

## FIRST TIME BUYERS

### Where Do I Start?

Buying a stove can be a confusing and daunting experience. A huge number of products are available at wildly varying prices. The cost of a stove and chimney components is not insignificant so you will want to feel confident that you are making a good decision based on sound advice. At Backwoodsman our aim is to guide you smoothly through the process. We want to ensure that you end up with the right product for your individual requirements and a safe, efficient installation that will give years of good service.

The information below is designed to help you identify what areas need consideration when thinking about installing a stove. Should you want more specific detail on a particular area then you will find a wealth of information in our Knowledge Base section on the website or you can contact us direct.

### Do I Need A Site Survey?

In the first instance (wherever practical) we always recommend a site survey to enable us to get a clear picture of what you are looking for and what the job specifications entail. There are a number of technical considerations that need to be addressed when supplying and installing a stove and these are best addressed by surveying the site first-hand.

When making a site visit we will discuss your heating requirements with you and take any relevant measurements required for technical drawings such as plotting sectional chimneys. We also use our time on site to look at the following specific areas:-

- The size of room / space to be heated
- The requirements of the stove, e.g. space heating, domestic hot water, central heating
- Flue requirements – is there an existing chimney or will a sectional chimney be required
- The best site for the stove if using a sectional chimney
- What fuel you want to burn
- Any preference for stove style / model
- Other heating systems the stove may work in conjunction with
- The type of installation work required
- Clearance to combustibles and hearth requirements
- Ventilation requirements

Based on the information we have gathered we will then provide a written report and quotation with a recommendation for both stove and installer. We aim to turn our reports around within 5 working days.

**NOTE!** For areas further afield that are less easily accessible – specifically (though not exclusively) the Islands, the Cowal Peninsula and more remote areas of Morvern – we have adopted a very successful Email Survey system. Please contact us for more information on 01631 720539

### Choosing A Suitable Stove

Your choice of stove will be based on various factors as discussed below:-

- What size do you need? - output ought to be one of the first considerations since a stove that is too small or too large will cause a variety of problems, not least under or over heating the space
- What do you want your stove to do? – for instance, space heating / domestic hot water / full central heating (the range of stove options is reduced when you add water heating to the equation)
- What style preferences do you have? - traditional, contemporary, inset or free standing
- What is your preferred fuel choice? – there are multifuel or wood burning options
- What specific installation requirements you have to consider? – for example installing a stove with a sectional chimney requires a different set of regulations to be adhered to that installing into an existing chimney

We generally recommend you leave the decision making part of the process until *after* you have received our report. By this time you will know what size of stove you need and be aware of the various installation requirements of the job. In addition to this we will make a recommendation and provide you with a list of suitable models to choose from which helps to simplify the process considerably.

## What Size Of Stove Do I Need?

We will work out the best size requirement for your space based on the dimensions of the room and various other factors such as insulation, number of outside walls etc. This is a particularly important area to get right if you are planning a central-heating installation as unbalanced ratios between output to room and water heating can cause all sorts of problems.

Many websites provide a heat loss calculator but we always prefer to run the figures through our own programme as we have been working with it for many years and are assured of its reliability across many building types. We can also take into account any design features specific to your house such as an open stairwell, high ceilings, conservatory, etc.

For further information please read our [Heat Loss Calculations](#) section.

## What Do I Want My Stove To Do?

In its most simple form a stove is installed purely to heat the room it is situated in. However certain models can accommodate boilers or are built with integral boilers in the stove “jacket” and these can provide either domestic hot water or full central-heating depending on the boiler configuration and the existing plumbing set up in the house.

Not all situations are suitable for accommodating water heating as part of the set up. If you are considering any form of water heating we recommend you read through our [Water Heating](#) section first.

## What Style Options Are There?

A bamboozling array of stove options are to be found on the market, but before you begin looking at your options it is important to be aware that all stoves are not equal! The market is flooded with cheap imports from every corner of the world, many made with substandard materials and poorly engineered. Stoves from China tend to be suitable only for burning coal based products as the air control function is so poor. Other products are launched with a loud fanfare and then when insufficient sales are made they are suddenly withdrawn leaving the owner unable to source spare parts for a stove less than five years old.

