Graham is a leading distributor of heating, plumbing and bathroom products across the UK, providing market-leading products from a network of strategically located branches. Our network covers England, Scotland and Wales and is continually expanding.

Graham continually adapts to changing market conditions and we pride ourselves by sourcing innovative, problem solving products and services to meet our customers’ needs, as well as continuing to supply proven products in our portfolio.

This Guide features the range of products available through strategic locations. The range of products is continually growing so if you don’t see what you need or you have a specific requirement then please call your nearest Graham Branch or call 0500 701 702 and we will be happy to help.

Renewable solutions are an excellent choice, especially for properties that do not have access to mains gas. With efficiencies of up to 4 times the heat output of electricity used, as well as no requirements for flues, unsightly oil tank or having to rely on fuel deliveries in the winter, renewable solutions can offer many benefits over traditional heating systems.

Demand for Renewable products is continuing to grow with the government tasked to ensure 15% of the UK’s overall energy consumption comes from Renewable Sources by 2020. Heating demand accounts for the largest aspect of this energy use and contributes to the main Greenhouse gas Carbon Dioxide (CO2) which accounts for around 82% of total UK Greenhouse gas emissions.

We have put together quick and easy Heat Pump and Solar PV quotation forms which can also be downloaded from our website to make designing your system as straight forward as possible. Once complete either email the completed quotation form to the dedicated email address or drop it into your local Graham branch. We will do the rest!

GREENWORKS TRAINING ACADEMY

Our Greenworks training academy located in Birmingham is able to offer a host of training solutions including free awareness days on

- Solar PV
- Solar Thermal
- Heat Pumps

We also hold training events throughout the country in conjunction with various manufacturers enabling customers to get hands on experience with the products and see first-hand the benefits and savings available to them.
PART OF A GLOBAL NETWORK

As part of Saint-Gobain Building Distribution we have the backing of a global company with roots in manufacturing high quality, market leading and innovative building materials. Furthermore we can draw upon our other major brands in helping our customer’s source exactly what they need for their complete projects.

Graham is fully committed to providing the products and services our commercial plumbing & heating customers depend on across our nationwide branch network. It’s a commitment we constantly renew in our determination to deliver on the Graham promise:

**Unbeatable product availability**
Get the specialist products and brands you need, on time and in full. We’re here to guarantee quick and easy access to a wide range of the latest commercial plumbing & heating product lines from a carefully selected range of manufacturers.

**Rapid speed of response**
You need a quick response from us each and every time - before, during and after every sale. We strive to do this for you whether it’s in branch, over the phone or online.

**Knowledgeable staff**
All our highly experienced staff undergo comprehensive training with regular updates and are fully supported by specialist commercial plumbing & heating estimators.

Channel Graham
This news portal gives every Graham customer one-click access to news, videos and a Twitter feed on everything from product developments and events to training.

The Plumbers’ Club
The biggest and best reward scheme our industry has ever seen gives you exclusive benefits, unique deals and fantastic rewards when you buy from Graham.
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NEED TO FIND THE RIGHT PART FAST?
JUST ASK GRAHAM.

We use PartsArena to identify the part you need quickly and accurately. Even the ones you’re not sure about yourself. And the people you’ll be talking to really do know what they’re talking about.

We carry an extensive spares range featuring all the leading boiler brands. And we can deliver your parts to site or your nearest branch.*

At Graham, we’ve got the technology, the knowledge and the people to help you finish the job.

For the right part fast, start with Graham.

Leading brands • Parts identification • Online ordering • Delivery service*

www.grahamplumbersmerchant.co.uk

*Terms, conditions and additional fees apply.
PartsArena is a registered trademark of Infomill Ltd

For spare parts, here’s where you start.
Solar PV

Solar PV, or photovoltaic, is a system consisting of solar modules, electric inverter and generation meter. The system converts natural light from the sun into electricity which uses no carbon fuels.

Solar PV technology has continued to develop and become more and more efficient enabling end users to generate the most electricity from the space they have available.

Not only does Solar PV provide free electricity but in addition, at present you get paid for any unused electricity you generate and export back to the grid through the government’s Feed in Tariff (FiT).

With our range of battery storage solutions you are also able to benefit from the Feed in Tariff and store the additional energy you have generated for use later, further increasing the efficiency of your system.

R-Volt – The next generation

R-Volt have moved Solar PV to a whole new level. The Systovi R-Volt system offers a unique technology which not only provides all the benefits of a traditional PV system, but also supplies warm air in addition, to help heat and ventilate the home. Whilst most PV panels make use of around 20% of the solar energy and 60% is lost in heat, The R-Volt system captures the 60% normally lost and uses it to provide additional heating to your home.

As houses become increasingly more insulated ventilation proves to be an important factor within. Coupled with the additional warm air generated, the R-Volt system helps reduce heating costs and create additional savings whilst improving the efficiency of the solar panels.

• Provides a combined 900W (250Wp + 650W)
• Generates free electricity
• Improves your homes heating
• Provides cool air in the summer
• The Modul-R filter purifies and directs the flow of air for heating or cooling the home
• Temperature is regulated by a digital thermostat
• Smart monitoring in real time with App
Solar PV

Single Phase Inverter Mini

- Single Phase Inverter
- 5 year warranty
- No Wifi

Code: HRSTL10M
Manufacturer code: SL-TL1000 - MINI

Single Phase Inverter Mini

- Single Phase Inverter
- 5 year warranty
- No Wifi

Code: HRSTL15M
Manufacturer code: SL-TL1500 - MINI

Single Phase Inverter Air

- Single Phase Inverter
- 5 year warranty
- No Wifi

Code: HRSTL22A
Manufacturer code: SL-TL2200 - AIR

Single Phase Inverter Air

- Single Phase Inverter
- 5 year warranty
- No Wifi

Code: HRSTL28A
Manufacturer code: SL-TL2800 - AIR
Single Phase Inverter Air

- Single Phase Inverter
- 5 year warranty
- No Wifi

Code: HRSTL30A
Manufacturer code SL-TL3000 - AIR

Single Phase Inverter Air

- Single Phase Inverter
- 5 year warranty
- No Wifi

Code: HRSTL36A
Manufacturer code SL-TL3600 - AIR

Single Phase Inverter Air - Dual MPPT

- Single Phase Inverter
- 5 year warranty
- No Wifi
- Twin Tracker

Code: HRSTL33T
Manufacturer code SL-TL3300T - AIR

Single Phase Inverter Air - Dual MPPT

- Single Phase Inverter
- 5 year warranty
- No Wifi
- Twin Tracker

Code: HRSTL36T
Manufacturer code SL-TL3600T - AIR
Solar PV

**Single Phase Inverter Air - Dual MPPT**

- Single Phase Inverter
- 5 year warranty
- No Wifi
- Twin Tracker

Code: HRSTL44T
Manufacturer code: SL-TL4400T - AIR

**Single Phase Inverter Air - Dual MPPT**

- Single Phase Inverter
- 5 year warranty
- No Wifi
- Twin Tracker

Code: HRSTL50T
Manufacturer code: SL-TL5000T - AIR

**Hybrid Inverter**

- 3.0kW Hybrid Inverter inc BMU & Charger

Code: HRSSU30E
Manufacturer code: SK-SU3000E

**Hybrid Inverter**

- 3.7kW Hybrid Inverter inc BMU & Charger

Code: HRSSU37E
Manufacturer code: SK-SU3700E
### Hybrid Inverter

- 5.0kW Hybrid Inverter inc BMU & Charger
- Code: **HRSSU50E**
- Manufacturer code: SK-500000E

### Agilo 100kW Indoors

- Designed for Indoor use
- 100,000W Rating
- 3 Phase
- First central inverter in its performance class that can be completely installed, commissioned and maintained by the installer
- Special heavy-duty castors
- Compact design
- Code: **RS100IND**
- Manufacturer code: AGILO100-IND

### Agilo 100kW Outdoors

- Designed for Outdoor use
- 100,000W Rating
- 3 Phase
- First central inverter in its performance class that can be completely installed, commissioned and maintained by the installer
- Special heavy-duty castors
- Compact design
- Code: **RS100IND**
- Manufacturer code: AGILO100-OUTD

### Agilo 75kW Indoors

- Designed for Indoor use
- 75,000W Rating
- 3 Phase
- First central inverter in its performance class that can be completely installed, commissioned and maintained by the installer
- Special heavy-duty castors
- Compact design
- Code: **RS075IND**
- Manufacturer code: AGILO75-IND
## Solar PV

### Agilo 75kW Outdoors

- Designed for Outdoor use
- 75,000W Rating
- 3 Phase
- First central inverter in its performance class that can be completely installed, commissioned and maintained by the installer
- Special heavy-duty castors
- Compact design

**Code** RS75OUTD  
**Manufacturer code** AGILO75-OUTD

### Datalogger Box Easy IG

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### CL 36kW Inverter

- 36,000W Rating
- Modular system design of up to 15 identical power modules in the MIX™ concept
- Central inverter for PV systems of up to several hundred kilowatts
- Exact MPP tracking of the module manager

**Code** RSCL36KW  
**Manufacturer code** CL36

### CL 60kW Inverter

- 60,000W Rating
- Modular system design of up to 15 identical power modules in the MIX™ concept
- Central inverter for PV systems of up to several hundred kilowatts
- Exact MPP tracking of the module manager

**Code** RSCL60KW  
**Manufacturer code** CL60
Solar PV

Eco 25kW 3 Phase Light

- 25,000W Rating
- 3 Phase
- Low weight
- Suitable for indoor and outdoor installation
- IP66 Protection
- No need for string collection boxes

Code: RSECO253
Manufacturer code: ECO25.03SLIGHT

Eco 27kW 3 Phase Light

- 27,000W Rating
- 3 Phase
- Low weight
- Suitable for indoor and outdoor installation
- IP66 Protection
- No need for string collection boxes

Code: RSECO273
Manufacturer code: ECO27.03SLIGHT

IG Plus 55V-3 5kW 3 Phase

- 5,000W Rating
- 3 Phase

Code: RSUS55V3
Manufacturer code: IGPLUS-55V-3

IG Plus 80V-3 7kW 3 Phase

- 7,000W Rating
- 3 Phase

Code: RSUS80V3
Manufacturer code: IGPLUS80V-3
**Solar PV**

**Primo 3.6kW Single Phase WLAN**
- 3,600W Rating
- Single Phase
- Complete with WLAN

Code: RSIMO361
Manufacturer code PRIMO-3.6-1

**Primo 8.2kW Single Phase WLAN**
- 8,200W Rating
- Single Phase
- Complete with WLAN

Code: RSIMO821
Manufacturer code PRIMO-8.2-1

**Symo 10kW 3 Phase Dual MPPT WLAN**
- 10,000W Rating
- 3 Phase
- SnapInverter mounting system
- Smart Grid Ready

Code: RSYMO100
Manufacturer code SYMO-10.0

**Symo 10.0-3-M Light**
- 10,000W Rating
- 3 Phase
- SnapInverter mounting system
- No Datamanager card - COM card installed

Code: RSS100LI
Manufacturer code SYMO-10.0-LIGHT
Symo 12.5kW 3 Phase Dual MPPT WLAN

- 12,500W Rating
- 3 Phase
- SnapInverter mounting system
- Smart Grid Ready

Code: RSYM0125
Manufacturer code: SYMO-12.5

Symo 12.5-3-M Light

- 12,500W Rating
- 3 Phase
- SnapInverter mounting system
- No Datamanager card - COM card installed

Code: RSS125LI
Manufacturer code: SYMO-12.5-LIGHT

Symo 15kW 3 Phase Dual MPPT WLAN

- 15,000W Rating
- 3 Phase
- SnapInverter mounting system
- Smart Grid Ready
- Dual MPPT

Code: RSYM0150
Manufacturer code: SYMO-15.0

Symo 15.0-3-M Light

- 15,000W Rating
- 3 Phase
- SnapInverter mounting system
- No Datamanager card - COM card installed

Code: RSS150LI
Manufacturer code: SYMO-15.0-LIGHT
Solar PV

Symo 17.5kW 3 Phase Dual MPPT WLAN
- 17,500W Rating
- 3 Phase
- SnapInverter mounting system
- Smart Grid Ready
- Dual MPPT
Code: RSYM0175
Manufacturer code SYMO-17.5

Symo 17.5-3-M Light
- 17,500W Rating
- 3 Phase
- SnapInverter mounting system
- No Datamanager card - COM card installed
Code: RSS175LI
Manufacturer code SYMO-17.5-LIGHT

Symo 20kW 3 Phase Dual MPPT WLAN
- 20,000W Rating
- 3 Phase
- SnapInverter mounting system
- Smart Grid Ready
- Dual MPPT
Code: RSYM0200
Manufacturer code SYMO-20.0

Symo Light 20kW 3 Phase
- 20,000W Rating
- 3 Phase
- SnapInverter mounting system
- No Datamanager card - COM card installed
Code: RSS200LI
Manufacturer code SYMO-20.0-LIGHT
Symo 3kW 3 Phase Dual MPPT WLAN

- 3,000W Rating
- 3 Phase
- Two MPP trackers
- WLAN connection

Code: RSSYM030
Manufacturer code SYMO-3.0

Symo 3.7kW 3 Phase Dual MPPT WLAN

- 3,700W Rating
- 3 Phase
- Two MPP trackers
- WLAN connection

Code: RSSYM037
Manufacturer code SYMO-3.7

Symo 4.5kW 3 Phase Dual MPPT WLAN

- 4,500W Rating
- 3 Phase
- Two MPP trackers
- WLAN connection

Code: RSSYM045
Manufacturer code SYMO-4.5

Symo 4.5-3-M Light

- 4,500W Rating
- 3 Phase
- No Datamanager card - COM card installed

Code: RSILIGHT
Manufacturer code SYMO-4.5-3-LIGHT
### Solar PV

#### Symo 5kW 3 Phase Dual MPPT WLAN

- 5,000W Rating
- 3 Phase
- Two MPP trackers
- WLAN connection

Code: RSYM0175  
Manufacturer code: SYMO-5.0

#### Symo 6kW 3 Phase Dual MPPT WLAN

- 6,000W Rating
- 3 Phase
- Two MPP trackers
- WLAN connection

Code: RSS175LI  
Manufacturer code: SYMO-6.0

#### Symo 6.0-3-M Light

- 6,000W Rating
- 3 Phase
- No Data Manager card - COM card installed

Code: RSYM0200  
Manufacturer code: SYMO-6.0-LIGHT

#### Symo 7kW 3 Phase Dual MPPT WLAN

- 7,000W Rating
- 3 Phase
- Two MPP trackers
- WLAN connection

Code: RSS200LI  
Manufacturer code: SYMO-7.0
Symo 7.0-3-M Light

- 7,000W Rating
- 3 Phase
- No Datamanager card - COM card installed

Code: RSYM030
Manufacturer code SYMO-7.0-LIGHT

Symo 8.2kW 3 Phase Dual MPPT WLAN

- 8,200W Rating
- 3 Phase
- Two MPP trackers
- WLAN connection

Code: RSYM037
Manufacturer code SYMO-8.2

Symo 8.2-3-M Light

- 8,200W Rating
- 3 Phase
- No Datamanager card - COM card installed

Code: RSYM045
Manufacturer code SYMO-8.2-LIGHT

Sunny Boy 1.5 1MPPT

- 1,500W Rating
- Single Phase
- Perfect inverter for a small domestic PV system
- Enables an increase in consumption of self-generated power
- Easy to integrate into the home network

Code: RS15VL40
Manufacturer code SB-1.5-1VL-40
Solar PV

Sunny Boy 2.5 1MPPT

- 2.500W Rating
- Single Phase
- Perfect inverter for a small domestic PV system
- Enables an increase in consumption of self-generated power
- Easy to integrate into the home network

Code: RS25VL40
Manufacturer code: SB-2.5-1VL-40

SB240 Micro Inverter 240W

- 240W Rating
- Single Phase

Code: RS409910
Manufacturer code: SB240-99-10

SB3000TL-21 SunnyBoy Dual Tracker

- 3,000W Rating
- Single Phase

Code: RS30TL21
Manufacturer code: SB3000TL-21

SB3600TL-21 SunnyBoy Dual Tracker

- 3,600W Rating
- Single Phase

Code: RS36SE10
Manufacturer code: SB3600TL-21
**SB4000TL-21 SunnyBoy Dual Tracker**

- 4,000W Rating
- Single Phase

Code: RS36TL21  
Manufacturer code: SB4000TL-21

**SB5000SE - Smart Energy**

- Hybrid Inverter
- Ideal for battery storage system

Code: RS40TL21  
Manufacturer code: SB5000SE-10

**3600 Smart Energy**

- Hybrid Inverter
- Ideal for battery storage system

Code: RS36SE10  
Manufacturer code: SB3600SE-10

**SB5000TL-21 SunnyBoy Dual Tracker**

Code: RS50TL21  
Manufacturer code: SB5000TL-21
## Solar PV

### SB Storage 2.5
- Battery inverter for high-voltage batteries
- Charge and discharge power of 2.5kW
- Combines the flexibility of the AC coupling with the advantages of high-voltage technology
- Enables reduced installation costs of storage system

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### Sunny Island 3.0M
- Supports a wide range of on-grid and off-grid applications
- Perfect product solutions for stand-alone and grid-connected systems

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### Sunny Island 8.0H
- Battery inverter
- Designed for increased self-consumption and reliable backup power

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### Sunny Tripower 15000TL-10
- 15,000W Rating
- 3 Phase
- 2 MPP inputs

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<td>RS00TL10</td>
<td>ST-15000TL-10</td>
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Solar PV

Sunny Tripower 20,000TLEE-10 Project Model

- 20,000W Rating
- 3 Phase
- Supplied with a built-in Webconnect card
- No Display

Code: RSE10PJ
Manufacturer code ST-20000TLEE-10-PROJECT

Sunny Tripower 10000TL-20

- 10,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability

Code: RS10TL20
Manufacturer code STP10000TL-20

Sunny Tripower 12000TL-20

- 12,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability

Code: RS12TL20
Manufacturer code STP12000TL-20

Sunny Tripower 20000TL-30

- 20,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability

Code: RS20TL30
Manufacturer code STP20000TL-30
Solar PV

**Sunny Tripower 20000TL-30 (Inc Display)**

- 20,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability
- Includes Display

Code: RS2TL30D
Manufacturer code: STP20000TL-30-D

**Sunny Tripower 25000TL-30**

- 25,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability

Code: RS25TL30
Manufacturer code: STP25000TL-30

**Sunny Tripower 25000TL-30 (Inc Display)**

- 25,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability
- Includes Display

Code: RS25TL30D
Manufacturer code: STP25000TL-30-D

**Sunny Tripower 5000TL-20**

- 50,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability

Code: RS50TL20
Manufacturer code: STP50000TL-20
SOLAR PV

Sunny Tripower 6000TL-20

- 60,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability

Code: RS60TL20
Manufacturer code: STP6000TL-20

Sunny Tripower 7000TL-20

- 70,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability

Code: RS70TL20
Manufacturer code: STP7000TL-20

Sunny Tripower 8000TL-20

- 80,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability

Code: RS80TL20
Manufacturer code: STP8000TL-20

Sunny Tripower 9000TL-20

- 90,000W Rating
- 3 Phase
- Maximum efficiency of 98.5%
- DC input voltage of up to 1,000V Multistring capability

Code: RS90TL20
Manufacturer code: STP9000TL-20

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Solar PV

**IndOP 300W Power Optimiser MC4 - Alt. Inverters**

- 300W Rating
- Per-module Maximum Power Point Tracking (MPPT)
- Superior efficiency (99.5%) peak performance in both mismatched & unshaded conditions
- 25 year reliability and warranty

Code: RS0LVMC4  
Manufacturer code: GP3000-LV-MC4

**P300 Optimiser 300W MC4 60 Cell**

- 300W Rating
- Optimised for high-power modules
- Faster, simpler Installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS300MC4  
Manufacturer code: P300-MC4

**P300 Optimiser 300W MC4 60 Cell Frame Mounted**

- Frame Mounted
- 300W Rating
- Optimised for high-power modules
- Faster, simpler Installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS30C4FM  
Manufacturer code: P300-MC4-FM

**P350 Ind-Optimiser 350W MC4 60/72 Cell**

- Can be operated with any inverter
- 350W Rating
- Optimised for high-power modules
- Faster, simpler Installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS30DMC4  
Manufacturer code: P350-IND-MC4
P350 Optimiser 350W MC4 72-Cell 1.2M

- 350W Rating
- Optimised for high-power modules
- Faster, simpler installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS350MC4
Manufacturer code: P350-MC4

P350 Optimiser 350W MC4 72 Cell Frame Mounted

- Frame Mounted
- 350W Rating
- Optimised for high-power modules
- Faster, simpler installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS35C4FM
Manufacturer code: P350-MC4-FM

P404 Optimiser MC4 60 / 72 Cell

- 405W Rating
- Optimised for high-power modules
- Faster, simpler installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS404MC4
Manufacturer code: P404-MC4

P405 Optimiser MC4 60/72/96 Cell

- 405W Rating
- Optimised for high-power modules
- Faster, simpler installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS405MC4
Manufacturer code: P405-MC4
Solar PV

P500 Optimiser 500W MC4 96 Cell

- 500W Rating
- Optimised for high-power modules
- Faster, simpler Installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS500MC4
Manufacturer code: P500-MC4

P600 Optimiser 600W MC4 2x60Cell 1.2m

- 600W Rating
- 1.2m
- Optimised for high-power modules
- Faster, simpler Installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS612MC4
Manufacturer code: P600-1.2-MC4

P600 Optimiser 600W MC4 2x60 Cell 1.8m

- 600W Rating
- 1.8m
- Optimised for high-power modules
- Faster, simpler Installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS618MC4
Manufacturer code: P600-1.8-MC4

P700 Optimiser 700W MC4 2x72 Cell 1.2m

- 700W Rating
- 1.2m
- Optimised for high-power modules
- Faster, simpler Installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS712MC4
Manufacturer code: P700-1.2-MC4
P700 Optimiser 700W MC4 2x72 Cell 2.1m

- 700W Rating
- 1.8m
- Optimised for high-power modules
- Faster, simpler installation requiring just a single screw
- Compliance with VDE-AR-E 2100-712 Fire Safety standard

Code: RS021MC4
Manufacturer code: P700-2.1-MC4

300W Power Optimiser TYCO

- Maximize energy throughput from each and every module
- Automatically maintain a fixed string voltage
- Monitors the performance of each module and communicate performance data to the SolarEdge monitoring portal
- Ideal for 60-cell panels

Code: RS00TYCO
Manufacturer code: POW-OP-300-TYCO

10,000W 3 Phase Inverter

- 10,000W Rating
- 3 Phase
- Does not have Trackers and will require power optimizers to function
- Supplied with a G59/2 SD Card
- 12 year warranty

Code: RS010000
Manufacturer code: SE-10000

2,200W Single Phase Inverter

- 2,200W Rating
- Single phase
- Does not have Trackers and will require power optimizers to function
- 12 year warranty

Code: RS012500
Manufacturer code: SE-2200
**Solar PV**

**3,000W Single Phase Inverter**
- 3,000W Rating
- Single phase
- Does not have Trackers and will require power optimizers to function
- 12 year warranty

Code: RSE15000  
Manufacturer code: SE-3000

---

**3,500W Single Phase Inverter**
- 3,500W Rating
- Single phase
- Does not have Trackers and will require power optimizers to function
- 12 year warranty

Code: RSE16000  
Manufacturer code: SE-3500

---

**3,680W Single Phase Inverter 16A AC (SE-4000-ER-01-16A)**
- 3,680W Rating
- Single phase
- Does not have Trackers and will require power optimizers to function
- 12 year warranty
- Unique inverter for the UK market limited to 16A

Code: RSE17000  
Manufacturer code: SE-3680

---

**3,680W Single Phase GSM Inverter 16A AC**
- 3,680W Rating
- Single phase
- Does not have Trackers and will require power optimizers to function
- Built in GSM Modem - No internet connection required
- 12 year warranty

Code: RSSE2200  
Manufacturer code: SE-3680-GSM
**4,000W Single Phase Inverter**

- **4,000W Rating**
- **Single phase**
- **Does not have Trackers and will require power optimizers to function**
- **12 year warranty**
- Not clamped at 16A AC output and therefore if more than 3.68kWp of modules are connected to it, prior approval must be sought from the local DNO with a G59 application

Code: RSSE25000
Manufacturer code: SE-4000

---

**5,000W Single Phase Inverter**

- **5,000W Rating**
- **Single phase**
- **Does not have Trackers and will require power optimizers to function**
- **12 year warranty**

Code: RS5000D2
Manufacturer code: SE-5000

---

**6,000W Single Phase Inverter**

- **6,000W Rating**
- **Single phase**
- **Does not have Trackers and will require power optimizers to function**
- **12 year warranty**

Code: RSSE27600
Manufacturer code: SE-6000

---

**12,500W 3 Phase Inverter**

- **12,500W Rating**
- **3 Phase**
- **Does not have Trackers and will require power optimizers to function**
- **Supplied with a G59/2 SD Card**
- **12 year warranty**

Code: RS7600D2
Manufacturer code: SE-12500
Solar PV

15,000W 3 Phase Inverter

- 15,000W Rating
- 3 Phase
- Does not have Trackers and will require power optimizers to function
- Supplied with a G59/2 SD Card
- 12 year warranty

Code: RSSE3000
Manufacturer code: SE-15000

16,000W 3 Phase Inverter

- 16,000W Rating
- 3 Phase
- Does not have Trackers and will require power optimizers to function
- Supplied with a G59/2 SD Card
- 12 year warranty

Code: RSSE3500
Manufacturer code: SE-16000

17,000W 3 Phase Inverter

- 17,000W Rating
- 3 Phase
- Does not have Trackers and will require power optimizers to function
- Supplied with a G59/2 SD Card
- 12 year warranty

Code: RSSE3680
Manufacturer code: SE-17000

25,000W 3 Phase Inverter N2 Basic

- 25,000W Rating
- 3 Phase

Code: RS680GSM
Manufacturer code: SE-25000
25,000W 3 Phase Inverter D2 with DC Safety Unit and Fuses

- 25,000W Rating
- 3 Phase
- DC safety switch
- DC surge protection (type II)
- DC fuses (+/-)

Code: RSSE4000
Manufacturer code: SE-25000-D2

27,600W 3 Phase Inverter N2 Basic

- 27,600W Rating
- 3 Phase

Code: RSSE5000
Manufacturer code: SE-27600

27,600W 3 Phase Inverter D2 with DC Safety Unit and Fuses

- 27,600W Rating
- 3 Phase
- DC safety switch
- DC surge protection (type II)
- DC fuses (+/-)

Code: RS003PH
Manufacturer code: SE-27600-D2

5,000W 3 Phase Inverter

- 5,000W Rating
- 3 Phase
- Specifically designed to work with power optimisers
- 12 year warranty
- >97% Efficiency

Code: RSSE0000
Manufacturer code: SE-5000-3PH
Solar PV

**7,000W 3 Phase Inverter**
- 7,000W Rating
- 3 Phase
- Specifically designed to work with power optimisers
- 12 year warranty
- >97% Efficiency

Code: RSSE7000
Manufacturer code SE-7000

**8,000W 3 Phase Inverter**
- 8,000W Rating
- 3 Phase
- Specifically designed to work with power optimisers
- 12 year warranty
- >97% Efficiency

