.5 Chimney connector systems and clearances from combustible walls for residential heating appliances.**





System	Clearance (in.)/(mm)
 <p>Minimum chimney clearance to brick and combustibles 2 in. (51 mm)</p> <p>Minimum 12 in. (305 mm) to combustibles</p> <p>Masonry chimney constructed to NFPA 211</p>	<p><b>A</b> Minimum 3.5 in. (90 mm) thick brick masonry wall framed into combustible wall with a minimum of 12-in. (305-mm) brick separation from clay liner to combustibles. Fireclay liner (ASTM C 315, <i>Standard Specification for Clay Fire Linings</i>, or equivalent), minimum 5/8-in. (16-mm) wall thickness, shall run from outer surface of brick wall to, but not beyond, the inner surface of chimney flue liner and shall be firmly cemented in place.</p> <p>12/305</p>
 <p>Minimum chimney clearance from masonry to sheet steel supports and combustibles 2 in. (51 mm)</p> <p>Minimum clearance 9 in. (229 mm)</p> <p>Factory-built chimney length</p> <p>Air space 9 in. (229 mm) min.</p> <p>Nonsoluble refractory cement</p> <p>Chimney length flush with inside of flue</p> <p>Chimney flue</p> <p>Chimney connector</p> <p>Masonry chimney constructed to NFPA 211</p> <p>Sheet steel supports</p> <p>Use chimney mfrs. parts to attach connector securely</p>	<p><b>B</b> Solid-insulated, listed factory-built chimney length of the same inside diameter as the chimney connector and having 1 in. (25.4 mm) or more of insulation with a minimum 9-in. (229-mm) air space between the outer wall of the chimney length and combustibles.</p> <p>The inner end of the chimney length shall be flush with the inside of the masonry chimney flue and shall be sealed to the flue and to the brick masonry penetration with non-water-soluble refractory cement. Supports shall be securely fastened to wall surfaces on all sides.</p> <p>Fasteners between supports and the chimney length shall not penetrate the chimney liner.</p> <p>9/229</p>
 <p>Minimum chimney clearance to sheet steel supports and combustibles 2 in. (51 mm)</p> <p>Two ventilated air channels, each 1 in. (25.4 mm). Construction of sheet steel.</p> <p>Chimney flue</p> <p>Chimney connector</p> <p>Masonry chimney constructed to NFPA 211</p> <p>Sheet steel supports</p>	<p><b>C</b> Sheet steel chimney connector, minimum 24 gauge [0.024 in. (0.61 mm)] in thickness, with a ventilated thimble, minimum 24 gauge [0.024 in. (0.61 mm)] in thickness, having two 1-in. (25.4-mm) air channels, separated from combustibles by a minimum of 6 in. (152 mm) of glass fiber insulation. Opening shall be covered, and thimble supported with a sheet steel support, minimum 24 gauge [0.024 in. (0.61 mm)] in thickness.</p> <p>Supports shall be securely fastened to wall surfaces on all sides and shall be sized to fit and hold chimney section. Fasteners used to secure chimney section shall not penetrate chimney flue liner.</p> <p>6/152</p>
 <p>Minimum chimney clearance to sheet steel supports and combustibles 2 in. (51 mm)</p> <p>Minimum clearance 2 in. (51 mm)</p> <p>1-in. (25.4-mm) air space to chimney length</p> <p>Sheet steel supports</p> <p>Chimney section</p> <p>Chimney connector</p> <p>Chimney length</p> <p>Masonry chimney constructed to NFPA 211</p>	<p><b>D</b> Solid-insulated, listed factory-built chimney length with an inside diameter 2 in. (51 mm) larger than the chimney connector and having 1 in. (25 mm) or more of insulation, serving as a pass-through for a single wall sheet steel chimney connector of minimum 24 gauge [0.024 in. (0.61 mm)] thickness, with a minimum 2-in. (51-mm) air space between the outer wall of chimney section and combustibles.</p> <p>Minimum length of chimney section shall be 12 in. (305 mm). Chimney section concentric with and spaced 1 in. (25.4 mm) away from connector by means of sheet steel support plates on both ends of chimney section. Opening shall be covered, and chimney section supported on both sides with sheet steel supports of minimum 24 gauge [0.024 in. (0.61 mm)] thickness.</p> <p>Supports shall be securely fastened to wall surfaces on all sides and shall be sized to fit and hold chimney section. Fasteners used to secure chimney section shall not penetrate chimney flue liner.</p> <p>2/51</p>

**Additional requirements:**

- Insulation material used as part of wall pass-through system shall be of noncombustible material and shall have a thermal conductivity of 1.0 Btu-in./hr-ft<sup>2</sup>-°F (4.88 kg-cal/hr-m<sup>2</sup>-°C) or less.
- All clearances and thicknesses are minimums; larger clearances and thicknesses shall be permitted.
- Any material used to close up an opening for the connector shall be of noncombustible material.
- A connector to a masonry chimney, except for System B, shall extend in one continuous piece through the wall pass-through system and the chimney wall to the inner face of the flue liner, but not beyond.

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## SECTION 4 - OPERATING INSTRUCTIONS

-  NEVER USE FLAMMABLE LIQUIDS TO START OR FRESHEN UP A FIRE
-  CAUTION: Do not use any fuels that are not seasoned natural wood.
-  Do not leave the stove unattended with the door open.
-  DO NOT OVERFIRE THIS STOVE – Attempts to achieve temperatures that exceed this stove's design specifications can result in permanent damage to the stove.

### YOUR 1<sup>ST</sup> FIRE (BREAK-IN PERIOD)

**Paint Curing:** When building your 1<sup>st</sup> fire, be careful to start small and increase the heat slowly over a 4 to 5-hour period. The paint on the stove cures with heat and needs to be done slowly. As the paint cures, it gives off a smell and even sometimes a visible haze into the room. **Do not use the oven for baking until you have fully cured your stove paint for at least 5 hours.** Make sure the area is well ventilated during the curing operation. The smell will subside after a few hours of operation.

**Popping and creaking:** As the metal heats up and cools down, it moves. This movement can cause a normal popping or creaking sound that will likely decrease after the first several weeks.

**Performance:** It is normal for the first few fires to seem a bit lazy. As moisture evaporates from the brick, the fire will become more active. A layer of ash in the bottom of the stove will also help to keep your coal bed hot and active. A good thick coal bed and full load of dry wood are key to optimum performance.

### SELECTING WOOD

The leading cause for creosote build-up in the stove or chimney is moisture in the wood. Wood should be protected from rain and seasoned for 1 full year prior to being used. Your wood must have a moisture content of 15% or less. You will need to use a moisture meter to determine the moisture content of the wood. The recommended wood length for this stove is 14". This stove is designed to burn natural wood only. Higher efficiencies and lower emissions generally result when burning air dried seasoned hardwoods, as compared to softwoods or to green or freshly cut hardwoods. **Be mindful of what you are burning if you choose to cook inside the firebox of the stove.** For example, you do not want to use an alcohol based Firestarter or creosote removing products before or during a fire that you cook over.

