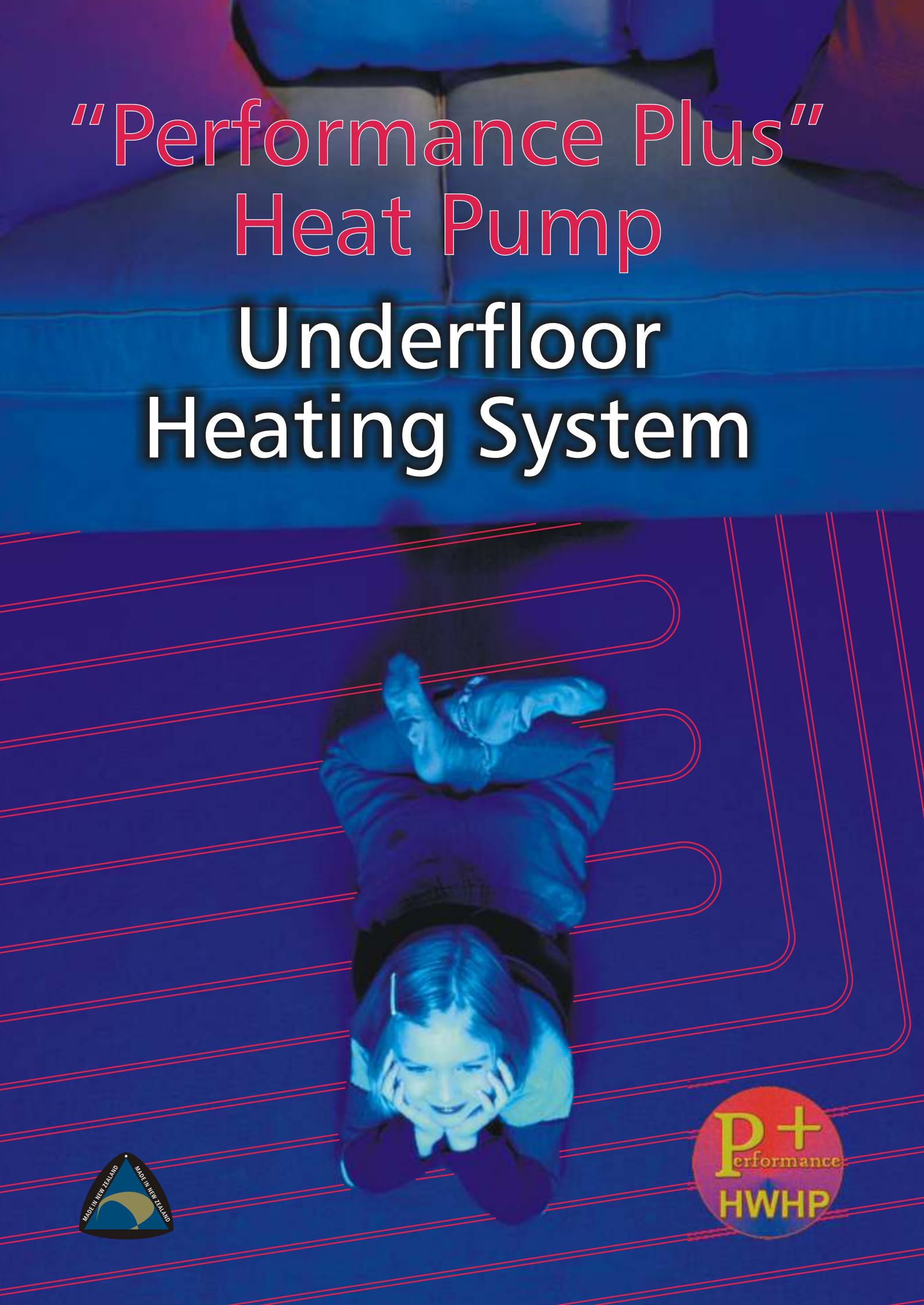
"Performance Plus" Heat Pump

Underfloor Heating System



Under-floor Heating with "Performance Plus" Heat Pumps

The most pleasant environment with the lowest running costs is essentially what hydronic under-floor heating is all about. The same constant temperature around you day and night without the worry of weather conditions and high power consumption. 'Performance Plus' heat pumps can reduce heating running costs to heat a whole house for a similar amount some households might spend to heat 1-2 rooms.