Code: RSSE8000
Manufacturer code SE-8000

**9,000W 3 Phase Inverter**
- 9,000W Rating
- 3 Phase
- Specifically designed to work with power optimisers
- 12 year warranty
- >97% Efficiency

Code: RSSE9000
Manufacturer code SE-9000

**YC500-UK APS Dual-Input Micro Inverter 500W**
- AP systems offer the smartest microinverter on the market today
- A YC500 inverter handles two modules, significantly reducing installation costs.
- 10 year warranty

Code: HRPS1001
Manufacturer code APS1001
**Energy Monitoring Unit - ECU**

- Optional smart monitoring available with the Energy Monitoring Unit (ECU)
- Code: HRPS1002
- Manufacturer code: APS1002

**AC End Cable for Connection to the Junction Box 2m**

- For connecting to the junction box – 2m
- One cable is required for each separate branch of an installation.
- Code: HRPS1003
- Manufacturer code: APS1003

**AC End Cap for Sealing Exposed Cable**

- For sealing exposed cable
- One end cap is required per branch in the Solar installation.
- Code: HRPS1004
- Manufacturer code: APS1004

**AC Extension Cable for AC End Cable 2m**

- Used to connect each Micro-Inverter together when the standard 2m leads are not long enough.
- Perfect for use in bespoke installations.
- Code: HRPS1005
- Manufacturer code: APS1005
### Solar PV

#### Extended Warranty from 10 - 25 Years

- Additional 15 year warranty extension – 25 years total

<table>
<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>HRPS1006</td>
<td>APS1006</td>
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</tbody>
</table>

#### 0.7kW Single Phase Single MPPT - DC Isolator

- 5 year warranty
- Solis products are proven to provide reliability and high quality balanced with value for money

<table>
<thead>
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<th>Manufacturer code</th>
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<tr>
<td>HRNV3202</td>
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</tbody>
</table>

#### 6kW 3 Phase Dual MPPT

- 10 year warranty
- Solis products are proven to provide reliability and high quality balanced with value for money

<table>
<thead>
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<tbody>
<tr>
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<td>INV3098</td>
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<tr>
<td>HRNV3099</td>
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#### Data Logging Stick WI-Fi Dongle

- Allows access to the monitoring portal
- WiFi

<table>
<thead>
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<td>HRNV3095</td>
<td>INV3095</td>
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</tbody>
</table>
**Eclipse 250W Triple Black Module Black**

- Dimensions: 1650x992x40mm
- Frame/Back Sheet (Concealed Busbars & Solder Lines)
- The Intenergy Eclipse is the only all black module that offers concealed busbars and solder lines
- 12 year product guarantee
- Unique to Intenergy are extended cable lengths of 1.8m to make landscape installations even easier!
- High efficiency crystalline cells up to 19.29%

Code: HR0D2019
Manufacturer code: MOD2019

---

**250W Standard Black Module**

- Dimensions: 1650x992x40mm
- Frame/Back Sheet
- Cell Efficiency 18.30%, Module Efficiency 15.82%
- Low-Iron Tempered glass & High quality EVA and TPT
- 12 year product guarantee
- Unique to Intenergy are extended cable lengths of 1.8m to make landscape installations even easier!
- High efficiency monocrystalline solar cell

Code: HR0D2023
Manufacturer code: MOD2023

---

**250W Poly Module**

- Dimensions: 1640x992x40mm
- Silver Framed Poly
- Cell Efficiency 16.6-18%, Module Efficiency 15.37%
- Low-iron tempered glass and constructed from quality raw materials and components (PID Free)
- 12 year product guarantee
- Unique to Intenergy are extended cable lengths of 1.8m to make landscape installations even easier!
- Stringent testing ensuring high performing modules are supplied

Code: HR0D2022
Manufacturer code: MOD2022

---

**255W Poly Module**

- Dimensions: 1640x992x40mm
- Silver Framed Poly
- Stringent testing ensuring high performing modules are supplied, constructed from quality raw materials and components (PID Free)
- 12 year product guarantee
- Unique to Intenergy are extended cable lengths of 1.8m to make landscape installations even easier!
- Salt mist corrosion tested, Low-iron tempered glass

Code: HR0D2036
Manufacturer code: MOD2036
Solar PV

285W Standard Black

- Dimensions: 1640x992x40mm
- Standard Black
- Back frame and black back sheet with a superior quality finish
- Unique to Intenergy are extended cable lengths of 1.8m to make landscape installations even easier!
- 12 year performance warranty of 90% of original power output, 25 year performance warranty of 80% of original output

Code: HR002037
Manufacturer code: MO002037

Anodized Rail Clip - Fixings Included

- Light/Med Snow loads - Anodized rail clip
- Solar Roof Pro mounting system provides a quick and easy installation
- Fixings and a rail clip are supplied as standard with all roof hooks
- Clenergy offer a 10 year warranty and compliant to MCS012 where applicable

Code: HR050016
Manufacturer code: MOU50016

Anodized Rail Clip - Adjustable Version

- Light/Med Snow loads - Anodized rail clip
- Solar Roof Pro mounting system provides a quick and easy installation
- Fixings and a rail clip are supplied as standard with all roof hooks
- Clenergy offer a 10 year warranty and compliant to MCS012 where applicable

Code: HR050039
Manufacturer code: MOU50039

Anodized Rail Clip - Landscape

- Light/Med Snow loads - Anodized rail clip
- Solar Roof Pro mounting system provides a quick and easy installation
- Fixings and a rail clip are supplied as standard with all roof hooks
- Clenergy offer a 10 year warranty and compliant to MCS012 where applicable

Code: HR050087
Manufacturer code: MOU50087
## Solar PV

### Anodized Rail Clip Fixings Included

- Flat tile - Anodized rail clip
- Solar Roof Pro mounting system provides a quick and easy installation
- Fixings and a rail clip are supplied as standard with all roof hooks
- Clenergy offer a 10 year warranty and compliant to MCS012 where applicable

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>HR005034</td>
<td>Anodized Rail Clip Fixings Included</td>
<td>MOU05034</td>
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### Variants

<table>
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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>HROU5034</td>
<td>Solar PV</td>
</tr>
<tr>
<td>MOU5034</td>
<td>Anodized Rail Clip Fixings Included</td>
</tr>
</tbody>
</table>

### Anodized Rail Clip Fixings Included

- Slate/Prefab: Anodized rail clip
- Solar Roof Pro mounting system provides a quick and easy installation
- Fixings and a rail clip are supplied as standard with all roof hooks
- Clenergy offer a 10 year warranty and compliant to MCS012 where applicable

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<tr>
<td>HR005026</td>
<td>Anodized Rail Clip Fixings Included</td>
<td>MOU05026</td>
</tr>
</tbody>
</table>

### Hanger Bolt

- M10x200mm Timber Purlin
- Solar Roof Pro mounting system provides a quick and easy installation
- Fixings and a rail clip are supplied as standard with all roof hooks
- Clenergy offer a 10 year warranty and compliant to MCS012 where applicable

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<tbody>
<tr>
<td>HR005025</td>
<td>Hanger Bolt</td>
<td>MOU05025</td>
</tr>
</tbody>
</table>

### Hanger Bolt

- M8x150mm Steel Purlin
- Solar Roof Pro mounting system provides a quick and easy installation
- Fixings and a rail clip are supplied as standard with all roof hooks
- Clenergy offer a 10 year warranty and compliant to MCS012 where applicable

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<tbody>
<tr>
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<td>MOU05073</td>
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</tbody>
</table>

[www.grahamplumbersmerchant.co.uk](http://www.grahamplumbersmerchant.co.uk)
Solar PV

**ER-MP-HB - Mounting Plate & EZ Fit Clip**

- Landscape mounting & hanger bolts
- Solar Roof Pro mounting system provides a quick and easy installation
- Fixings and a rail clip are supplied as standard with all roof hooks
- Clenergy offer a 10 year warranty and compliant to MCS012 where applicable

Code: HR059066  
Manufacturer code: MOU5086

**SFS-U-S5.5X25S12 - U-Support - Trapezoidal Profiles**

- Comes with 3 x SFS screws Anodized
- Solar Roof Pro mounting system provides a quick and easy installation
- Fixings and a rail clip are supplied as standard with all roof hooks
- Clenergy offer a 10 year warranty and compliant to MCS012 where applicable

Code: HR059082  
Manufacturer code: MOU5082

**Pro Rail Silver Anodised**

- 2.56m Length
- One of the leading mounting manufacturers in Solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HR059086  
Manufacturer code: MOU5086

**Pro Rail Black Anodised**

- 3.4m Length
- One of the leading mounting manufacturers in Solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HR059085  
Manufacturer code: MOU5085
### Pro Rail Splice Anodised

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

**Code:** HROU5018  
**Manufacturer code:** MOU5018

### ER-CC-PRO Cross Connector for Crossed Rail Systems

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

**Code:** HROU5030  
**Manufacturer code:** MOU5030

### ER-CC-LPT Pro Rail Clip for Solar Limpet

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

**Code:** HROU5084  
**Manufacturer code:** MOU5084

### ER-CAP-PRO/B Rail End Cap Black

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

**Code:** HROU5059  
**Manufacturer code:** MOU5059

**Variants**

<table>
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<td>MOU5058</td>
</tr>
<tr>
<td>ER-CAP-PRO/G Rail End Cap Grey</td>
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</tr>
</tbody>
</table>
Solar PV

ER-I-17 Seamed Roof Clamp for Zinc Roof

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
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<td>MOU5083</td>
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</tbody>
</table>

Variants

- HROU5077
- MOU5077

ER-ZSTWB Z-Module for Fixing Micro-invertor / Optimiser

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

<table>
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<tr>
<td>HROU5067</td>
<td>MOU5067</td>
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</tbody>
</table>

ER-C-PRO35 ezClip 35mm Additional Rail Clips

- Compatible with PRD/01, PRD/01A, PRD/01A/LS, PRD/02, PRD/07, PRD/08
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

<table>
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<tr>
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<td>MOU5060</td>
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</tbody>
</table>

ER-IC-ST30B Mid Clamp 30mm Black

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

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<tr>
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<td>MOU5075</td>
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</tbody>
</table>
ER-EC-ST30B End Clamp 30mm Black

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HROU5076
Manufacturer code: MOU5076

ER-IC-ST35B Mid Clamp Black 35mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HROU5041
Manufacturer code: MOU5041

ER-EC-ST35B End Clamp Black 35mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HROU5042
Manufacturer code: MOU5042

ER-IC-ST35 Mid Clamp Silver 35mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HROU5064
Manufacturer code: MOU5064
Solar PV

**ER-EC-ST35 End Clamp Silver 35mm**

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HR0U6056
Manufacturer code: MOU5065

**ER-IC-ST40B Mid Clamp Black 40mm**

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HR0U5044
Manufacturer code: MOU5044

**ER-EC-ST40B End Clamp Black 40mm**

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HR0U5046
Manufacturer code: MOU5045

**ER-IC-ST40 Mid Clamp Silver 40mm**

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HR0U5031
Manufacturer code: MOU5031
### ER-EC-ST40 End Clamp Silver 40mm
- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

**Code:** HR0US032  
**Manufacturer code:** MOUS032

### ER-IC-ST4B Mid Clamp Black 42mm
- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

**Code:** HR0US062  
**Manufacturer code:** MOUS062

### ER-EC-ST42B End Clamp Black 42mm
- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

**Code:** HR0US063  
**Manufacturer code:** MOUS063

### ER-IC-ST42 Mid Clamp Silver 42mm
- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

**Code:** HR0US037  
**Manufacturer code:** MOUS037
Solar PV

ER-EC-ST42 End Clamp Silver 42mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HROU5038
Manufacturer code: MOU5038

ER-IC-ST46B Mid Clamp Black 46mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HROU5019
Manufacturer code: MOU5019

ER-EC-ST46B End Clamp Black 46mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HROU5020
Manufacturer code: MOU5020

ER-IC-ST46 Mid Clamp Silver 46mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HROU5027
Manufacturer code: MOU5027
ER-EC-ST46 End Clamp Silver 46mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HR05028
Manufacturer code: MO5028

ER-IC-ST50B Mid Clamp Black 50mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HR05068
Manufacturer code: MO5068

ER-EC-ST50B End Clamp Black 50mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HR05069
Manufacturer code: MO5069

ER-IC-ST50 Mid Clamp Silver 50mm

- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

Code: HR05070
Manufacturer code: MO5070
### Solar PV

#### ER-EC-ST50 End Clamp Silver 50mm
- One of the leading mounting manufacturers in solar photovoltaics
- Simple and effective solution for domestic rooftops
- Stainless steel and aluminium components
- 10 year warranty

<table>
<thead>
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<tr>
<td>HR0US071</td>
<td>MOUS071</td>
</tr>
</tbody>
</table>

#### Portrait Plate 1650x992mm
- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

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<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRSE0001</td>
<td>5SE0001</td>
</tr>
</tbody>
</table>

#### Landscape Plate 1650x992mm
- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

<table>
<thead>
<tr>
<th>Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>HRSE0002</td>
<td>5SE0002</td>
</tr>
</tbody>
</table>

#### Universal Lateral Flashing 1.2m
- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRSE0003</td>
<td>5SE0003</td>
</tr>
</tbody>
</table>
Top Right Flashing

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

Code: HRSE0004
Manufacturer code: GSE0004

Top Left Flashing

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

Code: HRSE0005
Manufacturer code: GSE0005

Top Centre Flashing 1.5m

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

Code: HRSE0006
Manufacturer code: GSE0006

Top Corner Piece (for Centre Flashing)

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

Code: HRSE0007
Manufacturer code: GSE0007
**Solar PV**

### Pop Rivets (4 Rivets per Top Corner Piece)
- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

**Code:** HRSE0008  
**Manufacturer code:** GSE0008

---

### Top Flashing Junction
- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

**Code:** HRSE0009  
**Manufacturer code:** GSE0009

---

### Screw + Washer (6 per Plate)
- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

**Code:** HRSE0010  
**Manufacturer code:** GSE0010

---

### Screw + Washer for Clamp Fixation
- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLIPSE black panel for the best aesthetics

**Code:** HRSE0011  
**Manufacturer code:** GSE0011
**EDPM Joint**

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenerg ECLIPSE black panel for the best aesthetics

Code: HRSE0012  
Manufacturer code: GSE0012

---

**Double Clamp**

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenerg ECLIPSE black panel for the best aesthetics

Code: HRSE0013  
Manufacturer code: GSE0013

---

**Single Clamp**

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenerg ECLIPSE black panel for the best aesthetics

Code: HRSE0014  
Manufacturer code: GSE0014

---

**Top Flashing Hook**

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenerg ECLIPSE black panel for the best aesthetics

Code: HRSE0015  
Manufacturer code: GSE0015
### Solar PV

#### Waterproofing Strip 5m

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLPSE black panel for the best aesthetics

Code: HRSE0016  
Manufacturer code: GSE0016

#### Precompressed Joint 5m

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLPSE black panel for the best aesthetics

Code: HRSE0018  
Manufacturer code: GSE0018

#### Wedges for Clamps R/L

- Fits 95% of the PV modules on the market
- Completely waterproof and 100% recyclable
- Ideal for retrofits and new constructions
- Easy to install - designed by installers for installers
- Inexpensive in-roof solution
- Install with Intenergy ECLPSE black panel for the best aesthetics

Code: HRSE0019 / HRSE0020  
Manufacturer code: GSE0019 / GSE0020

#### Rayleigh Instruments Generation Meter - Single Phase

- Rayleigh Instruments Gen Meter 2 d.p. Inc. cover RIXE12R
- Single phase meter which features compact and cost efficient design

Code: MET7010  
Manufacturer code: MET7010
Solar PV

Elster A1100 Generation Meter Three Phase

• LCD Meter with pulse and OFGEM approved
• Compact design with large figure display
• 16 year product life

Code: MET7002
Manufacturer code: MET7002

PGK Isolator 3 Pole 20A AC

• Developed by the Solar Industry for the Solar Industry
• Optimum design, quality and safety

Code: HRS08026
Manufacturer code: ISO8026

Kraus & Naimer 3 Pole 25A AC

• Extensive experience in design and manufacture

Code: HRS08001
Manufacturer code: ISO8001

Kraus & Naimer Single String 25A DC

• Extensive experience in design and manufacture

Code: HRS08003
Manufacturer code: ISO8003
Solar PV

PGK SE030A DC Isolator 4 Pole 1000VDC 32A 1 or 2 string

- Developed by the Solar Industry for the Solar Industry
- Optimum design, quality and safety
Code: HRSO8025
Manufacturer code: ISO8025

Kraus & Naimer DC 18A 600V 2 String

- Extensive experience in design and manufacture
Code: HRSO8006
Manufacturer code: ISO8006

Surface Mount Rotary Isolator 32A 4 Pole AC

- High quality and durable rotary isolators available in 32A 4 Pole
Code: HRSO8008
Manufacturer code: ISO8008

Surface Mount Rotary Isolator 63A 4 Pole AC

- High quality and durable rotary isolators available in 63A 4 Pole
Code: HRSO8010
Manufacturer code: ISO8010
Solic 200 Solar Immersion Controller

- Automatically diverts energy generated by a PV system into hot water
- Simple to use and maintenance free
- Easy to install and can save the homeowner hundreds of pounds over the course of a year
- The SOLiC 200 includes a 10-year return-to-base guarantee

Code: HRS10063
Manufacturer code: MS10063

R-VOLT On Roof Panel

- On Roof PV Panel for R-Volt system

Code: HSP0255
Manufacturer code: PT01250N00

Variants:
- HSP0255 P028250N00 R-VOLT On Roof Panel

Crosspiece R-VOLT On Roof V1

- Vertical Crosspiece

Code: HSCPF131
Manufacturer code: CPF131

Variants:
- HSCPF132 CPF132 Crosspiece R-VOLT On Roof V2

Crosspiece R-VOLT On Roof H1

- Horizontal Crosspiece

Code: HSCPF133
Manufacturer code: CPF133

Variants:
- HSCPF134 CPF134 Crosspiece R-VOLT On-Roof H2
### Solar PV

#### Bottom and Top R-VOLT Fixing Rail 1.5m

<table>
<thead>
<tr>
<th>Variants</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCPF136</td>
<td>CPF136</td>
<td>Bottom and top R-VOLT fixing rail 2.0m</td>
</tr>
<tr>
<td>HSCPF137</td>
<td>CPF137</td>
<td>Bottom and top R-VOLT fixing rail 3.0m</td>
</tr>
</tbody>
</table>

- **1.5m**
  - Code: HSCPF135
  - Manufacturer code: CPF135

#### Intermediary R-VOLT Fixing Rail 1.5m

<table>
<thead>
<tr>
<th>Variants</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSCPF139</td>
<td>CPF139</td>
<td>Intermediary R-VOLT fixing rail 2.0m</td>
</tr>
<tr>
<td>HSCPF140</td>
<td>CPF140</td>
<td>Intermediary R-VOLT fixing rail 3.0m</td>
</tr>
</tbody>
</table>

- **1.5m**
  - Code: HSCPF138
  - Manufacturer code: CPF138

#### Hardware Accessory Set (1 Line)

<table>
<thead>
<tr>
<th>Variants</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSQ07L2T</td>
<td>Q07L2TE</td>
<td>Hardware Accessories Set (2 lines)</td>
</tr>
</tbody>
</table>

- **Accessory set for 1 line of panels**
  - Code: HSQ7LITE
  - Manufacturer code: Q07LITE

#### R-VOLT Fixing On Roof Set - 1 Line Slate Hooks

- **Slate hooks for 1 line installation**
  - Code: HSQ07L1A
  - Manufacturer code: Q07L1A
R-VOLT Fixing On Roof Set - 1 Line Tile Hooks

- Tile hooks for 1 line installation
  Code: HSQ07LIT
  Manufacturer code: 007L1T

R-VOLT Fixing On Roof Set - 2 Lines Slate Hooks

- Slate hooks for 2 line installation
  Code: HSQ07L2A
  Manufacturer code: 007L2A

R-VOLT Fixing On Roof Set - 2 Lines Tile Hooks

- Tile hooks for 2 line installation
  Code: HSQ07L2H
  Manufacturer code: 007L2T

Hardware Accessory Set for 54 Cells Panel Portrait Configuration

- Suitable for portrait configuration
  Code: HSQ09V54
  Manufacturer code: 009V54E2

<table>
<thead>
<tr>
<th>Variants</th>
<th>Hardware accessory set for 54 cells panel LANDSCAPE configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSQ09HE2</td>
<td>Q09HE2</td>
</tr>
</tbody>
</table>

www.grahamplumbersmerchant.co.uk
**Solar PV**

**Hardware Accessory Line Set for 54 Cells Panel Portrait - 2 Air Entries**

- 2 air entry system

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSQ10V54</td>
<td>010V54E2</td>
</tr>
</tbody>
</table>

**Variants**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSQ10HE2</td>
<td>Hardware accessory line set for 54 cells panel LANDSCAPE - 2 air entries</td>
</tr>
<tr>
<td>Q10HE2</td>
<td></td>
</tr>
</tbody>
</table>

**Rail Jointer On-Roof**

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSQE04RJ</td>
<td>GE04</td>
</tr>
</tbody>
</table>

**Aeraulic Accessory Set**

- Includes 1 vent

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSQAE05V</td>
<td>GAE05</td>
</tr>
</tbody>
</table>

**Accessory Set 2nd Vent**

- Additional vent

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSQAE02V</td>
<td>GAE02</td>
</tr>
</tbody>
</table>
**Y Manifold for Ventilation Duct**

- 160x160x160mm
  - Code: HSMA07MF
  - Manufacturer code MA07

**Ventilation Ducting**

- 10m
  - Code: HSMA0210
  - Manufacturer code MA02

**Flat Duct Package**

- Code: HSMA19FD
  - Manufacturer code MA19

**Roof Passing Set - On Roof Tiles**

- Code: HSQAE07T
  - Manufacturer code QAE07T
Solar PV

**PPE Fixing Screws**

- **Code:** HSCPF147
- **Manufacturer code:** CPF 147

**Ventilation and Heat Production Module**

- Suitable for on roof panel installations
- **Code:** HSMAVEIS
- **Manufacturer code:** MAVEIS06

**Isolating Air Collector Back Sheet PPE**

- **Code:** HSCPV52C
- **Manufacturer code:** CPV52

**Nylon Clamp Collar (100 Black Pieces)**

- **Code:** HSMAO3CC
- **Manufacturer code:** MAO3
<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless Steel Clamp Collar</td>
<td>HSMA12CC</td>
<td>MA12</td>
</tr>
</tbody>
</table>
Solar PV Battery Storage

**ZTE Lithium Battery 2.4kWh**

- 2.4kWh Lithium Battery
- Maximise the benefits of your Solar PV system

Code: HRIUM50
Manufacturer code: LITHIUM 50

**LG Chem Battery 6.4kWh**

- 6.4kWh Lithium Battery
- Maximise the benefits of your Solar PV system

Code: HRLGCH64
Manufacturer code: LG RESU 6.4

**EPS KIT**

- Used with Solax Hybrid inverter to enable Emergency Power Supply (EPS) to a dedicated circuit in the event of a power failure

Code: HREPSCHA
Manufacturer code: EPS KIT

**3.3kW Energy Hub**

- 3.3kW unit
- Plug and play
- Includes bidirectional 3kw inverter, battery management system, balancing meter operation, App and monitoring software
- Everything in one box
- G83 Certified and critical load
- Cell technology works in parallel, ensuring that the battery is constantly working at full capacity

Manufacturer code: MinES3.3

Available Autumn 2016
**Solar PV Battery Storage**

---

### 3.3kW Battery Pack

- Unit and battery pack
- Plug and play
- 3.3kW battery pack add on to create a 6.6kWh storage system
- Retrofit simply by the DC cable
- G83 Certified and critical load
- Cell technology works in parallel, ensuring that the battery is working at full capacity

Manufacturer code: MiniES6.6

Available Autumn 2016

---

### SP2000 Solar Battery Storage with 5KWh Lithium battery

- Growatt SP2000 + 5KWh Li-ion Battery
- Up to 3,000 life cycles at 80% DOD
- New or Retro Fit
- RS232/Ethernet/Wi-Fi with Wi-Fi monitoring via App
- Compatible with all inverters excluding Solar Edge

Code: RSWT5KT

Manufacturer code: GROWATT-5KWH-KIT
**Solar PV Accessories**

**DC Fuse 1A 600V**

- Code: RS070187
- Manufacturer code: 4100070187

**Datalogger Card Easy Retrofit**

- Real time data
- Day information
- Total data
- Year information (only in combination with a Datalogger)
- Code: RSRDEASY
- Manufacturer code: DATA CARD EASY

**DC Box 60/12**

- Junction Box
- Code: RSOX6012
- Manufacturer code: DC-BOX60-12

**Personal Display with uk adapter plug**

- Not suitable with IGTL inverters
- Personal Display
- Stay informed about system performance data
- Radio range: up to 300m in the open
- 190x114x53mm
- Code: RSDIFRPD
- Manufacturer code: DIFRPD
Solar PV Accessories

Public Display Box

- Display interfaces
  Code: RSIFRPDB
  Manufacturer code: DIFRPDB

Personal Display Card Retrofit

- Not suitable with IGTL inverters
- Provides wireless communication between the Fronius inverters and the personal display
  Code: RSIFRPDC
  Manufacturer code: DIFRPDC

Ambient Temperature Sensor

- Suited for measuring outside temperature as well as room temperature
- Measuring Range: -40°C to +180°C
- Cable: 3m Cu-cable; 2x0.5mm, silicon isolated, ferrules, UV-resistant
- Max Length: 20m
  Code: RSBPSENS
  Manufacturer code: FRAMBPSENS

Datamanager Box 2.0

- DataLogger
  Code: RSABOX20
  Manufacturer code: FR-DATABOX-2.0
Solar PV Accessories

Datamanager 2.0 Card for Galvo, Symo, Primo WLAN

- DataLogger for Galvo, Symo, Primo WLAN
  Code: RSCARD20
  Manufacturer code: FR-DATACARD-2.0

Datamanager 2.0 Card for IG+ WLAN

- Code: RSIGPLUS
  Manufacturer code: FR-DIGCARD-IGPLUS

Datamanager Card for IG and IG+ (wireless)

- Not compatible with CL range of inverters
- Sends data to Fronius Solar web online portal when connected via WLAN
  Code: RSRDWLAN
  Manufacturer code: FR-DATACARD-WLAN

DC Connector Kit for Symo 10.0 - 20.0kW and Eco

- DC connector kit
- Safe to touch terminal
  Code: RSONNKIT
  Manufacturer code: FR-DC-CONN-KIT
Solar PV Accessories

Smart Meter Single or 3 Phase 50kA

- Feed-in Limitation system
- Fully complies with the current UK DNO requirements
- The Energy Meter works in conjunction with Datamanager 2.0 interfaces from Fronius
- The Fronius Energy Meter requires suitably rated CT clamps

Code: RSYMETER
Manufacturer code: FR-ENERGY-METER

DC Fuse 10A 600V

- DC Fuse

Code: RSUSE10A
Manufacturer code: FRFUSE10A

DC Fuse 15A 600V

- DC Fuse

Code: RSUSE15A
Manufacturer code: FRFUSE15A

DC Fuse 15A 1000V

- DC Fuse

Code: RS15A10W
Manufacturer code: FRFUSE15A-1000V
Solar PV Accessories

**DC Fuse 20A 600V**

- DC Fuse
- Code: RSUSE20A
- Manufacturer code: FRFUSE20A

**DC Fuse 20A 1000V**

- DC Fuse
- Code: RS20A10V
- Manufacturer code: FRFUSE20A-1000V

**DC Fuse 8A 600V**

- DC Fuse
- Code: RSFUSE8A
- Manufacturer code: FRFUSE8A

**Module Temperature Sensor**

- Measures temperature on surface of PV panel
- Fixes on back side of PV module
- Code: RSDPSENS
- Manufacturer code: FRMODPSENS
Solar PV Accessories

