Installation & Operating Instructions

19.05.2014

Clearview Vision/Vision Inset/Pioneer & Solution

Stove transport

Before loading, unloading or moving your Clearview Stove check packaging for "Truck this Side" this is the opposite side to the stove door. This stove is heavy please ensure adequate handling facilities are available. If it is necessary to remove the stove door for transport take care not to revolve the hinges.

(Stoves and flue components may have sharp edges, gloves should be worn at all times while moving or handling components)

Hearth Suitability

This appliance must be installed on floors with adequate load bearing capacity. A load distribution plate is occasionally required to distribute weight over a larger area. This is a "closed appliance" requiring a hearth extending at least 225mm in front and 150mm either side of the appliance when installed in the U.K. These appliances should stand wholly above a non combustible hearth at least 12mm thick

Positioning your stove

Clearview Stoves come bolted or strapped to their pallets for protection. It is usually easiest to keep the stove attached to the pallet, until you have transported it to your fireside, then remove fixing bolts using a 17mm spanner and slide the stove onto your hearth. Take particular care that the air slide underneath the stove is not damaged by catching on the edge of the pallet or hearth. It is important your stove stands firmly on your hearth. The pallet fixing bolts should be re inserted in the legs or stove base plate. The bolts can then be used to level the stove on your hearth. You may wish to protect your hearth with a strip of card board under each pair of legs or side of base plate while you move your stove into place.

Position your stove in the desired place on your hearth, remembering that the more air circulation around your stove, the more heat will be transferred into the room. Position the stove well forward in your fireplace, if maximum heat-output is desired, you may wish to extend your hearth.

Select the flue outlet position that is most suitable and blank the flue outlet that is not required with the blanking plate. Seal the joint with the glass fibre gasket provided (this is glued to plate or collar). Top blanking plates are fitted upwards from inside stove; rear blanking plates are fitted from the outside of stove. Connect the stove to the flue in accordance with your area building codes.

Check that your firebox door is closing correctly; adjustment can be made by just revolving the handle through one revolution inwards or outwards. Door hinges can also be screwed inwards or outwards, to adjust the sealing of the door. First lift the door off its hinges, revolve the hinge half a turn and refit door; if hinge pin does not freely slide into hinge block, top and bottom hinges are probably unequally adjusted.

Operating Instructions

Prior to lighting the stove ensure the installation is safe and complete and the flue is clean and free of obstructions. Always check no combustibles are within the safe clearance distance.

Stove operating tools

Warning "Hot Stove" external surfaces will be hot, take care.

The most important aid to safe and easy stove fuelling is a pair of good stove gloves, or even better gauntlets. These will keep your hands clean and are ideal for positioning logs exactly how you want them in the firebox. Always use stove gloves when fuelling your Clearview Stove.

Fuel recommendations

Wood should ideally be cut to about 15in. long for the Vision or Solution 500, 10 to 12in. for Vision Inset and 10in. long for the Pioneer or Solution 400, logs over 5in. in diameter are best split, unless very dry. Wood should be air dried to a moisture content of below 25% preferably below 20% Burning green or wet fuel will mean increased fuel consumption, reduced heat output, excessive tarring of the flue and may lead to more serious chimney problems. Wood should be cut split and stored under cover with good air circulation for at least twelve months prior to burning

Very dry fuel such as compressed wood waste, peat briquettes and kiln dried timber should be used cautiously; particular care should be taken not to overheat your stove. We usually try and operate between 400F and 550F. Air manifold temperatures in excess of 340°C. /650° F. could cause irreparable damage. Rapid heat output fuels can be mixed with slower fuels such as damp wood. If you want to burn unusually hot fuels please ask us for advice.

This stove has been tested for wood burning only.

- **Do not burn wet fuel; ensure fuel storage is covered but well ventilated.**
- **Do not store fuels or other combustibles within Clearview's safe installation clearances. (see clearances I:6)**
- **Do not use chemicals or fluids to start the fire.**
- **Do not burn kitchen waste, plastic, flammable fluids such as petrol, naphtha or engine oil.**
- **Always operate the stove with the air slide open, the "spinwheel" is for starting the stove only. When the fire is established close the "spinwheel"**
- **Do not operate the stove with the spin wheel fully open after initial lighting.**
  Note: Pull to open air slide, push to close.
- **Do leave a thin layer of ash to retain heat, protect grate and aid clean combustion.**

Clearview Smoke Control stoves are suitable for use in U.K. smoke control areas.
Clearview Smoke Control Stoves state "Smoke Control" on the guarantee form enclosed.
Only burn wood and approved smokeless fuels in smoke control areas. Ensure wood is dry, store under cover with good ventilation for at least one season. Always close spinwheel when fire has properly ignited, do not overload stove, add individual logs to maintain a bright fire, avoid slow smouldering fires. Do not load fuel above base of baffle plate. Do not burn painted wood or wood treated with preservatives. Do not burn waste materials or plastics.

