

# Faq:

## Everything you ever want in a heating system...



Floor Heating System  
for your home

- What is electric storage floor heating (ESFH)?**  
ESFH is a continuous space heating system. It consists of one or more Pyrotenax Electric Heating Elements cast into the concrete slab of a house or building which then acts as a large storage and radiant heating panel. The system is designed to operate on off peak electricity, otherwise a time clock can be used.
- Why is radiant heating more effective?**  
The heat energy stored in the concrete slab is radiated throughout the room to provide a uniform warmth and thermal comfort at a lower temperature than required by other heating systems. No draughts, heat stratification or cold feet.
- Do ESFH systems require a thicker concrete slab?**  
No. There is no need to increase the slab thickness or change any structured reinforcing mesh. Unlike hydronic in slab systems that need additional thickness for water pipes. The heating cable is fixed to the reinforcing mesh within the standard slab design.
- How does the ESFH system operate?**  
Heat input to the slab is controlled by either a wall mounted air sensing thermostat or wall mounted floor sensing thermostat. When the temperature reaches the thermostat setting the power supply automatically switches off and the stored heat continues to warm the room throughout the day. The heat is topped up again during the next regulated supply period.
- Can sections of the ESFH system be isolated?**  
Yes. In fact multiple zones with independent thermostats for different rooms / areas is recommended. This gives greater control of temperature, comfort levels and more economical running costs.
- Is the ESFH system safe?**  
Yes, The outer copper sheath of the Pyrotenax heating element is earthed during installation.
- Does the ESFH system require maintenance?**  
No. The Pyrotenax ESFH system is maintenance free apart from thermostats which may require replacement at some time during the life of the building.

### Complete layout freedom

This is one system that does not interfere with your home décor plans. Availability of maximum floor space without intrusion. Invisible as no ducts, fans, consoles or vents required. Suitable for most types of floor covering including wool or synthetic carpet. Pleasantly warms cold floor coverings such as slate, ceramic tiles, vinyl tiles, cork tiles and parquetry. \*

### Unequaled health and safety

Its healthy and safe. No draughts, smoke or irritating fumes. Dust movement is minimal so the system is ideal for people who suffer from respiratory difficulties such as asthma. There is nothing to cause drowsiness, wheeziness or a heady atmosphere. Since the entire heating system is encased in the concrete floor, there is nothing potentially dangerous for children or elderly people, no burning surfaces, no fan blades.

### Perfect silence

Listen to music or have a conversation without the heater joining in. And most important, you can look forward to a good, quiet night's sleep.

### Cost effective

The Pyrotenax ESFH system takes advantage of the off peak electricity for a regulated period to store heat energy into the concrete slab which is then radiating into the room for 24 hours a day providing a cosy warmth that you deserve. Heating in each room or zone is controlled by thermostats so energy need never be wasted. ESFH integrated into energy efficient housing design will further reduce running costs.

Pyrotenax mineral insulated metal sheath copper heating cable is proven in use in Australia for over 45 years.

\* For cork tiles and parquetry care should be taken that they are laid only when the floor is completely dry.



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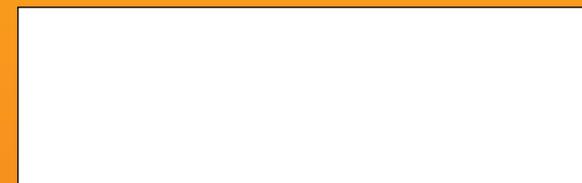
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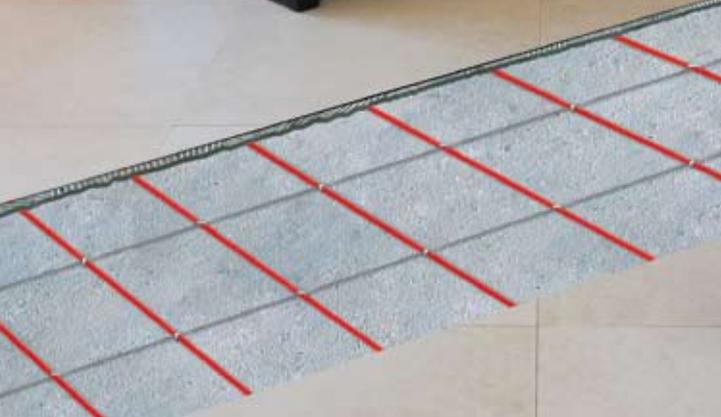
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Cosy warmth that you deserve!



safe... healthy... fume-free...

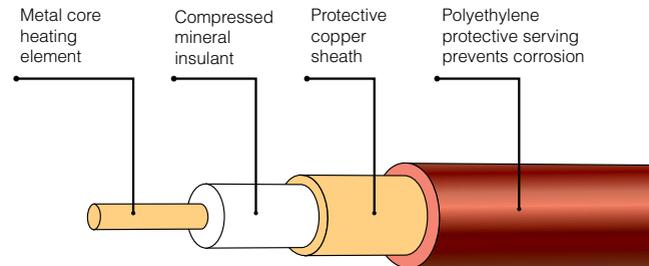
### Wonderful warmth

The heat stored inside the concrete slab is emitted from the whole surface area, giving an almost even air temperature from the floor to ceiling. Warmth is produced where it is required the most, underfoot then radiates throughout the area. Studies show that where floor level temperatures are around 16°C, people feel comfortably warm all over. When floor level temperature is lower, people feel cold even if the temperature at head level is over 21°C. Pyrotenax Electric Storage Floor Heating (ESFH) is a highly energy – efficient system, that provides a constant and comfortable room temperature. The charts show the temperature range you can expect in different seasons with the air thermostat set at 18°C.

### Amazing efficiency

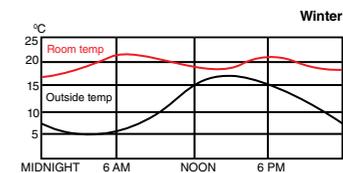
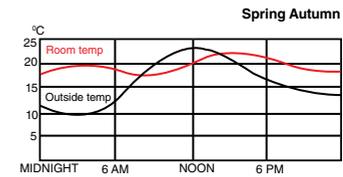
Heat that radiates from the floor level is much more efficient than heat that is forced from overhead ducts. The system can also utilize the solar energy, radiated through north facing windows, that is absorbed into the slab (particularly onto hard surfaces floor coverings). The energy efficiency of the system can be further enhanced by insulation in the ceiling and under slab with solar access integrated into the house design. This will further reduce heat loss and running costs.

### Enlarged section of heating cable



### Specifications

- Cable:** Pyrotenax mineral insulated copper sheathed heating cable, with red polyethylene sleeving.
- Cable diameter:** 4.6 to 6.7 mm.  
Slab thickness: Normally 100mm.
- Installation:** Heating cable fastened in 'S' loop formation to reinforcing steel mesh.
- Cable spacing:** Nominally 200mm between runs.



### Installation ease

No building modifications are needed. Compare this with other heating systems where plans must be made to incorporate a plant room, ductwork or flues or even increases in slab thickness.

### Economical solution

Heat input to the slab is controlled by wall-mounted or in-slab thermostats, Heating in each room or zone is controlled by a separate thermostat, so energy is utilized efficiently. The system takes advantage of low cost off-peak electricity available in most areas. When normal rate electricity is being used, the system can be regulated by a time clock. Check with your local electricity authority regarding off-peak power availability in your area. The concrete slab stores enough heat during the off-peak charge period to continue to maintain a comfortable temperature for 24 full hours. Heat storage is topped up again during the next heating period.

