

Central Heating Diesel Boilers



Why Choose Central Heating?

In recent years central heating has been widely acknowledged as the most effective and efficient method of heating.

Central heating offers superior efficiency which means that your running costs will be significantly lowered. Central heating offers homeowners ongoing savings on their energy bills which quickly outweigh the initial outlay.

In the UK, Europe and Northern America, central heating is the standard method of home heating because it keeps your whole home at a comfortable temperature year round, while remaining extremely affordable.

Benefits at a Glance

Efficient

Central heating systems require much less energy to heat homes because water holds significant amounts of energy and transfers energy extremely well, resulting in economical operation and lower energy consumption in the form of much friendlier power/gas bills.

Healthy

Central heating provides your home with even, radiant heat with no cold spots. No forced air circulation means no dust or allergens are distributed making central heating the healthier choice and ideal for people who suffer from allergies.

What is Central Heating?

Central heating is a heating system that heats your home from one central point and then circulates that heat to rooms within your home.

KE KELIT Climate Control specialise in 'hydronic central heating.' This is when a central heat source, such as a diesel boiler, heats water in a discrete location within your home. For example, your garage or laundry room.

The heated water is then circulated silently through a network of pipes connected to an underfloor heating system and/or a radiator heating system. Resulting in a comfortable, energy efficient and healthy home. Central heating can also heat your hot water cylinder, providing your home with optimal levels of hot water, all year long.

Comfort

Central heating warms your whole home through silent, radiant heat delivered through underfloor heating, and or radiators. Such radiant warmth is affordable luxury when delivered through a well-designed and easy to use programmable control system.

European Quality

Although not mandatory in New Zealand our central heating systems designed in accordance with European standards provide optimised performance, reduce energy consumption and CO₂ emissions and provide ultimate climate control.



Weather Compensation

All KE KELIT Climate Control heating systems are required to be installed with a weather compensating outdoor temperature sensor.

Weather compensation is when a small temperature sensor is located on the outside of the building, on a south facing wall (coldest side of the house). This is wired to the internal controls of the heat source and information about the outside temperature is sent to the heat source controller constantly.

When the temperature changes outside the heat source responds and starts to increase or decrease the heating water temperature to compensate. This pro-active mechanism means that people inside the building won't even notice that the temperature has changed outside.

For example, when the outside temperature drops at night, more heat is lost through the walls of the building. Because the outdoor sensor detects the fall as soon as it happens, the heat source is able to raise the heating water temperature and keep the inside temperature stable. With a conventional system, the temperature is dependent on a room thermostat, which will only take effect after the inside of the building has become too hot or too cold.

Homeowner Benefits

Lower Bills

Incorporating a condensing boiler can save you up to 30% on your heating bills. With weather compensating controls, you can save up to 15% on top of this.

A Comfortable Home

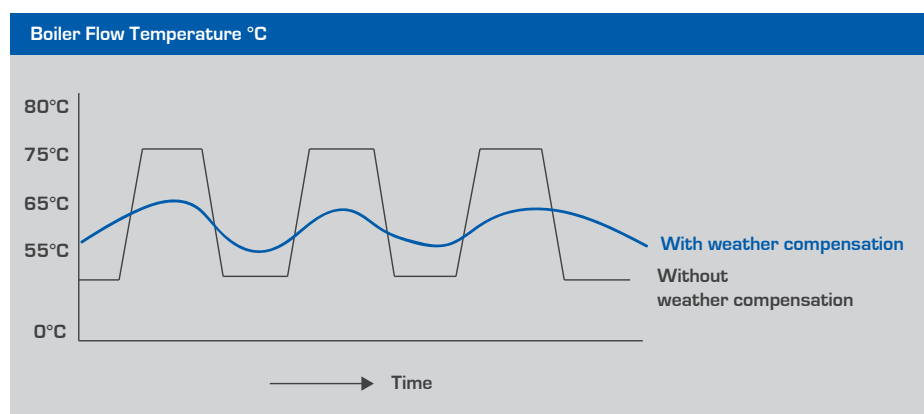
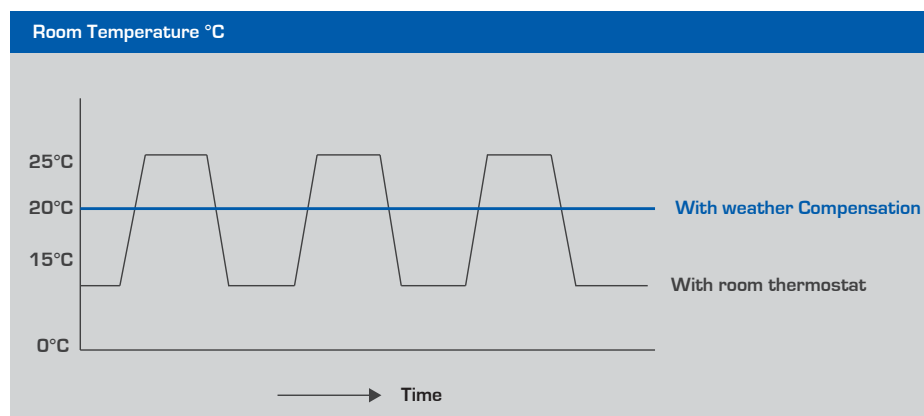
A constant temperature is maintained inside, despite the changing weather.

