



# Your Guide to Heating Your New Build Home

#ThinkHeatingThinkGrant

Self Building | Building Regulations | Efficient Heating



# Comfortable, efficient & affordable heating for your new build

At Grant we understand the importance of choosing the right heating system for your new home, to suit your requirements and keep you and your family warm and comfortable for many years to come.

We also recognise that selecting the right system can be a daunting process. We have developed this guide to help you on your journey by outlining the specific products you need to heat your new build home.



Pictured: Grant Aeron R290 4kW air to water air source heat pump

**Start your journey**  
Send your planning drawings  
to our technical specialists at  
[heatpump@grant.ie](mailto:heatpump@grant.ie)







## Reliability & efficiency

It is important to start planning your heating from the out-set as every home has different requirements. Reliability and efficiency are key priorities; together they can help keep your heating bills down whilst delivering maximum comfort. This can help save you time and money in the long run.

Homeowners should consider their current and future requirements along with their preferred radiators, underfloor heating or use of both to heat individual rooms. This can affect the choice of heat source that drives the system.

With a growing focus on sustainability, carbon reduction, and reducing environmental impact, incorporating renewable energy sources into the home heating design is important and can help to future-proof the home.

## Free Home Heating Design Process

-  01. Heat Loss Calculations
-  02. Sizing Your Heat Pump & Hot Water Cylinder
-  03. Selecting Underfloor Heating, Aluminium Radiators or Both and Temperature Controls
-  04. Quotations
-  05. Ensuring Compliance
-  06. Engaging Your Installer
-  07. Commissioning Your System
-  08. Distribution & Aftercare Service



# The Journey



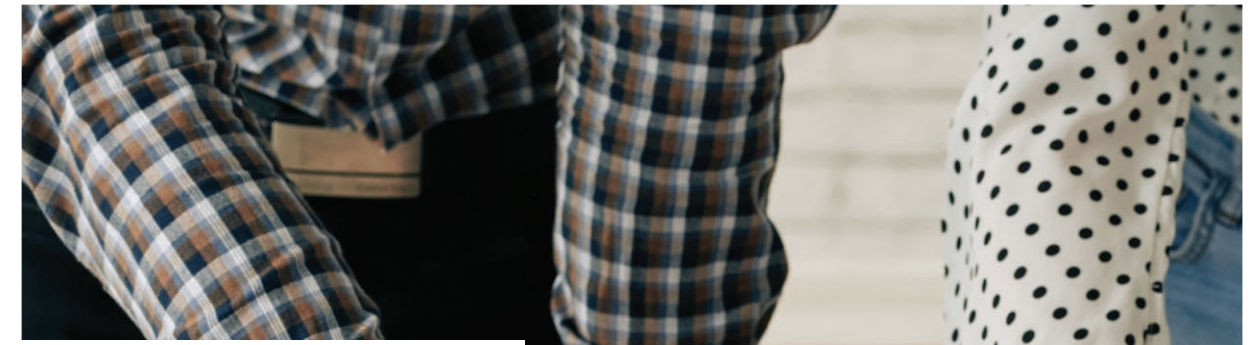
## Free Home Heating Design Process

To meet building standards compliance and other requirements, we offer a free of charge Home Heating Design Service.

This not only helps to save time on the project, but also provides peace of mind from knowing that our technical specialists are taking all your considerations on board and designing the best-suited home heating solution for your home.

By working with our technical specialists, you can optimise your home heating investment and achieve long-term financial and carbon savings. These benefits are delivered by a smart, bespoke heating system, consisting of correctly sized heating technologies, designed with the unique needs of both you and your property in mind.

Having delivered reliable, efficient home heating solutions for over four decades, Grant is a trusted partner for those working in the trade and our technical specialists work effectively with your appointed architects, BERs, specifiers, engineers, installers, electricians, suppliers and builders for your project.



## 01. Heat Loss Calculations

The first stage in the home heating design service begins when we receive your house plans. Using these plans, our technical specialists carry out room by room heat loss calculations in line with S.R. 50/ MCS requirements. This information provides the heat load requirement for each room and helps to prove compliance with Part L of the building regulations and calculate the heat pump output, the hot water demands and underfloor heating and/or radiators for your home. If further information is needed, a member of the Grant team will contact you as required.