#### DO NOT BURN:

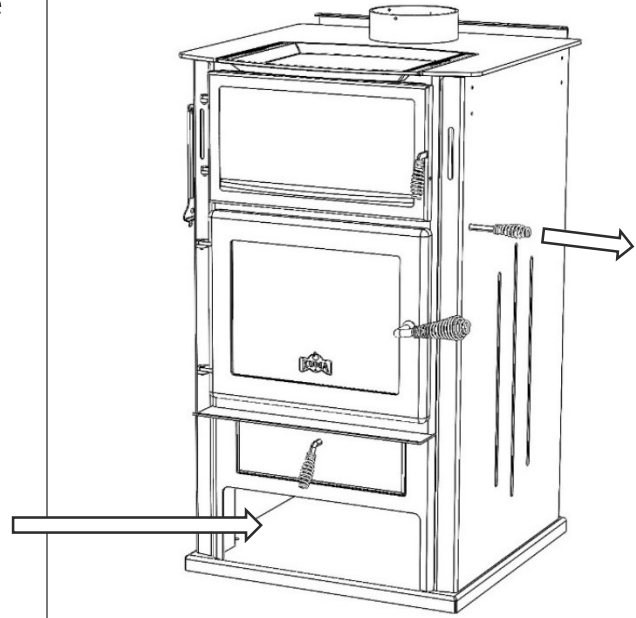
- Lawn clippings or yard waste
- Garbage, manure or animal remains
- Plastic or materials containing rubber, including tires
- Waste petroleum products, paints or paint thinners, or asphalt products
- Materials containing asbestos
- Construction or demolition debris including railroad ties or pressure-treated wood
- Saltwater driftwood or other previously salt water saturated materials
- Unseasoned wood; or Paper products, cardboard, plywood, or particleboard

Burning these materials may result in release of toxic fumes or render the cook stove ineffective and cause smoke. You may use fire starters made from paper, cardboard, saw dust, wax and similar substances.

## LIGHTING A FIRE

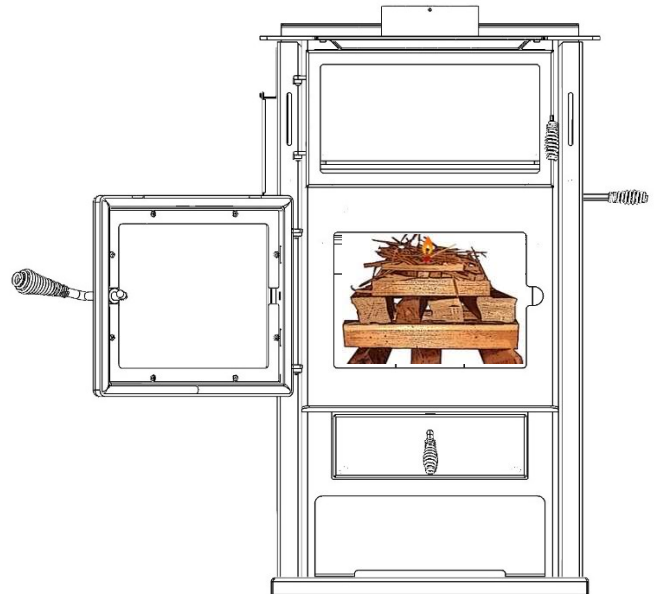
**Step 1:** Slide the air control out away from the stove until it stops. The air is now fully open for starting a fire.

**DO NOT STORE WOOD OR COMBUSTIBLE MATERIALS UNDERNEATH THE ASH PAN. THIS AREA IS FOR COOKWARE STORAGE**

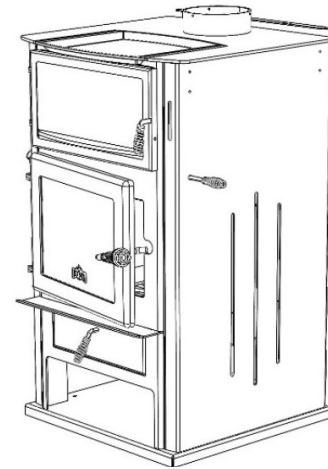


**Step 2:** Open the door and place kindling, Firestarter, and small pieces of wood in the stove. Do not use a grate or elevate the fire – Build the fire directly on the fire brick. When starting a fire, you should never use un-split pieces of wood unless they are small, such as twigs and branches.

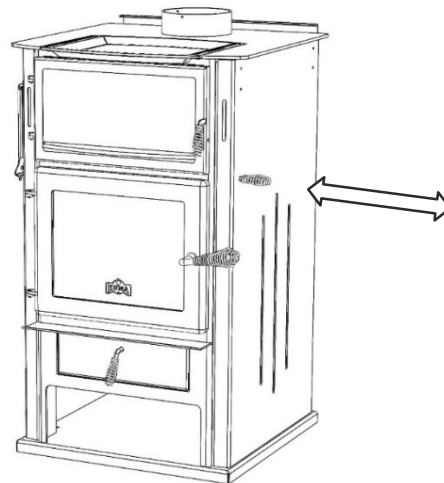
Shown to the right is an example of what is called a “top down” fire: Start by loading larger pieces of wood into the firebox bottom then stack progressively smaller pieces so that the kindling pieces are at the top of the stack. You may use a fire starter such as shredded paper on top of the kindling.



**Step 3:** Light the Fire, you can optionally leave the door slightly cracked open to aid in the start-up of your stove. Close the door once the fire is well lit. **Do not leave the stove unattended with the door open.**



**Step 4:** After 20-30 minutes, begin to regulate the heat output and burn rate by sliding in the air control. Use the table below to adjust your rate of burn:



Desired Burn Rate	Position of the Air Control	Burn Time	Application
Start Up or High Burn	Fully Open	1-2 hours	<b>Primary Use:</b> Frying or boiling on the cook surfaces.
Medium Burn	½ open from fully closed position	3-5 hours	<b>Primary Use:</b> Roasting or baking in the oven or simmering on the cook surfaces
Low Burn	Fully Closed	6-8 hours	<b>Primary Use:</b> Warming food or slow cooking in the oven.

## **ADDING MORE WOOD TO THE FIRE**

1. Slide the air control to fully open just as you would do when you are starting a fire. Wait 5 minutes to allow the coals to become active and to allow the smoke to draft up the chimney.
2. Slowly open the wood loading door and rake the coals breaking up any larger pieces. Add wood then shut the door.
3. Leave the air control open for 10-20 minutes so that the fire becomes well established then begin to adjust your rate of burn.