Whatever style you end up choosing, our advice is to always make sure you are sourcing your stove from a reputable company with a decent track record - unless you are prepared to endure a very short term investment. All of our suppliers have been in business for some decades and have shown a commitment to providing high standards of after-sales care in terms of warranty support and the provision of spare parts at reasonable cost.

If you are considering one of the contemporary cylindrical type models then it may be useful to know that these are mainly wood burners only (though this is not such a problem these days as you can always revert to a wood based product such as Verdo if you find you are stuck with a load of wet wood). Also worth noting is that any curved door glass is much more expensive to replace in the event of a breakage – particularly if the entire door is designed in glass which can make the replacement eye-wateringly expensive!

Many stoves offer colour options and we have colour swatches available to look at in our showroom – the range is dependent on the stove manufacturer. Morsø offer black only. Most stoves are now painted with an aerosol based pigment paint. Enamel is less commonly available than it used to be since the problem with the enamel coating becoming chipped has caused many manufacturers to drop it from their range.

## What Should I Burn?

Argyll has no shortage of wood, though getting it dry is another matter!

Most people in the area want to take advantage of our abundant local supply of wood. There are numerous suppliers to be found and often your best bet is to ask around locally and see who is recommended as supplying decent dry wood. Alternatively you may have access to free wood or decide to get a ‘Scavenging Permit’ from the Forestry Commission. The most important thing about burning wood is to make sure that it is seasoned and DRY!

A multifuel stove offers you more flexibility over all since you can burn HETAS approved solid fuel as well as wood and peat based products. However if you have a stove which is designed to burn wood only and you get stuck with a wet load or have not yet got a wood management in place yet then you can opt to burn one of the compressed wood briquette products on the market such as Verdo. Peat is also suitable for wood burning stoves.

If you are running a central-heating system you will find that anthracite or smokeless fuel gives a more even, sustained output to the boilers and therefore may be more desirable to use during the coldest parts of winter. For more information please read our [Fuel](#) section.

## Installation – What Do I Need To Think About?

Your specific installation requirements will be dictated by various factors, the first being whether or not you have an existing chimney.

### Chimneys

A commonly overlooked fact when it comes to installing a stove, is that *the chimney is equally as important as the stove its self*. A useful analogy is to equate a stove and its chimney with a mobile phone and its network signal. It doesn't matter how expensive and up to date your phone is, if you don't have a decent signal you won't get a reception that enables it to function properly. The same can be said for a stove. A common mistake is to think that a stove can be treated like a piece of furniture and placed wherever you want in the room.

Stove installations can be broken down into two categories. Those with an existing chimney and those which require a sectional chimney to be built up. Please refer to the section that reflects your own situation;-

#### Existing Chimney (bricks and mortar)

Wherever possible we recommend that you recess the stove vertically under the chimney. This helps to simplify the connections and conserve space in the room. In most cases during our surveys we encounter what is known as a British Standard Opening which is a fireplace of 16" x 20" or 18" x 22" in width and height. During installation this will be removed and the opening enlarged enough to accommodate a stove within the chimney-breast. We also advocate the use of a "convector-box" in order to maximize the efficiency of the installation and provide a neat finish solution.

Your chimney should be lined with a flexible flue liner and backfilled with vermiculite. Wood-smoke from a closed stove is extremely dense and must be kept as hot as possible – if it gets chilled through contact with a masonry chimney it will condense to form a 'goo' of moisture, tar and creosote which back-flows down the chimney and creates smells and a chimney-fire hazard. The purpose of the liner is to heat up rapidly as soon as the stove is lit as if it can be kept at or above 50°C. condensation will be minimised or hopefully eliminated altogether.

#### Twin-Wall Sectional Chimney

If you have no existing chimney then you will have a few more issues to consider as listed below;-

- Best site for stove AND chimney
- Fireproofing requirements
- Hearth requirements

#### Siting the Stove

The site of the stove should in the first instance be dictated by the best flue line and in the second instance by your preferred site. A sectional flue should be kept as straight as possible and be brought out as close as possible to the highest point on the roof. This arrangement gives the flue height which helps draught performance. Also most of the chimney is accommodated within the building so that it is kept warm. Hot chimneys generate more draught than cold ones and the flue gases are kept safely above their dew point (typically 50°C. – 60°C.) so that precipitates of moisture, tar and creosote are minimized or even eliminated. Finally, the chimney head emerges into an area of neutral air-pressure where it is least affected by cross-winds.

