

The UK's Largest Independent **Supplier of Heat Pumps** 













www.gogeothermal.co.uk

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# Introduction to Go Geothermal

The business evolved with the owners having a vision and belief that renewable energy (in particular ground source) has a place in the UK as a viable energy resource. Go Geothermal Ltd champions the technology believing in its contribution to CO<sup>2</sup> reduction and replacing expensive fossil fuels regardless of grants!

Go Geothermal are the true embodiment of the one stop shop for all things Ground Source and to complement our offering we also stock and distribute products for Air Source, Biomass, Under Floor Heating and many other renewable technologies

The entire offering from Go Geothermal has evolved from working closely with our customers. Owner operated, proudly independent and not bound by the red tape of large multi nationals allows us to hold significant stocks and manage product ranges as we see fit enabling us to provide a first class service.

With interest and demand in Ground Source growing fast it is imperative that Heat Pump manufacturers and installers alike have a dependable source for advice and specialist products. To this end we continually look for innovative and market leading products which is the cornerstone of our business.

All this but with a firm commitment to source within the UK wherever possible, but if not then Europe. In our years of trading we have never exceeded more than 2% of our spend out with this criteria. A clear practical demonstration of our values to ensure ethical sources & minimising our carbon footprint.

This brochure is merely a flavour of the range you can expect to find available at Go Geothermal. The online document is continually updated and as such we ask you to regularly visit our website.

The true test of the value of what we offer will always be judged by you the reader (customer) we look forward to being of service to you.

Go Geothermal – The Source for Ground, Water & Air Source

Established in 2006

www.gogeothermal.co.uk

## **Ground & Air Source Heat Pumps**

#### **Ground & Air Source Heat Pumps**

At the heart of our offering Go Geothermal has both Ground and Air Source units from 3kW to 1MW demand. Having played a major part in the UK Heat Pump industry since 2006, we have chosen carefully the brands we have allied ourselves with.

Having been recommended as the specialist distributor of Heat Pump components from the technical schools of OEM's, we are now pleased to have established an equally impressive reputation with the supply of Heat Pumps.

We have forged strong links with Stiebel Eltron, Vaillant, IVT & Mitsubishi, consistently in the top 4 brands in the UK & mainland Europe.

Whether you are considering the first install or have been installing for years, Go Geothermal has the full technical knowledge and brand support in heat pumps to ensure your business has a dependable "Best in Class" offering.



## **Air Source Heat Pumps**

#### Stiebel Eltron

The WPL inverter-driven air to water heat pump design offers many benefits for both new build and modernisation projects. As an outdoor installation, the appliance requires minimal space indoors and can be sited even in densely built-up areas, due to exceptionally quiet operation. Thanks to the high quality of the individual parts, these models reach an output level that enables flow temperatures of up to +65 °C to be achieved. Quick installation is ensured by the hydraulic connection and straightforward connection concept. In short, this is an appliance designed to provide an outstanding level of convenience all round. Furthermore, the heat pumps can be combined with a variety of DHW cylinders and buffer tanks. Available from 4kW to 13kW.

Both Ground and Air source units from Stiebel Eltron come with a FREE ISG Web Interface (Internet Service Gateway) – Allowing communication with your heat pump remotely via a Smartphone Web app and also allows communication with the Stiebel Eltron Customer Service Centre.

Stiebel Eltrons GS and AS Heat Pump packs both come with a seven year warranty as standard.



#### Vaillant

aroTHERM is Vaillant's second generation air-to-water heat pump range, developed in line with the exacting standards and precision engineering you would expect when you choose Vaillant. The pump harnesses naturally renewable resources, so it saves money on your fuel bills and reduces your carbon footprint. Available from 5kW to 15kW.

Vaillant GSHPs and ASHPs both come with seven year parts and labour warranty.



## **Ground & Air Source Heat Pumps**

#### **Ground & Air Source Heat Pumps**

#### **IVT (Bosch)**

The IVT AirX is a whole new generation of air source heat pump which sets new standards in terms of efficiency levels and noise abatement. Behind the impressive performance, there are several clever innovations along with five new registered patents. The inverter-driven AirX automatically adjusts heat production for your home's heating demand. When the house needs more heat, the compressor works harder to account for this and vice versa, increasing your savings. The heat pump has a patented defrost cycle in that the fan speed is controlled, and the defrosting – compared to a conventional air source heat pump – works much more efficiently and with less energy consumption. Available from 6kW to 17kW.

Using the IVT Anywhere app, homeowners can monitor the system in real-time and make adjustments to heating or DHW as well diagnose faults.

IVT GSHPs and ASHPs come with a five year warranty as stand and can be extended up to fifteen years.



The Ecodan is the most installed ASHP in the UK to date, part produced in the UK. With a wide range of pre-plumbed cylinders (using plate heat exchangers) and 5th generation controller, simplicity of installation is key to their success. The built-in electrical meter allows easy conformity with MCS. All external units comply with permitted development rights so in most cases there is no planning requirement. Available in 5kW to 14kW outputs.

Mitsubishi Ecodan's come with a three year warranty as standard.



## **Ground Source Heat Pumps**

#### Stiebel Eltron

The new, optimised WPF reaches the elusive output level of up to 5.0 (COP) putting the WPF among the top products in the heat pump market – with user friendliness being another leading feature. Similarly trend-setting is the advanced integration level of the appliance, which ensures safe and speedy installation. The expansion vessels for both the heating and brine sides are pre-fitted, as are the highly efficient circulation pumps for the heating circuit and brine circuit. The WPF heat pump, with heat and electricity meters included as standard, is available in six versions with heating output levels ranging from 4.6kW to 13kW. The WPF cool version also offers a cooling function in addition to DHW and central heating.



## **Ground & Air Source Heat Pumps**

#### **Ground & Air Source Heat Pumps**

Both Ground and Air source units from Stiebel Eltron come with a FREE ISG Web Interface (Internet Service Gateway) – Allows communication with your heat pump remotely via a Smartphone Web app and also allows communication with the Stiebel Eltron Customer Service Centre.

Stiebel Eltron GSHP and ASHP packs both come with a seven year warranty as standard.

#### Vaillant

flexoTHERM is a smart and flexible multi-source heating system that uses renewable heat sources from the ground, water or air. The heat pump come in different sizes of heat output to suit your property, with 5, 8, 11, 15 and 19kW models available. geoTHERM is a quiet, efficient and economical heat pump that significantly reduces heat loss for greater comfort and lower fuel bills. The clear LED display shows how much energy is being extracted from the ground, so you can see how effectively the heat pump is working. It has received a Quiet Mark award which means it's one of the quietest of its type on the market. Available from 3kW to 46kw.

Vaillant GSHPs and ASHPs both come with seven year parts and labour warranty as standard.



Greenline HF

The most installed GSHP in the UK and Sweden, the IVT Greenline HE is equipped with the latest generation of low-energy circulation pumps on both the hot and cold side, meaning that electricity consumption is reduced further, giving you even lower heating costs. The dynamic pump control (DPC) optimises the output to meet the demands of your home, providing greater savings. The Energy Measurement System (ESM) clearly shows on the heat pump display how much energy the heat pump is delivering. Flow temperatures of up to 65°C means that the IVT Greenline HE is an excellent choice for retrofit applications which require a higher flow temperature.

IVT GSHPs are available from 6kW to 22kW for domestic applications (with larger commercial options available).

Using the IVT Anywhere app, homeowners can monitor the system in real-time and make adjustments to heating or DHW as well diagnose faults.

IVT GSHPs and ASHPs come with a five year warranty as standard and can be extended up to fifteen years.





## **Horizontal Collector Pipe**



Manufactured from Virgin Grade Black PE100 High Performance Polyethylene (BS/EN12201)

Go Geothermal offer a "true" geothermal collector pipe:

- Pipe manufactured specifically for heat collection
- Available in coil sizes from 50m to 400 metres

Nominal Size O/D (mm)	SDR Rating	Maximum Operating Pressure	Wall Thickness (mm)	Approx Weight (kg/m)	Lengths Available (metres)
25mm	11	16 Bar	2.3	0.165	100m
32mm	11	16 Bar	2.9	0.274	100m – 200m
40mm	11	16 Bar	3.7	0.434	50m – 250m
40mm	17	10 Bar	2.4	0.282	300m – 400m

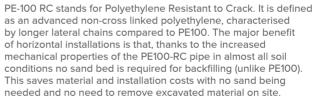


Standard PE100 - Sand Required

#### Horizontal Collector (PE100-RC)

## PE100-RC – THE NEW GENERATION OF GROUND SOURCE PIPE MATERIAL

The improved mechanical properties of PE100-RC and the demand for higher quality products has seen many European countries switch from PE100 to PE100-RC as their ground source pipework of choice.





PE100-RC Pipe – No Sand Required

For the additional cost of PE100-RC pipe, the total installed cost can often be significantly cheaper than standard PE100 backfilled with a sand bedding.

Nominal Size O/D (mm)	SDR Rating	Maximum Operating Pressure	Wall Thickness (mm)	Approx Weight (kg/m)	Lengths Available (metres)
25mm	11	16 bar	2.27	0.165	100m
32mm	11	16 Bar	2.9	0.274	100m – 200m
40mm	11	16 Bar	3.7	0.434	100m – 300m

This product is yet another step in the improvement of the technical quality of Ground Source materials.



#### **Slinkies**



Slinkies in 32mm PE100 SDR11, lengths as follows:

- 30m (200m of 32mm) i.e. requires a 30m trench
- 40m (250m of 32mm)
- 50m (300m of 32mm)

There must be a separation of at least 5 metres between each trench.

## PE-Xa Horizontal Collector / Header Pipes



- Resistant to puncture loads, notches and grooves allowing the pipe to be backfilled with excavated material (PE 100 requires a sand bed), therefore reduction of installation time and costs
- 2. Better thermal efficiency from excavated material compared with a dry sand bed
- 3. Extremely tough and able to handle temperatures up to 95°C
- **4.** Tight bending radii, therefore easier installation as less space and less joints are required

## **Header Pipe**



Manufactured in the UK from Virgin Grade Black PE100 High Performance Polyethylene (BS/EN12201)

Typically installed in pipe sizes 40mm, 50mm & 63mm OD

- 40mm available in 50m increments from 50m to 400m
- 50mm & 63mm available in 25m, 50m & 100m coils
- Larger PE pipe sizes available on request.
- Also available in PE-Xa, please see page 13 for details.