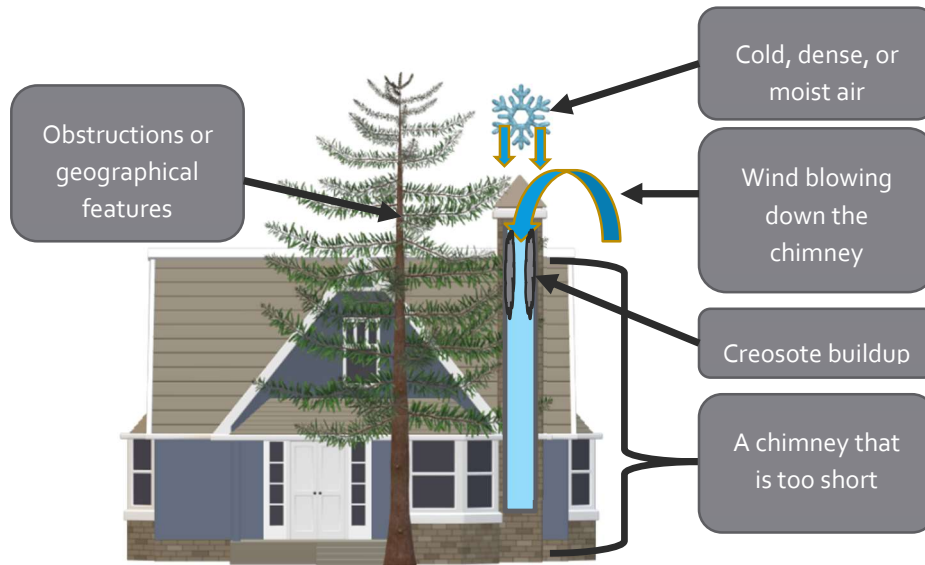
## **ADDITIONAL TIPS FOR BURNING EFFICIENTLY**

Burning wood produces both visible emissions (e.g. particulate matter or smoke) as well as invisible emissions (e.g. Carbon Monoxide). When operating your stove, periodically check for visible emissions coming from the chimney and adjust the burn rate and fuel load to reduce emissions. Remember to let your stove burn open for 20-30 minutes each time you reload it with wood. Shutting the air control prematurely can cause excessive creosote in the chimney. Small hot fires produce less creosote than long, low smoldering fires. When you start your stove or reload your stove with more wood, open the draft fully and burn the stove at high burn for 10-30 minutes to heat up the chimney and secondary burn system. This ensures that when the draft control is pushed in for a lower, longer burn, the stove will burn cleaner.

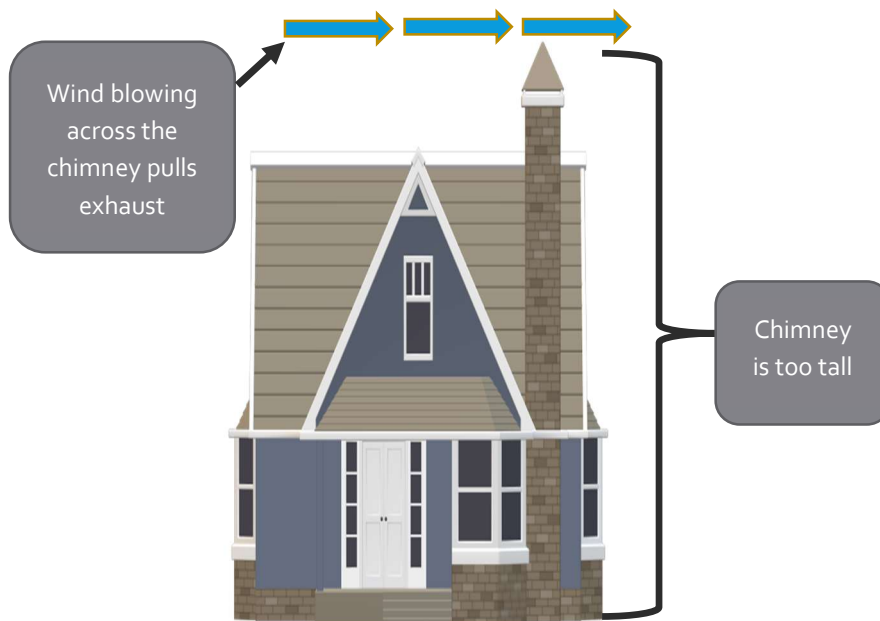
## UNDERSTANDING DRAFT

Wood stoves depend on the draft of the chimney to operate properly. Draft is the force which moves exhaust from the appliance up through the chimney. This force is created by heat in the chimney. A properly drafting chimney will pull the correct amount of air into the stove and will provide you with excellent performance.

**Too little draft** may cause back puffing of smoke into the room and creosote formation in the chimney. Inadequate draft can cause the appliance to leak smoke and carbon monoxide into the room through appliance and chimney connector joints. **Factors that reduce draft are:**



**Too much draft** may cause excessive temperatures inside the firebox and may damage the internal components of the stove. An uncontrollable burn or excessive temperature indicates excessive draft. **Factors that increase draft are:**



**SAFETY INFORMATION – READ BEFORE USING YOUR COOKSTOVE**

- 🔥 Do not leave children unattended in the room while the cook stove is in use.
- 🔥 Never light a fire inside the oven
- 🔥 Do not store anything in the oven or near the cook top – especially paper products.
- 🔥 Always use a potholder or oven glove when handling pots, pan or hot items near the stove.
- 🔥 Do not let cooking grease build up in the oven or on the cook top clean regularly when cool.
- 🔥 Do not use water on grease fires. Do not attempt to pick up a flaming pan. Carefully smother a flaming pan by using a flat tray, a properly fitting lid, or a dry-chemical fire extinguisher.
- 🔥 Do not touch any part of the oven or cooktop while cooking – touching the stove while in operation can cause severe burns.
- 🔥 Do not heat any sealed food containers in the oven or on the cooktop. Pressure could build up and burst.
- 🔥 Do not use a pressure cooker or pressure canner with this stove: The heat generated by a wood cook stove is more difficult to regulate and can cause too much pressure to build in a pressure cooker.
- 🔥 Do not deep fry with this stove: The heat generated by a wood cook stove is more difficult to regulate and can cause the cooking oil to overheat.
- 🔥 Place the oven shelves or cooking griddles in the desired position when the stove is cool.
- 🔥 Never leave the stove unattended while boiling or pan frying – especially in shallow pans that can become too full and boil over.
- 🔥 Except for the cast iron griddle, do not cook directly on the cooking surfaces – always use cookware.

**BAKING WITH THE OVEN**

Before lighting a fire, move the oven racks to the lower position and make sure that the heat shields are in place covering the bottom of the oven. Insert the oven thermometer into the front oven rack. Light a fire by following the operating instructions in section 4 of this manual. Once a fire is established, you will use the air control to control the temperature of the oven. Additionally, the amount of fuel that you load in the firebox can be used to maintain your desired cooking temperature. Finally, you can open the oven door to reduce the temperature of the oven.

The oven thermometer is placed in the cooking rack at the front of the oven just behind the glass door. This oven thermometer is accurate but moves slower than a digital thermometer so you will want to reduce the heat of the fire before the thermometer reaches your desired baking temperature. This will prevent the oven from exceeding your desired baking temperature.

Bake your items by following the time and temperature instructions given in the recipe that you are using. The oven temperature is hotter in the back, so **it is highly recommended that you rotate your food 180° halfway through the baking time.**

**USING THE STOVETOP**

Move the oven racks and cooking griddle to a position that works best for what you are cooking. If you are using the integrated cast iron cooking griddle for pan-frying or boiling at high temperatures, you must



remove the oven thermometer from the oven. If you do not remove the thermometer, it will be exposed to temperatures that will cause it to discolor. You can place the thermometer in its storage area on the back left side of the heat shield or you can place the thermometer on the stovetop to measure the temperature while cooking on the griddle or stovetop. Light a fire by following the operating instructions in section 4 of this manual. Once a fire is established, you will use the air control to control the temperature of the cooktop. If you are uncomfortable due to heat coming from the firebox, it is recommended that you stand to the side of the stove while cooking or use the optional cook's comfort shield accessory (Part# KA-CS-AD).

## POSITIONS THAT WORK BEST FOR WHAT YOU ARE COOKING:

Your Applewood cookstove is highly configurable to achieve a wide variety of temperatures with all types of cookware. It is recommended that you configure the cooktop when the stove is cool.

**For medium cooking temperatures when you plan on building a hot fire:** slide the front rack and the front heat shield to the back of the oven exposing the griddle to heat from the firebox.