Running in your stove

We recommend that you have two or three small fires before you operate your stove at maximum heat output; this is to steadily bake the silicone paint finish. Baking the paint is completed when most surfaces have reached about 220C / 475°F. During this burn-off period you will notice an unpleasant smell; you should not touch or wipe the paint during this period as it will be soft and may mark. The room should be well ventilated, children and pets should be kept away; it is preferable to leave the room while this initial baking takes place.

Lighting your stove

Build a small fire in the normal way, using newspaper, small sticks, or similar lighting materials. Open spin wheel and air slide fully. Light fire at base; you may find it helpful to leave the door about half an inch open for the first one or two minutes after lighting. Never leave your stove unattended with the door open. When the wood is well alight you can add larger sticks.

The spin wheel controls air that rises up through the grate. The air slide controls air that washes downwards from the front air manifold over the glass. It is this air-wash downdraught air that keeps the glass clean, and because it is highly pre-heated promotes a clean combustion of fuel, high efficiency and much reduced chimney emissions.

When your fuel is well alight you can start restricting updraught air by closing the spin wheel half way, then three-quarters until finally, the spin wheel control should be fully closed,

We recommend the use of an air manifold thermometer; this inexpensive accessory is a useful guide to combustion efficiency and fuel quality. Thermometers are best positioned on the front of your Clearview above the door, (this is where the air enters the firebox) you will notice that once temperatures in the region of 260°C./500°F. have been achieved your fire will burn extremely cleanly, the refractory bricks will be clean and a high degree of secondary combustion will be evident. Fresh logs will burn almost on immediate contact with the pre-heated air and gases released from new fuel will ignite, producing flames dancing high in the fire.

Because Clearview Stoves are heavily constructed and have a refractory lining they are able to retain their heat longer than lighter weight stoves, this retention of heat also promotes clean efficient combustion. It is recommended that you heat your stove to at least 205°C./ 400°F. on the air manifold (area above door) before fully shutting down air inlet to minimum setting, this may take 15 to 30 minutes from lighting, depending on fuel.

The fire can be slowed down with the air slide shut to half or only a quarter open. If the air slide is shut completely the air wash is cut off and glass will smoke up, usually about 8mm open is the minimum setting for this control, this does not apply to Smoke Control Stoves as their controls are pre-set. The spin wheel can be shut completely. Exact settings vary depending on fuel, chimney, and weather conditions. **Caution** do not fully close air slide, the fire requires some air to burn and the flue requires airflow to provide an up-draft.

Fuel and stove loading

In order to maintain an attractively burning fire, logs can be up to 15in. long for Vision, 12in. long for Vision Inset and 10in. long for Pioneer and unless small or extremely dry, should be split. High combustion temperatures are the secret of efficient burning; ideally one or two logs should be added at a time, depending on size. Loading a firebox full of cold, damp wood onto a low fire, is an ideal recipe for low combustion efficiency, tar production and smoke emission. When you add a new log to the fire, pull the old log to the front and put the new log behind it; this will produce attractive flames.

Overnight burning

If you fill your stove with fuel and shut all air supplies you will, no doubt, easily achieve overnight burning, but you will also acquire very dirty glass, there is also risk of explosion if collected gases suddenly ignite. Always leave the air slide at least 5mm open. (Smoke control stoves have factory set minimum air control settings, air controls may be fully in, the air control will still allow a small air flow)

Many people prefer to let their stove burn out at night; this should be done with the spin wheel closed and the air slide open; this way your glass will remain clean. One way of almost achieving the best of both worlds, is to fully load your stove and run it fast until the fuel load is well alight. Close the spin wheel and leave the air slide about 8mm open (the exact amount will depend on fuel and chimney draught).

In the morning you will find the fuel load has burned through, but there will be red embers, or at least hot ashes, that can be easily re-kindled. The glass will be clean, though a damp cloth may be required to remove a little soot. Re-kindle by riddling your stove to clear some of the ash from the centre of the grate. Load with small wood, bark or shavings, open both controls fully and in seconds you will have a blazing fire again. It is not necessary to remove all old ashes prior to re lighting your stove.

Smoke Control Stoves *(for use in U.K. smoke control areas)*

Air controls are usually fitted with a special air slide or adjustable stop. This is factory set for average conditions. Do not re-set stops without first seeking manufacturers advice, reducing air inlet openings to create slow smouldering fire will reduce combustion efficiency, and increase air pollution. **This is an offence in a smoke control area.** To operate at minimum burn speeds the air slide can be fully pushed in, Smoke Control air slides are factory set to minimum openings.

Glass door

Properly operated, your glass door will not get coated with thick tar like a conventional stove; if this does occur you may have to resort to using a glass cleaner specifically marketed for cleaning glass stove doors, the manufactures instructions should be followed and particular precautions should be taken to avoid contact with skin, eyes and items other than the glass itself. Glass cleaners are a last resort. A hot fire will often clean a dirty glass door, small amounts of sooting and dust can be removed with a cloth and warm water, deposits should be dampened a few minutes before wiping off. Stubborn deposits can usually be removed with a damp cloth that has been previously dipped into stove wood ash, then using clean water and a clean cloth, rinse and dry glass; try to avoid scratching the glass. Do not clean glass with metal abrasives or scrapers.

