

Information &
Operating Guide:
**In-Slab Off Peak
Floor Heating
Systems**



Customer Information & Operating Guide: In-Slab Off Peak Floor Heating Systems

Floor Heating

In-slab

A SunRay electric floor heating system has been installed in your home. It has been designed to give you all-over warmth, comfort and safety. Special insulated electric heating cables have been laid in your slab floor when your home was constructed. In-slab heating is usually connected to an Off Peak or Heating tariff. During the periods of the day or night when cheaper electricity is available, heat is automatically stored in the floor. The heated concrete then dissipates background warmth evenly throughout the room.

Under tiles or in a Screed Bed

Your heating system will function in much the same way as in-slab heating, but is more likely to be connected to either an extended Off-Peak or a 24 hour tariff. In addition to using the normal Thermostat, a time switch may be used especially in bathrooms. When connected to a 24 hour tariff, a timer permits the heating to operate only when required, such as the morning or the evening periods. Warm-up and cool-down times are usually much faster than in-slab heating. It does however, depend on the exact nature of each type of installation.

Suitable Floor Coverings

The usual operating surface temperature of an uncovered deviflex heated floor is between 24 to 27°C(which is quite acceptable for most floor finishes. Typical floor coverings include: Carpets (with rubber or felt underlay), Slate, Ceramic, Marble and Terracotta tiles, Vinyl, Cork, Parquet, wood block and strip flooring. Should you require further advice please contact your floor finish supplier or SunRay Comfort Heating.

Controlling your Heating System

Switching On and Off

Switching your heating system on or off at the beginning or end of the heating season, or isolating the heating, is carried out at the sub-board or the electricity meter box – look for a switch labelled 'Main Switch – Heating'. The switching methods used are usually tailor made for each installation and therefore it is difficult to give further detailed advice. If you have any doubts on how to switch on or off please consult your installer or SunRay Comfort Heating.

You will have either individual thermostats installed in each room or just one thermostat controlling a heated zone. Once the heating has been switched on, the thermostats provide automatic control. Do not turn the thermostats down at night or when you go out for short periods (see further advice below).

Operating Temperatures

Adjusting a Thermostat

When making temperature adjustments to any thermostat, do so using small, 1-2°C increments, then allow sufficient time (1-2 days) to pass before assessing the need for further adjustments. The time taken for the room to warm up to the set temperature is not shortened by turning the temperature to the highest setting. Some thermostats come with an adjustment in °C or are simply a graduated scale. Adjustment is similar for both.

Recommended Floor Temperatures

Living areas: 18-25°C (floor temp)

Bedrooms: 16-21°C (floor temp)

Bathrooms and hallways: 22-27°C (floor temp)

Note: The higher hall temperature may allow for bleed off heating to other rooms.

Maintenance and Repairs

Since there are no moving parts or surfaces hot enough to deteriorate under normal use, one of the best features of the floor radiant heating system is the lack of maintenance.

Your heating system is designed to give many years of reliable service and should be maintenance-free provided the cables below the floor surface are not damaged by penetrating the floor surface. Floors should never be penetrated without first checking with your installer.

Should you require any assistance or repairs to your heating system, please contact SunRay Comfort Heating. Any remedial work to your heating system should only be carried out by a suitably trained and qualified electrician.

Flooding

Flooding of any floor heated area should not affect the heating cables in any way, however, the connections at the wall mounted connecting box/thermostat will need to be checked by a qualified electrician along with all other electrical connections and equipment.

Short Periods

If you are away for only two or three days, leave your floor heating switched on and turn your wall thermostat to a lower setting (keeping the setting above 10°C will help to avoid condensation). Reset it to 'normal' when you return. If you do not have a wall thermostat and your controller does not have a set back facility, you are advised to leave the system running normally.

Longer Periods

It may be advisable to switch off your floor heating completely but don't forget that when you return you may need at least 24 hours before your floor heating will be fully effective again.

Caution

With a floor heating system, the surface must be kept relatively free of restrictions that would inhibit heat output. The usual items of furniture such as tables, chairs and couches are okay but always avoid placing items like bean bags, piles of clothing, thick rugs or anything offering high resistance to heat output over any area of the heated floor.

To avoid damage to floor or floor coverings, SunRay floor heating systems should be switched on **no earlier than 8 weeks after concrete is poured or 6 weeks after tiles are laid for undertile heating**. The heating should initially be switched on at a very low temperature setting (16°C is recommended) with increments of 1-2°C, working up to full comfort loading within 8-10 days.

Failure to heed the above warning can, in extreme cases, lead to cable damage and discolouring of some floor coverings due to the high temperature created.

Running Costs

Running costs are affected by how you use your heating system, room temperatures, outside weather conditions, how well your home is insulated, how much ventilation you have, and so on. In the very first season, the drying out of moisture within walls and floors may add significantly to your running costs.

Helpful Tips

- Do not overheat your room! High room thermostat settings will increase running costs so keep your settings as low as is comfortable. Remember, increasing your temperature by just 1°C will add 10-15% to your running costs.
- Your home should be insulated to the recommended local standards. For example, at least 75mm of insulation in the ceiling space and cavity insulation in external cavity walls is recommended. If heating a suspended slab, the underside of the slab should be insulated to prevent heat loss.
- Ensure that windows and doors are effectively draught proof.
- Windows and doors left open unnecessarily are throwing heat and money away.
- Glass areas allow considerable heat loss. Drawing your curtains will make a significant difference.
- Do not obstruct your wall thermostats.

Remember – running costs are very much in your hands

Electricity Tariffs

The hours when the electricity is cheaper (i.e. off peak) is normally between 11pm and 7am; and in the afternoon, approximately 2-4pm, depending on the area you are in and which tariff you are on. If you have any questions as to which tariff you are on, or think it would be advantageous to change tariffs, please contact your local electricity supplier.