









Contents

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What is warm water central heating?

Hydronic central heating systems utilise natural convection and radiant heating via wall-mounted radiators or underfloor pipes. Heat is generated centrally by boilers or air-to-water heat pumps and distributed through a network of small pipes, minimizing heat loss. These systems operate silently, provide even heat distribution, and eliminate drafts and stratification.

They offer various heat source options and can integrate with hot water systems. With efficient heat transfer and long component life, they reduce energy demands and running costs. Comparatively, they offer greater comfort, increased efficiencies leading to lower power bills, and lower transmission of dust and allergens than forced air ducted systems.

Tailored to suit your home and lifestyle

Heat Source



The heat source, usually a boiler or air-to-water heat pump, is the core of the system. Water is heated in the heat source and then pushed through a closed network of pipes to the emitters to warm the home.

Emitters



The emitters are responsible for releasing heat into the room and warming the home, and they typically include underfloor, radiators and heated towel rails for bathroom comfort.

Distribution



Insulated pipes, with a 50+year lifespan, distribute heated water to emitters. Underfloor systems use manifolds to evenly distribute water through pipes embedded in the construction slab.

Controls



The brains of the system, typically installed in a central location, giving customers control over their heating system. They monitor the room temperature and communicate with the heat source.



this enjoyable. We should

66 Winter has never been





Central Heating Benefits

Central heating provides consistent warmth throughout the home and is tailored to suit your home and your lifestyle – no two homes are the same!





Comfortable

Hydronic central heating offers unparalleled comfort, evenly heating your entire home for enjoyment throughout the winter.



Convenient

Automated heating and cooling systems make living easier, a key reason for choosing hydronic central heating. Often, it's a set-and-forget scenario, but app-based control systems offer added flexibility.



Healthy

Hydronic central heating provides consistent warmth, benefiting respiratory health by avoiding the circulation of dust or allergens, thus fostering a healthier home environment.



Flexible & Future Proof

Select the right heat sources and distribution methods for cost-effective performance suited to your lifestyle. Invest in adaptable hydronic central heating for flexible power options. Don't overlook the opportunity to install underfloor pipes during new home construction.



Silent

Underfloor and radiator heating systems operate silently, ensuring that hydronic central heating offers a peaceful and enjoyable environment for relaxation, socializing, and daily life, free from the noise and disruptions caused by forced air.



Efficient & Effective

Distributing heat in smaller increments across a home ensures efficiency and consistent temperatures. Water transfers energy more efficiently than air, providing enhanced warmth through radiant methods like radiators, rather than air-based convection heating.





Why Central Heating New Zealand

• Extensive Experience and Expertise:

With a rich history of involvement in over 13,000 central heating systems throughout New Zealand, Central Heating New Zealand brings unparalleled expertise to ensure optimal comfort and performance in your home. Their experienced engineering and technical teams understand the local climate, building regulations, and customer preferences, guaranteeing a heating system tailored to your needs.

Central Heating New Zealand provides detailed design documentation and drawings, making the installation and maintenance of your central heating system seamless. From schematics to pipe layouts and electrical drawings, their comprehensive package

maximises efficiency, minimising potential issues in

• Comprehensive Design Documentation:

your home.

• Guaranteed System Performance:

One of the stand out benefits of choosing
Central Heating New Zealand designed systems
is the guarantee of system performance. Central
Heating New Zealand stands behind the performance
of their systems, ensuring they meet or exceed
industry standards. With their commitment to
quality and reliability, you can have peace of mind
knowing you've invested in a high-performing
heating solution.

• Rigorous Research and Development:

Central Heating New Zealand conducts thorough testing and refinement in their Research and Development (R&D) department. This ensures that only tried and tested products are integrated into your central heating system. By prioritizing product quality and performance, Central Heating New Zealand consistently delivers reliable and efficient heating solutions for your home.

• Extended Warranties:

Central Heating New Zealand prioritise quality and believe that the products we import and install in New Zealand homes embody the essence of excellence. We offer generous warranties on crucial components, reflecting our belief in the durability and dependability of their products.

• Decades of Industry Experience:

With over 20 years of experience in the central heating industry, Central Heating New Zealand has built a reputation for excellence and reliability. Their longevity signifies their ability to adapt to changing technologies and meet the unique needs of homeowners like you. When you choose Central Heating New Zealand, you partner with experts who understand the importance of creating a comfortable and energy-efficient home.