## **Preinsulated Header Pipe**



To avoid thermal interference and to maximise flow temperature from the ground collectors to the Heat Pump it is critical that the header pipes are insulated.

Preinsulated Polyethylene Header pipe for the transport of low temperature Glycol to and from the manifold in Ground Source applications.

- Available in 40mm, 50mm & 63mm (90mm, OD)
- Significantly reduces installation time on site
- Superior heat loss values versus other installation practices
  - Manufactured in Virgin Grade Polyethylene with insulation and corrugated casing

#### **Probes**



Our European sourced Probes are manufactured from Virgin Grade Black PE100-RC High Performance Polyethylene. The pipe is manufactured and tested in accordance with EN12201 / PAS1075, with the Probe Tip and finished product audited and certified by and according to the guideline by SK-Z Würzburg HR 3.26 and complies with the VDI 4640 & VBS 2011 guidelines.

All Probes have metre markings and print line information in accordance with EN12201. A test certificate can be supplied with each individual Probe and unlike "others" our Probes are **individually factory pressure tested.** 

Go Geothermal probes are designed to operate at a minimum of 25 years service life and as such the entire probe is accredited – NOT just the pipe but the probe weld and foot.



## PE100-RC THE NEW GENERATION OF GROUND-SOURCE PIPE MATERIAL

- PE100-RC stands for Polyethylene Resistant to Crack
- The major benefit of PE100-RC probes is the increased point load resistance over PE100
- Point loads are a potential problem as the probe does not sink in a straight line
- PE100-RC performs better on ACT test than PE100 (Accelerated Creep Test which is an artificial pipe ageing method)
- Many European countries have switched from PE100 to PE100-RC as their ground source pipework of choice
- The UK GSHPA has already included PE100-RC as a pipe material in their Vertical Borehole Standards
- All our PE100-RC Probes have SKZ certification (independent test house)

Go Geothermal stock
PE100-RC Probes which
give superior crack
resistance (5x) versus
PE100 Probes giving peace
of mind a huge technical
benefit to the customer.

Nominal Size O/D (mm)	SDR Rating	Maximum Operating Pressure	Wall Thickness (mm)	Approx Weight (kg/m)	Maximum Probe Width (mm)	Lengths Available (metres)
32mm	11	16 Bar	2.9	0.274	83	50m – 150m
40mm	11	16 Bar	3.7	0.434	98	50m – 300m

#### **New: Haka Gerodur Probes**

#### Standard PN16/PN20 Probe



Different drilling depths, geologically difficult zones or different drilling methods – whatever particular challenges you might face on your construction site, the GEROtherm® system will certainly have the perfect solution.

The Geothermal probe PN16 / PN20 made from robust PE100-RC has established itself as the standard in the market and is the first geothermal probe to be certified by the SKZ and KIWA.

#### **Advantages of the Haka Gerodur Standard Probe:**

- Increased protection with a dimple effect design
- Increased wall thickness in the U-bend for greater resistance and stability
- Holding fixture for GEROtherm® weights and a supporting strip for the GEROtherm®-Push (dim. 32 and 40mm)
- Minimised pressure loss due to increased cross section area and welded couplers
- Proven mud container in the U-bend
- Customized length on request available
- £10,000 consequential loss cover per probe



## **Probes for Elevated Temperatures**



The new RT (Raised Temperature) probe offers unmatched security when transferring heat over 40°C, where standard probes start to soften and begin to leak; the RT probe is rated to transfer temperatures up to 95°C.

Not only does using this probe maximise energy efficiency for a heating system when compared to other probes, this also makes it amazingly suitable to use with solar-powered heating systems, and can even work to regenerate the ground moved when installing the probe, further increasing its energy efficiency.

#### **New: Haka Gerodur Probes**

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#### **REX Probe**

The diffusion-tight GEROtherm® REX geothermal probe prevents gaseous substances from penetrating into the heat carrier. GEROtherm® REX thereby guarantees the correct operation of the heat pump and protects it against damage from degassing.

The gas is absorbed by the liquid (heat carrier) and is transported to the heat pump by the circulation of the liquid. Pressure is reduced by the difference in depth in the geothermal probe, which allows the gases to degas. The gas bubbles collect at the highest part of the primary circuit. This generally takes place in the heat pump, which can result in serious impairment of operation of the heat pump and also irreparable damage to it.

Use of the diffusion-tight GEROtherm® REX geothermal probe prevents the penetration of gaseous substances. The core pipe, which carries the medium, is made of state-of-the-art crack-resistant PE100-RC and is SKZ HR3.26-certified.

#### **FLUX Probe**



The new pressure-resistant GEROtherm® FLUX geothermal probe is now available for drilling depths of up to 410 metres for difficult geological conditions and deep boreholes.

The GEROtherm® FLUX geothermal probe is a full-plastic solution, and is thus corrosion-resistant with a service life of over 50 years in compliance with SIA 384/6.

#### Advantages of the Haka Gerodur FLUX Probe:

- The pressure loss in operation compared to a PN20 geothermal probe is significantly reduced
- Greater safety thanks to internal pressure resistance up to a depth of 320 metres
- Improved buckling pressure resistance offers benefits when using heavier or more conductive grouting material

#### **New: Haka Gerodur Probes**



#### **VARIO Probe**

The newly developed GEROtherm® VARIO geothermal probe can be supplied for drilling depths of up to 250 metres.

The optimised and patented GEROtherm® VARIO geothermal probe is an enhancement of the PN16 or PN20 probe. It offers major benefits over these two solutions:

- The hydraulic pressure drop is significantly lower than with the existing geothermal probe.
- Internal pressure resistance is guaranteed in the lower section of the drill hole.

These benefits are achieved by production of a conical geothermal probe pipe – with a reinforced wall thickness in the lower section of the geothermal probe.

GEROtherm® VARIO geothermal probes, respond to the latest trends in the use of geothermal energy. The quality products provide a high level of safety and offer enhanced energy efficiency.

#### PF-Xa Probe



The Rehau PE-Xa probes, where only the ultimate solution will suffice. Extremely tough and able to handle temperatures up to 95°C (perfect for excess heat storage such as solar – an increasingly required feature of new builds). Has a roughened outer surface giving improved contact between Probe and Grout / Backfill material.

Such is the strength and durability of the PE-Xa probes we are able to offer a £10,000 consequential loss per PE-Xa probe installed. Contact us for more details.

We also offer RAUGEO HPR high pressure deep probes up to a staggering 800m!



Raugeo PE-Xa Probe

#### Advantages of the Raugeo PE-Xa Probe:

- PE-Xa material is not sensitive to notches and grooves
- Simple insertion even into the tightest boreholes
- Constant operating temperatures -40°C to 95°C
- Stable up to temperatures of 95°C, thus the RAUGEO PE-Xa probe can be used for heat storage purposes
- Can be connected by Electrofusion fittings or by REHAU Everloc joint system.
- Crack growth at FNCT (full notch creep test) NO FAILURE
- 32mm Probe (91mm Probe Tip Diameter)
- 40mm Probe (100mm Probe Tip Diameter)

## **Vertical Thermpipe – VTP**



Installation by using a hollow auger drill

# The efficiently smart solution for extracting heat at a restricted drilling depth. Ideal where a high water table exists.

Easy installation by using hollow auger drill or conventional drilling auger with a protection pipe.

- · Ideal for restricted drilling depth
- Ideal for areas with groundwater flow
- High degree of heat extraction (2.5kw from 6m stick - requires 5m<sup>3</sup> groundwater flow per day)
- Quick and easy installation
- Ready to use for direct installation
- · Defined pipe distance of brine pipe
- Pipe connections using Electrofusion couplers
- Standard lengths of 6m and 12m, other dimensions and lengths on request
- No drilling rig required.
- · Can be extended to a water well
- Can be used as drainage for rainwater



Easy connection with electrofusion-couplers



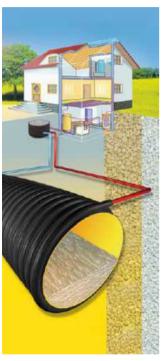
Return pipe inside of VTP

#### Technical data:

Outer diameter VTP:	360mm	260mm		
Length VTP	6m / 12m	6m / 12m		
Length of brine pipe:	60m / 120m	50m 100m		
Brine pipe	d 32mm	d 25mm		
Connections	Spigot PE 100, SDR 11			
Heat extraction:	Depending on kind of soil and groundwater flow			



## **PKS - Thermpipe**



Heat from soil and sewage

Geothermal energy? Well-known. Heat from sewage? You know that already. However, both combined for one technology? A novel plastic spiral pipes allows using the energy potential of soil and sewage simultaneously with one heat pump. Even moderate lengths of pipes can be sufficient to supply modern buildings with energy.

#### General

We are all responsible for using energy sensibly and efficiently, so that generations will benefit from our efforts. By using the PKS-Thermpipe®-System industrial and private buildings can be heated cost-effectively with energy from sewage and geothermal. The pipe system is manufactured from high quality and approved PE 100 material, thus guaranteeing the durability of the whole installation for many decades. PKS spiral pipes have already been used in public sewage systems for many vears and proved their reliability in hundreds of projects.

#### **Description**

Besides offering a secure wastewater discharge, the PKS-Thermpipe®-System additionally provides potential customers the possibility of using thermal energy. As the output of thermal energy depends on various factors (volume and temperature of sewage), the PKS-Thermpipe®-System also uses the surrounding soil of the pipeline zone for the energy supply. The system is independent of daily hydrographs or irregular wastewater discharges. The system (both static and thermal) is designed project-related and orientates itself at the structural conditions as well as the existing energy potential (sewage, thermal energy) and energy supply of the buildings to be supported. The number of PKS-Thermpipes® depends on the amount of energy and the abstraction capacities to be realised from the subsystems "sewage" and "pipeline zone". The PKS-Thermpipes® welded together will be connected to the FRANK PKS manifold chamber with fittings made of PE 100. From there pipes lead to the heat pump in the building and to the energy transformation.

