



# 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 AERONA<sup>3</sup> R32 10kW air to water air source heat pump

**BEST BUY**

**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



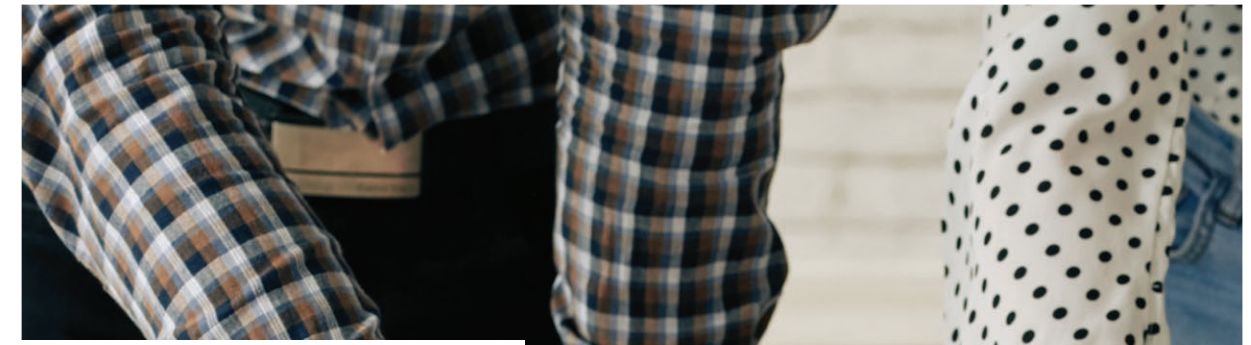
## Free Home Heating Design Process

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 SR:50 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 AERONA³ R32 air to water air source heat pump, 6kW, 10kW, 13kW & 17kW

## Heat Pumps

Air source heat pumps, also known as air to water heat pumps, are an increasingly popular 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 AERONA³ R32 air to water air source heat pump** has an ErP rating of A+++ with an SCOP of up to 5.4:1 and is available in outputs of 6kW, 10kW, 13kW and 17kW. The 13kW and 17kW models have also been recognised for their quiet operation by the internationally acclaimed Quiet Mark®.

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



\*Specific to the Grant AERONA³ R32 13kW & 17kW models



Pictured: Grant AERONA³ R32 10kW air to water air source heat pump



Grant integrated 210ltr cylinder

## Hot Water Cylinders

Once the heat source for the property is identified, a high performance, energy efficient hot water cylinder will be selected to support the system's overall efficiency and work effectively with an air to water air source heat pump.

The Grant pre-plumbed cylinder range is designed to heat water faster and more efficiently than standard cylinders and ensure that homeowners have hot water 24/7. All pre-plumbed and pre-wired features are conveniently located to ensure quick and easy installation. These highly versatile cylinders can work effectively with an air to water air source heat pump and are configured for two heating zones but have options for two further heating zones and a domestic hot water zone.

“It was a great help to us to have the Grant team there to support us with the design of the heating system for our new home. This included ensuring that our 10kW heat pump and hot water cylinders were sized correctly, which saved us time and gave us peace of mind.”

Jack M, Kilkenny





# 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

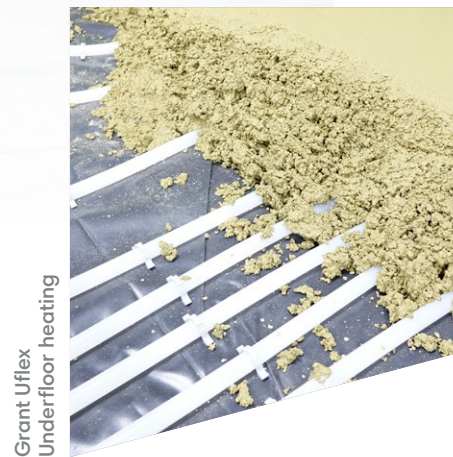
Underfloor heating works effectively with an air to water air source heat pump, helping to save energy and money as both systems work at low temperatures to use less energy.

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.

