Heating Solutions

Dimplex®

Heating for commercial and residential buildings.

Your guide to specifying efficient, intelligent heating solutions.

dimplex.co.uk

Energy efficient heating solutions – from a name you can trust

With an unmatched reputation for quality, reliability and innovation, Dimplex is a trusted name in both public and private sectors, from major home builders to housing associations. Recognised as the number one name in electric heating technology, we're synonymous with energy-saving products and have a commitment to excellence and customer satisfaction.

Our products, your benefits.

Tried and tested technology.

All Dimplex products are designed to meet the latest international performance and safety standards. They are subjected to rigorous testing and evaluation using state-of-the-art facilities that recreate challenging environments to ensure our products perform – every time.

Wide distribution network.

Our wide distribution network utilises our national and regional partners to ensure full product availability through national and independent distributors.

Microgeneration Certification Scheme (MCS) approved.

At Dimplex, we offer a wide range of ground and air source heat pumps that are MCS certified, this ensures eligibility for Renewable Heat Incentive (RHI) and their quality and performance.

Customer service.

When you choose Dimplex, you have the support of our experienced customer service team, as well as backup provided by our specialist service engineers.

Product warranty*.

For extra peace of mind, Dimplex offers comprehensive product warranties to ensure continued performance and protection against manufacturing defects. Dimplex heat pumps have the benefit of a three-year warranty* with longer warranty options available on some models.
All EC-Eau cylinders have a 25-year guarantee for the inner cylinder.

Free design service.

Our in-house design team can provide detailed plans for the application of renewable technologies specific to an individual property. These include full heat loss calculations, energy saving estimates, plus a complete product and accessory specification.

Standard Assessment Procedure (SAP) Appendix Q listed.

As SAP Appendix Q listed products, our ground and air source heat pumps can help achieve higher SAP ratings within a dwelling by including their measured performance data in SAP calculations, rather than default values for heat pumps. Dimplex also offers electric heating solutions that can make gaining SAP compliance in multiple dwellings easier than you might think.

* When installed by a Dimplex accredited installer.

The UK heating market is changing faster than ever before

Reason 1: Energy costs

The rising cost of energy is forcing homeowners, suppliers and the government to find ways of reducing fuel consumption. 36% of the UK's energy is used to heat the space and hot water in our buildings. So it's no surprise there is a concerted effort to reduce our exposure to volatile price movements.

Reason 2: Legislation

The UK is committed to reducing its greenhouse gas emissions by at least 80% by 2050, relative to 1990 levels. This means that we need to secure lower carbon energy supplies today. As electricity moves to low carbon sources of generation, and with significant drops in emissions targets expected by 2030, electricity will become a universal and versatile source of low carbon energy.

"Technologies that use electricity to generate heat are well placed to become major low carbon heating technologies in the coming decades."

DECC – Future of Heating.

Reason 3: Benefits

Electricity is the obvious choice for our future heating needs due to its many benefits, both at national and local level:

- It can be produced in the UK, allowing continuity of supply at a steady price.
- It is increasingly being produced from renewable sources, neutralising its carbon intensity.

Specifically, electric heating:

- Is 100% efficient at the point of use – every unit of electricity that you pay for becomes heat.
- Can be controlled with a degree of accuracy not achievable with other systems.
- Can be quickly and easily installed as there is no pipework to consider, making it ideal for both refurbishment and new build.
- Can operate as standalone heating or a complete system, subject to requirement and budget – with the flexibility to add to the system at any time – making it ideal for extensions.
- Has a low lifetime cost as it requires very little, if any, maintenance and will last at least 50% longer than a gas system on average.
- Is not limited by planning issues associated with flue requirements in new build.

The future of domestic space heating is electric. As the world's largest manufacturer of electric heating products, Dimplex has the capabilities and knowledge to remain at the forefront of these developments.

The future is electric; we are electric.

Eco Design: the Energy Related Products Directive

The 2012 Efficiency Directive 2012 (2012/27/EU) aims to establish a common framework and drive the necessary action to help achieve a 20% energy saving target by 2020.

It requires all participating countries to use energy more efficiently at all stages of the energy chain from production to final consumption. New national metrics have been implemented to ensure major energy savings for consumers and industry alike:

- Energy utilities have to achieve 1.5% energy savings per year through energy efficiency measures.
- Participant countries can opt to achieve the same level of savings by means such as improving the efficiency of heating systems, installation double glazed windows or insulating roofs.
- Every year the government will carry out energy efficient renovations on at least 3% of the buildings they own and occupy.
- Empower energy consumers to better manage consumption. This includes easy and free access to data on consumption through individual metering.
- More stringent energy efficiency targets for all new buildings.

As part of this legislation, 'Lot 20' requires that the energy consumption and emission for local space heaters to be reduced. There are a series of features and may be incorporated into the product for compliance.

