

ESWA[®]

ceiling heating



The ESWA ceiling heating system is a system that has been developed in use over 55 years in the United Kingdom (75 years in Norway) and which is used today in more than 20 countries world-wide.

It has been designed to take particular economic advantage of current UK electricity tariffs whilst providing an ideal combination of comfort, safety and sophistication. It consists of heating foils above the ceiling to provide gentle radiant warmth evenly spread from wall to wall and floor to ceiling.

As the sources of the heat are contained within the structure there are no radiators or grilles to interfere with your furnishings or decoration. All the floor and wall space you have paid for can be used. The ESWA system will give long, maintenance free life.

USER INSTRUCTIONS

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ALL ABOUT YOUR SYSTEM

The first thing that you will notice about your new heating system is that there is nothing at all to see other than the thermostats on the walls of the main rooms. The heating elements were carefully installed while the building was being constructed and are hidden above the plasterboard of the ceilings, backed by thermal insulation. From this position they provide gentle radiant warmth over a large area and thus will warm the floor, the walls, and yourself in a manner comparable with sunshine - without hot spots, cold spots or unnatural draughts. There is nothing to hear, either. No pump or fan noises, no boiler or burner noises, no sound of air movement. The only thing you may possibly hear from time to time is the occasional click of the thermostats as they operate.

There are no limitations at all on where you can place the furniture, no valuable floor or wall space is taken up by heating appliances, ducts or pipe work.

There is no annual maintenance to be carried out either. The system is designed to work at full efficiency year after year without any servicing adjustments. The heating elements themselves are made of special foil; with an especially low melting point for safety, encapsulated in sheets of electrical insulation.

Eswa electric ceiling heating has been in use for over 55 years in this country and continues to be manufactured to the highest standard.

Electric ceiling heating obtains its flexibility of response, its high standard of comfort and good economy by means of thermostatic control (their use is explained in the following section)

Individual room thermostats control the ceiling heating and ensure minimum consumption by taking advantage of all the incidental heat gains from the sun, lighting, TV, appliances and even people, whilst maintaining exactly the temperature you have set the thermostat to.

It is a low temperature radiant system which makes it particularly efficient. Remember, so called conventional systems rely on cold air falling, forcing the heated air up causing uneven temperatures and draughts. Radiant heat goes where it is directed, including downwards (like the sun) and does not just heat the air but the surrounding surfaces. This ensures that the air remains fresher, temperature distribution vertically and horizontally is even and comfort is obtained at lower air temperatures thus saving energy. Just think of the effect of stepping into the shade on a pleasant sunny day, the air temperature remains the same, the effective temperature does not.

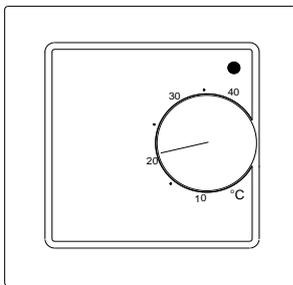
OPERATION:

During the summer months of course, there is no need for heating and so the ceiling heating may be switched off. As autumn approaches, all you need to do is to operate the main switch and set the thermostats and programmer (where fitted) to your liking and according to the use that you are making of each room.

The system is designed to be left on continuously, with the thermostats being turned back in rooms not being occupied - generally by 3 to 5°C from the comfort setting for the room concerned.

There is a two channel programmer installed [see separate instructions], and this enables the heating to be turned down [or 'set-back' by approximately 5°C] at times of non-occupancy. Generally the two channels control two zones - living areas and sleeping areas (Note: the hall/landing & bathrooms are controlled only by the thermostats). Careful use of the programmer will allow maximisation of the low rate availability.

The use additional heaters as they will upset the pattern of control of the system and is not recommended. The thermostats are not output controls, but switch the heating elements on and off at the set temperature. You do not get greater output at higher settings, so turning the control knob above the temperature you want will not heat the room any quicker. An indication of comfort settings is as follows:-

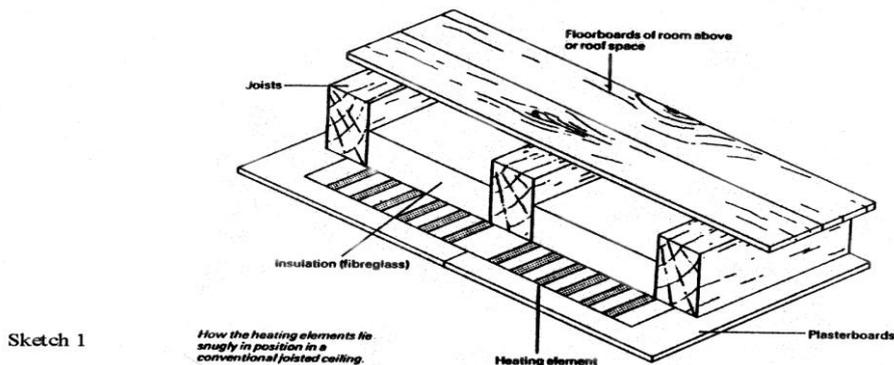


suggested thermostat settings

living, dining, bathrooms: 20° - 22°C

bedroom, kitchen, hall: 16° - 18°C

These may vary in different installations and reference should be made to the specific manufacturer's instructions but again choose the comfort setting by experience.



Electricity Tariffs

The best economy will be obtained with Eswa ceiling heating system is working in conjunction with a two rate electricity tariff (Economy 7/Economy 10)

Electric Water Heating:

In order to get the fullest benefit from time of day tariffs you are recommended to make maximum use of the lower rate periods to heat your water.

Payment of Accounts:

In all homes much more energy is used in the winter than in the summer. In fact, it is normal to incur as much as 75% of your annual heating cost over the worst winter quarter. More energy is of course also used for lighting, cooking and water heating in the winter. Most people wish to 'spread the load' of costs evenly over the year, and this can be arranged through your Electricity Company with a direct debit facility. Remember maintaining a higher temperature than required will increase running costs - a 1°C increase in temperature could increase costs by 10%.

NOTES:

There have to be some "do's and don'ts" and these are:-

- (a) **DO NOT** pierce the ceiling. Clearly this must not be done as the heating elements above the plasterboard could be damaged.
- (b) **DO NOT** stick insulating tiles onto the ceiling. The warmth is designed to pass downwards through the ceiling.
- (c) **DO NOT** obstruct or cover any part of the ceiling with high level furniture units or lighting fittings - a clear air space must be left between the top of them and the ceiling.
- (d) **DO NOT** maintain higher than necessary temperatures.

WARNING: Access to the inside of all controls should only be undertaken by a competent person, after the supply has been disconnected.