You Won't Notice the Changes

With central heating you won't notice the weather compensation control working, you will simply feel a very consistent and comfortable room temperature.

If radiators are incorporated into your central heating system, you may notice changes to your radiators temperature automatically changing as the outside temperature increases and decreases to maintain the desired room temperature.

Weather compensation controls work by ensuring that the boiler burns the exact amount of fuel required to match the heat lost from the building. Your house will always be warm (at the desired temperature) and will never be too hot or too cold.



Home Heating - Powered by Viessmann

Viessmann is one of the leading international manufacturers of heating systems. Founded in 1917, Viessmann has been pushing the boundaries in efficient home heating for over 100 years.

Converting fuel oil into heat, diesel condensing boilers are highly efficient. They extract nearly all of the heat contained in the flue gases, turning this into additional heating energy and therefore minimising waste. In fact, Viessmann diesel condensing boilers have an unbeaten high efficiency of 98 percent thanks to the stainless steel Inox-Radial heat exchanger. This indestructible technology brings safe and efficient operation during its long service life.

Viessmann guarantees Inox-Radial heat exchangers up to 150 kW with a ten year warranty against leaks resulting from corrosion.

The Viessmann diesel boiler is the perfect heat source for your homes hot water supply, underfloor heating system and radiator heating system.



Underfloor Heating

The main advantage of underfloor heating is its high level of performance. Radiant heat means that the warmth is concentrated where you need it most. Room temperatures higher up are usually around 2°C lower than at floor level. So it's perfect for human comfort - you won't get cold feet and you will keep a cool head!

It's a highly controllable heat too. You can make each room a separate zone, varying heat output according to the time of day and location. You'll enjoy uniform heat even in the largest rooms, with no cold spots and no draughts caused by air circulation. It's even good for furniture, with its gentler, more even heat and smaller variations in humidity!

Underfloor heating is extremely discrete. With nothing showing above floor level, it does not interfere with either your living space or your décor. This leaves you free to make the most of every square foot of your floor and wall space.



Radiator Heating

Perfectly suited for New Zealand's unpredictable weather, radiators provide high performance, rapid heat-up times and healthy, radiant heat without forcing dust allergens around your home. KE KELIT Climate Control offer a diverse and stylish range of radiators and heated towel rails from European supplier Vogel & Noot.

The main advantage of central heating with radiators is its high level of performance. Radiant heat means that the warmth is concentrated where you need it most. Radiant heat heats up the room, furniture and people in it, which creates a more comfortable and natural warmth, similar to the rays of the sun.

From traditional designs to the most modern, KE KELIT Climate Control have a vast range of radiators, that meet every need in terms of indoor comfort as well as décor requirements. With hundreds of different sizes and an extensive range of colours available, KE KELIT Climate Control have a radiator to suit every taste.



