User's Manual and Installation Guide

HWAM 3055 Wood Stove

with Up-swing Door (Model F 30/55,04211)
or Side-swing Door (Model F 30/55s,04201)

UPDATED 09/20/2013

CAUTION !!
IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS INCLUDED. DO NOT DISCARD.
LEAVE THIS MANUAL WITH THE HOMEOWNER.

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Safety

CAUTION !!

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Risk of Fire

Failure to follow the information in this manual may result in a fire; causing property damage, personal injury, or death. Read this booklet completely before installing or operating this appliance.

For use with solid wood fuel only. This appliance has not been tested for the use of compressed wood logs or bricks.

Caution

Do not modify this appliance in any way. Do not install gas logs in this appliance.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

Comply with all minimum clearances to combustibles as specified. Failure to comply may cause a house fire.

Glass and other surfaces are hot during operation and for some time after the fire has gone out. Supervise children around this appliance. Warn children and adults about high temperatures. High temperatures may ignite clothing or other flammable materials. Keep clothing, furniture, draperies and other combustible materials away.

HOT

DO NOT OPERATE WITH THE DOOR OPEN.

Do not operate with door open

CALIFORNIA PROP 65 WARNING:
Use of this product may produce smoke which contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Table of Contents

1. Introduction

We welcome you as a new owner of a HWAM wood-burning stove. This manual will explain the installation, operation and maintenance of the HWAM wood-burning stove. Please familiarize yourself with the owner's manual before operating your stove and save the manual for future reference.

Included are helpful hints and suggestions that will make the operation and maintenance of your new stove an easier and more enjoyable experience.

Please read the entire manual carefully before you install and use your new HWAM wood-burning stove. Failure to follow instructions may result in property damage, bodily injury or loss of life. This manual contains important user information. Keep this manual with the stove after installation is complete.

Safety and environmental testing

HWAM 30/55 Wood Stove has been tested by Intertek Testing Services of Fairview, Oregon, and is safety listed by Intertek to UL 1482, ULC-S627.

The serial number is fixed to the stove and to the guarantee card. If you need to contact the factory please refer to this serial number.
Items included:

1 instruction and maintenance manual, 1 guarantee card, 1 oven mitten, and 1 set of screws for the flue collar.

Contact your local building officials for information on restrictions and installation and permit requirements in your area.

WARNINGS!

1. Use a metal container with a tight fitting lid to dispose of ashes.

2. Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire in this stove. Keep all such liquids well away from the stove while it is in use.

3. Do not burn garbage or flammable fluids such as gasoline, naphtha or engine oil.

4. The stove is hot while in operation. Do not touch and keep children, clothing and furniture away. Contact may cause skin burns. Use gloves when stoking the fire.

5. Do not connect this stove to a chimney flue connected to another stove or appliance.

6. Do not connect to any air distribution duct or system.

7. Do not install in a mobile home.

8. Be sure to allow an adequate source of fresh air into the room where the stove is operating .

9. Do not operate the stove without the firebox refractory plates properly installed.

10. Build fires directly on the refractory bottom plates inside the stove.

11. Do not use grates, irons or any other method to elevate the fire.

What to do if you have a chimney fire

- If you realize a chimney fire is occurring, follow these steps:
- Get everyone out of the house, including yourself.
- Call the fire department. If you can do so without risk to yourself, these additional steps may help save your home. Remember, however, that homes are replaceable, lives are not.
- Put a chimney fire extinguisher into the stove.
- Close the air controls on the stove and any damper on the chimney connector.
- Use a garden hose to spray down the roof (not the chimney) so the fire won't spread to the rest of the structure.

Once it's over, call a CSIA Certified Chimney Sweep to inspect for damage. Chimney fire damage and repair normally is covered by homeowner insurance policies.

2. Installation

WARNING

IF YOUR HWAM WOOD-BURNING STOVE IS NOT PROPERLY INSTALLED, OPERATED AND MAINTAINED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW ALL INSTALLATION, OPERATION AND MAINTENANCE DIRECTIONS.

Pre Installation Check List

Before you begin an installation, review your plans, check to see:

- Your stove and chimney connector will be far enough from combustible material to meet all clearance requirements.
- The floor protection is large enough and is constructed properly to meet all requirements.
- You have all necessary permits from your local authorities. Your local building official is the final authority for approving your installation as safe and in determining that it meets all local and state building and safety codes.

The metal label permanently attached to the back of every HWAM wood-burning stove shows that it has been tested to current UL and ULC safety standards, and gives the name of the testing laboratory. Clearance and installation information is also printed on the label. Local authorities will generally accept the label as evidence that, when the stove is installed according to the information on the label and in this manual, the installation meets codes and can be approved.

This wood stove must be connected to 1) a chimney complying with the requirements for Type HT

chimneys in the standard for Chimneys, Factory-Built, Residential Type and Building Heating Appliance, UL 103, or 2) a code-approved masonry chimney with a flue liner.

For any unresolved questions about installation in the USA, refer to the national Fire Protection Association's publication ANSI/NFPA 211 Standard for Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances. For installation in Canada, refer to CSA CAN-B365, Installation Code for Solid Fuel Burning Applications and Equipment. These standards are the basis for many national codes. They are nationally recognized and are accepted by most local authorities. Your local dealer or your local building official may have a copy of these regulations.

WARNING!

CHECK ALL LOCAL BUILDING AND SAFETY CODES BEFORE INSTALLATION. THE INSTALLATION INSTRUCTIONS AND APPROPRIATE CODE REQUIREMENTS MUST BE FOLLOWED EXACTLY AND WITHOUT COMPROMISE. ALTERATIONS TO THE STOVE ARE NOT ALLOWED. DO NOT CONNECT THE STOVE TO A CHIMNEY SYSTEM SERVING ANOTHER STOVE, APPLIANCE OR ANY AIR DISTRIBUTION DUCT. FAILURE TO FOLLOW THESE INSTRUCTIONS WILL VOID THE MANUFACTURERS WARRANTY.

NOTE

If you plan to vent your stove into an existing masonry chimney, have the chimney inspected by a local fire marshal or qualified installer. Remember that the chimney and its location on the roof heavily influences the stoves performance. An oversized flue may not provide effective draft and a flue liner may be required. (Observe draft requirements). Consult your dealer or qualified installer before final selection is made.

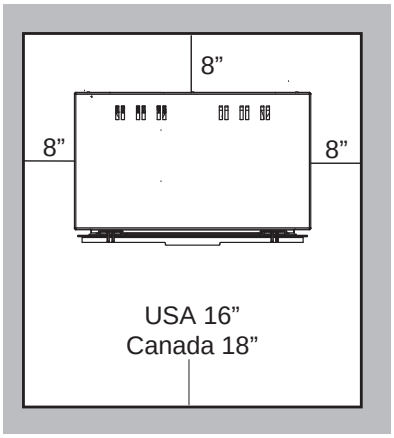
We advise you to leave enough room to enable cleaning between the stove and the wall.

Clearance to combustibles

One of the main necessary precautions you must take, when installing a stove is to leave sufficient space between the stove (top, sides, back, front, and under stove pipes) and any material that can catch fire.

Floor protection

FLOOR PROTECTOR



FRONT
Floor protection for Canada 18” (45 cm) from unit to front of floor protector - and 8” (20 cm) to the sides.

Floor Protector must be under connector pipe and 2” (5 cm) to the side for a through the wall configuration.

If the stove is to be installed on a combustible floor, the stove must be placed on a noncombustible hearth pad, which extends 8” (200 mm measured from the legs) beyond the stove sides and back, and 18” (455 mm) measured from side and back panels to the front.

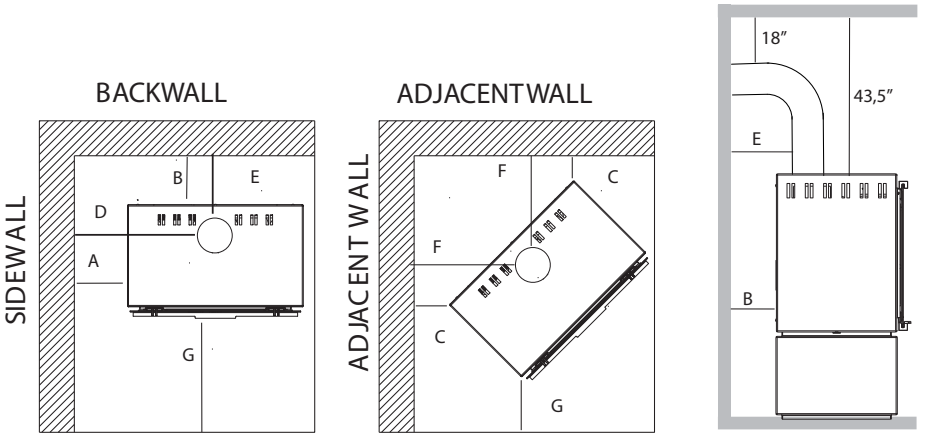
Ceiling height clearance

Do not install in an alcove or confined space and do not install in a room with a ceiling high below 7’0” (210 cm).

Combustible Wall Clearance for top vent installation

CLEARANCETO COMBUSTIBLE SURFACES

REAR/TOP VENT OPTION CEILING



In placing to stove the following clearances to combustible materials must be kept.