Clearview glass is strong, however, do not slam your stove door shut, hit glass with hard objects, or use the door to push awkward logs into the fire.
In the event of glass breakage try to ascertain the reason for the breakage occurring. Replacement Clearview glass is available from your stockist, or direct from the factory. Use only genuine Clearview glass, it can usually be recognised by it's carefully ground edges. Do not operate your Clearview with cracked glass.

Ash removal and frequent maintenance

Use a Clearview Stoves brush to brush clean the outside of your stove (a damp cloth will leave smears on your stove surface)

Wood ash usually requires removal every week or two. It is important that ash is not allowed to build up under the grate; this will cause overheating of the grate bars and their life will be reduced. Wood-ash can be allowed to build up on the grate and need only be removed when it becomes close to spilling out of the door. A layer of ash covering the grate half to one inch deep will protect the grate and retain heat thus promoting clean combustion. Ashes should be disposed of in a metal container with a tight fitting lid and taken outdoors immediately, other waste should not be placed in this container.

Check flue-ways in the stove and chimney regularly until experience shows how often they need to be cleaned to be safe. The hotter the fire the less creosote is deposited, so flues may require more frequent cleaning in warmer weather than in mid winter.

Annual maintenance

After every season's use your Clearview stove deserves a spring clean. Empty your stove of all ashes, vacuum or brush out well. Check for accumulation of soot above the baffle, boiler or canopy. You may find, with some fuels, more frequent cleaning is necessary. A drip of oil releasing fluid on screw's, catches and hinges will mean they move and adjust freely when next required. Check wearing parts to avoid a September panic. The glass-fibre door and window seals will need replacing when they are worn and no longer able to maintain an airtight seal. Firebricks that are cracked but still securely in position and protecting the stove body can be left until they fall apart, but order one ready for that day.

Your Clearview stove can be re-painted if the finish has become pale from high heat, or you may wish to change the colour. There are many paints on the market calling themselves heat-proof, some are much better than others; it's not worth experimenting; we use what we consider is the best. To avoid condensation during the summer months, air should be allowed to flow through your stove, leave the air controls open or the doors ajar.

To fit replacement glass remove the door from the stove, lay on a flat surface, (the door handle can be removed for your convenience) Remove four stainless steel screws from the glass retaining strips (use pozi 2 screwdriver) Carefully remove old glass and dispose of out of reach of children. Check glass sealing tape for signs of wear and replace if necessary. It is best to join the tape behind the glass retaining strips. Position the replacement glass making sure not to trap dust between the sheets. Replace glass and tighten to firmly retain glass, do not apply excessive pressure

Check your chimney

Clearview stoves are much cleaner burning than conventional stoves, however it is still necessary to clean your chimney well regularly, if your flue is relatively straight and lined with an insulated flue-liner you should have very little soot or tar. If your flue is very tall, poorly insulated, or has bends, it will need to be well monitored, more frequent cleaning will be necessary. Wood tar can accumulate in chimney pots and other cold places, such as bird guards and restrict the flue. It is often worth cleaning the flue from the top down if you suspect it is not drawing as it is used to do.

Fume emission

Properly installed and operated, this appliance will not emit fumes. Fumes may occasionally occur from de-ashing and refuelling. Persistent fume emission must not be tolerated. If fume emission persists open doors and windows to ventilate the room. Let the fire out and check flue and stove from top to bottom for restriction; do not relight until the cause has been identified

Chimney fire

If the chimney is lined and regularly swept properly, chimney fires should not occur. However, if a chimney-fire does occur, shut air controls and tightly close the doors of the appliance. This should cause the chimney-fire to go out. If the chimney-fire does not go out when the above action is taken the fire-brigade should be called immediately. After a chimney-fire, the chimney should be carefully examined for any damage. Expert advice should be sought if necessary. If you have a chimney-fire in an unlined chimney, where timbers are set into the walls of the flue, these should be carefully inspected, as they can smoulder for many hours or even days. Extreme chimney fires can ignite timber by conduction of heat through masonry walls.

Some pumice or concrete type flue-liners are designed to safely contain a normal chimney-fire. Providing this type of flue-liner has been correctly installed there should be no need to apply water to the fire. Check your flue manufacturer's instructions.

Extra care to avoid chimney fires should be taken, if your house or close neighbour's home has a thatched roof. Clearview Stoves recomend flue linning whenever possible, however it is essential that all thatched properties have lined flues. Chimneys should either be lined using pumice concrete flue liner / chimney system or a factory made insulated metal flue system, the flue should be ventilated top and bottom to avoid heat build up in the unlikely event of a chimney fire. Have a clearly understood plan to handle a chimney-fire and the chances are you will never have to use it.

