

ROSCOMMON COUNTY COUNCIL

PLANNING AND DEVELOPMENT ACT, 2000 (as amended)

SECTION 5 - DECLARATION ON DEVELOPMENT AND EXEMPTED DEVELOPMENT

NOTIFICATION OF DECISION

REGISTERED POST

John & Una Fannon,



Reference Number: DED 808

Application Received: 28th November 2024

Name of Applicants: John & Una Fannon

Agent: N/A

WHEREAS a question has arisen as to whether the internal refurbishment of an existing dwelling with works including 1) removing of floors, insulate floors & install new floors; 2) install new radiators; 3) remove old kitchen cabinets & install new cabinets; 4) dry line walls; 5) remove carpets; 6) remove old bathroom suite; 7) insulate attic; 8) paint interior & 9) install new heat pump at Castle Street, Roscommon Town, Co. Roscommon, F42 X971, is or is not development and is or is not exempted development:

AND WHEREAS Roscommon County Council, in considering this application, had regard particularly to:

- (a) Sections 2, 3, 4, 5 and 57 of the Planning and Development Act, 2000, as amended.
- (b) Articles 6 and 9 of the Planning and Development Regulations, 2001, as amended.
- (c) The record forwarded to Roscommon County Council in accordance with subsection (6)(c) of Section 5 of the Planning and Development Acts 2000 as amended.
- (d) The planning history of the site.

AND WHEREAS Roscommon County Council has concluded that:

- (a) The works outlined above are development.
- (b) The proposed restoration & renovation works for the conversion of an existing dwelling which is a Protected Structure as described in this case is not an exempted development.
- (c) The proposed development individually and in combination with other plans or projects would not be likely to have a significant effect on any European site and that the requirement for AA or EIAR does not apply with respect to the current case.

NOW THEREFORE:

By virtue of the powers vested in me by the Local Government Acts 1925 – 2024 and Section 5(2)(a) of the Planning and Development Act 2000 (as amended) and having considered the various submissions and reports in connection with the application described above, it is hereby declared that the said development to internally refurbish an existing dwelling with works including 1) removing of floors, insulate floors & install new floors; 2) install new radiators; 3) remove old kitchen cabinets & install new cabinets; 4) dry line walls; 5) remove carpets; 6) remove old bathroom suite; 7) insulate attic; 8) paint interior & 9) install new heat pump at Castle Street, Roscommon Town, Co. Roscommon, F42 X971., is development that is **not exempted development** as defined within the Planning and Development Act 2000 (as amended) and associated Regulations.

Signed on behalf of the Council:



Alan O'Connell,
Senior Executive Planner,
Planning.

Date: 4th February, 2025

ADVICE NOTE

Any person issued with a Declaration under Section 5 of the Planning and Development Act, 2000 (as amended) may, on payment to An Bord Pleanála of the prescribed fee, refer a Declaration for review within 4 weeks of the date of the issuing of the Declaration.

**Planner's Report on application under
Section 5 of the Planning and Development Act 2000 (as amended)**

Reference Number:	DED 808
Re:	Permission for the internal refurbishment of an existing dwelling with works including 1) removing of flooring, insulate floors & install new floors; 2) install new radiators; 3) remove old kitchen cabinets & install new cabinets; 4) dry line walls; 5) remove carpets; 6) remove old bathroom suite; 7) insulate attic; 8) paint interior & 9) install new heat pump under the Planning and Development Act (Exempt Development) Regulations 2018
Name of Applicant:	John and Una Fannon
Location of Development:	Castle Street, Roscommon Town, County Roscommon, F42 X971
Site Visit:	10/01/2025

WHEREAS a question has arisen as to whether the following works to refurbish an existing dwelling with works to the interior including 1) removing of flooring, insulate floors & install new floors; 2) install new radiators; 3) remove old kitchen cabinets & install new cabinets; 4) dry line walls; 5) remove carpets; 6) remove old bathroom suite; 7) insulate attic; 8) paint interior & 9) install new heat pump, at the above address is or is not development and is or is not exempted development.

I have considered this question, and I have had regard particularly to –

- (a) Sections 2, 3, 4, 5 and 57 of the Planning and Development Act, 2000, as amended
- (b) Articles 6 and 9 of the Planning and Development Regulations, 2001, as amended
- (c) The record forwarded to Roscommon County Council in accordance with subsection (6)(c) of Section 5 of the Planning and Development Acts 2000 as amended.
- (d) The planning history of the site

Site Location & Development Description

The property is an attached two-story uninhabited townhouse on Castle Street, Roscommon Town, Co. Roscommon. The proposed development consists of the interior refurbishment of an existing dwelling which include but are not limited to removing the floors and installing new floors and installing a new heat pump and radiators.

There are no European designated sites in, adjoining or in close proximity to the subject site, as per the Roscommon County Council GIS.

Archaeological and Cultural Heritage

The site is in an Archaeological zone of notification, R184453. The property is listed as a protected structure in the Roscommon County Development Plan 2022-2028, registration number 03900594.

Appropriate Assessment

The closest European site to the proposed development is Lough Ree SAC (Site Code 000440) which is located circa 4km to the south east of the subject site.

Having regard to the separation distance between the site and the closest Natura 2000 site and the nature of the proposal, there is no real likelihood of significant effects on the conservation objectives of these or other European sites arising from the proposed development. The need for further Appropriate Assessment, therefore, be excluded.

Planning History

As per the Roscommon County Council's Planning Registry, no recent planning history has been traced to the proposed site.

Relevant statutory provisions

Planning and Development Acts 2000 (as amended)

Section 2. -(1)

"works" includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure or proposed protected structure, includes any act or operation involving the application or removal of plaster, paint, wallpaper, tiles or other material to or from the surfaces of the interior or exterior of a structure.

Section 3. -(1)

In this Act, "development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land.

Section 4(1) of the Act defines certain types of development as being 'exempted development'. Of potential relevance is section 4(1)(h) which provides as follows:

development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures;

Section 4 (2) of the Planning and Development Act provides that the Minister, by regulations, provide for any class of development to be exempted development. The principal regulations made under this provision are the Planning and Development Regulations.

Section 57(1) of the Planning and Development Act as follows:

F424[Notwithstanding section 4(1)(a), (h), (i), F425[(ia)] (j), (k), or (l) and any regulations made under section 4(2),] the carrying out of works to a protected structure, or a proposed protected structure, shall be exempted development only if those works would not materially affect the character of—

- a) the structure, or*
- b) any element of the structure which contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.*

Planning and Development Regulations, 2001 as amended

Article 6 (1)

Subject to article 9, development of a class specified in column 1 of Part 3 of Schedule 2 shall be exempted development for the purposes of the Act, provided that such development complies with the conditions and limitations specified in column 2 of the said Part 3 opposite the mention of that class in the said column 1.

Article 9 (1) applies:

Development to which article 6 relates shall not be exempted development for the purposes of the Act

viiB) comprise development in relation to which a planning authority or an Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site,

Assessment

In accordance with the Planning and Development Act, 2000, as amended Section 3. (1) development is defined as the following: "In this Act, "development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land". The proposed development is considered to be the carrying out of works. Works are defined in the Act as; "works" includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal and, in relation to a protected structure....". It is considered that said works constitute development, as defined in Section 3 of the said Act.

The proposal includes the refurbishment of an existing dwelling, which has been indicated as a protected structure. Section 57(1) of the Planning and Development Act states "*the carrying out of works to a protected structure, or a proposed protected structure, shall be exempted development only if those works would not materially affect the character of— (a) the structure, or (b) any element of the structure which contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest*". The proposal includes works both internally and externally on a protected structure, based on Section 57(1) of the Planning and Development Act of the Planning and Development Regulations the proposed works is deemed not an exempt development.

With regard to Article 9 (1)(a) of the Planning and Development Regulations 2001 (as amended), it is reasonable to conclude, on the basis of the information available, that the proposed development individually and in combination with other plans or projects would not be likely to have a significant effect on any European site and that the need for AA does not apply with respect to the current case.

I am satisfied that an Environmental Impact Statement or Appropriate Assessment are not required. It should be noted that any development for which Environmental Impact Assessment or Appropriate Assessment is required shall not be exempted development unless specifically exempted in regulations where there is provision in other legislation for the carrying out of EIA or AA. In addition, the restrictions on exemption Art 9 (1)(a) (viiB) exclude development which would otherwise be exempted development under these regulations where an AA is required.

Recommendation

WHEREAS a question has arisen as to refurbish an existing dwelling with works to the interior including 1) removing of flooring, insulate floors & install new floors; 2) install new radiators; 3) remove old kitchen cabinets & install new cabinets; 4) dry line walls; 5) remove carpets; 6) remove old bathroom suite; 7) insulate attic; 8) paint interior & 9) install new heat pump is or is not development and is or is not exempted development, I have considered this question, and I have had regard particularly to –

- (a) Sections 2, 3, 4, 5 and 57 of the Planning and Development Act, 2000, as amended
- (b) Articles 6 and 9 of the Planning and Development Regulations, 2001, as amended
- (c) The record forwarded to Roscommon County Council in accordance with subsection (6)(c) of Section 5 of the Planning and Development Acts 2000 as amended.
- (d) The planning history of the site

AND WHEREAS I have concluded that

- The works outlined above are development.
- The proposed restoration & renovation works for the conversion of an existing dwelling which is a protected structure as described in this case is not an exempted development.
- The proposed development individually and in combination with other plans or projects would not be likely to have a significant effect on any European site and that the requirement for AA or EIAR does not apply with respect to the current case.

AND WHEREAS I have concluded that the said development for the refurbishment of an existing dwelling with works to the interior including 1) removing of flooring, insulate floors & install new floors; 2) install new radiators; 3) remove old kitchen cabinets & install new cabinets; 4) dry line walls; 5) remove carpets; 6) remove old bathroom suite; 7) insulate attic; 8) paint interior & 9) install new heat pump is not an exempted development. I recommend that a declaration to that effect should be issued to the applicant.

Signed:

Smith O'Grady

Graduate Planner

Date: 22/01/2024



Signed:

Senior Executive Planner

Date: 22nd January 2025



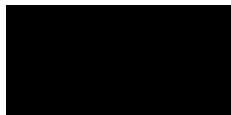




Comhairle Contae
Ros Comáin
Roscommon
County Council



John & Una Fannon,



Date: 3rd December 2024
Planning Reference: DED 808

Re: Application for a Declaration under Section 5 of the Planning & Development Act 2000 (as amended), regarding Exempted Development.
Development: Permission for the internal refurbishment of an existing dwelling with works including 1)removing of flooring, insulate floors & install new floors; 2) install new radiators; 3)remove old kitchen cabinets & install new cabinets; 4)dry line walls; 5)remove carpets; 6)remove old bathroom suite; 7)insulate attic; 8)paint interior & 9)install new heat pump under the Planning & Development Act (Exempt Development) Regulations 2018 at Castle Street, Roscommon Town, Co. Roscommon, F42 X971.

A Chara,

I wish to acknowledge receipt of your application which was received on the 28th November 2024, for a Declaration under Section 5 of the Planning & Development Act 2000 (as amended), regarding Exempted Development along with the appropriate fee in the sum of €80.00, Receipt No. L01/0/231795 dated 29th November 2024, receipt enclosed herewith.

Note: Please note your Planning Reference No. is **DED 808**
This should be quoted in all correspondence and telephone queries.

Mise le meas,

Alan O'Connell
Senior Executive Planner,
Planning Department.

Roscommon County Council
Aras an Chontae
Roscommon
09066 37100

29/11/2024 10:01:17

Receipt No : L01/0/231795

JOHN FANNON

PLANNING APPLICATION FEES 80 00
GOODS 80 00
VAT Exempt/Non-vatable
DED808

Total : 80 00 EUR

Tendered :
Credit/Debit Card 80 00
3803

Change : 0 00

Issued By : Louis Carroll
From : Central Cash Office



Comhairle Contae
Ros Comáin
Roscommon
County Council



Aras an Chontae,
Roscommon,
Co. Roscommon.