## Reference values for extraction output by the PKS-THERMPIPE system

DN	Q [W/m]	DN	Q [W/m]
300	350	1100	1130
400	450	1200	1220
500	550	1300	1320
600	640	1400	1420
700	740	1500	1520
800	840	1600	1610
900	930	1800	1810
1000	1030	-	-

## **Pipe Decoilers/Dispensers**



Our Spinning Jenni can accommodate most sizes and lengths of horizontal collector pipe and geothermal probes.

The adjustable frame enables the installer to easily dispense and recoil if necessary. Assembly takes approximately 5 minutes and will fit easily into a small van when being transported (when dissembled).

#### The advantages of our Decoiler are:

- Made from Steel Gives superior strength
- Controlled dispensing of the pipe (reduced likelihood of kinking)
- Galvanised for long life
- Adjustable to be versatile
- Easy to assemble / transport



## **Energy Piles**

Energy piles provide a cost-effective alternative to probes if the building is already including foundation piles as no extra drilling needs to be carried out. Piles are typically between 10–20m deep, depending on site conditions. Ground-source pipework can simply be integrated into the pile with cable ties.

PE-Xa is ideal for energy piles as the tight bending radius of PE-Xa removes the need for joints in the pile, therefore eliminating any potential leakages.







Vertical zig-zag

U Pattern pipe laying



## Thermally Enhanced Bentonite – HeatSeal

## Thermally Enhanced Bentonite - HeatSeal



Offering 2.15 w/mk performance!

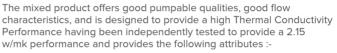
Totally UK sourced & manufactured product

Product verified by an independent UK based test house

A blend of quality assured raw materials used in conventional Civil Engineering applications, specifically formulated for use in Geothermal Heat Pump Grouting Technologies. Offers ease of mixing, combined with low shrinkage and excellent sealing.

Once mixed with water it remains slightly soft and non-setting, thus insuring continued flexibility to cope with any ground movement and maintain contact between the ground and probes.

#### **Performance**





- UK produced low carbon footprint
- Non setting
- · Single bag product eliminates on site blending
- Easy to mix
- Consistent/easy pumping performance and flow
- · High thermal conductivity
- Low permeability 3.5 x 10–11 m/sec
- Supplied in 25kg bags

The product is supplied in a dry powder form. We provide you with a single bag solution ensuring accuracy in material usage with each bag requiring only the addition of water.

Used by leading edge companies this Thermally Enhanced Grout provides excellent Thermal Conductivity specifically engineered for Ground Source and gives excellent pumpability.

Some people favour geothermal grouts with cement content. We avoid this because of the risk that future ground movement or drying out of a rigid pile of grout could lead to the double-whammy of:

a) Loss of contact between the ground formation and the grout and or the grout and the loops and hence total break of conductivity.

b) Contaminated surface water running down the gap between the formation and the rigid pile.

#### **Proven Quality**

For a copy of an independent 3rd Party Thermal Conductivity Test on our HeatSeal product please give us a call.



#### **Modular Manifold Solutions**



Complete 2 way manifold (Flow and Return Leg shown)



3 Way Manifold (without isolation valves)

Endorsed by leading Heat Pump manufacturers our modular reinforced plastic manifolds remain ever popular. Modular design, self-sealing and simple to install on site, these versatile modular manifolds are ideally suited for installation in Plant Rooms, utility rooms or in purpose built chambers.

#### Basic unit consists of:

- Fill/Bleed Points (½")
- 40mm PE spigot for Header Pipe / Heat Pump connection
- Mounting brackets
- Isolation Valves (Flow & Return) or 40mm PE spigot outlet
- Each outlet comes complete with Flowmeters (Variable) 8 to 32L/min and Isolation valves
- 40mm PE Spigot suitable for Electrofusion and Compression Fittings (also suitable for 25mm and 32mm collector pipe)
- Flow rate of 7.7m<sup>3</sup> per hour

#### Extras:

- Thermometer with immersion sleeve, -20°C to + 40°C
- Pressure Gauge, 0-6 bar

Unlike inferior manifolds, ours are resistant to corrosion and freezing - hence they will not crack. To this end we are so confident in our modular manifolds we now offer a 5 year guarantee; for all removable parts (e.g. ball valves, flowmeters etc.) the warranty period is 2 years. (The warranty is strictly in accordance with Frank GMBH installation instructions)

## Modular Manifold for larger installations / Greater Flow Rates



Frank 3060 Modular Manifold

## Modular Manifold complete with the following features:

- Fill/Bleed Points (1")
- 63mm spigot for Header Pipe / Heat Pump connection
- · Mounting brackets
- Each outlet complete with Flowmeters (Variable)
   5 to 42L/min and Isolation valves
- 40mm PE Spigot suitable for Electrofusion and Compression Fittings (also suitable for 25mm, 32mm and 50mm collector pipe)
- Flow rate of 16m³ per hour
- No special tools required to assemble the manifold

#### **Extras:**

- Thermometer with immersion sleeve, -20°C to + 40°C
- Pressure Gauge, 0-6 bar



## Type L-520/L-540 Chamber



#### Our latest offering:

#### **Square Chamber Manifold**

Offering the following features:

- Compact Design reduced time excavating on site.
- Ball Valve on the Flow legs
- Integral Flow Meters on the Return legs (adjustable)
- Manifold Header OD 63mm c/w 1" filling and bleed valve
- All connections are welded to the chamber wall to ensure its watertight
- Able to handle light traffic loads of 600Kg (Tested to 1,500 Kg)
- Anti Skid Cover perfect for residential & public sector installations
- Lockable Cover
- · Can be supplied with a telescopic section
- Fully Pressure Tested (Test Certificate in each Chamber)
- 63mm Header Pipe connections
- 40mm Flow & Return Ports

The L-540 chamber manifold (2, 3 and 4-way) is even more versatile than standard chamber manifolds as the header pipe connections are fabricated at opposite sides of the chamber. You then simply select and cut away the end caps on the side you wish to use.



#### Dimensions:

Circuits	Width/Length (mm)	Height (mm)
		670 670 670







#### **Chamber Manifolds**

#### Warranty

For all manifolds we offer a warranty period for a maximum of 5 years\*\*. For all removable parts (e.g. ball valves, flowmeters etc.) the warranty period is 2 years\*\*.

\*\* The warranty is strictly in accordance with Frank GMBH installation instructions.

For larger installations we have the following chamber manifolds available:



G FRANK

L-1200 T (up to 16-way)





V-1300 T (up to 24 way)



H-1500 T (up to 40-way)





#### **Chamber Manifolds**



#### **Manifold for High Water Table Locations**

We also offer Chamber Manifolds which are suitable for High Water Table areas. These manifolds come with an oversized base which can be concreted into position, alleviating any risk of damage caused by the high water table putting undue pressure on the manifold spigots during periods of high rain fall.

We hold large stocks of 2-Way to 16-Way chamber manifolds, call us now for delivery tomorrow.

## **Bespoke Manifolds**



These quality engineered bespoke manifolds come with all the features required as standard on a ground source application along with the quality of finish and approvals expected from Go Geothermal Ltd and Frank GmbH.

Please give us a call with your requirements.

- "Submarine" shaped manifold chambers manufactured from large diameter PE pipe (e.g 2.4m diameter as per picture)
- Simple connections to a large collector field (e.g. 400 circuits as per picture)
- Up to 40 Tonne loading possible.
- Available on 2-3 week lead times where applicable







Bespoke Manifolds for plant rooms. We can meet any requirement.



## **Heat Transfer Fluid / Glycol**

#### Kilfrost GEO



#### **User Guidelines:**

As per BSRIA guide BG29/2012 all pipework should be cleaned and sanitised to remove all physical debris and biological growth prior to the installation of a thermal fluid. For added protection, Kilfrost GEO is available pre-diluted with deionised water to the required level of freeze protection.

#### **Monitoring:**

We stock a Thermal Fluid Test Kit which is used to monitor the health of Kilfrost GEO as part of a routine maintenance schedule. In addition, we (via Kilfrost) offer a number of free comprehensive fluid health checks to our customers.

#### Dosage:

The dilution rate depends on the freeze point required by the system.

- Product concentrate should not be diluted below 25% v/v
- Product dilutions >30% v/v will give optimal corrosion and scale protection
- Kilfrost GEO should not be added to systems already containing another brand of heat transfer fluid

## High efficiency, NON-TOXIC alternative to IMPG for closed loop ground and water source heat pumps

Specifically engineered to improve the performance of closed loop ground and water heat pump collectors. Systems using our new GEO product will benefit from lower pressure drops, reduced pumping costs and higher overall efficiency.

When replacing more viscous fluids such as MPG (propylene glycol) or glycerine (refined vegetable extracts) based heat transfer fluids in existing systems with GEO, your customers will benefit from an immediate increase in pumping and heat transfer efficiency, leading to long term energy savings.

- Outperforms MEG, MPG & Ethanol based heat transfer fluids
- Leads to lower system pressure drops
- · Lower pumping costs
- Higher Heat Transfer Efficiency than MEG, Ethanol or MPG
- Protects against corrosion and scaling
- Classified as non-hazardous according to CLP/REACH
- Superior environmental profile
- Free from nitrates, nitrites, borates,
  - heavy metals and phosphates
- Created to Improve MIS 3005 Compliant Collector Design

#### **Viscosity Comparison:**

Kilfrost GEO has been engineered to reduce pressure drops, reduce pumping costs and increase the hydraulic efficiency of closed loop ground and water source heat pumps.

Supplied in 20 litre tubs or 1000L IBCs.



Freeze Protection					
Freeze point / ° C	Refractive Index				
-10	1.3632				
-15	1.3679				
-20	1.3794				
-30	1.3905				
	Freeze point / ° C -10 -15 -20				

Physical da	ata	
Property	Unit of Measurement	Value
pH		8.5-9.5
Refractive Index	n/a	ca 1.4437
Boiling Point	"C	ca 105
German Water Hazard Classification	n/a	WGK1

## **Heat Transfer Fluid / Glycol**

#### Sentinel R500C Ground Source Heat Transfer Fluid



Sentinel R500 is a blue coloured glycol based liquid. It's specifically designed for use as a highly efficient heat transfer fluid providing frost protection in Ground Source Heat Pump equipment and Ground Loop circuits.