Installation

These instructions cover basic principals only, if you have questions or an unusual situation; please ask for advice. This appliance must be installed in accordance with local building codes.

The traditional chimney position is the best, maximum height and maximum warmth in the building; always consider all the options prior to commencing installation. When connecting a stove into an existing chimney we always advise lining the flue with an insulated flue liner.
The flue diameter of this stove is 150mm, clearview Stoves flue pipe will fit snugly in your flue collar. Fit flue pipe spigot down socket up (all joints running inwards)

This appliance can be connected to 150 to 225mm diameter flue liners. If you intend connecting to existing clay or concrete flue liners it is important the liner is sealed and well insulated. Liners have often been installed without insulation or joint sealing, if you are unsure we recommend you inner line your flue with a continuous flexible flue liner. **Flue re lining is not mandatory however re lining an existing flue has many advantages.**

The enclosed drawings provide some typical installation examples based on our many years of installation experience. Chimney systems are not all the same; follow the manufacturer's installation instructions. Care should be taken to shield insulated chimney systems as they pass through floors to discourage rodents etc., occupying clearance space. Shielding is also necessary in any situation where combustibles may come in contact with a flue system, such as cupboards and immediately above attic floors

Always clean chimneys prior to fitting a stove, it is essential that an existing chimney is very thoroughly cleaned preferably from the top and the bottom prior to re lining.

Clearance to combustibles I-6

Before installing your Clearview Stove check construction of fireplace or wall you plan to install in front of to ensure it is entirely masonry, non-combustible and is not covered or coated with paint or finishes unsuitable for high temperatures. Single skin flue pipe is likely to be as hot as the stove. U.K. building regulations require single skin flue pipe of 150mm diameter to be 450mm from combustibles. A suitable heat shield may be used to protect beams or lintels when 450mm clearance is not possible.

Clearview Vision, Pioneer and 400P stoves require a 450mm clearance to combustibles, i.e. wooden stud work, dry lining, plastics, many insulation materials.

Clearview Solution and Pioneer Oven require 300mm clearance rearwards to combustibles and 200mm either side.

Clearview Stoves manufacture heat shields for use with Vision and Pioneer to reduce the rear clearance required to 300mm.

Clearview Vision 500 range, Pioneer 400 range and Solution range are approved for installation on a minimum thickness non-combustible hearth (12mm). This must extend at least 225mm in front and 150mm either side of the stove. (Hearths must be well supported).

When using an insulated metal flue system a section of single skin flue or telescopic length is usually used to connect to the stove. The insulated metal flue Clearview Stoves supply requires a 50mm clearance to combustibles some products require 75mm, always check specification prior to installation and follow installation instructions. Use correct support components, maintain clearances throughout entire length of the chimney and ensure insulation materials do not come within the safe clearance distance.

Choosing the most suitable flue position

It is important to have good air circulation around your Clearview Stove, at least 100mm between masonry and the stove body is a good if space is available. The rear flue position will bring your stove further forward; this will normally provide maximum efficiency however a little more chimney draft is required. The rear flue position is often chosen when a chimney is very high and may provide more flue draft than you require. If the chimney is short, cold or has excessive bends a top flue is advisable. When installing in a single storey building, boat, cabin or caravan a top flue will perform best.

Ensure the flue can be cleaned throughout its entire length; flue cleaning is often done through the stove with baffle removed, through a telescopic length, or cleanout tee.

