### THE GUIDE TO SOLID FUELS

This leaflet will tell you all you need to know about:

- The different solid fuels available and their suitability for the various types of appliances
- Smoke control legislation
- Buying solid fuel
- Hints on getting the best from your fuel and appliance

### **Choice of Fuel**

There are a great many different solid fuels for sale. Your choice will be based on a number of criteria, the most important of which will be the type of appliance you will be burning the fuel on and whether or not you live in a smoke control area (see page 4).

### **Fuels for open fires**

### Housecoal



The most traditional fuel for open fires is housecoal. It is available in various sizes e.g. Large Cobbles, Cobbles, Trebles and Doubles. The larger sizes are usually a little more expensive than Doubles size.

Housecoal comes from mines in Britain and other parts of the world, most notably Columbia and Indonesia.

The coal may be sold by the name of the colliery it comes from e.g. Daw Mill, the port of entry e.g. Merseyport or a merchant's own brand name, e.g. Stirling. Coal merchants also frequently sell the coal by grade – 1, 2 and 3 or A, B and C; 1 and A being the best quality.

### Wood

Wood and logs can be burnt on open fires. They should be well-seasoned and preferably have a low resin content. You should not use any wood that has any kind of coating on the surface e.g. varnish or paint, as harmful gases may be emitted on burning. The heat output is not as high as other solid fuels and you may find that a combination of logs and other solid fuel will enable you to keep the fire alight for a longer period. If you use wood or coal, you should have your chimney swept twice a year.

Neither wood or housecoal are authorized for use in smoke control areas (see page 4).

# Other non -authorized fuels for open fires

In addition to the above there are several briquetted fuels that have been manufactured for open fires.

Wildfire • Union briquettes • Maxiheat • Peat briquettes (not widely available in Britain)

# **Authorised Smokeless Fuels for Open Fires**

You can enjoy the cosy glow of a real open fire even in smoke control areas. Manufactured smokeless fuels are produced to the highest quality standards and give consistent high performance. Solid smokeless fuels are clean and easy to use and up to a third more heat is obtained than when burning the same weight of ordinary housecoal. Each fuel has different characteristics regarding flame, duration of burn, response to air controls and output – your Approved Coal Merchant or the Solid Fuel Association can advise you on the best choice for your particular fire.

Manufactured smokeless fuels are all sold by brand name:

Coalite • Homefire • Homefire Ovals • Supertherm Newflame • Briteflame • Excel

There are also two branded blends of hard coke and petroleum coke suitable for open fires (see note on page 4 on Petroleum Coke based fuels):

### "Instant" Fires

There are several instant fires on the market, available through shops and garages. These are convenient to use and give several hours burning. The fuel and ignition material are included in the package which may either be a bag of fuel or in the form of a log.

Fuels for closed appliances - (roomheaters, stoves, freestanding boilers (except gravity feed appliances))



There is a great variety of appliances available. Many can supply hot water and full central heating systems, whilst others offer efficient space heating. Back boiler models can also be linked to other central heating systems to provide hot water whilst the stove is alight. (See our separate leaflet on Link-Up). Many of the appliances are "multifuel" and can burn either wood or solid fuel (coal and smokeless fuel). It is important to follow the manufacturer's recommendations for fuel. A few fuels may not be suitable for certain appliances and use of them could invalidate your guarantee. (See our note on petroleum coke on page 4). The manufacturers'

instructions will also give you handy tips on how to operate your appliance to get the best from your fuel, whether it's a roaring fire or a slumbering glow to keep in overnight.

### **Naturally smokeless fuels (Anthracites)**

Anthracites are available in two sizes for closed appliances. Large Nuts (Stove Nuts) and Small Nuts (Stovesse). The larger size will allow a better draught than the smaller one. Only the larger size is recommended for cookers and is preferred for roomheaters and freestanding boilers. Anthracites come in different grades and are mined in Wales and Scotland, or imported, typically from China, Vietnam and South Africa. All are carefully prepared for the domestic market. The main Welsh Anthracites are Betwys, Celtic and Tower. Imported Anthracites may include the origin in the name eg Chinese or Taisi – Chinacite, Redflame, Red River. Other imported Anthracites are available widely.

