



# Your Guide to Heating Your New Build Home

#ThinkHeatingThinkGrant

Self Building | Building Regulations | Efficient Heating



# Welcome to comfortable efficient living

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

We understand the importance of selecting a home heating system to keep you and your loved ones warm and comfortable for many years to come, and we recognise that selecting the right system for your home can be a daunting process. This guide has been developed to help you on your journey and take you through everything you need to take into consideration whether you are renovating your home and upgrading your heating system or building a new home.





# Building Your Own Home

When building a new home it is important to starting 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.



**Start your journey**

Send your planning drawings to our technical specialists at [heatpump@grantni.com](mailto:heatpump@grantni.com)

# The Journey



## Free Home Heating Design Process

To meet building standards and compliance and other requirements, we offer a free of charge Home Heating Design Service for those wishing to install an air source heat pump as the main heat source in their new home.

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, Energy Performance Assessors, engineers, installers, electricians, suppliers and builders for your project.

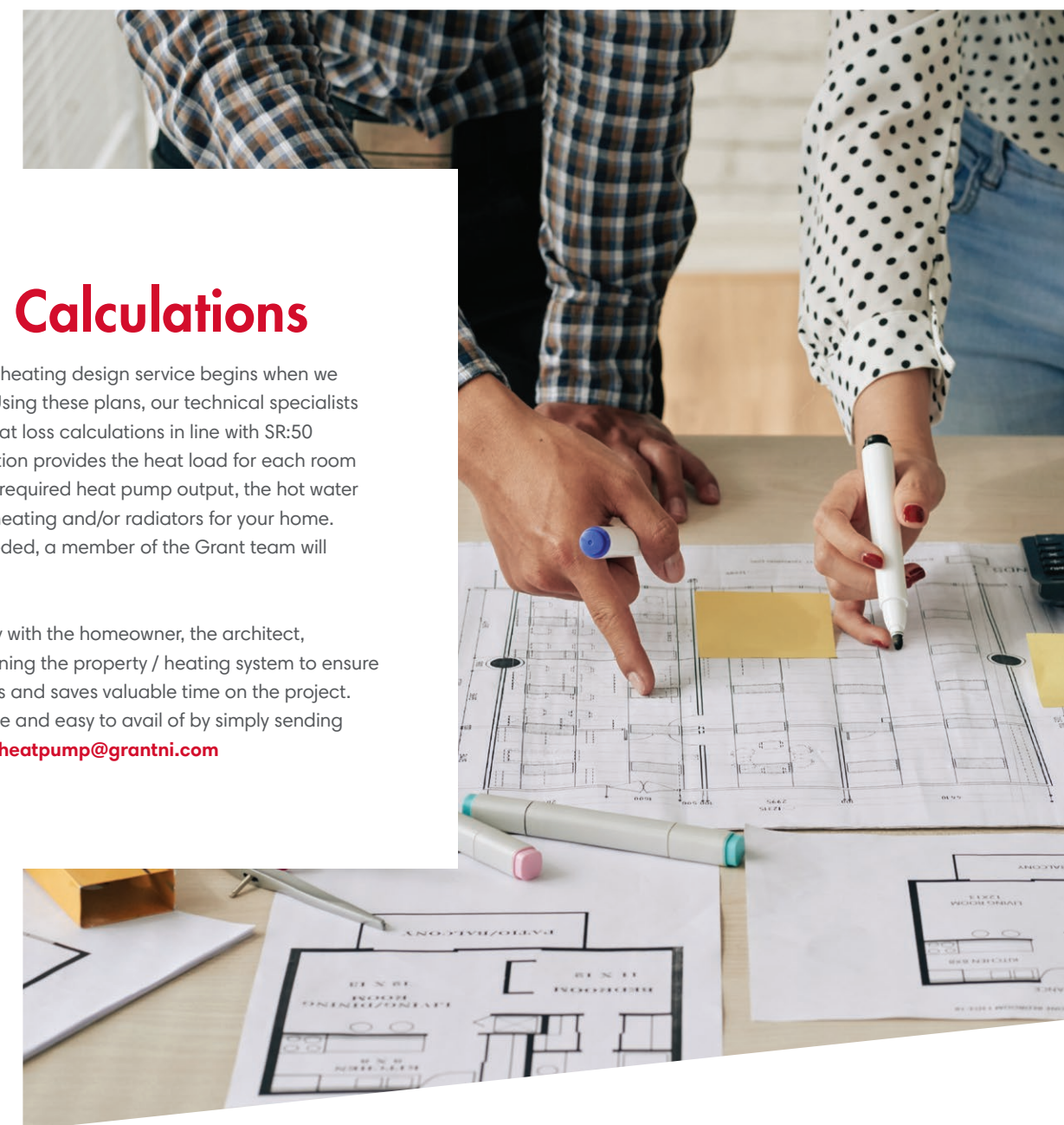
### Our Process

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

## 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 for each room and helps to calculate the required 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@grantni.com](mailto:heatpump@grantni.com)



## 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@grantni.com](mailto:heatpump@grantni.com)
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.

### Heat Pumps

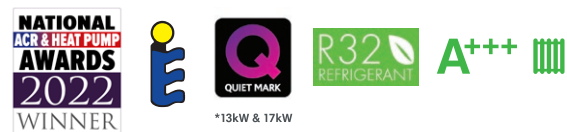
Air source heat pumps, also known as air to water heat pumps, are an increasingly popular choice for new builds because they provide an energy efficient, sustainable, and cost-effective way to heat your home.

The award-winning **Grant Aeronas<sup>3</sup> 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<sup>®</sup>.

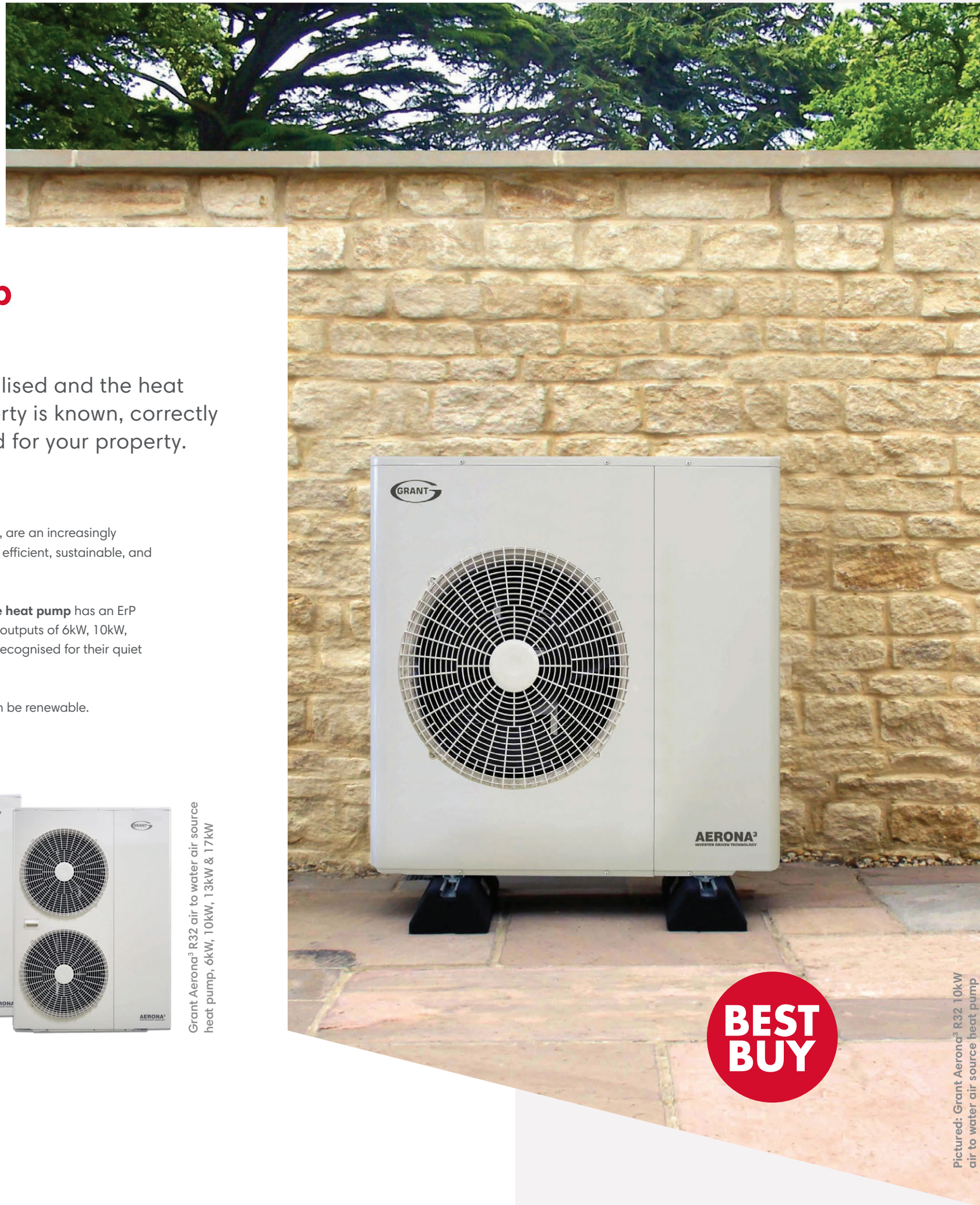
The energy source used by a heat pump is electricity which can be renewable.