PARALLEL WALL WITH SINGLE WALL CONNECTOR PIPE

B. Back Wall to Appliance	9”/229 mm
E. Back Wall to Connector	12”/305 mm
A. Side Wall to Appliance	8”/204 mm
D. Side Wall to Connector Pipe	21”/534 mm
G. Distance to front of unit	36”/914 mm

PARALLEL WALLS DOUBLE WALL CONNECTOR PIPE

B. Back Wall to Appliance	5”/127 mm
E. Back Wall to Connector Pipe	8”/204 mm
A. Side Wall to Appliance	8”/204 mm
D. Side Wall to Connector Pipe	21”/534 mm

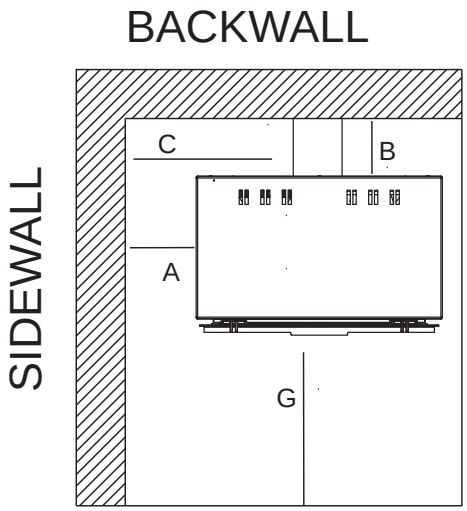
CORNER SINGLE WALL CONNECTOR PIPE

C. Corner of Appliance to Walls	3”/77 mm
F. Center of Connector Pipe to Walls	19”/483 mm

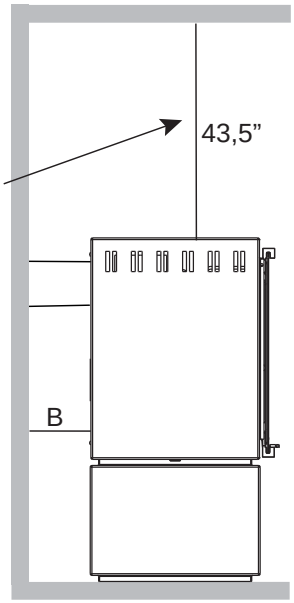
CORNER DOUBLE WALL CONNECTOR PIPE

C. Corner of Appliance to Walls	0”/0 mm
F. Center of Connector Pipe to Walls	16”/407 mm
G. Distance to front of unit	36”/914 mm

Combustible Wall Clearance for rear vent installation



REAR VENT OPTION
CEILING CLEARANCE



PARALLEL WALLS REAR VENT SINGLE WALL CONNECTOR PIPE

B. Back Wall to Appliance	12”/305 mm
E. Back Wall to Connector Pipe	0”/0 mm
A. Side Wall to Appliance	12”/305 mm
C. Side Wall to Connector Pipe	27”/686 mm
G. Distance to front of unit	36”/914 mm

PARALLEL WALLS REAR VENT DOUBLE WALL CONNECTOR PIPE

B. Back Wall to Appliance	9”/229 mm
E. Back Wall to Connector Pipe	0”/0 mm
A. Side Wall to Appliance	12”/305 mm
C. Side Wall to Connector Pipe	26”/661 mm
G. Distance to front of unit	36”/914 mm

Refer to the chimney connector manufacturer's instructions concerning installation of listed connector pipe, wall thimble and chimney.

Draft Requirements

HWAM 30/55 Wood Stove is only one component of the total system. The venting system is equally important for achieving the required flow of combustion air to the firebox and for safely removing unwanted combustion by-products from the appliance. If the venting system's design does not promote these ends, the system may not function properly. Poorly functioning venting systems may create performance problems as well as be a safety hazard (i.e. .an oversized chimney may result in less than optimum performance. Installations into a large, masonry chimney may require a liner to improve performance). A draft test should read greater than .04" W.C. (Inches Water Column) and less than 08" W.C.

The chimney draft depends on the weather conditions. In stormy weather, you may reduce the chimney draft by closing the damper in the connector pipe (if a damper has been installed). If the chimney draft is strong, the combustion air supply should also be reduced.

Chimney Installation

Do not connect this unit to a chimney flue serving another appliance. Do not connect to any air distribution duct or system.

HWAM 30/55 Wood Stove is listed for installation as a vertically top or rear vented wood-burning stove using a listed class A (UL103HT) for Canada (CAN/ULC-S629) factory built chimney exiting through the ceiling/attic/roof.

The inside diameter of the chimney and connector pipe must not be smaller than 6" (152 cm) diameter. Single wall 24 gauge MSG (0.58 - 0.71 mm) , this may be used in the room where the stove is installed, follow the chimney manufacturer's instruction for installation of chimney and chimney adapter. In Canada, where passage through wall, or partition of combustible construction is desired, the installation shall conform to CAN/CSA B365.

Factory Built Chimney

When a metal prefabricated chimney is used, the manufacturer's installation instructions must be followed. You must also purchase (from the same manufacturer) and install the ceiling support package or wall pass-through and "T" section package, fire stops (where needed), insulation shield, roof flashing, chimney cap, etc. Maintain the proper clearance to the structure as recommended by the manufacturer. The chimney must be the required height above the roof or other obstructions for safety and proper draft operation.

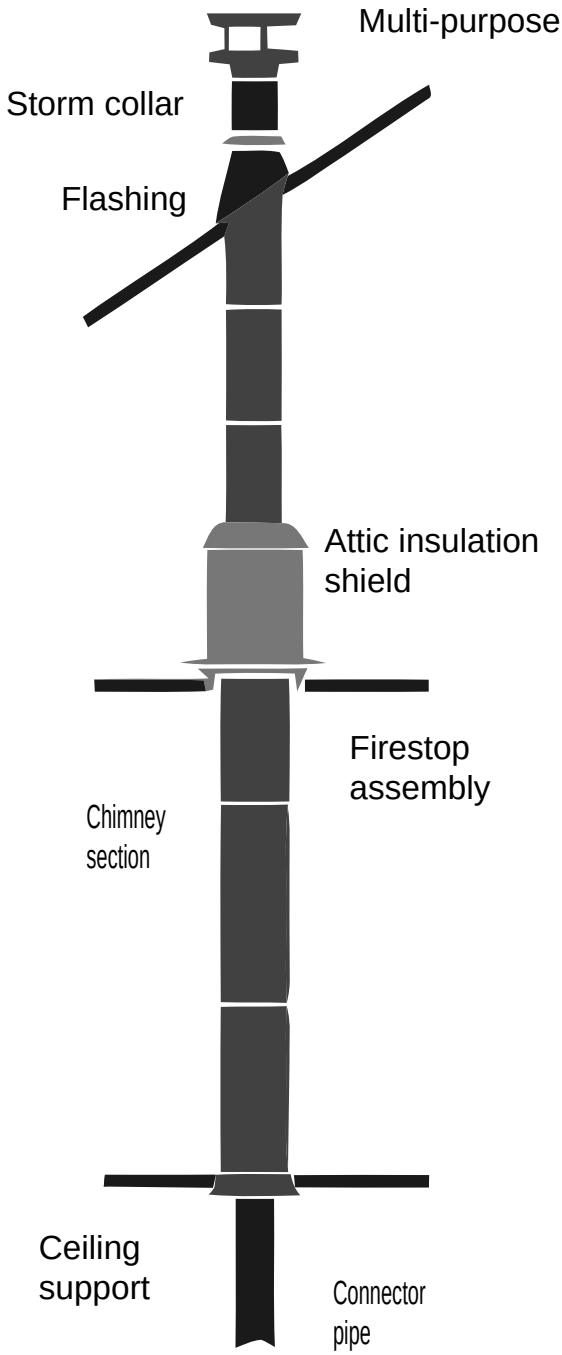
Masonry Chimney

Ensure that a masonry chimney meets the minimum standards of the National Fire Protection Association (NFPA) by having it inspected by a professional. Make sure there are no cracks, loose mortar or other signs of deterioration and blockage. Have the chimney cleaned before the stove is installed and operated. When connecting the stove through a combustible wall to a masonry chimney, special methods are needed. Refer to Combustible Wall Chimney Connector Pass-Throughs on the following pages.

Top outlet installation

Required installation components:

- Chimney cap
- Insulated chimney
- Storm collar
- Roof flashing
- Ceiling support box or joist shield/fire stop spacer
- Chimney connector pipe
- Chimney connector adapter

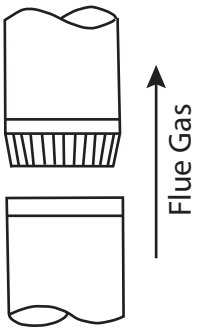


Chimney connector

The chimney connector is a single or walled pipe used to connect the stove to the chimney. For use with the HWAM wood-burning stoves the chimney connector MUST be 6” in diameter, with a minimum thickness of 24 gauge black steel or 26 gauge blued steel

Aluminum and galvanized steel pipe is not acceptable for use with the HWAM wood-burning stove. These materials cannot withstand the extreme temperatures of a wood fire and can give off toxic fumes when heated.

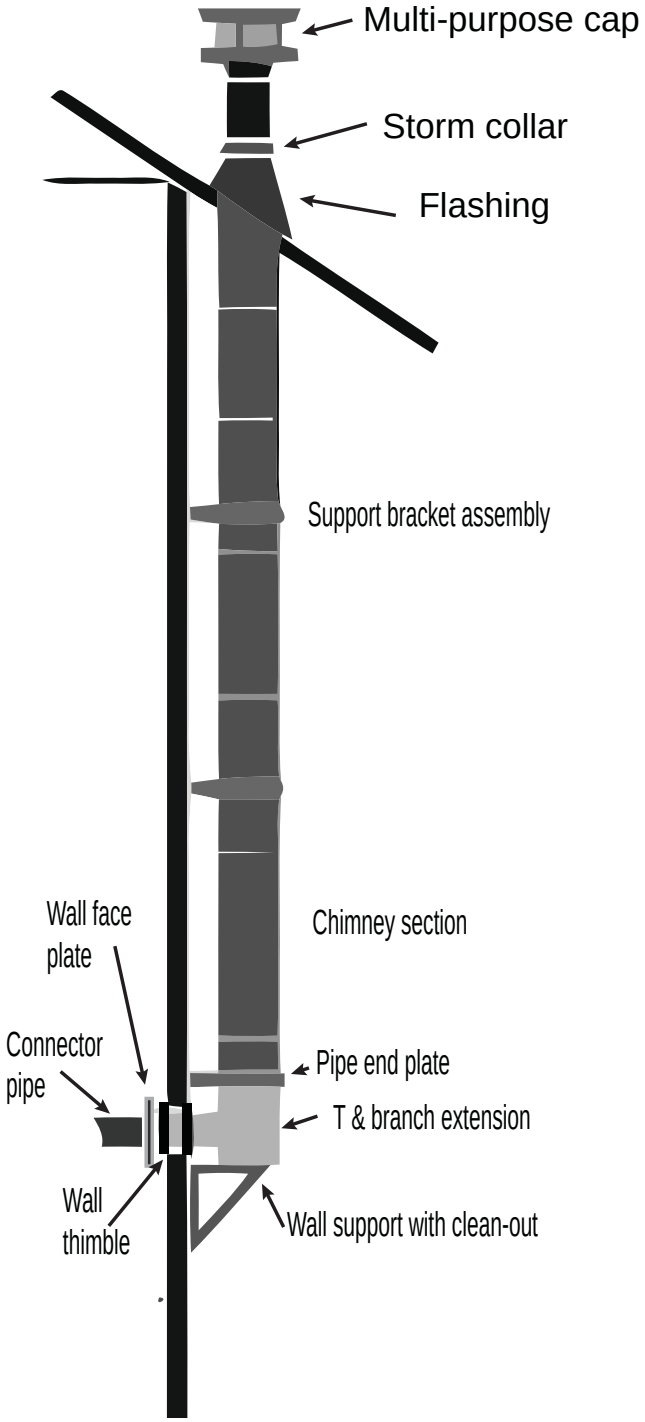
DO NOT USE THE CONNECTOR PIPE AS A CHIMNEY



Each chimney connector or stove pipe section must be connected to the stove flue collar and to each other with the male (crimped) end toward the stove. Each adjacent piece of connector must be fastened with 3 screws. This prevents any condensed or liquid creosote from running down the outside of the pipe or the stove top. All joints, including the flue collar connection must be secured with three sheet metal screws to ensure that the sections do not separate. For the best performance the chimney connector should be as short and direct as possible, with no more than one 90 degree elbow. The maximum horizontal run is 36” and a recommended total length of connector pipe should not exceed 10 feet. Always slope horizontal runs upward ¼” per foot toward the chimney.