Our team can work directly with the homeowner, the architect, engineer or specifier designing the property / heating system to ensure this is a hassle-free process and saves valuable time on the project. This service is free of charge and easy to avail of by simply sending your planning drawings to [heatpump@grant.ie](mailto:heatpump@grant.ie)



### Take advantage of our free of charge Home Heating Design Service in 3 easy steps:

1. Send planning drawings, a contact number and your preference of underfloor heating, radiators or both to [heatpump@grant.ie](mailto:heatpump@grant.ie)
2. Grant technical specialists will be in touch to discuss your requirements
3. Full property specifications with recommended Grant products will be provided



# 02. Sizing Your Heat Pump & Hot Water Cylinder

Once heat loss calculations are finalised and the heat load for each room within the property is known, correctly sized heating products are specified for your property.



Grant Aeron R290 air to water air source heat pump range (4kW - 16kW)

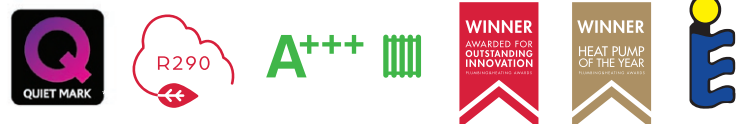
## Heat Pumps

Air source heat pumps, also known as air to water heat pumps, are a popular heating choice for new builds because they provide compliance and an energy efficient, sustainable, and cost-effective way to heat your home.

The award-winning Grant Aeron R290 air to water air source heat pump has an ErP rating of A+++ and has been designed and tested for exceptional performance in the Irish and UK climate. Using environmentally friendly, natural refrigerant R290 the Aeron R290 heat pump is available in outputs of 4kW, 6.5kW, 9kW, 12kW and 16kW, with models recognised by Quiet Mark for their ultra-low noise levels.

Models within the Aeron R290 range can be monitored and managed remotely using the Aeron Smart Controller giving both installers and homeowners full control of their heat pump system.

The energy source used by a heat pump is electricity which can be renewable.



Pictured: Grant Aeron R290 4kW air to water air source heat pump



Grant Quick Recovery Smart Integrated 210 litre cylinder

## Hot Water Cylinders

Once the heat source for a property has been selected, choosing a high-performance, energy-efficient hot water cylinder is essential to ensure the overall system operates at its best. Designed to work seamlessly with air source heat pump systems, the right cylinder plays a key role in delivering consistent, reliable hot water while supporting system efficiency.

The Grant Quick Recovery cylinder range is designed to deliver faster heat-up times, helping to ensure hot water is available when it's needed. The range is available in regular, slimline and smart pre-plumbed and pre-wired options, with key components of the smart models conveniently positioned to support quick and easy installation.

Highly versatile, the Quick Recovery cylinders are designed specifically for use with air to water air source heat pump systems and are suitable for multi-zone heating systems, including domestic hot water.

**“The Grant team has been a tremendous help to support with the design and specification of the heating system for our new build home. Our heating solution features a new 12kW Grant Aeron R290 heat pump which looks very stylish and we are really impressed with its performance. It is so quiet and easy to control.”**

James G, Carlow



# 03. Selecting Underfloor Heating, Aluminium Radiators or Both and Temperature Controls

Underfloor heating and aluminium radiators are great choices to heat individual rooms in your new build home. Designed to effectively distribute heat within the home, modern heat emitters offer versatility to support the overall design and architecture of the space whilst also creating comfort.



## Grant Uflex Underfloor Heating

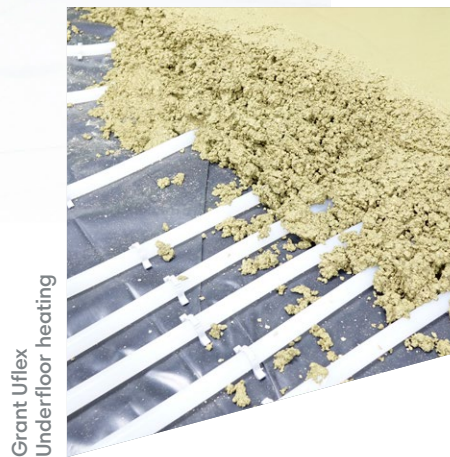
Underfloor heating works effectively with an air to water air source heat pump, helping to save energy and money as both systems work at low temperatures to use less energy.

In addition to providing a balance of warmth throughout a room, underfloor heating offers increased hygiene due to reduced air circulation and ensures more space to design and decorate a room without blocking radiators with furniture.