Phone: (090) 6637100

Email: planning@roscommoncoco.ie

Roscommon County Council

Application for a Declaration under Section 5 of the

Planning & Development Act 2000 (as amended), regarding Exempted Development

Name of Applicant(s)	JOHN FANNON UNA FANNON
Name of Agent	JOHN FANNON
Nature of Proposed Works	INTERNAL IMPROVEMENTS TO EXISTING HOUSE. NO EXTERIOR WORK
Location & Address of Subject Property to include, Eircode (where applicable), Townland & O.S No.	CASTLE STREET ROSCOMMON TOWN CO ROSCOMMON F42X971
Floor Area: a) Existing Structure b) Proposed Structure	a) <u>90 SQ M</u> b) <u>90 SQ M</u>
Height above ground level:	
Total area of private open space remaining after completion of this development	6.2 METERS
Roofing Material (Slates, Tiles, other) (Specify)	SLATES

Roscommon County Council

Application for a Declaration under Section 5 of the

Proposed external walling (plaster, stonework, brick or other finish, giving colour)	PLASTER , CREAM
Is proposed works located at front/rear/side of existing house.	INTERNAL AND REAR
Has an application been made previously for this site	NO
If yes give ref. number (include full details of existing extension, if any)	
Existing use of land or structure	VACANT HOUSE
Proposed use of land or structure	HOUSING
Distance of proposed building line from edge of roadway	2 METERS
Does the proposed development involve the provision of a piped water supply	YES
Does the proposed development involve the provision of sanitary facilities	YES

Planning & Development Act 2000 (as amended), regarding Exempted Development

Signature:

John Lannon Eva Fenn

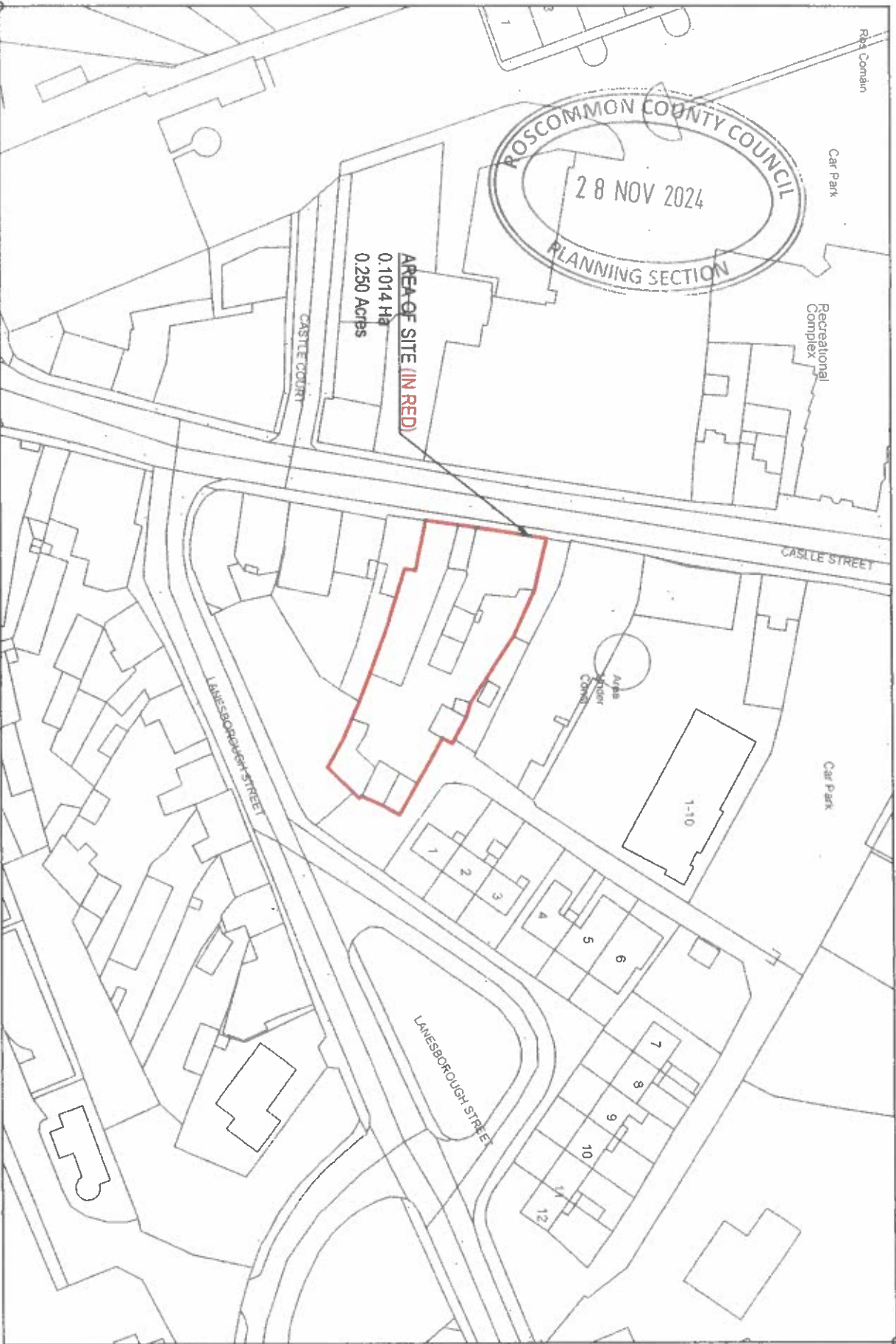
Date:

27-11-24

Note: This application must be accompanied by: -

- (a) €80 fee
- (b) Site Location map to a scale of 1:2500 clearly identifying the location
- (c) Site Layout plan to the scale of 1:500 indicating exact location of proposed development
- (d) Detailed specification of development proposed





E. 587329 N. 764674

SITE LOCATION MAP Scale 1:1,000

LEGEND

Folio RN43579F & RN44739F
PLAN No. DRG90 & DYJUT (RED)



Title

Site Location Map 1:1000

Scale	Date	Drawn	Checked	Issued
As Shown @ A4				
Sage				

Issued No.



Centre Point Co-ordination

X, Y = 587447, 764754

License / Copyright

Ordinance Survey / Ireland Terms of Use

www.osi.ie/about/terms-conditions

ALL RIGHTS RESERVED. NO PART OF THIS PUBLICATION MAY BE COPIED, REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN PERMISSION OF THE COPYRIGHT OWNERS.

THE REPRESENTATION ON THIS MAP OF A ROAD, TRACK OR FOOTPATH IS NOT EVIDENCE OF THE EXISTENCE OF A RIGHT OF WAY.

ORDNANCE SURVEY MAPS NEVER SHOW LEGAL PROPERTY BOUNDARIES NOR DO THEY SHOW OWNERSHIP OF PHYSICAL FEATURES

E. 587598 N. 764834



S I T E L A Y O U T M A P S c a l e 1 : 5 0 0

LEGEND

Folio RN435/39F & RN44/39F
Plan No. DRG80 & DYJ11 (RED)



TITLE

Site Layout Map 1:500

Scale As Shown @ A4	Date	Permitted	Drawing No
Stage:	Drawn:	Checked:	

Development plan for house, Castle Street, Roscommon

Entrance, Remove tile floor and insulate floor, new floor, new radiator.

Sitting room, remove floor, insulate floor, new floor, new radiator.

Kitchen, remove old cabinets, remove old floor, insulate floor, new flooring. Dry line walls. New cabinets.

Back kitchen, remove old flooring, insulate floor, new flooring, new radiator.

Bedroom 1, remove carpeting, dry line walls, new radiator, new flooring.

Bedroom 2, remove carpeting, dry line walls, new radiator, new flooring.

Bathroom, remove old bathroom suite. Dry line walls, new radiator, new tiling.

Insulate attic.

Paint interior of house.

Install new heat pump.



Carmel Curley

From: Carmel Curley
Sent: Thursday 28 November 2024 11:02
To: [REDACTED]
Subject: Section 5 Application

Hi John,

I wish to confirm that we have received your Section 5 Application – can you please clarify the following:

1. On the application form under 'proposed use of land structure' you have indicated 'Housing' – can you clarify if this is individual or multiple
2. On the detailed specifications you have listed 'install new heat pump' – please note that we require the location & specification of an external heat pump equipment (Class 2 (d) refers)

On receipt of the above your application will be considered further.

Regards,

Carmel

**Carmel Curley, Assistant Staff Officer,
Planning Department, Roscommon County Council,
Aras an Chontae, Roscommon, Co. Roscommon, F42 VR98
☎: (090) 6637100**

✉: planning@roscommoncoco.ie | 🌐 www.roscommoncoco.ie

MAP LOCATION



Carmel Curley

From: JOHN FANNON [REDACTED]
Sent: Thursday 28 November 2024 11:24
To: Carmel Curley
Subject: Re: Section 5 Application

Follow Up Flag: Follow up
Flag Status: Completed

Hi Carmel

The application is for an individual house. Regarding the heat pump. Do you want me to come in and mark on the drawing the location of the heat pump or will I send you in a location in a separate drawing and scan and send back to you. The heat pump is a Grant AERONA R290 4 kW heat pump.

Kind regards, John Fannon

On Thu 28 Nov 2024 at 11:02 a.m., Carmel Curley <CCurley@roscommoncoco.ie> wrote:

Hi John,

I wish to confirm that we have received your Section 5 Application – can you please clarify the following:

1. On the application form under 'proposed use of land structure' you have indicated 'Housing' – can you clarify if this is individual or multiple
2. On the detailed specifications you have listed 'install new heat pump' – please note that we require the location & specification of an external heat pump equipment (Class 2 (d) refers)

On receipt of the above your application will be considered further.

Regards,

Carmel



Carmel Curley, Assistant Staff Officer,

Planning Department, Roscommon County Council,

Aras an Chontae, Roscommon, Co. Roscommon, F42 VR98

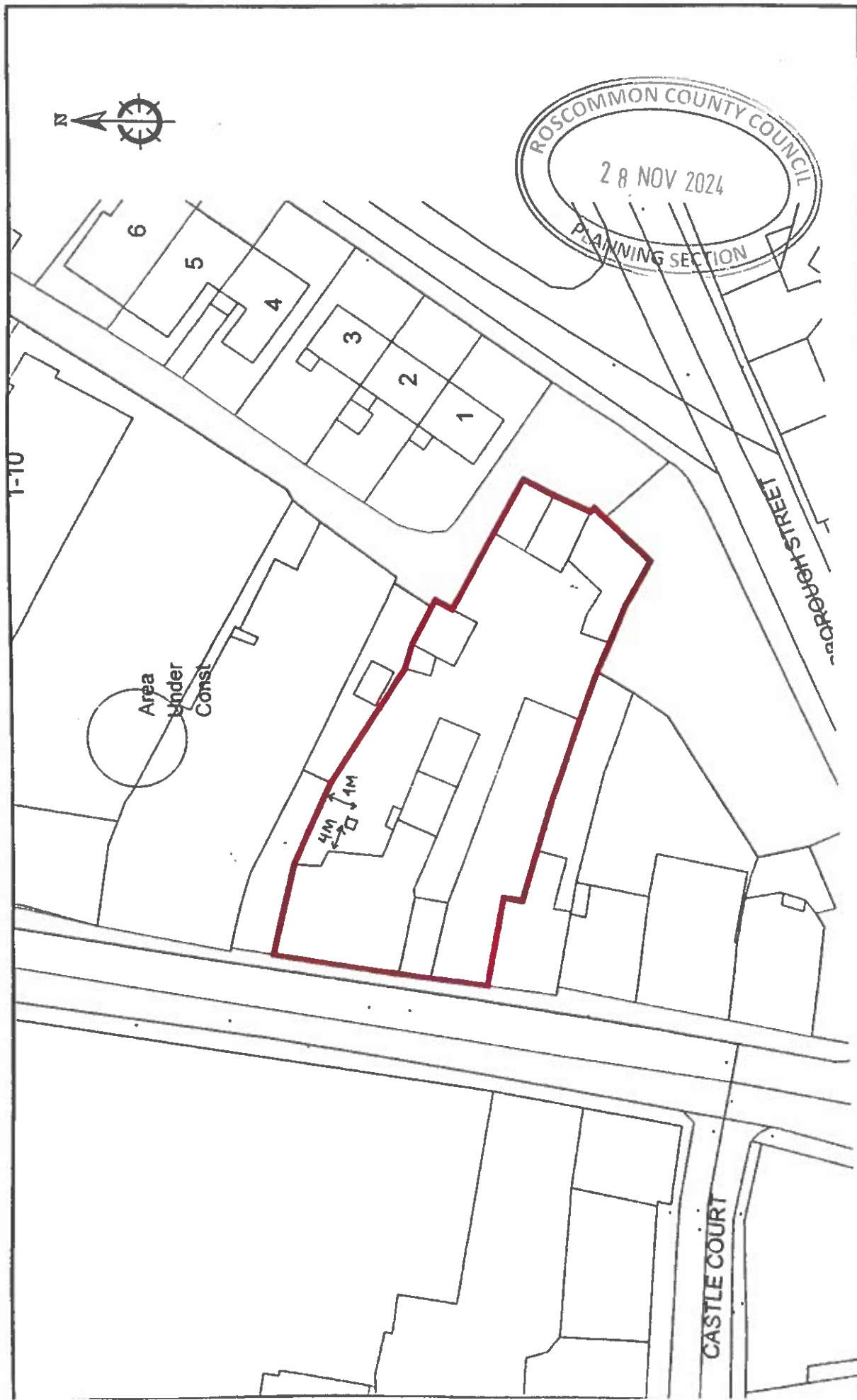
☎: (090) 6637100

Carmel Curley

From: JOHN FANNON [REDACTED]
Sent: Thursday 28 November 2024 16:55
To: Carmel Curley
Attachments: CamScanner 11-28-2024 16.53.pdf

Hi Carmel. Location of heat pump attached.