### **Manufactured Smokeless Fuels**

Manufactured fuels are usually sold by brand name. Your local Approved Coal Merchant will be able to offer a selection suitable for your appliance and your pocket. Some are cokes and coke blends, others "ovoids" manufactured from anthracite or petroleum coke.

Coalite Nuts • Coalite Blazebrite • Coalite Firebrite • Sunbrite Doubles

- Fireglo Phurnacite Ancit Taybrite (Surefire in Scotland)
  - Econotherm Newflame Maxibrite Supacite
- Homefire and Homefire Ovals are also suited to many multifuel stoves

Cosycoke, Supercoke, Pureheat and Jewel are either petroleum coke based fuels or contain petroleum coke in a blend. These may be used in roomheaters and some stoves but should be avoided if the manufacturer does not recommend petroleum based fuels

### **Fuels for Cookers**



Smokeless fuels particularly recommended for cookers are Sunbrite Doubles, Phurnacite, Ancit, Taybrite, Maxibrite, Supacite and Anthracite Large Nuts.

# Fuels for gravity feed appliances e.g. Trianco TRG boilers and Parkray Everglow roomheaters.



Anthracite Beans and Grains

These are widely available and may come from indigenous sources or imported. There are different grades according to calorific value of the product.

# **Smoke Control Legislation**

Great numbers of solid fuel users live in smoke control areas and therefore have to comply with the Clean Air Act. It is an offence to cause smoke from a chimney in a smoke control area, you should make sure you only use an authorised smokeless fuel. It is an offence for a householder to obtain an unauthorised fuel for use in a building in a smoke control area and also an offence for anyone to deliver it to you. **There is an exception if the appliance is exempted.** Exempt appliances can burn bituminous coal and sometimes wood without creating smoke. They are tested and approved by Defra. Examples of exempt appliances are Parkray Coalmaster II (no longer being manufactured) and the Dunsley Yorkshire Stove. Full details of exempt appliances are available from the Solid Fuel Association.

To find out if you are in a smoke control area, you should contact your local Environmental Health Department and give them your postcode.

# **Buying Fuel**

Look For This Logo



# The Approved Coal Merchants Scheme

When purchasing solid fuel, the Solid Fuel Association recommends you always buy from a coal merchant who is a member of the Approved Coal Merchants Scheme. These merchants are fully trained in their trade and are committed to serving the customer. This means they have agreed to operate and abide by the Coal Trade Code. There are over 1,100 Approved Coal Merchants nationwide. Ring the Solid Fuel Association for your nearest Approved Merchant or visit our website, www.solidfuel.co.uk.

They will deliver fuel to you either in open sacks of 50kgs or in plastic prepacked bags, normally 25kgs. Prepacks are usually more expensive than open sack sales. Deliveries of open sacks are regulated by the Weights and Measures Act. A delivery note itemising the number of sacks, weight in each sack, total weight of delivery and type of fuel, signed by the merchant, must be given to customers before deliveries of more than two 50kg sacks.

Many merchants also operate cash and carry depots, where you can go and pick up prepacked fuels.

Other outlets such as garages and shops also sell prepacked sacks, but the range on offer is sometimes limited and may only cater for open fires. If you buy prepacked fuel for use in a smoke control area, make sure the bag states on it that the product inside is authorised for use in a smoke control area.

# **Petroleum Coke**

As its name suggests, this is a by-product of the petrol refining industry. Most of the fuel is imported into this country from the United States. Long Beach Nuts and Lumps are authorised for use in smoke control areas because they are low in sulphur. Other Pet Cokes are not authorised.

