

Caring, Committed, Connected, Creative



Heating & Photo Voltaic Panels



Recent changes in legislation means that new homes must be more effectively heated and powered. In order to do this developers have had to increase insulation levels, invest in renewable technologies and particularly in more rural locations look at alternative heating sources from more traditional gas fired boilers.

Heating

Why is heating required?

Eildon Housing Association have a legal obligation to provide adequate heating to a property which is occupied by a tenant. This can be achieved in many ways but the most common way is by a central heating system.

What type of heating do I have?

The heating system installed within your property uses an air-source heat pump together with a water tank and wet radiator system. This type of heating is similar to how a gas central heating system runs except that the unit uses external air and electric to generate heat.

How will the system operate?

Air-source heating operates using the same type of controls as that of a gas central heating system. The system can be set up to heat hot water and provide heating at various times of the day and night to suit your requirements. The system operates at a lower temperature compared to that of a gas central heating system, however, the radiators tend to be larger in size so that their heating output is higher to achieve the required temperature.

What is important?

Whilst the systems are similar to that of a gas system, it is important to note that the air-source unit will always heat the hot water before it produces any heat for radiators, therefore the timing clock should start to heat hot water for around one hour before you need the heat from the radiators.

The following notes give guidance on how to protect the heating system and operate it efficiently:

Air Source Units and Water Cylinder

- Air-source are large boxes similar to that of air conditioning units they
 are situated on the ground externally within your property and close to
 the building fabric.
- The units have fans within them which draw in fresh air and take out any heat within this air to preheat water which is then fed into the water cylinder.
- The fans should be kept clear from any obstruction around the unit to allow the system to operate efficiently. It is also important to note that objects should not be inserted into the unit as this could damage the refrigeration element.
- Preheated water which is fed into the water cylinder located with the heating cupboard then uses electric to further heat the water for both heating and hot water up to the required temperature.
- Water temperature from the heating systems are generally around 42 degrees which is lower than that of a gas system but as noted the radiate
 - of a gas system but as noted the radiators are larger to increase heat output.
- Advice from installers is to ensure that you have an economy 10 or equivalent tariff to allow the system to use cheaper electricity during the night to heat hot water.
- The systems will be set to operate at the optimum efficiency by the installation engineer thereby keeping your utility bills as low as possible.
- The timing and controls of the systems allow you to alter times to suit your family life, but as noted before it is very important to remember that the hot water must be heated before you require the heating to operate.

Photo Voltaic Panels

- Your house has photo voltaic panels erected on the roof which utilise UV rays from the sun to generate electricity
- The amount of panels on your roof depends on the requirements to meet the Building Standards Regulations
- These panels will generate electricity which will provide a certain amount of free electricity and also feed electricity back into the national grid
- Photo voltaic panels provide a way in which developers can help to reduce carbon emissions by generating electricity for the home and for the national grid.

Eildon Housing has installed the panels on the roof to ensure that the Association is able to comply with the governments Building Standards Regulations.

These panels will provide the tenant with a certain amount of free electricity depending on the time of day and year. The summer months will result in a higher generation of power than the winter months when the sun is lower in the sky and the days are shorter.

Photo voltaic panels also generate electricity which can be fed into the national grid. The amount of electricity which is fed into the grid depends on whether the house itself is using the electric that the panels are generating. Generally when households are out during the day the panels will be generating electricity which is then fed back in to the national grid.

A government backed scheme called 'Feed in Tariff' provides payment to the Association for the amount of electric generated. Eildon Housing will receive this benefit whilst the tenant will benefit from lower electricity bills.