No part of the chimney connector may pass through an attic or roof space, closet or other concealed-space, or through a floor or ceiling. All sections of the chimney connectors must be accessible for cleaning. Where passage through a wall or partition of combustible construction is desired, the installation must conform with NFPA 211 or CAN/CSA-B365.

Rear outlet installation



For venting into a masonry or a back standing steel chimney through the top vent the top horizontal portion of a single wall connector pipe can be located not closer than 18” below a combustible ceiling

Required installation components:

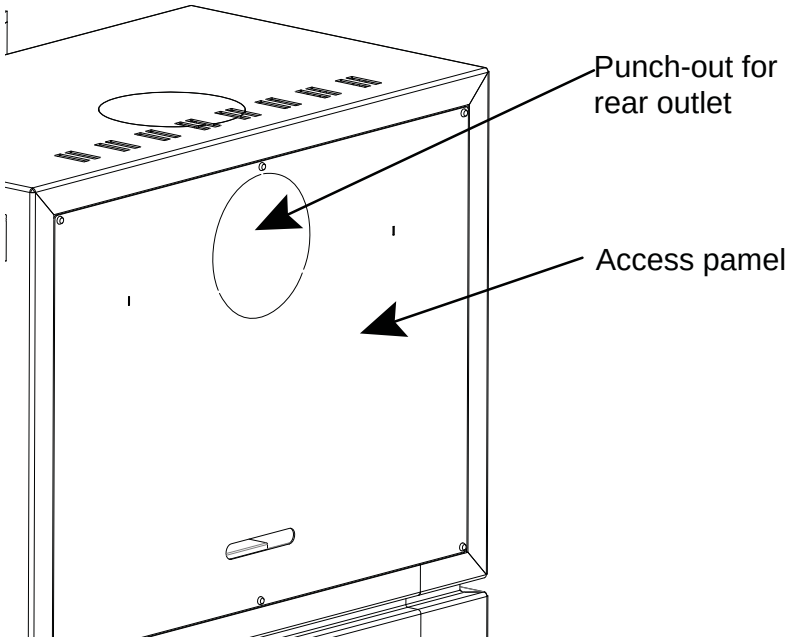
- Chimney cap
- Insulated chimney
- Tee section
- Tee support bracket
- Chimney connector pipe
- Wall thimble
- Wall strap

Rear venting into a masonry or steel chimney through a thimble vent configuration or other than described here must follow local codes or NFPA 211 or CAN/CSA_B365 guidelines and methods.

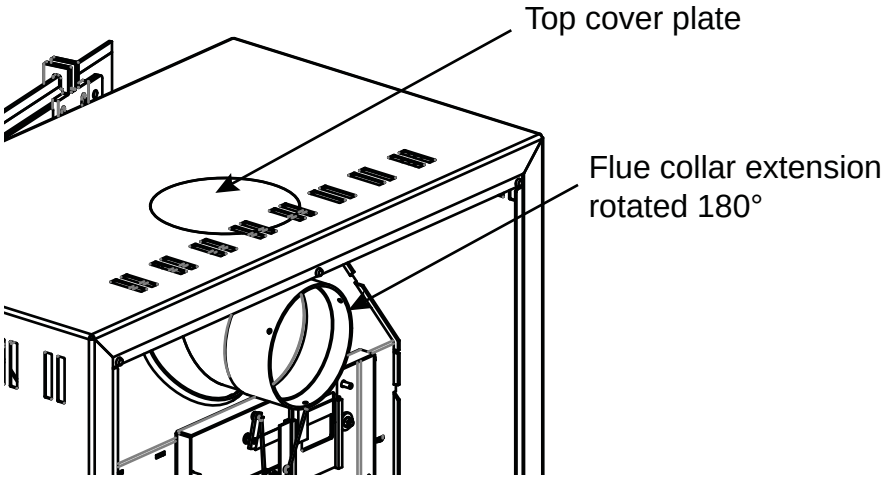
From the factory the stove is prepared for top venting of the chimney connector, but all HWAM wood-burning stoves have an optional rear flue outlet, therefore the flue collar can be fitted either on the top or at the rear as required.

Changing the flue collar for rear outlet stoves

- Remove the access cover on the rear of the stove.
- Remove the punch-out for the rear outlet at the top of the access cover.
- Remove the screws holding the flue collar extension to the flue collar



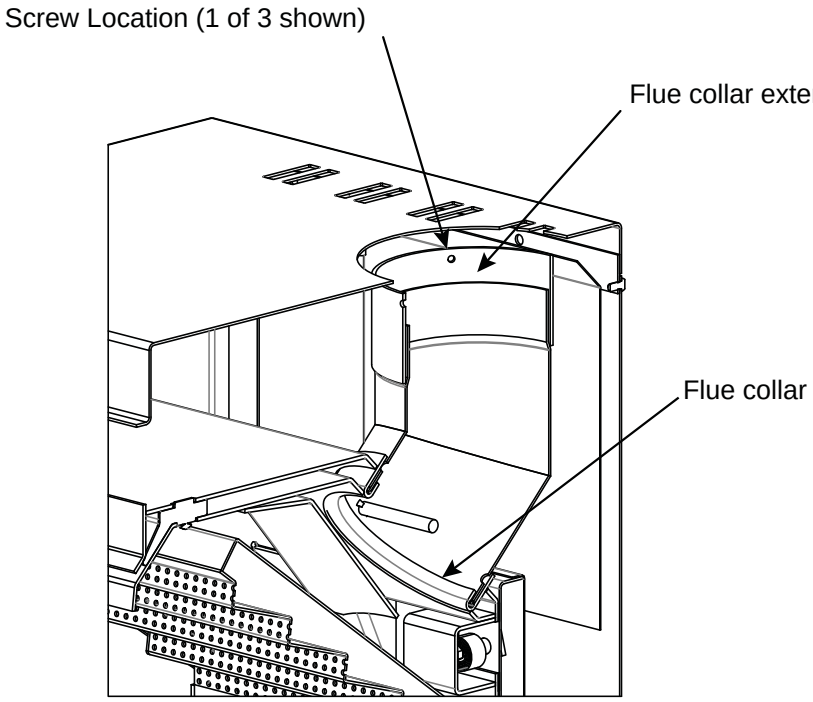
- Rotate the flue collar extension 180 degrees so that it will be in line with the punch-out at the top of the rear access plate. Replace the screws
- Replace the access cover on the rear of the stove.
- Mount the top cover plate to close the hole on top of the stove



Mounting the connector pipe to the stove

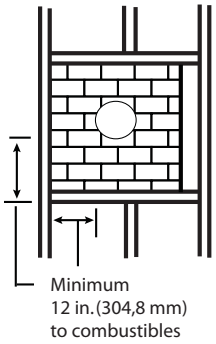
Chimney connector pipe is placed in smoke outlet.

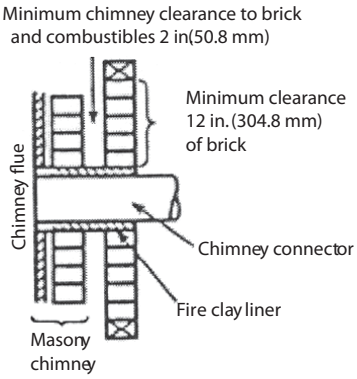
The 3 screws are screwed into the pipe to make a mark in the pipe. Drill a 3/16” (5.2 mm) hole at the marks made from the 3 screws. .
Screw the 3 screws through the holes in the pipe, so the pipe cannot be lifted of turned from the stove



Combustible Wall Chimney Connector Pass-Throughs

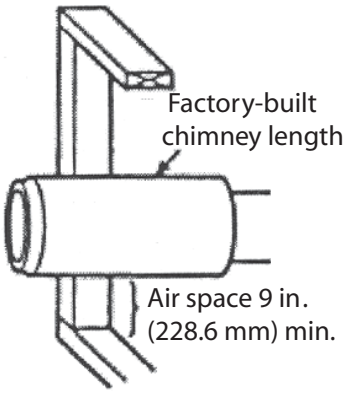
Method A 12” (304.8 mm) Clearance to Combustible Wall Member:
Using a minimum thickness 3.5” (89 mm) brick and a 5/8” (15.9 mm) minimum wall thickness clay liner, construct a wall pass-through. The clay liner must conform to ASTM C315 (Standard Specification for Clay Fire Linings) or its equivalent. Keep a minimum of 12” (304.8 mm) of brick masonry between the clay liner and wall combustibles. The clay liner shall run from the brick masonry outer surface to the inner surface of the chimney flue liner but not past the inner surface. Firmly grout or cement the clay liner in place to the chimney flue liner.