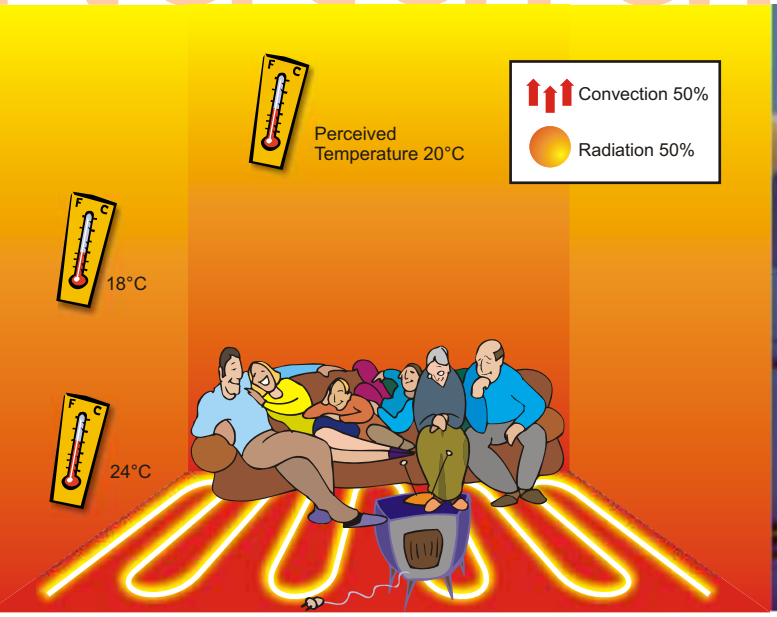
Why Hydronic Floor Heating?

Hydronic heating provides warmth by natural radiation and convection. There are no unpleasant draughts, hot spots or noises, and does not dry out the air or blow dusty air around.
Want warm feet even when you go barefoot? The under-floor system has a floor surface temperature of 22-26° C. With traditional forms of heating, temperature variations can occur. With under floor heating this does not happen as the pipe work distributes heat to the entire floor area, so there are no hot or cold spots. Separate controls for each "zone" means you can tailor the water flow for each area to suit individual room or zone requirements night & day.

Highest Efficiency

A good floor system will be capable of running water temperatures between 30-40°C. Less capable installs can require temperatures of over 60°C to produce the same environment. More energy is needed to maintain higher water temperatures. Couple lower water temperatures with the known heat pump efficiencies and you can see why "Performance Plus" heat pumps have the lowest running costs.

Natural



Economical

The Benefits of Underfloor Heating

- Natural feeling warmth all around you from head to toe.
- Quiet - You will never know it is operating
- Healthy - No dusty air particles or toxic gas fumes in the environment
- Energy Efficient - Lowest reliable running costs over any other system
- Long Life - Will still be in use by future generations
- Low Water Temperature / High Heat Transfer Specification

Under-floor Heat Pump Features

- High efficiency even in low ambient conditions.
- Versatility - Custom designed for your house with options for Domestic Hot Water and Swimming Pool Heating (Dual and Triple Applications)
- Easy to operate electronic controller with digital temperature display
- Built in refrigeration safety switches
- Electronic Reverse Cycle De-Ice Control
- Quiet Running
- Epoxy coated corrosion resistant cooling coils
- Built in drain tray
- Specifically designed for economical underfloor heating

Things to Know (Hints, Tricks & Traps)

1. Make sure the pipes for the floor are installed at 150-200 centres (150-200mm apart) or less depending on the type of flooring and insulation of the different exterior walls. 300mm centres are too far apart and often cold patches can be felt on the floor. To compensate for this some installers will run the water in the floor above 45°C, some even higher than 60°C. This is inefficient and means much higher running costs, all for the sake of a few hundred dollars on the pipes and installation costs.
2. Make sure under the slab is well insulated with thick polystyrene or equivalent and is properly drained. We want to heat your house, not any water under it. Insulating the edges of the slab is another useful point to consider.
3. A house needs several circuits, the bigger the house, the more circuits it will need. Don't make circuits larger than about 80 linear metres of pipe and instead of a single manifold, use a multiple manifold system. This will allow you to run at lower water temperatures.

HW 3300

HW 800

HW 150

HW 650

How "Performance Plus" Heat Pumps Save Money

A "Performance Plus" Underfloor Heat Pump uses electricity to operate. The heat is extracted from the ambient air, upgraded with a compressor, and then transferred to the underfloor circuit, making this a very cost-effective way to heat the whole house continuously during the winter.

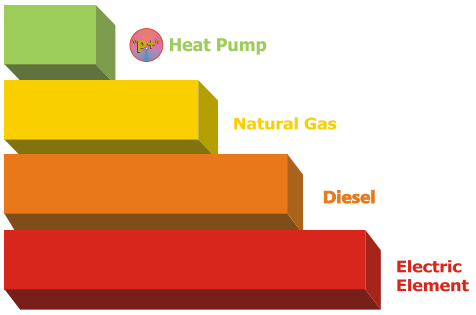
The electricity used by the heat pump does not generate heat, but moves the free heat to the underfloor system, or other heating applications, such as spa, domestic hot water or swimming pool, no matter what the weather conditions are.

Due to their high efficiency, Heat Pumps have low operating costs compared to gas and diesel burners, electric elements and even other brands of heat pumps.

At Hot Water Heat Pumps we aim:

- To provide high quality, cost efficient underfloor heating solutions, using durable, low maintenance "Performance Plus" Heat Pump technology, ensuring excellent long term value for our clients.
- To seek to reduce the serious health effects associated with high indoor humidity levels
- To promote the effective use of renewable energy through consistent design advancement and development.
- To create customer satisfaction by delivering a targeted service through a nationwide distribution channel, with a view to establish a worldwide network.

Heat Pump Cost Comparisons



warm feet

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