

# Your Home

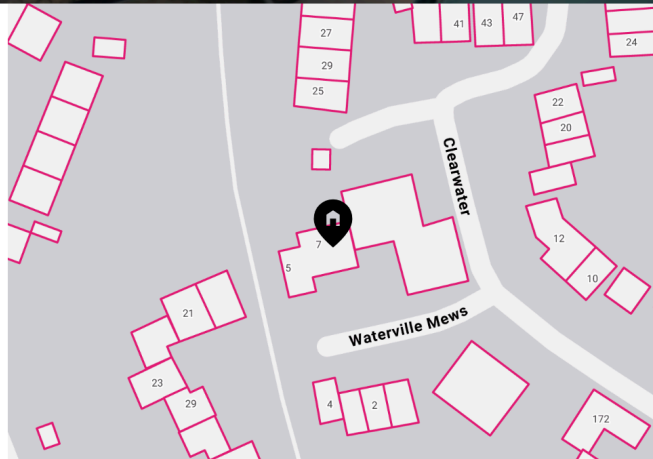
7 Waterville Mews, Colchester

## Hi elia! Your proposal is here.

This proposal includes an overview of your future heating system, details on its design, engineering and installation, along with pricing and next steps.

Whenever you're ready to move forward, you may digitally sign the proposal.

[View your proposal](#)



# Overview





Here's a summary of your new high-efficiency heating system.

For more details, use the tabs above to explore your proposed system design, pricing options, and next steps.

For design questions, please contact your Heat Geek. For other inquiries, you can email the Upgrades team at

[upgrades@heatgeek.com](mailto:upgrades@heatgeek.com).

## Your new heating system

	Guaranteed minimum efficiency 	360%
	Heat pump	Vaillant aroTHERM plus 5kW
	Hot water cylinder	Vaillant uniSTOR150L
	Radiators and emitters	3 new radiators
	Estimated running costs	£ 22 per month
	Final price	£ 7,838 or £ 88 per month



Proposal Overview: This proposal is based on our design consultation and heat demand survey. We have carefully assessed the heating requirements for each room, determining the appropriate type and size of emitters (radiators) and the correct ASHP (air source heat pump) capacity. The proposal covers the design, supply, and installation of a new ASHP system, along with the plant and hot water cylinder, as part of a comprehensive heating system retrofit. The hot water cylinder and immersion heater are Solar PV-ready, though a solar immersion controller (e.g., iBoost) will be required to integrate with solar PV. The primary heating system will be designed as an open-loop system with weather compensation. This design ensures a consistent, comfortable indoor climate while optimizing efficiency with low flow temperatures. Scope of Work: • ASHP Installation: The ASHP unit will be installed at the identified location (as per the survey), on either a solid base or wall brackets, based on the site conditions and suitability. • Pipework Installation: We will install all necessary pipework to connect the ASHP to the internal heating system. This includes the flow and return pipes for the heating circuit and any additional plumbing needed to integrate the hot water and cold water to the new cylinder and system. • Hot Water Cylinder Installation: • Location: Existing Airing Cupboard • We will install any additional pipework and amend existing supplies to ensure proper integration. • The existing safety discharge pipe will be reused. • The new unvented hot water cylinder will operate at mains pressure. This upgrade will significantly increase water pressure at taps and showers, providing improved flow rates and a more consistent hot water supply throughout the property. • Radiator Upgrades: Radiators will be installed according to the calculated system requirements to ensure optimal heating. We will install standard white panel radiators or chrome towel rails, though decorative radiators can be supplied at an additional cost. Customers are responsible for ensuring the specified radiators (as per the Heat Loss Survey) fit the available space. Any necessary replacements due to sizing issues may incur additional charges. • System Volume: To ensure maximum run times and minimise cycling of the heat pump at base load conditions we need to ensure minimum open loop water volumes are available. The open loop volume of the radiators and pipework are insufficient and a volumiser is required. • System Adaptation & Pressure Loss: The system pressure loss has been calculated accurately to verify that the existing pipe sizing and velocities fall within the ASHP's circulator tolerances. Existing pipework will be adapted or replaced to match the new system. All newly installed heating, hot, and cold water pipework will be pressure-tested as far as reasonably practical. The new cylinder will be relocated to the back of the existing utility/cupboard and all heating, hot and cold water pipework amended to suit. • Weather Compensation: The system will include weather compensation controls, which adjust the heating output based on outdoor temperatures. This feature ensures that the system operates efficiently, offering consistent and comfortable heating with minimal energy consumption. • Electrical Work: We will carry out all necessary electrical work to power the ASHP and associated controls. This includes wiring the ASHP back to a new consumer unit with suitable breakers. The new controls will be powered via the existing heating circuit's supply. We will install the power supply for the heat pump back to the consumer unit and amend the existing supply for the controls circuit and immersion on the cylinder. • Flushing & Filling: Once the installation is complete, the system will be flushed to remove any debris, preventing contamination of the heat pump and radiators. The system will be filled with demineralized water and pressure-tested to ensure there are no leaks. • Commissioning & Handover: The ASHP and heating system will be commissioned to ensure everything operates correctly. We will calibrate the system to meet your desired settings and provide a full handover. During the handover, we will explain the operation of the ASHP and controls, including how to maintain the system, set heating schedules, and maximize efficiency. You will also receive all necessary documentation, including warranties, user manuals, and maintenance instructions. • Separation of Responsibilities: Any elements of the existing system not installed by us will be isolated using lever valves (as far as practical). This ensures a clear separation of responsibilities between our work, the existing system, and any other contractors involved. Additional Details: Our goal is to offer a clear and transparent cost estimate for the system installation. Any unforeseen costs, such as Energy Performance Certificate requirements, DNO works, or planning-related issues, will be communicated promptly. Should there be unexpected delays beyond our control, we will discuss the potential implications with you. If we encounter any unforeseen issues, such as electrical or building work requirements, we will provide an updated assessment of the associated costs before proceeding. Any changes requested during the installation process will be quoted at the daily or hourly rate of our installers. Exclusions: We cannot be held responsible for any equipment, services, or controls reused as part of this project unless otherwise specified. This proposal does not include painting, decorating, boxing-in of pipework, or relaying floor finishes. Additionally, any work involving asbestos will require a separate survey and quotation. If asbestos is discovered, work will halt until it is made safe. Lifting and replacing carpets or other floor coverings, as well as repairs or modifications to defects in the existing system, are also excluded. Any redundant flue holes in the wall or roof will need to be made good by others.