Sensor Box

- Enables sensors to be integrated into the Fronius DATCOM system
- Code: RSENSBOX
- Manufacturer code: FRSENSBOX

String Control 100/12

- Quickly detects errors in the module group
- Collection of up to 12 module strings with a total current of up to 100A
- Installation option for DIN rail-mountable over-voltage protection (type 1 or type 2)
- Continuous current measurement at the string level. Ensuring reliable detection of even the smallest errors in the entire system
- Perfect outdoor capability thanks to an IP55 protection class
- Code: RSN10012
- Manufacturer code: FR-ST-CON100-12

String Control Agilo Range 250/30

- Code: RSN25030
- Manufacturer code: FR-ST-CON250-30

String Control Base 250/30 (Agilo)

- Code: RSE25030
- Manufacturer code: FR-STR-BASE-250-30
Solar PV Accessories

### COM Card Retrofit
- Can provide a data link from the Fronius IG or Fronius IG Plus to the SolarNet and to the associated DATCOM components
- Code: RSGOCOMR
- Manufacturer code: GOCOMR

### Personal Display DL
- Personal Display
- Displays system data with the function of a Datalogger
- Enables fast and easy data transfer from up to 15 inverters to a computer
- Fronius Solar.Access software enables the recording, analysis and archiving of the logged data
- Code: RSPDLBOX
- Manufacturer code: PERS-DISP-DL

### Datalog Retrofit Card Pro IG
- Code: RSARDPRO
- Manufacturer code: RETROCARDPRO

### 485 Data Module Type B
- Enables you to setup cable-connected RS485 communication
- Compatible with the SMA TL-20 range of three phase inverters
- Code: RS3LIGHT
- Manufacturer code: 485BRD-10
Solar PV Accessories

Accessory Pack for SMA Cluster Controller

Code: RSBCON10
Manufacturer code: BP-CLCEN-10

Cluster Controller (75 Devices)

- Professional monitoring and controlling for decentralised large-scale PV plants
- Monitoring and control of up to 75 string inverters
- Complies with national and international requirements for grid integration
- Immediate e-mail notification in the event of a failure
- Remote monitoring and maintenance via the integrated user interface and Sunny Portal

Code: RSLCON10
Manufacturer code: CLCEN-10

Cluster Controller Type S (25 Devices)

- Professional monitoring and controlling for decentralised Mid-scale PV plants
- Monitoring and control of up to 25 string inverters

Code: RSCONS10
Manufacturer code: CLCEN-S-10

Energy Meter 3 Phase (<63A)

- Provides three phase energy measurement for up to 63A per phase
- For higher power systems add 3 X STCK35 current transformers

Code: RSETER10
Manufacturer code: EMETER-10
Solar PV Accessories

Energy Meter 3 Phase with Current Transformers (>63A)

Consists of:
- SMA Energy Meter 3 phase (<63A)
- 3 Split Core Current Transformer (incl. fly lead)
Code: RS10200A
Manufacturer code EMETER-10-200A

Sunny Home Manager with Bluetooth

- Standard access to Sunny Portal
- Provides simple plant monitoring and intelligent energy management
- Able to control loads via SMA radio-controlled sockets automatically
- Learns the typical consumption pattern of the household and combines this information with a forecast of the plant-specific PV generation
Code: RSHMBT10
Manufacturer code HM-BT-10

Sunny Home Manager Bluethooth incl. 2 Radio-controlled Sockets

Code: RST10SET
Manufacturer code HM-BT-10-SET

Multicluster Box 12 for Sunny Island

- For easy set-up of stand-alone and hybrid systems
Code: RSBOX123
Manufacturer code MC-BOX-12.3
Solar PV Accessories

Multicluster Box 6 for Sunny Island

- For easy set-up of stand-alone and hybrid systems
  Code: RS0X6311
  Manufacturer code: MC-BOX-6.3-11

AC Cable 1.4m

- 1.4m Length
  Code: RSB14101
  Manufacturer code: MI-ACCAB14-10-1

AC Cable 2.0m

- 2.0m Length
  Code: RSB20101
  Manufacturer code: MI-ACCAB20-10-1

AC Protective Cap

- Code: RSCAP101
  Manufacturer code: MI-ACCAP-10-1

AC Field Plug

- Code: RSCON101
  Manufacturer code: MI-ACCON-10-1

DC MC4 Adapter

- Code: RSMC4101
  Manufacturer code: MI-DCMC4-10-1

DC TYCO Adapter

- Code: RSYCO101
  Manufacturer code: MI-DCTYCO-10-1
Solar PV Accessories

Sunny Sensor Box - Power Injector RS-485

- Installed directly onto the modules and measures solar irradiation and, optionally, wind speed and ambient temperatures
- When combined with Sunny WebBox and Sunny Portal, it provides continuous target-actual comparison of the plant performance
- Makes it possible to detect shading, dirt, and a gradually declining array performance
Code: RSJECTOR
Manufacturer code: POWER-INJECTOR

Sunny Beam Bluetooth Repeater

- Enables extended range of bluetooth data connection between data logger and inverters
- Up to 100 inverters
- IP20 Protection rating
- Dimensions 225x130x57mm
Code: RSSBBTRP
Manufacturer code: SBBTRP

Sunny WebBox Bluetooth

- Multi-purpose SMA data logger
- Wireless system monitoring with Bluetooth interface
- Remote diagnosis and data storage from SMA inverters
- Up to 100m range in free field
Code: RSBWBBXBT
Manufacturer code: SB-WEBBOX-BT

RS485 Wireless Radio Set

- Allows wireless contact between two sections of a PV plant
Code: RS485WRS
Manufacturer code: RS485WRS

Quick Module RS485 interface for HF range

- Interface and multi-function relay for use with the HF range of inverters
Code: RSFRS485
Manufacturer code: SB-HF-RS485
## Solar PV Accessories

### Sunny View
- Large, easy-to-read 5” colour touch screen
- Communicates via Bluetooth with up to 12 inverters
- **Code**: RSVIEW10
  - Manufacturer code: S-VIEW-10

### Sunny Remote Control for Sunny Island
- Up to 20m range
- Can be used to process information from up to 3 devices
- **Code**: RSASRC20
  - Manufacturer code: SMA-SRC-20

### Sunny Matrix 800x800mm
- External display
- Includes Ethernet interface
- **Code**: RSATRIX2
  - Manufacturer code: SMATRIX-2

### Speedwire Datamodule for Sunny Island
- Communication interface for the battery inverter
- **Sunny Island**
- **Code**: RSSINR10
  - Manufacturer code: SWOMSi-NR10

### RS485 Interface
- Compatible with SMA inverters with a low frequency transformers
- **Code**: RSRRS485
  - Manufacturer code: SWH-RS485

### RS485 SMC Interface
- Compatible with the SMC5000A and SMC6000A
- **Code**: RS485SMC
  - Manufacturer code: SWR-RS485SMC

### RS485 Interface for SMA TL Inverters
- **Code**: RS485TL
  - Manufacturer code: SWR-RS485-TL
Solar PV Accessories

Service Cable

Code: RSICEUSB
Manufacturer code: SWR-SERVICEUSB

Upgrade Kit DC Overvoltage Protector (Type 2) for Inputs A

Code: RSPROTA
Manufacturer code: TP-PROT-A

Upgrade Kit DC Overvoltage Protector (Type 2) for Inputs A & B

Code: RSPROTAB
Manufacturer code: TP-PROT-A-B

Upgrade Kit DC Overvoltage Protection (Type 2) for Inputs A + B

Code: RSOTAB30
Manufacturer code: TP-PROT-A-B-30

Web Connect

Code: RSONNECT
Manufacturer code: WEB-CONNECT

Firefighter Safety Gateway

- Centralised safety management

Code: RS00CCGF
Manufacturer code: SE1000-CCG-F
Solar PV Accessories

Control and Communication Gateway (HUB)

- Control and Communication Gateway
- Expands the SolarEdge monitoring and control capabilities
- Can be connected to SolarEdge and non-SolarEdge inverters, environmental sensors and revenue meters
- Wireless connections

Code: RS00CCGG
Manufacturer code: SE1000-CCG-G

Power Key SE-1000

- Allows power optimisers with independent optimisation (OPi300) to work with non-SolarEdge inverters without installation of additional interface
- Fast, one-time commissioning of all power optimisers in a string
- Disables power optimiser’s SafeDCTM mechanism allowing non-SolarEdge Inverter to operate with power optimisers
- Portable and rugged handheld tool, can be used in multiple installations

Code: RS00KEY
Manufacturer code: SE-1000-KEY

RS485 Expansion Kit

- Provides an additional RS485 port for the inverter for enhanced communications
- Allows connection of devices to a multiple inverter system without a Control and Communication Gateway
- Allows daisy chain configuration of multiple RS485 buses for communications in commercial
- Suitable for installation in the SolarEdge Control and Communication Gateway
- Located within the inverter enclosure for outdoor protection

Code: RS485IF01
Manufacturer code: SE1000-RS485-IF01

S0 Meter Adapter Cable

Code: RSS0IF01
Manufacturer code: SE1000-S0IF01
## Solar PV Accessories

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irradiance Sensor 0-1.4V</td>
<td>RSNIRRS1</td>
<td>SE1000-SEN-IRR-S1</td>
</tr>
<tr>
<td>Temperature Sensor PSU 24V/1A</td>
<td>RSNSUS1</td>
<td>SE1000-SEN-PSU-S1</td>
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<tr>
<td>Ambient Temperature Sensor 0-10V</td>
<td>RSTAMBS1</td>
<td>SE1000-SEN-TAMB-S1</td>
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<tr>
<td>Module Temperature Sensor 4-20mA</td>
<td>RSTM0DS1</td>
<td>SE1000-SEN-TM0D-S1</td>
</tr>
</tbody>
</table>
Solar PV Accessories

Wind Velocity Sensor 4-20mA

Code: RSWINDS1
Manufacturer code: SE1000-SEN-WIND-S1

WiFi Module Kit

- Enables wireless communication between the SolarEdge inverter and a Wi-Fi router
- Extended communication range with external antenna
- Wi-Fi module installed within the inverter enclosure for outdoor resilience
- Robust communications with support of 802.11b/g/n standards
Code: RSWIFI01
Manufacturer code: SE-1000-WIFI01

Zigbee Inverter Slave Kit Type 5

- Connects SolarEdge inverters wirelessly to an Internet router
- ZigBee unit installed within the inverter enclosure for outdoor resilience
- Antenna external to inverter for wider range
- Communication to Internet via Ethernet
- Home gateway supports up to 15 SolarEdge devices on wireless network
Code: RSB05SLV
Manufacturer code: SE-1000-ZB05-SLV

Home Gateway + Slave

- Used to wirelessly connect any SolarEdge inverter to the internet via a router
- Can transmit and receive signals from as many as 15 inverters or other SolarEdge devices
- External antenna provides range of up to 50m indoor and up to 400m outdoors (line of sight)
- ZigBee cards are installed within the inverter enclosure for outdoor resilience
- 5 year limited warranty
Code: RSOZBGWK
Manufacturer code: SE-1000-ZBGW-K

www.grahamplumbersmerchant.co.uk
Solar PV Accessories

50A Split-Core Current Transformer

- Outstanding accuracy and one-handed operation
- Only suitable for use in indoor environments
- Supports AC Current and Amps (A)
- For use with the SolarEdge Electricity Meter 1PH/3PH 230/400V Electricity Meter (RGM) W/RS485

Code: RS075050
Manufacturer code: SE-ACT-0750-50

100A Split-Core Current Transformer

- Outstanding accuracy and one-handed operation
- Only suitable for use in indoor environments
- For use with the SolarEdge Electricity Meter 1PH/3PH 230/400V Electricity Meter (RGM) W/RS485

Code: RS0750100
Manufacturer code: SE-ACT-0750-100

250A Split-Core Current Transformer

- Outstanding accuracy and one-handed operation
- Only suitable for use in indoor environments
- Supports AC Current and Amps (A)
- For use with the SolarEdge Electricity Meter 1PH/3PH 230/400V Electricity Meter (RGM) W/RS485

Code: RS0750250
Manufacturer code: SE-ACT-0750-250

1000A Split-Core Current Transformer

- Outstanding accuracy and one-handed operation
- Only suitable for use in indoor environments
- Supports AC Current and Amps (A)
- For use with the SolarEdge Electricity Meter 1PH/3PH 230/400V Electricity Meter (RGM) W/RS485

Code: RS07501000
Manufacturer code: SE-ACT-0750-1000
Solar PV Accessories

DC Storage Interface

- Enables the connection of the Tesla Powerwall Home Battery to a SolarEdge inverter
- Simple installation and connectivity of the battery and the SolarEdge meter
- Connects to the SolarEdge inverter in parallel to the PV strings
- Can be used to upgrade existing SolarEdge systems
- Designed to eliminate DC voltage and current during installation, maintenance or firefighting

Code: RESSTI1
Manufacturer code: SE-STI-S1

1PH/3PH 230/400V Modbus Meter 1 Second

- Modbus Meter for SolarEdge Installations
- High accuracy meter readings for production/consumption monitoring
- Import/Export meter readings for export limitation functionality
- Small and easy to install - fits in standard electrical panel
- Supports residential, commercial and utility-size installations

Code: RS00MBK1
Manufacturer code: SE-WNC-3Y-400-MB-K1

Safety and Monitoring Interface

- Module-level safety and monitoring for non-SolarEdge inverters
- Collects module performance data measured by each power optimiser and transmits the data to the SolarEdge monitoring server
- Activates the SafeDC™ feature of the power optimisers, which automatically shuts down module DC voltage during AC power shutdown, for safe installation, maintenance and firefighting
- Provides multiple advantages when adding SolarEdge power optimisers to existing installations and when designing new sites
- Can be added to an existing installation that has SolarEdge power optimisers at any stage

Code: RSSM35I
Manufacturer code: SMI-35
Solar PV Enquiry Form

Required information
- How many panels are required?
- Are the panels in portrait or landscape?
- How many rows?
- What type of roof/tile is it being fitted on?
- Steel or Timber purlins? (Commercial)
- Single or 3 phase?
- Black Mono or Silver Poly?

Optional information
- Hook spacing required (1200mm Std)
- Spacing of Purlins? Horizontal or Vertical?

Additional information may be required to provide an accurate quotation.

Most domestic properties have a tiled roof and our standard roof hook will fit most tiles, slate tiles have their own dedicated hook.

Available panels are black Monocrystalline or silver Polycrystalline.

Solar panels. How many? How are they arranged?

Available information

Inverter. Converts DC to AC Power

Power. Single or three phase?

These profiles are normally found on commercial rooftops, the roof is supported by either steel or timber purlins.

What’s on the roof?

Available roof types
- Trapezoidal
- Corrugated

Customer Details

Branch Details

grahamplumbersmerchant.co.uk | Facebook | Twitter

We get what you need.

grahamcategoryteam@grahamplumbersmerchant.co.uk

Heating & Spares
Plumbing & Plastics
Bathrooms
Renewables

Graham Renewables Brochure.indd   82
06/09/2016   12:07
Solar Thermal

By using energy from the sun, solar thermal panels are able to produce up to 65% of a homes hot water requirements free of charge.

When used alongside one of our solar cylinders you are able to combine solar thermal panels with a traditional heating system or even add further heat sources such as stoves and heat pumps.
Solar Thermal

**FPW18 Solar Thermal Flat Plate Panel**

- Robust, durable, sleek and subtle in design
- Flexible in installation with both ‘in-roof’, ‘on-roof’ and ‘A-frame’ options
- High efficiency performance,
- Highly insulated to reduce heat loss
- MCS Approved

  Code: HKFP0170
  Manufacturer code: KFP0170

**FPW21 Solar Thermal Flat Plate Panel**

- Robust, durable, sleek and subtle in design
- Flexible in installation with both ‘in-roof’, ‘on-roof’ and ‘A-frame’ options
- High efficiency performance,
- Highly insulated to reduce heat loss
- MCS Approved

  Code: HKFP0171
  Manufacturer code: KFP0171

**FPW25 Solar Thermal Flat Plate Panel**

- Robust, durable, sleek and subtle in design
- Flexible in installation with both ‘in-roof’, ‘on-roof’ and ‘A-frame’ options
- High efficiency performance,
- Highly insulated to reduce heat loss
- MCS Approved

  Code: HKFP0172
  Manufacturer code: KFP0172

**TMAX DF400 2m² Manifold**

- DF400-2m² manifold
- Ease of installation and maintenance thanks to simple ‘plug and play’ design
- Flexible installation - can be installed horizontally or vertically, on flat roofs and facades
- Unique glass to metal seal maintaining superior vacuum to protect the system from outside influences
- High efficiency performance - work from dawn till dusk - all year round
- MCS Approved

  Code: HKSK0179
  Manufacturer code: KSK0179

**Variants**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HKSK0180</td>
<td>TMAX DF400 3m² Manifold</td>
</tr>
</tbody>
</table>
**TMAX DF400 Tubes (box of 10)**

- Ease of installation and maintenance thanks to simple ‘plug and play’ design
- Flexible installation - can be installed horizontally or vertically, on flat roofs and facades
- Unique glass to metal seal maintaining superior vacuum to protect the system from outside influences
- High efficiency performance - work from dawn till dusk - all year round
- MCS Approved

Code: HKSP0495
Manufacturer code: KST0005

**Varisol HP90 Collector (box of 10)**

- World’s first collector with no rigid manifold
- Temperature limitation to prevent overheating and system stagnating
- Unique design allowing single tubes to simply ‘click-fit’ together
- Precise sizing, total flexibility in design and installation
- MCS Approved

Code: HKST0078
Manufacturer code: KST0078

**Varisol DF Collector (box of 10)**

- World’s first collector with no rigid manifold
- Flexible installation - can be installed horizontally or vertically, on flat roofs and facades
- Unique design allowing single tubes to simply ‘click-fit’ together
- Precise sizing, total flexibility in design and installation
- MCS Approved

Code: HKST0027
Manufacturer code: KST0027

**Dual Stream HE Pump Station**

- Flow meter to measure system flow
- Flush and fill ports
- Hot and Cold temperature gauges
- Ball valves with integrated check valves (isolate system at pump station)
- ErP compliant

Code: HKSP0681
Manufacturer code: KSP0681
Solar Thermal

SC400 Controller

- Compact, multipart designer casing
- Large animated easy to read graphic display screen that allows access to information on the performance of your solar hot water system
- Simple to operate
- Various pre-set operating modes, incl. holiday mode
- Display showing CO2 savings

Code: HKX0054
Manufacturer code: KEK0054

SC500 Controller

- Compact, multipart designer casing
- Large animated easy to read graphic display screen that allows access to information on the performance of your solar hot water system
- Simple to operate
- Various pre-set operating modes, incl. holiday mode
- Display showing CO2 savings

Code: HKX0055
Manufacturer code: KEK0055

1st Fix for Kingspan Solar Flat Plate

- 1st fix for Kingspan Solar Flat Plate
- Contains all the necessary components to complete the roof mounted plumbing, ready for pressure testing
- Include all couplings, seals, 2x2m lengths of pre-insulated flexible stainless steel pipework and roof solar sensor
- Requires no specialist tools - easily formed by hand
- Double annealed – retain their shape when bent or straightened
- Pipework operates from −50ºC to 200ºC

Code: HKSK0032
Manufacturer code: KSK0032EN

1st Fix for Thermomax

- 1st fix for Thermomax (inc PT1000 & C0673)
- Contains all the necessary components to complete the roof mounted plumbing, ready for pressure testing
- Include all couplings, seals, 2x2m lengths of pre-insulated flexible stainless steel pipework and roof solar sensor
- Requires no specialist tools - easily formed by hand
- Double annealed – retain their shape when bent or straightened
- Pipework operates from −50ºC to 200ºC

Code: HKSP0810
Manufacturer code: KSK0030
2nd Fix Pack Fittings

- Comes with 22mm Compression ends suitable for Kingspan Solar Flat plate and Thermomax
- Contains all components to complete the plumbing of the solar system by connecting the hot water cylinder and pumping station to the previously installed roof mounted plumbing
- Includes all couplings, seals and 20m of pre-insulated flexible pipework.
- Requires no specialist tools - easily formed by hand
- Double annealed – retain their shape when bent or straightened
- Pipework operates from −50°C to + 200°C

Code: HKSP0081
Manufacturer code: KS0031

Greenskies Solar-Lito Roof Kit - 1 Collector

- A competitive cost effective choice
- Low a1 heat loss for a flat panel design
- Solar panels = 10 years. Parts = 2 years.
- Specifically designed to complement existing home heating systems
- Easy to use controller

Code: HW150168
Manufacturer code: 7716150168

Greenskies Solar-Lito Roof Kit - 2 Collectors

- A competitive cost effective choice
- Low a1 heat loss for a flat panel design
- Solar panels = 10 years. Parts = 2 years.
- Specifically designed to complement existing home heating systems
- Easy to use controller

Code: HW150169
Manufacturer code: 7716150169

Greenskies Solar Lifestyle Plumb Kit: Standard Single

- Can be installed in a full range of positions including the popular in roof option, which allows flush, hidden effect to be achieved
- Specifically designed to complement existing home heating systems
- Solar panels = 10 years. Parts = 2 years.
- Optimised to capture the maximum levels of heat, even in cloudy weather
- Simple controls

Code: HW150174
Manufacturer code: 7716150174
Solar Thermal

Greenskies Solar Lifestyle Plumb Kit: Standard Twin

- Can be installed in a full range of positions including the popular in roof option, which allows flush, hidden effect to be achieved
- Specifically designed to complement existing home heating systems
- Solar panels = 10 years. Parts = 2 years.
- Optimised to capture the maximum levels of heat, even in cloudy weather
- Simple controls
  Code HW615175
  Manufacturer code 7716150175

Greenskies Solar Lifestyle Plumb Kit: Advance Single

- Can be installed in a full range of positions including the popular in roof option, which allows flush, hidden effect to be achieved
- Specifically designed to complement existing home heating systems
- Solar panels = 10 years. Parts = 2 years.
- Optimised to capture the maximum levels of heat, even in cloudy weather
- Simple controls
  Code HW150173
  Manufacturer code 7716150173

Solar Thermal 1 Collector Bronze On-roof Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid
  Code HSSKIT0
  Manufacturer code GSSKIT0
  ERP Rating 82.6

Solar Thermal 2 Collector Bronze On-roof Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid
  Code HSSKIT1
  Manufacturer code GSSKIT1
  ERP Rating 82.6
Solar Thermal 3 Collector Bronze On-roof Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSKIT2
Manufacturer code: GSSKIT2
ERP Rating: 82.6

Solar Thermal 2 Collector Bronze Flat-roof Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSKIT5
Manufacturer code: GSSKIT5
ERP Rating: 82.6

Solar Thermal 1 Collector Bronze In-roof (Tile) Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSKIT15
Manufacturer code: GSSKIT15
ERP Rating: 82.6

Solar Thermal 1 Collector Bronze In-roof (Slate) Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSKIT16
Manufacturer code: GSSKIT16
ERP Rating: 82.6
Solar Thermal

Solar Thermal 2 Collector Bronze In-roof (Tile) Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSSKIT3
Manufacturer code: GSSKIT3
ERP Rating: 82.6

Solar Thermal 2 Collector Bronze In-roof (Slate) Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HSSKIT17
Manufacturer code: GSSKIT17
ERP Rating: 82.6

Solar Thermal 3 Collector Bronze In-roof (Tile) Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSSKIT4
Manufacturer code: GSSKIT4
ERP Rating: 82.6

Solar Thermal 3 Collector Bronze In-roof (Slate) Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HSSKIT18
Manufacturer code: GSSKIT18
ERP Rating: 82.6
Solar Thermal 1 Collector Bronze On-roof Landscape Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSKOLAN
Manufacturer code: GSSKITOLAND
ERP Rating: 82.6

Solar Thermal 2 Collector Bronze On-roof Landscape Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSK1LAN
Manufacturer code: GSSKIT1LAND
ERP Rating: 82.6

Solar Thermal 3 Collector Bronze On-roof Landscape Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSK2LAN
Manufacturer code: GSSKIT2LAND
ERP Rating: 82.6

Solar Thermal 1 Collector Bronze In-roof (Tile) Landscape Kit

Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSK15LA
Manufacturer code: GSSKIT15LAND
ERP Rating: 82.6
Solar Thermal

Solar Thermal 1 Collector Bronze In-roof (Slate) Landscape Kit
Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid
Code: HGSX16LA
Manufacturer code: GSSXKIT16LAND
ERP Rating: 82.6

Solar Thermal 2 Collector Bronze In-roof (Tile) Landscape Kit
Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid
Code: HGSX3LAN
Manufacturer code: GSSXKIT3LAND
ERP Rating: 82.6

Solar Thermal 2 Collector Bronze In-roof (Slate) Landscape Kit
Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid
Code: HGSX17LA
Manufacturer code: GSSXKIT17LAND
ERP Rating: 82.6

Solar Thermal 3 Collector Bronze In-roof (Tile) Landscape Kit
Sahara Solar Kit Includes:
- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid
Code: HGSX3LT1
Manufacturer code: GSSXKIT3LT1
ERP Rating: 82.6
Solar Thermal 3 Collector Bronze In-roof (Slate) Landscape Kit

Sahara Solar Kit Includes:

- Sahara collectors
- Roof mounting system
- Expansion vessel
- Pump station
- Control panel, pipe connections and solar fluid

Code: HGSK28LA
Manufacturer code: GSSKT28LAND
ERP Rating: 82.6
Solar Thermal Accessories and Fittings

Solar Fluid Catchment Tank

- 6.05 Litres
- Manufactured from high quality temperature resistant plastic
- Compact wall mounted unit
- Large volume suitable for most domestic solar systems
- Effective seals prevent any leaks or splashes
- Integrated drain valve to allow fluid to be recovered

Code: HKSP0301
Manufacturer code: KSP0301

Solar Thermal GSD3X Controller

- Differential temperature solar controller
- Automatically manages the operation of the solar thermal system
- Monitors the temperature in both the collector and the cylinder
- Operates the circulating pump only when the difference in temperature will provide efficient heating of the hot water

Code: HGGS222X
Manufacturer code: GS222020X

Solar Thermal GSX1 Controller

- Differential temperature solar controller
- Automatically manages the operation of the solar thermal system
- Monitors the temperature in both the collector and the cylinder
- Operates the circulating pump only when the difference in temperature will provide efficient heating of the hot water

Code: HG222765
Manufacturer code: GS222765

Solar Thermal Filling Station

Code: HS222139
Manufacturer code: GS222139
### Solar Thermal Accessories and Fittings

#### CombiSOL Kit

<table>
<thead>
<tr>
<th>Code</th>
<th>HMBISOL3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer code</td>
<td>COMSOL3</td>
</tr>
</tbody>
</table>

#### WinterSOL Kit

<table>
<thead>
<tr>
<th>Code</th>
<th>HGERSOL1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer code</td>
<td>WINTERSOL1</td>
</tr>
</tbody>
</table>

#### Solar Pump Station with HE Pump

- Combined fill and flush valve assembly
- Easy adjustment of fluid flow rate using simple integral flow indicator

<table>
<thead>
<tr>
<th>Code</th>
<th>HGGS222H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer code</td>
<td>GS222154H</td>
</tr>
</tbody>
</table>

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Solar Thermal Fluids & Treatments

Solar S1

- An inhibited heat transfer fluid for all solar thermal applications
- Frost protection to -28°C
- Volatile corrosion inhibitor for protection in gas and liquid phases
- Compatible with all makes and models of solar panels

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF057675</td>
<td>57675</td>
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</table>

Variants

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF057640</td>
<td>57640</td>
</tr>
</tbody>
</table>

Solar Cleaner

- A concentrated universal cleaner for solar systems
- Removes degraded solar heat transfer fluids and sludge
- Clears blockages
- Restores efficiency of existing systems

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF059430</td>
<td>59430</td>
</tr>
</tbody>
</table>

Injector

- Allows fast introduction of all Fernox treatments
- Fitted pressure relief valve
- 5 litre reservoir capacity
- Tough construction for a long life

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTAFX075</td>
<td>24122</td>
</tr>
</tbody>
</table>

Tyfocor 20 Litres Antifreeze

- 20 Litres
- For use with evacuated tubes
- Specially formulated for modern solar systems
- Can then be used in conjunction with the optional filling station to provide a simple commissioning process
- Acts as an antifreeze
- With the added benefit of having corrosion inhibiting additives built in

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HKC05600</td>
<td>05600</td>
</tr>
</tbody>
</table>
Solar Thermal Fluids & Treatments

**Glycol Solution 10kg Pre-Mixed**
- For use with flat plate systems
- Specially formulated for modern solar systems
- Pre-mixed with distilled water, saving both time and complication on site
- Can then be used in conjunction with the optional filling station to provide a simple commissioning process
- Acts as an antifreeze
- With the added benefit of having corrosion inhibiting additives built in

Code: HKSP0825  Manufacturer code: KSK0046

**R100 Solar Thermal Fluid**
- 10 Litres
- A superior heat transfer fluid for enhanced system performance and longer life.
- Ready to use without dilution
- Protects system from corrosion in both liquid and vapour states
- Effective frost protection down to -25°C
- Resistant to degradation

Code: HSR10010  Manufacturer code: 5060154180411

**R200 Solar System Cleaner**
- 10 Litres
- Specially-formulated product designed to quickly restore the efficient operation of solar heating systems in which thermal fluid has degraded.
- Ready to use without dilution
- Removes sludge and deposits from degraded thermal material
- Cleans with only 20 minutes circulation time
- Effective at low or room temperature

Code: HSR20010

**Solar Check Test Kit**
- The Sentinel SolarCheck Test Kit contains everything you need.
- Checks frost protection level
- Helps determine when fluid replacement is required
- Checks orientation of solar panels
- Includes: Compass, Radiator Key, Mini IR Thermometer, Refractometer, Sampling Kit, Instruction CD

Code: HSXTEST  Manufacturer code: 5060154180435

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Solar Thermal Fluids & Treatments

FrostCheck Test Kit

- Confirms level of anti freeze left in thermal fluid
- Determine exactly when replacement is needed
- Measures system performance
- Mini infra red (IR) Thermometer
- Refractometer
- Sample Bottle

Code: HSFCKIT
Manufacturer code: 5060154180848
Heat Pumps

A heat pump takes the natural heat from an external source, usually the surrounding ground or air, and increases its temperature to heat the hot water and central heating system in the home. Heat pumps are extremely efficient and can produce up to 4 times as much heat energy for every unit of electricity used to power them.