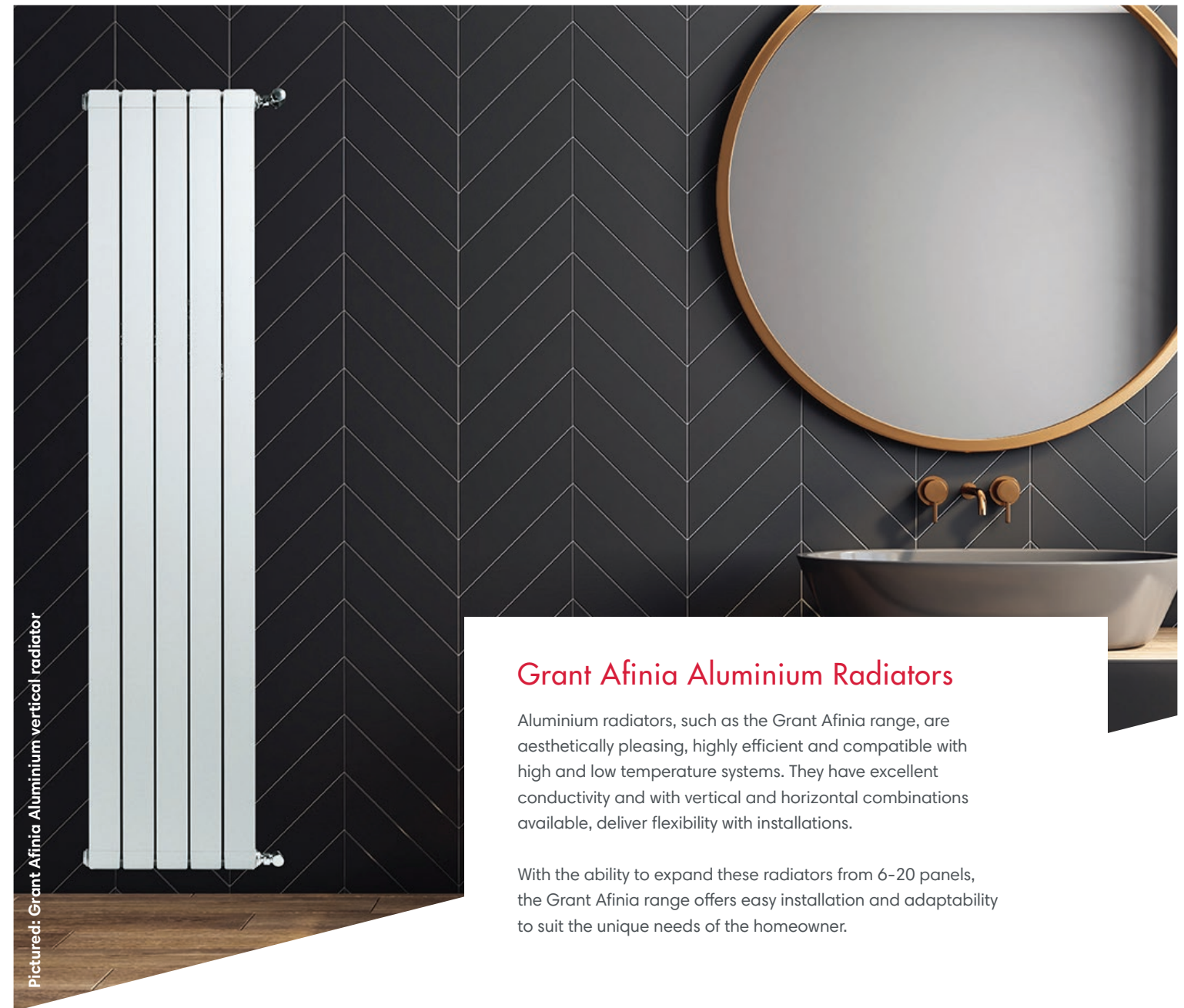
The Grant Uflex underfloor heating system is ideal for new builds offering easy installation, optimal control with individual zone heating and comfort.

The system is embedded in the floor construction and is designed specifically for the individual areas. It is especially suited under tile and hardwood flooring in kitchens, bathrooms and open plan areas.

A room's look is an important consideration for homeowners and today's market offers a range of options, broadening the horizons beyond traditional radiators.