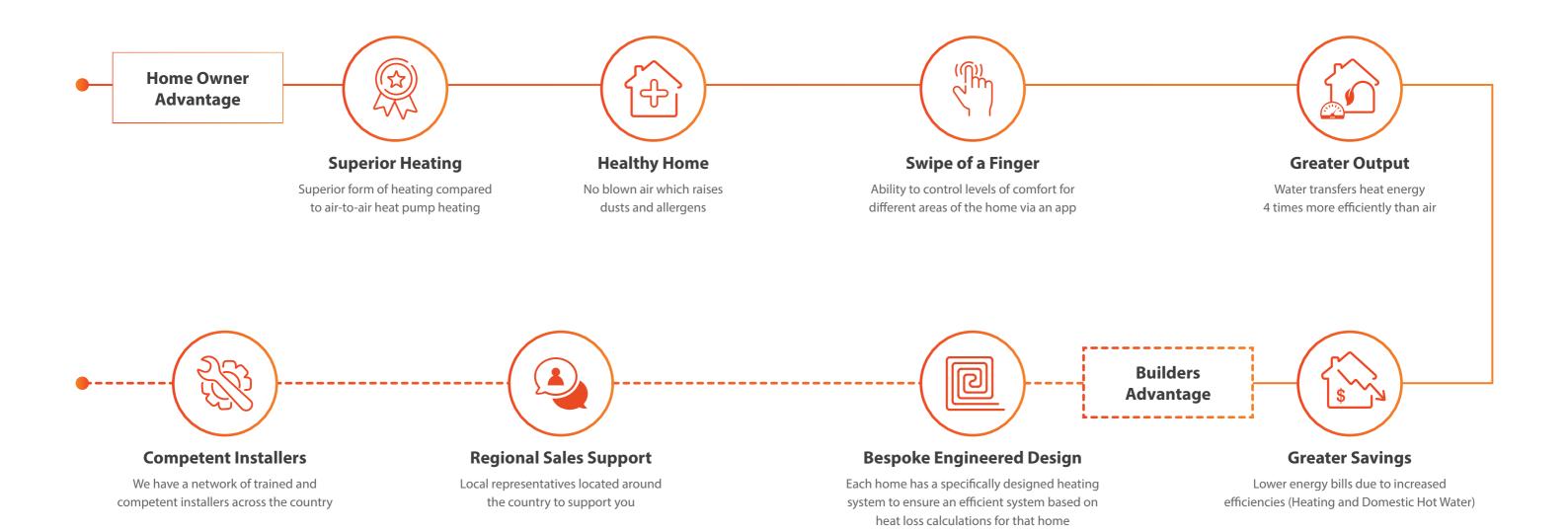
By choosing Central Heating New Zealand, you gain access to extensive experience, meticulous design, guaranteed system performance, rigorous testing, long-term warranties, and a wealth of industry knowledge.

These factors collectively make Central Heating New Zealand the ideal choice for homeowners seeking reliable and efficient central heating solutions for their homes.



Advantages

Central heating systems offer a distinct advantage for Builders by providing consistent warmth throughout, ensuring comfort for occupants regardless of the structure's size or layout.







How does our system compare in the market?

Choosing the perfect heating solution for your home can be daunting, but hydronic central heating stands out as a particularly favourable choice. Comparing hydronic central heating, ducted central heating, and high wall heat pumps, reveals that hydronic heating advantages make it especially appealing.

Hydronic central heating delivers whole-home warmth through radiant heat, circulating hot water through pipes beneath the floor or within walls. This efficient system ensures consistent, gentle warmth and in some cases cooling without drafts and noise. It's ideal for those seeking whole-home, silent, efficient heating with customisable zoning, allowing different areas of your home to be heated to different temperatures and the power to control your heating remotely on an app.

In contrast, ducted central heating uses a network of large ducts to distribute warm air throughout the home. While it offers heating and cooling functionalities, it falls short in comfort compared to hydronic systems. Forced air can create drafts which spread dust and allergens, and they also provide uneven heating to your home.

High wall or ducted heat pumps, extract heat from the air outside to warm an indoor area. However, they only heat the room where the unit is installed, leaving the rest of the house cold. Their efficiency can also vary with outdoor temperatures, leading to higher operating costs in extreme weather.

Ultimately, hydronic central heating stands out for its ability to provide consistent, silent, and comfortable whole-home warmth. Its customisable zoning ensures each part of your home is perfectly heated. While ducted systems and high wall heat pumps have their merits, hydronic central heating offers superior comfort, efficiency, and control. By considering factors such as budget, space constraints, and desired comfort levels, homeowners can make an informed decision ensuring year-round comfort and efficiency.

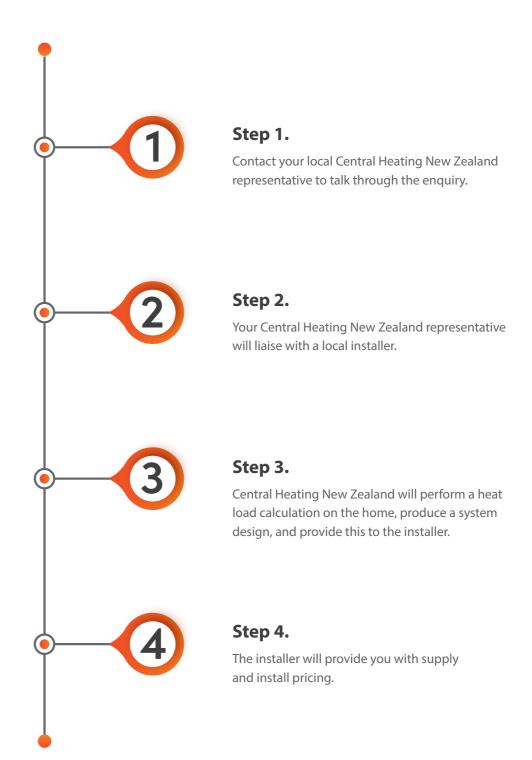
Comparables

	Hydronic Central Heating	Ducted Central Heating	High Wall Heat Pump*
Efficiency	****	***	***
Install Cost**	\$20,000 - 35,000	\$15,000 - 25,000	\$7,500 - 11,000
Running Cost***	\$1,500 - 2,000/year	\$2,000 - 2,500/year	\$2,200 - 2,700/year
Heating Comfort	✓	✓	✓
Cooling Comfort	✓	✓	✓
Delivery Method	Radiant Heating	Forced Air Heating	Forced Air Heating
Domestic Hot Water	✓	x	x
Noise Level (Indoor)	None	Medium	High
Healthy	****	**	**
Whole Home Heating	****	***	*

 $[\]bigstar$ More stars indicate better quality, with five stars being excellent and one star being poor

Your Journey

Once you've thoroughly evaluated the suitable central heating systems for your project, feel free to reach out to our approachable sales team to delve into further discussions.