SITE LAYOUT MAP **Scale 1:500**

LEGEND

Folio RM4357BF & RM4473BF
PLAN NO. DRG50 & DY4U1(RED)

—

Site Layout Map 1:500

Author	As Shown @ A1	Drawn	Checked	Planned No
Scale				

Carmel Curley

From: JOHN FANNON [REDACTED]
Sent: Thursday 28 November 2024 16:53
To: Carmel Curley
Subject: Re: Section 5 Application
Attachments: grant-renewable-heating-solutions-brochure.pdf

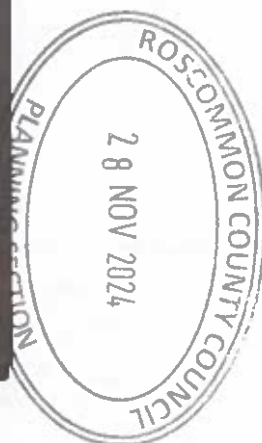
Hi Carmel
Grant specs in the attachment.
Thanks, John





RENEWABLE HEATING SOLUTIONS

THE NEXT GENERATION R290 HEATPUMP



HEAT PUMPS • CYLINDERS • HEAT EMITTERS



Grant Engineering has been designing and manufacturing reliable, efficient and innovative heating products since 1978. Specialising in condensing oil-fired boilers and an expanding range of renewable appliances including air source heat pumps and solar thermal, the Grant brand has established a reputation for quality that is second to none.

At Grant, we combine precision engineering, innovation, performance and value for money to produce sustainable heating solutions that are trusted by installers and homeowners alike. While the technology is sophisticated, Grant products are easy to install, straightforward to maintain and backed-up by excellent after-sales support. When customers choose Grant, they also get the added peace of mind that comes with the excellent reliability and superb efficiencies of our products.

At the heart of everything we do is continuous product development. Every Grant product incorporates the latest technologies and materials which enable them to exceed performance and environmental standards ensuring that they make the best use of our natural resources. Consequently, Grant products meet the heating needs of tomorrow, today.

Think Heating. Think Grant.



INTRODUCING THE PRODUCTS



Aerona R290 Air Source Heat Pumps with Smart Controls

The Aerona 290 inverter driven air source heat pumps utilise the more environmentally friendly R290 refrigerant and have exceptional SCOPs (Seasonal Coefficient of Performance), delivering high performance while also having minimal impact on their surroundings both aesthetically and acoustically.

PAGE 5



High Performance Cylinders

The Grant cylinder range consists of single, twin coil and pre-plumbed variants which are all manufactured to the highest specification to help deliver maximum heat transfer and recovery for effective hot water heating.

PAGE 10



Uflex Underfloor Heating

Grant's wet underfloor heating range, which includes systems suitable for both new build and retrofit situations, effectively and evenly distributes heat into a room while also helping the heat source, such as an air source heat pump, to work at its optimal efficiency.

PAGE 20



Afinia Aluminium Radiators

The Afinia aluminium vertical and horizontal radiators have excellent thermal conductivity which makes them highly responsive and incredibly effective for both low and high temperature systems.

PAGE 24



Sahara Solar Thermal

Available as on-roof mounting options, Grant's Sahara solar thermal systems offer a clean, sustainable and cost effective low carbon alternative to providing homes with hot water.

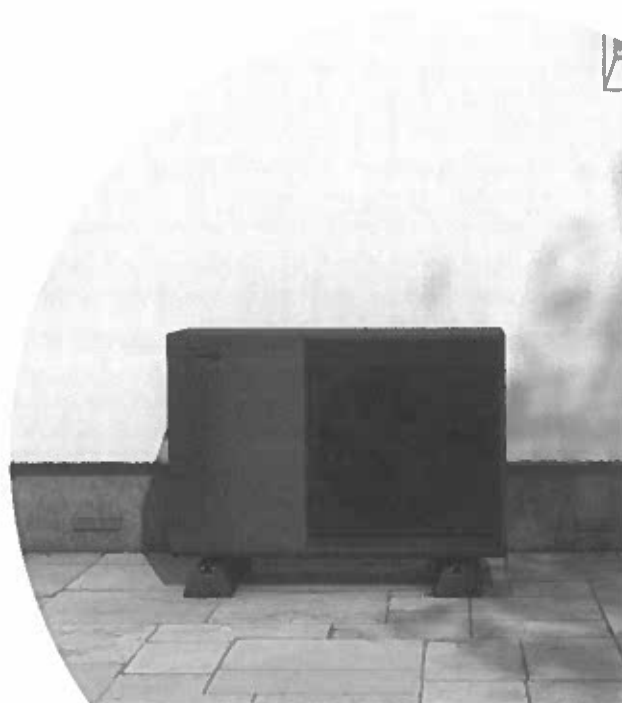
PAGE 28



Biomass

Condensing woodpellet boilers with ranges from 5kW to 66kW. Self cleaning and modulating burners. The unique Grant Spira Pell condensing woodpellet boiler combines easy installation with straight forward daily operation and low maintenance.

PAGE 31



PACKAGE SOLUTIONS BY GRANT

Renewable technologies are becoming increasingly popular amongst homeowners who want their property to be heated by a sustainable system. Consumer demand and industry legislation are driving manufacturers to develop products which have less impact on the environment, helping householders to reduce their carbon footprint and to lead greener lifestyles. Consequently, products which offer viable alternatives to traditional fossil fuel heating systems are playing a more prominent role in today's market with householders opting to install cleaner, renewable heating products within their home.

To meet this growing demand for greener heating solutions, Grant has carried out extensive research and development to design, manufacture and supply a comprehensive range of renewable heating technologies. Grant's renewable product portfolio consists of the heat sources and complementary products including a growing range of heat emitters. Not only can installers turn to Grant for a complete range of products but their customers benefit from the peace of mind that comes from sourcing their heating system from one manufacturer.

Grant's renewable technologies all achieve impressive individual efficiencies however, when multiple technologies are combined, the overall efficiency of the complete heating system can be further improved. For example, installing an air source heat pump alongside a high performance cylinder and effective heat emitters can take a home's heating system into a new class of efficiency. All of Grant's products have been developed to complement one another, allowing each product to work at its best when installed alongside the other components within the system helping it to achieve maximum overall efficiency.

Alongside its comprehensive product offering, Grant also provides customer support in the form of design assistance and quotations. The dedicated Grant Renewables Support Team is on hand to assist with the design and sizing requirements for renewable and underfloor heating installations. From answering design queries and assisting with heat loss calculations through to providing full system drawings and complete product specifications, the Renewables Support Team can provide expert advice to help installers and their customers make informed decisions when choosing the right heating solutions for their requirements.

Through its design and quotation services and product supply, Grant delivers complete home heating packages and with so many different products available within its portfolio, there is a package solution to meet almost any home's heating requirements. The diverse range of products available from Grant delivers choice and flexibility for customers, allowing them to select the technologies which best meet their heating needs. From new builds through to retrofits and renovations, Grant's heating products are suitable for installation within a wide range of properties.

For multiple package solutions, choose Grant.





AERONA R290 AIR SOURCE HEAT PUMPS

The Aerona R290 inverter driven air source heat pumps are Grant's greenest and most efficient heat pumps yet. Incorporating R290 refrigerant which has a significantly lower Global Warming Potential compared to traditional refrigerants, the Aerona R290 range models are cleaner and more eco-friendly while also being incredibly effective. With excellent SCOPs, all of the Aerona heat pumps achieve high performances allowing homeowners to lower their dependency on fossil fuels.













AERONA R290 RANGE

Consisting of five single phase models – 4kW, 6.5kW, 9kW, 12kW and 16kW – the AERONA R290 heat pumps provide heating and hot water for properties. Each unit operates at high efficiencies even when the external temperatures are low, making for a cost-effective renewable alternative to traditional off-gas heating methods. Furthermore, the AERONA 290 heat pumps have minimal impact on their surroundings being compact in size and quiet in operation with the 4kW, 6.5kW, 9kW and 12kW models achieving the Quiet Mark. The range is also Keymark approved.

A+++



FEATURES

-  Grant designed and tested
Built for Irish weather conditions
-  4-16kW Output
-  R290 Gas
-  Outdoor
-  Highly efficient
-  Weather Compensation
-  Inverter Driven
-  Domestic hot water/Central heating
-  3kW Backup Heater
-  65°C Flow temperature easily achieved



Features & Benefits

The new Grant Aeron 290 air source heat pump incorporates all the features and benefits of our existing Aeron³ range such as DC inverter driven and built in weather compensation, while now using R290 refrigerant. R290 is an environmentally friendly natural refrigerant gas. As it is a pure gas, it does not emit greenhouse gases into the atmosphere, resulting in a significantly lower Global Warming Potential (GWP) than other refrigerants. With an ERP rating of A+++ @ 35degC, a low GWP of 3, Remote Monitoring Software and Smart Control Options, the Aeron 290 is our most efficient air source heat pump to date.

How the Aeron R290 works

Air source heat pumps use basic thermodynamic principles to convert thermal energy contained within the air we breathe to heat energy that can be used to provide heating and hot water. This "ambient heat" is replenished by the sun making our heat pumps both effective and environmentally friendly.

Grant Aeron 290 heat pumps use an air to water system which uses energy absorbed from the air and transfers it to a water based heating system. The process uses the same vapor/compression cycle that extracts heat in a domestic fridge. A refrigerant with a low boiling point is exposed to external air temperatures in an evaporator. The liquid boils off to a gas and absorbs the thermal energy of the air. This gas is then compressed, increasing the heat energy contained within the refrigerant. It then passes through a heat exchanger where it condenses back to a liquid form, whilst transferring the heat to the water of the heating system. The liquid refrigerant is then re-circulated through the evaporator and the cycle is repeated.

Fit for the Future

With the recent fluctuations in price and supply of fossil fuels, air source heat pumps offer both an environmentally and economically sustainable alternative. Home heating accounts for approximately 30% of CO₂ emissions. The heat source used by Grant Aeron 290 heat pumps is entirely renewable which helps reduce the amount of harmful greenhouse gases being released into the atmosphere and, in doing so, lowers the carbon footprint of the household.

Lower Heating Costs

Compared with other domestic heating methods, the Grant Aeron 290 can benefit homeowners by creating annual savings on fuel bills. The units can deliver over four times the amount of energy for every 1kW of electricity used depending on the flow temperature and the climate conditions prevailing at the time. Homes utilising this type of heat generator will obviously have a lower dependency on fossil fuels, making them less susceptible to rising fuel costs.