To maximise efficiency heat pumps are best used along with underfloor heating or smart radiators due to their lower operating temperatures of around 45 degrees.

There are two main types of heat pumps, both of which work using the same principles but use alternative sources for their heat supply.

Air Source Heat Pumps (ASHP)

Air Source Heat Pumps operate the same way as a refrigerator but in reverse. They take heat from the air outside of the property and transfer the heat via a heat exchanger. An evaporator uses the heat from the air to boil a refrigerant liquid which has a low boiling point and turns it into a gas. The gas is then compressed which increases the temperature before it is then transferred to the water in the central heating or DHW system via an additional heat exchanger. Even when the outside temperature is low the heat pump can still work efficiently.

Ground Source Heat Pumps (GSHP)

Ground Source Heat Pumps work using the same principles as Air Source Heat Pump however instead of taking heat from the external air, use loops of collector pipe filled with heat transferred fluid to draw heat from deep in the ground.

GSHP can either use large loops of pipe spread over a wide area or alternatively, if there is insufficient ground area, a borehole can be drilled and heat extracted from deeper within the ground. When installing a GSHP you should always have a ground survey to assess which option best suits your circumstances.

Accessories

Graham are also able to offer a full range of heat pump accessories including collector pipe, manifolds, transfer fluids, anti-vibration feet, wall brackets, flexi hoses, pipe insulation kits and guards to ensure you have everything you need for the perfect install.
Heat Pumps

Greensource Air to Air Heat Pump

- Up to 500% efficient (producing up to 5kW of heat energy for every 1kW of electricity used)
- Compact design, requiring only an outside wall
- Inbuilt air purification is perfect for allergy sufferers

Code: HW150179
Manufacturer code: 7 716 150 179

F2040-8kW

- 8kW
- Inverter controlled compressor
- Compact design
- Built-in condensate water tray

Code: HN064109
Manufacturer code: 064109
ERP Rating: A+++}

F2040-12kW

- 12kW
- Inverter controlled compressor
- Compact design
- Built-in condensate water tray

Code: HN064092
Manufacturer code: 064092
ERP Rating: A+++}

F2040-16kW

- 16kW
- Inverter controlled compressor
- Compact design
- Built-in condensate water tray

Code: HN064108
Manufacturer code: 064108
ERP Rating: A+++}
Heat Pumps

F2300-14kW
- 14kW
- COP levels amongst the best on the market
- Supply temperature 63°C at -25°C ambient
- Very low noise level
Code: HN004063
Manufacturer code: 064063
ERP Rating: A++

F2300-20kW
- 20kW
- COP levels amongst the best on the market
- Supply temperature 63°C at -25°C ambient
- Very low noise level
Code: HN004064
Manufacturer code: 064064
ERP Rating: A++

ASHP Air/Water Pack 1A
- Includes: F2040-8kW
- VVM320
- 18L expansion vessel
Code: HN20401A
Manufacturer code: PAC20401A
ERP Rating: A+++}

ASHP Air/Water Pack 1B
- Includes: F2040-12kW
- VVM320
- 18L expansion vessel
Code: HN20401B
Manufacturer code: PAC20401B
ERP Rating: A+++
Heat Pumps

**ASHP Air/Water Pack 1C**

Includes:
- F2040-16kW Heat Pump
- VM320
- 18L expansion vessel

Code: HN20401C
Manufacturer code: PAC20401C
ERP Rating: A+++

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**ASHP Air/Water Pack 2A**

Includes:
- F2040-8kW Heat Pump
- SMO 20 Control Module
- VST 05 three way hot water control valve

Code: HN20402A
Manufacturer code: PAC20402A
ERP Rating: A+++

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**ASHP Air/Water Pack 2B**

Includes:
- F2040-12kW Heat Pump
- SMO 20 Control Module
- VST 05 three way hot water control valve

Code: HN20402B
Manufacturer code: PAC20402B
ERP Rating: A+++

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**ASHP Air/Water Pack 2C**

Includes:
- F2040-16kW Heat Pump
- SMO 20 Control Module
- VST 11 three way hot water control valve

Code: HN20402C
Manufacturer code: PAC20402C
ERP Rating: A+++
ASHP Air/Water Pack 3A

Includes:
- F2040-8kW Heat Pump
- SMO 40 Control Module
- VST 05 three way hot water control valve

Code: HN20403A
Manufacturer code: PAC20403A
ERP Rating: A+++ 

ASHP Air/Water Pack 3B

Includes:
- F2040-12kW Heat Pump
- SMO 40 Control Module
- VST 05 three way hot water control valve

Code: HN20403B
Manufacturer code: PAC20403B
ERP Rating: A+++ 

ASHP Air/Water Pack 3C

Includes:
- F2040-16kW Heat Pump
- SMO 40 Control Module
- VST 11 three way hot water control valve

Code: HN20403C
Manufacturer code: PAC20403C
ERP Rating: A+++ 

A6M 6kW A-Class Heat Pump

- 6kW
- Outdoor air to water inverter driven
- A Rated

Code: HDA6MINV
Manufacturer code: 049032
ERP Rating: A
Heat Pumps

A8M 8kW A-Class Heat Pump
- 8kW
- Outdoor air to water inverter driven
- A++ Rated

Code: HD08MH11
Manufacturer code: 049049
ERP Rating: A++

A12M 12kW A-Class Heat Pump
- 12kW
- Outdoor air to water inverter driven
- A++ Rated

Code: HD049056
Manufacturer code: 049056
ERP Rating: A++

A16M 16kW A-Class Heat Pump
- 16kW
- Outdoor air to water inverter driven
- A++ Rated

Code: HD046499
Manufacturer code: 046499
ERP Rating: A++

A6M Pack with 150L Cylinder
Includes:
- A6M 6kW Heat Pump
- ECS150HP40A-580 150L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACC830) and heating system expansion vessel

Code: HDP11504
Manufacturer code: 057679
Heat Pumps

A6M Pack with 210L Cylinder

Includes:
- A6M 6kW Heat Pump
- ECS210HP40A-580 210L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, isolator, Control
- Requires RS485 Connection Cable (ACC830) and heating system expansion vessel

Code: HDP12104
Manufacturer code: 057665

A6M Pack with 250L Cylinder

Includes:
- A6M 6kW Heat Pump
- ECS250HP40A-580 250L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, isolator, Control
- Requires RS485 Connection Cable (ACC830) and heating system expansion vessel

Code: HDP12504
Manufacturer code: 057648

A8M Pack with 150L Cylinder

Includes:
- A8M 8kW Heat Pump
- ECS150HP40A-580 150L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, isolator, Control
- Requires RS485 Connection Cable (ACC830) and heating system expansion vessel

Code: HDM15040
Manufacturer code: 054364

A8M Pack with 210L Cylinder

Includes:
- A8M 8kW Heat Pump
- ECS210HP40A-580 210L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, isolator, Control
- Requires RS485 Connection Cable (ACC830) and heating system expansion vessel

Code: HDM21040
Manufacturer code: 054357
Heat Pumps

A8M Pack with 250L Cylinder

Includes:
- A8M 8kW Heat Pump
- ECS250HP40A-580 250L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Code: HDM25040
Manufacturer code: 054340

A12M Pack

Includes:
- A12M 12kW Heat Pump
- ECS150HP40A-580 150L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Code: HD050809
Manufacturer code: 050809

A12M Pack

Includes:
- A12M 12kW Heat Pump
- ECS210HP40A-580 210L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Code: HD050816
Manufacturer code: 050816

A12M Pack

Includes:
- A12M 12kW Heat Pump
- ECS250HP40A-580 250L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Code: HD050823
Manufacturer code: 050823
A12M Pack

Includes:
- A12M 12kW Heat Pump
- ECS150HP40A-580 150L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Code HD050830
Manufacturer code 050830

A16M Pack

Includes:
- A16M 16kW Heat Pump
- ECS210HP40A-580 210L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Code HD050847
Manufacturer code 050847

A16M Pack

Includes:
- A16M 16kW Heat Pump
- ECS250HP40A-580 250L Smart Cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Code HD050854
Manufacturer code 050854

A6M Pack Slimline Cylinder

Includes:
- A6M 6kW Heat Pump
- ECS180HP40A-480 180L Slimline combination cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Manufacturer code 057662
Heat Pumps

**A8M Pack Slimline Cylinder**

Includes:
- A8M 8kW Heat Pump
- ECS180HP40A-480 180L Slimline combination cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Manufacturer code 054982

**A12M Pack Slimline Cylinder**

Includes:
- A12M 12kW Heat Pump
- ECS180HP40A-480 180L Slimline combination cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Code HD050922
Manufacturer code 050922

**A16M Pack Slimline Cylinder**

Includes:
- A16M 16kW Heat Pump
- ECS180HP40A-480 180L Slimline combination cylinder
- ACCHYPK Hydraulic Pack - Pump, valves, Isolator, Control
- Requires RS485 Connection Cable (ACCB30) and heating system expansion vessel

Code HD050939
Manufacturer code 050939

**aroTHERM 5kW**

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Comes with weather compensation system controller
- ErP A++ rated

Code HV196231
Manufacturer code 0020196231
ErP Rating A++
aroTHERM 8kW

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Comes with weather compensation system controller
- ErP A++ rated

Code: HV175478
Manufacturer code: 0020175478
ErP Rating: A++

aroTHERM 11kW

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Comes with weather compensation system controller
- ErP A+ rated

Code: HV175479
Manufacturer code: 0020175479
ErP Rating: A+

aroTHERM 15kW

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Comes with weather compensation system controller
- ErP A++ rated

Code: HV196232
Manufacturer code: 0020196232
ErP Rating: A++

aroTHERM 5kW Hybrid For Incumbent Boiler

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Unique triVAI intelligent control, automatically selects the most cost efficient heating source to warm your home
- Compatible with all boiler types
- Bolts onto your existing system giving a renewable solution to the re-assurance of a traditional system

Code: HV196235
Manufacturer code: 0020196235

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**Heat Pumps**

### aroTHERM 8kW Hybrid for Incumbent Boiler

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Unique triVAI intelligent control, automatically selects the most cost efficient heating source to warm your home
- Compatible with all boiler types
- Bolts onto your existing system giving a renewable solution to the re-assurance of a traditional system

Code: HV178074  
Manufacturer code: 0020178074

### aroTHERM 11kW Hybrid for Incumbent Boiler

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Unique triVAI intelligent control, automatically selects the most cost efficient heating source to warm your home
- Compatible with all boiler types
- Bolts onto your existing system giving a renewable solution to the re-assurance of a traditional system

Code: HV178075  
Manufacturer code: 0020178075

### aroTHERM 15kW Hybrid for Incumbent Boiler

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Unique triVAI intelligent control, automatically selects the most cost efficient heating source to warm your home
- Compatible with all boiler types
- Bolts onto your existing system giving a renewable solution to the re-assurance of a traditional system

Code: HV196236  
Manufacturer code: 0020196236

### aroTHERM 5kW Hybrid System VL Boiler

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Unique triVAI intelligent control, automatically selects the most cost efficient heating source to warm your home
- Links to Vaillant boilers giving a total system solution
- Bolts onto your existing system giving a renewable solution to the re-assurance of a traditional system

Code: HV196233  
Manufacturer code: 0020196233
### aroTHERM 8kW Hybrid System VL Boiler

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Unique triVAI intelligent control, automatically selects the most cost efficient heating source to warm your home
- Links to Vaillant boilers giving a total system solution
- Bolts onto your existing system giving a renewable solution to the re-assurance of a traditional system

**Code**: HV178072  
**Manufacturer code**: 0020178072

### aroTHERM 11kW Hybrid System VL Boiler

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Unique triVAI intelligent control, automatically selects the most cost efficient heating source to warm your home
- Links to Vaillant boilers giving a total system solution
- Bolts onto your existing system giving a renewable solution to the re-assurance of a traditional system

**Code**: HV178073  
**Manufacturer code**: 0020178073

### aroTHERM 15kW Hybrid System VL Boiler

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Unique triVAI intelligent control, automatically selects the most cost efficient heating source to warm your home
- Links to Vaillant boilers giving a total system solution
- Bolts onto your existing system giving a renewable solution to the re-assurance of a traditional system

**Code**: HV196234  
**Manufacturer code**: 0020196234

### Aerona 3 6kW Inverter Driven Air Source Heat Pump

- Cost effective renewable alternative to traditional off-gas heating methods
- Provides both heating and hot water
- In-built weather compensation and base tray heating element
- DC inverter driven
- MCS approved. High efficiency plate heat exchanger.

**Code**: HGIP1006  
**Manufacturer code**: HPID6  
**ERP Rating**: A++ (ERP)

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Heat Pumps

Aerona 3 10kW Inverter Driven Air Source Heat Pump

- Cost effective renewable alternative to traditional off-gas heating methods
- Provides both heating and hot water
- In-built weather compensation and base tray heating element
- DC inverter driven
- MCS approved. High efficiency plate heat exchanger.

Code: HGHPD10
Manufacturer code: HPID10
ERP Rating: A++ (ERP)

Aerona 3 16kW Inverter Driven Air Source Heat Pump

- Cost effective renewable alternative to traditional off-gas heating methods
- Provides both heating and hot water
- In-built weather compensation and base tray heating element
- DC inverter driven
- MCS approved. High efficiency plate heat exchanger.

Code: HGHPD16
Manufacturer code: HPID16
ERP Rating: A++ (ERP)

Greenstore 6 System

- System Heat Pump
- Up to 400% efficient
- Straightforward to install and easy to maintain
- Can heat an area up to 100m²

Code: HW203184
Manufacturer code: 8 738 203 184

Greenstore 7 System

- System Heat Pump
- Up to 400% efficient
- Straightforward to install - no flue or boiler required
- Can be cascaded for large properties
- Weather compensation

Code: HW203185
Manufacturer code: 8 738 203 185
**Heat Pumps**

### Greenstore 9 System
- System Heat Pump
- Up to 400% efficient
- Straightforward to install - no flue or boiler required
- Can be cascaded for large properties
- Weather compensation

**Code**: HW203186  
Manufacturer code: 8 738 203 186

### Greenstore 11 System
- System Heat Pump
- Up to 400% efficient
- Straightforward to install - no flue or boiler required
- Can be cascaded for large properties
- Weather compensation

**Code**: HW203187  
Manufacturer code: 8 738 203 187

### Greenstore 6 Combi
- Combi Heat Pump
- Up to 400% efficient
- Straightforward to install - no flue or boiler required
- Can be cascaded for large properties
- Weather compensation

**Code**: HW180025  
Manufacturer code: 7 716 180 025

### Greenstore 11 Combi
- Combi Heat Pump
- Up to 400% efficient
- Complete heating and hot water solution
- Straightforward to install - no flue or boiler required
- Can be cascaded for large properties
- Weather compensation

**Code**: HW180028  
Manufacturer code: 7 716 180 028
# Heat Pumps

## Greenstore 7 Combi
- Combi Heat Pump
- Up to 400% efficient
- Complete heating and hot water solution
- Straightforward to install - no flue or boiler required
- Can be cascaded for large properties
- Weather compensation

**Code**: HW180026  
**Manufacturer code**: 7 716 180 026

## Greenstore 9 Combi
- Combi Heat Pump
- Up to 400% efficient
- Complete heating and hot water solution
- Straightforward to install - no flue or boiler required
- Can be cascaded for large properties
- Weather compensation

**Code**: HW180027  
**Manufacturer code**: 7 716 180 027

## F1145 5kW
- 5kW
- Extraordinarily high efficiency (COP)
- Multicolour display with user instructions and Universal connection interface (1xUSB-port) multilingual support

**Code**: HN065155  
**Manufacturer code**: 065155  
**ERP Rating**: A+++ 

## F1145 8kW
- 8kW
- Extraordinarily high efficiency (COP)
- Multicolour display with user instructions and Universal connection interface (1xUSB-port) multilingual support

**Code**: HN065156  
**Manufacturer code**: 065156  
**ERP Rating**: A+++
Heat Pumps

F1145 10kW
- 10kW
- Extraordinarily high efficiency (COP)
- Multicolour display with user instructions and Universal connection interface (1xUSB-port)
- Multilingual support

Code: HN065157
Manufacturer code: 065157
ERP Rating: A+++  

F1145 12kW
- 12kW
- Extraordinarily high efficiency (COP)
- Multicolour display with user instructions and Universal connection interface (1xUSB-port)
- Multilingual support

Code: HN065158
Manufacturer code: 065158
ERP Rating: A+++  

F1245 5kW
- 5kW
- Integrated Immersion
- Extraordinarily high efficiency (COP)
- Multicolour display with user instructions and Universal connection interface (1xUSB-port)
- Multilingual support

Code: HN065150
Manufacturer code: 065150
ERP Rating: A+++  

F1245 8kW
- 8kW
- Integrated Immersion
- Extraordinarily high efficiency (COP)
- Multicolour display with user instructions and Universal connection interface (1xUSB-port)
- Multilingual support

Code: HN065151
Manufacturer code: 065151
ERP Rating: A+++  

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Heat Pumps

**F1245 10kW**
- 10kW
- Integrated Immersion
- Extraordinarily high efficiency (COP)
- Multicolour display with user instructions and Universal connection interface (1xUSB-port)
- Multilingual support

Code: HN065152  
Manufacturer code: 065152  
ERP Rating: A+++  

**F1245 12kW**
- 12kW
- Integrated Immersion
- Extraordinarily high efficiency (COP)
- Multicolour display with user instructions and Universal connection interface (1xUSB-port)
- Multilingual support

Code: HN065153  
Manufacturer code: 065153  
ERP Rating: A+++  

**F1145 15kW**
- 15kW
- Integrated Immersion
- Extraordinarily high efficiency (COP)
- Multicolour display with user instructions and Universal connection interface (1xUSB-port)
- Multilingual support

Code: HN065098  
Manufacturer code: 065098  
ERP Rating: A+++  

**F1145 17kW**
- 17kW
- Integrated Immersion
- Extraordinarily high efficiency (COP)
- Multicolour display with user instructions and Universal connection interface (1xUSB-port)
- Multilingual support

Code: HN065099  
Manufacturer code: 065099  
ERP Rating: A++
### F1345 24kW New Improved Generation

- 24kW
- Perfect for buildings with a high heat demand
- Industry leading seasonal performance
- High flow temperatures up to 65°C for improved domestic hot water comfort

**Code:** HN065297  
**Manufacturer code:** 065297  
**ERP Rating:** A+++  

### F1345 30kW New Improved Generation

- 30kW
- Perfect for buildings with a high heat demand
- Industry leading seasonal performance
- High flow temperatures up to 65°C for improved domestic hot water comfort

**Code:** HN065298  
**Manufacturer code:** 065298  
**ERP Rating:** A+++  

### F1345 40kW New Improved Generation

- 40kW
- Perfect for buildings with a high heat demand
- Industry leading seasonal performance
- High flow temperatures up to 65°C for improved domestic hot water comfort

**Code:** HN065299  
**Manufacturer code:** 065299  
**ERP Rating:** A+++  

### F1345 60kW New Improved Generation

- 60kW
- Perfect for buildings with a high heat demand
- Industry leading seasonal performance
- High flow temperatures up to 65°C for improved domestic hot water comfort

**Code:** HN065300  
**Manufacturer code:** 065300  
**ERP Rating:** A+++
Heat Pumps

**SIH4ME 4kW Ground Source Heat Pump**
- 4kW
- Brine to water ground source heat pump
- A++ Rated
- High temperature

Code: HDSIH4ME
Manufacturer code: 043795
ERP Rating: A++

**SIH6ME 6kW Ground Source Heat Pump**
- 6kW
- Brine to water ground source heat pump
- A++ Rated
- High temperature

Code: HDSIH6ME
Manufacturer code: 031914
ERP Rating: A++

**SIH9ME 9kW Ground Source Heat Pump**
- 9kW
- Brine to water ground source heat pump
- A++ Rated
- High temperature

Code: HDSIH9ME
Manufacturer code: 031921
ERP Rating: A++

**SIH11ME 11kW Ground Source Heat Pump**
- 11kW
- Brine to water ground source heat pump
- A++ Rated
- High temperature

Code: HDIH11ME
Manufacturer code: 031938
ERP Rating: A++
Heat Pumps

SI14ME 14kW Ground Source Heat Pump

• 14kW
• Brine to water ground source heat pump
• A++ Rated

Code: HDSI14ME
Manufacturer code: 028303
ERP Rating: A++

geoTHERM 22kW

• 22kW
• Quiet Mark accredited
• Up to a 7 year guarantee when installed by a Vaillant Advance installer
• Comes with weather compensation controller
• ErP A+++ systeming rating

Code: HV219382
Manufacturer code: 0020219382
ERP Rating: A+++ systeming rating

geoTHERM 30kW

• 30kW
• Quiet Mark accredited
• Up to a 7 year guarantee when installed by a Vaillant Advance installer
• Comes with weather compensation controller
• ErP A+++ systeming rating

Code: HV219383
Manufacturer code: 0020219383
ERP Rating: A+++ systeming rating

geoTHERM 38kW

• 38kW
• Quiet Mark accredited
• Up to a 7 year guarantee when installed by a Vaillant Advance installer
• Comes with weather compensation controller
• ErP A+++ systeming rating

Code: HV219384
Manufacturer code: 0020219384
ERP Rating: A+++ systeming rating
## Heat Pumps

### geoTHERM 46kW

- 46kW
- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Comes with weather compensation controller
- ErP A+++ systeming rating

Code: HV219385  
Manufacturer code: 0020219385  
ERP Rating: A+++ systeming rating

### flexoTHERM 5kW 230V

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Comes with weather compensation system controller
- ErP A+++ systeming rating
- Brand new copeland EVI compressor given “super charged” performance

Code: HV221330  
Manufacturer code: 002021330  
ERP Rating: A+++ systeming rating

### flexoTHERM 8kW 230V

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Comes with weather compensation system controller
- ErP A+++ systeming rating
- Brand new copeland EVI compressor given “super charged” performance

Code: HV221331  
Manufacturer code: 002021331  
ERP Rating: A+++ systeming rating

### flexoTHERM 11kW 230V

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Comes with weather compensation system controller
- ErP A+++ systeming rating
- Brand new copeland EVI compressor given “super charged” performance

Code: HV221332  
Manufacturer code: 002021332  
ERP Rating: A+++ systeming rating
Heat Pumps

**flexoTHERM 15kW 400V**

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Comes with weather compensation system controller
- ErP A+++ systeming rating
- Brand new copeland EVI compressor given “super charged” performance

**Code** HV221333  
**Manufacturer code** 0020221333  
**ERP Rating** A+++ systeming rating

**flexoTHERM 19kW 400V**

- Quiet Mark accredited
- Up to a 7 year guarantee when installed by a Vaillant Advance installer
- Comes with weather compensation system controller
- ErP A+++ systeming rating
- Brand new copeland EVI compressor given “super charged” performance

**Code** HV221334  
**Manufacturer code** 0020221334  
**ERP Rating** A+++ systeming rating

**Groundsource Heat Pump**

- Fully modulating output 6-18kW
- MCS approved for RH4
- 508% efficient at B1W35
- 65°C water produced at a COP 3
- Eliminates buffer tanks
- Single phase

**Code** HWGSHP16  
**Manufacturer code** GS16  
**ERP Rating** A+++  

**13kW Classic ASHP**

- Twin Compressor
- MCS Accredited
- Stainless Cabinet
- Monobloc
- Easy install
- Attractive design

**Code** ESPP38KD  
**Manufacturer code** PASW-0308-KD  
**ERP Rating** A+
Heat Pumps

17kW Classic ASHP

- Twin Compressor
- MCS Accredited
- Stainless Cabinet
- Monobloc
- Easy install
- Attractive design

Code: ESPP4BKA
Manufacturer code: PASRW-040B-KA
ERP Rating: A+

25kW Classic ASHP

- Twin Compressor
- MCS Accredited
- Stainless Cabinet
- Monobloc
- Easy install
- Attractive design

Code: ESPP8BKA
Manufacturer code: PASRW-080B-KA
ERP Rating: A+

Varimax 4-12kW ASHP

- Inverter driven
- Powder coated cabinet
- Monobloc
- Easy install
- Attractive design