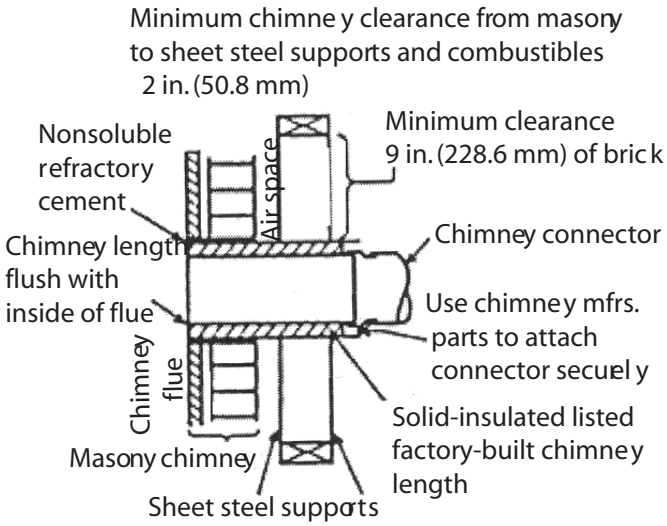




Method B 9” (228.6 mm) Clearance to Combustible Wall Member:

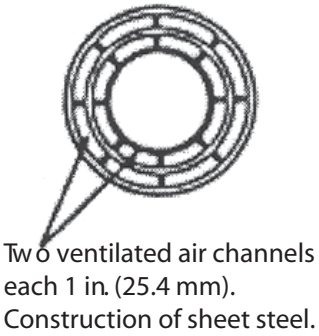
Using a 6” (152.4 mm) inside diameter, listed factory-built Solid-Pak chimney section with insulation of 1”(25.4 mm) or more, build a wall pass-through with a minimum 9” (228.6 mm) air space between the outer wall of the chimney length and wall combustibles. Use sheet metal supports fastened securely to wall surfaces on all sides, to maintain the 9” (228.6 mm) air space. When fastening supports to chimney length, do not penetrate the chimney liner (the inside wall of the Solid-Pak chimney). The inner end of the Solid-Pak chimney section shall be flush with the inside of the masonry chimney flue, and sealed with a non-water soluble refractory cement. Use this cement to also seal to the brick masonry penetration

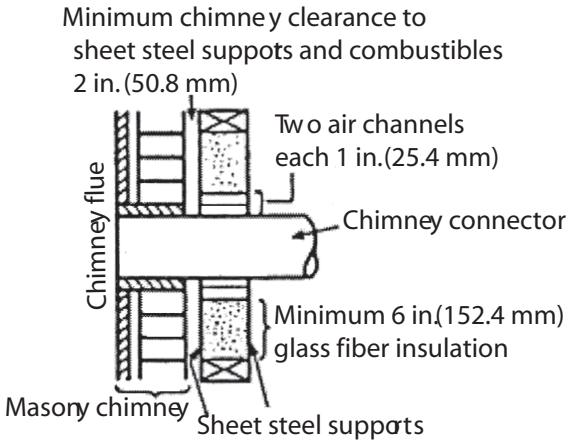




Method C 6” (152.4 mm) Clearance to Combustible Wall Member:

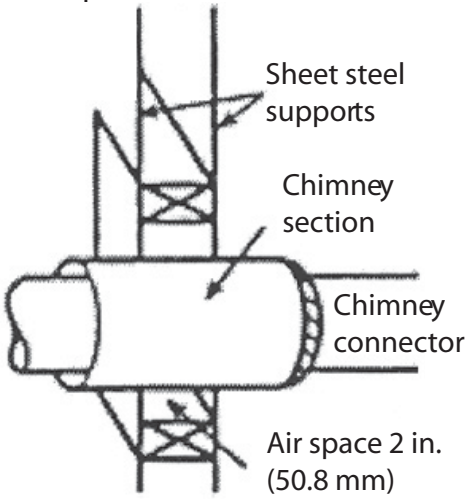
Starting with a minimum 24 gage (.024” [.61 mm]) 6” (152.4 mm) metal chimney connector, and a minimum 24 gage ventilated wall thimble which has two air channels of 1 in. (25.4 mm) each, construct a wall pass-through. There shall be a minimum 6” (152.4) mm separation area containing fiberglass insulation, from the outer surface of the wall thimble to wall combustibles. Support the wall thimble, and cover its opening with a 24-gauge minimum sheet metal support. Maintain the 6” (152.4 mm) space. There should also be a support sized to fit and hold the metal chimney connector. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure the metal chimney connector do not penetrate chimney flue liner.

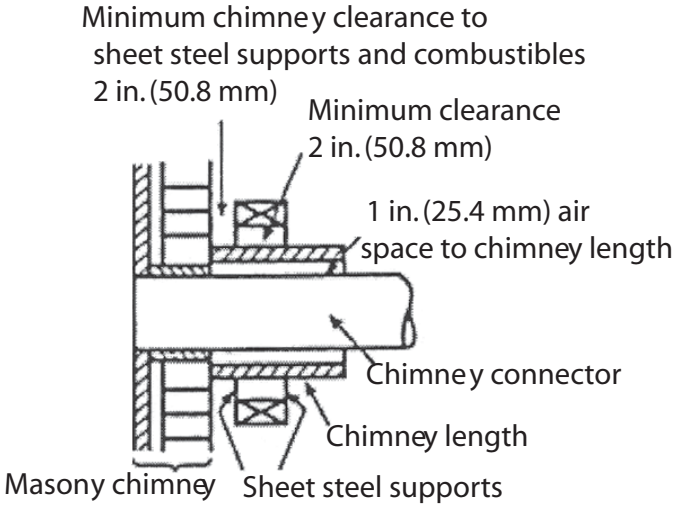




Method D

2” (50.8 mm) Clearance to Combustible Wall Member:
Start with a solid-pak listed factory built chimney section at least 12” (304 mm) long, with insulation of 1” (25.4 mm) or more, and an inside diameter of 8” (2 inches [51 mm] larger than the 6” [152.4 mm] chimney connector). Use this as a pass-through for a minimum 24-gauge single wall steel chimney connector. Keep solid-pak section concentric with and spaced 1” (25.4 mm) off the chimney connector by way of sheet metal support plates at both ends of chimney section. Cover opening with and support chimney section on both sides with 24 gage minimum sheet metal supports. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure chimney flue liner do not penetrate the liner.





Notes

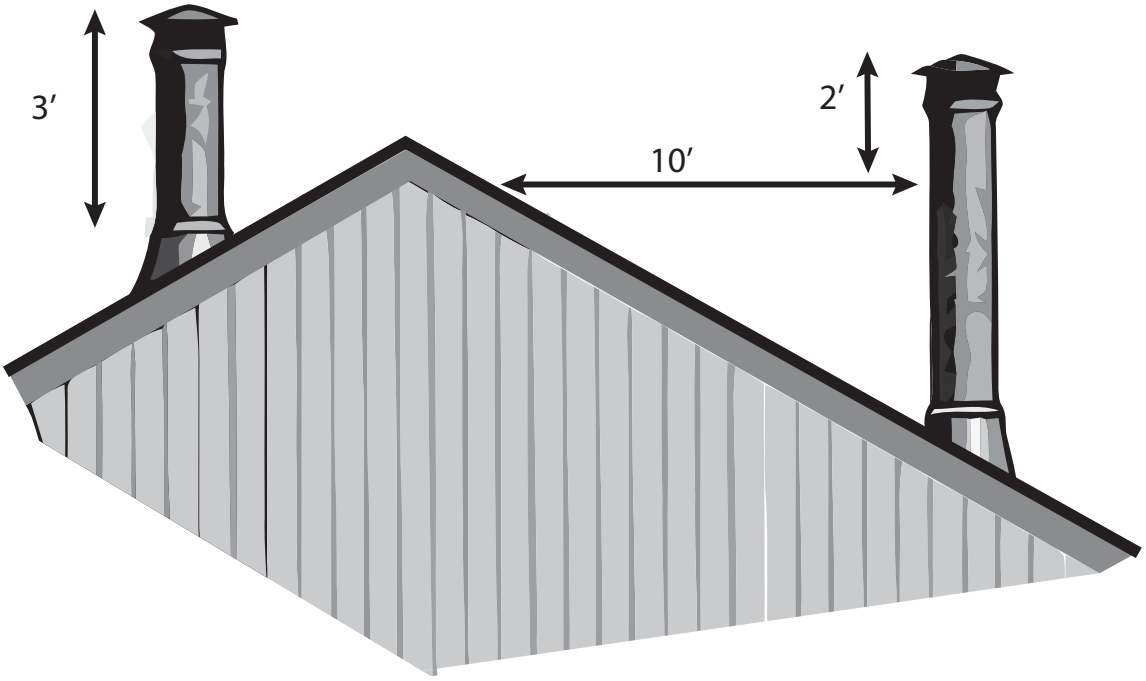
1. Connectors to a masonry chimney, excepting method B, shall extend in one continuous section through the wall pass-through system and the chimney wall, to but not past the inner flue liner face.

2. A chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor, or ceiling.

Chimney height requirements

The chimney must extend 3 feet above the level of roof penetration and a minimum of 2 feet higher than any roof surface within 10 feet. Check with your local building officials for additional requirements for your area.

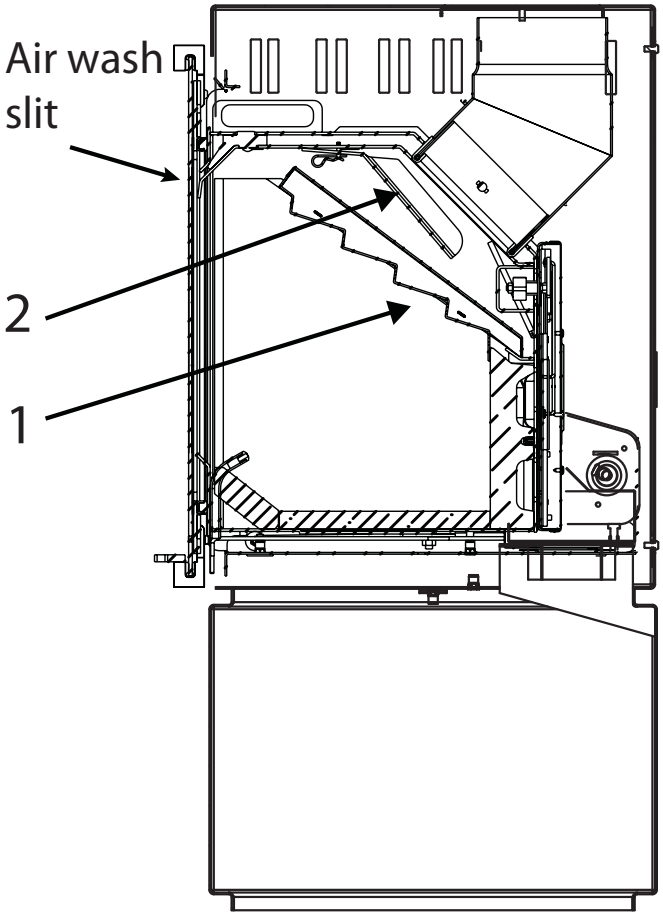
The condition of the chimney and height is very important; we suggest a total minimum height of 15' (4.5 m). Measured From the floor level on which the stove is installed.