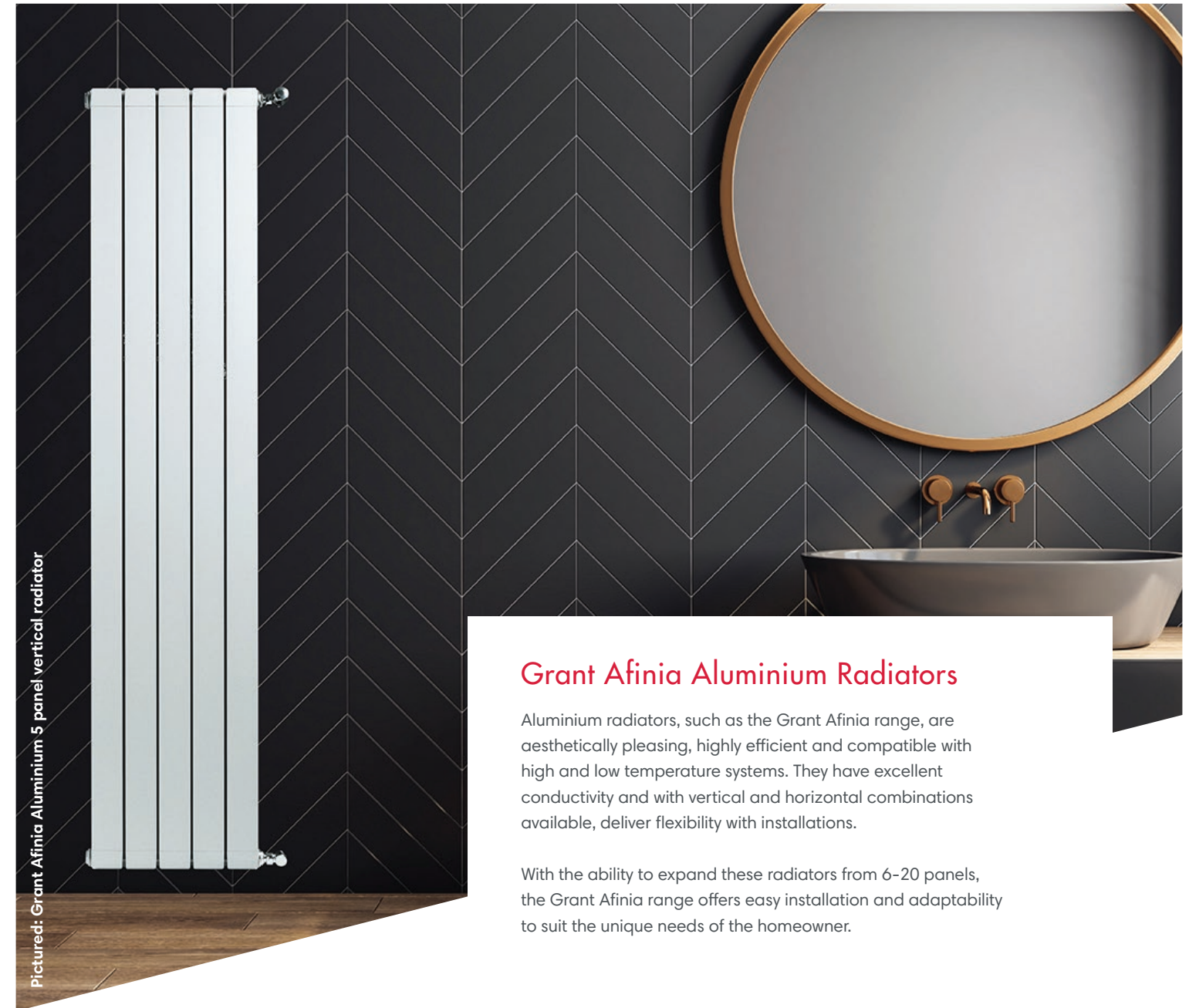
The Grant Uflex underfloor heating system is ideal for new builds offering easy installation, optimal control with individual zone heating and comfort.

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 5 panel 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 can work as a stand-alone thermostat, or as part of an app-controlled system.



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 6kW 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 Aeronas<sup>3</sup> 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/)



# We're here to help

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

#ThinkHeatingThinkGrant

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 and sustainable home heating.

## Opening Hours

Mon – Thurs (8am – 4.30pm)  
Friday (8am – 3.30pm)

## Contact Us

ROI - Call **057 912 6963**

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

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