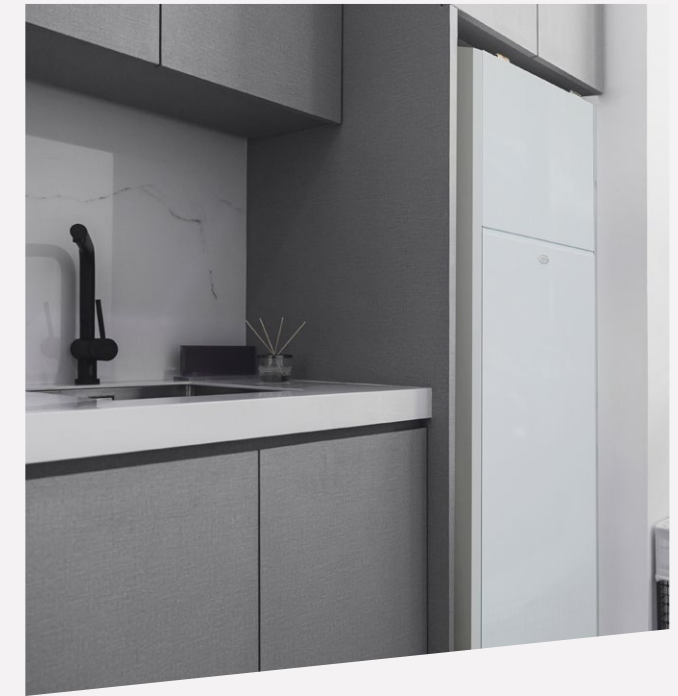
Grant Aeronas<sup>3</sup> R32 air to water air source heat pump, 6kW, 10kW, 13kW & 17kW



\*Specific to the Grant Aeronas<sup>3</sup> R32 13kW & 17kW models



Pictured: Grant Aeronas<sup>3</sup> 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 or a Grant Vortex condensing oil boiler.

The Grant AWave Integrated Unit and 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 or a condensing oil boiler and are configured for two heating zones but have options for two further heating zones and a domestic hot water zone.

“ Having the heating system for our new house designed by the Grant team meant the process really was hassle free. Their team liaised with our architect to ensure all relevant building regulations were met and this gave us peace of mind as we knew everything was designed professionally to maximise efficiencies. ”

David G., Omagh



# 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. It can also work well with high temperature systems featuring a condensing oil boiler.

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.