^{*} Based on the installation of 3 x 5kW units

^{**} Based on new build 200m² home

^{***} Based on \$0.25/kWh for electricity and 30,000/kWh/year of heating and cooling load









Chofu Heat Pump

Experience unparalleled efficiency and eco-friendliness with Air-to-Water heat pumps for your next project. Air-to-Water heat pumps (or commonly known as the hydronic heat pump) efficiently extract energy from the ambient air, even in temperatures as cold as -20°C, and utilise it to provide warmed or chilled water for heating or cooling homes. The Chofu heat pump offered by Central Heating New Zealand have demonstrated their quality, with units installed nationwide since 2014, aligned with the high standards expected from a Japanese manufacturer.

If you want to reduce your carbon footprint and increase your central heating energy efficiency, an Air-to-Water heat pump is an absolute must. It's a simple and eco-friendly choice for your home. Air-to-Water heat pumps are electrical appliances that get the most value from a unit of electricity.

Hydronic heat pumps are suitable for projects throughout New Zealand. They are compatible with radiators or underfloor heating systems and can be paired with underfloor or fan coils to provide cooling solutions. To enhance their versatility, these heat pumps can be combined with a 200L or 300L hot water cylinder for an effective and efficient domestic hot water solution.



- 16kW, 10kW, and 6kW Chofu Air-to-Water heat pump

Air-to-Water System Benefits



Greater Output

For every kilowatt used converts to 3–4 kilowatt output of heat into your home



High Quality

Tried and tested high Japanese manufacturing quality



Heating and Cooling

Two systems in one, increasing energy efficiency and value in one unit



Environmental

Keeping harmful refrigerants outside of the home reducing the risk of leaks











Gas Boilers

Gas boilers stand out as the most prevalent heat source for central heating systems globally, and the exceptional performance and efficiency of modern condensing gas boilers make them an ideal choice for New Zealand home heating. The trusted brand Rinnai, is synonymous with reliability in New Zealand, and Central Heating New Zealand takes pride in offering the Rinnai range to power our central heating systems.

Ideal for projects in the North Island, gas boilers capitalise on the economical and abundant supply of natural gas. Suited for home heating through radiators or underfloor pipes, combi models can also efficiently provide hot tap water from a single compact machine.

All residential models are wall hung, out-of-sight but within reach when needed. They are capable of running in extremely cold conditions. All gas boilers have a very low noise output and flued to the outside of the house.

While all boilers can be connected to a hot water cylinder for domestic hot water production, combi (short for combination) boilers heat and store hot water on their own. Because of their maximum water flow capacity, they are best suited to smaller properties.



Gas Boiler System Benefits



Greater Output

High output for compact size that can fit in small or large homes



Developed technology

Sophisticated and developed technology even in the coldest conditions



Adaptable

Various models available for projects such as condensing, standard efficiency and combination boilers



Cost Effective

Low capital cost and affordable running cost, especially when access to reticulated gas is available





Diesel Boilers

Central Heating New Zealand offers a wide range of different diesel boilers. Our design engineers and sales people will work with you to determine which model suits your heating needs. The Enviromax Systempac Condensing boiler for outdoor installation features a corrosion resistant, weatherproof and fully insulated casing that houses the boiler and required accessories. It includes an integral flue, a hydraulic group and frost thermostat.

For indoor installations, the System Boiler and System Condensing boilers are available. These boilers' compact sizes make them ideal for placement in the home without compromising space. The System Condensing Boiler, a High Efficiency model, reaches up to 98% efficiency compared to the 90% efficiency of Standard Efficiency boilers.

These floor standing boilers are very quiet (the most quiet on the market), compact and highly efficient. They can either fit easily in the home (they are smaller than a washing machine) or they can go outside. Indoor models typically go in an attached garage, laundry or cupboard. Both indoor and outdoor models are externally flued and require the installation of a fuel supply tank outside the home.