Offering frost protection, exceptional thermal transfer, protection against corrosion and deposits, and resistance to degradation so providing extended fluid life. It also contains an effective biocide that will help to control the growth of bacteria in a sanitised system should it become contaminated.

- · Resistant to degradation
- Biodegradable
- Compatible with Sentinel R700
- Contains corrosion inhibitors for superior protection of system metals
- · Contains a biocide to prevent fouling
- Non-toxic

## **Sentinel R600 Thermal Fluid for Air Source Heat Pumps**



Sentinel R600 is a blue coloured glycol based liquid. It's specifically designed for use as a highly efficient heat transfer fluid providing frost protection in Air Source Heat Pump systems.

As a multi-purpose inhibited thermal fluid concentrate it has the added benefits of preventing corrosion and scale in the Air Source Heat Pump system.

- Easy and quick to dose
- Resistant to degradation
- Biodegradable
- Compatible with heat pump materials
- Compatible with Sentinel R700
- Controls corrosion and scale
- Non-toxic
- Supplied as concentrate in 20 Litre Tubs

# Heat Pump Pre-Commissioning & Maintenance Solutions

#### Kilfrost SF20



#### Dosage:

- For use as a fast acting system sanitiser: 1 litre of SF20 to every 200 litres of system water.
- In systems to be left stagnant for any significant periods of time: 1 Litre SF20 to every 600 Litre of system water.

#### **Contact Time:**

For best results, it is recommended that Kilfrost SF20 is circulated for a minimum of 12-24 hours within systems. As per the user guidelines, the system should first be cleaned of all physical debris before adding Kilfrost SF20.

#### Test and monitoring:

A Kilfrost SF20 Test Kit is available for an onsite evaluation of the biological content of the collector. It can also be used to ensure the correct dosage of SF20 is administered and maintained.

#### Heat Pump Sanitiser and Biocide Solution

Kilfrost SF20 is a stabilised, fast acting, sanitiser and biocide solution, especially formulated for use with Ground Source Heat Pump Systems. Used during pre-commission cleaning of pipework in heating and chilled water systems (as instructed in building regulations BSRIA BG 29/2012 and Building Regs Part L) or to clean and sanitise pre-installed systems already contaminated with biological fouling. The active ingredient in SF20 is a fast acting oxidising biocide which decomposes to environmentally benign substances. These active ingredients are effective against a wide range of microorganisms including legionella bacteria.

- Suitable for pre-commissioning chemical cleaning
- Stabilised fast acting oxidising sanitiser and biocide agent
- Effective against a wide range of microorganisms including Legionella
- Fully biodegradable decomposing into environmentally benign substances
- Supplied in 1 litre tubs

#### **User Guidelines:**

Kilfrost recommends a 2 steps chemical cleaning and sanitising protocol:

CLEANSING: Kilfrost SF10 Cleaning Fluid or SF11 Cleaning and Descaling fluid is circulated and flushed to lift soil and physical debris or scale. ONLY REQUIRED WHEN CLEANING AN EXISTING SYSTEM

2. **SANITISING**: After flushing the cleaning fluid, Kilfrost SF20 should be added and circulated.

#### Safety:

Kilfrost SF20 must not be mixed with other chemicals. Always handle biocides with care and keep out of reach of children.

Supplied in 1 litre tubs.



# Heat Pump Pre-Commissioning & Maintenance Solutions

#### SF20 Test Kit



#### Content:

The SF20 Test Kit for Heat Pump Sanitiser and Biocide Solution contains:

- SF20 test strips (10 ea.)
- Dip slides (5 ea.) 6 months shelf life
- Sample bottle
- Instructions

#### Test Kit For Heat Pump Sanitiser and Biocide Solution

The Kilfrost SF20 Test Kit is an easy-to-use portable field test kit containing the essential test tools to be used by engineers for the correct dosing and monitoring of the SF20 Heat Pump Sanitiser and Biocide Solution on precommissioning ground source heat pump systems.

#### **Testing and monitoring:**

The Kilfrost SF20 Test Kit can be used to detect existing problems with biological growth and, in combination with the Kilfrost SF20 Heat Pump Sanitiser and Biocide Solution, prevent future problems associated with biological fouling. The SF20 Test Kit enables the engineer to apply and maintain the correct dose of Kilfrost SF20 Heat Pump Sanitiser and Biocide Solution in ground source heat pumps. The SF20 test kit can also be used to check for biological activity prior to installation of the system heat transfer fluid.

If SF20 solution is not dosed correctly or not used at all during pre-commissioning the risk of subsequent biological fouling of the thermal fluid or anti-freeze solution that is added will increase. Such fouling can lead to unpleasant smells and, in the worst cases, loss of system efficiency by thermal fluid degradation, microbial induced corrosion and extensive system damage.

Kilfrost offers in depth analysis services.

#### Features and benefits:

- Easy-to-use portable field test kit
- Determines the level of active Kilfrost SF20 content during pre-commission of heat pumps
- Determines the level of biological contamination during pre-commissioning of heat pumps and in the thermal fluid / anti-freeze solution



The Kilfrost SF20 Test Kit allows engineers to test the following:

Test	Method	Readings
Kilfrost SF20 active content	Test Strips	PPM Colour reading
Biological contamination	Dip slides	CFU/ml Visual check
Sampling	Sample bottle	Sample submission to Kilfrost for analysis

# Heat Pump Pre-Commissioning & Maintenance Solutions

#### Sentinel R700 Sanitsier & Biocide



Sanitiser & Biocide for Ground & Air Source Heat Pumps.

Sentinel R700 has a new formulation for 2019 - read below The new R700 Sanitiser & Biocide is a more stable better performing non-peroxide biocide giving the installer and end user greater peace of mind. Still supplied in 1 litre bottles and available from stock.

Typical fill is 1 litre bottle for 300L (new system)

- Pre-treatment steriliser
- Ideal as a system protector if the collector pipes/vertical probes are to be commissioned at a later date to maintain a sterile environment
- Can be added to a system where there exists problems caused by the growth of organisms such as bacteria & fungi.
   Caused typically by the degradation of thermal fluids or blockages in the pipework system causing unpleasant smells and corrosion of heat exchangers & manifolds etc.

#### R700 test kit



The R700 Test Kit is designed to ensure the correct use of Sentinel R700 in Heat Pump Systems.

The new formulation of Sentinel R700 requires a new test kit: revised test kit now available from stock.

The new R700 Test Kit is supplied in a compact, durable plastic case and contains everything required to analyse the system water, both prior to and post application of the R700. This ensures the levels in the system are sufficient before the introduction of the thermal fluid, giving both the installer and the system owner piece of mind.

## **Sentinel R800**



Sentinel R800 is a clear liquid, unique and specifically designed for use as a highly efficient cleaning and flushing fluid in Ground Source Heat Pump equipment and ground loop circuits.

Glycol-based thermal fluids commonly used in such circuits can degrade over time because of the stresses of cycling temperatures and is often accompanied by bacterial attack.

- Provides a clean system for refilling with R500C Thermal Fluid for Ground Source Heat Pump Systems
- Effective within 1 hour of circulation
- Supplied as concentrate in 20 Litre Tubs



# Fluids for Commercial & Domestic Heating Systems / Biomass Systems

#### Freeze Protection - Sentinel X500



Some Biomass boiler systems require protection against freezing as well as protection from scale formation and corrosion. X500 combines the market leading technologies available in X100 inhibitor with a non-toxic antifreeze in one simple to use product.

X500 provides protection against scale and corrosion in all types of indirect heating systems, including those containing aluminium components, whilst preventing freezing.

- · Prevents freezing
- Enhanced scale & corrosion protection
- Protects all system metals

- Prevents pin-holing
- Supplied in 20 litre tubs

**Sentinel X500** should be dosed at a minimum of 20% of total system volume to give frost protection of -8°C. a 30% solution will protect down to -13°C.

## **Central Heating Inhibitor – Sentinel X100**

Formulated as a multipurpose treatment to inhibit corrosion, scale, boiler noise and hydrogen gassing in all types of indirect heating systems including those containing aluminium components. Sentinel X100 is suitable for use in all waters, both hard and soft. The formulation is completely non-toxic.





- Effectively controls scale and corrosion
- · Helps prevent the formation of hydrogen gas
- · Suitable for all metals including aluminium
- Easy to handle Non-toxic and biodegradable
- Concentration is easily checked with a Sentinel Test Kit or a conductivity meter
- Supplied in 1L, 10L and 20 Litre Tubs





We recommend regular use of the Sentinel X100 Test Kit for central heating systems containing Sentinel X100 Inhibitor as it is a versatile treatment intended to control the risk of corrosion and scaling. The Sentinel X100 Test Kit allows you to check that the dosage of Sentinel X100 inside the system is sufficient to provide protection.

## X100 System Check Kit





Sentinel SystemCheck is a water treatment analysis service which provides rapid confirmation to installers, engineers, homeowners and authorities that a central heating system has been correctly cleaned and then protected with Sentinel X100 Inhibitor. It can be used during the commissioning of a new system or an older system following the replacement of any components.

Normal boiler systems do not generally need to be sanitised with R700 because they operate at temperatures well above 60°C and therefore there is a general pasteurisation effect. However many commercial boilers do not run on a regular basis or they are so big that the temp in some parts of the system remains low, e.g. underfloor heating – If you think this is the case then using R700 to sanitise is a wise precaution... if in doubt add R700!

All other Sentinel X Series products available on request

# Fluids for Commercial & Domestic Heating Systems / Biomass Systems

#### **KalGUARD**



Scale on Heat Exchanger

#### Sentinel's Commercial Electrolytic Lime Scale Inhibitor for all Water Heaters.

KalGUARD requires no salt to operate and is an environmentally friendly solution to prevent limescale deposits that saves money through greater energy efficiency, reduced maintenance and enhanced performance of water systems. The technology is listed in the Part L Building Regs Domestic Building Services Compliance Guide.