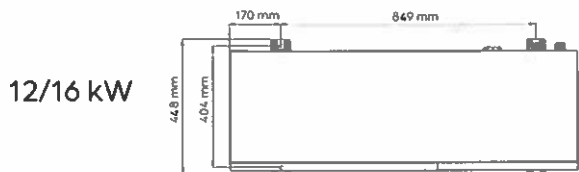
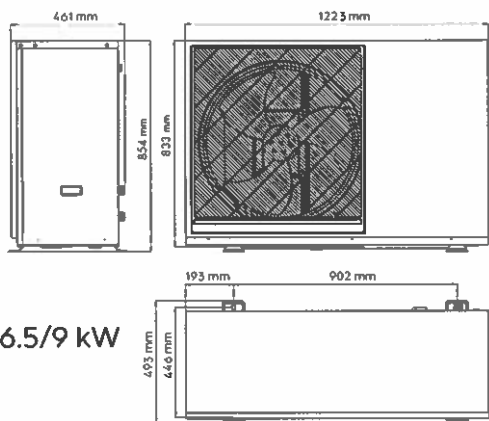
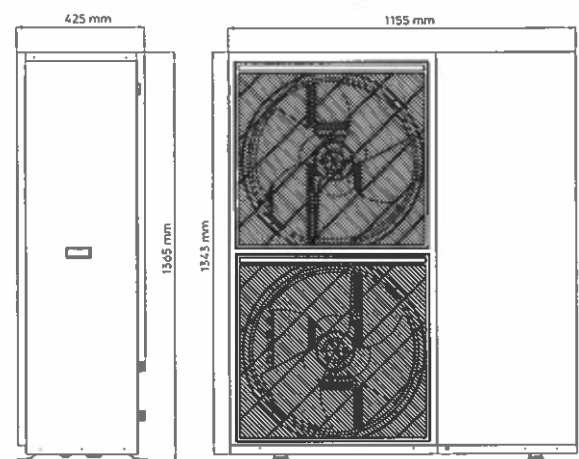
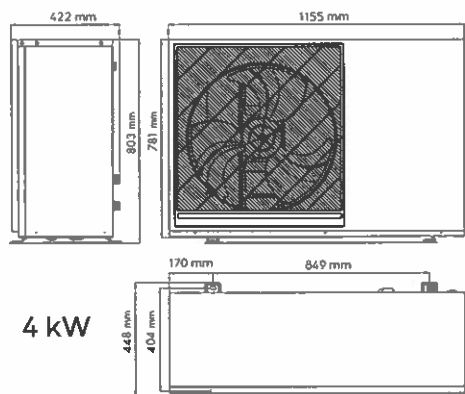


AERONA R290 TECHNICAL SPECIFICATIONS

	HPR290i40	HPR290i65	HPR290i90	HPR290i120	HPR290i160
ERP Rating (35°C/55°C)	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Height (mm)	803	854	854	1365	1365
Width (mm)	1155	1223	1223	1155	1155
Depth (mm)	422	461	461	419	419
Weight (Net/Gross) (kg)	101/116	117/137	132/149	155/182	182/210
Heating Capacity (A7W35) (kW)	4.1	7.6	9.38	12.2	16.16
Power Input (A7W35) (kW)	0.82	1.54	1.9	2.53	3.43
COP (A7W35)	4.99	4.95	4.93	4.81	4.72
SCOP	4.81	5.02	4.60	4.77	4.59
Refrigerant (R290) (kg)	0.59	0.81	0.96	1.2	1.65
Power Supply	230V/1Ph/50Hz				
Water Connections	1" BSP				
Min/Max Operating Temp (°C)	-25 to 43*				

* DHW

Dimensions



AERONA SMART CONTROLLER



NEW



The Aerona Smart Controller is an intuitive solution to control Grant heat pumps, cleverly incorporating sophisticated controller technology in a sleek display. Easy to install, this weather compensated controller incorporates heating curve configuration and advanced monitoring software to help with maximising the efficiency of Aerona 290 heat pumps.

Using the Aerona Smart Controller, installers can set, view and adjust the time schedules for the heating circuits, domestic hot water and the heat pump's on/off schedule as well as accessing in-built system configurator features which support the set-up and commissioning of an Aerona 290 heat pump and the system circuits. Supplied with the Aerona WiFi Hub, the Aerona Smart Controller can also be accessed remotely by homeowners and installers using a supporting browser-based platform and app.

INTUITIVE
DESIGN



7 DAY
PROGRAMMING



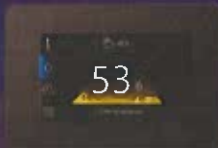
EASY
SET UP



HEATING CURVE
SELECTION



WEB BASED
MONITORING &
CONTROL



3 HEATING
ZONES + DHW





Grant High Performance Cylinders

The cylinder range comprises high efficiency indirect hot water solutions which can partner with all of Grant's heat source appliances. Each model can complement traditional and renewable technologies, providing an eco-friendly, reliable and energy efficient solution for a home's hot water requirements. All of the Cylinder models are suitable for use as unvented or open vented cylinders, and are designed to suit multiple installation scenarios, making them Grant's most versatile range of hot water cylinders.



INTRODUCTION TO THE CYLINDER RANGE

Universal Compatability

All of the Cylinders are suitable for installation alongside boilers, air source heat pumps and solar thermal systems. This means they can be fitted as part of a package with either a Vortex oil boiler, an AERONA 290 air source heat pump or a Grant Solar Thermal system. When an installation involves more than one heat source, such as a heat pump and solar thermal system, both systems can be combined using one of the twin coil Cylinder models. The streamlined Cylinder range is, therefore, incredibly adaptable with each model being suitable for multiple applications which can make specification very straightforward.

Excellent Performance

The Cylinder range is Grant's most efficient generation of cylinder models, boasting our fastest heat-up times and improved standing heat losses.

Clever Design

Each Cylinder incorporates a number of design features which make for an easier installation. The connections are all compression fittings and the pre-plumbed models include a fully integrated wiring centre. A 100mm high plinth is also an optional accessory and is suitable with all cylinders except the Integrated. This allows the pipework to be neatly routed under the cylinder and onto the cylinder connections as required. With these features and the cylinders' streamlined design, the range successfully combines function and aesthetics.

Quality build

The Cylinder range is produced to the highest standards so that each model delivers maximum heat transfer and recovery. They are manufactured using a high quality duplex stainless steel inner shell and the large internal coils are made from 22mm stainless steel tubing. Each cylinder is also insulated with 50mm of CFC/HCFC free, fire retardant, polyurethane foam which is injected between the stainless steel cylinder and the galvanised outer casing. This high level of insulation ensures low standing heat losses and outstanding efficiency. All of the cylinders within the range have a 10 year guarantee on their shell, reflecting their exceptional build quality and providing ultimate peace of mind.

Features

- 10 year material guarantee on cylinder shell (subject to full Terms and Conditions)
- 22mm stainless steel compression bosses supplied with polypropylene caps for protection during transit (Pre-plumbed and Integrated Cylinders have 28mm compression fittings supplied in the kit)
- No anode required
- Factory-fitted 3kW immersion heater
- Fast recovery stainless steel coils
- Labelled tappings and connections
- Factory fitted temperature and pressure relief valve
- Supplied with an unvented kit. The kit includes an expansion vessel, inlet manifold, tundish, 2-port motorised valve and dual thermostat
- Quality external finish with organic Estectic Tex paint
- Global Warming Potential (GWP) of 3.1
- Ozone Depletion Potential (ODP) of 0



CYLINDER MODELS

The Grant unvented, indirect mains pressure cylinders are available in single coil and twin coil variants. Available in sizes from 150 litres up to 300 litres, the Cylinders are high performing units which provide homes with an efficient, reliable hot water storage solution. The range includes pre-plumbed models which make for a quicker and easier installation as well as slimline units which are ideally suited for properties where space is at a premium. Internal and external volumisers are also available to complement the Cylinder range.

Models – Nominal Volumes

Single Coil

HPCY150G	150 litres
HPCY180G	180 litres
HPCY210G	210 litres
HPCY300G	300 litres

Single Coil | Slimline

HPCY150SLIM	150 litres
HPCY180SLIM	180 litres
HPCY210SLIM	210 litres

Single Coil | Pre-Plumbed

HPCY210PPG	210 litres
------------	------------

Single Coil | Integrated

HPINT210G	210 litres
-----------	------------

Twin Coil

HPCY210TWIN	210 litres
HPCY300TWIN	300 litres

Pre-Plumbed Models

The Pre-Plumbed cylinder models are supplied with the following:

Factory-fitted pre-wired controls

Factory-fitted cold water inlet pipework

Potable water expansion vessel for the cylinder

Factory-fitted primary system pipework including a built-in filling loop, system pressure gauge, automatic system bypass, a 2-port zone valve for the hot water and two 2-port zone valves for two heating zones

Optional galvanised plinth

Grant Integrated Cabinet Cylinder

The Integrated Cylinder is Grant's first cabinet cylinder model. This product encloses a Pre-Plumbed 210 litre single coil cylinder within a white casing which is suitable for kitchen and utility room installations. This innovative product, which has a similar footprint to that of a washing machine or fridge, has been designed with both the installer and homeowner in mind. The self-contained cabinet cylinder includes multiple factory-fitted features so installation is simple and straightforward. Meanwhile, the design of the unit allows for a cylinder to be easily integrated into a home, ideal when a separate airing cupboard or plant room is not available.

Supplied as standard:

Both the heating system and hot water expansion vessels

Pressure gauge and filling loop

Pre-wired electrics and factory-fitted pipework including a built-in filling loop, system pressure gauge, automatic system bypass, a 2-port zone valve for the hot water and two 2-port zone valves for two heating zones

Easy to access pipe connections and electrical cable outlets positioned at top of the unit towards the rear

Spacer channels provided to create a 100mm deep void between the rear of the cabinet and the wall to accommodate and conceal the pipework and electrical wiring, if required

Upper front panel is hinged and supported in the open position on two gas springs to allow access to control panel

Restraining chain fitted to the front panel to ease opening



GRANT WAVE CYLINDERS

Features & Benefits

Grants range of Wave cylinders are manufactured from duplex stainless steel and are indirect, mains water cylinders with single, double and triple coil options available. The single and double coil cylinders are high gain, which leads to a much faster heating time and quicker recovery. The range of cylinders have been specifically designed to operate in conjunction with the Grant Aeron 290 heat pump range.

- *10 year guarantee (subject to T&C's)
- Available from 150ltr - 300ltr
- Immersion heater & fast recovery stainless steel solid coils
- Suitable for use with heat pumps, biomass, gas, oil boilers and solar
- Suitable for both domestic and light commercial use
- T&P valve factory fitted
- Manufactured from 'Duplex' stainless steel for superior corrosion resistance
- 28mm and 22mm compression fittings
- 50mm CFC and HCFC-free foam lagging for low heat loss
- Additional sizes may be available upon request
- Cylinder kits available
- Good flow rate ideal for homes with multiple bathrooms and fast filling of baths
- Economical to run with minimal maintenance
- Fast reheat times for quick availability of hot water
- Not suitable for well or private water supplies



NOTE: Not suitable for a private well or bore hole



GRANT PRE-PLUMBED CYLINDERS

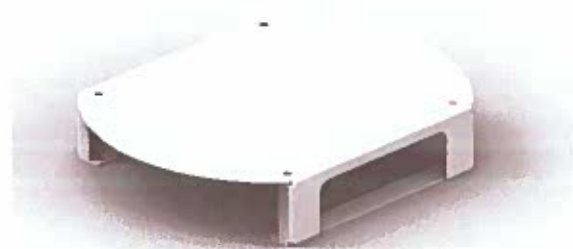
Features & Benefits

Our 210 litre pre-plumbed cylinder still features the same quality and efficiencies of the existing Grant cylinder range.

It comes configured for 2 heating zones and a domestic hot water zone, with an option to add an extra heating zone. It also includes a factory fitted automatic bypass. The Grant wiring centre now comes pre-fitted onto the cylinder for speed and ease of installation. This is a pre-configured electronic wiring centre that allows the installer to connect controls (stats, clocks etc), pumps, motorised valves etc together in a coherent and simple to understand manner. The wiring centre does all the complicated cross wiring during installation.

- Pre-plumbed & Pre-wired for speed of installation
- Available in 210ltr
- *10 year guarantee (subject to T&C's)
- Can be supplied with a plinth for increased options for pipe connections
- Filling valve
- Domestic hot water zone that allows hot water priority and a two-zone heating, with an option for a third heating zone
- Heating and DHW expansion vessels are installed
- Pressure reducing manifold installed and plumbed
- Automatic by pass fitted as standard
- Good flow rate ideal for homes with multiple bathrooms and fast filling of baths
- Economical to run with minimal maintenance
- Fast reheat times for quick availability of hot water

NOTE: Not suitable for a private well or bore hole



Cylinder Plinth



Technical Specifications

Cylinder Plinth code		Height (mm)	Diameter (mm)
MBK-24	Cylinder Plinth	100	550
470CP		470	550

GRANT INTEGRATED UNIT

Features & Benefits

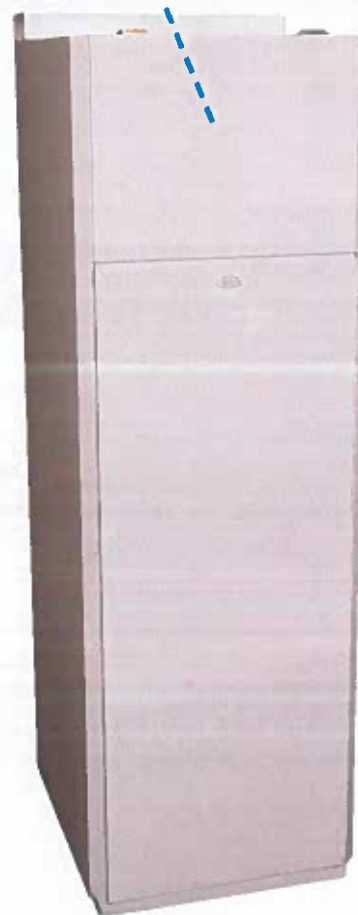
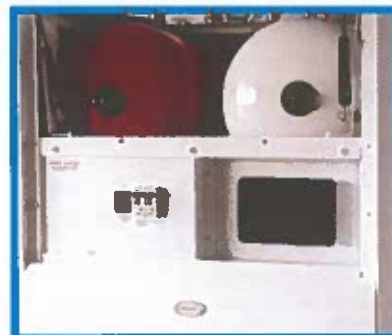
Standing at 1.8 metres high and with a footprint of 625 x 595mm, the Grant Integrated Unit can be installed neatly within domestic spaces of a property. Featuring aesthetically pleasing white paneling, the unit is easily incorporated into the design of most modern homes, with the system controls and display easily accessed by the homeowner if required. If access is required, homeowners can find the system's controls, heat pump controller and pressure gauge behind the top door of the easy open unit.