Code: ESPP41BB
Manufacturer code: PASRW0401B-BP
ERP Rating: A+/A++

9kW HT ASHP

- Designed for cooler climates
- Powder coated cabinet
- Monobloc
- Easy install
- Attractive design

Code: ESPP3BDP
Manufacturer code: PASRW030B-D-PS
ERP Rating: A+
## 12kW HT ASHP

- Designed for cooler climates
- Powder coated cabinet
- Monobloc
- Easy install
- Attractive design

**Code**: ESPP4BDP  
**Manufacturer code**: PASRW040B-D-PS  
**ERP Rating**: A+

---

## 13.8kW Swimming Pool ASHP

- Cost Effective, efficient
- Powder coated cabinet
- Monobloc
- Easy install
- Attractive design

**Code**: ESPPAA030  
**Manufacturer code**: PASRW030  
**ERP Rating**: A+
Heat Pump Accessories

**Heat Pump Accessories**

**ASHP Flexible Hose Pair 1” BSP**

- 500mm long
- Pre insulated stainless braided flexible heating hose
- 1” BSP and 28mm compression
- 19mm thick PVC tough coated insulation

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH50028F</td>
<td>ASHP Flexible Hose pair 1” BSP</td>
<td>FH-500-28-F</td>
</tr>
</tbody>
</table>

**ASHP Flexible Hose Pair 1¼” BSP**

- 750mm long
- Pre insulated stainless braided flexible heating hose, 1¼” BSP and 28mm compression 19mm thick PVC tough coated insulation.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHPFH750</td>
<td>ASHP Flexible Hose pair 1¼” BSP</td>
<td>FH-1000-28-F-1-1/4</td>
</tr>
</tbody>
</table>

**Thick Pipe Insulation up to 22mm Pipe**

- 1m Length x 19mm wall

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHPFH22</td>
<td>Thick Pipe Insulation up to 22mm Pipe</td>
<td>FH-I-1000-22</td>
</tr>
<tr>
<td>PHPFH28</td>
<td>Thick Pipe Insulation up to 28mm Pipe</td>
<td>FH-I-1000-28</td>
</tr>
<tr>
<td>PHPFH35</td>
<td>Thick Pipe Insulation up to 35mm Pipe</td>
<td>FH-I-1000-35</td>
</tr>
</tbody>
</table>

**Pair of Through Wall Insulated Sleeves and Elbows**

- 19mm PVC coated insulation
- Through wall insulated kit providing protection and tidy installation of pipework

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHPFTWKIT</td>
<td>Pair of Through Wall Insulated Sleeves and Elbows</td>
<td>TW-KIT</td>
</tr>
</tbody>
</table>
Heat Pump Accessories

Trunking

- 140mm x 2m lengths IVORY
- Made of rigid PVC offering impact resistance
- The ivory colour is fade proof and UV resistance
- Fire proof
- RAL colour 9001
- Can be painted to suit the application

Code: PHPTRD14
Manufacturer code TR-D-140

Trunking

- 140mm straight connector IVORY
- Made of rigid PVC offering impact resistance
- The ivory colour is fade proof and UV resistance
- Fire proof
- RAL colour 9002
- Can be painted to suit the application

Code: PHPTRCP1
Manufacturer code TR-CP-140

Trunking

- 140mm through wall cover IVORY
- Made of rigid PVC offering impact resistance
- The ivory colour is fade proof and UV resistance
- Fire proof
- RAL colour 9003
- Can be painted to suit the application

Code: PHPTRWC1
Manufacturer code TR-WC-140

Trunking

- 140mm 90 degree flat bend IVORY
- Made of rigid PVC offering impact resistance
- The ivory colour is fade proof and UV resistance
- Fire proof
- RAL colour 9004
- Can be painted to suit the application

Code: PHPTRFB1
Manufacturer code TR-FB-140

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Heat Pump Accessories

Trunking

- 140mm internal corner IVORY
- Made of rigid PVC offering impact resistance
- The ivory colour is fade proof and UV resistance
- Fire proof
- RAL colour 9005
- Can be painted to suit the application

Code: PHPTRIC1
Manufacturer code: TR-IC-140

Trunking

- 140mm external corner IVORY
- Made of rigid PVC offering impact resistance
- The ivory colour is fade proof and UV resistance
- Fire proof
- RAL colour 9006
- Can be painted to suit the application

Code: PHPTREC1
Manufacturer code: TR-EC-140

Trunking

- 140mm wide x 2m lengths BLACK
- Made of rigid PVC offering impact resistance

Code: PHPTRD1B
Manufacturer code: TR-D-140-B

Trunking

- 140mm straight connector BLACK
- Made of rigid PVC offering impact resistance

Code: PHPTRCPB
Manufacturer code: TR-CP-140-B
## Heat Pump Accessories

### Trunking

- **140mm through wall cover BLACK**
  - Made of rigid PVC offering impact resistance
  - Code: PHPTRWCB
  - Manufacturer code TR-WC-140-B

- **140mm 90 degree flat bend BLACK**
  - Made of rigid PVC offering impact resistance
  - Code: PHPTRFBB
  - Manufacturer code TR-FB-140-B

- **140mm internal corner BLACK**
  - Made of rigid PVC offering impact resistance
  - Code: PHPTRICB
  - Manufacturer code TR-IC-140-B

- **140mm external corner BLACK**
  - Made of rigid PVC offering impact resistance
  - Code: PHPTRECB
  - Manufacturer code TR-EC-140-B
Heat Pump Accessories

### Protective Guard

- Unique sliding panel system
- All panels can be removed for maintenance by unscrewing just four bolts
- All bolts are allen-headed for added security
- Quick and easy to install and access for maintenance
- 1450(H)x1150(W)x750mm(D)

**Code** PHCG750L  
**Manufacturer code** CG-750L

### Wall Bracket for Air Source Heat Pumps

- Integral spirit level makes correct installation of the crossbar easier
- Uprights mount anywhere on the crossbar which enables the arm span to be adjusted easily
- Adjustable wall spacers to level the arms
- Safe working load up to 250kg
- Crossbar 1100mm Upright 550mm Support Arm 540mm

**Code** PHCBR2L0  
**Manufacturer code** CBR2-L

<table>
<thead>
<tr>
<th>Variants</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHCBR2XL</td>
<td>Wall Bracket for Air Source Heat Pumps</td>
</tr>
<tr>
<td>CBR2-XL</td>
<td></td>
</tr>
</tbody>
</table>

### Anti Vibration Mounting Bolts (Pack of 4)

- Anti Vibration Bolts to isolate further vibration between the unit and wall
- Compatible for use with Type 1, Type 2, Type 3 and Cantilever Arms
- Comes in a 4 pack with M8 bolts, nuts and washers

**Code** PHPAVMB1  
**Manufacturer code** AVMB-1

### Air Source Heat Pump Heavy Duty Drip Tray

- Easy to handle – less than 1kg each
- Concave profile ensures effective water drainage
- Tapered outlet fits 16mm, 18mm or 20mm hose

**Code** PHTM800  
**Manufacturer code** CCTM-800
Heat Pump Accessories

Flexi Lite Slab Kit

- Low cost and rapid installation time
- Easy to transport and locate
- Safe working load – 600kg
- Simple to construct
- 1200(L)x600(W)x175mm(H)

Code PHFUC30
Manufacturer code FF-U-3

2 x 600mm Flexi Feet with Fixings

- Made from heavy duty recycled rubber
- 21x41mm galvanised steel strut is supplied bonded to the rubber
- Drain slots molded to the underside of the foot

Code PHPFF600
Manufacturer code FF-600-S-KIT

Wooden Protective Guard Small

- Wooden protective guard for ASHP
- Tested to ensure airflow is not compromised
- Natural finish helping to blend in with garden surroundings
- 925mm height (front) x 975mm height (back) x 1280mm width x 814mm depth

Code PHPCG75S
Manufacturer code CG-750S-WOOD

Variants

PHPCG75M Wooden Protective Guard Medium
CG-750M-WOOD

PHPCG75L Wooden Protective Guard Large
CG-750L-WOOD

Control Module SMO 20

Code HN067224
Manufacturer code 067224
# Heat Pump Accessories

## Control Module SMO 40

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
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<tbody>
<tr>
<td>HN067225</td>
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## Modular Cable

<table>
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<tr>
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<tr>
<td>HN418469</td>
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## CPD11-25/65 Speed Controlled Circulation Pump

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>HN067321</td>
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</table>

## CPD11-25/75 Speed Controlled Circulation Pump

<table>
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<th>Code</th>
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<tr>
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</table>

## AXC 30 Accessory Card for Cascade Dockings

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>HN067304</td>
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</table>

## KVR10-10 F2040 Heated Condensate Water Pipe

- 1m
<table>
<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>HN067233</td>
<td>067233</td>
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</table>

## KVR10-30 F2040 Heated Condensate Water Pipe

- 3m
<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>HN067235</td>
<td>067235</td>
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</table>

## KVR10-60 F2040 Heated Condensate Water Pipe

- 6m
<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
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</thead>
<tbody>
<tr>
<td>HN067237</td>
<td>067237</td>
</tr>
</tbody>
</table>
### Heat Pump Accessories

#### Ground Bracket 8kW

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HN015295</td>
<td>015295</td>
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</table>

#### Ground Bracket 12/16kW

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
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</thead>
<tbody>
<tr>
<td>HN015268</td>
<td>015268</td>
</tr>
</tbody>
</table>

#### Wall Bracket 8/12kW

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HN067210</td>
<td>067210</td>
</tr>
</tbody>
</table>

#### DEH 41 Gas Boiler Docking Accessory

- Suitable for F370 & F470

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HN066102</td>
<td>066102</td>
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</table>

#### PCM 40 Passive Cooling Module

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HN067077</td>
<td>067077</td>
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</tbody>
</table>

#### PCM 42 Passive Cooling Module

<table>
<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>HN067078</td>
<td>067078</td>
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</table>

#### Solar 40 Solar Thermal Kit for Heat Pump

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
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</thead>
<tbody>
<tr>
<td>HN067084</td>
<td>067084</td>
</tr>
</tbody>
</table>

#### HPAC 40 Climate Exchange Module

<table>
<thead>
<tr>
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<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HN067076</td>
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</tbody>
</table>
## Heat Pump Accessories

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HPAC 45 Climate Exchange Module</strong></td>
<td></td>
<td>HN067446</td>
<td>067446</td>
</tr>
<tr>
<td><strong>Modbus 40 Heat Pump External Control Module</strong></td>
<td></td>
<td>HN067144</td>
<td>067144</td>
</tr>
<tr>
<td><strong>AXC 40 Connection Box for F1145/F1245</strong></td>
<td>Requires Heat, HW circ, GW pump etc</td>
<td>HN067060</td>
<td>067060</td>
</tr>
<tr>
<td><strong>AXC 50 Connection Box for F1345</strong></td>
<td>Requires Heat, cooling, DHW immersion etc</td>
<td>HN067193</td>
<td>067193</td>
</tr>
<tr>
<td><strong>ECS 40 Extra Climate System</strong></td>
<td></td>
<td>HN067061</td>
<td>067061</td>
</tr>
<tr>
<td><strong>ECS 41 Extra Climate System</strong></td>
<td></td>
<td>HN067099</td>
<td>067099</td>
</tr>
<tr>
<td><strong>ACS 45 Passive/Active Cooling (4 pipe) for NIBE F1345</strong></td>
<td></td>
<td>HN067195</td>
<td>067195</td>
</tr>
<tr>
<td><strong>Pool 40</strong></td>
<td></td>
<td>HN067062</td>
<td>067062</td>
</tr>
</tbody>
</table>
Heat Pump Accessories

PCS 44 Passive Cooling 4” Pipe

- Code: HN067063
- Manufacturer code: 067063

RMU 40 Room Communication Module

- Code: HN067064
- Manufacturer code: 067064

RTS 40 Room Temperature Sensor

- Code: HN067065
- Manufacturer code: 067065

FLM Exhaust Air Module

- Code: HN067011
- Manufacturer code: 067011

FLM Brackets

- Code: HN067083
- Manufacturer code: 067083

VST 05 Three Way Hot Water Control Valve

- Max 11kW
- Code: HN089982
- Manufacturer code: 089982

VST 11 Three Way Hot Water Control Valve

- Max 15kW
- Code: HN089152
- Manufacturer code: 089152

VST 20 Three Way Hot Water Control Valve

- Max 30kW
- Code: HN089388
- Manufacturer code: 089388

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# Heat Pump Accessories

## VCC 05 Three Way Hot Water Control Valve
- Max 12kW
- Cooling only
- Code: HN067311
- Manufacturer code: 067311

## VCC 11 Three Way Hot Water Control Valve
- Max 16kW
- Cooling only
- Code: HN07312
- Manufacturer code: 067312

## Brine Filling Unit
- Max 12kW
- Code: HN089368
- Manufacturer code: 089368

## Brine Filling Unit
- Max 30kW
- Code: HN089971
- Manufacturer code: 089971

## Uplink Upgrade Kit
- Code: HN067227
- Manufacturer code: 067227

## Hydraulic Integration Pack for Heating and DHW
- Contains 3 port heat pump valve
- Heat pump isolation valves
- Electronic spring loaded bypass and user interface.
- Manufacturer code: 50489

## RS-485 MODBUS cable
- 100m
- Code: HD050588
- Manufacturer code: 050588

## Stand Alone Wiring Centre
- Required when not using A-Class cylinder
- Includes NTC 10 for DHW
- Code: HD049162
- Manufacturer code: 049162
**Heat Pump Accessories**

### IU 39 6kW 3 Phase Immersion Heater

- 6kW
- 3 Phase
- Requires K11 and HR10

**Code**: HSA1667  
**Manufacturer code**: 218011

### IU 311 9kW 3 Phase Immersion Heater

- 9kW
- 3 Phase
- Requires K11 and HR10

**Code**: HN218003  
**Manufacturer code**: 218003

### Junction Box K11

**Code**: HN018893  
**Manufacturer code**: 018893

### HR10 Relay Module

**Code**: HN067309  
**Manufacturer code**: 067309

### aroTHERM Heat Exchanger Module

- Separates the heat pump glycol circuit from the heating circuit
- Wall-mounted, compact and lightweight
- In built fill and flush points for the heat pump circuit
- No need to fill the entire system with costly glycol

**Manufacturer code**: 0020222285

### aroTHERM inline 6kW Back Up Heater

- Provides a back up boost to the heating system in extreme weather
- Wall-mounted, compact and lightweight
- Flexible outputs 2, 4 6kW or staged

**Code**: HV222286  
**Manufacturer code**: 0020222286

---

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Heat Pump Accessories

aroTHERM 40L De-coupler Module

- Acts as both a low loss header and small buffer tank
- Improves overall system performance
- Acts as a hydraulic nil point in the system
- Ensures system flow and volume required for a heat pump system

Code: HV177865
Manufacturer code: 0020177865

aroTHERM Flexi Hoses 750mm (pair of)

- Pre-insulated with 20mm weatherproof high grade insulation
- Right angled fixing to the heat pump
- 28mm copper compression fitting for fast and easy installation
- Kink-free bedding designed
- 750mm length to suit nearly all site requirements

Code: HSBA2159
Manufacturer code: 0020165288

aroTHERm Raised Rubber Feet (pair of)

- 600mm in length for stability
- Raised rubber mounting offers excellent vibration absorption
- Extra clearance at the base, improves access to the condensation pipe and drainage
- Improves air flow

Code: HSBA2162
Manufacturer code: 0020175140

Discharge Vessel

- Small wall mounted vessel
- Collects heating system glycol if the PRV opens
- Stops glycol does not discharge in the drainage system

Code: HV145563
Manufacturer code: 0020145563
Heat Pump Accessories

flexoTHERM Straight Connection Set
- Straight copper connection for flexoTHERM range
  Code: HV212715
  Manufacturer code: 0002012715

flexoTHERM Right Angle Connection Set
- Right angled copper connection for flexoTHERM range
  Code: HV212716
  Manufacturer code: 0020212716

fluoCOLLECT
- Water collector module for flexoTHERM range up to 11kW
- Vapor diffusion tight casing to prevent condensation
- Wall hung, light weight and compact
- Complete with fill and flush points and analogy pressure gauge
- Plate to plate exchanger sized for the flexoTHERM 5-11kW range
  Code: HV016719
  Manufacturer code: 0010016719

fluoCOLLECT
- Water collector module for flexoTHERM range 15-19kW
- Vapor diffusion tight casing to prevent condensation
- Wall hung, light weight and compact
- Complete with fill and flush points and analogy pressure gauge
- Plate to plate exchanger sized for the flexoTHERM 15-19kW range
  Code: HV016720
  Manufacturer code: 0010016720
Heat Pump Accessories

Passive Cooling Module

- Plate to plate exchanger sized for the flexoTHERM 5-11kW range
- Part of the ground source system to passively cool the heating system in summer
- Transfer the warm Central heating water against cool brine to cool the heating circuit
- Vapor diffusion tight casing to prevent condensation
- Wall hung, light weight and compact

Manufacturer code 0010016721

Variants

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HV016722</td>
<td>Passive cooling module</td>
</tr>
</tbody>
</table>

aroCOLLECT up to 11kW Pack

- Air collect module for flexoTHERM (400v)
- Very low noise with only 47dBa
- No refrigeration handling necessary as it uses brine to transfer the heat
- Very Low maintenance
- Connections come within the kit

Manufacturer code 002021335

aroCOLLECT up to 19kW Pack

- Air collect module for flexoTHERM (400v)
- Very low noise with only 47dBa
- No refrigeration handling necessary as it uses brine to transfer the heat
- Very Low maintenance
- Sized for the flexoTHERM 15-19kW complete with connection and piping for the aroCOLLECT

Code: HV221336
Manufacturer code 0020221336

Aerona 3 Flexi-foot Kit (2 x 600mm) + Fixings

- Anti Vibration

Code: HGHP1DFK
Manufacturer code HPDFFOOT/KIT

Aerona 3 Through Wall Insulation Kit to fit 22-28mm Flexi Hose

- Maximise heat pump efficiency

Code: HGHP1DIK
Manufacturer code HPDINSU/KIT
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For spare parts, here’s where you start.
Ground Source Heat Pump Accessories

geoTHERM Brine Pump

- Brine pump
- For 34-46kW geoTHERM system
  Code: HV227825
  Manufacturer code: 0020227825

geoTHERM Brine Pump

- Brine pump
- For 22-30kW geoTHERM system
  Code: HV227826
  Manufacturer code: 0020227826

geoTHERM Brine Pump

- Brine pump
- For 22-38kW geoTHERM system
  Code: HV227826
  Manufacturer code: 0020227826

geoTHERM Brine Pump

- Brine pump
- For 30-46kW geoTHERM system
  Code: HV227827
  Manufacturer code: 0020227827

geoTHERM Brine Pump

- Brine pump
- For 34-46kW geoTHERM system
  Code: HV227828
  Manufacturer code: 0020227828
Ground Source Heat Pump Accessories

Chamber Manifold 2 Way 40mm/63mm D400

- 2 way chamber manifold
- 40mm/63mm - D400
- Ease of installation
- Rated to 600kg
- Factory pressure tested - Certificate included

Code: HGE00285
Manufacturer code: FRCH2WW40TYP4

Chamber Manifold 3 Way 40mm/63mm D400

- 3 way chamber manifold
- 40mm/63mm - D400
- Chamber manifold
- Ease of installation
- Rated to 600kg
- Factory pressure tested - Certificate included

Code: HGE0290
Manufacturer code: FRCH3WW40TYP4

Chamber Manifold 4 Way 40mm/63mm D400

- 4 way chamber manifold
- 40mm/63mm - D400
- Chamber manifold
- Ease of installation
- Rated to 600kg
- Factory pressure tested - Certificate included

Code: HGE0295
Manufacturer code: FRCH4WW40TYP4

Chamber Manifold 5 Way 40mm/63mm S400

- 5 way chamber manifold
- 40mm/63mm - S400
- Chamber manifold
- Ease of installation
- Rated to 600kg
- Factory pressure tested - Certificate included

Code: HGE00300
Manufacturer code: FRCH5WW40TYP4SPL
### Chamber Manifold 6 Way 40mm/63mm S400

- 6 way chamber manifold
- 40mm/63mm - S400
- Chamber manifold
- Ease of installation
- Rated to 600kg
- Factory pressure tested - Certificate included

Code: HGEO0305  
Manufacturer code: FRCH6W40TYP45PL

### Modular Manifold 2 way

- Modular manifold 2 way
- Modular ground source manifold
- 3 year guarantee
- 40mm spigot for header pipe / heat pump connection
- Mounting brackets included

Code: HGEO0310  
Manufacturer code: FR2WAYM0D0MAN

### 40mm x 50m SRD11 PE100 Coil

- 40mm x 50m SRD11 PE100 Coi
- Collector Pipe
- Pipe manufactured specifically for heat collection
- Manufactured from Virgin Grade Black PE100 High Performance Polyethylene (EN12201)

Code: HGEO0035  
Manufacturer code: P40X50SDR11COIL

### Variants

- HGEO0030  
  Modaral Manifold 3 way  
  FR3WAYM0D0MAN
- HGEO0032  
  Modular Manifold 4 way  
  FR4WAYM0D0MAN
- HGEO0035  
  Modular Manifold 5 way  
  FR5WAYM0D0MAN
- HGEO0036  
  Modular Manifold 6 way  
  FR6WAYM0D0MAN

- HGEO0040  
  P40X100SDR11COIL
- HGEO0045  
  P40X150SDR11COIL
- HGEO0050  
  P40X200SDR11COIL
- HGEO0055  
  P40X250SDR11COIL
- HGEO0060  
  J40MMX300SDR17
- HGEO0065  
  J40MMX350SDR17
- HGEO0070  
  J40MMX400SDR17

- HGEO0080  
  J40MX300SDR17
- HGEO0085  
  J40MX350SDR17
- HGEO0090  
  J40MX400SDR17
# Ground Source Heat Pump Accessories

## 32mm x 100m SDR11 PE100 Coil

- 32mm x 100m SDR11 PE100 Coil
- Collector Pipe
- Pipe manufactured specifically for heat collection
- Manufactured from Virgin Grade Black PE100 High Performance Polyethylene (EN12201)

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HGE00360</td>
<td>P32X100SDR11PE100</td>
</tr>
</tbody>
</table>

**Variants**

- 32mm x 200m SDR11 PE100 Coil

## 40mm x 100m SDR11 PE100-RC Coil

- 40mm x 100m SDR11 PE100-RC Coil
- Collector Pipe - No Sand Required
- Pipe manufactured specifically for heat collection
- Can be welded to existing PE100 ground source pipe
- 5x stronger than PE100/PE100+!!

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HGE00370</td>
<td>FR40X100PE100-RCPIPE</td>
</tr>
</tbody>
</table>

**Variants**

- 40mm x 200m SDR11 PE100-RC Coil
- 40mm x 250m SDR11 PE100-RC Coil
- 40mm x 300m SDR11 PE100-RC Coil

## 32mm x 100m SDR11 PE100-RC Coil

- 32mm x 100m SDR11 PE100-RC Coil
- Collector Pipe - No Sand Required
- Pipe manufactured specifically for heat collection
- Can be welded to existing PE100 ground source pipe
- 5x stronger than PE100/PE100+!!

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>HGE00390</td>
<td>FR32X100PE100-RCPIPE</td>
</tr>
</tbody>
</table>

**Variants**

- 32mm x 150m SDR11 PE100-RC Coil
- 32mm x 200m SDR11 PE100-RC Coil
Heat Pump Fluids & Treatments

**HP-5C**

- A Concentrated heat transfer fluid for Air, Ground Source & underfloor heating
- Frost protection from -4°C to -14°C
- Protects against corrosion, limescale and bacterial contamination
- Compatible with materials commonly found in Heat Pump & underfloor heating

Code: HTAF9997
Manufacturer code: 58997

**HP-15C**

- A Concentrated heat transfer fluid for Air, Ground Source & underfloor heating
- Frost protection from -14°C to -34°C
- Protects against corrosion, limescale and bacterial contamination
- Compatible with materials commonly found in Heat Pump & underfloor heating

Code: HTAF9003
Manufacturer code: 59003

**HP Cleaner - Cleans and Disinfects Heat Pump Closed Loop Systems**

- 1 Litre
- Treats up to 600 meters of 40mm pipe work
- Compatible with all materials commonly found in Heat Pump systems
- Fast effective treatment

Code: HF059182
Manufacturer code: 59182

**Renewable Health Check Kit**

- Tests Fernox ‘renewable’ products & heat transfer agents
- Identify defects in the system or treatment
- Easy-to-read report and recommendations

Code: HF059084
Manufacturer code: 59084
Heat Pump Fluids & Treatments

TF1 22mm Filter

- 22mm
- Hydrocycionic and magnetic in-line filter
- Unique action, removes magnetic and non-magnetic contaminants
- Dosing point for Fernox ‘F’ range products
- Cleaned in seconds without removal or disassembly
- All valves and fittings included

Code HF059256
Manufacturer code 59256

<table>
<thead>
<tr>
<th>Variants</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>TF1 28mm Filter</td>
<td>HF059257</td>
</tr>
</tbody>
</table>

R500C Concentrate Thermal Fluid 20L

- Ready-to-use heat transfer fluid for ground source heat pump systems
- Exceptional thermal transfer and protection for Ground Source Heat Pump Systems
- Concentrated thermal fluid that allows for varying levels of frost protection
- Contains corrosion inhibitors and biocide to prevent fouling
- FrostCheck Test Kit is available for installation validation checks

Code HSR500C20

<table>
<thead>
<tr>
<th>Variants</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R500C Concentrate Thermal Fluid 1000L</td>
<td>HSR5C100</td>
</tr>
</tbody>
</table>

R500 Thermal Fluid for GSHP 20L

- Ready-to-use heat transfer fluid for ground source heat pump systems
- Exceptional thermal transfer and protection for Ground Source Heat Pump Systems
- Ready to use - no need for dilution, contains corrosion inhibitors
- Optimised to provide frost protection to -22ºC
- Contains a biocide to prevent fouling
- FrostCheck Test Kit is available for installation validation checks

Code HSR50020

<table>
<thead>
<tr>
<th>Variants</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R500 Thermal Fluid for GSHP 1000L</td>
<td>HSR51000</td>
</tr>
</tbody>
</table>

R600 Thermal Fluid for ASHP 20L

- Concentrated thermal fluid for air source heat pump systems
- Exceptional thermal transfer and protection for Air Source Heat Pump Systems
- Concentrated thermal fluid that allows for varying levels of frost protection
- Controls corrosion and scale
- FrostCheck Test Kit is available for installation validation checks

Code HSR60020

<table>
<thead>
<tr>
<th>Variants</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R600 Thermal Fluid for ASHP 20L</td>
<td>HSR60020</td>
</tr>
</tbody>
</table>
Heat Pump Fluids & Treatments

**R700 Sanitiser and Biocide 1L**

- Provides protection for ground and air source systems against contamination from bacteria and fungi
- Eliminates the problems caused by bacteria and fungi in Heat Pump Systems
- Prevents slime forming bacteria that cause unpleasant smells
- Provides long-lasting protection
- Safe to handle, environmentally acceptable - no toxic breakdown products
- R700 Test Kit available

Code: HSR70001
Manufacturer code: 5060154180817

**R700 Test Kit**

- For monitoring the correct use of Sentinel R700 Sanitiser and Biocide
- For monitoring the correct use of Sentinel R700
- Kit includes, test strips, dipslides, sample bottle, instruction CD

Code: HSR7TEST
Manufacturer code: 5060154180947

**R800 Cleaning and Flushing Fluid 20L**

- Helps to restore the efficient operation of ground source heat pump systems
- Fast and effective cleaner to remove degraded glycol from GSHP systems
- Ready to use, effective within 1 hour of circulation
- Provides clean system ready for refilling
- Helps reduce cost of system operation
- Effective at low temperatures, non-toxic

Code: HSR800020
Manufacturer code: 5060154180831
Heat Pump Design Form
Air to Water Heat Pump Heating and DHW System Design and Quotation Form

Please email your completed form to grahamcategoryteam@grahamplumbersmerchant.co.uk

Customer Name
Customer Address
Post Code
Landline
Mobile
E-Mail

Surveyor Name
Surveyor's Company
Surveyor's Mobile Number
Surveyor's E-mail address
Date of Survey

If plans or Estate Agent details are available, please attach them.