### Parts provided

Vaillant aroTHERM plus 5kW Heat Pump

Vaillant uniSTOR 150L Hot Water Cylinder

Radiators and Emitters (more details on [Design](#))

Small Parts and Accessories

### Labour provided

End-to-End Heat Pump installation

Hot Water Cylinder installation

Radiator installation

Radiator installation





### Price summary

Parts	£ 9,493
Labour	£ 5,845
Total price	£ 15,338
Government grant <span>?</span>	- £ 7,500
Final price	<b>£ 7,838</b>

You can find the full price breakdown on the [Money](#) page

## What you'll need to do

To help ensure a smooth installation process, here are a few things we recommend you prepare ahead of time:

-  Ensure all [prerequisites](#) for your home have been completed.
-  Organise an appropriate parking space for your Heat Geek and the delivery of parts.
-  Clear out space for your Heat Geek to operate, especially around agreed heat pump and cylinder locations.
-  Provide clear access to your consumer unit (fuse box), electricity meter, and main incoming fuse. Complete any necessary electrical work before your installation date.



## FAQs

What is the Heat Geek Guarantee? ▼

What sets Vaillant apart heat pumps apart from others in the market? ▼

Are there any maintenance requirements? ▼

What does the warranty cover? ▼

[Help Centre](#)

[Go to Design](#)

# Design

7 Waterville Mews, Colchester

## Our plan for your home

Your design is created from everything we know about your home. As we learn more about your home this may change until we agree on a final proposal.



### What we will install:

- Heat pump: Vaillant aroTHERM plus 5kW
- Cylinder: Vaillant uniSTOR 150L
- Controls: MyVaillant Connect Internet Gateway VR8/32, Vaillant sensoCOMFORT (Wireless Controls)
- Pipes, valves and radiators



### Where it will go:

From looking at your house we think you can site a heatpump outside your home. It looks like you might need planning permission.



### Estimated system efficiency:

360% efficiency at 45°C max flow temperature.



# Your Design

Thank you for having us in your home. Below is a summary of your proposed design.

