

SCARF is a company limited by guarantee (No 94819) and a registered charity (No: SCO 006901)

## Fact Sheet

### REF: 404 CONDENSING BOILERS

#### RUNNING COSTS & SAVINGS

The running costs of the most efficient condensing boiler is up to £90 per year less than the less efficient new conventional boiler. The choice of boiler is important to your pocket as well as the environment. Replacing an older boiler could save even more, up to 30% on your fuel bill so you could easily save **30 pence for every £1** you spend on fuel, but only if you make an energy efficient choice. There may be an energy efficiency offer towards the cost of installing a condensing boiler so check by calling the Local Energy Efficiency Advice Centre: - **Freephone 0800 512012**

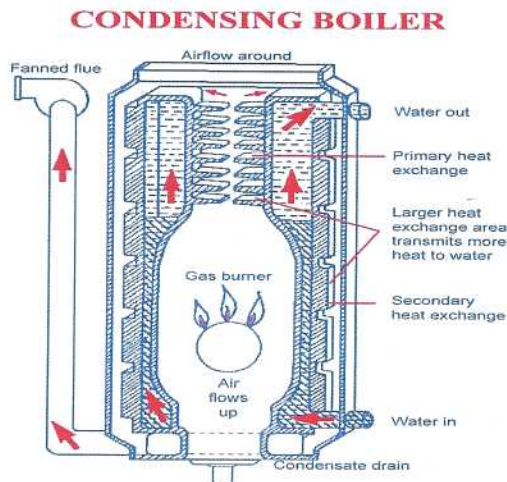
#### ENERGY EFFICIENCY

| Type                                 | Average Energy Efficiency | Extra cost of energy per £ spent on fuel |
|--------------------------------------|---------------------------|--|
| Most efficient gas condensing boiler | 91%                       | 0p                                       |
| Least efficient new gas boiler       | 71%                       | 20p                                      |
| Typical old gas boiler               | 60%                       | 31p                                      |

In a condensing boiler more heat is always extracted from the fuel than a conventional boiler. Unlike non-condensing boilers, which operate at a reduced efficiency in summer, a condensing boiler operates at high efficiency all year round because it extracts latent heat from the water in the flue gases. This means that condensing boilers need a condensate drain in addition to the flue.

#### CONDENSING BOILER LAYOUT

1. Flexible fanned flue air ducting system with left, right and vertical outlets
2. Electric fan
3. Gas injector
4. Gas valve
5. User control panel
6. Water temp thermostat control knob
7. Condensate drain
8. Burner assembly
9. Primary heat exchanger
10. Secondary heat exchanger
11. Flow and Return tappings



#### CHARACTERISTICS

Condensing boilers look like other modern boilers and can be wall or floor mounted. There are condensing combi models available, which do not have a hot water storage tank. Condensing boilers have been in use in Britain for more than 10 years. They can be used virtually anywhere that a normal boiler can be used provided that flue gases, which appear as a white 'plume' do not cause annoyance, so the boiler flue must be correctly sited. Test results from the Building Research Establishment Energy Conservation Support Unit (BRECSU) demonstrate condensing boilers have high efficiency and trouble free operation. They are generally British Gas tested for safety and reliability and can be covered by service contracts for the same price as a conventional boiler. The high quality heat exchanger has the same life as any other modern boiler.

The efficiency of all commonly available central heating boilers is measured by SEDBUK and displayed on their website [www.boilers.org.uk](http://www.boilers.org.uk). There you can see the individual efficiency of each boiler together with its energy efficiency label. Like many other domestic appliances, 'A' is the most energy efficient.

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#### Mission Statement

SCARF aims to work through partnership to promote sustainable use of energy, eradicate fuel poverty and create sustainable employment and training opportunities.

#### Core Objectives

- + To provide free impartial and accessible energy efficiency advice and information services to help save energy, save cash and help save the environment.
- + To encourage investment in energy efficiency and renewable energy measures and grant take up for property improvements to achieve affordable warmth.
- + To create sustainable employment and training opportunities.

#### SCARF Provides

One Stop Energy Advice Shop offers free impartial advice and information:

- + Energy efficiency in the home, business and the community
- + Renewable energy in the home, business and the community
- + Grants for loft and cavity wall insulation
- + Grants for draughtproofing
- + Grants for central heating
- + Grants for renewable energy installations
- + Paying for fuel and fuel suppliers
- + Choice and operation of heating and hot water systems

#### SCARF also offers:

- + Home visits
- + Home energy checks
- + Presentations and informal training
- + NVQ and City & Guilds Qualifications



INVESTOR IN PEOPLE