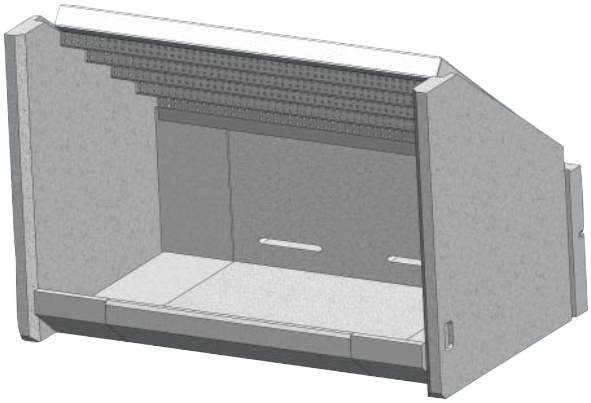
3. Components
Check the Stove Assembly

Before you start using the stove, you must ensure that all parts are fitted correctly.

- Secondary air baffle plate (1) must lie on the rear plate and on the slanting side plates. It must fall into position in the track on the rear plate.
- Steel smoke deflector plate (2) is mounted on two hooks. To mount the plate, lift it up and lead to the right until it is hanging on the two hooks.

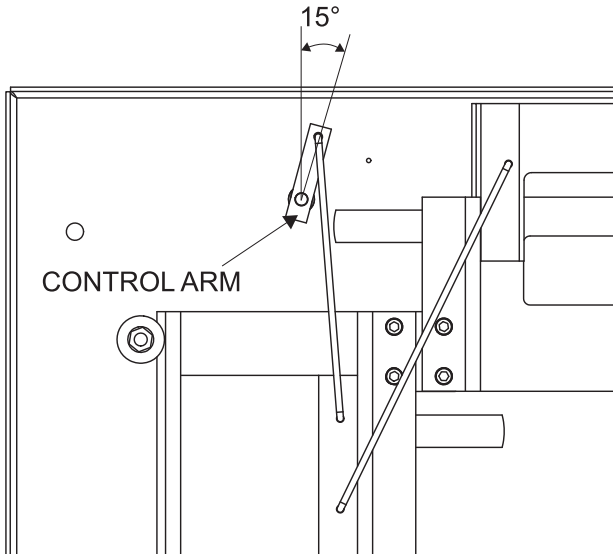


3D view of the Skamol refractory plates. Skamol is a very heat-resistant and highly-insulating material made of processed vermiculite. This material is capable of service temperatures up to 1150 C (2101 F). It is however somewhat fragile. Care should be used when handling these pieces and when fueling the stove.



Automatic Control

Brilliant solutions are often simple little details which nevertheless make a huge difference in our everyday lives. HWAM's patented automatic system consists of a small spring which automatically regulates the supply of air to the combustion chamber. Simple, convenient operation - The automatic system optimizes the combustion for you. All you need to do is to light up the stove and enjoy the flames and the heat to the fullest. When you add more firewood, the system will automatically readjust the stove to achieve the optimum combustion.



HWAM Automatic™

The control arm starting point on a cold stove should be 75° above horizontal. It should feel easy going and bouncy when you push it. The damper plates must be dry and clean and slide together easily. Control bars and slide gates may be lubricated with WD40 (never oil).

Skamol

Skamol refractory plates are delivered in all HWAM wood-burning stoves. We recommend that you treat the Skamol refractory plates with care because it is a delicate material (not covered by the limited warranty). Small cracks may arise in the Skamol from minor water content, especially if the stove is overheated during the first fire. These cracks do not influence the performance of the stove and are not covered by the limited warranty.

Glass

The glass is a heat-resistant ceramic glass that can withstand continuous temperatures up to 1390°F (754°C). This temperature is well above the temperatures at which you will operate your stove. This stove is designed to provide a flow of air over the inside of the glass. This air combined with high temperatures helps keep the glass optimally clean. When operating the stove on low for extended periods of time, the glass may become dirty. A short, hot fire will help clean off much of the normal soot buildup (see section 5: Troubleshooting). In order to keep glass soot free, the moisture content of the wood must be between 15 and 18%.

Smoke Detectors

HWAM strongly recommends installing smoke detectors throughout your home. However, do not install them too close to the stove as the heat can activate them.

"Protected-Wall" Reduced Clearances

Local codes in some areas will allow reduced clearances when the stove is installed adjacent to a protected wall system. Your local building official must approve the variance. Check your local building codes or with a qualified installer.

Room Ventilation & Combustion Air Supply

Provide for an adequate supply of air for combustion. Proper ventilation is essential when using a solid fuel-burning appliance. The combustion process uses oxygen from inside the dwelling and if there is not adequate make-up air (such as in newer homes which are well insulated and weather tight), it may be difficult to obtain an adequate draft in your chimney (caused by a shortage of air in the house). To correct this, it may be necessary to crack a window on the windward side of the dwelling, or provide combustion air to a nearby floor/wall vent (fresh air duct), or directly to the stove. Please refer to your local building codes.

4. Operation

The stove is hot while in operation. Do not touch. Keep children, clothing and furniture away. Contact may cause skin burns. Use gloves when stoking the fire.

WARNING! DO NOT USE GASOLINE, LIGHTER FLUID, KEROSENE OR OTHER FLAMMABLE LIQUIDS TO START OR FRESHEN A FIRE IN THE STOVE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE STOVE WHILE IT IS IN USE.

Fueling the Stove

Your HWAM wood stove is designed for burning dry natural well-seasoned wood only. Wood should be stored in a dry place for at least two years before being used for fuel. Some trees have very high moisture content and it is necessary to thoroughly dry the wood. Cutting and splitting the wood, then stacking it with both ends of the stick exposed, can speed up the drying process. More drying occurs through the end than through the sides even when the wood is split. We recommend that the moisture content of the wood be between 15-18%. If your wood sizzles, or you see bubbles coming from the end of the logs, the wood is not dry. Green or uncured wood does not work well as fuel, and can cause increased creosote buildup. The value of green wood as a source of heat is limited. Do not overload, use kindling wood, or mill ends for primary fuel as this may cause over-firing. Although feeding excessive amounts of fuel to the stove should be avoided, it is important to supply it with sufficient fuel to maintain a moderately hot fire (this is particularly important since burning wood produces volatile substances).

Do not store wood within the installation clearances or within the space required for refueling or ash removal.

WARNING! BURNING MATERIALS OTHER THAN NATURAL DRY WELL-SEASONED WOOD MAY SHORTEN THE LIFE OF YOUR STOVE AND POSSIBLY LEAD TO A DANGEROUS OVER-FIRING CONDITION. DO NOT BURN GARBAGE, PARTICLE BOARD, SCRAPS OR PRESSED LOGS USING BONDING AGENTS BECAUSE THEY CAN PRODUCE CONDITIONS, WHICH WILL DETERIORATE METAL. OVER FIRING THE STOVE MAY CAUSE PAINT DISCOLORATION. A WHITE GLAZE ON THE GLASS IS AN INDICATION OF OVER FIRING.

When you light up for the first time, the stove must be heated gradually. This is very important. Failure to do this may cause cracks to appear in the Skamol or problems with the paint. Do not build the fire too close to the glass. Keep the wood at least 2” (51 mm) away from the glass. Build a very small fire with small sticks weighing a total of 1 to 1.5 lbs. Let the fire go completely out. Then build a slightly larger fire with up to 2.5 lbs of wood and let the fire go out again. You may then proceed to fire the stove at a rate not to exceed 5 lbs per hour. The coating on the stove will cure the first time the stove is fired. Open the door carefully; otherwise there is a risk that the gaskets will stick to the paint. Ensure adequate ventilation while the odor is present.

WARNING IF YOU TOUCH BURNING WOOD OR ASHES WITH YOUR GLOVE BE SURE TO PLACE THE GLOVE ON A NON-COMBUSTIBLE SURFACE AFTER USE. LIVE EMBERS CAN STICK TO THE GLOVE AND CAUSE COMBUSTIBLE SURFACES TO CATCH FIRE RESULTING IN INJURY, PROPERTY DAMAGE OR LOSS OF LIFE.

Approved Fuel Types

The stove is approved for combustion of wood only. It is recommended to use dry wood with a water content of a maximum of 20%. Stoking a fire with wet wood results in soot, environmental problems, and less efficient fuel economy.

Recommended Wood Types

All types of wood, for instance, birch, beech, oak, elm, ash, conifers, and fruit trees can be used as fuel in your stove. The great difference is not in the fuel value, but in the weight of the wood types per cubic meter. Since beech weighs more per cubic meter than, for instance, common spruce, it will take more common spruce to produce the same amount of heat that you would get from a cubic meter of beech.

Banned Fuel Types

Do not stoke a fire with the following:

- Printed matter
- Plywood, plastic
- Rubber
- Fluid fuels
- Rubbish such as milk cartons, lacquered wood or impregnated wood
- Coal, briquettes and coke

The reason that you should not apply any of the above is that during combustion they develop substances that are health hazardous and harmful to the environment. These substances can also damage your stove and chimney, rendering the product warranty void.

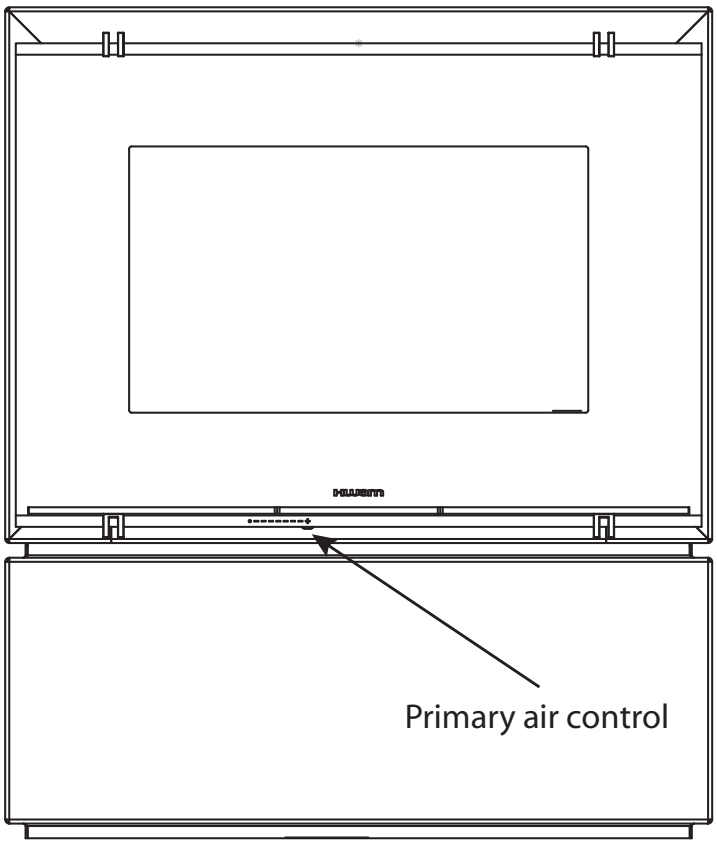
Opening and Closing The Up-Swing Door on Model 04211

Always hold the handle in the middle when opening and closing the door to avoid putting uneven pressure on the door lift mechanism.