Firebird Environmax and Systempac New Zealand Condensing Boilers

Diesel Boiler System Benefits



Greater Outputs

Various indoor and outdoor models with a range of high output



Cost Effective

Low

Running

Cost

Up to 98% efficient and 2-4 times more efficient that modern diesel cars



Choice of Emitter

Adaptable application makes it ideal for radiators or underfloor heating

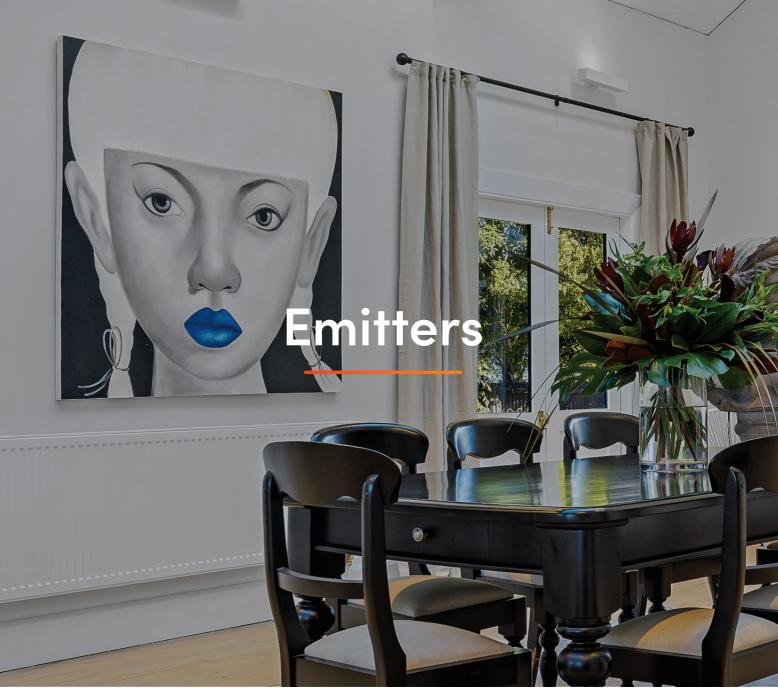


Developed technology

The quietest diesel boiler on the market





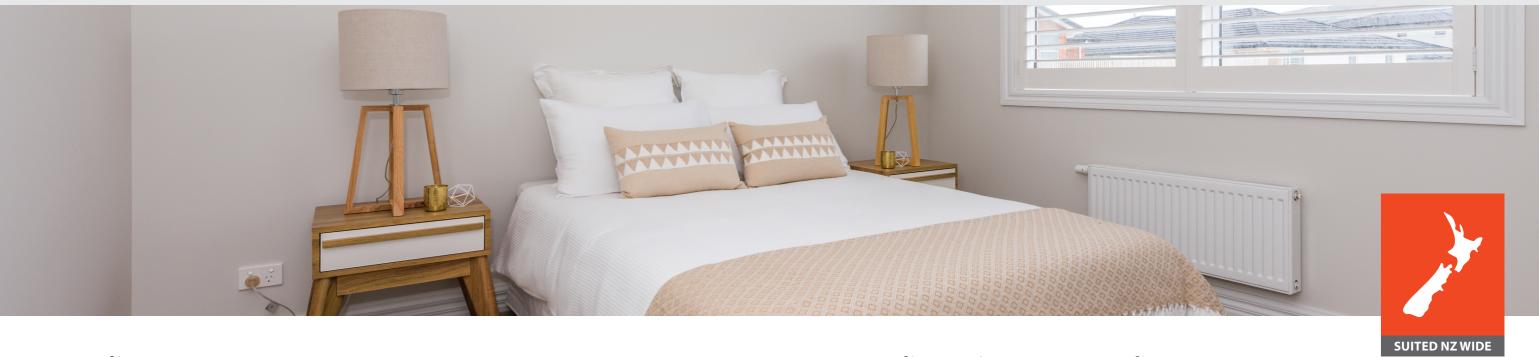


Emitters are used as a vital conduit for releasing heat from the heat source into the rooms. Hydronic central heating systems offer versatility by accommodating various heat emission systems, enabling customisation based on the unique requirements of each project.

Standard options include inslab underfloor heating and wall-mounted steel panel radiators. However, the flexibility of these systems extends to other options, which can be explored in the system enhancements.

These alternative choices can complement the in-slab underfloor and radiator system or even replace all or parts of the system, providing tailored solutions to meet specific project needs.





Radiators

Steel panel radiators are an efficient and effective way to heat the home, the modern steel panel radiator featuring water filled panels outside internal convector fins maximise the heating capacity available from the wall space obstruction.

Radiators can be positioned throughout the home to ensure heat is delivered evenly to all corners.

Radiators offer the ability for the homes heating to be responsive to changes of weather and can be turned up or down depending on the needs of the home throughout the day.

Central Heating New Zealand designs each radiator system to be the most efficient as possible given your home's layout and your heating needs. To do this, there are important factors to keep in mind when designing each radiator central heating system. Where possible radiators should be positioned to use up wall space that wouldn't otherwise be used for example behind a door or under a window.

When designed correctly, often a system will be capable of achieving a higher than recommended energy output, even at extremely low outside temperatures.



Type 21 and Type 22 steel panel radiator

Radiator System Benefits



Orientation to Suit

Vertical and Horizontal radiator models available to suit your project requirements



Developed Technology

Radiators are silent making it more enjoyable for relaxing and socialising



No Forced Air

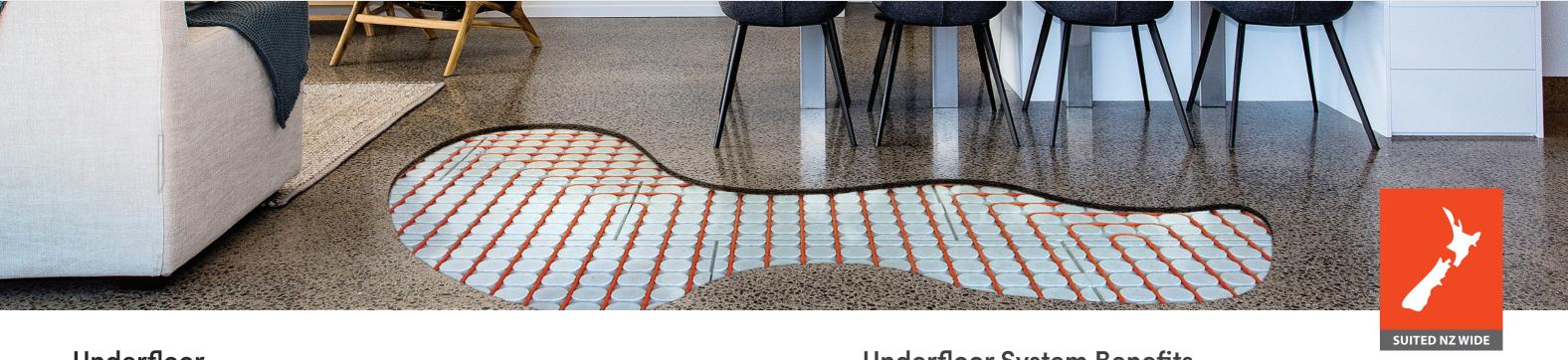
Convection radiant heat making it healthier with no dust movement



Steel Panels

High quality steel panel radiators providing maximised heating capacity





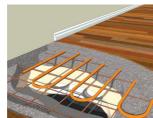
Underfloor

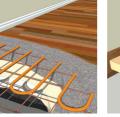
Underfloor heating is considered the most luxurious form of heating. By heating large areas of the floor, heating to the home and its occupants is delivered radiantly without creating noise or draughts.