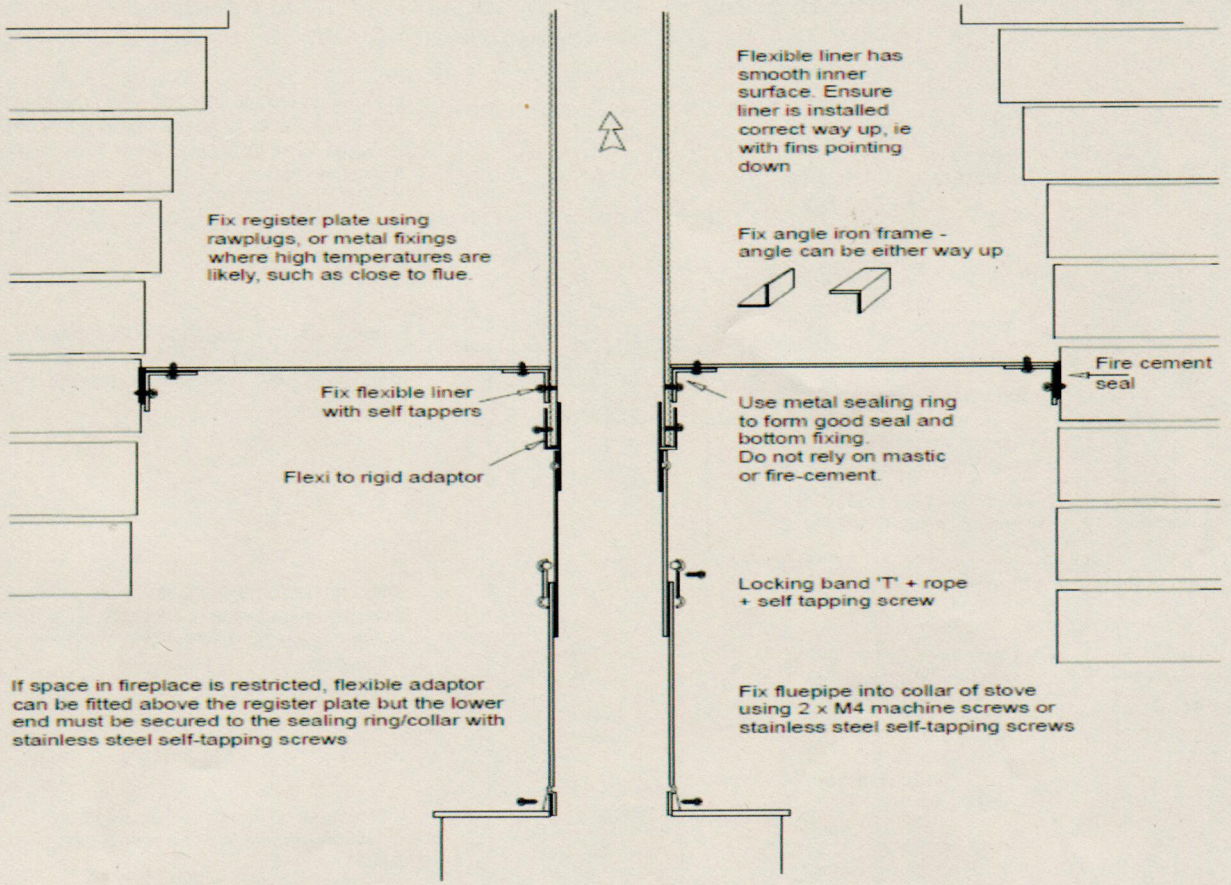
Air Supply

The use of building membranes, draft proofing and double glazing has resulted in homes becoming increasingly tightly sealed. Kitchen and bathroom extractor fans can result in homes being de compressed; de compression can reduce or reverse chimney draft causing fume emission. Adequate air must be available to ensure chimneys perform in all conditions.

Standards require that an air supply is provided when installing an appliance with a heat output in excess of 5kw in England and Wales. An air supply can be anywhere in the room the appliance is to be fitted in, an air brick on the outside wall may be the only practical solution in many homes. The ideal position for air entry is usually centrally to rear of the hearth or close to the base of the rear fireplace wall. Standard 100mm soil pipe is usually used to duct air from outside in new build situations. Care should be taken to ensure the air supply remains free of obstructions. Clearview Stoves manufacture "external air kits" these provide a direct connection to outside air. External air kits are particularly useful in situations where a room is likely to become de compressed due to extractor fans cooking hoods etc. Clearview Stoves stock 75mm stainless steel ducting suitable for connecting to external air supplies. In an ideal situation air should be ducted from at least two sides of the building to provide a balanced supply irrespective of wind direction. If a cellar or suspended floor is available this may be the ultimate buffer to provide constant available air irrespective of wind direction. Air requirements for a Clearview Stove are much less than an open fire; older houses may already have an available existing air supply.

Detail of Register Plate Installation

Installation based on our 30yrs experience in fitting stoves



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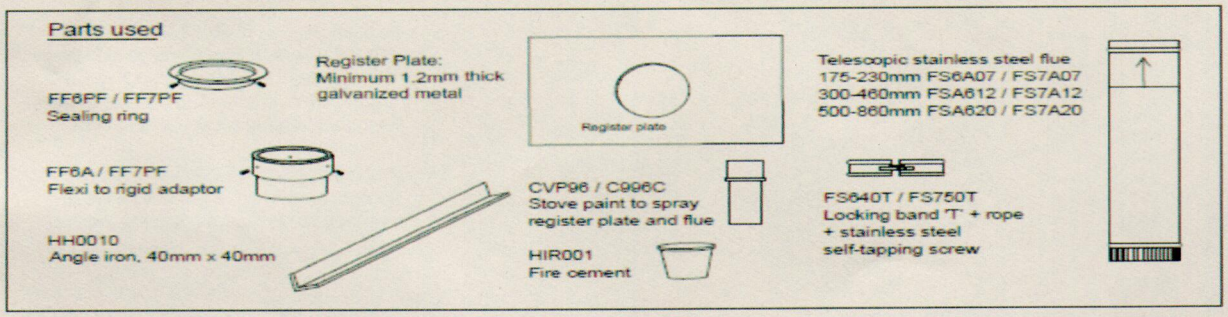