- Electronic room temperature control with seven-day timer.
- Temperature control with presence detection – automatically reduces the set-point for the room temperature when no person is detected in the room.
- Temperature control with presence detection – automatically reduces heat output when a window or door is opened.
- Distance control option – a function that allows remote interaction from outside the building in which the product is installed.
- Adaptive start control – a function which predicts and initiates the optimal start-up of heating in order to reach the set point temperature at the desired time.

All regulated products are required to comply by the 1st January 2018, meaning:

- A considerable investment on behalf of manufacturers to ensure their products are compliant within the time frame.
- End users, developers, architects, specifiers and energy assessors need to be aware of Lot 20 requirements now to ensure specifications for future developments are compliant.

Meeting the government's strict commitments

The government is monitoring commercial buildings because they account for 18% of the UK's emissions.

Are you compliant?

The Building Emission Rate (BER) is continually being tightened. In fact, no new building gets planning permission unless it demonstrates an improvement in heating efficiency. Existing buildings are also being targeted. Businesses using more than 6,000MWh per year of electricity must comply with the Carbon Reduction Commitment (CRC) energy efficiency scheme or face penalties.

Dimplex heat pumps are the answer.

Our heat pumps can meet your demanding energy targets, both now and in the future. They can deliver effective, low-carbon heat and are easy to operate, offering a lower-cost alternative to traditional fossil-fuelled systems. Already a proven technology, Dimplex heat pumps have been established for over 30 years and are installed all over the UK.

Dimplex heat pumps:

- ✓ Help to achieve renewable energy targets.
- ✓ Deliver high seasonal efficiencies – cutting running costs and carbon emissions.
- ✓ Provide both space heating and hot water.
- ✓ Are suitable for retro-fit or new build projects.
- ✓ Are scalable and flexible to meet your future needs.

Case study.

Dimplex is delivering advanced degrees in economy for the heating and hot water systems for the student residences development next to the £81million campus at University of the West of Scotland, Ayr.

"Achieving the 'very good' BREEAM rating, the industry-leading standard for best practice in sustainable buildings, the development is at one of the UK's most modern, environmentally-friendly and sustainable higher education learning establishments, with a campus design inspired by the area's woodland surroundings."

University of the West of Scotland

What is a heat pump?

Heat pumps offer an energy-efficient alternative to furnaces and air conditioners.

A heat pump is a device that transfers heat from a colder area to a hotter area by using mechanical energy, as in a refrigerator. Heat pumps warm the space and can often also be reversed, to provide cooling in the summer months.

A heat pump system comprises of three elements:

1. A means of collecting energy from a heat source, such as air or the ground.
2. A heat pump, which raises the heat collected to a useful temperature and transfers it to the heating system.
3. A heat distribution system which provides this heat into the property.

Wish you had a better understanding of heat pump technologies? We offer a range of interesting and informative CPD seminars - see page 11 for more details.

What BREEAM means for you

BREEAM is the world's foremost environmental assessment system. It is fast being adopted by the government and other bodies as the benchmark for lowering emissions. Dimplex heat pumps can help you meet BREEAM requirements, scoring credits on their rating system.

- ✓ Up to 15 credits are available in the 'Reduction of energy use and carbon emissions' sub-category.
- ✓ Three credits are available in the 'Low and Zero carbon technology' sub-category.
- ✓ One credit is available in the 'Energy monitoring' sub-category.

Case study.

Dimplex ground source heat pumps deliver low carbon heat enabling a hospital's new psychiatric unit to meet the NHS's target to be carbon zero by 2018.

"We wanted to incorporate the best practice in low carbon building technology and a partner to work with us. We chose Dimplex. Their heat pumps will help protect us from any future increases in energy prices."

Norfolk & Waveney Mental Health Foundation Trust

At the cutting edge

Heat pumps are not a new idea, but our innovation and experience makes ours the most advanced.

A range to suit all needs.

Dimplex heat pumps come in various sizes and are scalable. They can be applied to all sorts of buildings, offering both small and large scale heating solutions. No matter what your choice of energy source (air or ground), there will be a solution in the Dimplex range to suit you.

Most importantly, they offer energy and emission savings combined with an operational cost reduction.

Flexibility.

Our heat pumps can be combined with a wide number of fully compatible system accessories to provide complete flexibility in terms of system design.

Performance.

The Dimplex ethos is always to aim for the highest level of system efficiency, with our heat pumps designed to minimise energy use – no matter what the temperature or operating conditions.

Control.

Our comprehensive Dimplex heat pump manager provides complete system control over multiple heating and hot water circuits and, where needed, cooling functions. With a self-explanatory text display, it's also easy to operate.