**For the hottest cooking temperatures:** slide the shield back, remove or hinge the cast iron griddle out of the way and open the oven door. Use a pan or pot directly on the firebox:



**For medium cooking temperatures when you plan on having a medium or low fire:** Slide the front rack to the back of the oven but leave the front heat shield in place. Place the cast iron griddle or a pan directly on the front heat shield:

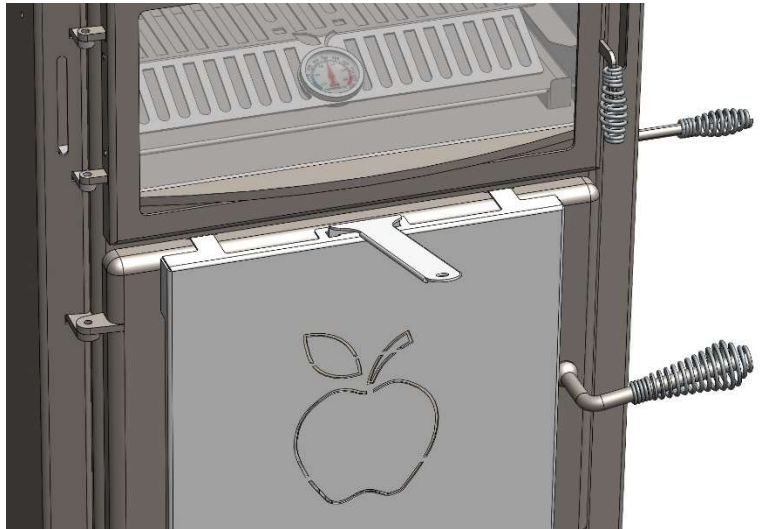


There are several other configurations including the use of a pizza stone and even boiling water canning:



## OVEN TOOL AND COOK'S COMFORT SHIELD

Use the oven tool to move the oven racks and shields. Insert the tool into the 2 square cut outs with the handle of the tool angled slightly upwards. Tilt the handle down to secure the tool then move the item to its desired position. Tilt the handle upwards to release and remove the tool. Also use the oven tool to install and remove the optional cook's comfort shield. This comfort shield is installed by placing the 2 hooks at the top of the shield over the top of the door. You will notice 2 notches in the top of the door to accept the hooks of the comfort shield. It is recommended that you install and remove the comfort shield when the stove is cool.



## COOKTOP AND OVEN CLEANING INSTRUCTIONS

Before cleaning the stove, make sure that every surface is cool to the touch. The oven and cooking surfaces should be cleaned with a damp cloth then dried with a towel. A very small amount of cooking oil can be wiped on the very top of the stove to hide any stains that develop from cooking. The removeable cast iron griddle should be lightly oiled after each use. A glass cook top cleaner/polish can be used on the oven glass. Do not spray oven cleaner or cooking oil inside the oven.

 This wood cookstove needs periodic inspection and repair for proper operation.

## FIRE EXTINGUISHER

Every home should have a type A:B:C fire extinguisher that is checked and maintained on a regular basis. The National Fire Protection Agency (nfpfa.org) recommends having an extinguisher on each floor of your home. The location of the extinguisher should be known to everyone in the house.

## ASH DISPOSAL

The Ash drawer is located below the fuel loading door. Empty the ashes when they get 2" to 3" deep. Make sure that the fire is out - Never try to empty the ashes when the stove has an active or full fire, doing so will overheat the stove. Leave 1" of ash in the bottom of the stove to help maintain a hot coal bed. Always wear gloves while handling hot ashes. To operate the ash drawer:

1. Turn the ash drawer handle to the left or right to release the latch.
2. Pull out the drawer and empty the ashes into a metal container with a tight-fitting lid.
3. Take the container far away from any part of the house including the porch or deck.
4. Clean out any ashes that may have fallen into the cavity that the ash drawer slides in to. **If any ashes remain in the cavity, it can prevent the ash pan from sealing, resulting in excessive air to the fire.**
5. Slide the ash drawer back into place, push in to compress the spring and turn the handle down.
6. **NEVER OPERATE THE STOVE WITH THE ASH DRAWER REMOVED OR OPENED.**

**NEVER EMPTY ASHES INTO A COMBUSTIBLE CONTAINER SUCH AS A PLASTIC BUCKET OR PAPER BAG. NEVER LEAVE ASHES NEAR THE HOUSE OR GARAGE.**

## CHIMNEY INSPECTION

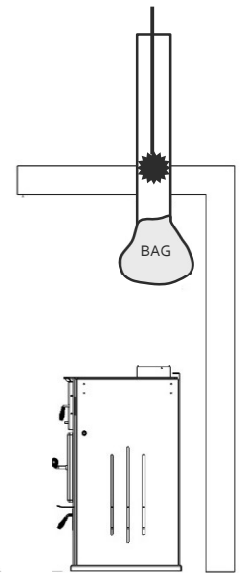
When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney connector and chimney should be inspected at least once every two months during the winter season to determine if a creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire. Failure to remove creosote can result in a chimney fire which can damage both the chimney and the stove. If the chimney is damaged, it must be replaced.

## CHIMNEY CLEANING

Chimney cleaning can be difficult and dangerous. We recommend having the chimney cleaned and inspected by a licensed, professional chimney sweep. The chimney can be cleaned by running a brush from the top of the chimney down to the stove. **It is recommended that you remove your connector pipe from the stove top so that you can clean your chimney without sending soot down into the top of the stove.**

Removing the connector pipe also allows you to properly clean soot from around the oven as described below. If you are not able to clean from the top of the chimney down, you can run a brush up through the oven clean-out plate to the top of the chimney (see figure 1). This will cause soot to fall into the stove's oven and will need to be cleaned.

**Once the chimney is clean, any soot that has been brushed into the oven exhaust path must be removed.**



Recommended Cleaning Method

## IMPORTANT: CLEANING SOOT FROM AROUND THE OVEN

The exhaust path of the stove flows around the sides, back and top of the oven. Soot can accumulate in the exhaust path and creosote can fall into this exhaust path when you brush your chimney. The exhaust path should be inspected and cleaned every 2 months along with the cleaning of the chimney. **The main fuel loading door is located directly below the oven and serves as the soot clean-out door.** Using the soot brush that came with the stove, follow these steps to clean around the oven:

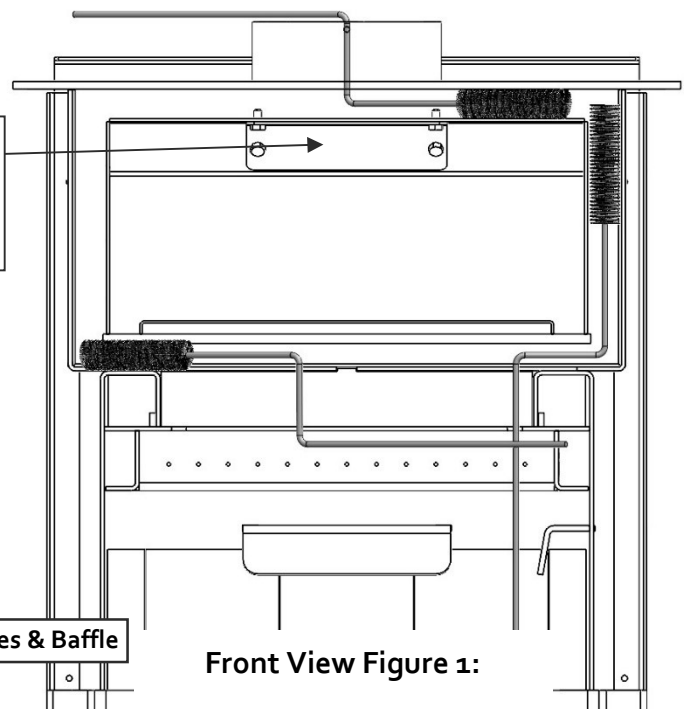
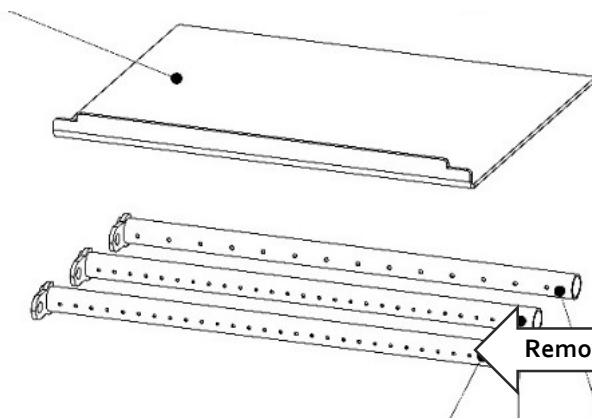


Soot Brush

### 1. Clean the sides of the oven (Figure 1):

Open the fuel loading door. With a  $7/16$ " wrench, remove the 3 burn tubes located in the top of the firebox. The entire baffle will now come down and out of the stove. From inside the firebox, use the soot brush to clean any soot from the sides of the oven. The brush handle is bent in a manner that allows you to insert it up along the sides of the oven. Slide the brush forwards and backwards angling the brush to reach all areas of the oven sides.

Use the oven clean-out plate if you cannot remove your connector pipe.

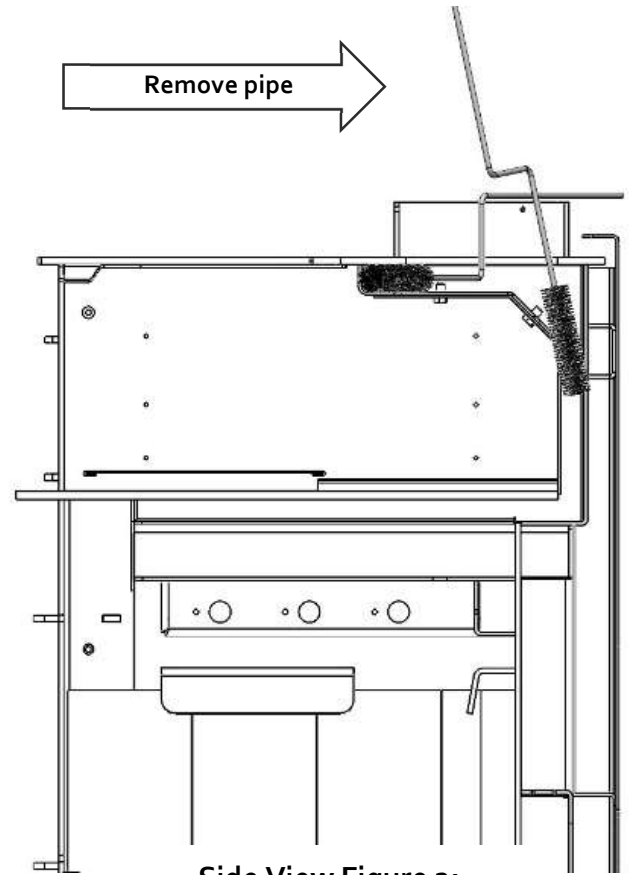


2. **Clean the top and back of the oven (Figure 2):**

It is highly recommended that you clean this area through the flue collar of the stove. This allows you the best access to perform a thorough cleaning. Remove the connector pipe from the stove. Reaching through the flue collar, use the soot brush to clean ash from the top and back wall of the oven as far as you can reach.

If you cannot remove the pipe from the flue collar, then you must make sure to thoroughly clean these areas by removing the oven clean-out plate located in the ceiling of the oven or install a Tee section in your pipe with a removable access cover (see figure 1).

3. **Clean the ledge (Figure 3):** Remove any soot that has fallen into the firebox. Pay special attention to the ledge in the corners of the oven exhaust path: soot will settle in this location when cleaning.



Side View Figure 2:

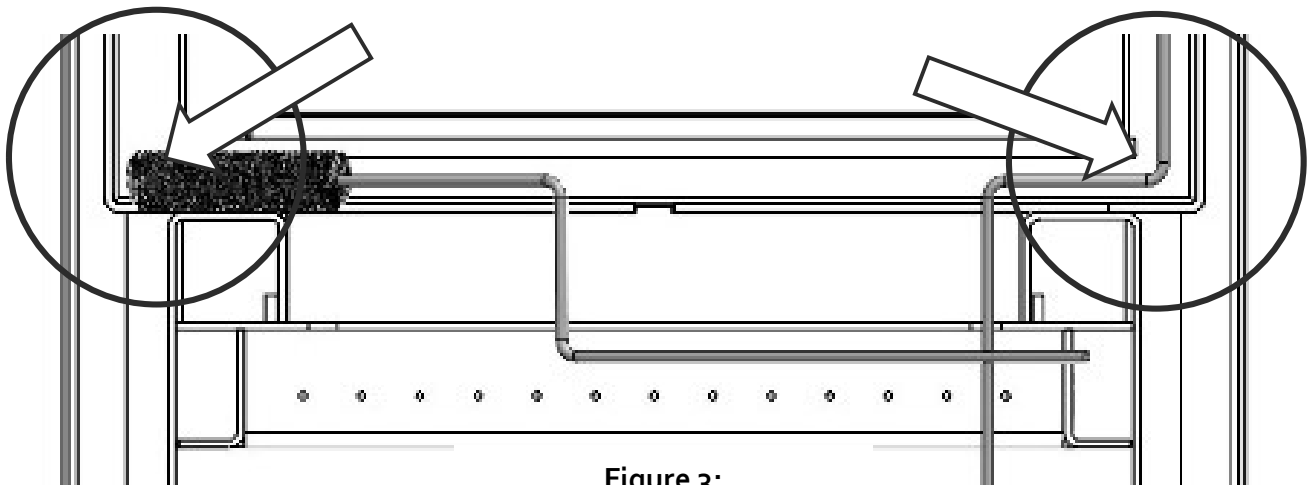


Figure 3:

After you have thoroughly brushed all areas around the oven exhaust path, re-install your baffle and burn tubes then reconnect your pipe.

## **GASKET INSPECTION AND REPLACEMENT**

Inspect the gaskets around the fuel loading door, glass and ash pan at least once a year. Check for areas that are frayed or missing. Press the gasket with your finger to see if the gasket is somewhat soft. Gaskets that are hard will not conform to the stove and may leak air. When the stove is cold, check to see if the glass moves up and down or left to right. If the glass moves, you may need to tighten the screws around the retaining ring or replace the gasket. Replacement gaskets and service are available through your local dealer or by visiting [kumastoves.com](http://kumastoves.com).