The Integrated Unit has been pre-plumbed and pre-wired for a domestic hot water zone that allows hot water priority and a two-zone heating, with an option for a third heating zone. As the unit is pre-plumbed and pre-wired, it is time saving and enables a hassle free installation for the installer. The Grant 210 litre capacity single coil Integrated Unit has a solid, stainless steel coil which will lead to a much faster heating and recovery time.

When installing a Grant Integrated Unit with a Grant Aerona 290 heat pump, it is very important that the unit has been correctly sized to ensure the hot water needs of the property are fulfilled. Sizing will be carried out by the Grant technical team as part of the home heating design service.

Stainless steel cylinders should not to be fitted on private water source, bore hole or well.

- High gain 210 litre capacity single coil
- Solid stainless steel coil
- System controls and display easily accessed
- Pre-plumbed and pre-wired
- Domestic hot water zone that allows hot water priority and a two-zone heating, with an option for a third heating zone
- Heating and DHW expansion vessels are installed
- Pressure reducing manifold installed and plumbed
- Fitted with fill and flush point
- Automatic by pass fitted as standard
- Good flow rate ideal for homes with multiple bathrooms and fast filling of baths
- Economical to run with minimal maintenance
- Fast reheat times for quick availability of hot water



NOTE: Not suitable for a private well or bore hole

CYLINDER RANGE TECHNICAL SPECIFICATIONS

Single Coil

Model	Actual Capacity (ltrs)	ErP Rating	Expansion vessel (ltrs)	Coil rating primary (kW)	Standing heat loss (kW/24hrs)	Overall Height (mm)	Overall Diameter (mm)	Weight empty (kg)	Weight full (kg)
HPCY150G	136	C	19	32.0	1.41	1117	550	45	181
HPCY180G	167	C	19	32.0	1.61	1305	550	50	217
HPCY210G	197	C	19	32.0	1.79	1491	550	54	251
HPCY300G	289	C	24	34.0	2.24	2054	550	68	357

Single Coil | Slimline

Model	Actual Capacity (ltrs)	ErP Rating	Expansion vessel (ltrs)	Coil rating primary (kW)	Standing heat loss (kW/24hrs)	Overall Height (mm)	Overall Diameter (mm)	Weight empty (kg)	Weight full (kg)
HPCY150SLIM	141	C	19	30.0	1.58	1458	478	39	180
HPCY180SLIM	171	C	19	30.0	1.72	1708	478	43	214
HPCY210SLIM	201	C	19	30.0	2.08	2021	478	50	251

Single Coil | Pre Plumbed

Model	Actual Capacity (ltrs)	ErP Rating	Expansion vessel (ltrs)	Coil rating primary (kW)	Standing heat loss (kW/24hrs)	Overall Height (mm)	Overall Diameter (mm)	Weight empty (kg)	Weight full (kg)
HPCY210PPG	197	C	19	32.0	1.79	1493	550	59	256

Single Coil | Integrated

Model	Actual Capacity (ltrs)	ErP Rating	Expansion vessel (ltrs)	Coil rating primary (kW)	Standing heat loss (kW/24hrs)	Overall Height (mm)	Overall Width (mm)	Overall Depth (mm)	Weight empty (kg)	Weight full (kg)
HPINT210G	197	C	19	32.0	1.79	1855	594	727*	139	375

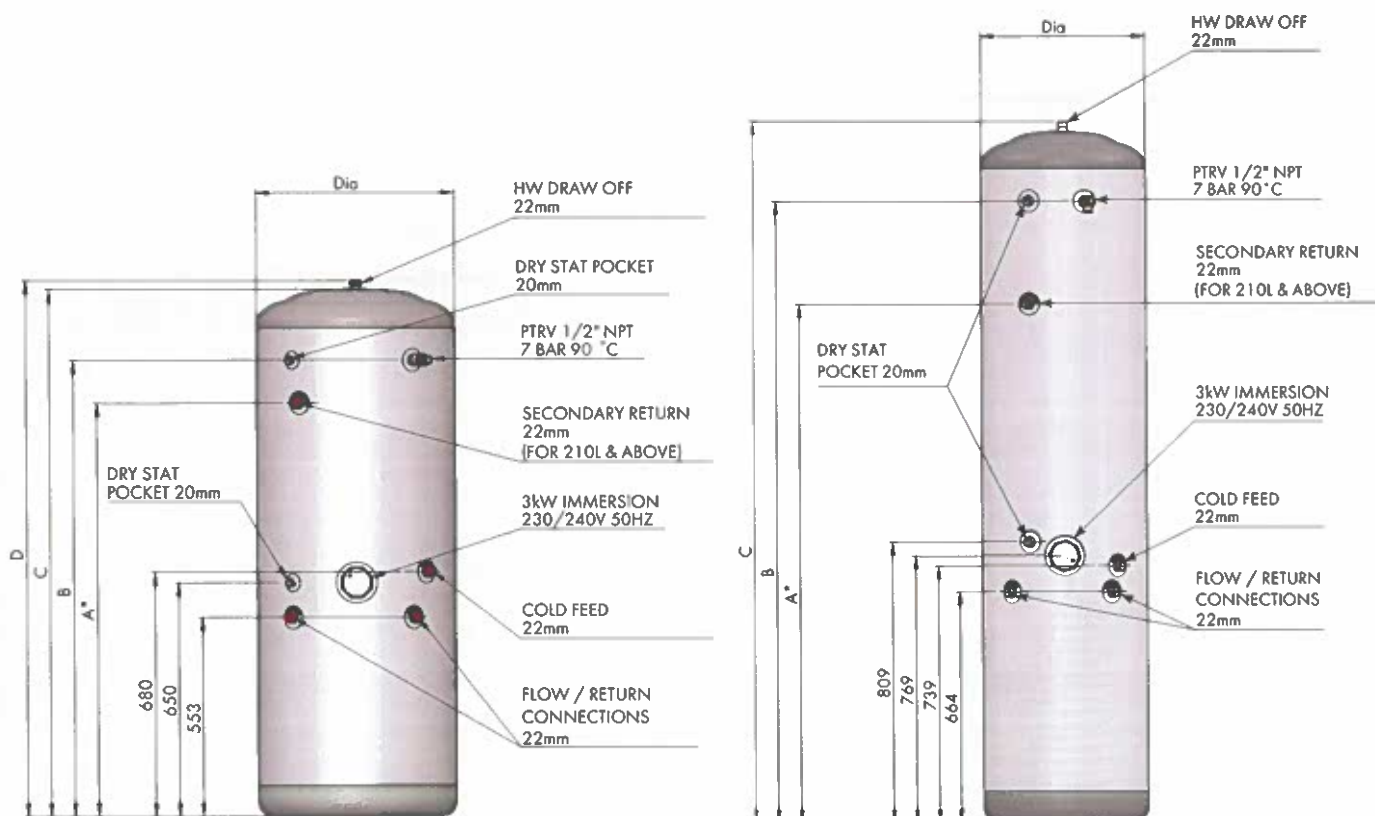
Twin Coil

Model	Actual Capacity (ltrs)	ErP Rating	Expansion vessel (ltrs)	Coil rating primary (kW)	Solar Coil (kW)	Standing heat loss (kW/24hrs)	Overall Height (mm)	Overall Diameter (mm)	Weight empty (kg)	Weight full (kg)
HPCY210TWIN	192	C	19	32.0	19.7	1.79	1490	550	59	251
HPCY300TWIN	284	C	24	34.0	22.1	2.24	2054	550	77	361

*includes 100mm spacer channel (627mm without spacer)



TECHNICAL SPECIFICATIONS



Single Coil

Dimensions (mm)	150L	180L	210L	300L
A*	-	-	1150	1600
B	893	1081	1269	1832
C	1091	1279	1467	2030
D	1117	1305	1491	2054
Diameter	550	550	550	550

*Secondary return on 210 & 300 litre models only

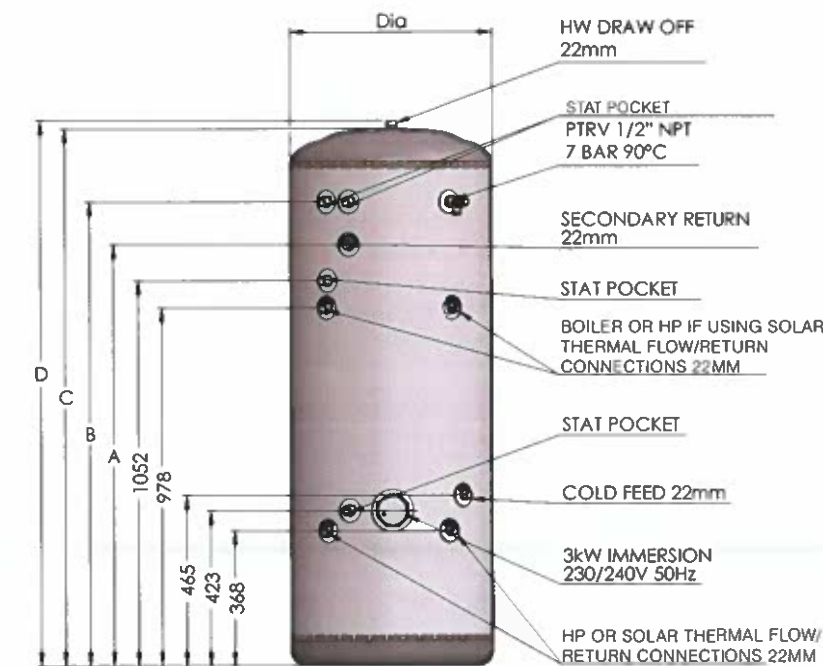
Single Coil | Slimline

Dimensions (mm)	150L	180L	210L
A*	-	-	1494
B	1228	1478	1791
C	1458	1708	2021
Diameter	478	478	478

*Secondary return on 210 litre model only

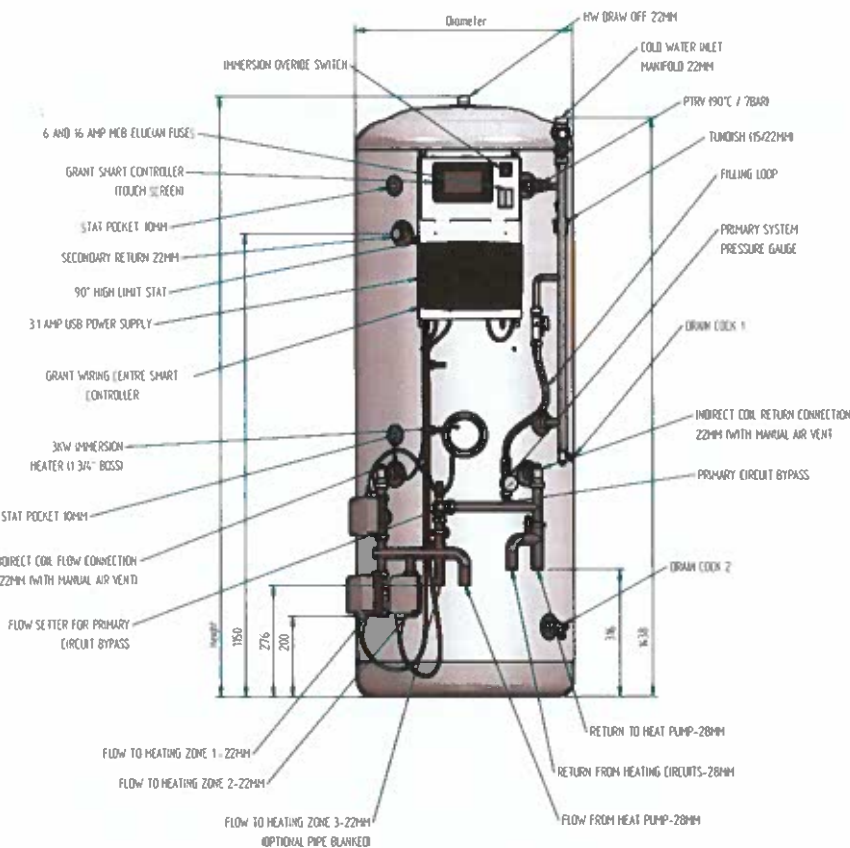


CYLINDER RANGE TECHNICAL SPECIFICATIONS



Twin Coil

Dimensions (mm)	210L	300L
A	1150	1601
B	1267	1831
C	1467	2030
D	1490	2054
Diameter	550	550