[Radio buttons for property description]
- Detached
- Semi-Detached
- Bungalow
- Mid Terrace
- End of Terrace
- Ground Floor Apartment
- Top Floor Apartment
- Mid Floor Apartment

Number of Bedrooms
Number of Bathrooms

Descriptive details:
- Approximate date of build
- Does it have under-floor insulation?
- Does it have wall insulation?
- Roof Type (Flat or Pitched)
- Depth of Insulation mm
- Roof Insulation Depth mm
- Does it have Cavities?
- Is the property in an exposed position (hill top etc.)

We get what you need.
Graham
The Plumbers' Merchant
We get what you need.

Additional notes on property type and construction.

<table>
<thead>
<tr>
<th>Basement Area m²</th>
<th>Ground Floor Area m²</th>
<th>First Floor Area m²</th>
<th>Second Floor Area m²</th>
<th>Top Floor Area m²</th>
</tr>
</thead>
</table>

**Current Heating System:**

- **DHW System:**
  - Emitter types (rads or UFH)
  - Circulation pipework diameter mm

- **Fuel:**
  - Boiler type

**Notes:** Please fill in as much detail as possible as the accuracy of your answers improves the accuracy of the initial ASHP and DHW Design.

Please attach any external photos of the property, if there are any additional factors that could influence the design, please note them below.

Comments:

Please note any additional factors that could influence the design.
Biomass

A biomass boiler can provide all the benefits of a gas or oil boiler with the additional benefits of burning carbon neutral fuel. Owners are also currently able to benefit from the government's RHI (Renewable heat Incentive) payments when their biomass boiler is installed by an MCS approved engineer.

Biomass boilers supply all your heating and hot water needs by burning approved wood pellet chips which have already offset the carbon dioxide they realise during the growing process of the trees which they come from. This helps to reduce Carbon Dioxide levels which accounts for around 82% of total UK greenhouse gas emissions.

Graham offer a wide range of biomass boilers to suit small and large properties as well as various sized hoppers to suit your pellet storage requirements.
Biomass

Greenflame Eco 10kW Internal 110kg Store

- MCS accredited - 91%+ efficient
- New Igneo slim controller
- Up to 80% modulation range
- Lambda control
- Large hopper store capacity

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
<th>ERP Rating</th>
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</thead>
<tbody>
<tr>
<td>HTFG3731</td>
<td>FG3731</td>
<td>1.0 - 10</td>
</tr>
</tbody>
</table>


Greenflame Eco 15kW Internal 110kg Store

- MCS accredited - 91%+ efficient
- New Igneo slim controller
- Up to 80% modulation range
- Lambda control
- Large hopper store capacity

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
<th>ERP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTFG3733</td>
<td>FG3733</td>
<td>1.5 - 15</td>
</tr>
</tbody>
</table>


Greenflame Eco 25kW Internal 110kg Store

- MCS accredited - 91%+ efficient
- New Igneo slim controller
- Up to 80% modulation range
- Lambda control
- Large hopper store capacity
- MCS Approved

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
<th>ERP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTFG3735</td>
<td>FG3735</td>
<td>2.5 - 25</td>
</tr>
</tbody>
</table>


Greenflame Eco 40kW Internal 127kg Store

- MCS accredited - 91%+ efficient
- New Igneo slim controller
- Up to 80% modulation range
- Lambda control
- Large hopper store capacity
- MCS Approved

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
<th>ERP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTFG3737</td>
<td>FG3737</td>
<td>3.0 - 40</td>
</tr>
</tbody>
</table>
**Biomass**

**Greenflame Eco 60kW Internal 145kg Store**

- MCS accredited - 91%+ efficient
- NEW Igneo slim controller
- Up to 80% modulation range
- Lambda control
- Large hopper store capacity
- MCS Approved

<table>
<thead>
<tr>
<th>Variants</th>
<th>ERP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTFG3738</td>
<td>Greenflame Eco 60kW Internal 145kg Store 4.0 - 60</td>
</tr>
</tbody>
</table>

**Greenflame Eco Air Blower 60kW**

- Suitable for commercial application
- NEW Igneo slim controller
- Up to 80% modulation range
- Lambda control
- Large hopper store capacity
- MCS Approved

<table>
<thead>
<tr>
<th>Variants</th>
<th>ERP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTFG3744</td>
<td>Greenflame Eco Air Blower 60kW 4.0 - 60</td>
</tr>
</tbody>
</table>

**Greenflame Eco 60kW Boiler (220kg) Store c/w Air Blower**

- Suitable for commercial application
- NEW Igneo slim controller
- Up to 80% modulation range
- Lambda control
- Large hopper store capacity
- MCS Approved

<table>
<thead>
<tr>
<th>Variants</th>
<th>ERP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTFG3743</td>
<td>Greenflame Eco 60kW Boiler (220kg) Store c/w Air Blower 4.0 - 60</td>
</tr>
</tbody>
</table>

**Pellet Vacuum System**

- Ideal for automatic transportation
- Transports pellets from up to 20m
- Slumber mode option
- MCS approved

<table>
<thead>
<tr>
<th>Variants</th>
<th>ERP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTFG3740</td>
<td>Pellet Vacuum System 4.0 - 60</td>
</tr>
</tbody>
</table>

www.grahamplumbersmerchant.co.uk
Biomass

Long Auger (2m) C/W Motor

- Pellet rotator
- Steel construction

<table>
<thead>
<tr>
<th>Variants</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTFG3723</td>
<td>HTFG3723</td>
<td>Long Auger (2m) C/W motor</td>
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</table>

FG3713

ECO Control Box (for Auger Feed)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>HTFG3724</td>
<td>ECO Control Box (for Auger Feed)</td>
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</tbody>
</table>

FG3724

25m Hose

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>HTFG3725</td>
<td>25m Hose</td>
</tr>
</tbody>
</table>

FG3725

Spira 18kW Wood Pellet Boiler c/w 110kg Right Hand Single Hopper and Feed Auger

- Right hand single hopper and feed auger
- Features Grant’s patented stainless steel turbulator baffle system
- Award winning efficiency at outputs ranging from 5kW to 72kW
- Integrated pellet store
- Automatic pellet feed and ignition
- Automatic wash system for condensing unit

<table>
<thead>
<tr>
<th>Variants</th>
<th>Code</th>
<th>Description</th>
<th>ERP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HGW5RH11</td>
<td>HGW5RH11</td>
<td>Spira 18kW wood pellet boiler c/w 110kg</td>
<td>89.5</td>
</tr>
<tr>
<td>WPS018RH110</td>
<td>WPS018RH110</td>
<td>left hand single hopper and feed auger</td>
<td></td>
</tr>
</tbody>
</table>

ERP Rating 89.5

WPS518RH110
Biomass

Spira 18kW Wood Pellet Boiler c/w 200kg Right Hand Single Hopper and Feed Auger

- Right hand single hopper and feed auger
- Features Grant’s patented stainless steel turbulator baffle system
- Award winning efficiency at outputs ranging from 5kW to 72kW
- Integrated pellet store
- Automatic pellet feed and ignition
- Automatic wash system for condensing unit

Code: HGWSRH20
Manufacturer code: WPS018RH200
ERP Rating: 89.5

Spira 26kW Wood Pellet Boiler c/w 110kg Right Hand Single Hopper and Feed Auger

- Right hand single hopper and feed auger
- Features Grant’s patented stainless steel turbulator baffle system
- Award winning efficiency at outputs ranging from 5kW to 72kW
- Integrated pellet store
- Automatic pellet feed and ignition
- Automatic wash system for condensing unit

Code: HG6RH110
Manufacturer code: WPS026RH110
ERP Rating: 89.5

Spira 26kW Wood Pellet Boiler c/w 200kg Right Hand Single Hopper and Feed Auger

- Right hand single hopper and feed auger
- Features Grant’s patented stainless steel turbulator baffle system
- Award winning efficiency at outputs ranging from 5kW to 72kW
- Integrated pellet store
- Automatic pellet feed and ignition
- Automatic wash system for condensing unit

Code: HG6RH200
Manufacturer code: WPS026RH200
ERP Rating: 89.5

Spira 36kW Wood Pellet Boiler c/w 110kg Right Hand Single Hopper and Feed Auger

- Right hand single hopper and feed auger
- Features Grant’s patented stainless steel turbulator baffle system
- Award winning efficiency at outputs ranging from 5kW to 72kW
- Integrated pellet store
- Automatic pellet feed and ignition
- Automatic wash system for condensing unit

Code: HG936RH1
Manufacturer code: WPS036RH110
ERP Rating: 88.4
**Biomass**

**Spira 36kW Wood Pellet Boiler c/w 200kg Right Hand Single Hopper and Feed Auger**

- Right hand single hopper and feed auger
- Features Grant’s patented stainless steel turbulator baffle system
- Award winning efficiency at outputs ranging from 5kW to 72kW
- Integrated pellet store
- Automatic pellet feed and ignition
- Automatic wash system for condensing unit

**Code** HG36RH20  
**Manufacturer code** WPS36RH200  
**ERP Rating** 88.4

<table>
<thead>
<tr>
<th>Variants</th>
<th>ERP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>HG36LH2</td>
<td></td>
</tr>
<tr>
<td>WPS36LH200</td>
<td></td>
</tr>
</tbody>
</table>

**Spira 2 x 26kW Wood Pellet Boilers c/w 140kg Dual Hopper and Feed Augers**

- Award winning efficiency at outputs ranging from 5kW to 72kW
- Integrated pellet store
- Automatic pellet feed and ignition
- Automatic wash system for condensing unit

**Code** HGPS1252  
**Manufacturer code** WPS12/52  
**ERP Rating** TBC

**Spira 26kW & 36kW Wood Pellet Boilers c/w 140kg Dual Hopper and Feed Augers**

- Award winning efficiency at outputs ranging from 5kW to 72kW
- Integrated pellet store
- Automatic pellet feed and ignition
- Automatic wash system for condensing unit

**Code** HGPS1562  
**Manufacturer code** WPS15/62  
**ERP Rating** TBC

**Spira 2 x 36kW Wood Pellet Boilers c/w 140kg Dual Hopper and Feed Augers**

- Award winning efficiency at outputs ranging from 5kW to 72kW
- Integrated pellet store
- Automatic pellet feed and ignition
- Automatic wash system for condensing unit

**Code** HGPS1872  
**Manufacturer code** WPS18/72  
**ERP Rating** TBC
**SpiraPod 18kW Wood Pellet Boiler and External Casing**

- Purpose built external housing solution for the Spira Biomass boilers
- Accomodates all Spira models
- Fully weatherproof steel casing
- Top fill integral hopper with 190kg capacity
- Suitable for vacuum feed
- Optional vacuum systems and sealed system kits can be fitted within the casing

**Code** HGWPOD18  
**Manufacturer code** WPSPOD18  
**ERP Rating** 89.5

---

**SpiraPod 26kW Wood Pellet Boiler and External Casing**

- Purpose built external housing solution for the Spira Biomass boilers
- Accomodates all Spira models
- Fully weatherproof steel casing
- Top fill integral hopper with 190kg capacity
- Suitable for vacuum feed
- Optional vacuum systems and sealed system kits can be fitted within the casing

**Code** HGWPOD26  
**Manufacturer code** WPSPOD26  
**ERP Rating** 89.5

---

**18KW Wood Pellet Boiler**

- Fully modulating output 4-18kW
- MCS approved for RHI
- 92.9% Efficient
- MCS Approved
- Built in back end protection
- Built in 120kg hopper

**Code** WFPBWP18  
**Manufacturer code** WP18  
**ERP Rating** A
Biomass Accessories

Wood Pellet Store 0.5 Tonne (1x1m) Painted

- Easy side access maintenance door for cleaning
- Universal auger/vacuum connection
- Galvanised Steel construction.

Code: HGRAN200
Manufacturer code: WPXG05TP

Wood Pellet Store 0.75 Tonne (1x1m) Painted

- Easy side access maintenance door for cleaning
- Universal auger/vacuum connection
- Galvanised Steel construction.

Code: HGRAN202
Manufacturer code: WPXG075TP

Wood Pellet Store 3.0 Tonne (2x2m)

- Easy side access maintenance door for cleaning
- Universal auger/vacuum connection
- Galvanised Steel construction.

Code: HGRAN186
Manufacturer code: WPXG03T

Variants

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>HGRAN180</td>
<td>Wood Pellet Store 1.5 Tonne (2x1m)</td>
</tr>
<tr>
<td>WPXG15ST</td>
<td></td>
</tr>
<tr>
<td>HGRAN182</td>
<td>Wood Pellet Store 2.0 Tonne (2x1m)</td>
</tr>
<tr>
<td>WPXG20ST</td>
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</tr>
<tr>
<td>HGRAN184</td>
<td>Wood Pellet Store 2.5 Tonne (2x1m)</td>
</tr>
<tr>
<td>WPXG25ST</td>
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</tr>
<tr>
<td>HGRAN188</td>
<td>Wood Pellet Store 3.5 Tonne (2x2m)</td>
</tr>
<tr>
<td>WPXG30ST</td>
<td></td>
</tr>
<tr>
<td>HGRAN190</td>
<td>Wood Pellet Store 4.0 Tonne (2x2m)</td>
</tr>
<tr>
<td>WPXG40ST</td>
<td></td>
</tr>
<tr>
<td>HGRAN192</td>
<td>Wood Pellet Store 5.0 Tonne (2x2m)</td>
</tr>
<tr>
<td>WPXG50ST</td>
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</tr>
<tr>
<td>HGRAN194</td>
<td>Wood Pellet Store 6.0 Tonne (2x2m)</td>
</tr>
<tr>
<td>WPXG60ST</td>
<td></td>
</tr>
</tbody>
</table>

Wood Pellet 2.5m Feed Auger

- Universal Connection to Grant Wood Pellet Stores
- Eliminates the need for manual filling

Code: HGRAN206
Manufacturer code: WPXUG25

Variants

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HGRAN208</td>
<td>Wood Pellet 3m Feed Auger</td>
</tr>
<tr>
<td>WPAUG3</td>
<td></td>
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<tr>
<td>HGRAN210</td>
<td>Wood Pellet 3.5m Feed Auger</td>
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<tr>
<td>WPAUG35</td>
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</tbody>
</table>
Biomass Accessories

500mm Extension

Code: WFEX4181
Manufacturer code: 4181

45° Bend

Code: WFBD4187
Manufacturer code: 4187

1000mm Extension

Code: WFEX4188
Manufacturer code: 4188

Standard Wall Bracket

- 30mm

Code: WFWB4189
Manufacturer code: 4189
## Biomass Accessories

### Pitched Roof Flashing

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
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<td>WFRF4348</td>
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### Flat Roof Flashing

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<td>WFRF4349</td>
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### Extended Wall Bracket

- 400mm

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<td>WFWB4347</td>
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### Flue Stabiliser

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<td>WFFS4351</td>
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### Flue Install Buggy

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<tbody>
<tr>
<td>WFBWPTRK</td>
<td>WPTRK</td>
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</tbody>
</table>
ICS 45° Bend & Locking Band

- Simple push-fit jointing system, secured by locking band

Code: SC112806
Manufacturer code: 112806

ICS 135° Tee & 2 Locking Bands

- Advanced corrosion resistant design and construction
- Laser welded 316L stainless steel inner liners and stainless steel case
- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots

Code: SC117052
Manufacturer code: 117052

ICS 90° Tee & 2 Locking Bands

- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC115231
Manufacturer code: 115231

ICS Plug Tee & Drain

- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC101107
Manufacturer code: 101031
ICS Wall Support Top Plate & Locking Band

- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC100963
Manufacturer code: 100963

ICS Wall Band 60mm

- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC127213
Manufacturer code: 127213

ICS Wall Band Extensions Bracket

- Low external case temperature
- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC127199
Manufacturer code: 127199

Roof Support

- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC100963
Manufacturer code: 100963
Uniflashing

- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC112197
Manufacturer code: 112197

Tapered Terminal & locking band

- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC101215
Manufacturer code: 101215

ICS Pipe

- 250mm pipe
- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC112909
Manufacturer code: 112909

ICS Pipe

- 500mm pipe
- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC115902
Manufacturer code: 115902
Biomass Twin Flue

ICS Pipe
- 1000mm pipe
- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: SC117960
Manufacturer code: 117960

Appliance Connector
- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Code: J2147150
Manufacturer code: 111158

Draft Stabiliser Connector
- The only stainless steel system to have passed the internationally recognised GASTEC corrosion test
- Rigid joining system
- Capillary break prevents moisture being drawn through the joint
- Joint enables insulation in the pipe to be continuous over the length of the system ensuring no hot spots
- The 25mm high efficiency Superwool blanket maintains flue gas temperature

Manufacturer code: 101205

150mm Starter Pack 1 with 135° Tee for Top or Rear Outlet Appliances
- 45° bend
- 135° tee
- 90° tee
- Plug tee and drain
- Wall support and top bracket
- 60mm wall band
- Wall band extension bracket
- Roof Support
- Uniflashing
- Tapered Terminal with locking band

Code: SC138252
Manufacturer code: 138252
150mm Starter Pack 2 with 90° Bend for Rear Outlet Appliances

- 2 x 90° tee’s
- Plug tee and drain
- Wall support and top bracket
- 60mm wall band
- Wall band extension bracket
- Roof Support
- Uniflashing
- Tapered Terminal with locking band

Code SC138253
Manufacturer code 138253
Biomass Fluids & Treatments

**F3 Cleaner**

- 500ml
- Neutral universal cleaner for pre-commissioning new systems in accordance with BS7593:2006
- Removes sludge, limescale and other debris to restore heating efficiency of existing systems
- Compatible with all metals and materials commonly used in heating systems
- Neutral, non-hazardous formula (COSH rated zero)

**Code** HTF52339

**Manufacturer code** 56600

**F1 Protector**

- 500ml
- Protects against corrosion and scale in mixed metal central heating systems
- Stops frequent venting of radiators
- Prevents sticking pumps and boiler noise
- Prevents cold spots in radiators

**Code** HTF52337

**Manufacturer code** 56599

**TF1 Omega 22mm with Valves**

- 22mm
- With valves
- High performance Nickel plated Brass, inline system filter

**Variants**

- HF062248
- TF1 Omega 22mm without valves
- 62248

**Code** HF062249

**Manufacturer code** 62249
Pre Insulated Pipe

Pre Insulated pipe is designed to be installed either above or below ground to transfer water over distances with minimal heat loss. It is ideal for use in domestic situations where the heat source is located externally or in an outhouse.

Pre insulated pipe is also a great solution for district heating projects enabling the transfer of hot water from a centralised source to multiple outlets.
## Pre Insulated Pipe

### Ecoflex Thermo Single 25x2,3/140mm
- **Ecoflex Thermal Single**
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Manufacturer code</th>
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<tbody>
<tr>
<td>EF500002</td>
<td>Ecoflex Thermo Single 25x2,3/140mm</td>
<td>1018109</td>
</tr>
</tbody>
</table>

### Ecoflex Aqua Single 25x3,5/140mm
- **Ecoflex Aqua Single**
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

<table>
<thead>
<tr>
<th>Code</th>
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<th>Manufacturer code</th>
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</thead>
<tbody>
<tr>
<td>EF500020</td>
<td>Ecoflex Aqua Single 25x3,5/140mm</td>
<td>1018117</td>
</tr>
</tbody>
</table>

### Ecoflex Thermo Mini 25x2,3/68mm
- **Ecoflex Thermo Mini**
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

<table>
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<tr>
<th>Code</th>
<th>Description</th>
<th>Manufacturer code</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF500052</td>
<td>Ecoflex Thermo mini 25x2,3/68mm</td>
<td>1018132</td>
</tr>
</tbody>
</table>

### Variants

- **Variants**
- **EF500003** Ecoflex Thermo Single 32x2,9/140mm
- **EF500004** Ecoflex Thermo Single 40x3,7/175mm
- **EF500005** Ecoflex Thermo Single 50x4,6/175mm
- **EF500006** Ecoflex Thermo Single 63x5,8/175mm
- **EF500007** Ecoflex Thermo Single 75x6,8/200mm
- **EF500008** Ecoflex Thermo Single 90x8,2/200mm
- **EF500009** Ecoflex Thermo Single 110x10,0/200mm

- **EF500021** Ecoflex Aqua Single 32x4,4/140mm
- **EF500022** Ecoflex Aqua Single 40x5,5/175mm
- **EF500023** Ecoflex Aqua Single 50x6,9/175mm
- **EF500024** Ecoflex Aqua Single 63x8,6/175mm

- **EF500053** Ecoflex Thermo mini 32x2,9/68mm
Pre Insulated Pipe

Ecoflex Thermo Twin 2x25x2,3/175mm

- Ecoflex Thermo Twin
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF500102
Manufacturer code: 1018134

Variants:
- EF500103: Ecoflex Thermo Twin 2x23x2,9 /175mm
- EF500104: Ecoflex Thermo Twin 2x40x3,7 /175mm
- EF500105: Ecoflex Thermo Twin 2x50x4,6 /200mm
- EF500106: Ecoflex Thermo Twin 2x63x5,8 /200mm

Ecoflex Aqua Twin 25x3,5-25x3,5/175mm

- Ecoflex Aqua Twin
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF500113
Manufacturer code: 1018139

Variants:
- EF500114: Ecoflex Aqua Twin 32x4,4-25x3,5/175mm
- EF500116: Ecoflex Aqua Twin 40x5,5-25x3,5/175mm
- EF500118: Ecoflex Aqua Twin 50x6,9-25x3,5/175mm

Ecoflex Quattro 2x25x2,3-2x25x3,5/175mm

- Ecoflex Quattro
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF500311
Manufacturer code: 1018147

Variants:
- EF500331: Ecoflex Quattro 2x32x2,9-2x25x3,5 /175mm
- EF500351: Ecoflex Quattro 2x32x2,9-32x4,4-25x3,5 /175

Ecoflex Tee 200/175/140mm

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: U1060982
Manufacturer code: 1060982

Variants:
- U1060984: Ecoflex Coupling 200/175/140mm
- U1060985: Ecoflex Elbow 200/175/140mm
- U1060991: Ecoflex Reducer Ring 200/140mm
Pre Insulated Pipe

Ecoflex Wall Sleeve Set NPW 175/200mm

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525403
Manufacturer code: 1018269

Variants

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<tbody>
<tr>
<td>EF525404</td>
<td>Ecoflex wall sleeve set NPW 140mm</td>
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</tbody>
</table>

Ecoflex Rubber End Cap Quattro

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525737
Manufacturer code: 1018306

Variants

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<td>EF525739</td>
<td>Ecoflex rubber end cap Twin 25+32+50/175mm</td>
</tr>
<tr>
<td>EF525740</td>
<td>Ecoflex rubber end cap Twin 25+32+40/175mm</td>
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</tbody>
</table>

Ecoflex Rubber End Cap Twin 40+50+63/200mm

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525738
Manufacturer code: 1018307

Variants

<table>
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<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>EF525741</td>
<td>Ecoflex rubber end cap Single 90+110/175mm</td>
</tr>
<tr>
<td>EF525742</td>
<td>Uponor Ecoflex rubber end cap Single 63+75/175mm</td>
</tr>
<tr>
<td>EF525743</td>
<td>Ecoflex rubber end cap Single 32+40+50/175mm</td>
</tr>
<tr>
<td>EF525744</td>
<td>Ecoflex rubber end cap Single 40+50+63/140mm</td>
</tr>
<tr>
<td>EF525745</td>
<td>Ecoflex rubber end cap Single 40+50+63/140mm</td>
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<tr>
<td>EF525746</td>
<td>Ecoflex rubber end cap Single 25+28+32/140mm</td>
</tr>
<tr>
<td>EF525747</td>
<td>Ecoflex rubber end cap Single 25+32+40/68mm</td>
</tr>
</tbody>
</table>

Ecoflex Rubber End Cap Single 75+90+110/200mm

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525741
Manufacturer code: 1018310

Variants

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<th>Description</th>
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<td>EF525742</td>
<td>Ecoflex rubber end cap Single 90+110/175mm</td>
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<tr>
<td>EF525743</td>
<td>Uponor Ecoflex rubber end cap Single 63+75/175mm</td>
</tr>
<tr>
<td>EF525744</td>
<td>Ecoflex rubber end cap Single 32+40+50/175mm</td>
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<td>Ecoflex rubber end cap Single 40+50+63/140mm</td>
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<td>Ecoflex rubber end cap Single 25+28+32/140mm</td>
</tr>
<tr>
<td>EF525747</td>
<td>Ecoflex rubber end cap Single 25+32+40/68mm</td>
</tr>
</tbody>
</table>
**Pre Insulated Pipe**

**Ecoflex Chamber 6x140/175/200mm**

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525816
Manufacturer code: 1018326

**Variants**

<table>
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<tr>
<td>EF525818</td>
<td>Ecoflex chamber 8x140/175/200mm</td>
</tr>
<tr>
<td>1018327</td>
<td></td>
</tr>
</tbody>
</table>

**Wipex Coupling PN6 25x2,3-G1**

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: UP525820
Manufacturer code: 1018326

**Variants**

<table>
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<th>Description</th>
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<td>EF525821</td>
<td>Wipex coupling PN6 32x2,9-G1</td>
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<tr>
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<tr>
<td>EF525822</td>
<td>Wipex coupling PN6 40x3,7-G1 1/4</td>
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<tr>
<td>EF525823</td>
<td>Wipex coupling PN6 50x4,6-G1 1/4</td>
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<tr>
<td>EF525824</td>
<td>Wipex coupling PN6 63x5,8-G2</td>
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<tr>
<td>EF525825</td>
<td>Wipex coupling PN6 75x6,8-G2</td>
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<tr>
<td>EF525826</td>
<td>Wipex coupling PN6 90x8,2-G3</td>
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<tr>
<td>EF525827</td>
<td>Wipex coupling PN6 110x10,0-G3</td>
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<tr>
<td>1018335</td>
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</tbody>
</table>

**Wipex Coupling PN10 25x3,5-G1**

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: UP525829
Manufacturer code: 1018336

**Variants**

<table>
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<th>Description</th>
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<tr>
<td>EF525833</td>
<td>Wipex coupling PN10 32x4,4-G1</td>
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<tr>
<td>EF525834</td>
<td>Wipex coupling PN10 40x5,5-G1 1/4</td>
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<tr>
<td>EF525835</td>
<td>Wipex coupling PN10 50x6,9-G1 1/4</td>
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<td>1018340</td>
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<tr>
<td>EF525836</td>
<td>Wipex coupling PN10 63x8,6-G2</td>
</tr>
<tr>
<td>1018341</td>
<td></td>
</tr>
</tbody>
</table>
Pre Insulated Pipe

Wipex Tee G1-G1-G1

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525841
Manufacturer code: 1018345

Variants
- EF525842: Wipex tee G1 1/4-G1 1/4-G1 1/4
- EF525843: Wipex tee G2-G2-G2
- EF525844: Wipex tee G3-G3-G3
- EF525851: Wipex elbow G1-G1
- EF525852: Wipex elbow G1 1/4-G1 1/4
- EF525853: Wipex elbow G2-G2
- EF525854: Wipex elbow G3-G3

Wipex Sleeve G1-G1

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525861
Manufacturer code: 1018355

Variants
- EF525862: Wipex sleeve G1 1/4-G1 1/4
- EF525863: Wipex sleeve G2-G2
- EF525864: Wipex sleeve G3-G3

Wipex Flange F25/4-85/G1

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525870
Manufacturer code: 1018359

Variants
- U1018360: Wipex flange F32/4-100/G1 1/4
- EF525873: Wipex flange F50/4-125/G2
- EF525875: Wipex flange F80/8-160/G3

Wipex Reducer Male x Female G1 1/4-G1

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525882
Manufacturer code: 1018368

Variants
- U1018369: Wipex reducer male x female G1 1/2-G1 1/4
- EF525887: Wipex reducer male x female G2-G1
- EF525888: Wipex reducer male x female G2-G1 1/4
- EF525890: Wipex reducer male x female G3-G1
- EF525891: Wipex reducer male x female G3-G1 1/4
- EF525892: Wipex reducer male x female G3-G2
Pre Insulated Pipe

Ecoflex Shrinkable Tape 255mm x 30m

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525910
Manufacturer code: 1018378

Ecoflex Chamber Shrink Sleeve 175mm

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525913
Manufacturer code: 1018380

Variants

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
<td>EF525915</td>
<td>Ecoflex chamber shrink sleeve 250mm</td>
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<tr>
<td>1018381</td>
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</tbody>
</table>

Ecoflex Sealing Tape for Chamber 50mm x 10m

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: UP525919
Manufacturer code: 1018382

Ecoflex Trench Warning Tape Red 40mm x 250m

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

Code: EF525950
Manufacturer code: 1018385
Pre Insulated Pipe

**Wipex Jointing Equal PN10 25x3.5-25x3.5**

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

**Code**  U1042970  
**Manufacturer code** 1042970

**Wipex Jointing Equal PN6 25x2.3-25x2.3**

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

**Code**  U1042972  
**Manufacturer code** 1042972

**Variants**

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<td>U1042979</td>
<td>Wipex jointing equal PN10 40x5.5-40x5.5</td>
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<td>U1042987</td>
<td>Wipex jointing equal PN6 110x10-110x10</td>
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</tbody>
</table>

**Ecoflex End Cap 140mm**

- Ecoflex Accessories
- From heat source to building
- No special tools, no welding and no fuss. Quality product, long lifetime
- Cut to length, delivered directly to site
- Rapid work progress, up to 200m joint free installation
- Solutions for: Family Homes, Social Housing, Farm Buildings, Small Holdings and Outbuildings

**Code**  E1045310  
**Manufacturer code** 1045310

**Variants**

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</tr>
<tr>
<td>E1045312</td>
<td>Ecoflex end cap 200mm</td>
</tr>
</tbody>
</table>

The Graham Guide to Renewables
Cylinders and Buffer Tanks

Solar cylinders incorporate a second coil specifically designed to enable the connection of solar thermal panels to your hot water system. This enables the homeowner to have multiple sources for heating their hot water and avoids the need for two separate cylinders, saving both money and space.