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Drawing No: 01401

Chimneys and Flues

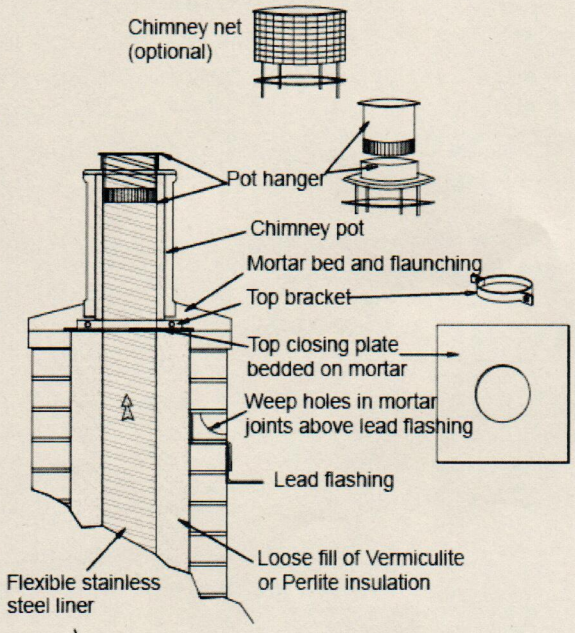
Chimneys are traditionally the highest point of the house, a minimum chimney height of 600mm above the ridge of the building is the usual rule. It is important that a flue and chimney system is well sealed, well insulated and as straight as reasonably possible. Only one appliance should be connected to one flue liner.

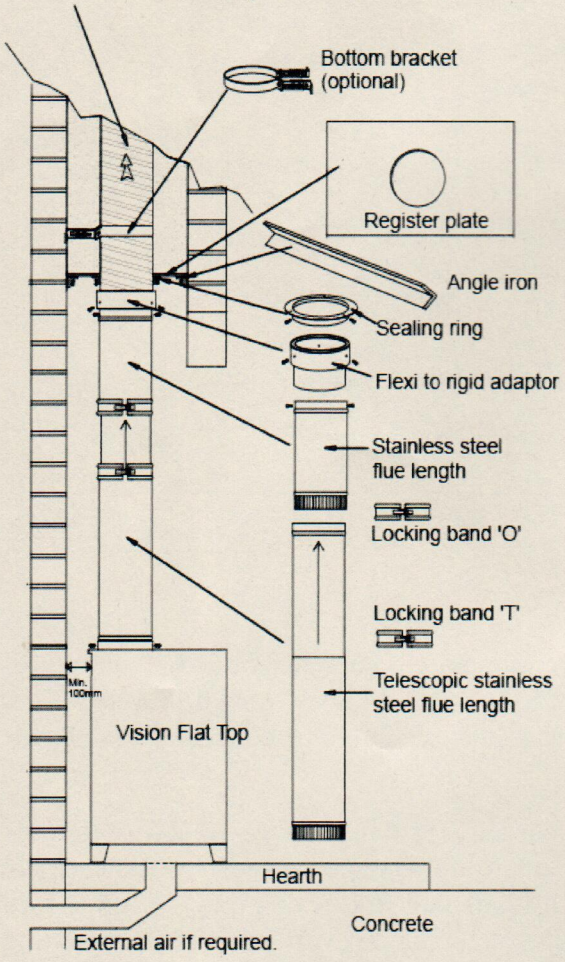
UK. Building codes require chimneys and flues to terminate at least 1800mm above combustible roofs such as felt, thatch or shingles. Cold external flue pipes are often problematic whenever possible route insulated flues through the building rather than externally. All joints in a flue or chimney system should be socket up spigot down, this will channel condensation in rather than out on every join. Avoid travelling long distances using single skin flue pipe; we usually convert into insulated flue within 1.2 metres of the appliance. Distances travelled with single skin flue is dependent on appliance, method of operation, fuel moisture content and speed of operation.

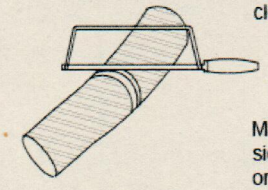
Bends in flue pipe and chimneys cause friction and reduce draft, do not use more bends than necessary, avoid large angle bends when possible, use 30 degree bends in preference to 45 degree. Two 45 degree bends may be hard to clean but 15 degree bends will provide little resistance. If bends are unavoidable, try and fit them in the bottom half of the flue where flue gases are hotter.

CLEARVIEW STOVES

Installation of Flexible Stainless Steel Liner

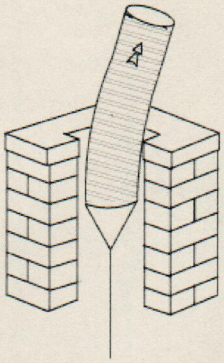




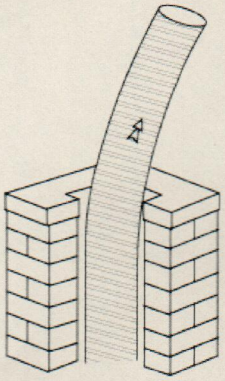


Make sure the chimney has been thoroughly cleaned before any work commences.