Warm water underfloor heating achieves this high level of comfort with no aesthetic impact on the home. As the system is integrated into the floor it is invisible allowing heating to effectively be provided – even to spaces with limited wall space and large amounts of glazing.

Underfloor heating systems are integrated in the structural floor of the home as this is the most cost effective installation method and is best paired with floor surfaces that promote the effective and efficient release of heat, for example polished concrete, tiles, vinyl, and thin engineered timber.

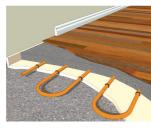
Central Heating New Zealand provides four main types of warm water underfloor central heating; Kiwi Inslab Method, Spreader Plates, EzyMix Screed Floor or VarioComp Underfloor Heating. A team of design engineers will work with you to determine which method is right for your heating needs and house's structure.





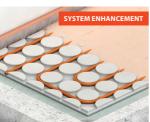


 Inslab Underfloor Heating Spreader Plates Underfloor





EzyMix Underfloor Heating



VarioComp Underfloor Heating

Underfloor System Benefits



Heating and Cooling

Two systems in one, increasing energy efficiency and value in one unit





No Forced Air

Convection radiant heat making it healthier with no dust movement





Environmental

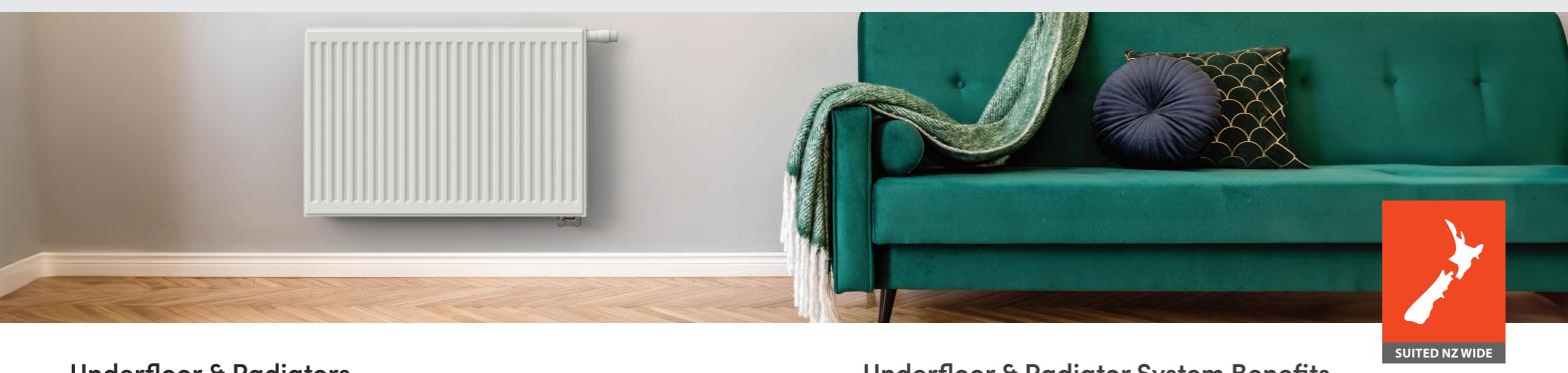
Better for your respiratory system as radiant heat doesn't blow dust or allergies around



Developed Technology

Radiators are silent making it more enjoyable for relaxing and socialising





Underfloor & Radiators

For some projects just underfloor heating or radiators alone isn't suitable and a combination of these is required. Typical examples of this are to use underfloor heating in the living spaces and bathrooms as they need heating for more hours of the day and having radiators installed in the bedrooms where the temperatures can be changed depending on the use of the room.

The combination of these systems can be used in many ways to suit the use, style, and construction of the home to maximise comfort and flexibility of the system.

Underfloor heating systems are integrated in the structural floor of the home as this is the most cost effective installation method and is best paired with floor surfaces that promote the effective and efficient release of heat, for example polished concrete, tiles, vinyl, and thin engineered timber.

Radiators can be positioned throughout the home to ensure heat is delivered evenly to all corners. Radiators offer the ability for the homes heating to be responsive to changes of weather and can be turned up or down depending on the needs of the home throughout the day.



Underfloor & Radiator System Benefits



No Forced Air

Convection radiant heat making it healthier with no dust movement



Heating and Cooling

Two systems in one, increasing energy efficiency and value in one unit



Environmental

Better for your respiratory system as radiant heat doesn't blow dust or allergies around



Developed Technology

Radiators are silent making it more enjoyable for relaxing and socialising









Domestic Hot Water

Unlike many other methods of heating the home, central heating systems can provide space heating and hot water for baths, showers and the like. There are two ways in which a warm water central heating system can service a domestic hot water supply.

- 1. Combination boilers, suitable for homes with up to two bathrooms, heat water for the central heating system as well as additional water, either produced instantaneously or stored in the boiler, for domestic hot water use.
- 2. System boilers or hydronic heat pumps use the same heated water which is pumped around the central heating system to indirectly heat domestic hot water via a heat exchange coil in the hot water cylinder.