## **GLASS CLEANING AND REPLACEMENT**

Never clean the glass when it is hot. Your stove is equipped with an air wash system that will self-clean. Burn the stove on high for 20 to 30 minutes every time you add fuel to the fire. This will reduce the creosote on the glass. If needed, clean the glass with a soft cloth and stove glass cleaner. Do not use steel wool, sandpaper or abrasive cleaners. If you close the door on a piece of wood that is too long, you will break the glass. If the glass breaks in your stove, shut off the primary air control and let the fire burn out. Do not leave the stove unattended with a broken glass. To replace broken glass:

1. Use a flat blade screwdriver to pry off the retaining washers from the bottom of the door pins.
2. Carefully lift the door from the stove and place it on a clean, soft work area.
3. Using a Phillips screwdriver, remove the retaining ring screws and the retaining ring.
4. Carefully discard the broken glass. CAUTION: BROKEN GLASS WILL BE SHARP.
5. Clean the door and set the new piece of glass into the door so that the logo reads correctly from the front side of the door. Kuma replacement glass will have the gasket pre-installed.
6. Replace the retaining ring and screws. Be careful to tighten the screws evenly and tighten just enough to hold the glass firmly. Re-install the door and door pin retaining washers.

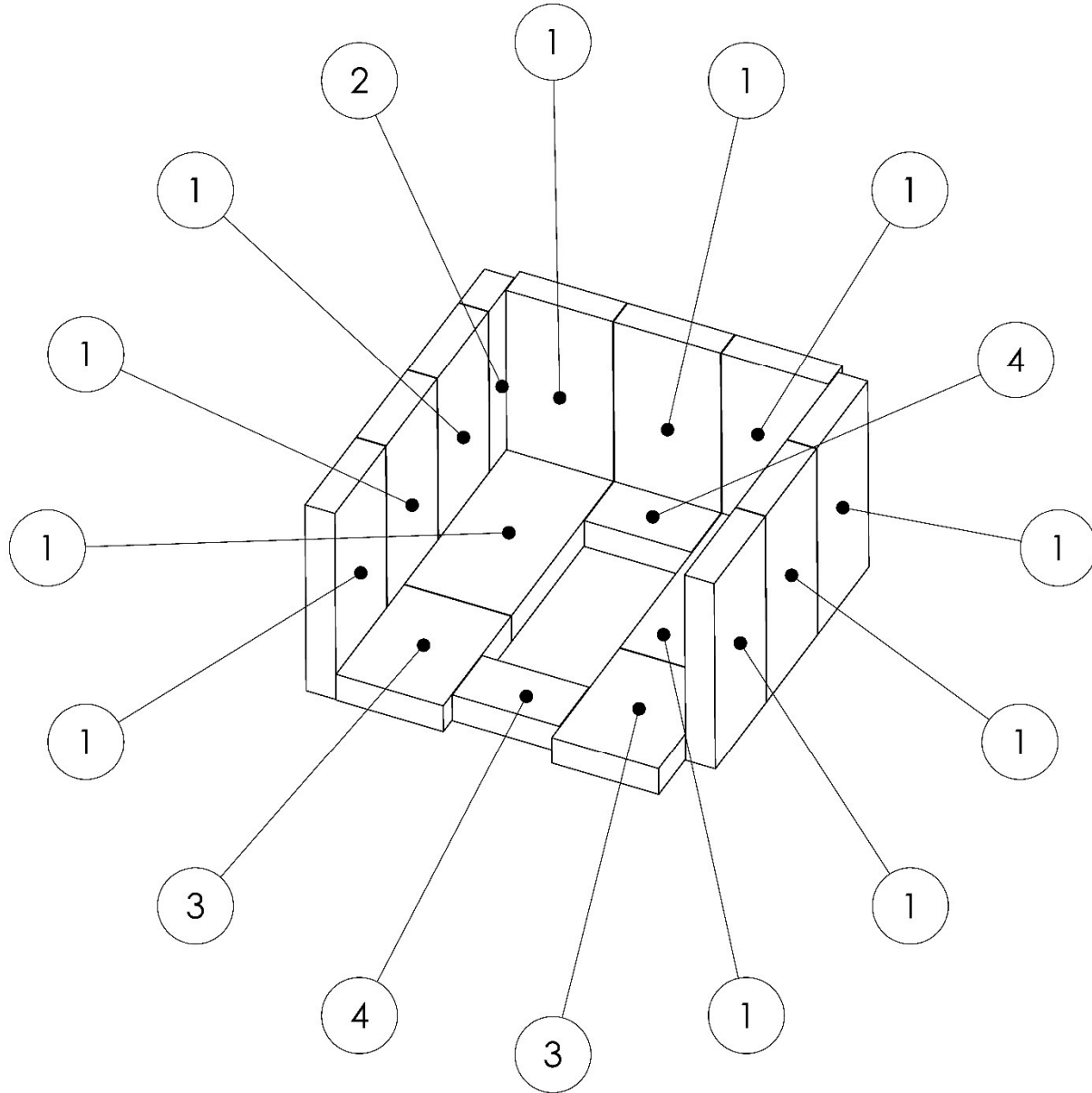
## **SECONDARY BURN TUBE REPLACEMENT**

If your burn tubes are not physically degraded (falling apart, crushed or excessively warped) then they are functioning and will not need replacement. To remove a burn tube, un-bolt the tube using a 7/16" wrench. Pull the tube to the right then down and out of the stove. Replace the tube and re-install the bolt the holds the tube in place.

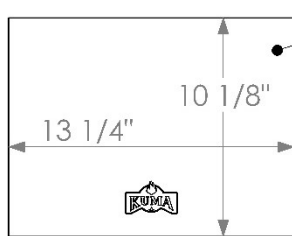
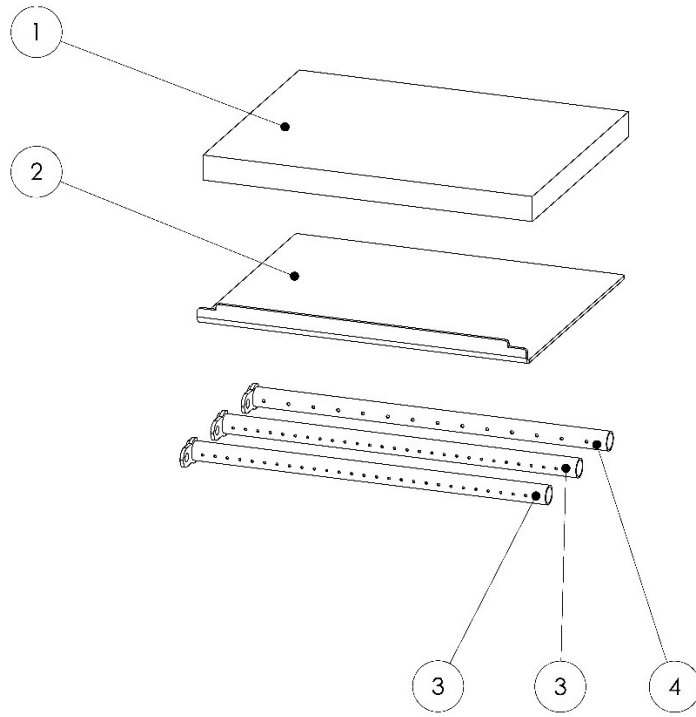
## **BRICK AND CERAMIC INSULATION REPLACEMENT**

Bricks and ceramic insulation should be inspected annually and replaced if necessary. Hairline cracking in the brick may be acceptable if they remain in place. Bricks that are crumbling or falling out need to be replaced. The ceramic insulation is located on the top of the stove's baffle and is designed to keep heat in the stove and increase efficiency. If the insulation is in place, it can be left alone. If the insulation becomes torn during cleaning, simply lay it back together tightly in that area. If the insulation tears to multiple pieces, it should be replaced. To replace the ceramic insulation, remove the 3 burn tubes allowing the entire baffle to come down and out of the stove. Mark or otherwise note the order of the tubes so they can be replaced in the same location. Place the insulation blanket on top of the baffle so that the cut-out aligns with the bypass opening in the baffle. Re-install the baffle and the 4 burn tubes.