Grant Uflex Underfloor heating



Pictured: Grant Afinia Aluminium vertical radiator

## Grant Afinia Aluminium Radiators

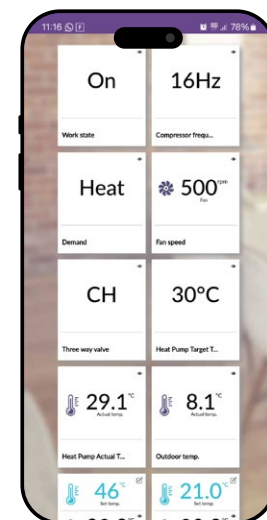
Aluminium radiators, such as the Grant Afinia range, are aesthetically pleasing, highly efficient and compatible with high and low temperature systems. They have excellent conductivity and with vertical and horizontal combinations available, deliver flexibility with installations.

With the ability to expand these radiators from 6-20 panels, the Grant Afinia range offers easy installation and adaptability to suit the unique needs of the homeowner.

## Smart Controls

In addition to the Uflex system's mechanical components, Grant also supplies the necessary controls to operate the underfloor heating system as efficiently as possible with the touch of a button.

The slim and stylish smart controls can be set to provide different room temperatures and different time intervals on individual heating zones, with a wireless option available. These controls communicate with the heat pump and intelligently provide the heat pump with the information to optimise the system performance and efficiency.



Once you have selected the appropriate heat emitters for your home, Grant will design your bespoke Uflex underfloor heating system, correctly size your Grant Afinia aluminium radiators and integrate smart controls to bring your property into a new class of efficiency and comfort.



Pictured: Typical 6.5kW heating system



# 04. Quotations

From the information submitted with your plans, a detailed quotation will be provided including a list of materials bespoke to your home. The price will include a breakdown of the required sized air to water air source heat pump, a suitable domestic hot water solution and the agreed heating emitters, which may include the Grant Uflex underfloor heating or the Grant Afinia aluminium radiators and controls. Heating and plumbing accessories and commissioning the system by Grant will also be included in the quotation.

All specified products will be supplied and purchased through your local heating and plumbing provider.

# 05. Ensuring Compliance



In addition to helping homeowners, architects, engineers, builders, BERs, Technical advisors and installers save time with our home heating design service, the technical specialists at Grant also provide peace of mind by helping to ensure compliance on all heating requirements for your new build home.

New build properties in the Republic of Ireland are required to meet specific building regulations to ensure home heating compliance for energy ratings including being Nearly Zero-Energy Buildings (NZEB) under the Energy Performance of Buildings Directive.

Our team works with your BER assessor to ensure future compliance and Building Energy Rating (BER) certification for the property that complies with Part L of the Building Regulations. Compliance includes, Carbon Performance Coefficient (CPC), Energy Performance Coefficient (EPC) and that the property meets a specific Renewable Contribution.

Compliance results in reduced carbon emissions and greater long-term savings for the property owner.



# 06. Engaging Your Installer

All Grant heating products are supplied through your local heating and plumbing merchant (see full list of all merchants on our website)\*. The installation should be carried out by a trained and competent installer. Grant provides a full range of training on all our products at our state-of-the-art training centre in Birr, Co. Offaly. All Grant products can be effectively integrated into the design and build of your new home.



# 07. Commissioning Your System

Following installation, your Grant Aeronia R290 air to water air source heat pump will be commissioned on site by Grant at no extra charge.

Your installer will contact Grant to arrange this and agree a suitable date and time. This process will ensure that the unit is installed correctly, set up to match the house requirements and you will be shown how to operate the system controls.

Thanks to Grant's comprehensive installer training, the homeowner will have peace of mind in the complete installation.

# 08. Distribution & Aftercare Service

All Grant products are available through your local plumbing and heating merchant\*. A full aftercare service is provided by the Grant Service Network, which includes trained technicians located throughout Ireland, and your local installer. Should any spare parts be required at any time, these can be supplied promptly to your installer through this dedicated network. The Customer Care team at Grant is also available for any other information you may require.



\*Find your local merchant at - [www.grantengineering.ie/support/find-a-merchant/](http://www.grantengineering.ie/support/find-a-merchant/)



[www.grant.ie](http://www.grant.ie)

#ThinkHeatingThinkGrant

# We're here to help

For over 45 years in Ireland Grant has been designing, manufacturing and supplying innovative home heating solutions to homes throughout the UK and Ireland.

We understand the importance of having a reliable and efficient home heating system that maximises comfort for the homeowner.

Our team is here to help and to be with you every step of the way on your journey to more efficient heating.

## Opening Hours

Mon – Thurs (8am – 4.30pm)

Friday (8am – 3.30pm)

## Contact Us

Call **057 912 6963**

Email [heatpump@grant.ie](mailto:heatpump@grant.ie)

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Instagram @**Grant\_IRL** and  
Pinterest @**GrantHeating**