In a typical household, the performance is so good that when using a separate cylinder, the boiler only needs to heat the domestic hot water for an hour in the morning and an hour in the evening. These heating times and the stored water temperature can be adjusted easily to suit any household or lifestyle.

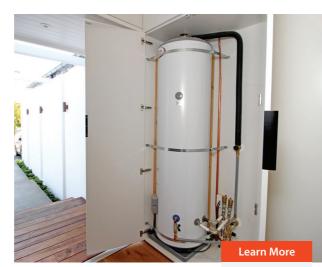
Hot Water Cylinders

Central Heating New Zealand distributes Megaflo hot water cylinders. They are made of duplex stainless steel which offers superior resistance to corrosion, especially in aggressive water areas. Coupled with state of the art automated welding techniques and post weld

processes, duplex ensures the longest possible working life for every cylinder.

Features of Hot Water Cylinders:

- · Optional backup 3kW electric element
- · Unique "coil in coil" heat exchanger
- 50mm thick insulation means minimal heat loss
- Indirect thermostat and over temperature thermal cut-out for boiler connection and control



Multiple options available tailored to suit your project requirements.

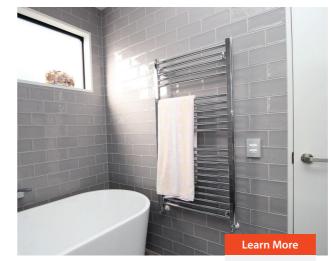


Towel Rails

Heated towel rails can be easily added to a central heating system and a range of colours and styles are available. Towel rails can be added to the bathrooms of the home and will ensure the towels are warm and dry, the heating of these are efficient and effective central heating system will reduce the operating costs. For summer heating of the towel rails, electrical elements can easily be integrated to ensure year round warmth.

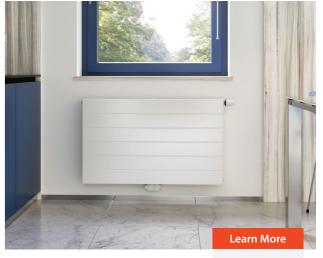
Korado Radiator

Upgrade your radiator system to use the modern and sleek looking Korado Line Radiators. These radiators have a unique style and are available from stock to improve the aesthetic of a radiator central heating system.



Multiple options available tailored to suit your project requirements.





Multiple sizes available tailored to suit your project requirements.





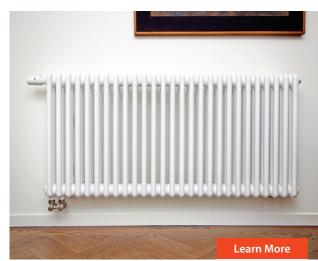


Multicolonna Radiator

Upgrade your radiator system to use the stylish, retro column DeLonghi Multicolonna Radiators. These radiators can be supplied in a wide range of sizes and styles to suit the space and aesthetic of any project.

Arroll

Upgrade a radiator system to use the traditional styled Arroll Radiators. These elegant radiators are available in a wide range of styles, colours and finishes and are a great option for new or existing traditional styled construction projects.



Multiple sizes available tailored to suit your project requirements.



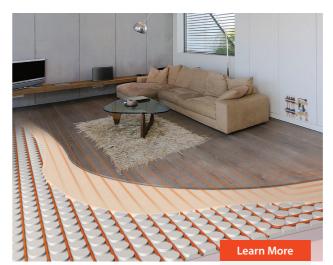


Multiple options available tailored to suit your project requirements.



VarioComp

The VarioComp system is a lightweight 20mm thick underfloor heating system that is installed over new or existing structural floors like concrete or timber floor structures and will allow the use of silent and discrete floor heating and cooling system to be easily integrated into the project. With the VarioComp system having a much lower thermal mass than other types of underfloor heating it can respond more quickly to the demands in the home.

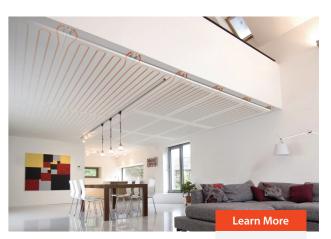


Tailored to suit your project requirements.



ModuleCeiling

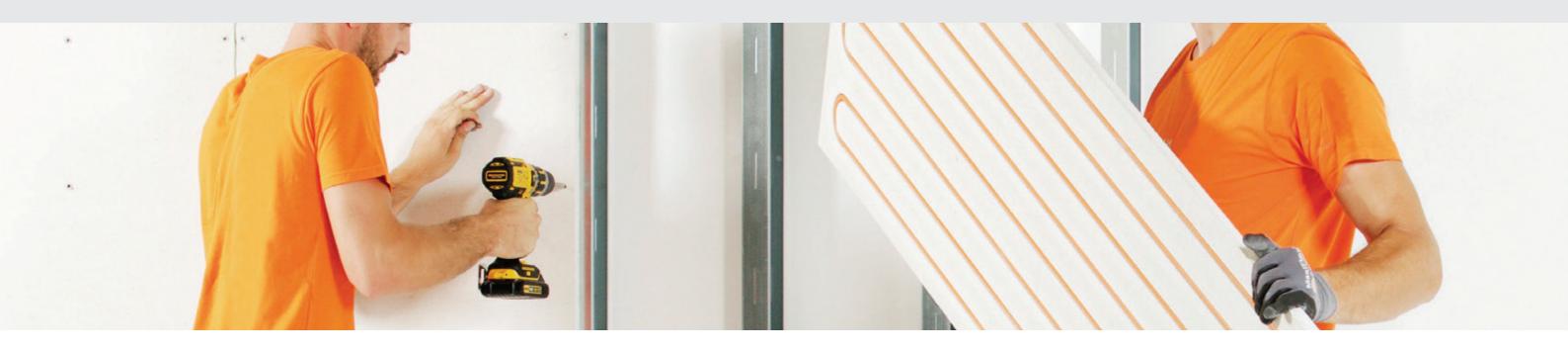
ModuleCeiling Panels are a gypsum panel of 18mm thickness that includes integrated pipes to allow the finished ceiling surface to provide heating or cooling of the entire home or certain rooms. Similar to the underfloor system these panels allow an invisible heating or cooling system to be created. Perforated Acoustic Module Panels are also available and cover 4 functions; a ceiling lining, an acoustic aid, heating and cooling (it's an all in one panel). Central Heating New Zealand's engineers calculate the required surface area to heat and cool the building and can advise on practical installation issues.