Please note that it is important not to let go of the handle when opening and closing the door. The glass could be damaged if the door is allowed to open or close on its own.

Controlling the Combustion

Primary air control (1) is located behind the glass. The automatic air control function is set to maximum when the adjustment bar is set to the right-most position, and minimum when the bar is set to the left-most position.



Starting the Stove

- Do not elevate the fire on a grate. Build fire directly on the hearth inside the stove.
- Push the primary air control all the way to the right to set the automatic control to maximum effect.
- Put split kindling, corresponding to two to three pieces of wood (about 4 lbs/2 kg), into the stove.
- Put two fire lighters in between the kindling. Light them and allow the flames to spread slowly. Keep the door ajar until no more condensation forms on the glass (for a maximum of 5 min.). Close the door.
- When the kindling is burning well, push the primary air control into middle position. If the fire goes out, this has been done too early. Push the primary air control to the right again until the fire is burning properly. Allow the kindling to burn until flames are no longer visible.

Important! The door should be opened only when lighting the stove, adding fuel to the fire or removing ash.

Refueling the Stove

When there are no more visible yellow flames, and a bed of embers has been created, you can fire again. The layer of embers is suitable when the pieces of wood begin to disintegrate and the bottom of the stove is covered by embers. Put two or three pieces of wood weighing up to 2 lbs/1 kg each into the stove. The automatic control manages the regulation of the air supply.

The temperature can, however, be set up or down by pushing the primary air control either to the right or left, respectively. If the adjustment bar is set farther to the left, combustion is reduced and the burning time is prolonged. By pushing it to the right, combustion is increased and burning time is shortened. Do not add new firewood to the fire until the layer of embers is sufficiently low.

Maximum Amounts of Fuel
The maximum allowed amount of fuel per hour is 5 lbs (2.4 kg).

Should these limits be exceeded, the stove will no longer be covered by the factory guarantee, and it may be damaged due to excessive heat. The stove has been approved for intermittent use.

Insufficient Firing
If the fireproof materials in the combustion chamber are blackened after a heating session, the stove is polluting, and the automatic air flow regulation system is not functioning properly. The bar must therefore be pushed to the right. Also, it may be necessary to burn more wood.

Prolonged Burning Time
Prolong the burning time by burning a few (at least 2) very large pieces of wood whilst at the same time closing the temperature controls down. To extend burning time, the primary air control should be regulated down to the half open position. Shutting the control down further may result in the glass sooting up.

When Burning Is Complete
When the stove is not in use, push the primary air control all the way to the left.

How To Achieve The Best Combustion

- Use clean and dry wood.
- Wet wood results in inefficient combustion, plenty of smoke, and soot. Furthermore, the heat will dry the wood, not heat up the room.
- The fire should only be stoked with a little wood at a time.
- You achieve the best combustion by starting up a fire often and using only a little wood. If you use too much firewood, it will take some time before the temperature reaches a level where you achieve a good combustion.
- Make sure there is the right amount of air.
- You should also make sure that there is plenty of air – especially in the beginning - so the temperature in the stove climbs quickly. In this way the gasses and particles released during the combustion will be consumed by the fire. Otherwise they build up soot in the chimney (constituting a chimney fire risk) or will be released in a non-combusted state into the environment.

We advise against adding firewood to your stove and reducing the air supply at night in an attempt to still have some embers left in the morning. If you do so, large amounts of hazardous smoke will be emitted, and your chimney will be exposed to unnecessarily large amounts of soot with the risk of a chimney fire.

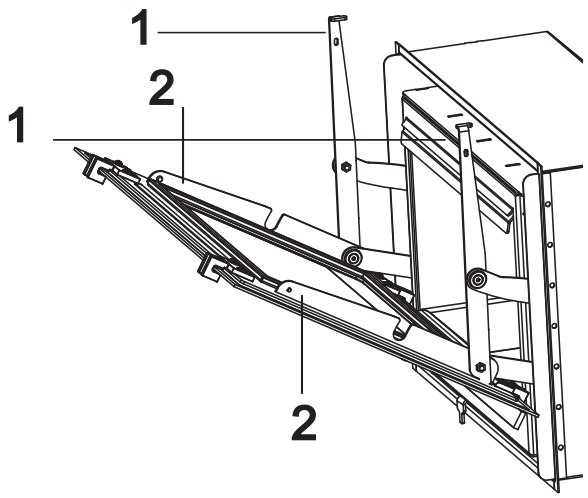
Cleaning

External Cleaning
Cleaning of the stove should only be performed when it is not in use/cool. Daily maintenance is limited to a minimum. It is easiest to vacuum the outside of the stove with a tiny nozzle with soft brushes. You may also clean the stove with a moist lint free cloth. Do not use abrasive cleaners. HWAM spray paint

is available for repair of possible damage or scratches. Your dealer has the right spray in the right color. As there may be minor color differences, it is recommended to repair larger areas with natural borders. You will get the best result if the stove is repaired while it is hand-warm (if the stove is too hot the paint will be granular). Remember to keep the area well ventilated when using the paint. Over firing may cause some paint areas on black stoves to turn gray. Do not use more wood than recommended. Start a small fire after repairing paint to allow the paint to cure. Keep the area well ventilated during this firing.

Cleaning the Glass

If it becomes necessary to clean the inside of the glass on model 04211 with the up-swing door, lift the door halfway up and pull out the two top guide latches (1) on each side of the door in order to loosen them from the screws (2). The glass can then be tilted out and cleaned. Once the glass is clean, lift the door again halfway up, pull out the top guide latches on the sides, ease the glass pane into place, and lead the guide latches back into place over the screws.



The inside of the glass pane is best cleaned with a damp paper towel dipped in ash. Afterwards, dry with a clean paper towel

- Do not use abrasive cleaners.
- Do not let the door gasket get wet. Do not abuse the glass by striking or slamming the door shut.
- Do not operate the stove with broken glass. If the glass breaks then replace it promptly. Use only replacement gasket listed for the door, glass and ash drawer.
- Do not clean the glass when hot.

The outside of the glass can be cleaned with ordinary glass cleaner. We recommend wiping down the glass when the stove is not in use and cool.

Ash Disposal and Removal

CAUTION

Make sure the fire is out and stove is cold before removing ashes! Be careful when you remove ashes from the stove; there may be embers left as long as 24 hours after the stove was last used. Ashes should be placed in a metal container with a tight-fitting lid and moved outdoors immediately. Other waste should not be placed in this container. The closed container of ashes should be placed on a noncombustible floor, or on the ground well away from all combustible materials, pending final disposal.

If ashes are disposed of by burial in soil, or otherwise locally dispersed, they should be kept in the closed container until all cinders have thoroughly cooled.

WARNING! AVOID SKIN CONTACT WITH ASH!

4. Maintenance

Regularly ensure that the air slit for the pane air rinse function is free of ash and soot particles. Regularly check to make sure that seals in the door are complete and soft. If not, they should be replaced. Use only original spare parts.
The insert should be thoroughly cleaned once a year. Ash and soot must be removed from the combustion chamber. If necessary, lubricate the door lift mechanism with copper grease.

Service Inspection

At least once every 2 years, the insert should receive a thorough, preventative service inspection. Among other things, the service inspection covers:

- A thorough cleaning of the insert.
- Inspection of the door lift mechanism and lubrication with copper grease if necessary.
- Checking the spring in the automatic unit and replace if necessary.
- Checking gaskets. Replace gaskets if they are not intact or are no longer soft.
- Inspection of springs for chain drive. Check to ensure that the door closes tightly all the way around.
- Inspection/possible replacement of Skamol refractory material.

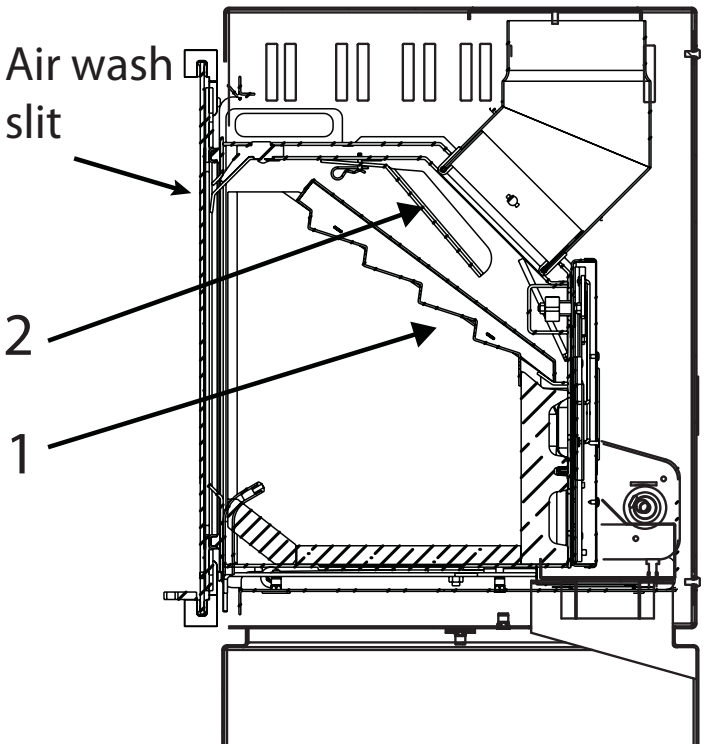
The inspection must be performed by a qualified professional.
Use only original HWAM replacement parts.

Seasonal Cleaning

IMPORTANT

Before chimney sweeping can be performed, the primary air control must be set all the way to the left to prevent soot and ash from entering the automatic control.

Remove the smoke shelf (1). Push the plate forward and lift it up a bit to the side. Tilt one side downward. The plate is now free and can be removed from the combustion chamber. Lift the steel smoke deflector plate (2) off of the hooks so that it can be removed.

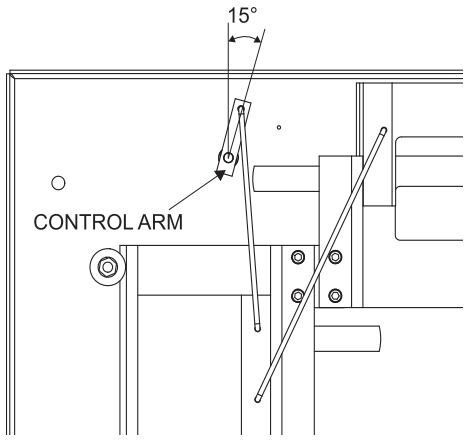


Skamol Refractory

The efficient, but porous Skamol refractory in the combustion chamber may, in time, be worn and damaged. Cracks in the Skamol will not affect the operation of the insert. However, the Skamol should be replaced when, due to wear and tear, it has been reduced to less than half its original thickness.