The product burns very hot and is often sold as a blend with other fuels to enhance the burning characteristics. However, because of the heat and the low ash content of the product, it can cause damage to appliances if the concentration of petroleum coke to other fuels is too high. The Dti do not recommend the product is used on any appliance in an unblended form. Some appliance manufacturers also warn customers against its use. The Solid Fuel Association recommends you only use branded preblended products such as Cosycoke and Supercoke. These are quality controlled blends authorised for use in smoke control areas. Your Coal Merchant will give you further guidance on the use of these products.

# Safety

Remember to have your chimney swept by a professional sweep (either a Guild of Master Sweeps or NACS member) AT LEAST ONCE A YEAR if you use smokeless fuel and AT LEAST TWICE if you are burning wood or coal. Never light a fire for the first time without having the chimney swept. It may be blocked and harmful fumes and smoke may enter the room.

Always follow the manufacturer's instructions on maintenance and use. If you smell fumes or smoke is entering the room, let the fire out, open the windows and leave the room. Do not relight the fire until the appliance has been checked by a qualified engineer. (Ask for a list of SFA recommended HETAS Registered Engineers in your area). More information can be found in our Safety leaflet.

# **Using Your Fire**

Fuel usage can vary from house to house depending on your personal requirements and expectations, the appliance type and the efficiency of the chimney. No two homes are ever the same.

Below is a useful checklist to help you get the best from your fire. In addition we supply a range of leaflets on particular types of appliance giving specific advice.

# How to Get the Best from your Solid Fuel Appliance

- Don't allow the ash to build up to the firebars and touch them they will burn away. Remove the ash regularly.
- Use the riddling device and a poker to clear ash and clinker that collects above the firebars. The appliance will not function efficiently if the grate is clogged.
- Don't open the bottom ash door on a roomheater or stove and leave the main fire door closed the intensity of the fire could cause damage to the grate.
- The throat plate in the top of a roomheater (and some stoves) should be removed, or lowered down, at least once a month to remove any build up of fly ash or chimney debris. Check the flue pipe at the same time.
- The main chimney should be swept at least once a year twice or more if the appliance is burning housecoal or wood. Flue pipes which connect an appliance to the main flue should also be cleaned regularly.
- If the appliance incorporates a fan, its blades should be kept free of any fluff buildup. This can be done by yourself or a maintenance engineer during his annual service visit.
- Scraping any flueways once a week will help maintain high efficiency.
- Scraping off tar deposits from open fires with high output back boilers will ensure high heat output to the boiler.
- Metal mating surfaces on roomheater and stove doors should be periodically checked for rust and other similar deposits.
- Glass doors on appliances are easily cleaned by opening the door, allowing it to cool and wiping clean with a warm damp cloth.
- Approved blends of petroleum coke can be used on open fires, roomheaters and stoves but only if they are fitted with high chrome iron or chrome steel grates and firebed components.
- When the room is unoccupied, use a firescreen and/or a spark guard with an open fire
- A firescreen should always be used if children are in the room.
- Do not apply excessive draught stripping to doors and windows, or block air vents solid fuel appliances and chimneys need a supply of air to function properly.
- Whilst roomheaters and multi-fuel stoves are robust appliances you should have the appliance checked and serviced annually by a qualified heating engineer to maintain efficiency and maintain safe operation.
- Use dry fuel and wood to reduce emission of smoke and other gases.
- Do not burn household waste such as plastic or metal. These emit harmful gases or can explode from the fire when hot.

# Other Useful Guides available from the Solid Fuel Association

Guide to Opening Up Your Fireplace
Complete Guide to Solid Fuel Heating
Curing Chimney Problems
Solid Fuel Safety Guide
How to Get the Best out of Your Open Fire
How to Get the Best out of Your Roomheater
How to Get the Best out of Your Boiler

# HELPLINE: 0845 6014406



**SOLID FUEL ASSOCIATION** 

7 Swanwick Court, Alfreton, Derbyshire, DE55 7AS Tel: 0845 601 4406

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