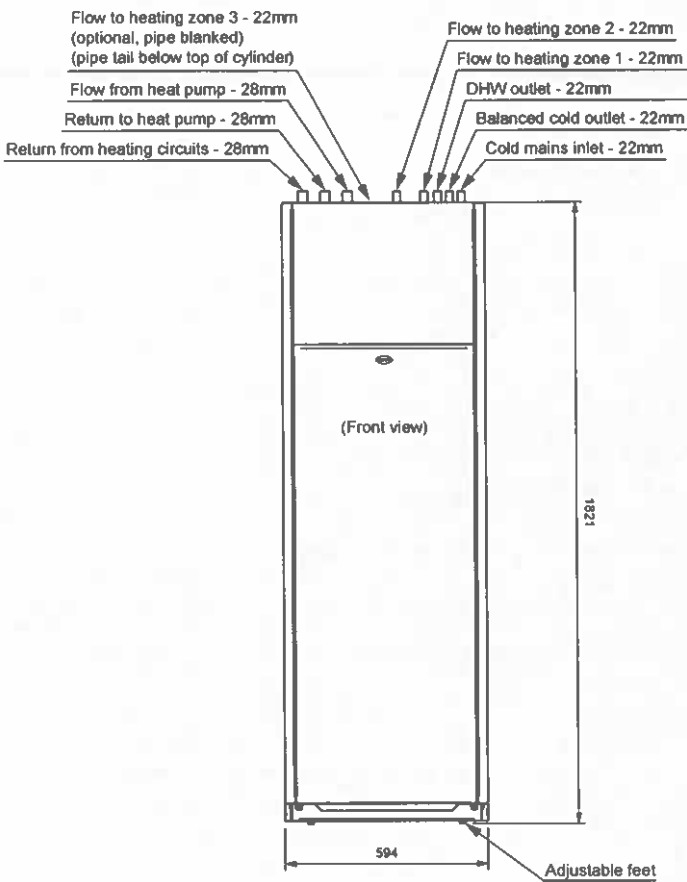


Single Coil | Pre-Plumbed

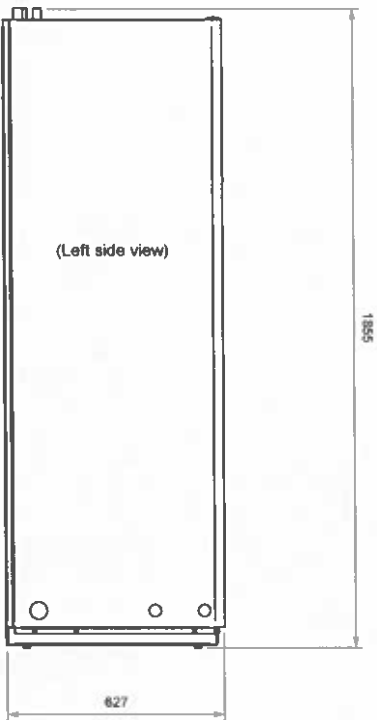
Dimensions (mm)	210L
A	1150
B	1269
Height	1493
Diameter	550



TECHNICAL SPECIFICATIONS

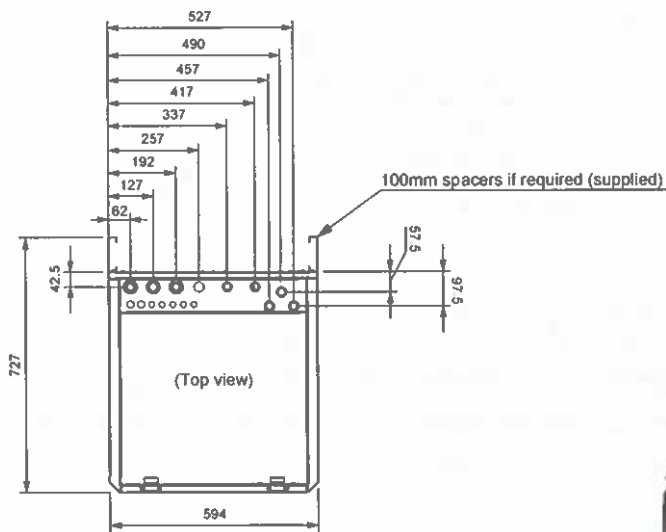


Front View



Side View

Single Coil | Integrated



Top View



A photograph of a person's bare feet standing on a polished wooden floor. The person is wearing light-colored jeans with the hems rolled up. A dark purple rectangular box is overlaid on the right side of the image, containing white text. In the bottom right corner, there is a faint, circular, embossed-style stamp.

UFLEX UNDERFLOOR HEATING

Grants Uflex underfloor heating system is embedded into the floor construction. It is ideally suited for new builds whereby the pipework is installed during the initial stages of the property's development. The Uflex pipework is then positioned and clipped into place once the flooring's insulation and membrane has been fitted, after which a sand/cement or flow screed is laid over the top and allowed to fully dry before heat is introduced.



UNDERFLOOR HEATING BY GRANT

Highly efficient

The warm water used in underfloor heating systems has a much lower flow temperature, compared to conventional radiator systems, as it feeds into a much larger surface area. This enables it to heat a room very effectively and efficiently.

Grant's underfloor systems operate at their most efficient when they are not frequently switched off and on. The floor screed takes time to heat up, but once up to temperature it only requires a small amount of energy to maintain this. Switching the system off and on, as is commonly the case with a radiator system, results in the floor losing temperature, requiring more heat input to reach that temperature when switched back on again, and so on.

Optimal control and comfort

When designing an underfloor heating system, the pipework layout can be easily divided into zones. With Uflex underfloor, the rooms can either be split into more than one zone or multiple rooms can be incorporated into one zone. This allows homeowners to precisely control the temperature in a particular room or a space within a room. The temperature delivered is also evenly distributed from one side of the room to the other. The pipework is positioned so that the entire room will receive heat with no 'hot spots' or cool draughts. Underfloor systems radiate heat uniformly upwards, achieving a constant temperature throughout the space to deliver ultimate comfort.

Quick & easy installation

Grant underfloor heating is supplied as packs specifically suited to meet the requirements detailed in the system designs. From the pipework and connections through to the edging strip and controls, Grant can supply all the components required. Straightforward to install. Grant's underfloor range is user-friendly to work with and simple to maintain. Furthermore, Grant can be on hand with a full design service, providing installers with assistance from start to finish.

Dedicated design team

Grant has a Design Team who are on hand to provide product and design assistance. This Team has extensive experience in a range of products including air source heat pumps, complementary technologies, and heat emitters such as underfloor. From product specification through to producing full designs, Grant can help installers develop bespoke package solutions to suit the heating needs of their customers.

Underfloor design service








Specifying the required parts to complete an underfloor heating installation can be time-consuming so Grant are able to provide installers with comprehensive quotations, quickly and efficiently. Each quotation will detail the components required to complete the specific job being quoted for. These components can then be supplied as a pack once the order is finalised.



UFLEX UNDERFLOOR HEATING



FEATURES

-  Highly efficient when paired with a heat pump
-  Easy Installation
-  Optimal control and comfort
-  Uniform heat distribution across the room area & constant room temperature
-  Operates at lower flow temperatures
-  Can provide individual zone control
-  Increased hygiene due to reduced air circulation transferring dust particles

Quality Underfloor Pipe

The basic operation of a water-based underfloor heating system is pipe embedded within a concrete screed, with warm water circulating through the pipe work allowing for the gradual heating of the screed and eventual emitting of heat from the floor into the room.

Features

- WRAS Approved
- Five layer composite pipe using PEX-AL-PEX pipe, with inner and outer layers and a 0.2mm thick edge-welded aluminium core.
- Butt welded manufacturing method.
- Can be formed by hand and maintains its shape perfect for underfloor heating pipework.
- Suitable for general use in underfloor and low temperature heating applications, maximum temperature 90°C and 10 bar maximum pressure.
- White outer layer looks good even in exposed runs.
- A wide range of complimentary accessories to ensure trouble-free fitting. Pipe connectors, mounting rail, pipe staples, tacker guns and bend supports are all available in the UFH Accessories section.
- Simple and easy to use 16mm multi-layer heating pipe.

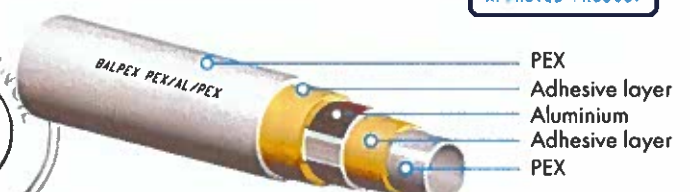
Screeded System

Once the Uflex pipework has been secured into place, the manifold installed and system pressure tested, a screed is laid with a thickness, specified by the architect/engineer and then left to dry. The screed suppliers recommend that during the drying period, no heat should be introduced to the system and no one should walk over the floor construction. Using a flow or sand/cement screed, as opposed to a solid screed system, means that the drying time is much quicker with the flow screed mix drying in up to thirty days. Again, the drying time and screed thickness will be specified by the project's architect/engineer.

Quick reaction time

The Uflex system is designed for continuous operation with heat being supplied through the screed all day. This means that the screed acts as a thermal store. As the change in the temperature demand between unoccupied and occupied will be relatively small (17°C to 21°C for example), the manifold and controls will manage the flow of water into the system at the correct temperature and flow rate to satisfy the heat demand.

PEX-AL-PEX PIPE



PREFERRED CONTROLS STRATEGY



Full time and temperature control and Keylock feature to prevent temperature tampering



Slim and stylish in design



Backlit display which turns off when not in use



App enabled option



Controls are simple to install and setup

Heating Controls

In addition to the mechanical components such as pipework, manifold and other components, Grant also supply the necessary controls to operate the underfloor heating system as efficiently and as effectively as possible.

The Grant control system provides homeowners with the ability to control the underfloor heating system with the touch of a button.

The wiring centre allows for different heating zones.

The stat allows full time and temperature control. The stat can be set to provide different room temperatures at different time intervals on individual heating zones. The room thermostat can be controlled from anywhere wirelessly.

Having open loops on the heating system is an alternative and highly efficient control strategy for controlling underfloor heating. This type of control is done on a purely weather compensated basis from the main heat pump controller. This removes the need for room stats around the building, reducing installation costs and can lead to higher efficiencies.

Whilst it may seem counter-intuitive, the lesser the number of controls used with a heat pump, the greater the overall heat pump and system efficiency is.

All heat pump systems work best with unobstructed flow rates and minimal heating controls.

Open loop heating systems are the best and most efficient method with any heat pump. This is achieved with:

No or minimal TRVs on radiators.

No or minimal Underfloor actuators.

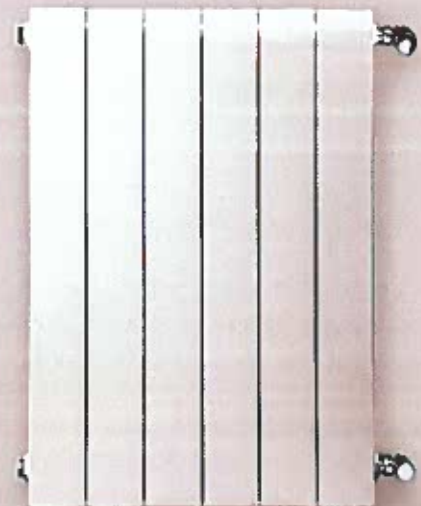
Minimal room thermostats.

Weather compensation control.



AFINIA ALUMINIUM RADIATORS

The Afinia Aluminium radiators combine functionality and aesthetics to deliver the ideal partner for both traditional and renewable heating systems. Available in horizontal and vertical options, the Afinia radiators are superb conductors of heat and incredibly responsive, heating up and cooling down quickly. Their curved design and sleek appearance also make them a stylish addition to any room.