Domestic Hot Water

Demand for hot water is completely different in every household and varies according to the number of residents and their bathing or showering habits. For example, if three members of a family set off for work and school at the same time, lots of hot water needs to be continuously available for the shower in short order. Those who prefer a bath will also want to have enough hot water to fill the tub.

Viessmann hot water cylinders are pressurised systems fed directly from the cold water mains feed, eliminating the need for a cold water storage tank and allowing them to deliver hot water at mains pressure.

These hot water cylinders heat water up to six times faster than traditional element water cylinders, offering limitless amounts of hot water for your home



Air/Dirt Separators

Air and dirt separators protect the boilers, pumps and fittings from damage caused by the deposit of dirt particles, increase comfort and improve the yield. Air and dirt separators also offer benefits in the event of application in old systems or when an open system is converted to a closed system.

Systems in which the water is properly de-aerated and free of contamination are more efficient, produce less noise and have a longer service life. Flamco's range of products use proven and innovative technology to remove air and solid particles from the water.



System Protection

ADEY's advanced chemical range has been created to provide a solution for the maintenance and protection of central heating systems.

With a dual biocide formulation, MC10+ tackles algae and biological contamination with ease. Extra concentrated, containing two active ingredients, it's more effective than single biocide products when it comes to preventing the problems that arise in underfloor heating.

One 500ml bottle will provide effective long-term treatment for 100 litres. MC10+ can also be used to provide sanitisation when commissioning or cleansing a heating system.

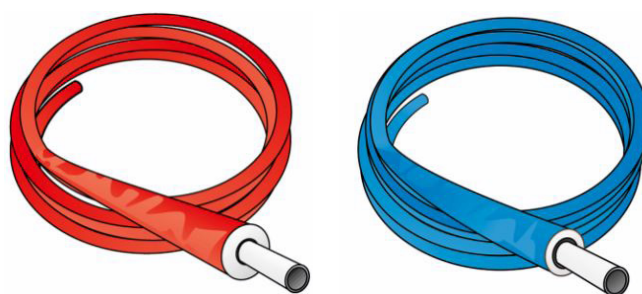


Piping System

KE KELIT's KELOX pipe is one of the highest-quality European piping systems available in New Zealand.

Your heating system will be connected together using KELOX Multilayer pipe. KELOX Multilayer pipes are low weight and are impermeable to water vapour and oxygen. Available as naked pipe or soft foam insulated pipe coils (option of 4mm, 9mm or 13mm insulated coils). Insulated pipes offer resistance to heat loss and improve the efficiency of your heating system.

KELOX Multilayer pipe comes with a 25 year warranty. Please contact KE KELIT for more details on this warranty.



Design Approach

Choosing a Central Heating System

The first step is to have a conversation about your expectations and what's important to you. During this process, the central heating system including the heat source that is best suited to you, your family and your home will become clear.

Central Heating Costs

Once this initial consultation is completed you will receive in writing a summary of the central heating system discussed that is most suited to you, estimated operating costs and estimated system costs.

Bringing Your Heating System to Life

Depending on the requirements of your home and system we will then proceed to either a full design with one of our design engineers or put you in touch with an installer who can go through the design process with you.

Design Standards

KE KELIT CLIMATE CONTROL designs are always completed in accordance with the following standards to provide assurance that the performance outputs of the system will be satisfied.

- Radiator heating design with VDI 6030
- Heat load in accordance with EN 12831
- Underfloor heating design with EN 1264
- Pipe network with EnEv 2009

It is recommended that when designing radiator heating systems the use of sophisticated thermal simulation software and adherence to these standards is incorporated to ensure correct performance

Design Process

The KE KELIT Climate Control team of design engineers will require a set of house plans. This won't be a problem for new builds, however accurate plans for existing homes can be a bit harder to come by.

In these instances when accurate plans are not available we will arrange with you a time that is convenient to come and measure up your home. During this visit we capture specific details about your home that are required to complete the design process.

Once we have your house plans, we can start the four-step design process, as pictured below. The whole design process is completed in accordance with European central heating standards and once completed all design data and verification reports are available in addition to system design and installation drawings.

Contact KE KELIT Climate Control or your local installer to start this process and become one step closer to achieving total home comfort: climatecontrol@kekelit.co.nz





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