- Only ONE KalGUARD is needed to protect the whole H&C system
- Independently proven water treatment chemistry
- KalGUARD treatment does not decay with pumping or storage, it permanently protects against limescale
- · WRAS approved
- Delivers value engineering when installed on rising main, CAPEX savings likely with no detriment in performance
- Cleaner taps, showers and valves means bacteria have less places to hide
- Keeps systems clean and protects capital investments
- Where it replaces a brine water softener, it can deliver an ROI in around 12 months.







## 22mm Electrolytic Scale Inhibitor (SESI)



#### Electrolytic Scale Inhibitor for protecting Hot Water Systems

Key Features

- Protects against limescale encrustation
- WRAS approved
- 5 year guarantee
  - Available in 22mm from Stock
- Recommended by the Compliance Guide to Part L1 of the Building Regulations
  - Takes just a few minutes to install

# Fluids for Commercial & Domestic Heating Systems / Biomass Systems



#### **Filling and Flushing Station**



A solid, favoured piece of kit with our professional installers for over 5 years

Go Geothermal have worked closely with leading heat pump manufacturers for many years and one of the many advantages of this is awareness of common issues. One such example is the importance of flushing units up to the task of expelling enough air and the correct equipment being used.

One of the most common issues seen by installers is trapped air in collector systems – Our solution eradicates this problem.

Our solution not only complies with the MIS3005 document requirement it exceeds it. It also ensures correct mixing of heat transfer fluids another major issue with GSHP installs.

Can fill 500m of 40mm Ground Collector Pipe with Glycol in less than 30 minutes.



#### **Application:**

Filling, flushing and venting large scale solar collectors, ground collectors, probes and Underfloor heating systems.

#### Features

- Dry self-priming impeller pump, working pressure max. 5 bar
  - 2 x 3 m supply and return hose 1"
- Sturdy cart with pneumatic tyres
- 120 litre tank
- 90 L/min Flow Rate
- · 2 multifunction valves
- Pressure relief valve
- Comes complete with a standard UK 3 Pin 240V Plug



## **Preinsulated Pipe**

For district heating, heating, biomass and biogas systems.

The ideal solution for transporting hot water with minimal heat loss.

We now offer the superb Rauthermex & Rauvitherm Pre-Insulated pipe. Available in long lengths, depending on pipe size up to 400m.

Pre-Insulated Pipe solutions available in Single & Twin configurations:

#### Rauvitherm - Manufactured in the UK



Having our own Decoiler means we can cut to order and deliver direct from our stores on a 1–2 day Service (AM to most of the UK).

- Available in sizes 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm, 110mm, 125mm, 140mm, 160mm.
- Ideal for transporting hot water with minimal heat loss
- Temperature range -15 °C to +95 °C
- · Supplied cut to specific lengths
- No minimum order charge
- 5 Year Warrantv
- WRAS Approved
- Rauvitherm manufactured in the UK
- Cut to order and delivered on a 1–2 day service (AM Service to most of the UK)

#### **RAUVITHERM**

- Pre-insulated pipe system for short heating distances, small to medium heating networks and heat distribution
- Optimum heat transport with low heat losses
- Longitudinally watertight flexible pipe system with a robust outer sleeve
- Safe sleeve system without intricate screw connections and minimal shrinkage effort

CUT TO ORDER AND DELIVERED ON A 1–2 DAY SERVICE (AM Services to most parts of the UK)







## **Preinsulated Pipe**

#### **Rauthermex**



Rauthermex – With a heat loss of just < 0.024, this product lends itself perfectly to large commercial projects where heat loss needs to be kept to a minimum.

- Available in sizes 20mm, 25mm, 32mm, 40mm, 50mm, 63mm, 75mm, 90mm, 110mm, 125mm, 160mm (DUO available up to and including 75mm)
- Ideal for transporting hot water with minimal heat loss
- Temperature range -15°C to +95°C
- Supplied cut to specific lengths
- No minimum order charge
- 5 Year Warranty
- WRAS Approved



#### **RAUTHERMEX**

- Pre-insulated composite pipe system for large heating distances and distribution networks
- Optimum heat transport with the minimum loss of heat
- Longitudinal pipe system which does not change in length if the temperature fluctuates

#### **REHAU Everloc**



An extensive range of fittings are available to cover applications which include Preinsulated Pipe and Underfloor Heating.

The Rehau Everloc joint has been proven since the 1980's installed all over the world it has many advantages;

- Leak Proof
- Speed of installation
- Over 3/4 billion joints already installed
- Simple tooling makes jointing simple and lends itself to jointing in poor weather conditions
- No bore reduction at joint
- Can be used on internal and external joints (versatile)
- Typical joint time 32mm and below (23 seconds)

Available up to and including 63mm from our warehouse.



## **Preinsulated Pipe**

#### **isoPex**



Authorised Distributor

We offer the superb isoplus Pre-Insulated pipe. Available in long lengths, depending on pipe size up to 250m.

Go Geothermal offers a range of leading brand Pre-Insulated Pipe solutions available in Single & Twin configurations utilising PE-Xa carrier pipes.

- Available in twin sizes (from stock) 25mm, 32mm, 40mm, 50mm, 63mm, 75mm
- Ideal for transporting hot water with minimal heat loss
- Temperature range -15°C to +95°C
- 5 Year Warranty
- Lower pipe-covering heights possible
- RHI Compliant
  - Fittings are bagged as a complete item, which includes compression sleeves



#### **HEAT LOSS SPECIFICATIONS**

Forward and eturn	Pipe system		Series		Length			Total	Total
FI	[-]	[mm]	[-]	[mm]	[m]	[W/mK]	[W/m]	[kW]	[MWh]
Forward	D-18-1	25	Series 2	110	100	0.000	10.1	-	
Return	Pexflex	25	Series 2	110	100	0,022	10,1	3	8,8
Forward	Pexflex	32	Series 1	110	400	0.000	40.0		40.0
Return		32	Series 1	110	100	0,022	13,8	1,4	12,3
Forward		40	Series 1	125	400	n 200	45.4		42.4
Return	Pexflex	40 Series 1 125 100 0,022	0,022	15.4	1,5	13,1			
Forward	5.0	50	Series 1	160		0.000		7272	
Return	Pexflex	50	Series 1	160	100	0,022	14,4	1.4	12,3
Forward	0	63	Series 1	180	400	0.000	17,1	1,7	14,9
Return	Pexflex	63	Series 1	180	100	0,022	17,7	1,7	14,9
otal								7	61.8

Order your Preinsulated pipe today, we'll cut to your desired length and deliver on a 1-2 day service (usually next day AM)

## **Underfloor Heating**

## **Underfloor Heating**









Utilising the latest software Go Geothermal can now offer a 24hr – 48hr turnaround on Underfloor project enquiries.

Full AutoCAD\* design service, Commissioning Details, Zone Requirements plus all electrical documents and schematics – Free of Charge upon receipt of order. \*DWG format plans must be provided.

#### Benefits of the system include:

- PERT, PE-X and MLCP Pipe systems available upon request
- Various pipe sizes ranging from 12mm up to 20mm diameter
- · Product in stock for very quick delivery
- Long Life pressure stability across the temperature range gives a projected pipe life well in excess of 50 years (in accordance with BS7291)
- MLCP pipe pressure rating of 10 bar at 95°C for 50 years (in accordance with BS 7291)
- Low frictional resistance through pipe and fittings results in low noise transition
- WRC listed under the water fittings and bylaws scheme

#### **Controls:**

- A full range of 12V or 240V, both wired and wireless control options available.
- Ranging from dial to more advanced digital thermostats to suit customers' requirements.
- · Controls with internet accessibility available.

#### Floor Constructions:

#### A range of solutions:

- Screed floors Clip Rails or Tacker Staples
- Timber Suspended Floors Heat Plates or Screed Infill
- Overlay Systems Ideal for refurbs of existing buildings



## **Underfloor Heating**

## **Underfloor Heating**

## KEY BENEFITS >>>>

- Low Profile only 15mm increase in floor height
- Ideal for refurbishments, extensions, and conservatories
- Low profile means a fast response time
- High efficiency due to low resistance value
- All floor finishes can be fitted directly on top
- Fast drying time compared to traditional screed









Order your underfloor heating pack today for delivery to site tomorrow.

## **Jaga Radiators**

#### **Heat Emitters**



## UP TO 30% MORE

The better temperature control and the shorter operating periods result in significant energy savings, making your heating system much more economical. With Jaga DBE you can easily switch to any new, environmentally friendly low water temperature system. It's a matter of preparing for the future!

#### Key Advantages of Jaga DBE Heating:

- Rapid response & Controllability
- Comfortable heating
- More constant room temperatures
- Safe surface temperatures
- Excellent temperature distribution
- · Lower lifetime costs
- Ideal for use with Ground/Air Source Heat Pump Systems

## The Jaga DBE Radiator gives up to 300% higher heating output than standard radiators.

## Maximum Efficiency with Low Water Temperature Systems (i.e. Heat Pumps).

The unique combination of the copper-aluminium heat exchanger (standard in every Low-H<sup>2</sup>O radiator) and the powerful DBE technology that has been specially developed for these low water temperatures, gives up to 3 times more heat output than a conventional radiator with the same dimensions.

#### **DBE SAVES ENERGY**

#### **FASTER HEATING**

Due to their high mass, traditional radiators and underfloor heating need a Lot of energy just to warm themselves up. Only when they have heated up sufficiently themselves do they begin to emit heat. Jaga Low-H²O heat exchangers with DBE, limit this warm-up time to an absolute minimum. The heating time is much shorter making heat delivery fast and more efficient. This means that the night-time reduction periods can be extended, saving money and energy.

#### LESS EXCESS HEATING

Is the room approaching the desired temperature? Is the sun suddenly shining in? Traditional radiators stubbornly keep on heating the room, wasting energy. A DBE will react much more quickly, and automatically reduce the he output at the right time. This means that the comfort temperature is under better control.