Tailored to suit your project requirements.

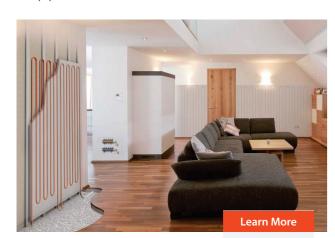






ModuleWall

ModuleWall Panels are a gypsum panel of 18mm thickness that includes integrated pipes to allow the finished wall surface to provide heating or cooling of the entire home or certain rooms. Similar to underfloor system these panels allow an invisible heating or cooling system to be created. The ModuleWalls are attached as a drywall construction to metal or wooden support structures and the pipes are already integrated in the rear of the gypsum fibre boards. Light switches and power sockets can easily be planned for and simple pipe locating tools enables picture hanging between the pipes.

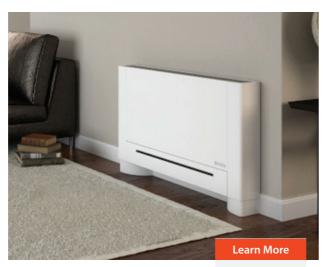


Multiple sizes available tailored to suit your project requirements.



Fan Coils

Fan Coils are similar to the air conditioning system indoor units we commonly associate with heat pumps in New Zealand. These units can be connected into the central heating system and used with warmed or chilled water to provide heating or cooling to a space. These units can either be used on their own or in combination with radiators or underfloor heating in the same space. Fan Coils are thermostatically controlled and can automatically select the fan speed to reduce disturbance in the space.



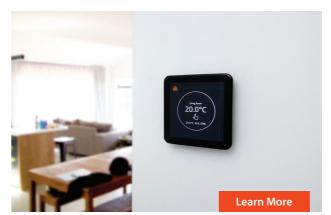
Multiple options available tailored to suit your project requirements.



Underfloor Cooling

Central Heating New Zealand is renowned for being an early adopter of new technology and techniques, we offered underfloor heating systems to the market 10 years before they became popular and we have done the same with radiant cooling.

In 2020 after extensive research and development, Central Heating New Zealand launched New Zealand's first in-slab cooling option. Heat pump powered underfloor heating systems can also be used to provide a level of cooling of the home and we developed the control system required to manage this efficiently and effectively.



Multiple options available tailored to suit your project requirements.



Smart Controllers

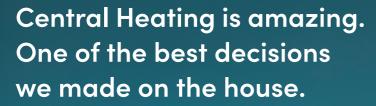
Smart heating controls such as the Smart One Controller or Google Nest 3 allow you to manage your heating remotely from a computer, tablet or smart phone. One clear advantage of a smart heating control system is that you can make changes remotely if your plans change – for example, you can change the time that your heating comes on if it turns out you will be home sooner or later than you thought. Other features such as tracking your energy use and monitoring tenants or holiday home use are available.



Multiple options available tailored to suit your project requirements.







— Richard Markham-Barrett —



System Design Example

In the realm of building, Central Heating New Zealand stands out as the premier choice for customised heating solutions. As the country's leading experts in central heating, we tailor our offerings to perfectly complement any project.

With our expertise, you can ensure exceptional warmth and comfort for residents while differentiating your properties in the market. By partnering with Central Heating New Zealand, housing projects receive not just heat, but a hallmark of quality and innovation that sets them apart from the rest.