### 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.

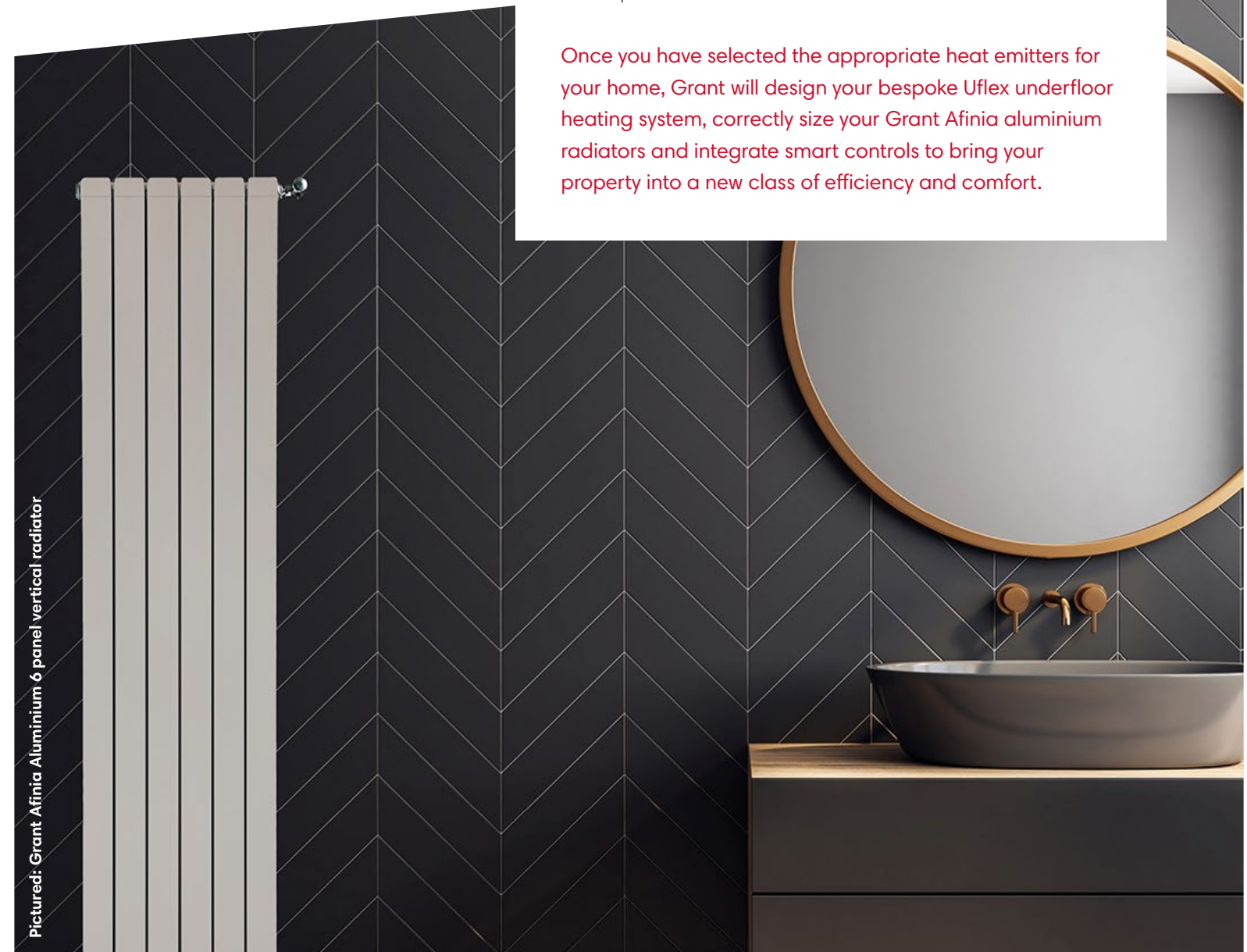
The slim and stylish smart controls can be set to provide different room temperatures and different time intervals on individual heating zones, with a wireless option available. These controls can work as a stand-alone thermostat, or as part of an app-controlled system.

### 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.

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: Grant Afinia Aluminium 6 panel vertical radiator



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, energy assessors and technical advisors 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 Northern Ireland are required to comply with building regulations to meet standards for energy performance as set out by Building Control Northern Ireland. Our team works with your project specifier and EPC assessor to ensure from a heating perspective all Energy and Carbon Performance requirements are met and to ensure future compliance and Energy Performance (EPC) certification.

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 Aerona<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.grantni.com/support/find-a-merchant/](http://www.grantni.com/support/find-a-merchant/)

# We're here to help

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

Call **0800 088 7010**

Email **heatpump@grantni.com**

Follow us on Facebook, Instagram or Twitter  
**@myGrantNI**

**[www.grantni.com](http://www.grantni.com)**

**#ThinkHeatingThinkGrant**

