



CLADE

UK manufacturer of natural
refrigerant heat pumps for
commercial and industrial use

- + 100% natural refrigerants for the lowest carbon footprint
- + Naturally quieter than the competition
- + Full design, commissioning and service support available
- + Proven heating designs for all building types
- + Finance options for zero capital cost
- + Grid flexibility ready controls
- + Designed and manufactured in the UK



Clade Standard Products

Clade use only natural refrigerants in our heat pumps. These are the future of heating with the lowest climate impact. Natural refrigerants also deliver high temperatures, high efficiencies and are future proofed against regulatory changes.

Choosing natural refrigerants is a no regret choice!



Acer, Birch and Elm



Rowan, Maple and Yew

Model	Capacity (kW) at -5°C ambient							
	50kW	75kW	100kW	200kW	300kW	400kW	500kW	
Acer	70°C							CO2
Maple				70°C				CO2
Birch	60°C							R290
Rowan				60°C				R290
Elm	80°C							R290
Yew				80°C				R290

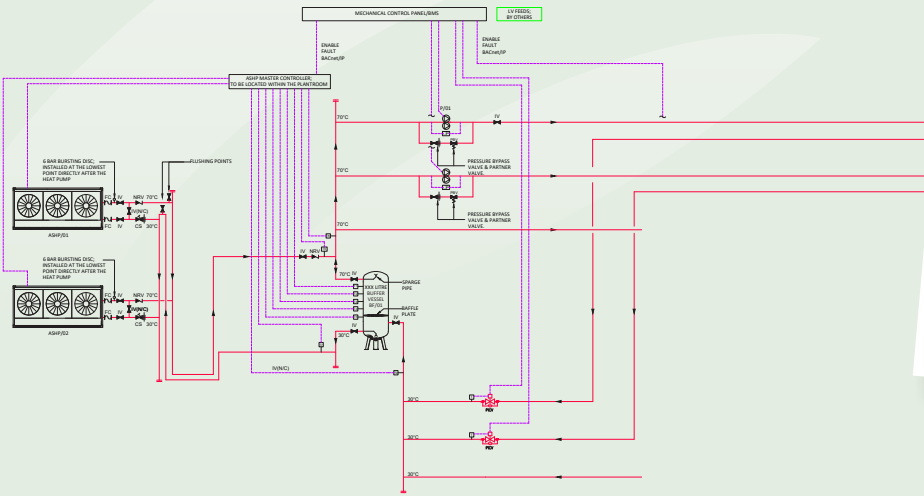
- CO₂ is the King of refrigerants with a GWP of 1.
 - CO₂ loves high temperatures and will produce 70°C water with a COP of 3.15!
 - CO₂ is non toxic, non flammable, widely available and the cheapest of all refrigerants.
- Propane is great for retrofit projects with temperature differentials that match many heating systems or can be achieved with minimal system changes.
 - With a GWP of 3 or 0.02 (depending on the period considered) propane is extremely low climate impact.
 - Yew and Elm models use Propane and special technology to operate at 80°C flow with a 10°C differential making them ideal for boiler replacement.

Check out our case studies of CO₂ heat pumps providing heating and hot water: clade-es.com/case-studies
Come and visit us in Leeds and see the quality for yourself.

Bespoke Options

Multi unit and system controllers

To easily integrate heat pumps with BMS systems. Standard example schematics available for most system configurations.



UK based heat pump and applications engineering team to assist with challenging projects.

Noise technology

Clade have proprietary technology to control noise which features in our low noise models and kits. Noise is a significant planning issue for heat pump installations yet with our technology projects can meet stringent noise requirements.



Clade Services

As well as manufacturing heat pumps in Leeds UK, Clade provide a full range of support services to give our customers peace of mind.

If you need a quick bit of advice or a full design, the final connections or the full installation just give us a call and we're here to help make your project a success.

Feasibility studies	Clade can carry out or support site surveys and provide info for funding applications or early design.
Design and design support	From quick advice to full stage 5 designs Clade's team are always available to help.
Install and project management	Clade will manage the full installation or provide services to support your team.
Aftercare and support	Fully comprehensive to statutory compliance – we offer Gold, Silver and PAYG cover to suit your needs.
Optimisation of heat pump operation	During the first year of operation it is critical to tune up the heat pump to achieve best efficiency. Clade will use data analytics to optimise performance and provide insights to improve operation.

About us

At Clade, we lead with purpose and innovation. We don't wait for change – we create it, driving advancements in the heating and cooling industry to help combat and reverse global warming.

Our B Corp certification highlights our unwavering commitment, extending beyond financial success to social and environmental responsibility.

We understand the profound responsibility our generation holds, and we embrace it as a call to action. Our vision is clear: a carbon-neutral world

powered by Clade technology. From assembling top talent in green tech, to becoming the UK's first manufacturer of refrigeration systems that use only natural refrigerants, to engineering ultra-efficient heat pumps – we are proud to be pioneers in sustainable innovation.

With over 30 years of expertise in design, installation, manufacturing, and service, Clade Engineering Systems is a trusted partner to leading UK blue-chip companies. Our carbon reduction solutions have proven transformative, helping clients significantly lower both their energy costs and carbon emissions.

Leading the energy transition in heating and cooling

For more information, call 0113 887 9604 or email sales@clade-es.com

Technology Centre & Manufacturing Site
Units R1-R3 Gildersome Spur Industrial Estate,
Stone Pits Lane, Morley, LEEDS LS27 7JZ

Head Office & Registered Office
Bristol & Bath Science Park, Dirac Crescent,
Emersons Green, BRISTOL BS16 7FR

Certified



Corporation

In 2023, Groupe Atlantic made a significant investment in Clade, expanding their portfolio which already includes renowned UK brands such as Ideal Heating, Hamworthy Heating, Keston, Gledhill, ACV and Atlantic.

A BRAND OF  **GROUPE ATLANTIC**
UK, ROI & NORTH AMERICA DIVISIONS