Mark round flexible liner and tape around either side of the mark. Liner can be cut with a saw or snips. Wear protective gloves to avoid injury from sharp edges.



Remove any pots and unsuitable capping. Secure a short length of flexible liner to a length of rope and draw through the chimney to check obstructions.

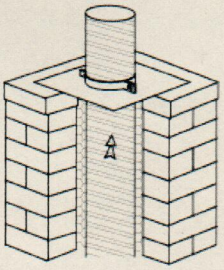


With one person at the bottom, use pull rope to draw the entire length of liner, with arrowheads pointing upwards, from the top of chimney to the bottom.

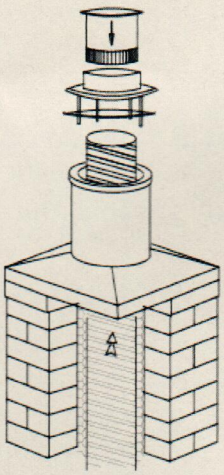
At the base of the chimney fix register plate in position and secure liner with Sealing Ring.

Back at the top, pour vermiculite insulation into the space between liner and the wall of the chimney. Position top closing plate around liner. Tighten top bracket around liner immediately above closing plate.

Fit chimney pot, flaunch with a thick layer of cement around base of pot to edge of chimney stack to prevent water ingress.



Take the lower section of the pot hanger and drill 3 holes equally spaced around the side of the spigot. Place this section on top of the pot and mark the chimney liner with a marker pen at the level where liner emerges. Remove pot hanger and cut off liner carefully ensuring the cut is no higher than the level of the line. Fill between the liner and the chimney pot with perlite or vermiculite



Replace lower section of pot hanger on top of pot and push down upper section inside the liner until it meets the spigot. Drill through the pilot holes on the spigot, liner and inner wall of the upper section and fix with stainless steel, self tapping screws. Secure the fixing straps around the pot with the jubilee clip provided.

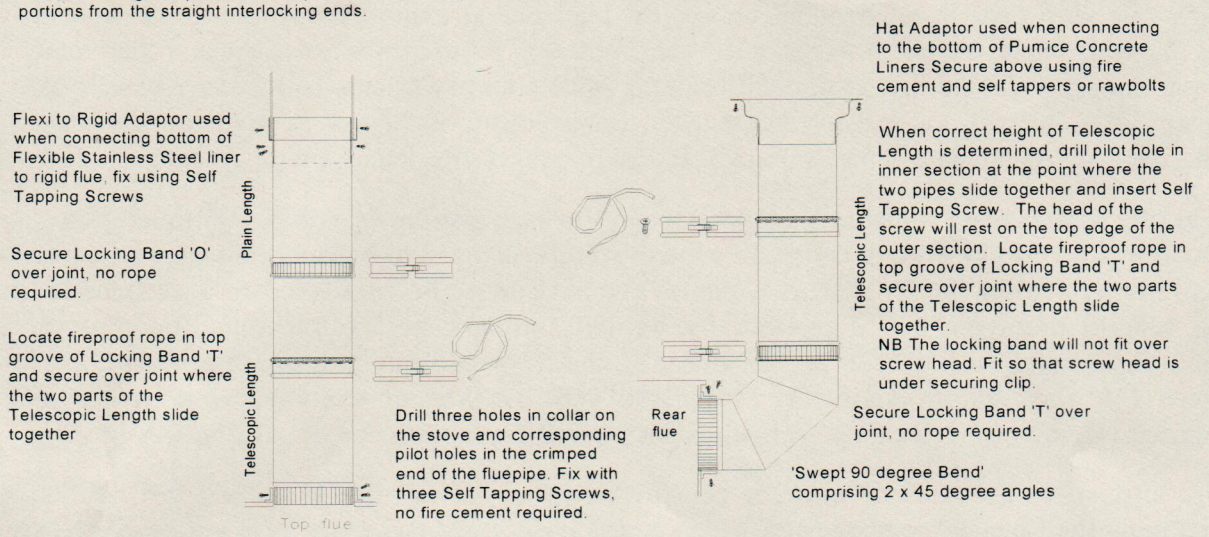
Please note that this is a typical example only. Every chimney installation is different and may require different components. It is important to check that any installation or building work is in accordance with your local Building Codes.

Using Clearview Stoves flue pipe

Clearview flue pipe is a good fit inside the flue collar, no sealing is normally required, if you are using other flue that is a loose fit glass fibre string can be used to provide a seal. **Always fix the flue to the flue collar using stainless steel screws;** this will prevent the flue working loose. Telescopic flue sections provide easy stove connection and disconnection and can be used as an access to clean the flue liner. It is essential provision is made to access the flue for cleaning. Cleaning access may be via a telescopic section, cleaning tee, access section or cleaning door. Most chimney sweeps prefer to clean through the stove; however it is good practice to provide an additional option

Installation of Telescopic Flue

Always fit with crimped end pointing down so that any condensation forming inside the liner will be funneled downwards and burn off in the stove. If a shorter length of plain flue is required, cut non-crimped end. In a shorter Telescopic flue is required, it is necessary to carefully cut equal length portions from the straight interlocking ends.