Buffer tanks are designed to take peak loads when excess hot water is generated or supply hot water in situations when a surge in demand exceeds the capacity of the heating source.

Graham offer a wide range of cylinders and buffer tanks to meet your requirements, whether domestic or commercial.
**Cylinders and Buffer Tanks**

**Trinity 3c Solar Boiler Coil**
- Indirect, with boiler coil 380L
- Unique three coil design for maximum solar yield
- Save money on both space heating and hot water bills
- Ideal for fitting into new and existing solar thermal systems
- Provides mains pressure hot water for powerful showers
- High flow rates for fast filling of baths, ideal for multiple bathrooms

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
<td>HKT3C38B</td>
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</table>

Manufacturer code: T3C380BC

**Trinity 3c Solar Indirect Heat Pump Coil**
- Indirect, with heat pump coil 380L
- Unique three coil design for maximum solar yield
- Save money on both space heating and hot water bills
- Ideal for fitting into new and existing solar thermal systems
- Provides mains pressure hot water for powerful showers
- High flow rates for fast filling of baths, ideal for multiple bathrooms

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<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>HKT3C38H</td>
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</table>

Manufacturer code: T3C380HP

**Tribune Xe Solar Indirect Twin Zone Pre-Plumb**
- Indirect 180L
- Factory fitted plumbing and wiring save up to 70% on-site installation time
- Built-in thermal expansion space, removing the need for an external expansion vessel
- 62mm thick environmentally friendly high performance insulation for low heatloss
- Provides mains pressure hot water for powerful showers
- Duplex stainless steel basic vessel for superior corrosion resistance

<table>
<thead>
<tr>
<th>Code</th>
<th>ERP Rating</th>
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<tbody>
<tr>
<td>HTXSN18T</td>
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</table>

Manufacturer code: TXSN180PT

**Ultrasteel Plus Solar Indirect**
- Indirect 180L
- Built-in thermal expansion space, removing the need for an external expansion vessel
- Provides mains pressure hot water for powerful showers
- High flow rates for fast filling of baths, ideal for multiple bathrooms
- 50mm thick insulation economical to run
- Duplex stainless steel basic vessel for superior corrosion resistance

<table>
<thead>
<tr>
<th>Code</th>
<th>ERP Rating</th>
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<tbody>
<tr>
<td>HUXSN180</td>
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Manufacturer code: AIXSN180

**Variants**
- HKT3C50B
- T3C500BC
- HKT3C50H
- T3C500HP
- HTXSN21T
- TXSN210PT
- HTXSN25T
- TXSN250PT
- HTXSN30T
- TXSN300PT
- HUXSN210
- AIXSN210
- HUXSN250
- AIXSN250
- HUXSN300
- AIXSN300

**The Graham Guide to Renewables**

The Graham Renewables Brochure.indd 174

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Cylinders and Buffer Tanks

Greenstore TC-150

- Can be combined with our Greenskies solar thermal range
- Compatible with other manufacturers’ products
- 25 year guarantee
- Factory-installed G3 temperature and pressure relief valve
- 3kW immersion heater included

Variants

<table>
<thead>
<tr>
<th>Code</th>
<th>Manufacturer code</th>
<th>Description</th>
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<td>7 716 842 040</td>
<td>Greenstore TC-150</td>
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<td>HW800546</td>
<td>7 716 842 044</td>
<td>Greenstore TC-300</td>
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</tbody>
</table>

Code HW800542
Manufacturer code 7 716 842 040

VPB 200 GSHP Cylinder

- Suitable for connection to NIBE F1145 ground source heat pump up to 12kW
- Stainless steel corrosion protection
- Offers excellent thermal properties
- Insulated with neoprene

Code HN088516
Manufacturer code 088516
ERP Rating D

Code HN083020
Manufacturer code 083020
ERP Rating E

VPB 300 GSHP Cylinder

- Suitable for connection to NIBE F1145 ground source heat pump up to 12kW
- Stainless steel corrosion protection
- Offers excellent thermal properties
- Insulated with neoprene

Code HN083021
Manufacturer code 083021
ERP Rating E

Code HN083020
Manufacturer code 083020
ERP Rating E

VPBS GSHP Solar Cylinder

- Solar Cylinder for F1145
- Copper corrosion protection
- Offers excellent thermal properties
- Insulated with neoprene

Code HN083021
Manufacturer code 083021
ERP Rating E

Code HN083020
Manufacturer code 083020
ERP Rating E
Cylinders and Buffer Tanks

HA-WH5 Megacoil Cylinder

- 160L
- Air Source Heat Pump Domestic Hot Cylinders
- Stainless steel cylinder
- Specifically designed for the NIBE F2040 Air source heat pump range

Code: HN100001
Manufacturer code: G1100001
ERP Rating: D

HA-WH5 Megacoil Cylinder

- 200L
- Air Source Heat Pump Domestic Hot Cylinders
- Stainless steel cylinder
- Specifically designed for the NIBE F2040 Air source heat pump range

Code: HN100002
Manufacturer code: G1100002
ERP Rating: D

HA-WH5 Megacoil Cylinder

- 300L
- Air Source Heat Pump Domestic Hot Cylinders
- Stainless steel cylinder
- Specifically designed for the NIBE F2040 Air source heat pump range

Code: HN100003
Manufacturer code: G1100003
ERP Rating: D

HA-WH5 Megacoil Solar Cylinder

- 200L
- Air Source Heat Pump Domestic Hot Cylinders
- Additional Solar Coil
- Stainless steel cylinder

Code: HN100004
Manufacturer code: G1100004
ERP Rating: D
## Cylinders and Buffer Tanks

### HA-WH5 Megacoil Solar Cylinder
- **300L**
- Air Source Heat Pump Domestic Hot Cylinders
- Additional Solar Coil
- Stainless steel cylinder

  Code: HN100005
  Manufacturer code: G1100005
  ERP Rating: E

### VPB 500 GSHP Cylinder
- **500L**
- No G3 kit supplied
- Suitable for connection to NIBE F1145 ground source heat pump up to 12kW

  Code: HN083221
  Manufacturer code: 083221

### VPB 750 GSHP Cylinder
- **750L**
- No G3 kit supplied
- Suitable for connection to NIBE F1145 ground source heat pump up to 12kW

  Code: HN083230
  Manufacturer code: 083230

### VPB 1000 GSHP Cylinder
- **1000L**
- No G3 kit supplied
- Suitable for connection to NIBE F1145 ground source heat pump up to 12kW

  Code: HN083240
  Manufacturer code: 083240

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Cylinders and Buffer Tanks

**VPA 300/200 GSHP Cylinder**
- Can be paired with any heat pump model that does not have a built-in water heater
- Code: HN088712
- Manufacturer code: 088712
- ERP Rating: D

**VPA 450/300 GSHP Cylinder**
- Can be paired with any heat pump model that does not have a built-in water heater
- Code: HN088662
- Manufacturer code: 088662

**VPAS 300/450 GSHP Cylinder with Solar Coil**
- With Solar Coil
- Can be paired with any heat pump model that does not have a built-in water heater
- Code: HN087720
- Manufacturer code: 087720

**IU 34 3kW Immersion Heater Single Phase**
- 3kW
- Single Phase
- Requires K11 and HR10
- Code: HN018084
- Manufacturer code: 218009
Cylinders and Buffer Tanks

UKV 40 Buffer Tank

- 40L
- Code: HN088470
- Manufacturer code: 088470
- ERP Rating: B

UKV 100 Buffer Tank

- 100L
- Code: HN088207
- Manufacturer code: 088207
- ERP Rating: C

UKV 200 Buffer Tank

- 200L
- Code: HN080300
- Manufacturer code: 080300
- ERP Rating: C

UKV 300 Buffer Tank

- 300L
- Code: HN080301
- Manufacturer code: 080301
- ERP Rating: D
Cylinders and Buffer Tanks

**UKV 500 Buffer Tank**

- 500L
- Code: HN080302
- Manufacturer code: 080302
- ERP Rating: E

**UKV 750 Buffer Tank**

- 750L
- Code: HN085002
- Manufacturer code: 085002

**UKV 1000 Buffer Tank**

- 1000L
- Code: HN085003
- Manufacturer code: 085003

**UKV 200 Buffer Tank - Cooling Only**

- 200L
- Code: HN080321
- Manufacturer code: 080321
# Cylinders and Buffer Tanks

## UKV 300 Buffer Tank - Cooling Only

- **300L**
  - Code: HN080330
  - Manufacturer code: 080330

## 150L Cylinder with 40L Buffer

- For use with A-Class heat pumps
- B Rated
  - Code: HD050656
  - Manufacturer code: 050656
  - ERP Rating: B

### Variants

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>ERP Rating</th>
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</thead>
<tbody>
<tr>
<td>HD050663</td>
<td>210L cylinder with 40L buffer</td>
<td>B</td>
</tr>
<tr>
<td>HD050670</td>
<td>250L cylinder with 40L buffer</td>
<td>B</td>
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</table>

## 150L Unvented Stainless Steel DHW Cylinder

- 150L
- Heat pump ready
- 2.8m² coil
  - Manufacturer code: 042088
  - ERP Rating: B

### Variants

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>ERP Rating</th>
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<tbody>
<tr>
<td>#N/A</td>
<td>210L unvented stainless steel DHW cylinder</td>
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<tr>
<td>#N/A</td>
<td>250L unvented stainless steel DHW cylinder</td>
<td>B</td>
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<td>#N/A</td>
<td>300L unvented stainless steel DHW cylinder</td>
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<td>#N/A</td>
<td>150L unvented stainless steel DHW cylinder</td>
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<tr>
<td>#N/A</td>
<td>210L unvented stainless steel DHW cylinder</td>
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<tr>
<td>#N/A</td>
<td>180L unvented stainless steel DHW cylinder</td>
<td>C</td>
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</table>

## DuoWave Solar Single Coil Direct s/s 170L Cylinder

- 170L Direct
- Particularly suitable for use with solar hot water systems like Grant Solar Thermal
- Can significantly reduce annual bills compared to traditional fossil fuel heating techniques
  - Code: HGDIR170
  - Manufacturer code: GDUI/DIR170
  - ERP Rating: B

### Variants

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<thead>
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<th>Code</th>
<th>Description</th>
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<td>DuoWave solar single coil direct s/s 250L cylinder</td>
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<tr>
<td>HGDIR300</td>
<td>DuoWave solar single coil direct s/s 300L cylinder</td>
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<tr>
<td>HGDIR400</td>
<td>DuoWave solar single coil direct s/s 400L cylinder</td>
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</tbody>
</table>
Cylinders and Buffer Tanks

DuoWave Solar Twin Coil Indirect s/s 170L Cylinder

- 170L Direct
- Particularly suitable for use with solar hot water systems like Grant Solar Thermal
- Can significantly reduce annual bills compared to traditional fossil fuel heating techniques

Code: HGGDU170
Manufacturer code: GDUG/IND170
ERP Rating: B

DuoWave Plus Vented Triple Coil Solar Indirect s/s 300L Cylinder

- 300L Indirect
- DuoWave Plus has the capability to use three sources of heat sources
- Particularly suitable for use with solar hot water systems like Grant Solar Thermal
- Can significantly reduce annual bills compared to traditional fossil fuel heating techniques

Code: HGLUS300
Manufacturer code: GDUG/PLUS300
ERP Rating: C

DuoWave Plus Unvented Triple Coil Solar Indirect s/s 300L Cylinder

- 300L Indirect
- DuoWave Plus has the capability to use three sources of heat sources
- Particularly suitable for use with solar hot water systems like Grant Solar Thermal
- Can significantly reduce annual bills compared to traditional fossil fuel heating techniques

Code: HGUS300U
Manufacturer code: GDUG/PLUS300U
ERP Rating: C

MonoWave Single Coil Indirect s/s 200L Cylinder for ASHP

- 200L Indirect
- Single Coil
- Stainless steel heat pump cylinder
- Specifically matched to the Aerona3 range
- Larger primary coil for quicker heat transference
- Can significantly reduce annual bills compared to traditional fossil fuel heating techniques

Code: HGHPMA2
Manufacturer code: HPMON/IND200
ERP Rating: A

Variants

<table>
<thead>
<tr>
<th>Variants</th>
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<tr>
<td>HGIND125 HP/IND125</td>
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<td>HGIND150 HP/IND150</td>
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<tr>
<td>HGIND170 HP/IND170</td>
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The Graham Guide to Renewables
# Cylinders and Buffer Tanks

## MonoWave Single Coil Indirect s/s 200L Cylinder for ASHP

<table>
<thead>
<tr>
<th>Variants</th>
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<tr>
<td>HGMON250</td>
<td>C</td>
</tr>
<tr>
<td>HPMOND/IND250</td>
<td>C</td>
</tr>
</tbody>
</table>

- **200L Indirect**
- **Single Coil**
- Stainless steel heat pump cylinder
- Specifically matched to the Aerona3 range
- Larger primary coil for quicker heat transference
- Can significantly reduce annual bills compared to traditional fossil fuel heating techniques

**Code**
HGMON200

**Manufacturer code**
HPMONG/IND200

**ERP Rating**
B

## DuoWave Solar Twin Coil Indirect Stainless Steel 170L Cylinder for ASHP

<table>
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<th>Variants</th>
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<tr>
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<tr>
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<td>HGIND250</td>
<td>C</td>
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<tr>
<td>HPDUO/IND250</td>
<td>C</td>
</tr>
<tr>
<td>HGIND300</td>
<td>C</td>
</tr>
<tr>
<td>HPDUO/IND300</td>
<td>C</td>
</tr>
<tr>
<td>HGIND400</td>
<td>C</td>
</tr>
<tr>
<td>HPDUO/IND400</td>
<td>C</td>
</tr>
</tbody>
</table>

- **170L Indirect**
- **Twin Coil**
- Stainless steel heat pump cylinder
- Specifically matched to the Aerona3 range
- Larger primary coil for quicker heat transference
- Can significantly reduce annual bills compared to traditional fossil fuel heating techniques

**Code**
HGIND170

**Manufacturer code**
HPDUO/IND170

**ERP Rating**
C

## ThermaWave Open-vented Stainless Steel 250L Thermal Store

<table>
<thead>
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<th>Variants</th>
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<tbody>
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<tr>
<td>GTHERM/300</td>
<td>C</td>
</tr>
</tbody>
</table>

- **250L thermal store**
- **Open-Vented**
- Allow for multiple heat sources to be connected in a number of different ways
- Immersion heater(s) back up
- Multi-level temperature distribution
- 1mm thick duplex 2304 stainless steel - resists all forms of corrosion

**Code**
HGTH250

**Manufacturer code**
GTHERM/250

**ERP Rating**
C

## ThermaWave Domestic Hot Water Boost Kit

<table>
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<th>Variants</th>
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<tbody>
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<tr>
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</tbody>
</table>

**Code**
HGTH400

**Manufacturer code**
GTHERM/KIT1

**ERP Rating**
C

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Cylinders and Buffer Tanks

ThermaWave Open-vented Stainless Steel 300L Thermal Store c/w Hot Water Coil

- 300L thermal store with hot water coil
- Open-Vented
- Immersion heater(s) back up
- Multi-level temperature distribution
- 1mm thick duplex 2304 stainless steel - resists all forms of corrosion

Code: HGRAN224
Manufacturer code: GTHERM300HW
ERP Rating: C

ThermaWave Sealed System Stainless Steel 400L Thermal Store c/w Hot Water Coil

- 400L thermal store with hot water coil
- Sealed System
- Immersion heater(s) back up
- Multi-level temperature distribution
- 1mm thick duplex 2304 stainless steel - resists all forms of corrosion

Code: HGRAN230
Manufacturer code: GTHERM400HWU
ERP Rating: C

ThermaWave Open-vented Stainless Steel 400L Thermal Store c/w Hot Water Coil

- 400L thermal store with hot water coil
- Open-Vented
- Immersion heater(s) back up
- Multi-level temperature distribution
- 1mm thick duplex 2304 stainless steel - resists all forms of corrosion

Code: HGRAN226
Manufacturer code: GTHERM400HW
 ERP Rating: C

ThermaWave Sealed System Stainless Steel 400L Thermal Store c/w Hot Water Coil

- 400L thermal store with hot water coil
- Sealed System
- Immersion heater(s) back up
- Multi-level temperature distribution
- 1mm thick duplex 2304 stainless steel - resists all forms of corrosion

Code: HGRAN232
Manufacturer code: GTHERM400HWU
ERP Rating: C
Cylinders and Buffer Tanks

ThermaWave Open-vented Stainless Steel 500L Thermal Store c/w Hot Water Coil

- 500L thermal store with hot water coil
- Open-Vented
- Immersion heater(s) back up
- Multi-level temperature distribution
- 1mm thick duplex 2304 stainless steel - resists all forms of corrosion

Code: HGRAN228
Manufacturer code: GTHERM500HW
ERP Rating: D

ThermaWave Sealed System Stainless Steel 500L Thermal Store c/w Hot Water Coil

- 500L thermal store with hot water coil
- Sealed System
- Immersion heater(s) back up
- Multi-level temperature distribution
- 1mm thick duplex 2304 stainless steel - resists all forms of corrosion

Code: HGRAN234
Manufacturer code: GTHERM500HWU
ERP Rating: D

Smartline SLE Plus 210

- Stainless steel Tank-in-Tank technology
- Fast recovery and superior DHW delivery
- 3.5bar mains water systempak and DHW mixing valve supplied as standard
- Space saving due to higher dhw generation
- Heat pump connections into outer primary tank minimising pump cycling

Code: HRXB3021
Manufacturer code: XB302100
ERP Rating: B

Carbon Steel Tank For Primary Network 300L

- Enamelled tank with high resistance to thermal shock and high temperatures
- Five Primary 2" side tapings
- Glass wool insulation and flexible PVC jacket included
- Removable legs and Handling eyebolts for easy transportation

Code: HR663681
Manufacturer code: 06636801
ERP Rating: C
Cylinders and Buffer Tanks

**Smartline SLME 200L Multi Energy Unvented Cylinder**

- Stainless steel Tank-in-Tank technology
- Fast recovery, Superior DHW delivery
- 3.5bar mains water system pack and DHW mixing valve supplied as standard
- Large primary volume allows for greater thermal store
- Multiple choice of energy sources

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>HRXB3120</td>
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<td>Manufacturer code: XB312000</td>
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</table>

**50L Wall-Hung Buffer Tank**

- Wall hung ideal for smaller properties, Stainless Steel
- Mg Anode protection
- Can take immersion heater
- Wide range of configurations/highly insulated

<table>
<thead>
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<th>ERP Rating</th>
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<tr>
<td>ESP50BSA</td>
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<tr>
<td>Manufacturer code: ESP50B</td>
<td>ERP Rating: B</td>
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</table>

**100L Buffer Tank**

- Stainless Steel
- Mg Anode protection
- Can take immersion heater
- Wide range of configurations/highly insulated

<table>
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<td>Manufacturer code: ESP100B</td>
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</table>

**200L Buffer Tank**

- Stainless Steel
- Mg Anode protection
- Can take immersion heater
- Wide range of configurations/highly insulated

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**Smartline SLME 300 1tr Multi Energy Unvented Cylinder**

- Stainless steel Tank-in-Tank technology
- Fast recovery, Superior DHW delivery
- 3.5bar mains water system pack and DHW mixing valve supplied as standard
- Large primary volume allows for greater thermal store
- Multiple choice of energy sources

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<td>Manufacturer code: X312000</td>
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**Variants ERP Rating**

- HRXB3130
- XB313000

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<td>XP313000B</td>
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</table>
Cylinders and Buffer Tanks

300L Buffer Tank
- Stainless Steel
- Mg Anode protection
- Can take immersion heater
- Wide range of configurations/highly insulated

Code: ESP300BA
Manufacturer code: ESP300B

300L Buffer Tank With Coil
- Stainless Steel
- Mg Anode protection
- Can take immersion heater
- Wide range of configurations/highly insulated

Code: ESP300EBA
Manufacturer code: ESP300EB

500L Buffer Tank
- Stainless Steel
- Mg Anode protection
- Can take immersion heater
- Wide range of configurations/highly insulated

Code: ESP500BA
Manufacturer code: ESP500B

500L Twin Coil Buffer Tank
- Stainless Steel
- Mg Anode protection
- Can take immersion heater
- Wide range of configurations/highly insulated

Code: ESP500EBA
Manufacturer code: ESP500EB
SMARTLINE CYLINDERS
SMARTLINE PLUS & SMARTLINE MULTI ENERGY

SMART ME 210 > 800
The unique design of our multi energy cylinder with its large primary store makes the SLME the perfect partner for solar thermal, heat pumps, pellet burners, heat recovery systems and much more.

SMARTLINE BENEFITS
- Tank-in-Tank Technology
- Stainless steel DHW Cylinder
- Large Heat Transfer area
- Unrivalled resistance to scale
- Low pressure drop
- Low heat Loss
- Unvented kits available
- 25 year warranty

SMART E PLUS 210 > 300
Fast recovery cylinder with the addition of multiple ports allowing flexible installation options. Ideal partner to heat pumps.

WWW.ACV.COM
ACV (UK) Ltd, St. David’s Business Park - Dalgety Bay - Fife - KY11 9PF
01383 820 100 - uk.info@acv.com

EXCELLENCE IN HOT WATER
ACV
Mechanical Ventilation Heat Recovery (MVHR)

MVHR is designed to bring fresh air into your home and improve ventilation whilst reusing excess heat from other rooms within the property. As warm air is drawn out of rooms such as the kitchen and bathroom, it is then passed through a heat exchanger to warm fresh air from outside. The warm fresh air is then circulated to the main living areas and bedrooms providing ventilation and heat. An MVHR system can re-use as much as 95% of the heat that would normally be discarded. This can help to reduce heating bills and improve comfort.

As buildings continue to become better insulated and more air tight, natural ventilation becomes more difficult. Poor ventilation can cause serious issues including build-up of mould and damp. It is therefore vital that you ensure your property has a good source of ventilation to prevent long term issues.