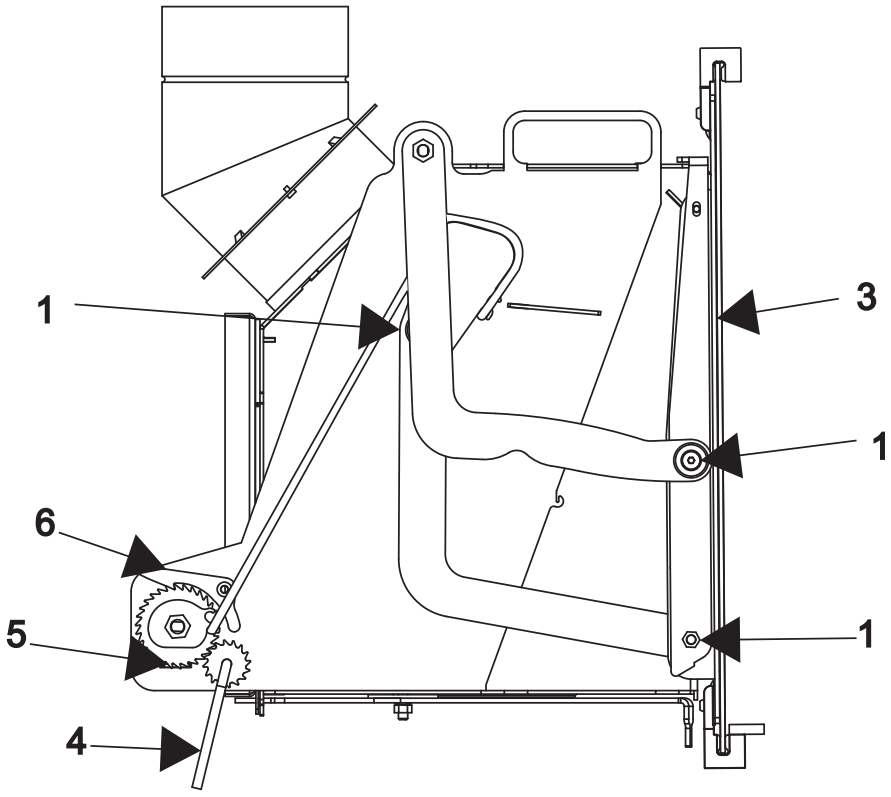
Automatic Control System

The control arm starting point on a cold insert is about 75° above horizontal. It should feel easy going and bouncy when you push it. The damper plates must be dry and clean and slide together unhindered. Control bars and slide gates may be lubricated with WD40 (never oil).



Adjust the Lifting Door for Model 04111

The door lift mechanism consists of a chain pull placed on either side of the insert and a spring. If the door opens with difficulty, you may correct this by greasing the chain wheel boxes and door hinges (1) with copper grease (we recommend a grease that can withstand temperatures of up to 1,100º C). You should do this once every 2 years. If the door still opens and closes too stiffly, the spring on the door lift mechanism can be loosened slightly. If the door slides too easily, the spring has loosened. The spring can be loosened or tightened as follows:



Slide the inner cassette out of the outer case. Make sure the door of the combustion chamber (3) is closed. Attach the tightening tool (4) supplied with the insert to the toothed wheel (5). To tighten the spring so that the door closes more slowly (or can remain fully open), turn the toothed wheel (5) clockwise slightly. This can be done by turning the tightening tool (4) counter-clockwise. To loosen the spring so that the door closes faster (or can no longer remain fully open), lift

the locking pawl (6) and turn the toothed wheel (5) counter-clockwise slightly. This can be done by turning the tightening tool (4) clockwise. IMPORTANT! Keep a firm grip on the handle of the tightening tool (4) when lifting the locking pawl as considerable weight and force are transferred when it is lifted.

After each adjustment, check to see whether the desired effect has been achieved. If not, repeat the process. If you have loosened the spring, we recommend holding the door handle when checking the effect for the first time to ensure that the spring has not become so loose that the door closes too fast with the risk of damaging the glass.

Please Note: You should always have a professional adjust, grease and repair these parts.

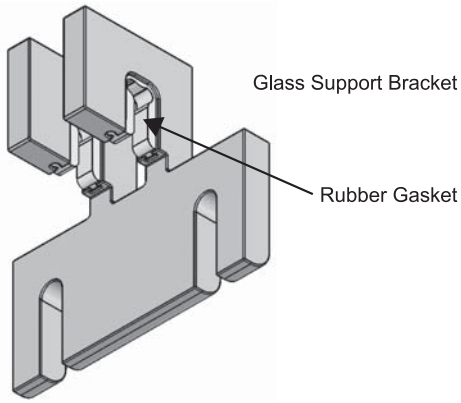
Gaskets
The stove is equipped with ceramic gaskets to ensure the tightness of the doors and the glass. These gaskets are wearing parts and must be changed from time to time. Note the position of and remove worn gaskets. Remove the protective strip from the back of the new gaskets and place the new gasket in the same position as the worn one.

Guarantee
The guarantee does not cover damage due to insufficient maintenance!

WARNING! DO NOT OPERATE WOOD-BURNING INSERT WITHOUT BAFFLE PLATES PROPERLY INSTALLED OR WARRANTY WILL BE VOID.

WARNING! DO NOT USE SUBSTITUTE MATERIALS. ALWAYS USE LISTED SPARE PARTS FROM HWAM A/S.

Replacing Door Glass



Use only HWAM ceramic replacement glass 4 mm in thickness. The use of any other glass is prohibited. When replacing the glass all gaskets must be installed correctly. Make note of the gasket locations as you take the door apart.

- Begin by removing the screws that hold the glass support brackets from the top of the door.
- Check that the rubber gaskets are in the proper place in the glass support bracket.
- Slide the new glass down into the glass support brackets that are part of the handle. Be sure the painted side of the glass is towards the insert. It may help to tip the glass slightly away from the top of the insert as you slide it in. Make sure the glass is centered on the door handle.
- Next, slide the top support brackets over the top edge of the glass and fasten to the door with the screws provided.

Creosote Formation and the Need for Removal

When wood is burned at a low temperature 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 in the flue lining. When ignited this creosote makes an extremely hot and dangerous fire.

The chimney connector and chimney should be inspected at least once every two months during the heating season to determine if soot creosote and ash build up has occurred. If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

5. Troubleshooting

High Rate of Combustion

- A seal in the door is not completely tight. Replace the seal.
- If the draught is too strong inside the chimney, it may be necessary to set the primary air control to minimum, i.e., to the left.

Smoke in the Room When Opening Door

- The damper at the top of the chimney may be closed. Open the damper. Open the air control arm on the front of the insert.
- Insufficient chimney draft - check if the chimney has the right height compared to the surroundings, or contact chimney sweep.
- Do not open the insert door when there are still flames visible.
- Clean out door leaking or dislodged - replace or refit.
- Check if the chimney has the right dimension.
- Check if the connector pipe or chimney is blocked.
- Wood with too high moisture content.

The Wood Burns Too Fast

- Are the air controls adjusted correctly according to the instructions?
- Is the smoke deflector plate placed correctly?

Soot On The Glass

- The wood is too damp. Only use wood stored for at least 12 months under cover and with a moisture level not exceeding 20%.
- The door's seals may not be tight.
- Insufficient secondary air introduced to the pane-flushing system - push the adjustment bar further to the right until the glass is burned clean.
- Intermittent firing - allow the insert to heat through properly. Is the primary air control adjusted according to the instructions?
- Is the wood dry?

Glass Has White Haze. This Can Be Caused By Faulty Operation, Such As:

- Glass not cleaned sufficiently.
- Burning milk cartons, newspaper advertising material, etc.

- Burning unapproved fuels, such as coal and the like, which creates too much heat.
- Burning impregnated wood or pressed wallboard.
- Excess chimney draft.
- Burning with door open.

If the glass turns white or opaque and cannot be immediately cleaned, it may have been permanently damaged. The glass in the wood-burning insert is a special ceramic glass that can withstand very high temperatures. At high temperatures, however, the glass is very sensitive to chemicals. Burning advertising materials, newspapers, impregnated wood, etc. can ruin the glass.

Should this occur, a glass set is available which contains glass, sealing compound and an installation guide.

Excessive creosote build-up in chimney - this is a symptom of poor combustion. It may be caused by wet wood or insufficient draft.

The insert's surface turns gray - overheating.

The insert does not heat - the wood is not dry. The combustion energy is being used to dry the wood.

If problems occur that you cannot fix yourself, please consult your wood-burning insert dealer.

6. Five-Year Extended Warranty

Congratulations on the purchase of your new HWAM wood-burning stove, insert, or fireplace. All of our products are of high-quality craftsmanship, manufactured with first-class materials and subject to a thorough quality control process. That is why we are convinced that you have purchased a product that will function problem-free for many years to come. Should a problem arise, however, you are naturally guaranteed the best possible service available.

HWAM A/S provides an extended, five-year right to submit claims from the date of purchase. You must save your original receipt with purchase date as proof of the date of purchase.

Extent

The Warranty covers the basic construction of the stove, insert, or fireplace such as panel components, welding, etc., and includes components which must be replaced or repaired in accordance with HWAM's evaluation. Wearing parts are not covered by the Warranty.

The Warranty is given to the first buyer of the product and cannot be transferred.

The Warranty is only valid in the country to which the product was originally delivered.

Shipping and handling expenses incurred when sending the stove, insert, or fireplace or individual parts for replacement or repair will not be covered by HWAM A/S.

Limitations

Certain things are not covered by the warranty, and the right to invoke the Warranty may lapse if the stove, insert, or fireplace is not maintained and operated in accordance with the instructions. Among other things, this applies to the following:

Faults or Damage Arising through:

- Incorrect fitting, installation or connection of the stove, insert, or fireplace.
- Incorrect operation, incorrect use or misuse of the stove, insert, or fireplace.
- Fire, accidents or similar situations.
- Repairs carried out by others than HWAM A/S or authorized distributors.
- The use of spare parts not manufactured by HWAM A/S.
- Lacking or inadequate service and maintenance.
- Changes made in the product or its accessories in relation to the original state and construction of the stove, insert, or fireplace.
- Construction modifications made to the wood-burning stove, insert, or fireplace.
- If the serial number of the stove, insert, or fireplace has been damaged or removed.
- Deterioration of wearing parts and moving parts.
- Corrosion.
- Transport costs.
- Transport damage.
- Costs in connection with any dismantling and reassembling the stove, insert, or fireplace.
- Extra costs of any kind and any consequential damage that may occur.