## **Heat Meters & MMSP**

# For Ground Source & Air Source Heat Pumps, Biomass & Solar applications



Mains Operated

#### RHI Scheme Compliant – MID Approved

- RHI Scheme & MID Compliant Heat Meters
- Sensor Cable MID Approved & Tagged
- Certificate of Conformity Supplied with each Heat Meter
- Third Party Accredited "best in class"
- Same Meter for Heating and Cooling: -20°C +130°C.
- Remote Measuring
- Can be Calibrated for use with Glycol most others cannot
- Same meter for horizontal or vertical pipework
- Full range of flows Qp1.0 (130°C) to Qp400 (130°C)
- No reflection or misdirection of the signals

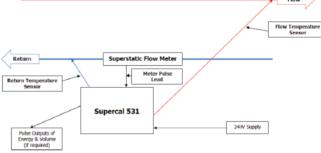
   as with ultrasonic sensors.
- Replaceable sensor head without removing from pipework



Mains & Battery Operated



**Battery Operated** 



Typical Heat Meter Layout

Note: Temperature Sensor Leads Must Not be shortened

### **Heat Meters & MMSP**

### **Metering & Monitoring Servicing Package (MMSP)**

Our Ofgem approved Metering and Monitoring Service Package (MMSP) measures how well an air source heat pump is performing. It uses a wireless temperature sensor, electricity and heat meters and local weather data to provide an Ofgem compliant solution, enabling you to receive MMSP payments in addition to your Domestic RHI payments.

Our MMSP solution can communicate via either broadband or GSM and it works with any air source heat pump; making it perfect whether you are looking to install one heat pump or many as part of an assignment of rights programme.

Our MMSP service is also available with PassivLiving Heat. This provides smart thermostatic control, enabling the homeowner to manage space heating remotely using a smart phone app or any device with a web interface. Our award winning smart thermostat learns the thermal response of a building and uses predicted external temperatures to optimize the performance of the heat pump.



In-depth monitoring of the heat pump



Compatible with all air source heat pump types



Multiple communication options



# **Cylinders**

### **Buffer Tanks/Hot Water Cylinders for Ground/Air Source/Biomass**



We stock a range of Hot Water Cylinders for Ground/ Air Source/Biomass, Traditional Indirect & Direct Hot Water Cylinders and Buffer Tanks, in various sizes and configurations. Available in Mild and Stainless Steel.

We also offer BESPOKE Cylinders made to order including Horizontal. Domestic Hot Water Cylinders and Buffer Cylinders must be considered carefully as part of the Heating and Hot Water system design. Choosing a Cylinder and a Tank that is specially designed to work with the Heat Pump/Biomass Boiler being installed is critical for system efficiency. If space is a premium please contact us to discuss our range of DHW Cylinders with integral Buffer Cylinders.

#### **Hot Water Cylinders for Heat Pumps**

Heat Pump Cylinders are designed to work seamlessly with Heat Pumps to provide an efficient and environmentally friendly way of supplying domestic hot water. Employing a large surface area heat exchanger (coil) to maximise the transfer of heat generated from renewable energy to the stored water, optimising heat pump efficiency and reducing running costs. Available in Unvented and with single or twin coils from 120L to 1500L and beyond. Coil lengths can be configured to your Heat Pump Manufacturer's specification. DO NOT be caught out by the coil length being too short!

#### **Heat Pump Cylinder**

#### Twin Coil Heat Pump Cylidner



### **Cylinders**

### **Buffer Tanks/Hot Water Cylinders for Ground/Air Source/Biomass**

#### Mild Steel / Stainless Steel Direct Buffer Tanks

Buffer Tanks are essentially cylinders that contains a volume of hot water. They are recommended by Heat Pump manufacturers to ensure efficient running of the Heat Pump. This is achieved by presenting the Heat Pump with a large volume of water to heat which reduces the amount of Heat Pump cycling which in turn extends the life of the Heat Pumps compressor and by reducing cycling time reduces running costs. Direct Buffer Stores are heated by the main heat source only (i.e. the Heat Pump) whilst Indirect Buffer Stores enable connections to be made to an additional heat source such as oil or gas (but not solid fuel) as well as the Heat Pump. This is achieved by having a separate coil in the Buffer Store.

Mild or Stainless Steel Buffer Tanks available as Direct or Indirect (1 x coil). Available in sizes 40L to 5000L



# **Cylinders**

### **Buffer Tanks/Hot Water Cylinders for Ground/Air Source/Biomass**

#### **Traditional Hot Water Cylinders**

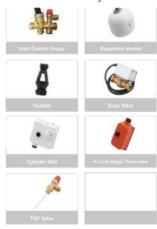
As part of our offering we supply a range of traditional hot water cylinders. Available in Unvented with Single or Twin coils from 90L to 500L. As well as the Indirect cylinders shown above we can also supply them as a Slimline version or Pre-Plumbed. We also offer BESPOKE Cylinders made to order.

#### **Indirect Cylinder**





#### **Twin Solar Cylinder**





### **Water Source**

### **Limnion – Underwater Heat Exchanger**









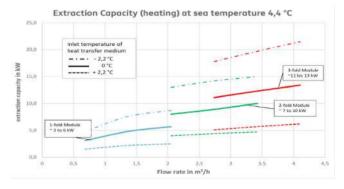
Having exclusive access to Frank GmbH renewable products, we are excited to be able to offer the Limnion here in the UK.

The FRANK water heat exchanger has been designed specifically for generating heat from surface water. The compact, high-efficiency heat exchanger draws the heat energy from the water and provides it to a heat pump. The FRANK water heat exchanger can just as easily be used for cooling purposes. The FRANK heat exchanger and the protective casing are made of environmentally-friendly, high-grade polyethylene.

#### **Features:**

- Large heat exchanger surface
- Modular design with 3 module sizes
- All pipe connections are welded
- · Robust protective casing
- Secure connection by means of welding connection with electro fusion fittings

#### **Technical Data:**



Size:	Height
1-fold module	600 mm
2-fold modules	900 mm
3-fold modules	1200 mm
Max. operating pressure:	3.5 bar
Max. test pressure	5.0 bar
Perm. ambient temperature	-15°C to +40°C
Supply/return pipe connection	d 40 mm, SDR 11

### **Water Source**

### **Lake Weights for Ground Source Collector Pipes**

#### Go Geothermal Lake Weights:

Diameter: 40mm Length: 1150mm Weight: 2.5kg



Our Lake Weights being deployed (once the pipe is filled with Glycol, the pipe will sink)



### **Pond Mats**

Corrosion resistant stainless steel frame complete with a 32mm x 250m Slinky. Easy installation and low cost solution that can be easily weighed down on site.



# Mechanical Ventilation & Heat Recovery



#### **MVHR**



#### Ventilation

Sealed rooms require regular supplies of fresh air. The hourly minimum air change required is 0.4-times the room volume

#### **Energy Consumption**

Ventilation results in the loss of approx. 50% of the heating energy through windows and infiltration. It is just like throwing money out of the window!

#### Air tight buildings

A tight building envelope and closely sealed windows reduce heating bills, but also greatly reduce air change rates.

#### Mould

Lack of ventilation increases the relative humidity indoors. The result is moisture damage and mould growth. Working in partnership with the trusted manufacturer of renewable energy equipment Stiebel Eltron, Go Geothermal can offer full bespoke Mechanical Ventilation & Heat Recovery systems. Full designs are done in conjunction with our partners in Germany and with a range of units available virtually all applications can be catered for.

\*Exclusive to Go Geothermal in 2019 with additional savings if ordered in conjunction with a Stiebel heat pump.

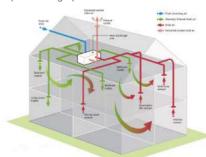
#### Why is ventilation so important?

For practical thermal insulation purposes, nowadays, modern homes are so airtight that virtually no energy is lost. Low energy houses in particular have an airtight building envelope primarily to prevent heat losses. This also prevents any natural air change and makes mechanical ventilation essential.

However, ventilation is also an issue in older homes. As a result of subsequent thermal insulation measures, there is often no longer an adequate supply of outdoor air through gaps and other previously air permeable spots. This creates a conflict of interest between practical thermal insulation and the need for fresh air, which can be resolved with mechanical ventilation systems.

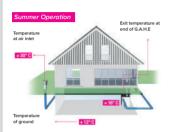
The increasing impermeability of new buildings and modernised residential dwellings in particular, calls for a continuous air change, for example, in order to avoid the growth of mould fungus and damage to the building. However, ventilation via windows is not very practicable as the sole means of ventilation. To ensure an energy efficient and hygienic minimum air change, ventilation via windows would have to occur four to six times a day for approx. 5 minutes each time. Heating would have to be turned off and windows fully open, making this virtually impossible.

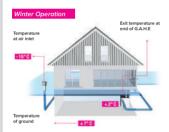
- Budget quotations turned around in 24 hours
- Full bespoke design provided



### Rehau Awadukt

### **Ground-Air Heat Exchanger System for Controlled Ventilation**







Ever improving insulation and air tight construction of buildings means that controlled ventilation is becoming ever more important. The ground-air heat exchanger makes a considerable contribution to this, especially when used in conjunction with a heat recovery unit.

As well as increasing the quality of life within the building, this also provides significant energy savings by using the embodied ground energy to pre-condition the incoming ventilation air. The ground-air heat exchanger takes advantage of the fact that the temperature of the ground, 1.5 to 2m deep, remains a relative constant temperature between  $7^{\circ}\text{C}-12^{\circ}\text{C}$  throughout the year. The incoming air passes through an undergound pipe system to pre-heat it in winter and to pre-cool in summer. Experience shows that a ground-air heat exchanger makes it possible to raise the temperature of air taken in by up to  $9^{\circ}\text{C}$  in winter, and to reduce it by up to  $14^{\circ}\text{C}$ .

#### **AWADUKT Thermo Features and Benefits:**

#### Antimicrobial inner layer AWADUKT

Thermo pipes feature an inner layer unique amongst groundair heat exchanger pipes. This is achieved by a specialist process that incorporates silver particles into the inner layer of the base polymer. The result is that the fresh air inside the system is hygienic, containing virtually no germs.