AFINIA RANGE

Grant's Afinia aluminium radiators are more efficient than traditional radiator materials, such as steel and cast iron. Aluminium has excellent thermal conductivity and this, combined with their low water content, makes these radiators incredibly effective. With low energy consumption, Afinia radiators can therefore provide cost savings for householders on their energy bills.

Being a great conductor of heat, aluminium radiators heat up and cool down very quickly, enabling them to rapidly respond to any changes in the temperature demand set via the thermostat. Afinia radiators can heat up a room in a short amount of time once set to do so by the thermostat and, equally, if the temperature setting is reduced, they will cool down quickly as well. This functionality makes the Afinia radiators incredibly adaptive heat emitters, delivering maximum room comfort.

Compatibility & flexibility

Afinia aluminium radiators can be installed with high and low temperature heating systems which makes them compatible with all of Grant's heating products. Their performance levels, which comply with European requirements, make the Afinia range an ideal partner for renewable appliances in particular. With their smaller size, compared to steel radiators, the Afinia models work incredibly effectively with air source heat pumps.

Supplied fully assembled and available in both horizontal and vertical options, the Afinia range is adaptive to suit the location where it will be sited. The horizontal radiators are available in three heights – 430mm, 580mm and 680mm – with 6 to 20 section combinations, delivering choice and flexibility when it comes to installation. Meanwhile, the vertical models are supplied with 6 or 8 sections and are available in two heights – 1,842mm and 2,042mm – providing the perfect solution when space is limited.

Simple installation

Afinia radiators have a number of features which make for an easy installation. They are light in weight and manageable for a single engineer to install. Each Afinia radiator comes with robust steel wall brackets which allow for the straightforward mounting of each radiator. In addition, no electricians are involved with the fitting of these aluminium radiators which allows for a quick installation, reducing installation costs.

Aesthetics

One of the distinctive features of radiator's aesthetics is their curved, rounded surface. This design makes them stylish in appearance allowing them to subtly suit their environment. Slim in build and supplied in an off-white colour finish, Grant's Afinia radiators can suit many a home's bespoke requirements.

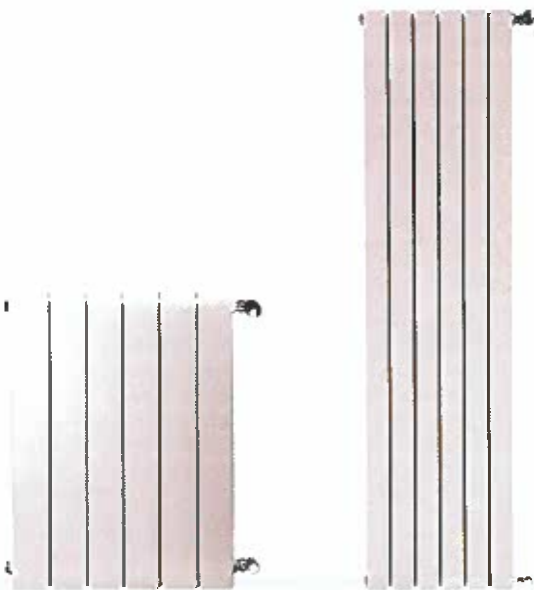
Peace of mind guaranteed

All the models within the Afinia aluminium radiator range are supplied with a 15 year guarantee, reflecting their quality of build. Following extensive testing and independent verification of the radiators' efficiency, reliability and output, a market leading 15 year guarantee accompanies the Afinia aluminium radiators to provide complete peace of mind for householders.

NOTE: All aluminum radiator systems must have system inhibitor added as standard



AFINIA ALU RADS

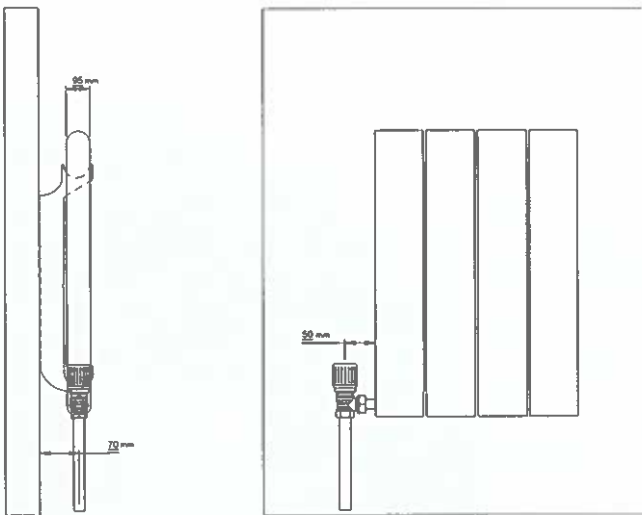


Features & Benifits

The Afinia Aluminium Radiator has curved surfaces, an off white powder coated finish and is available from 6 to 20 sections, as either a standard rad or vertical rad, ensuring that it can fit any application.

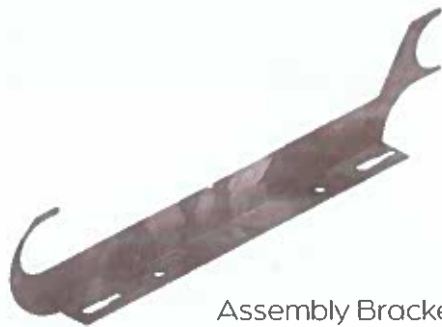
Designed to work with both low and high temperature heating systems, the Afinia radiators deliver superior quality and performance matched by the sleek and stylish finish.

Dimensions



FEATURES

-  White powder coated finish
-  Curved surfaces
-  6-20 sections
-  Easy installation
-  Highly efficient
-  Low surface temperature
-  Slim and compact design
-  Standard colour RAL 9010 Faral
-  The thermal power complies with the European standard UNI EN 442-2



Assembly Bracket



Assembly Kit



*Subject to full T&C's

AFINIA RANGE TECHNICAL SPECIFICATIONS

Horizontal

	430MM	580MM	680MM
Height (mm)	430	580	680
Width per section (mm)	80	80	80
Depth (mm)	95	95	95
Centres (mm)	Add 100mm to width of rad	Add 100mm to width of rad	Add 100mm to width of rad
Water Volume (L)	0.25	0.34	0.39
Output 20(W)	28	38	41
Output 50(W)	92	124	142

430MM				580MM			680MM			
Sections	Code	Output	Output	Code	Output	Output	Code	Output	Output	Width of rod (mm)
		W ΔT20	W ΔT50		W ΔT20	W ΔT50		W ΔT20	W ΔT50	
6	GALU4306	169	552	GALU5806	228	744	-	-	-	480
8	GALU4308	225	736	GALU5808	304	992	GALU6808	330	1136	640
10	GALU43010	281	920	GALU58010	380	1240	GALU68010	413	1420	800
12	GALU43012	338	1104	GALU58012	456	1488	GALU68012	495	1704	960
14	GALU43014	394	1288	GALU58014	532	1736	GALU68014	578	1988	1120
15	-	-	-	GALU58015	570	1860	-	-	-	1200
16	-	-	-	GALU58016	608	1984	-	-	-	1280
18	-	-	-	GALU58018	684	2232	-	-	-	1440
20	-	-	-	GALU58020	760	2480	-	-	-	1600

Vertical

	1842MM	2042MM
Height (mm)	1842	2042
Width per section (mm)	80	80
Depth (mm)	80	80
Centres	Add 100mm to width of rad	Add 100mm to width of rad
Water Volume (L)	0.68	0.75
Output 20(W)	79	85
Output 50(W)	271	293

		1842MM		2042MM			
Sections	Code	Output		Code	Output		Width of rad (mm)
		W ΔT20	W ΔT50		W ΔT20	W ΔT50	
6	GALUV18426	474	1626	GALUV20426	510	1758	480
8	GALUV18428	632	2168	GALUV20428	680	2344	640

Please note: Afinia aluminium radiators are sized in accordance with the heat requirement of each individual room.



GRANT SOLAR RANGE

Solar Thermal Systems from Grant allow householders to utilise the power of the sun to provide hot water to their home. An environmentally responsible alternative to traditional energy sources and fossil fuels, solar thermal technology has zero CO₂ emissions and efficiently uses the energy from the sun within a central heating system. Grant Solar Thermal systems are compatible with different types of roof and easily incorporate into an existing or new heating system so accessing the benefits of the inexhaustible supply of sunshine is made simple and easy.



SAHARA SOLAR RANGE

Grant supply their Solar Thermal Systems as a series of individually numbered kits that meet the requirements of most installations. Each kit consists of the Sahara collector(s) (either portrait or landscape), a roof mounting system, expansion vessel, pump station, controller, pipe connections and solar fluid.

Features & Benefits

Grant Solar thermal collectors can integrate easily with conventional heating systems.

The range includes a high efficiency flat plate collector, multi functional controller with LCD display.

Grant Sahara collectors have a durable aluminium frame with a bronze anodised finish, which has been designed to blend in with most domestic roof types.






Heat Transfer Technology

Grant use a unique patented system where the heat transfer sheet interlocks both the pipe and absorber for perfect thermal transfer. Additional aluminium plates enclose the copper pipes. The plates combined with an industrial strength adhesive result in 360° heat transfer.

When choosing a solar thermal system, there are a number of factors to consider. Almost any roof type is suitable, however, a south facing arrangement could gain 100% of the light available during the day. If the roof was to face South-East or South-West, there will be a reduction in yield by 5-10%.



Features

-  82.6% collector efficiency
-  4mm self cleaning glass
-  Copper absorber with sun select coating for most efficient solar absorption
-  Solar Key Mark approved
-  On roof mounting options

Designing your system

Grant Solar collectors have an absorber (or nett) area of 2.14m². As a rule of thumb, when sizing a system, you should allow 1.0-1.3m² of nett collector area, per person.

Cylinder requirements are 50-60 litres capacity per m² of nett collector area. To simplify this, for a 2-collector system of 2 x 2.14 = 4.28m², you would require a cylinder of approximately 200-250 litres. This should be sufficient for 4 people and satisfy up to 70% of your hot water demand per annum.

Things to consider

- Location of building
- Orientation of building
- Angle of inclination (roof)
- Shading of collectors
- Collector array in m²
- Hot water requirements
- Size of cylinder
- Pipework requirements

Free energy!

Many people believe that solar panels only work in the summer, however this type of free energy is available throughout the year. From May to September, Grant Solar can produce 100% of the energy required for heating your domestic water (see right). The Grant Sahara collector operates not just with direct sunlight, but also diffused sunlight, so they even work on cloudy days.

On average, Grant Solar can provide up to 70% of your hot water needs per year, for free!

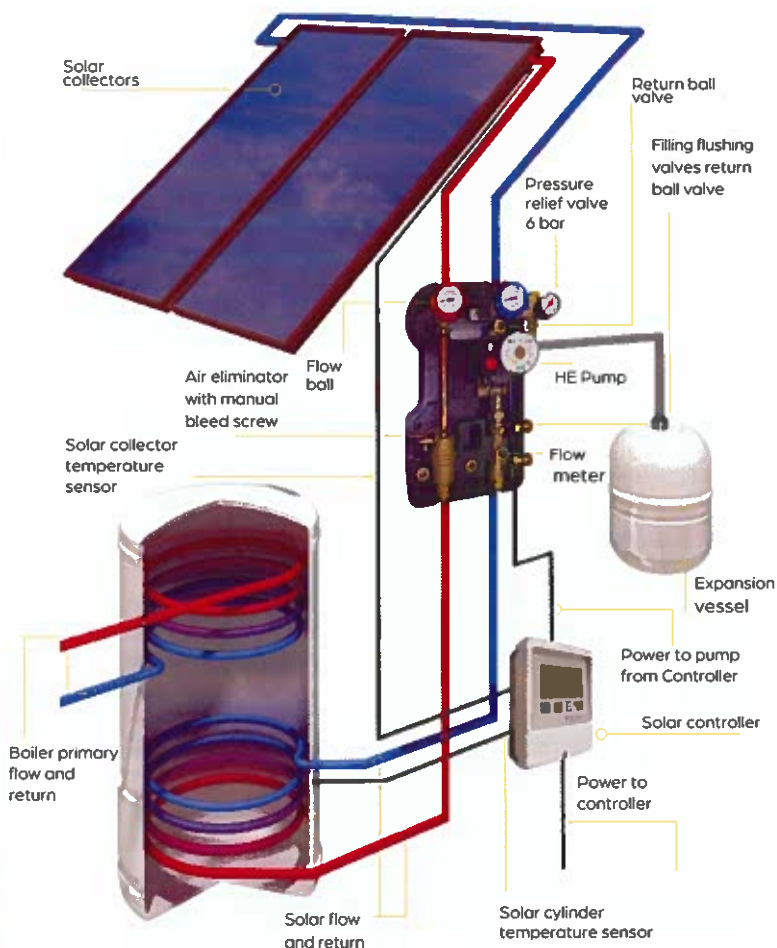
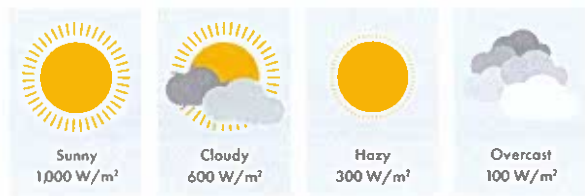
SOLAR THERMAL SYSTEM DESIGN

TECHNICAL SPECIFICATIONS

Length	mm	2043
Width	mm	1143
Depth	mm	80
Weight	kg	40
Collector gross area	m ²	2.34
Degree of efficiency no	%	82.6
Heat loss coefficient	(a1)	4.4
Zero-loss collector efficiency	(n)	0.826
Heat capacity	kW	1.7
Stagnation temperature	°C	177*
Maximum operating pressure	bar	10
Fluid content	litre	1.6

Absorber		
Absorption	%	95
Emission	%	5.0
Absorber net area	m ²	2.14
Material/coating	Copper/sunselect	
Minimum efficiency	kWh/m ² a	525

*Test conditions: irradiance 1000 W/m² ambient temperature 30 °C



BIOMASS BOILERS

Condensing woodpellet boilers with ranges from 5kW to 66kW. Self cleaning and modulating burners. The unique Grant Spira Pell condensing woodpellet boiler combines easy installation with straight forward daily operation and low maintenance.