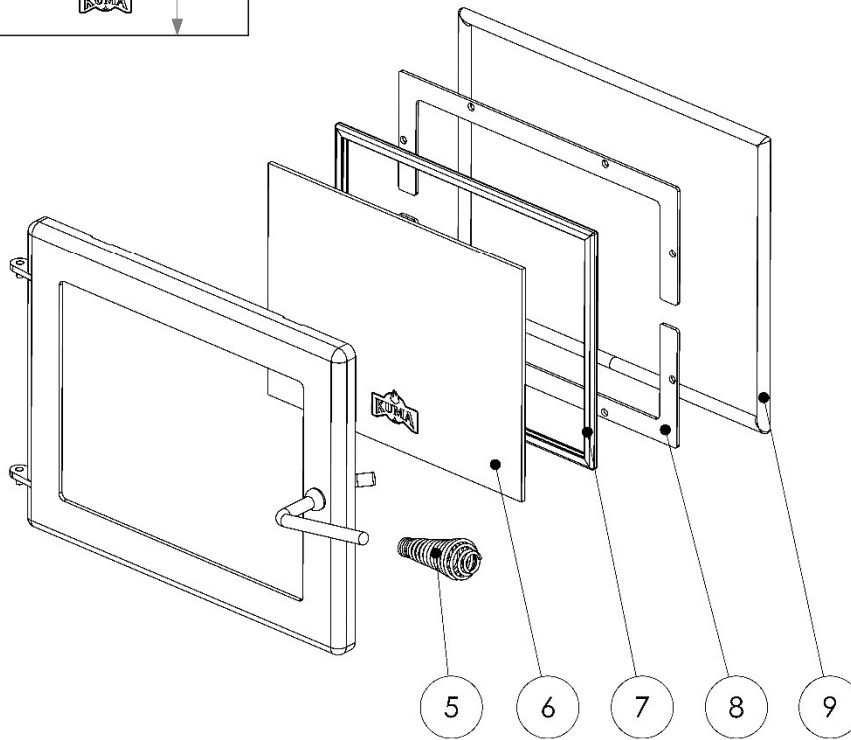
# MAINTENANCE DIAGRAMS & PARTS LIST



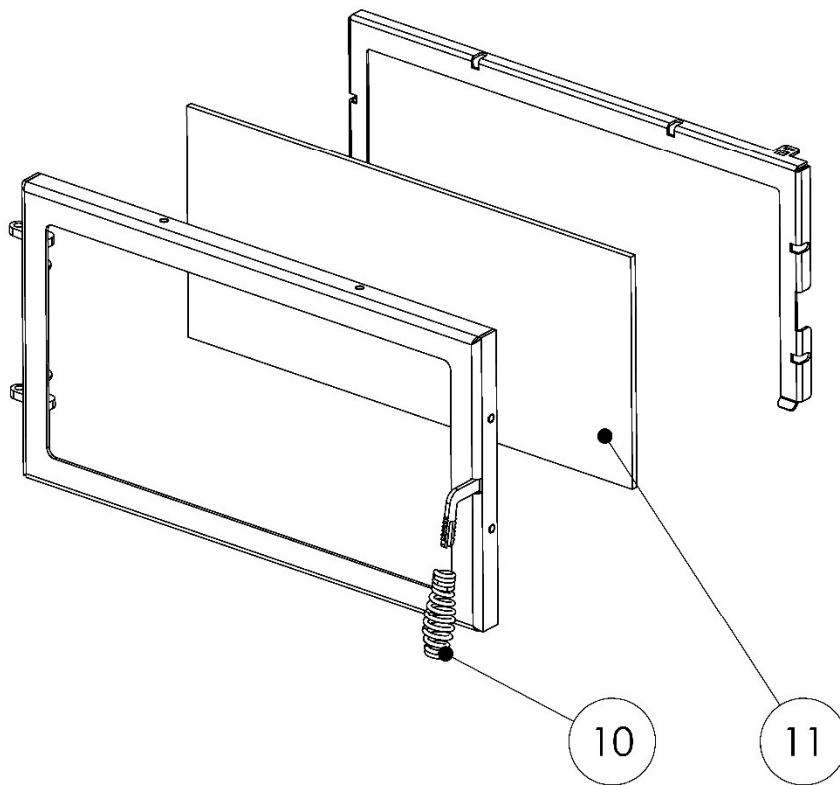
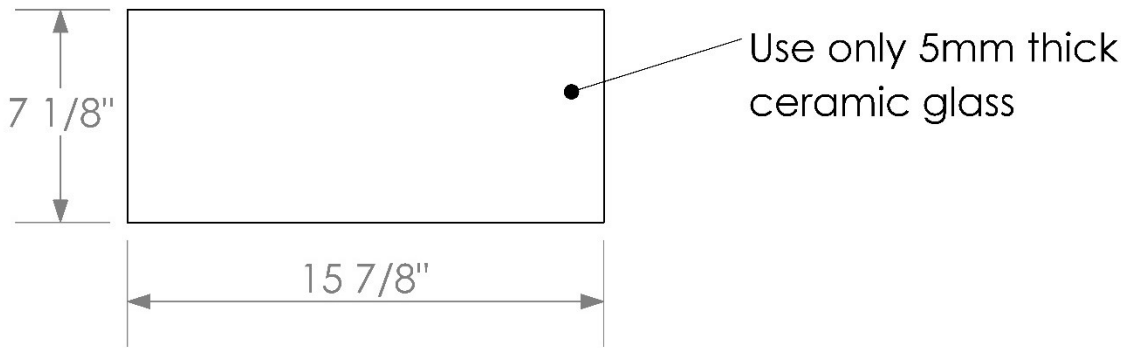
ID	Item #	Description
1	KR-BR-01	Brick, standard size. 9" x 4-1/2".
2	KR-BR-122	Brick, cut size. 9" x 2-1/4"
3	KR-BR-123	Brick, cut size. 6" x 4-1/2"
4	KR-BR-124	Brick, cut size. 2-5/8" x 4-1/2"



Use only 5mm thick ceramic glass







ID	Item #	Description
1	KR-IN-12	Ceramic Baffle Insulation. Fits: Applewood cook stove.
2	KR-BF-12	Baffle plate, stainless steel. Includes Insulation blanket (KR-IN-12).
3	KR-BT-121	Baffle burn tube, front or middle. Fits: Applewood cook stove
4	KR-BT-122	Baffle burn tube, Rear. Fits: Applewood cook stove
5	KR-SP-02P	Door handle, pewter.
6	KR-GL-12	Fuel loading door glass. Fits: Applewood cook stove
7	KR-GK-034	Gasket, 3/4" fiberglass channel, 5 feet. Fits: All glass sizes.
8	KR-GR-12	Fuel loading door glass retainer: Fits Applewood cook stove
9	KR-GK-058	Gasket, 5/8" fiberglass, 8 feet. Fits: All doors and ash pans.
10	KR-SP-01P	Silver stove spring for 3/8" control rod/handle
11	KR-GL-5	Replacement oven glass. Applewood cookstove.