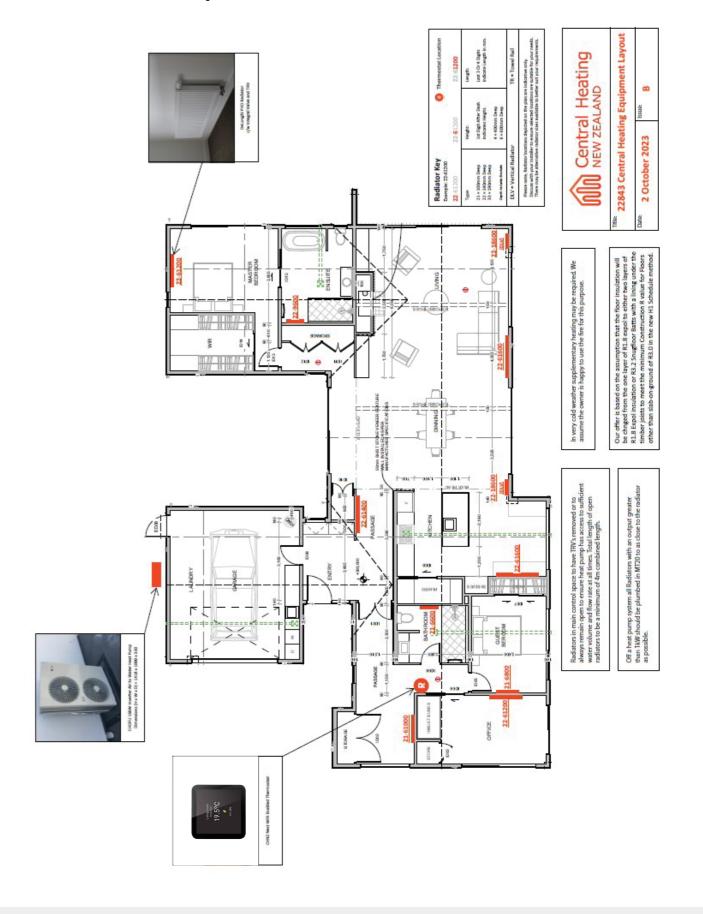


For all installations of radiator systems, we provide clear equipment layout plans to ensure full visibility to all stakeholders of the locations of radiators, towel rails, heat sources, controls and hot water cylinders if required. Our design engineering team works hand-inhand with the installer to guarantee optimal warmth and aesthetic appeal in every home. Say farewell to complexities and hello to effortless warmth.

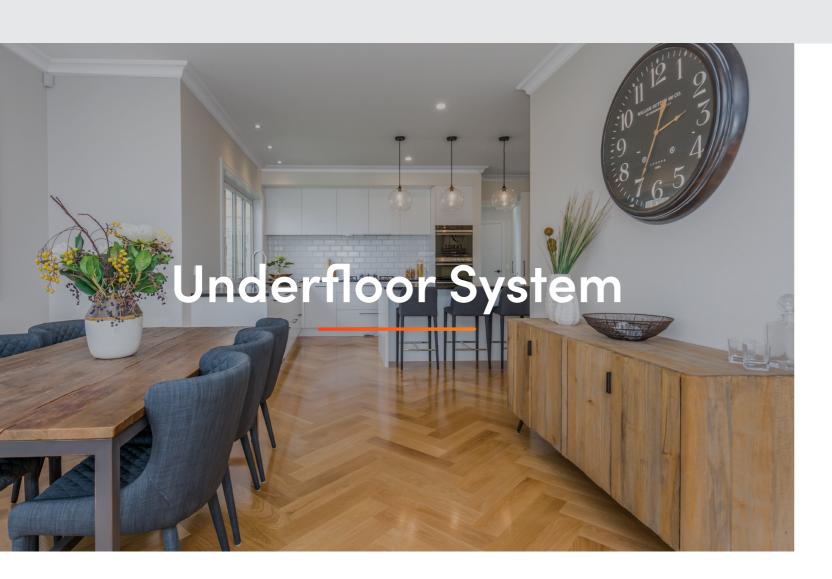
Products in System



Radiator Example:







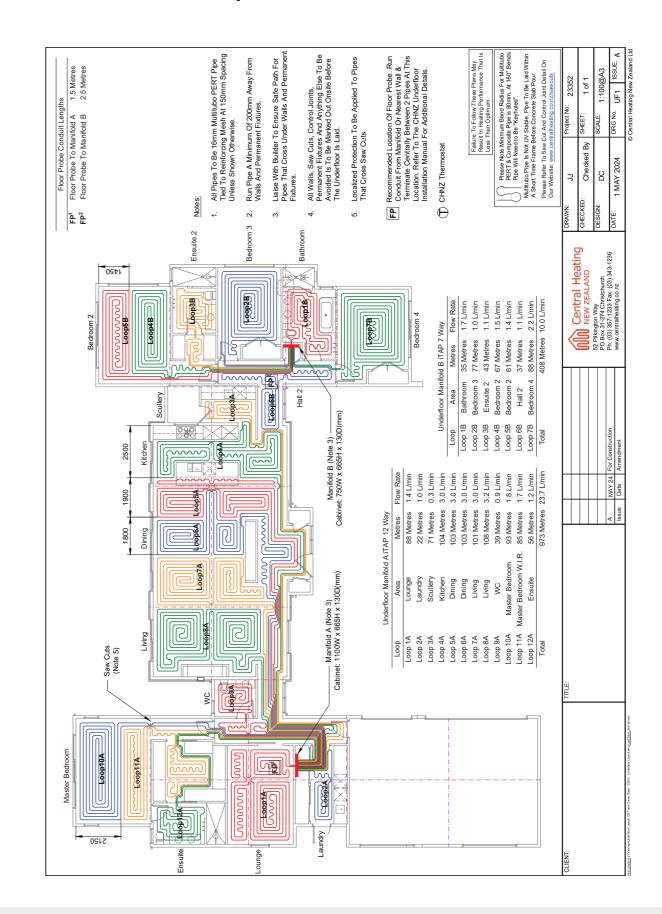
For underfloor systems we specialise in crafting custom loop design drawings tailored to each home, guaranteeing maximum efficiency and ease of installation for the installer. Our seamless process

and ability to adjust the flow and energy levels within each loop, ensures that every room is comfortably heated, from cosy bedrooms to spacious living areas.

Products in System



Underfloor Example:



0800 357 1233 | info@centralheating.co.nz | centralheating.co.nz

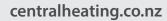


Working with us

- Support from start to finish
- Bespoke heating and cooling designs from in-house Engineers
- Marketing material and support
- Expert knowledge with more than 13,000 central heating installations New Zealand wide
- Invisible, silent, healthy and efficient solutions







info@centralheating.co.nz | 0800 357 1233



