#### · Solid Wall Polypropylene (PP) pipe

The optimised PP pipe with enhanced conductivity provides excellent heat transfer between the ground and the air, thereby ensuring a high degree of thermal efficiency.

#### • Radon-Proof

Radon is a natural, colourless, odourless radioactive inert gas encountered in rocks and in the ground. Radon diffuses through the ground, dissolves in water and escapes to the atmosphere at the ground surface.

#### · High longitudinal rigidity

The high longitudinal rigidity of AWADUKT Thermo pipes prevents sagging, so that condensation is safely discharged instead of forming puddles at the lowest points. Pipes with inadequate longitudinal rigidity are not to be recommended for ground-air heat exchangers.

#### Inlet Units

Inlet units are also available, the air is passed into the groundair heat exchanger through an air inlet tower. The air is filtered by a fine filter to BS EN 779, eliminating dust and pollen.

### Rehau Awadukt

### **Domestic Applications**









#### 1 Air Inlet Tower

With a range of filters (G4 or F6) for hygienic, dust and pollen free air supply.

#### 2 AWADUKT Thermo Pipe System

- Solid walled PP pipe for optimised heat conductivity
- Antimicrobial inner layer to prevent microbial growth
- High longitudinal rigidity for reliable condensation discharge
- Radon-proof by virtue of special sealing system
- Wide range of fittings.

#### 3 Condensation discharge

This is installed towards the end of the system to remove any condensation formed during the heat transfer.

- 4 Mechanical Ventilation & Heat recovery unit
- 5 Distribution of fresh filtered air
- 6 Extraction of warm, stale air
- 7 Ring Seal



#### Air-Volt Plus - Solar Aerovoltaic

### The New Generation of PV Panels



With its innovative double-sided effect and aerothermal boosters, AIR-VOLT PLUS is a true revolution in the world of renewable energy. The system offers an unparalleled experience in everyday life with even more comfort and savings!

When a photovoltaic panel produces electricity, it actually only uses 20% of the solar energy available to it. It abandons 60% of it, which is heat and the remaining 20% is lost through reflection. But thanks to its innovative air recovery, the R-VOLT PLUS aerovoltaic system uses the 60% of energy which is normally lost! This makes it the most powerful solar panel in the world, with unrivalled output of 900 W (250 Wp + 650 Wth)!

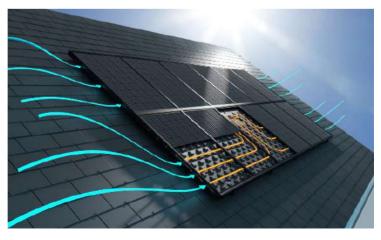
On the front, the panels convert the sun's rays into electricity in the same way conventional photovoltaic panels do. On the back the air is captured and heated between the panel and a well-insulated backing sheet before being aspirated, filtered and circulated around the home. This process can save home owners up to 50% on their heating bill on top of the benefits normally associated with solar panels.



#### **Advantages**

- Easy to install: Full kits supplied incl ducting, flashing, vents, etc...
- Easy to sell: Web or application based simulator for simple estimates
- Available in-roof (BIPV) or on roof
- · Generates electricity, heating and 95% filtrated air
- Summer night time cooling
- 20 Year Panel product Guarantee
- · Modules and mounting kit MCS accredited





#### **Smart Air - Remote Control and Monitoring**



The system can be controlled remotely for even more comfort and added efficiency. **SMART-AIR** is a smartphone, tablet and web application tool for managing and monitoring the performance of the Systovi Aerovoltaic solution.

Live data is captured and displayed for a detailed analysis of the production of heat and electricity as well as the energy consumption of the home. Settings are optimised thanks to the automatic connection to a local internet weather service. In many cases the existing heating system can also be controlled with SMART-AIR.

#### **Advantages**

- Maximise efficiency with remote controls via app or web interface
  - View energy production and consumption in real time (electricity, heating, DHW, cooling)
- · View historical data
- Compatible with many existing heating controls

### Store-H - Solar Heat Battery



The STORE-H battery works in perfect synergy with AIR-VOLT PLUS solar panels. At the same time hot air is being blown into the home, part of the heat is channelled into storage, while the temperature is kept comfortably warm.

STORE-H is a hot air battery consisting of several plates encapsulating revolutionary Phase Change Material (PCM). This material's state alters according to the temperature. When it gets hot, the crystals contained in the aluminium plates melts and absorbs the solar thermal energy. The battery is charged. When the temperature cools, this same substance solidifies and progressively releases the stored heat.

#### **Advantages**

- Up to 5hrs heating after the panels 'switch off'
- Eco friendly materials, no harmful & dangerous chemicals
- Patented battery, 15 year guarantee, 30 year life expectancy
- Can easily be retrofitted to existing AIR-VOLT PLUS systems
- Charge status can be monitored with SMART-AIR

#### **Solar Thermal**



#### **Solar Thermal Panels**

Vaillant auroTHERM VFK 145 solar collectors are available invertical and horizontal options, which are fully approved to EN 12975. The auroTHERM flat plate collector comes with the added benefit of a guarantee and nationwide back-up with dedicated solar support provided by Vaillant Service.

#### **Key Features and Benefits:**

- Push-fit hydraulic connections
- Does not require any special tools when fitting, reducing installation time
- Complete system solution offering
- Compatible with the full range of Vaillant products including intelligent controls, heat pumps, boilers and cylinders
- Black frameless design in both horizontal and vertical collector options
- Ensures maximum use of collector area resulting in high performance and efficiency
- Structured solar glass 3.2mm thick with 91% solar transmission
- Maximising solar gain and efficiency
- Flexible siting options
- On-roof, in-roof or flat roof options are available.
- Mounting bracket options are available to suit various roof tile types
- · High efficiency plate technology
- Features 40mm rear insulation and a low profile collector which is only 80mm thick
- Laser precision aluminium/copper welding
- High quality manufacturing and precision engineering



### **Sentinel R100 Heat Transfer Fluid for Solar Heating Systems**



#### **Features and Benefits:**

- Ready to use concentration no need for dilution
- Effective frost protection down to minus 25°C
- Resistant to degradation.
- Provides effective corrosion protection for system metals.
- Non-toxic and biodegradable
- Improved cost of operation of the solar system
- Supplied in 20 litre tubs

### **Sentinel R200 – Solar Cleaning Solution**



#### **Features and Benefits:**

- Ready to use no need for dilution
- Removes sludge and deposits from degraded thermal fluid
- Cleans with only 20 minutes circulation
- Effective at low or room temperature
- · Can be used with flushing machine
- None foaming and easy disposal
- Compatible with the construction materials of the solar system
- · Supplied in 20 litre tubs



For our Solar/Heat Transfer Fluid Filling Stations please see page 29.

Please note all of our Heat Transfer Fluids and Sanitiser/Biocides are made in the UK.

### **Cooling Systems**

#### **REHAU Coolboard**



Chilled ceiling systems offer the opportunity to cool offices, or other occupied spaces, efficiently and effectively.

REHAU CoolBoard consists of a double thickness gypsum board with routed grooves to carry 10mm RAUTHERM S PE-Xa pipe work. The panels are supplied pre-assembled with the pipe, along with an extensive range of fittings to secure the boards to the suspended ceiling hardware.

Pipe tails from the boards are connected into a manifold system to the supply of the chilled water. The complete system can be supplied using high quality RAUTHERM S PE-Xa pipework and REHAU EVERLOC<sup>TM</sup> fittings, ensuring no leaks - ever.

Where high performance cooling is required, special high performance panels are available, with improved themal conductivity properties. Unlike chilled beams and other ceiling systems, REHAU CoolBoard fits seamlessly with standard Gypsum ceiling panels in any suspended ceiling application. Although you may not be able to see the chilled ceiling panels from the standard panels, you will feel their effect. The cold feed can be provided by a small chiller unit.







REHAU Coolboard



### **Pipe Fittings**

#### **Fittings**

We stock a large range of Black Electrofusion, Compression and Transition fittings (i.e. PE to copper etc.). Electrofusion fittings manufactured in accordance with EN12201 / EN1555 and have a 4.0mm or 4.7mm pin suitable for any standard Electrofusion control box.









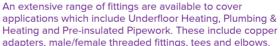




Sizes held in stock are 25mm, 32mm, 40mm, 50mm, 63mm, 90mm, 110mm and 125mm. Other sizes can be obtained within 24 hours.

#### **Rehau Everloc Joints**





The Rehau Everloc joint has been proven since the 1980's installed all over the world it has many advantages;



- Speed of installation
- Over 3/4 billion leak free joints already installed
- Simple tooling makes jointing simple and lends itself to jointing in poor weather conditions
- · No bore reduction at joint
- Can be used on internal and external joints (versatile)
- Typical joint time for 32mm and below (23 seconds)

Available up to and including 63mm from our warehouse.









### **Ancillaries**



### **Magnetic System Filters**

Many untreated or improperly treated heating systems suffer from an accumulation of debris, collectively referred to as sludge deposits. Made up of corrosion products, water hardness flakes and installation or maintenance debris, this sludge can cause premature equipment failure or block/restrict system flow – directly reducing system life, efficiency and effectiveness.

The SpiroTrap MB3 is an extremely effective and powerful dirt separator for removing both magnetic and non-magnetic dirt particles from central heating systems.

- Detachable powerful magnet 20 Year Guarantee
- Rotating connector to enabling the unit to be installed on horizontal, vertical and even diagonal pipes

Servicing takes just 30 seconds (emptying of deposits). The removal of parts is NOT required.



#### **Air Eliminators**

Air – in other words Oxygen – once present in a heating system, can cause blocks in radiators and pipe work due to the forming of large air pockets. The presence of oxygen can also cause corrosion of system components.

The SpiroVent RV2 automatically deaerates the system water and vents air as it circulates the heating system, leaving the system totally air free.

- Removes circulating air and micro bubbles effectively
  - vely 20 Year Guarantee
- Rotating connector to enabling the unit to be installed on horizontal, vertical and even diagonal pipes



#### Flow Limiters/Meters

Brass balancing valve c/w multi-turn valve for accurate flow setting and shut-off. The flow meter is made from impact resistant and temperature stable plastic, has a rotatable flow meter permanently indicating the actual flow rate.