**HOUSELOSS****2.25**

kW

**ROOMS****6**

Total

**EXT. TEMP.****-2.0**

°C

## Ground Floor

**Kitchen**

Heat loss: 0.58 kW

Design temperature: 21.0 °C

**Radiators**

- New - type 22 - 600 x 1200 mm  
2060 W@dT50

**Living room**

Heat loss: 0.78 kW

Design temperature: 21.0 °C

**Radiators**

- Existing - type 22 - 600 x 600 mm  
1030 W@dT50
- New - type 22 - 500 x 1200 mm  
1720 W@dT50

## First Floor

**Bed 1**

Heat loss: 0.32 kW

Design temperature: 21.0 °C

**Radiators**

- Existing - type 11 - 600 x 1100 mm  
1030 W@dT50

**Bathroom**

Heat loss: 0.18 kW

Design temperature: 21.0 °C

**Radiators**

- Existing - type 0 - 1600 x 500 mm  
470 W@dT50

**Bed 2**

Heat loss: 0.30 kW

Design temperature: 21.0 °C

**Radiators**

- New - type 21 - 600 x 800 mm  
1060 W@dT50

**Landing**

Heat loss: 0.09 kW

Design temperature: 21.0 °C

## Additional notes on your proposal

### Proposal Overview:

This proposal is based on our design consultation and heat demand survey. We have carefully assessed the heating requirements for each room, determining the appropriate type and size of emitters (radiators) and the correct ASHP (air source heat pump) capacity.

The proposal covers the design, supply, and installation of a new ASHP system, along with the plant and hot water cylinder, as part of a comprehensive heating system retrofit. The hot water cylinder and immersion heater are Solar PV-ready, though a solar immersion controller (e.g., iBoost) will be required to integrate with solar PV.

The primary heating system will be designed as an open-loop system with weather compensation. This design ensures a consistent, comfortable indoor climate while optimizing efficiency with low flow temperatures.

### Scope of Work:

- ASHP Installation:

The ASHP unit will be installed at the identified location (as per the survey), on either a solid base or wall brackets, based on the site conditions and suitability.

- Pipework Installation:

We will install all necessary pipework to connect the ASHP to the internal heating system. This includes the flow and return pipes for the heating circuit and any additional plumbing needed to integrate the hot water and cold water to the new cylinder and system.

- Hot Water Cylinder Installation:

- Location: Existing Airing Cupboard

- We will install any additional pipework and amend existing supplies to ensure proper integration.

- The existing safety discharge pipe will be reused.

- The new unvented hot water cylinder will operate at mains pressure. This upgrade will significantly increase water pressure at taps and showers, providing improved flow rates and a more consistent hot water supply throughout the property.

- Radiator Upgrades:

Radiators will be installed according to the calculated system requirements to ensure optimal heating. We will install standard white panel radiators or chrome towel rails, though decorative radiators can be supplied at an additional cost. Customers are responsible for ensuring the specified radiators (as per the Heat Loss Survey) fit the available space. Any necessary replacements due to sizing issues may incur additional charges.

- System Volume:

To ensure maximum run times and minimise cycling of the heat pump at base load conditions we need to ensure minimum open loop water volumes are available.



Overview **Design** Timeline Money

the available space, any necessary replacements due to sizing issues may incur additional charges.

- **System Volume:**

To ensure maximum run times and minimise cycling of the heat pump at base load conditions we need to ensure minimum open loop water volumes are available.

The open loop volume of the radiators and pipework are insufficient and a volumiser is required.

- **System Adaptation & Pressure Loss:**

The system pressure loss has been calculated accurately to verify that the existing pipe sizing and velocities fall within the ASHP's circulator tolerances. Existing pipework will be adapted or replaced to match the new system. All newly installed heating, hot, and cold water pipework will be pressure-tested as far as reasonably practical. The new cylinder will be relocated to the back of the existing utility/cupboard and all heating, hot and cold water pipework amended to suit.

- **Weather Compensation:**

The system will include weather compensation controls, which adjust the heating output based on outdoor temperatures. This feature ensures that the system operates efficiently, offering consistent and comfortable heating with minimal energy consumption.

- **Electrical Work:**

We will carry out all necessary electrical work to power the ASHP and associated controls. This includes wiring the ASHP back to a new consumer unit with suitable breakers. The new controls will be powered via the existing heating circuit's supply.

We will install the power supply for the heat pump back to the consumer unit and amend the existing supply for the controls circuit and immersion on the cylinder.

- **Flushing & Filling:**

Once the installation is complete, the system will be flushed to remove any debris, preventing contamination of the heat pump and radiators. The system will be filled with demineralized water and pressure-tested to ensure there are no leaks.

- **Commissioning & Handover:**

The ASHP and heating system will be commissioned to ensure everything operates correctly. We will calibrate the system to meet your desired settings and provide a full handover. During the handover, we will explain the operation of the ASHP and controls, including how to maintain the system, set heating schedules, and maximize efficiency. You will also receive all necessary documentation, including warranties, user manuals, and maintenance instructions.