Surface Treatment
If the paint is defective, this should become apparent after the first few firings. In other respects, no claims will be accepted related to the paint.

Wear Parts
A number of parts of your wood-burning stove, insert, or fireplace are designated as wear parts and are therefore not covered by the Warranty. Wear parts include:

- Heat insulating material. Either fireproof stone or special panels made of vermiculite (Skamol).
- Smoke deflection plates.
- Glass.
- Tiles and soapstone.
- Cast iron parts at the base, such as the grate.
- Gaskets.
- All moving parts.

Damage to wearing parts will only be covered by the warranty if the buyer can show that the damage was present when the stove, insert, or fireplace was delivered.

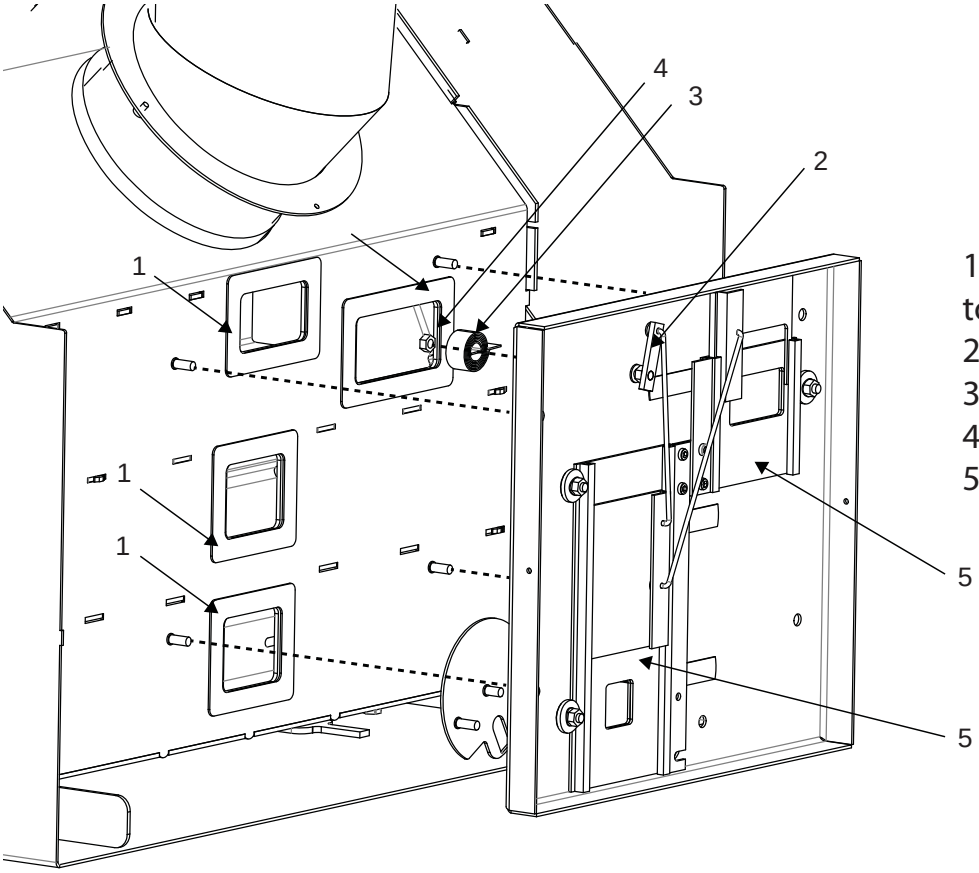
Service & Maintenance
We recommend that you maintain the wood-burning stove, insert, or fireplace and comply with the recommended inspections called for in the user instruction manual. This will help to ensure that the product functions problem-free.

Claims
All claims must be directed to the dealer from whom the wood-burning stove, insert, or fireplace was purchased. HWAM A/S does not accept claims directly from the end-user.

Unwarranted Claims/Service Calls
Before registering a claim, you should inspect your HWAM wood-burning stove, insert, or fireplace for possible faults that you yourself can rectify; consult the user instruction manual as needed.

7. Spare Parts

Automatic Air Control Parts and Assembly Diagram



1. Self adhesive gaskets fixed to inner case
2. Control arm
3. Thermostatic spring
4. Nut for thermostatic spring
5. Slide gate assembly

Optional - External Combustion Air System.

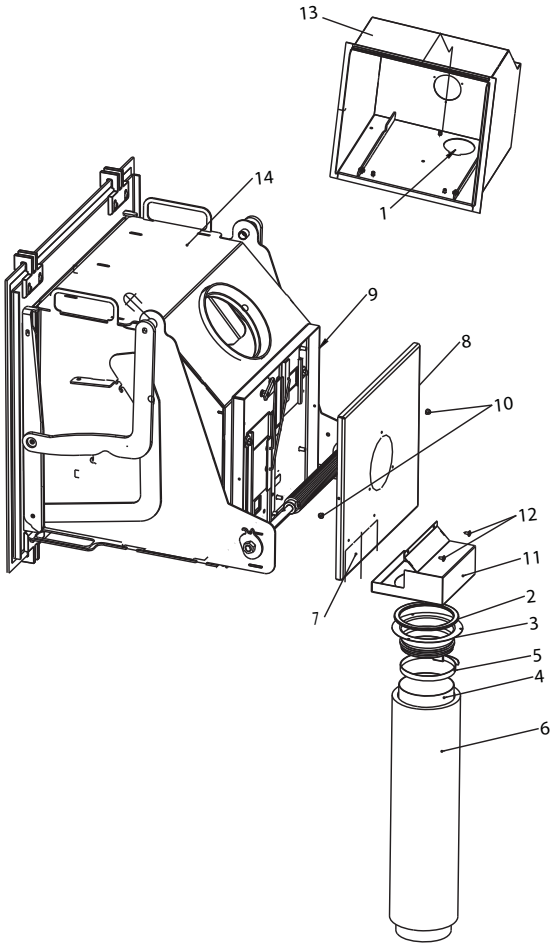
HWAM does not recommend the use of an external combustion air system in most cases. It is possible that these systems can experience a low pressure condition where the duct exits the house at the weather hood. This might happen in some circumstances on a windy day for example. If it does, there is the possibility that the flow in the duct may be reversed allowing heat and combustion products to enter. If the house is extremely tight and cannot provide enough combustion air we recommend a mechanically powered, balanced, make up air system. These systems also provide health benefits and improve the functioning of all appliances requiring ventilation or combustion air. An HVAC design professional should design and install such a system. However some jurisdictions require the use of

external combustion air. In this case the HWAM I 30/55 can be connected to an external combustion air system. The fresh air system can be purchased separately. The supply duct must take air from outside the building and it may not terminate in an attic space. The exterior termination of the duct must be fitted with a hood containing a rodent screen. This is provided in the optional kit. Use a 4” diameter duct for runs up to 8 feet. Use a 6” diameter duct for longer runs. Also follow these rules:

- The entry point for the air must be lower than the firebox but high enough to avoid being blocked by snow , leaves or other debris.
- Never take air from a garage or any area where combustible fluids or gases may be stored.
- The duct run should be as short and straight as possible.
- Never terminate the duct in an attic space.

Vertical connection

Perform the following steps for the outer case (8):



- Break out the pre-cut round plate (1) in the bottom plate.
- Attach the gasket (2) to the connector bushing (3).
- Push the flexi-hose (4) through the hole (1) in the bottom plate.
- Attach the flexi-hose (4) to the connector bushing (3) and fasten with the clamp (5).
- Pull the flexi-hose (4) back again so that the connector bush (3) reaches into the hole (1), the collar underside facing the bottom plate. The cut-out in the bottom plate leaves room for the clamp when it is turned correctly.
- Pull the insulation sleeve (6) over the flexi-hose (4).
- Perform the following steps for the insert:
- Break off the pre-cut rectangular plate (7) in the automatic cassette cover (8).
- Fasten the cover (8) on the automatic cassette (9) using two self-tapping screws (10), one on either side of the cover.
- Fasten the box (11) to the automatic cassette cover (8) using two screws (12) in the pre-drilled holes.
- When the casing (13) has been mounted, push the insert (14) into the casing. Make sure it clicks into place in the bottom plate.

Parts List

Description	Part no.
Door	
Door complete, side-hung door	22-1687
Glass incl. gasket, for up-swing door	22-1124
Glass incl. gasket, for side-hung door	22-1683
Handle for door, black, incl. screws, for up-swing door	22-1128
Handle for door, black, incl. screws, for side-hung door	22-1684
Glass supporters, for handle, 2 pieces	22-1219
Glass supporters, upper, 2 pieces	22-1220
Locking device, incl. screws, for up-swing door	22-5040
Locking device, incl. screws, for side-hung door	22-1283
Roller for closing device, incl. screws and nuts, 2 pieces	22-1239
Skamolex Refractory	
Set of skamolex without steel smoke plate	22-1255
Steel smoke plate with holes, US version	22-5041
Autopilot	
Autopilot box, complete	22-1678
Sensor spiral, incl. axle	22-0546
Misc. parts	
Handle for air adjustment	22-1688
Small smoke plate, steel	22-1131
Smoke outlet	22-5042
Combustion chamber, for stoves with side-hung door	22-5043
Gasket	
Gasket for door	22-1032
Gasket for glass	22-1045
Gasket for autopilot box	22-0077
Special parts	
Chains for up-swing door, 2 pieces	22-1034
Tightening tool (for door lift mechanism)	22-1199
Brass washers (for door lift mechanism)	22-1205

CAUTION !!

IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS INCLUDED. **DO NOT DISCARD.** LEAVE THIS MANUAL WITH THE HOMEOWNER.

Risk of Fire

Failure to follow the information in this manual may result in a fire; causing property damage, personal injury, or death. Read this booklet completely before installing or operating this appliance.

For use with solid wood fuel only. This appliance has not been tested for the use of compressed wood logs or bricks.

Caution

Do not modify this appliance in any way. Do not install gas logs in this appliance.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

Comply with all minimum clearances to combustibles as specified. Failure to comply may cause a house fire.

HOT

Glass and other surfaces are hot during operation and for some time after the fire has gone out. Supervise children around this appliance. Warn children and adults about high temperatures. High temperatures may ignite clothing or other flammable materials. Keep clothing, furniture, draperies and other combustible materials away.

Do not operate with door open

DO NOT OPERATE WITH THE DOOR OPEN.

CALIFORNIA PROP 65 WARNING:
Use of this product may produce smoke which contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.