Available in sizes (Female BSP):

1"FBSP - 5-50 lpm

1.5"FBSP - 15-120 lpm

2" FBSP - 25-200 lpm

Please note this item should not be used as an external manifold replacement as their use in this way is not endorsed by the leading heat pump manufacturers.





#### **Ball Valves**

Double Spigot (Electrofusion) and Compression Ball Valves.

Available in various sizes, please call for more details.

### **Ancillaries**

### **Underground Warning Tape**



Our Underground Warning Tape comes in two varieties, detectable and non detectable.



The detectable tape is 100m long and 200mm wide, manufactured from high strength coloured rot resistant homopolymer polypropylene plastic mesh incorporating a traceable stainless steel wire.

The non detectable warning tape is 365m long and 150mm wide, made from high quality plastic which is free from PVC and is Acid/Alkali resistant.

In line with best practice, GSHP guidelines state Marker Tape must be used in every ground source installation – FOR MINIMAL COST HUGE REPAIR BILLS CAN BE AVOIDED.



### **Pipe insulation**



Class O rated, it can reduce energy losses by up to 87%. It also prevents condensation and has built-in Anti-Microbial Protection which reduces mould and bacteria growth.

Excellent for insulating flow and return pipes when in close proximity, and for use where collector pipes are less than 1m below the surface. Also for use in plant rooms.

A large range of sizes are kept in stock.

- Closed cell structure provides built-in condensation control
- Reduces energy losses by up to 87%
- Water vapour resistance ≥ 7,000
- Self Seal Comes with adhesive tape already applied
  - Just peel off the strips and press together
- Class O Fire Protection
- Thermal conductivity o  $^{\circ}$ C  $\leq$  0.034 W/(m.K)
- Built-in Microban® antimicrobial protection reduces mould and bacteria growth

#### Refractometer



Special features make measurement easy and reliable.

- · Anti-roll supports
- High precision, clear scale
- Zero adjust with lock
- Push on prism flap
- Serial numbered
- Certificate of Conformity & Calibrated
- Manufactured in the UK.



### **Electrofusion Control Units / Ancillaries**

#### **Electrofusion Control Units**



It will display fault finding and calibration information from the menu options to allow errors to be quickly diagnosed. Programmable service intervals can be set to make sure the control unit remains in good working order. Our British Manufactured Electrofusion Control Unit is manual or fully automatic and designed to fuse bar coded PE and PP pressure fittings in the range of 8v to 48v and pipe sizes up to 400mm.

With a data log memory in excess of 2000 welds and the ability to download to a USB it has been designed with simplicity of use in mind. Its fast user interface allows fittings to be welded quickly and reliably.

Designed for universal use it does not limit the user by "brand specific fittings" (units particularly from Scandinavia are chipped to only work with a sole make of fitting) Our Electrofusion Control Unit is compatible with all leading brands of UK and European fittings offering peace of mind when sourcing electrofusion product.

The unit is built in a strong lightweight metal housing to protect it from damage and the compact design makes it easy to transport. It is fully sealed and waterproof to IP65 and is suitable for use with portable generators and is electrically protected to Class 1.

It has a simple button pad that allows quick navigation through the operating menus. Information is shown on a bright four line display that can easily be read in all lighting conditions.

An additional feature is that the lead adaptors have been designed to accept both 4.7mm UK and 4mm European pins.





### **Electrofusion Tooling**



- Electrofusion Weld Wipes to clean pipe ends
- Pipe Cutters (25mm 63mm) to cut pipe ends square
- Pipe Scraper to remove oxidized layer from the pipe
- Alignment Clamp (25mm 63mm) to secure pipe and fittings during the welding process

Not having these basic tools may result in electrofusion joint failures.

### **Electrofusion Control Units / Ancillaries**

#### **Portable Electrofusion Control Units**



We now offer a hand-held version of our Electrofusion Control Unit. The Portable Unit is manual or fully automatic and designed to fuse bar coded PE and PP pressure fittings in the range of 8v to 48v and pipe sizes up to 200mm.

With a data log memory in excess of 2000 welds and the ability to download to a USB it has been designed with simplicity of use in mind. Its fast user interface allows fittings to be welded quickly and reliably, and its portability makes it suitable for house-connection market, geothermal work, smaller-diameter water pipe joining and areas with sparse access to electricity. Available in an over-the-shoulder bag or stainless steel frame.



Operating Modes: Manual, Barcode Welding Voltage: 39.5V (8-48V)

Welding Current: 1-50A Welding Time: 1-1500 seconds

Supply Voltage: 115  $\pm 15\%$  110V (40-60Hz)  $\,-\,$  230  $\pm 15\%$  230V (40-60Hz)

Supply Current: 1-25A (115V)  $\,-\,$  1-12A (230V)

Supply Power: 3000W Weight (ATS180): 11kg

Weight (ATS180 SS Frame): 12kg Size (ATS180): 30 x 21 x 26cm

Size (ATS180 SS Frame):  $33 \times 25 \times 34$ cm

Operating Temp: -15C to +50C





### Air Source Heat Pump Ancillaries

### Mounting and Hydraulic Components for Air Source Heat Pumps

#### Floor Mounting



Anti Vibration Rubber Mounting Feet for ASHP. Can also be supplied with a light weight mounting base.

#### **Description:**

600mm Wide x 100mm High Rubber Mounting Feet

600mm Wide x 100mm High Rubber Mounting Feet c/w Base

#### Flexible Hoses



Stainless Steel Flexible Hoses for connection to the ASHP

- 11/4" FBSP Brass Right Angled Connection to the Heat Pump
- 28mm Copper Compression Fitting
- Protected with 20mm Weatherproof High Grade Insulation
- 750mm Long

#### **Motorised Diverter Valve**

28mm CU 3 Port Motorized Diverter Valve. Fitted on the flow side is used to divert the output from the Heat Pump to either Hot Water or Space Heating.



#### Wall Mounted Brackets

For ASHP - Available in 800mm & 1100mm versions



#### **System Strainer**

28mm CU Brass "Y" Strainer. Fits on the return side after the isolation valves removing impurities from the system.



#### System Filter

22mm/28mm CU Magnetic Filter System. Fitted on the return side and is installed to remove any impurities from the system. (See Ancillaries for more details).



#### **Air Eliminator**

The SpiroVent RV2 automatically deaerates the system water and vents air as it circulates the heating system, leaving the system totally air free. (See Ancillaries for more details)



#### **ASHP Cages**

Protect ASHPs from accidental damage or vandalism with our ASHP Cages. They can be wall or floor mounted.



Can't see what you're looking for?

Give us a call on 01388 720228

### **Stock Holding**

### Over £500k Worth of Stock Held at Our Headquarters



Go Geothermal Ltd has been stocking and supplying all types of Ground Source & Air Source products to the trade for many years and is well established within the UK as a leading technical distributor by all the main brands of Heat Pump. We offer a friendly and knowledgeable sales service to Trade Installers, to allow our clients to single-source all of their renewables requirements.

In April 2010 we moved into impressive new a warehousing facility allowing 13,000 sqft. of warehouse space in County Durham; hugely improving our logistics capabilities.



As an owner operated company Go Geothermal Ltd can boast of a trading history dating back 13 years and the current product range offers customers the chance to purchase standard and bespoke solutions along with the quality ancillaries for which we are renowned.

As you can see from the photos we invest heavily in our stockholding and to date carry circa £500k stock at any one time.

Products held include; Collector Pipe, Borehole Probes, Preinsulated Pipe, Header Pipe, Manifolds, Glycol, Water Treatment Fluids, Filling/Flushing Stations, DHW Cylinders, Heat Meters, Pipe Decoilers, Aerovoltaic Solar Panels, Fittings (i.e. Electrofusion, Rehau Everloc, Compression), Magnetic System Filters, Air Eliminators, Electrofusion Control Units, Refractometers, Scale Inhibitors, Feet and Hoses for Air Source Heat Pumps etc.





We are here to help! Our sales team is dedicated to customer service and offers technical advice to ensure the correct selection of product. We pride ourselves on our responsive and flexible approach to meeting our clients' various needs and endeavour to maintain a close working relationship with those customers.

### www.gogeothermal.co.uk







# **Services**

In addition to our products here at Go Geothermal Ltd we are able to offer a carefully vetted list of partners built up over the years that can support your project in areas such as:

- Microgeneration Certification Scheme (MCS) Accreditation Courses
- · Consultation Services
- Borehole Drilling
- Complete Design and Installation Services (Critical to the success of any project)
- Thermal Response Testing
- Horizontal Collector and Borefield Field Design
- · On site welding to City & Guilds Standard
- · Accredited Heat Loss Reports

Please contact us and we'll be glad to put you in touch with our partners.

Call us on 01388 720228 or email sales@gogeothermal.co.uk or visit us at www.gogeothermal.co.uk















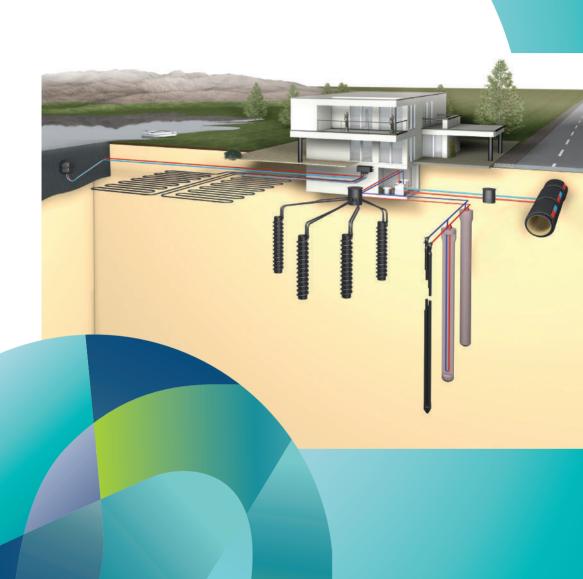














# The UK's Largest Independent Supplier of Heat Pumps

#### Headquarters

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#### **Midlands Commercial Office**

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