Air Source

				Nominal rating (kW)	Indoor/ outdoor	Controller	Max. flow temp (°C)
Single Phase*	A-Class	Inverter		6-16	O	A-Class	65
Three Phase	LA TU	High efficiency		25-60	O	WPM	58-65
Three Phase	LI TES	High output		9-28	I	WPM	60
Three Phase	LI AS	High output		40	I	WPM	58
Three Phase	LA TUR+	Reversible		35-60	O	WPM	60

Ground Source

				Nominal rating (kW)	Indoor/ outdoor	Controller	Max. flow temp. (°C)
Single Phase*	SIH ME	High temp.		4-11	I	WPM	70
Single Phase*	SI ME	Heating & hot water		14	I	WPM	58
Single Phase*	SIK ME	Integrated hydraulic components		16	I	WPM	55
Three Phase	SI TE	High output		30-130	I	WPM	58
Three Phase	SI TU	High efficiency		18-90	I	WPM	62
Three Phase	SIH TE SIH TU	High temp.		20-90	I	WPM	70
Three Phase	SI TER+ SI TUR+	Reversible		30-130	I	WPM	5-58

* See website for details.

Water cylinders

Mains pressure hot water with full eco-credentials.

The EC-Eau™ range of unvented stainless steel cylinders from Dimplex can supply all the hot water required for the modern home, providing rapid fill baths and invigorating showers to en-suite bathrooms and other domestic appliances simultaneously.

With both standard unvented direct models and models designed specifically to work with renewable energy sources, there is an EC-Eau cylinder suitable for every application. Offering low running costs, reliable hot water and fantastic flow rates, EC-Eau cylinders are available in a range of capacities, so there is a size to suit even the most demanding household.

Direct Cylinder Range

	Height (mm)	Diameter (mm)	Capacity (litres)	Expansion Vessel (litres)	Heat loss in 24 hours (kW/24hr)
ECSd100-580	810	580	100	12	0.75
ECSd125-580	960	580	125	12	0.95
ECSd150-580	1130	580	150	12	1.10
ECSd175-580	1280	580	175	19	1.12
ECSd210-580	1504	580	210	19	1.41
ECSd250-580	1750	580	250	24	1.51
ECSd300-580	2080	580	300	24	1.96

Electric heating

The way we heat our homes in the UK is changing. With the rising costs of energy, three things come into question:

- Which fuel do we use?
- How do we best use this fuel?
- How do we maximise our use of the heat produced?

The future of domestic space heating is electric, a fact which is fast becoming apparent from government publications outlining the future plans of the building and environmental legislation that governs the direction in which domestic heating will develop.

Electricity is the obvious choice for our future heating needs because it can be produced in the UK, allowing continuity of supply at a steady price and it is increasingly being produced from renewable sources, neutralising its carbon intensity.

To find out how you could gain compliance with electic heating see page 11.

Electric heating also has a number of benefits as it:

- Is 100% efficient at the point of use – every unit that you pay for becomes heat.
- Can be controlled with a degree of accuracy not achievable with other systems.
- Is quick and easy to install as there is no pipework to consider.
- Can operate as independent heaters or as a complete system subject to requirement and budget.
- Has low lifetime costs as it requires no maintenance and on average an electric heating system will last 50% longer than a gas system.
- Is not limited by planning issues associated with flue requirements in new build.

Electric Heating Range

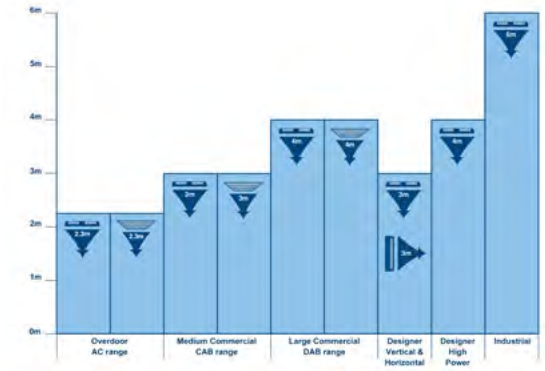
		Outputs	Dimensions (mm)		
		(W)	(H)	(W)	(D)
Q-Rad		500-2000	546	513-918	105
MFP		500-2000	536	503-911	105
GFP		500-2000	565	530-940	107
EPX		500-2000	430	450-860	108
LST		500-1500	430	688-860	108

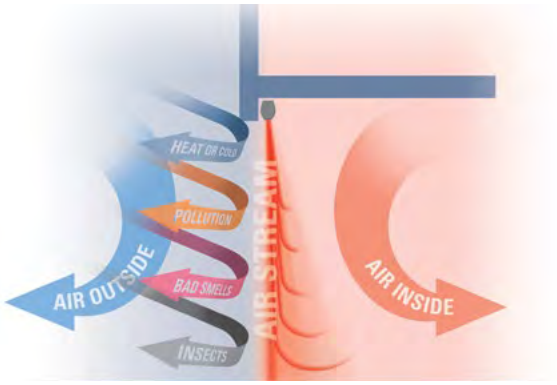
Air Curtains

Dimplex air curtains have been designed to deliver real energy savings with low levels of investment. They can contribute significantly to lower running costs, greater energy efficiency and a more comfortable environment - attributes appreciated in all commercial situations.