Parts and support are available from your local dealer, by contacting Kuma Stoves at 888-714-5294 or visiting [kumastoves.com](http://kumastoves.com) and clicking on the support tab.

## SECTION 7 - TROUBLESHOOTING

### STOVE BURNS LAZY AT START UP.

1. The chimney is still cool, allow more time to warm up.
2. Wood is not seasoned (still green). Wood should sit for about 1 year, split and loosely stacked if it was cut green.
3. Wood is well seasoned but has a lot of surface moisture. Your wood supply must be covered. Check your tarps or other covering to see that no rain or snow is getting to your wood. Wood should be covered on top, but open on the sides to allow air movement to aid in drying.
4. Stove is being shut down too soon. Leave the air or door open for longer (do not leave the stove unattended with door open) See Section 4 for lighting instructions.

### STOVE BACK-PUFFS OR SMOKES INTO THE ROOM AT START UP.

1. Chimney is cold. Cold chimneys can produce a "reverse draft" where cold air is rushing down the chimney into the stove. Open a door or a window for about 5 minutes to equalize pressure in the house then try restarting with small strips of newspaper. Using small strips of newspaper or an approved fast burning fire starter and small pieces of kindling will create heat faster to help reverse the cold air.
2. Chimney and/or the chimney cap needs to be cleaned. Your chimney should be checked and cleaned if necessary, every few months. Even a small amount of buildup can cause a draft restriction, for example: ¼ inch of buildup on the side wall of an 8" chimney reduces the effective area of the chimney by about 20%. Pay close attention to the chimney cap, especially if it has a screen. Screened chimney caps can become blocked enough to restrict flow in just a few weeks.

## **STOVE SMOKES OUT THE DOOR WHEN IT IS OPEN.**

1. The door was opened too quickly. Crack the door open just a small amount and let the stove “breathe” a few seconds before slowly opening all the way.
2. Chimney and/or the chimney cap needs to be cleaned. Your chimney should be checked and cleaned if necessary, every few months. Even a small amount of buildup can cause a draft restriction, for example: ¼ inch of buildup on the side wall of a 6” chimney reduces the effective area of the chimney by about 20%. Pay close attention to the chimney cap, especially if it has a screen. Screened chimney caps can become blocked enough to restrict flow in just a few weeks.

## **STOVE WON'T SHUT DOWN.**

1. Check the main door gasket and glass gasket for proper seal. See section 6 for instructions on checking your gaskets.
2. Chimney is too tall, see Section 3 for flue height recommendations.

## **STOVE WON'T BURN HOT ENOUGH FOR COOKING. LAZY BURN.**

1. Wood is not seasoned (still green). Wood should sit for about 1 year, split and loosely stacked if it was cut green.
2. Wood is well seasoned but has a lot of surface moisture. Your wood supply must be covered. Check your tarps or other covering to see that no rain or snow is getting to your wood. Wood should be covered on top, but open on the sides to allow air movement to aid in drying.
3. Chimney and/or the chimney cap needs to be cleaned. Your chimney should be checked and cleaned if necessary, every few months. Even a small amount of buildup can cause a draft restriction, for example: ¼ inch of buildup on the side wall of an 8” chimney reduces the effective area of the chimney by about 20%. Pay close attention to the chimney cap, especially if it has a screen. Screened chimney caps can become blocked enough to restrict flow in just a few weeks.
4. Atmospheric conditions. Occasionally, barometric episodes occur that affect draft, thereby affecting stove performance. If your stove has been working fine and performance drops suddenly, this is most likely the cause, and will usually go away within a few days.
5. Your fuel load may be too small or the wood size too large for the coal bed. A small bed of coals requires re-kindling to build up the heat, only put large chunks of wood on a very hot and active bed of coals.

## **BURN TIME TOO SHORT.**

1. Your fuel load may be too small or the wood size too large for the coal bed. A small bed of coals requires re-kindling to build up the heat, only put large chunks of wood on a very hot and active bed of coals. If there are large chunks of charred wood left after the fire has gone out, the coal bed was not hot enough.
2. Fuel quality. Harder, denser woods produce longer burn times. Likewise, softer woods produce shorter burn times.
3. Check the main door gasket and glass gasket for proper seal. See section 6 for instructions on checking your gaskets.

**SECTION 8 – LIMITED WARRANTY**

Our Promise:

If any maintenance items wear out in the first three years, we will supply you with the parts to fix it. For as long as you own your stove, if you ever have a defect in the material or workmanship of your stove’s firebox, we will repair or replace it for you. See full details below:

Items Covered	Parts Coverage Period	Labor Coverage Period
Maintenance Items: Bricks, gasket, ceramic insulation, and paint.	3 Years	No Labor Coverage
Brick supports. All removable wear items including the ash grate, cooking racks, and baffle plate	5 Years	3 Years
Stove firebox, burn tubes, legs, glass (thermal breakage) and door casting.	Forever	3 Years

Warranty Coverage:

**To ensure warranty coverage, it is very important that you register your Kuma Stove warranty within 30 days of purchase at [kumastoves.com](http://kumastoves.com) or fill out and return the warranty registration in your owner’s packet.** Operation of this stove in a manner inconsistent with the owner’s manual will void the warranty. This warranty covers your new Kuma Stove from defects in material and workmanship for the period outlined in this warranty. This stove is not designed or warranted for home heating. The primary use for this unit is for cooking or baking. Kuma Stoves reserves the right to replace, repair or authorize repair of any defective part at its sole discretion. This warranty is not transferrable and covers the original owner of the product from the time of purchase. All parts that have been replaced under this warranty will have a 90-day warranty coverage. The maximum value of this warranty is the original purchase price of the product. This warranty is subject to the conditions and limitations outlined below. This warranty covers stoves purchased from an authorized Kuma Stoves dealer.

Warranty Instructions:

Please contact the dealer where you purchased your stove. You may also contact Kuma stoves directly at 50145 N. Old Highway 95, Rathdrum ID 83858 or by phone at 1-888-714-5294 or contact us online at [kumastoves.com](http://kumastoves.com). When calling, you will need to have your proof of purchase, the model name, and the serial number of your stove. When calling please remember that shipping and handling costs are not covered under this warranty.

Warranty Exclusions:

This Warranty does not cover: 1. Changes in the color of the surface of the stove as this naturally happens during the firing of the stove and is considered normal. 2. Damage to plating due to chemical cleaners, fingerprints, or scratching. 3. Shattered glass caused from wood impact. 4. Discoloration of plating or glass. 5. Expansion and contraction of the firebox causing noise. 6. Damage caused from: power surges, unauthorized modifications, using incorrect fuel and/or accelerants, shipping/handling, failure to follow the manufacturer’s installation instructions, failure to follow any local building codes. 7. Damages to any product not manufactured by Kuma Stoves. 8. Any stove’s ability to heat a specific area. 9. Shipping costs or travel time. Please talk with an authorized dealer or Kuma representative about the potential charges for travel or shipping. 10. This warranty is void in the case of abuse, over firing, unauthorized repair, alterations, improper installation and/or service.