MVHR can also be used to heat the domestic hot water supply in the home. Special MVHR units combine a small heat pump with a hot water cylinder to extract the warm air from the bathroom and kitchen, heating the domestic hot water and eliminating the need to use your traditional heating system to supply your domestic hot water.
**MVHR**

**GV-HR110-250**

- Suitable for approx 180m²
- Code: H912001
- Manufacturer code: 912001

**GV-HR110-400**

- Suitable for approx 380m²
- Code: H912002
- Manufacturer code: 912002

**Electrical Pre/After Heater**

- Code: HN063264
- Manufacturer code: 063264

**Sentinel Kinetic Advance S**

- 100% Auto Summer Bypass
- WIFI Connectivity, Pre/Post Heater Option
- Ultra Quiet, Easy Install
- Manufactured in the UK
- Touch Screen Controller
- Code: VA405215
- Manufacturer code: 405215
Sentinel Kinetic Advance SX

- Wireless Commissioning, 100% Auto Summer Bypass
- WIFI Connectivity, Pre/Post Heater Option
- Ultra Quiet, Easy Install
- Manufactured in the UK
- Touch Screen Controller

Code: VA405216
Manufacturer code: 405216

Sentinel Kinetic BH Right

- Recognised in SAP Appendix Q, BMS Connectivity
- Integral Humidistat, Summer Bypass
- Ultra Quiet, Easy Install (Right Sided)
- Manufactured in the UK
- Self Diagnosis

Code: V4443319
Manufacturer code: 444319

Variants
- V4443319L: Sentinel Kinetic BH Left
- 443319L

Sentinel Kinetic Plus B Right

- Recognised in SAP Appendix Q, BMS Connectivity
- Integral Humidistat, Summer Bypass
- Ultra Quiet, Easy Install (Right Sided)
- Manufactured in the UK
- Increased Airflow

Code: V4443028
Manufacturer code: 4443028

Variants
- V443028L: Sentinel Kinetic Plus B Left
- 443028L

Sentinel Kinetic Cooker Hood CWHL

- Recognised in SAP Appendix Q, BMS Connectivity
- Integral Humidistat, Summer Bypass
- White, Different Spigot Option For Easy Install
- Manufactured in the UK
- Left Sided, Self Diagnosis

Code: V4446756
Manufacturer code: 446756

Variants
- V4446757: Sentinel Kinetic Cooker Hood CSHL
- 446757
### Sentinel Kinetic Cooker Hood CWHR

- Recognised in SAP Appendix Q, BMS connectivity
- Integral humidistat, summer bypass
- White, different spigot option for easy install
- Manufactured in the UK
- Right sided, self diagnosis

**Code** VA446798

**Manufacturer code** 446798

**Variants**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>VA446799</td>
<td>Sentinel Kinetic Cooker Hood CSHR</td>
</tr>
</tbody>
</table>

### Lo-Carbon Tempra T

- Meets Building Regs Part F and L, 78% Heat Recovery
- Timer, manual summer bypass
- Continuous running, low noise, low energy
- Manufactured in the UK
- Perfect for refurb, flats, extensions

**Code** VA443310

**Manufacturer code** 443310

### Lo-Carbon Tempra SELV T

- Meets Building Regs Part F and L, 78% Heat Recovery
- Timer, low voltage, manual summer bypass
- Continuous running, low noise, low energy
- Manufactured in the UK
- Perfect for refurb, flats, extensions

**Code** VA444369

**Manufacturer code** 444369

### Lo-Carbon Tempra HTP

- Meets Building Regs Part F and L, 78% Heat Recovery
- Humidistat, timer, pullcord, manual summer bypass
- Continuous running, low noise, low energy
- Manufactured in the UK
- Perfect for refurb, flats, extensions

**Code** VA443311

**Manufacturer code** 443311
Lo-Carbon Tempra SELV HTP

- Meets Building Regs Part F and L, 78% Heat Recovery
- Humidistat, timer, pullcord, low voltage, manual summer bypass
- Continuous running, low noise, low energy
- Manufactured in the UK
- Perfect for refurb, flats, extensions

Code VA444370
Manufacturer code 444370

1.5M Flat Channel Ducting Insulated 204x60mm

- Rigid, insulated ducting, perfect for MVHR systems

Code VA406870
Manufacturer code 406870

1.5M Flat Channel Ducting Uninsulated 204x60mm

- Rigid, uninsulated ducting, perfect for MVHR systems

Code VA436617
Manufacturer code 436617

2M Round Rigid Ducting 100mm Insulated

- Rigid, insulated ducting, perfect for MVHR systems

Code VA406873
Manufacturer code 406873
**MVHR**

**Round Rigid Ducting 100mm Uninsulated 2m**

- Rigid, Uninsulated Ducting, Perfect for MVHR Systems
- Code: VS108250
- Manufacturer code: 5108250

**Round Rigid Ducting 125mm Insulated 2m**

- Rigid, Insulated Ducting, perfect for MVHR Systems
- Code: VA406874
- Manufacturer code: 406874

**Round Rigid Ducting 125mm Uninsulated 1.5m**

- Rigid, Uninsulated Ducting, Perfect for MVHR Systems
- Code: VA434715
- Manufacturer code: 434715

**Flexible Ducting 204x60mm**

- Flexible Ducting for easy installations
- Code: VS109662
- Manufacturer code: 5109662
Horizontal 90° Bend 204x60mm Insulated

- Flat Rigid 90° Bend
- Code: VA406879
- Manufacturer code: 406879

Horizontal 90° Bend 204x60mm Uninsulated

- Flat Rigid 90° Bend
- Code: VA436620
- Manufacturer code: 436620

Horizontal 45° Bend 204x60mm Insulated

- Flat Rigid 45° Bend
- Code: VA406876
- Manufacturer code: 406876

Horizontal 45° Bend 204x60mm Uninsulated

- Flat Rigid 45° Bend
- Manufacturer code: 249944
**Round 90° Bend 100mm Insulated**

- Round Rigid 90° Bend
  - Code: VA406880
  - Manufacturer code 406880

**Round 90° Bend 100mm Uninsulated**

- Round Rigid 90° Bend
  - Code: VA372004
  - Manufacturer code 372004

**Round 45° Bend 100mm Insulated**

- Round Rigid 45° Bend
  - Code: VA406877
  - Manufacturer code 406877

**Round 45° Bend 100mm Uninsulated**

- Round Rigid 45° Bend
  - Code: VA372005
  - Manufacturer code 372005
**100mm Circular Exhaust Diffuser**

- Powder Coated Steel Exhaust Diffuser
  
  Code: VA544100  
  Manufacturer code: 10544100

<table>
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<th>Description</th>
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<tr>
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</table>

**100mm Circular Supply Diffuser**

- Powder Coated Steel Supply Diffuser
  
  Code: VA543100  
  Manufacturer code: 10543100

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<td>125MM Circular Supply Diffuser</td>
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<tr>
<td>10543125</td>
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**Ecocent 100L**

- Wall hung, compact, ideal for smaller spaces
- Ideal for close to point-of-use
- Uses waste heat
  
  Code: ESP4031L  
  Manufacturer code: ESP400-003-100L(D)  
  ERP Rating: A

**Ecocent 200L**

- Award winning efficiency, MCS Accredited
- Hot water 24/7/365
- Uses waste heat
- Improves SAP ratings
- Can be used as MEV system
  
  Code: ESP4102L  
  Manufacturer code: ESP400-10-200L(D)  
  ERP Rating: A
**MVHR**

**Ecocent 300L**
- Award winning efficiency. MCS Accredited
- Hot water 24/7/365
- Uses waste heat
- Improves SAP ratings
- Can be used as MEV system

Code: ESP4103L  
Manufacturer code: ESP400-10-300L(D)  
ERP Rating: A

**Ecocent 300L Maxi**
- Award winning efficiency. MCS Accredited
- Hot water 24/7/365
- Uses waste heat
- Improves SAP ratings
- Can be used as MEV system

Code: ESP4153L  
Manufacturer code: ESP400-15-300L(D)  
ERP Rating: A

**Ecocent 200L S**
- Highly efficient, stylish design
- Hot water 24/7/365
- Uses waste heat
- Improves SAP ratings
- Can be used as MEV system

Code: ESP4102L  
Manufacturer code: ESP400-10-200L(D)S  
ERP Rating: A

**Ecocent 300L S**
- Highly efficient, stylish design
- Hot water 24/7/365
- Uses waste heat
- Improves SAP ratings
- Can be used as MEV system

Code: ESP4103L  
Manufacturer code: ESP400-10-300L(D)S  
ERP Rating: A
Heat Interface Units

Heat Interface Units (HIU’s) control the flow of hot water generated from district heating or a shared heat source to individual property within a multi-residential unit.

Each HIU has the option of a built in heat meter which enables easy billing to each property based on precise energy usage.

Heat interface units remove the need for individual gas supplies for each property eliminating the need for gas safety checks in individual properties. This is particularly beneficial for social and student accommodation.
**Heat Interface Units (HIU)**

### Indirect HIU 10kW HTG / 45kW DHW

- 10kW HTG / 45kW DHW
- Compact Design, Fully modulating for high efficiency
- Plug and play commissioning
- Hot water safety tempering feature
- Fast hot water demand response time
- Up to 16 bar Primary System operating pressure

Code: RHIU1045  
Manufacturer code: RHIU1045

### Indirect HIU 10kW HTG / 60kW DHW

- 10kW HTG / 60kW DHW
- Compact Design, Fully modulating for high efficiency
- Plug and play commissioning
- Hot water safety tempering feature
- Fast hot water demand response time
- Up to 16 bar Primary System operating pressure

Code: RHIU1060  
Manufacturer code: RHIU1060

### Indirect HIU 15kW HTG / 60kW DHW

- 15kW HTG / 60kW DHW
- Compact Design, Fully modulating for high efficiency
- Plug and play commissioning
- Hot water safety tempering feature
- Fast hot water demand response time
- Up to 16 bar Primary System operating pressure

Code: RHIU1560  
Manufacturer code: RHIU1560

### Indirect HIU 15kW HTG / 70kW DHW

- 15kW HTG / 70kW DHW
- Compact Design, Fully modulating for high efficiency
- Plug and play commissioning
- Hot water safety tempering feature
- Fast hot water demand response time
- Up to 16 bar Primary System operating pressure

Code: RHIU1570  
Manufacturer code: RHIU1570
# Heat Interface Units (HIU)

**Greenstar Heat Interface Unit (HIU)**

- DHW & CH on demand with hydraulic system separation and two heat exchangers
- Flexible installation with first fix rail
- Compatible with GB162 and Bosch Commercial and Industrial Heating product range
- Modulating space heating pump
- Minimal installation space required

**Code**  
HW831662  
Manufacturer code 7738310662

**Variants**

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</table>

![Image of Greenstar Heat Interface Unit (HIU)](image-url)
Recoup have the UKs' largest range of WWHRS products suitable for all residential, commercial and retrofit applications. With tested efficiencies of up to 67%, the Pipe+ HE is the highest scoring product in its class in the 2013 SAP database and is used by housebuilders as an incredibly cost effective solution for Part-L compliance.
Waste Water Heat Recovery (WWHR)

Waste water heat recovery systems attach to either shower or bath wastes. The system transfers remaining heat from the grey water via a heat exchanger to increase the temperature of the incoming cold main water. The system helps to reduce the amount of energy required to heat the incoming cold mains water by increasing its temperature as much as 15 degrees before it reaches the shower unit.

WWHR can be installed in both new build properties and retrofitted into existing properties providing many benefits including:

- Reduced energy usage
- High SAP points for low cost system
- Easy to install
- Maintenance free
- No moving parts
- Works Automatically each time
Waste Water Heat Recovery (WWHR)

Pipe+ HE: High Efficiency, 2.1m WWHR Pipe
- Includes Ancillary Pack
- Achieve maximum SAP points and returns on investment. SAP
- Double walled (EN1717) Copper heat exchanger
- 67% maximum efficiency
Code: RCPHE01
Manufacturer code: R-PHE-01

Pipe+ HF: High Flow, 2.1m WWHR Pipe (inc. Ancillary Pack)
- Includes Ancillary Pack
- High Flow Rate Option
- Double walled (EN1717) Copper heat exchanger
Code: RCPHF01
Manufacturer code: R-PHF-01

Tray+ Integrated WWHR & Shower Tray
- 900x900mm tray
- Perfect solution for apartments or ground floor en-suites
- Horizontal waste water heat exchanger
- Suitable for easy installations at any level without the need for boxing in or major renovation work
Code: RCRT0209
Manufacturer code: R-T-02 (900)

Drain+
- 900mm drain
- Integrated WWHR & Wet-Room Drain
- Cost effective way to achieve SAP Points
- Finished in stainless steel
- Double wall heat exchanger
- 960mm unit size
Code: RCRD0109
Manufacturer code: R-D-01
Waste Water Heat Recovery (WWHR)

Drain+ Compact

- 800mm drain
- Integrated WWHRS & wet-room drain
- Cost effective way to achieve SAP points
- The compact size makes it suitable for slimmer shower spaces
- Finished in stainless steel
- Compact 800mm size

Code: RCRD0208
Manufacturer code: R-D-02

Retrofit+

- Efficiencies of up to 22%
- Can be installed under baths with showers, shower trays or even be boxed in next to your drain
- Easy to install - no major renovation or pipework required
- WRAS Approved

Code: RCRR01RF
Manufacturer code: R-R-01

WWHRS Preheat Supply Pipe Tape

- Preheat Supply Tape
- Used mark the preheat supply water pipe
- Helps conform with SAP regulations
- Permanent adhesive
- 48mm wide
- 66m per roll

Code: RCRWPIT1
Manufacturer code: R-WPIT-01

120L Waste Water Heat Recovery Tank

- Harvests waste heat from showers, baths and wash basins
- Easy clean system
- Compact
- No running costs
- Simple to install

Code: ESPHSO12
Manufacturer code: HSQ-120
ERP Rating: B
NEED TO FIND THE RIGHT PART FAST?
JUST ASK GRAHAM.

We use PartsArena to identify the part you need quickly and accurately. Even the ones you’re not sure about yourself. And the people you’ll be talking to really do know what they’re talking about.

We carry an extensive spares range featuring all the leading boiler brands. And we can deliver your parts to site or your nearest branch.*

At Graham, we’ve got the technology, the knowledge and the people to help you finish the job.

For the right part fast, start with Graham.

Leading brands • Parts identification • Online ordering • Delivery service*

www.grahamplumbersmerchant.co.uk

*Terms, conditions and additional fees apply. PartsArena is a registered trademark of Infomill Ltd

For spare parts, here’s where you start.
Rain Water Harvesting

Rain water harvesting systems are designed to collect rainwater and grey water which can then be used in gardens, for washing vehicles, laundry or flushing toilets.

With increasing droughts and hose pipe bans rain water harvesting can provide a convenient solution to water shortages whilst helping to preserve clean drinking water.
Rain Water Harvesting

HydroStore 1500L Garden Harvest

- Flat, load-bearing lid unobtrusive to pedestrians, lawnmowers, etc. Large diameter for easy access
- Turret diverts potentially contaminated surface water away to preserve integrity of captured water
- Calmed inlet reduces turbulence to tank sediment, improving water quality to property
- Self-cleaning, low maintenance filters, with no consumable parts, at inlet and pump ensure clear water supply
- Flat base for stability and integrated lifting points for handling and installation

Variants
- PHG1500 HydroStore 1500L Garden Harvest
- PHG2900 HydroStore 2900L Garden Harvest
- PHG4400 HydroStore 4400L Garden Harvest
- PHG4500 HydroStore 4500L Garden Harvest
- PHG5800 HydroStore 5800L Garden Harvest
- PHG6000 HydroStore 6000L Garden Harvest

HydroStore 1500L Home Harvest Direct

- Flat, load-bearing lid unobtrusive to pedestrians, lawnmowers, etc. Large diameter for easy access
- Turret diverts potentially contaminated surface water away to preserve integrity of captured water. 500mm invert depth as standard, with collars available to enable adaptation to site conditions
- Calmed inlet reduces turbulence to tank sediment, improving water quality to property
- Pump outlet capable of delivering 2500ltr/hour, nominal 35m head, and 3.5 bar pressure to guarantee reliable, constant and efficient supply
- Pressure-sensitive pump (turns off if no demand), dry-run protected (turns off if no water detected) for extended service life

Variants
- PHHD1500 HydroStore 1500L Home Harvest Direct
- PHHD2900 HydroStore 2900L Home Harvest Direct
- PHHD4400 HydroStore 4400L Home Harvest Direct
- PHHD4500 HydroStore 4500L Home Harvest Direct
- PHHD5800 HydroStore 5800L Home Harvest Direct
- PHHD6000 HydroStore 6000L Home Harvest Direct
HydroStore 1500L Home Harvest Gravity

- Flat, load-bearing lid unobtrusive to pedestrians, lawnmowers, etc. Large diameter for easy access
- Turret diverts potentially contaminated surface water away to preserve integrity of captured water. 500mm invert depth as standard, with collars available to enable adaptation to site conditions
- Calmed inlet reduces turbulence to tank sediment, improving water quality to property
- Pressure-sensitive pump (turns off if no demand), dry-run protected (turns off if no water detected) for extended service life
- Pump outlet capable of delivering 2500l/hour, nominal 35m head, and 3.5bar pressure to guarantee reliable, constant and efficient supply

Code PHHG1500

Variants
- PHHG2900 HydroStore 2900L Home Harvest Gravity
- PHHG4400 HydroStore 4400L Home Harvest Gravity
- PHHGST45 HydroStore 4500L Home Harvest Gravity
- PHHGST60 HydroStore 6000L Home Harvest Gravity
- PHHG5800 HydroStore 5800L Home Harvest Gravity

Ultra Slim Wall Tank 235L & Rainwater Filter Garden Use Only

- Rainwater harvesting system for retrofit
- Easy to install and Durable
- Constructed from high density food grade polyethylene

Code DR022H02

Ultra Slim Wall Tank System 470L incl. Mains Water Top Up

- Rainwater harvesting system for retrofit
- Easy to install and Durable
- Constructed from high density food grade polyethylene

Code DR044H01
## Rain Water Harvesting

### Ultra Slim Add-On Wall Tank 235L
- 235L add on tank
- Expand capacity of slim line wall tank
Code: DR225F01

### Slim-line Tower Tank System 1400L incl. Mains Water Top Up
- Modular Design
- Ability to add on 700L expansion tanks
- 1400L base tank
- Secure inner connection
Code: DR140H02

### Slim-line Tower Tank System 1400L Garden use only
- Modular Design
- Ability to add on 700L expansion tanks
- 1400L base tank
- Secure inner connection
Code: DRG40H03

### Slim-line Add-On Tower Tank 700L incl. Tank Connector
- Modular expansion tank for Slim line tower
- 700L capacity
Code: DR070E01
Rain Water Harvesting

Low Profile Platform Tank System 1500L incl. Mains Water Top Up

- High Capacity rainwater harvesting system
- Shallow dig tank
- Perfect for larger properties

Code: DR150H04

Variants

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<th>Code</th>
<th>Description</th>
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<td>Low Profile Platform Tank System 3000L incl. Mains Water Top Up</td>
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<tr>
<td>DR500H06</td>
<td>Low Profile Platform Tank System 5000L incl. Mains Water Top Up</td>
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Low Profile Platform Tank System 1500L Garden Use Only

- High Capacity rainwater harvesting system
- Shallow dig tank
- Perfect for larger properties

Code: DR150H08

Variants

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Grey Water Filter Diverter Garden Use Only

Code: DR040M01
GRAHAM BRANCH LIST

Aberystwyth
Glan yr afan Ind. Estate
LLanbadarn Fawr
SY23 3JQ
Tel: 01970 626586

Abingdon
Potenger Way
doN Drayton Road
Ladygrove
OX14 5HX
01235 524326

Airdrie
25 Watt Street
ML6 6LZ
Tel: 01236 755755

Andover
Units 1 & 2 Derby Gate
Hopkinson Way
West Portway Industrial Estate
SP10 3LF
Tel: 01264 366584

Ashford
Unit E1/E2
Beaver Business Park
Bearwood
TN23 7SH
Tel: 01263 623355

Ashington
Unit 1, Rotary Parkway
Network Centre
NE63 8QW
Tel: 01670 858381

Aylesbury
Alton House Estate
Gatehouse Way
HP19 8DX
Tel: 01296 395375

Ayr
30-36 Green Street
KAA BBQ
Tel: 01292 611291

Banbury
Marley Way
Southam Road Ind Estate
OX16 2RD
Tel: 01295 250822

Barnsley
Unit 1
Sandy Gate Lane
S71 5AW
Tel: 01226 283597

Barnstaple
Upcott Avenue
Pottington Trading Estate
EX31 1HN
Tel: 01271 371877

Basingstoke
Bell Road
Daneshill East Ind Estate
RG24 8PY
Tel: 01256 841501

Bath
Beckhampton Road
Oldfield Park
BA2 3LW
Tel: 01225 425357

Bathgate
Block 13, Unit 2
Whiteside Industrial Estate
EH48 2RH
Tel: 01506 650080

Bedford
Units 8.9 &10
Kingfisher Business Park
London Road
MK42 0NY
Tel: 01234 360011

Bellshill
Beglarv Street
Bellshill Ind Estate
ML4 3NP
Tel: 01698 841666

Berkham
Tweedside Trading Estate
Tweedmouth
Ord Drive
TD15 2XF
Tel: 01289 306446

Bexhill
Beeching Road
TN39 3LJ
Tel: 01424 215151

Birkenhead
133-141 Chester Street
CH41 5HY
Tel: 0151 647 7070

Blackpool
100 Mowbray Drive
FY3 7UN
Tel: 01253 398217

Bodmin
Dunmere Road
PL31 2ON
Tel: 01208 892644

Bolton
Bridgeman Street
BL3 6BS
Tel: 01204 389500

Bracknell
Unit 5, Bilton Industrial Estate
Lovelace Road
RG12 8YT
Tel: 01344 482029

Bradford
Hillam Road
Off Canal Road
BD2 1QN
Tel: 01274 735831

Brantree
Charter Way Business Park
Charter Way, Century Drive
CM77 8YL
Tel: 01376 348909

Bridlington
Unit 4
Bessingby Industrial Estate
Bessingby Way
YO16 4SJ
Tel: 01622 677441

Brighton
Unit 3a Freshfield Ind Estate
Stevensons Road
Kemptown
BN2 0DF
Tel: 01273 605972

Bristol
Unit 3
Avonside Industrial Estate
Feeder Road
BS2 0SB
Tel: 0117 971 2205

Broxburn
Unit 11, Freskyn Place
East Mains Ind. Estate
EH52 5NF
Tel: 01506 853498

Burton on trent
Unit B3
Sovereign Business Park
Hawkins Lane
DE14 1PD
Tel: 01283 539450

Bury
73-75 Bridge Street
Freetown
BL9 6HH
Tel: 0161 764 1302

Bury St Edmunds
Unit 10, Greyfriars Road
Moreton Hill Industrial Estate
IP32 7DX
Tel: 01284 701250

Caermarfon
Cilan Ind. Estate
Ilanberis Road
LL55 2BD
Tel: 01286 672451

Camberrley
Unit 22
Tuscam Trading Estate
Nelson Way
GU15 3DH
Tel: 01276 671273

Cambridge
Mercers Row
Garic Row Ind Estate
Newmarket Road
CB5 8YH
Tel: 01223 306670

Canterbury
Roper Road
CT2 7RJ
Tel: 01227 451274
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<td>Unit 6, Moores Garden</td>
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www.grahamplumbersmerchant.co.uk

Graham Renewables
Grantham
Unit 6, Harlaxton Road
NG31 7SA
Tel: 01476 594388

Greenock
Unit 1A, Block 3A
Maritime Ind Estate
Arthur Street
PA15 4RT
Tel: 01475 731515

Guildford
Unit 1F
Cathedral Hill Industrial Estate
off Middleton Road
GU2 7YB
Tel: 01483 574878

Halifax
Unit 2, Walnut Business Park
Walnut Street
HX1 5JD
Tel: 01424 934780

Harrogate
Unit 1, Standard Business Park
Clay Street
HG2 8JX
Tel: 01765 883760

Harrow
Unit 22
Christchurch Industrial Estate
Forward Drive
HA3 8NT
Tel: 020 8847 1384

Hastings
591 Sedlescombe Road North
TN37 7PY
Tel: 01424 754261

Haverfordwest
Merlins Bridge Trading Estate
SA61 1XE
Tel: 01437 765231

Hayes
Newport Road
Hayes
UB4 8JX
Tel: 020 8848 5000

Hereford
Unit 2, Canal Road
HR1 2EA
Tel: 01432 360885

High Wycombe
Unit 3, M40 Industrial Estate
Blenheim Road
Cresssex Business Park
HP12 3RS
Tel: 01494 523732

Honiton
Unit 1 Park Court
Devonshire Road
 Heathpark Industrial Estate
EX14 1SB
Tel: 01404 549854

Horsham
Unit 2, Horsham Trading Estate
Foundry Lane
RH13 5PX
Tel: 01403 252444

Hove
Lyon Close
Daviddor Road
BN3 1RX
Tel: 01273 771261

Ipswich
Anglia Parkway North
Anglia Business Park
IP1 5QL
Tel: 01473 238760

Irvine
23-25 Mackintosh Place
South Newmoor Ind. Estate
KA11 4JT
Tel: 01294 212433

Kendal
Mintstreet Road South
LA9 6ND
Tel: 01539 733884

Kettering
Northfield Avenue
NN16 9SL
Tel: 01536 412259

Kings Norton
Savoy Works
Presher Road
Kings Norton
B30 2DR
Tel: 0121 433 3099

Kirkcaldy
Unit 2
Forth Avenue Trading Estate
KY2 5QW
Tel: 01592 646080

Lanark
Units 1-2
Caldwellside Ind. Estate
Young Road, Cleghorn
ML11 7SR
Tel: 01555 661708

Leamington Spa
Rugby Road
CV32 6AR
01926 831907

Leeds
Brown Lane West
LS11 0DN
Tel: 0113 245 1200

Leeds (Seacroft)
Unit 11, The Courtyard
Victoria Road, off Coal Road
LS14 2LB
Tel: 0113 265 7508

Leicester
Blackbird Avenue
LE4 0AD
Tel: 0116 253 1957

Lincoln
Unit 13 Dixon Close
Summingdale Trading Estate
LN5 7UB
Tel: 01522 530277

Liskeard
Moorswater Industrial Estate
PL14 4LN
Tel: 01579 344717

Livingston
Unit 12 Kelvin Square
Houston Industrial Estate
EH5 5PF
Tel: 01506 440239

Louth
Belvoir Road
Fairfield Estate
LN11 0LQ
Tel: 01507 600601

Lowestoft
Unit 1
North Quay Industrial Estate
Barnards Way
NR32 2HD
Tel: 01502 589525

Lytham St Annes
Unit A
Scafell Road
FY8 3HE
Tel: 01253 782090

Macclesfield
Unit 2, Mottram Way
off Queens Avenue
SK10 2DH
Tel: 01625 619513

Maidenhead
Unit 4, Cordwallis Ind. Estate
Clive Road
SL6 7BU
Tel: 01628 780619

 Maidstone
Unit 5, St Peter’s Street
ME16 0SQ
Tel: 01622 673836

Manchester
18 Whitworth Street
Oxenden
M1 2NJ
Tel: 0161 231 9100

Mansfield
The Broadway
Great Central Road
NG18 2RL
Tel: 01623 657718

Maryhill
Unit 1, Block 8
Oakbank Industrial Estate
Maryhill
G20 7LU
Tel: 0141 332 1202

Middlesbrough
Unit 4 Tees Court
Wallis Road
Skippers Lane Ind. Est
TS8 6DX
Tel: 01642 466536

Milton Keynes
Unit F
Denbigh West Business Park
Third Avenue, Bletchley
MK1 1DH
Tel: 01908 377990

Morecambe
Southgate
White Lund Industrial Estate
LA3 3PB
Tel: 01524 68881

Newbury
Unit 4, Newbury Trade Park
Hambridge Road
RG14 5PF
Tel: 01635 881125

Newcastle
5 Penn Street
NE4 7BG
Tel: 0191 256 8389

Newcastle Under Lyme
Enderley Street
ST5 2LE
Tel: 01782 719993

North Shields
Narvik Way
Tyne Tunnel Trading Estate
NE29 7XJ
Tel: 0191 292 1318

Northampton
Unit 6a, Orbital Trade Park
Gladstone Road
NN5 7JT
Tel: 01604 752533

Norwich
21 Vulcan Road South
Holliesdton
NR6 6HA
Tel: 01603 487501

Norwich (Cringleford)
Newmarket Road
Cringleford
NR4 6UE
Tel: 01603 503744

Nottingham
Leen Gate, Gregory Street
Lenton
NG7 2PN
Tel: 0115 978 1255

Oxford
Unit 3 & 4 Driftway Centre
Horsemarch Industrial Estate
Pony Road, Cowley
OX4 2RD
Tel: 01865 749 336

The Graham Guide to Renewables
# MANUFACTURERS CONTACTS

<table>
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<tr>
<th>Manufacturer</th>
<th>Contact</th>
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<td>ACV</td>
<td>01382 280100</td>
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<tr>
<td>Dimplex</td>
<td>0844 8793587</td>
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<td>01388 720228</td>
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<td>01380 736920</td>
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<td>0121 328 9150</td>
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<td>0208 318 0957</td>
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