Keeping hot air in by fitting a Dimplex air curtain over frequently opening entrances, whole building heating costs can be reduced by up to 30% as a result of lower heat levels escaping the building.

Keeping cooled air in in summertime when air conditioning is used to cool the building, a Dimplex air curtain used in ambient* mode helps to maintain the cool interior climate from escaping the building cutting running costs and improving comfort levels.





The CAB and DAB surface mounted range.

Model	CAB10E	CAB15E	CAB20E	CAB10W	CAB15W	CAB20W	CAB10A	CAB15A	CAB20A	DAB10E	DAB15E	DAB20E	DAB10W	DAB15W	DAB20W	DAB10A	DAB15A	DAB20A
Loading	4.5/9.0	6.75/13.5	9.0/18.0	9.0	13.5	18.0	n/a	n/a	n/a	6.0/12.0	9.0/18.0	12.0/24.0	12	18	24	n/a	n/a	n/a
Width (mm)	1065	1569	2130	1065	1569	2130	1065	1569	2130	1057	1557	2114	1057	1557	2114	1057	1557	2114
Height (mm)	262	262	262	262	262	262	262	262	262	361	361	361	631	361	361	361	361	361
Depth (mm)	321	321	321	321	321	321	321	321	321	391	391	391	391	391	391	391	391	391
Weight (kg)	20.5	29	41	18	24.5	36	15.5	21.5	31	26.5	35	53	25	32	50	21.5	27.5	43

The AC surface mounted range.

Model	AC3N	AC3FN	AC45N	AC6N	AC3CN
Loading (kW)	1.5/3.0	1.5/3/0	2.25/4.5	3.0/6.0	1.5/3.0
Width (mm)	605	605	605	905	595
Height (mm)	200	200	200	200	209
Depth (mm)	135	135	135	135	295
Weight (kg)	5.1	5.3	5.2	7.2	8.7

Architectural Air Curtains

Model	ARC10	ARC15	ARC20
Length (mm)*	1100	1600	2100
Height (mm)*	450	450	450
Depth (mm)*	360	360	360
Weight (kg)**	55 - 65	82.5 - 95	110 -130

Continuous Professional Development

Staying up to date with the best practices and technologies the industry has to offer is important. That's why we provide a wide range of CPD titles covering the topics in this brochure. Wish you knew more about how a heat pump worked, or when to choose ground source over air source? Maybe you'd like to know how electric heating could make gaining compliance in multiple-dwellings easier, or how developments in Smart Electric Thermal Storage are changing the way energy is used in our buildings.

Our Continuing Professional Development (CPD) presentations will help you to collect accredited hours whilst giving useful, relevant and up-to-date information on how to improve the way that you specify the systems within your buildings.

Below are just some of the CPD topics we cover. For more details on how to arrange one of these sessions with our team, please contact us using the details on the back of this brochure.

- Introduction to heat pump technology.
- Finding the path to Part L compliance with electric heating.
- How smart can electric heating be?
- Hydronic distribution; considering a heat pump.
- Ground source heat pump collectors; evaluating the options.
- How do heat pumps help to pass planning and building regulations?

Building Information Modelling

We can offer BIM models of our specified products to Level 2 standard.

These are available on request. Contact us using the details at the back of this brochure for more information.

Specifications

Dimplex policy is one of continuous improvement; the Company therefore reserves the right to alter specifications without notice. The information contained in this brochure is correct at the time of printing.

The Dimplex Range

Dimplex offers the widest range of renewable energy, electric space and water heating products in the world – over 700. In addition to this publication, we have a wide range of brochures for both domestic and commercial applications. Please visit our website www.dimplex.co.uk/renewables for more information.

Quantum off-peak heater brochure

Q-Rad electric radiator brochure

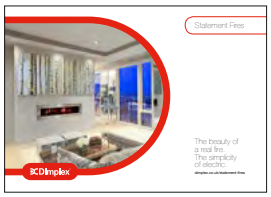
Quantum hot water cylinder brochure

LST brochure

Commercial brochure

Towel rail brochure

Electric fires brochure



Statement fires brochure

To find out more about how our team can help you to specify compliant, efficient and intelligent heating solutions contact us on:

Web: www.dimplex.co.uk/renewables

Email: pre-sales@dimplex.co.uk

Call: 0800 028 6122

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