If you have an upper floor to your house then you will need to consider where the flue will be accommodated in the space above the stove. Sometimes it is possible to conceal it within a wardrobe, otherwise it may be boxed in within a bedroom or landing space providing it is not causing an obstruction in any way.

You can read our [Chimneys](#) section for more in depth information on chimney function and good practice.

### Fireproofing Requirements

Each stove model has its own specific 'minimum distance to combustibles' requirement to both its rear and sides. Therefore any fireproofing to the stove surround depends on the model specified as well as the situation of the stove.

For example the Morsø Squirrel 1412 has no specific fire-proofing requirements other than to be situated 100mm from plasterboard to the rear or 150mm to the rear corners in the case of a corner installation. In comparison a Woodwarm Fireview 6kW requires a distance of 700mm to the rear and 400 to either side, though the rear distance can be reduced to 220mm with the use of a heat shield. Incidentally heat shields are available with a good number of models and can be very helpful in this kind of installation.

As an alternative you could build up a fire-proof wall. To do so you will need to provide a solid back-plate, at least 75mm thick and 1.2 metres high or 300mm above the stove, whichever is greater. The block work needs to extend 300mm to either side of the stove. Thermalite block is the material typically used as it is very light weight.

If you do go down this route then you will have a wider range of stoves to choose from since any stove can then be situated 50mm away from the wall. However be aware that if you have a suspended floor some extra joist support may be necessary since the combined weight of block-work, stove and hearth can add up to a considerable weight. In some instances a hearth pad will need to be built up to support the combined weight. Your installer will be able to advise you further.

Specifying a stove that has been designed with reduced distances to combustibles can often make for a simpler installation with minimal disruption. The size of stove required and available space in the room will all have a bearing on what makes most sense.

NOTE! The subject of fireproofing materials is one that causes a considerable amount of confusion. The following points should help to help clarify various points with regards to Building Standards requirements;-

1. Plasterboard is considered a combustible material by Building Standards.
2. Whilst fireboard (eg Thermolux), cement board, and vermiculite board are all considered non-combustible materials they do not provide the adequate thickness requirement of 75mm. This tends to cause the biggest area of confusion. The materials themselves will not catch fire but at the same time they do not provide adequate protection to any stud timbers concealed within the wall cavity and which the heat may penetrate through to. There have been a number of incidents reported where the heat from a stove has punched right through the fireboard and charred or set fire to the stud timbers behind.
3. The sectional twin-wall chimney we use is made by Schiedel and has a distance to combustibles of 60mm.
4. Any single wall pipe (also known as vitreous flue) has a distance to combustibles of 3 x its diameter. For example a 125mm (5") pipe requires a distance of 375mm (15") to combustibles both to the sides and above.

## Hearth

A 12mm thick hearth plate will suffice for the stove to stand on, provided you specify a model certified not to heat the floorboards to above 100°C. (nearly all stoves now comply). This should be of a non-combustible material (typically slate, glass or steel) and can be laid directly on top of the floor. The hearth plate needs to extend at least 150mm to the sides of the stove and 225mm in front for single door stoves designed to be run with the door closed. However we recommend that you extend the hearth by 300mm to the front since this gives a more comfortable margin should any ash or burning material fall out of the stove. The hearth plate can be recessed into the flooring to remove any trip points if preferred.

A range of shapes to accommodate corner installations are available.

## Ventilation

If your stove is rated above 5kW in output then Building Standards stipulate you must have an external air vent. In size terms the vent should be 550 mm<sup>2</sup> per kW above 5kW (550 mm<sup>2</sup> = roughly an inch). Consult Technical Standard Scottish Building Regulations 3.21 for further clarification. The vent can be sited next to the stove, connected directly to the stove or situated elsewhere in the room.

## Finally...

Although it is helpful to be aware of the various considerations listed above when thinking about installing a stove, there is by no means a requirement for you to become an expert on the subject before making a decision. That is what we are here for! We will provide all the relevant details you need to know in a straight forward, easy to decipher report along with a quotation and a shortlist of all the suitable products we can supply. In addition to this your installer will take care of all the various installation requirements and liaise with us where necessary.

This extremely successful formula has given us an excellent reputation locally, and the care and attention to detail we assign to each individual project means the majority of our business comes from word-of-mouth recommendations.