GRANT
Spira Pell
Condensing
9-33kW



GRANT SPIRA PELL









The Grant Spira Pell is a condensing wood pellet boiler that is easy to install with low maintenance and straightforward to operate. SEAI awarded the Spira, our first condensing woodpellet boiler “The best renewable energy product” in 2011 on its launch due to its unique twin baffle system. The Spira pell which launched in 2022 will give some of the highest efficiencies and environmentally friendly results from biomass boilers. The Grant Spira Pell has a rapid ignition system and generally does not require a buffer tank. When combined with our modulating and self cleaning burner, the system can operate in similar characteristics to an oil or gas boiler. For the homeowner, the patented boiler and burner self cleaning system, along with automatic fuel delivery, results in minimal intervention once installed. Wood pellets to EN Plus standards are some of the highest calorific value available in Biomass, with a low moisture content, and when combined with the unique boiler and burner combinations, excellent combustion and efficiency is achieved.

Features and Benifits

The Spira was one of the first condensing biomass boilers on the market following many years of research and development. The Spira Pell is available in a number of different models, all of which can be integrated into the home in a safe, convenient, and cost effective manner. The boiler is commonly installed in a garage / out-house or plant room. Your installer will advise on the best location for your Spira Pell, especially if you intend to use a bulk pellet store.

FEATURES

-  Unique and award winning condensing boiler
-  Grant pellet vacuum system up to 10m distance kits available
-  Automatic pellet feed, ignition and cleaning system for the boiler and burner
-  Supplied with a side pellet store
-  Highly efficient
-  Self cleaning modulating burner

Spira Pell boilers are available in outputs of 5–18kW, 7–25kW and 9–33kW. All Boilers are supplied with a Universal hopper. Also included is the pellet feed auger which supplies pellets when needed to the burner. If required for larger applications, two boilers with separate flues can be utilized, with a central twin auger hopper option up to 66kW.

This is a very cost effective method giving larger outputs with excellent efficiency. In this scenario, both burners can modulate as one and reduce to a quarter of the maximum output when not required. With the incredibly high efficiency, low flue gas temperature and easy maintenance, the Spira Pell is a unique option when installing a wood pellet boiler.

BOILER DIMENSIONS

Grant Spira Pell model	A	B	C
5–18kW 200kg left/right hand hopper	719	1120	1492
7–25kW 200kg left/right hand hopper	719	1120	1492
9–33kW 200kg left/right hand hopper	719	1220	1492

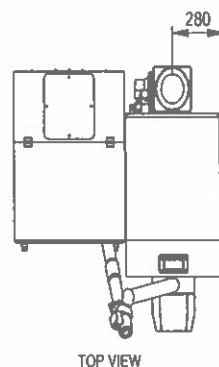
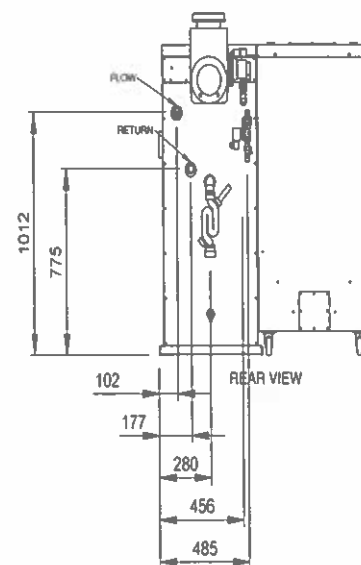
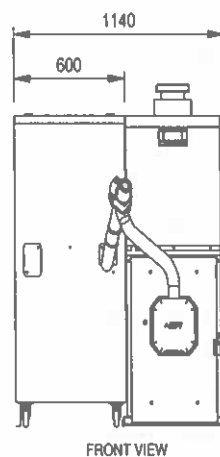
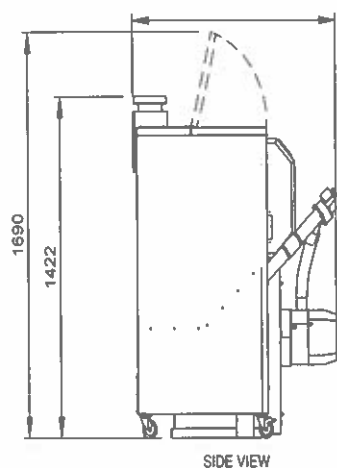


TECHNICAL SPECIFICATIONS

		WPS5/18	WPS7/25	WPS9/33	WPS14/50	WPS17/58	WPS18/66
Boiler type		Single	Single	Single	Twin	Twin	Twin
Boiler weight (without hopper) *	kg	231.5	231.5	261.5	463	493	523
200kg hopper weight c/w auger *	kg	77kg	77kg	77kg	n/a	n/a	n/a
Flue	mm	125(5")	125(5")	125(5")	125(5") x2	125(5") x2	125(5") x2
Wash system (condensing unit)	mm	15mm compression	15mm compression	15mm compression	15mm compression	15mm compression	15mm compression
Flow/return connection	"	1" female	1" female	1 1/4" female	1" female	1" / 1 1/4" female	1 1/4" female
Condensate drain	"	1 1/4" female	1 1/4" female	1 1/4" female	1 1/4" female	1 1/4" female	1 1/4" female
Water content	litres	51.5	51.5	60	103	111.5	120

DIMENSIONS

PELL CONDENSING 5-18 & 7-25 = 1100
PELL CONDENSING 9-33 = 1200



BOILER DIMENSIONS







Model	A	B	C	D	E	F	G	H
5-18 200kg hopper	1256	618	713	125	44	713	1160	1120
7-25 200kg hopper	1256	618	713	125	44	713	1160	1120
9-33 200kg hopper	1256	618	713	225	144	713	1260	1220

If the measurement from the flue centre line to the rear wall is increased (shown as 134 in the plan view), then the dimensions D, E and G will have to be increased by the same increment. All units in millimetres.

GUARANTEES

Provided below is a summary of the standard guarantees which are available from Grant on their renewable product ranges.



	Aerona ASHP		2 years parts and labour with the 3 following years parts only
		Collector	5 years
		Kit	5 years
	Cylinders & Thermal stores	Body	10 years
		Components	1 year
	Uflex Underfloor Heating	Pipe	25 years
		Mechanical & Electrical components	2 years
	Afinia Radiators		15 years*
	Spira Pell II		5 years on Boiler, 1 Year on Burner & other components

All guarantees are subject to Terms & Conditions

*Product must be fitted with Grant Mag One magnetic filter and have system inhibitor added







GRANT TRAINING ACADEMY



Designed for Installers and Service Engineers

With a range of courses, experienced trainers, online learning and state of the art facilities, keep installer knowledge up to date with the Grant Training Academy.



-  Air source heat pumps
-  Oil/HVO fired boilers
-  Underfloor heating & Alu Rads
-  Solar thermal systems

ADDITIONAL RESOURCES



We have a library of informative videos on our YouTube channel, view by scanning this QR code



HOME HEATING DESIGN SERVICE

Designing and building a new home? Then look no further than Grant for the full home heating solution! With a diverse product portfolio including highly-efficient air source heat pumps, hot water cylinders and modern heat emitters including aluminium radiators and underfloor heating, all the heating requirements for a property can be met under one roof.

HOME HEATING DESIGN SERVICE

PACKAGE OFFER

- Technical Design
- Detailed heating specification for tenders
- Estimation and quoting service
- SR 50 calculations
- Expert and experienced advice
- 45 years of after sales advice
- Service engineers network
- Customer focus and satisfaction to a standard of ISO 9001
- Commissioning of all installs
- Designer signs offs
- Professional Indemnity Insurance
- Employers liability
- Public and product liability
- Ancillary certification
- Installer training
- CPD training
- eLearning Academy
- Commissioning and servicing training
- Bespoke training
- Full warranty of parts and labour
- In house marketing team, design and printing facilities
- Product videos for end user
- On site R+D that are continuously developing and testing new products and standards

Grant Design Service

Popular amongst self-builders, architects, and those in the trade, our free of charge home heating design service enables those working on new build or retrofit projects the opportunity to have a bespoke heating solution for the property created and specified under one roof.

Providing a complete heating solution, our bespoke integrated heating packages are individually sized and specified by our technical specialists to suit both the property and the owner's current and future heating requirements. On receipt of home design drawings our technical team provides full heat loss calculations based on SR:50 guidelines, which prove compliance with Part L building regulations for new builds and ensures NZEB (nearly zero-energy building) standards are met.

The free heating design service and integrated heating package offering for new builds, are helping housebuilders throughout Ireland maximise heating efficiencies and save time on projects. Each bespoke heating package features award-winning heating technologies from our portfolio including the Grant Aeron 290 air to water air source heat pump, the most efficient hot water storage to support the system which includes either the Grant Integrated Unit or Grant pre plumbed and pre wired cylinder, and finally the chosen heat emitters for each individual room which includes the Grant Uflex underfloor heating system and/or Grant Afinia aluminium radiators. Grant smart heating controls can also be included within the package.

There are three easy steps to the **free** home heating design service.

1. Send the drawings of your house to heatpump@grant.ie or call 057 912 0089
2. A member of the Grant team will be in touch with you to discuss requirements
3. You will receive full property specifications with recommended products all available from Grant.



A person wearing a white long-sleeved shirt is pointing their right index finger at a set of architectural plans spread out on a table. In the foreground, a tablet computer displays a technical drawing. To the right of the tablet, there is a circular official stamp from Roscommon County Council, Planning Section, dated 28 NOV 2024. The background is a solid dark blue color containing white text.

CPD AND INFORMATION FOR BUILDING PROFESSIONALS

As heating technologies are constantly changing to match modern building methods, Grant strives to help to keep those professionals within the building industry up to date. With over 45 years' experience in the heating industry, you can trust Grant to evolve your knowledge to grow into the future

CPD AND INFORMATION FOR BUILDING PROFESSIONALS

CONTINUOUS PERSONAL DEVELOPMENT (CPD)

Training we provide here and off site for architects, engineers, energy assessors and similar minded professionals. These certified courses are available in many technologies, give an insight and knowledge on current and new products and areas for which are relevant to attendees. We currently have three CPD courses available which are RIAI and Engineers Ireland approved.

- An introduction to condensing oil boilers, woodpellet boilers and air to water heatpumps
- Condensing oil, woodpellet and heatpump product training
- Heatpump technology & appropriate heat emitter sizing

BIMSTORE

Collaborates the design, construction, and operating process to create a unique 3D model of Grant products. BIM is the latest modernized development in the construction industry and Grant has worked closely with the BIMSTORE to create Revit models of our Heat Pump and Cylinders range. The Grant products are free to download and give Engineers, Architects etc the ability to see how the Grant products will fit into their projects.

PRODUCT FICHES



Please scan QR code to view our R290 Heat Pump product fiches.





Grant Engineering (IRL) ULC
Crinkle, Birr, Co.Offaly
R42 D788, Ireland
W: www.grant.eu
E: info@grant.ie
T: +353 (057) 912 0089