- **Separation of Responsibilities:**

Any elements of the existing system not installed by us will be isolated using lever valves (as far as practical). This ensures a clear separation of responsibilities between our work, the existing system, and any other contractors involved.

Additional Details:

Our goal is to offer a clear and transparent cost estimate for the system installation. Any unforeseen costs, such as Energy Performance Certificate requirements, DNO works, or planning-related issues, will be communicated promptly. Should there be unexpected delays beyond our control, we will discuss the potential implications with you. If we encounter any unforeseen issues, such as electrical or building work requirements, we will provide an updated assessment of the associated costs before proceeding. Any changes requested during the installation process will be quoted at the daily or hourly rate of our installers.

Exclusions:

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Any redundant flue holes in the wall or roof will need to be made good by others.



**How your heat pump  
will look**



# What we'll install for you

We're excited to provide you with an overview of the fantastic equipment we'll be installing.



## Vaillant aroTHERM plus 5kW

We have great experience working with Vaillant. Their equipment is incredibly quiet, reliable and most of all, efficient. We continue to choose them because the slightly higher up-front cost is quickly returned by the running efficiencies. They also feature amazing controls that allow us to enable important settings such as Weather Compensation (utilising a solar powered wireless sensor).

<b>Height</b>	765 mm	<b>Instructions</b>
<b>Width</b>	1100 mm	<b>Instructions</b>
<b>Depth</b>	449 mm	
<b>Power</b>	5.00 kW	
<b>Energy Rating</b>	A+++	
<b>Warranty</b>	7 years	

# How it will perform

Heat pumps use a small amount of electricity to move a large amount of heat from outside, into your home, making them significantly more efficient than boilers.



Max Flow Temperature

**45°C**



Estimated System Efficiency

**360%**



Estimated Monthly Savings

**£ 15**

# Timeline

7 Waterville Mews, Colchester

## Here's an overview of the steps required to complete your upgrade.

As you progress through the journey we will update this with the latest information.

If you have any questions at all, [click here to get in touch](#).



Design Consultation

Complete ▾



Proposal

Signature required ▾



Prerequisites



Install



Handover



## Meet your team

Ali Sutor

Smart Heating Solutions, Ipswich

<https://smartheatingsolutions.co.uk/>




Ali Sutor is the owner of Smart Heating Solutions, a family run heating and plumbing business in Suffolk. Ali is one of our amazing Heat Geek trained installers and completed his advanced training via the Heat Geek courses. He has a passion for reliable and customer focused service, with a strong belief in transparency and quality in his installations.

# Money

7 Waterville Mews, Colchester

## Price

### Breakdown:

Parts	£9,493
Labour	£5,845
Heat Geek Assurance ( <a href="#">info</a> )	£0
<b>Total (pre-BUS)</b>	<b>£15,338</b>
Boiler Upgrade Scheme Grant 	-£7,500

# £7,838

total cost to you

## Pricing Explained

Your price is created from everything we know about your home, including the design consultation we have conducted and any conversations following that.

### Heat Geek Guarantee

Learn more about the Heat Geek performance and installation guarantee.



### Boiler Upgrade Scheme (BUS)

You're eligible for the Government [BUS](#). This allows us to pass on a £7,500 reduction in price to you. We'll do all the required applications on your behalf and you won't have to pay this money up front.

# Pricing Detail

## Labour

Design Consultation	£375
Heat Pump and Cylinder	£495
Radiator Installation	£880
Commissioning	£300
Electrical Works	£3,300
Radiator installation	£495

**Sub Total** **£5,845**

(Design consultation inclusive of 20% VAT, all other items subject to 0% VAT)

## Parts

Heat Pump	£3,291
Heat Pump Accessories	£393
Cylinder	£859
Intelligent Controls	£490
Radiators x3	£500
Sundries	£3,410
80 Ltr Buffer inc Fittings	£550

**Sub Total** **£9,493**

(All items subject to 0% VAT)

In addition to the above, you may have additional costs to pay for planning permission and or an EPC Assessment. These costs also excludes electrical supply, building or groundworks and any making good, all as shown in our terms of business.

# Payment Milestones

The price for the job is payable in three stages as the work progresses

PAYMENT	CALCULATION	VALUE	STATUS
Design Consultation	-	£375	Completed on 30/12/2024
Deposit	25% of total less design consultation fee	£3,741	<a href="#">Pay</a>
Final Payment	Remaining amount	£3,722	