Locking band 'T' used when securing Telescopic Length to fluepipe below and to seal joint where interlocking sections slide together. All other joints between sections of fluepipe are secured with Locking Band 'O'.

Connecting to the flue liner

If a rear flue is used a maximum horizontal travel of 150 mm is permitted in most of the U.K. if additional rear distance is required use a 45 degree bend to travel at a 45 degree angle, this will cause less restriction and be easier to clean.

When possible a direct connection should be made to the flue liner using the appropriate adaptor, Clearview Stoves keep thousands of adaptors in stock. A direct connection should ensure minimum heat loss reducing soot accumulation; a smooth transition should enable complete cleaning and eliminate risk of soot accumulation in difficult corners. When a direct connection is not intended ensure provision is made to adequately clean the entire chimney or flue system. Take care to ensure the vertical flue is not obstructed by the connecting flue pipe; a clearance of at least 150 mm is required between end of connecting pipe and any obstruction.

Clearview stoves are highly controllable and can be operated slowly providing low flue gas flows. If the existing flue liner is too large, square, or you are unsure if it was installed well or insulated, you may wish to inner line with a new liner of known properties. The insulation properties of the liner are most important if you intend to operate your stove slowly, perhaps overnight burning, or if you burn high moisture content fuel.

It is often necessary to use a register plate to seal the bottom of a chimney. Clearview Stoves have always used galvanized steel plates; these are usually supported with light metal angle. Care should be taken to ensure any plugs or fixings can withstand the maximum temperature likely to be experienced. Register plates should be fixed well above any wooden lintel or beam and edges sealed using appropriate mortar or fire cement as required. It is important that a good seal is provided between the register plate and the flue pipe, fire cement and mastics will usually crack or burn away. **Use a Clearview Stoves sealing ring this can secure the flue and provide a durable seal.**

It is not good practice to permanently "box in" a metal flue system. Metal flues can have a very short life when some coal products and plastics are burnt. It is sensible to periodically make an external inspection of a metal flue system. A louvered cupboard or a mesh grill is preferable to using plasterboard and studwork if a metal flue system must be "boxed in".

The Chimney Top

Chimneys usually are positioned close to the ridge of the roof; this position looks best, is strongest and provides maximum heat to the building while sheltering the chimney or flue from the elements. Chimneys and flues should normally terminate at least 600mm above the highest point of the building. Low buildings or buildings in deep or damp hollows will usually benefit from additional protruding flue or chimney height. It is important flue gases remain warm as they pass through the flue; insulation can be a great benefit and is most important at the top of the chimney. A traditional chimney pot is usually the best way to protect the top of a flue liner; this is best set in a concrete cast in situ capping. In high rainfall areas a rain drip will have great advantage by reducing saturation of porous brick or stonework. Particular care should be taken to make a waterproof seal between the flue liner and the chimney pot. Rain and moisture can be driven through brick or stone chimney stacks; it is usually wise to provide a breather at the chimney top to vent accumulated water vapour to the sky. Avoid restrictive cowls and guards, they can accumulate deposits quickly and be impossible to clean from the ground.

This appliance has been tested to European wood burning standards. All installations should conform to your local building codes. European standards need to be complied with when installing this appliance within the European Union. This stove must be connected to a class one chimney using 150mm diameter 1 mm continually welded stainless steel connecting flue pipe, or other suitable pipe tested to EN 1856-2. The chimney should usually be lined with an insulated liner of between 150 and 200mm diameter. Please ask your stockist or the Clearview Stoves technical department if you have questions or propose using a different size or type of flue or chimney.

Health and safety precautions must be considered when moving and installing this appliance and maintaining the flue, chimney or roof.

You are required to affix a data plate to describe the type of appliance and flue system installed. It has been suggested that a suitable prominent position for the data plate may be within a meter cupboard or close to an electrical consumer unit.

Commissioning, after inspection and testing installation and appliance please ensure operating instructions are left with customer and appliance operation is understood.

Appliance	Efficiency %	Nominal Output kW			Flue Temp °C	Flue Gas mass flow g/s	Minimum distance to combustible material mm		Appliance weight Total kg
		Total	Space	Water			Back	Side	
Pioneer 400	77	5.1	5.1	-	282	4.3	460	460	100
Pioneer 400 Oven	84.5	6.2	6.2	-	203	4.9	250	200	170
Solution 400	77	5.1	5.1	-	282	4.3	250	200	140
Solution 500	71.6	7.3	7.3	-	370	6.7	250	200	175
Vision 500	71.6	7.3	7.3	-	370	6.7	460	460	125
Solution 500 SB Boiler Tested	82.7	8.8	5.7	3.1	238	6.1	100	200	172

Note: Stoves tested at a flue draught of 12 Pa These appliances should not be fitted on shared flues