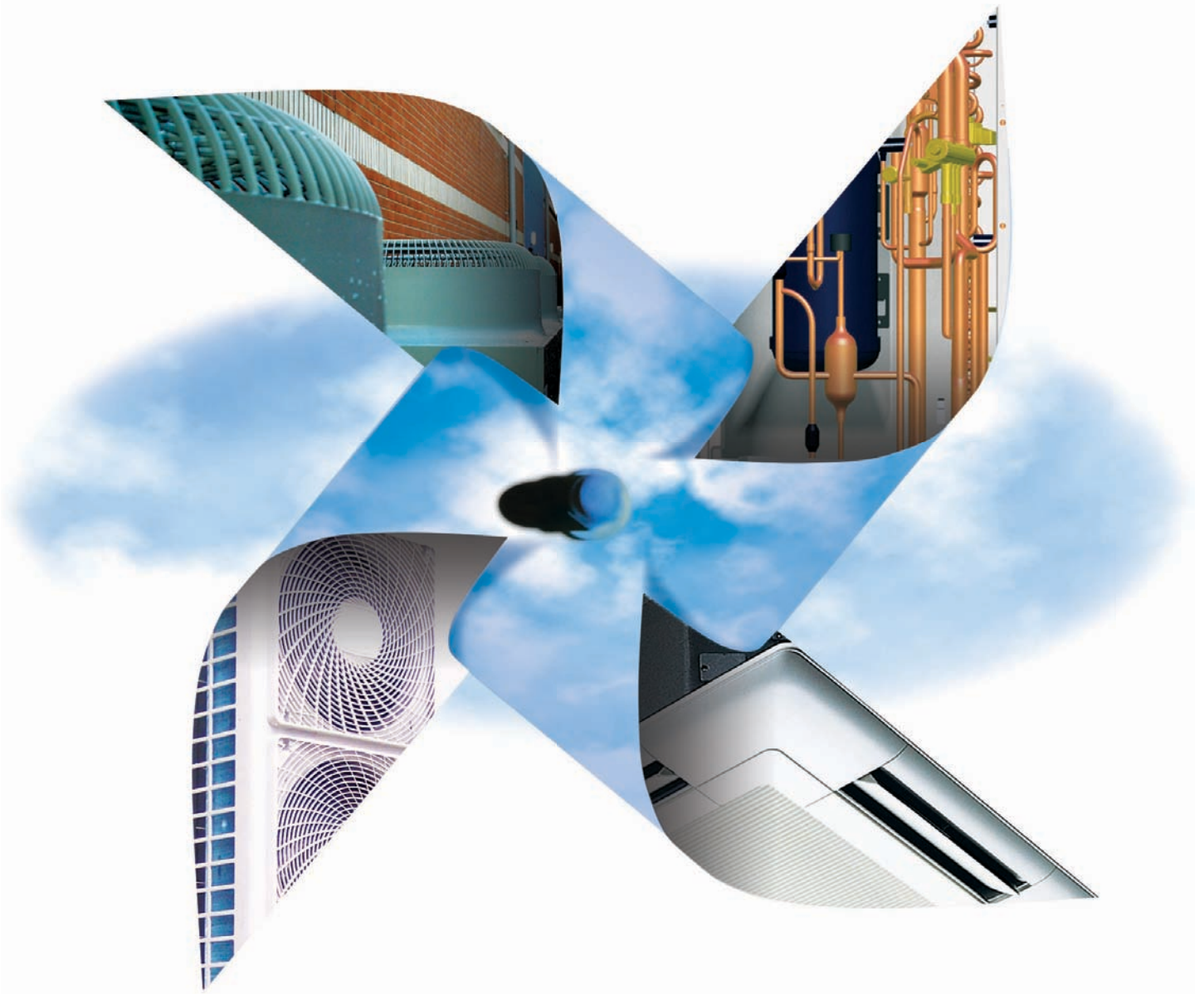


AIR CONDITIONING AND COMFORT COOLING

The design, engineering installation and support of complete air and environmental systems for Manufacturing, logistics and specialist buildings. Delivering the right solutions for your needs.



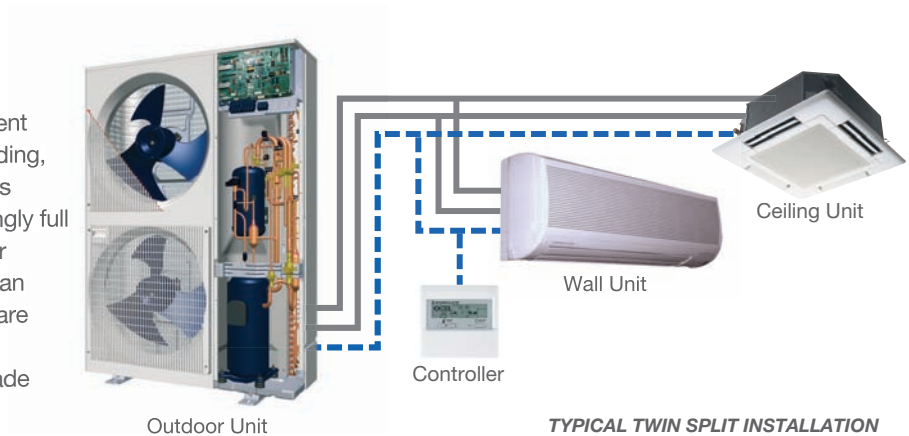
Environmental Climate Systems Ltd
SPECIALIST VENTILATION • AIR CONDITIONING
BUILDING SERVICES CONTRACTORS

Environmental Climate Systems are specialist design and build contractors for Air Conditioning and Ventilation Systems tailored to suit your needs.

Air Conditioning and comfort Cooling

Why Air Conditioning?

Air Conditioning is an ideal way of controlling the temperature, movement and cleanliness of air inside any building, large or small. With today's buildings being so well insulated and increasingly full of electronic equipment, the need for effective climate control is greater than ever. More and more people today are enjoying the benefits of comfortable working and living environments, made possible with air conditioning.



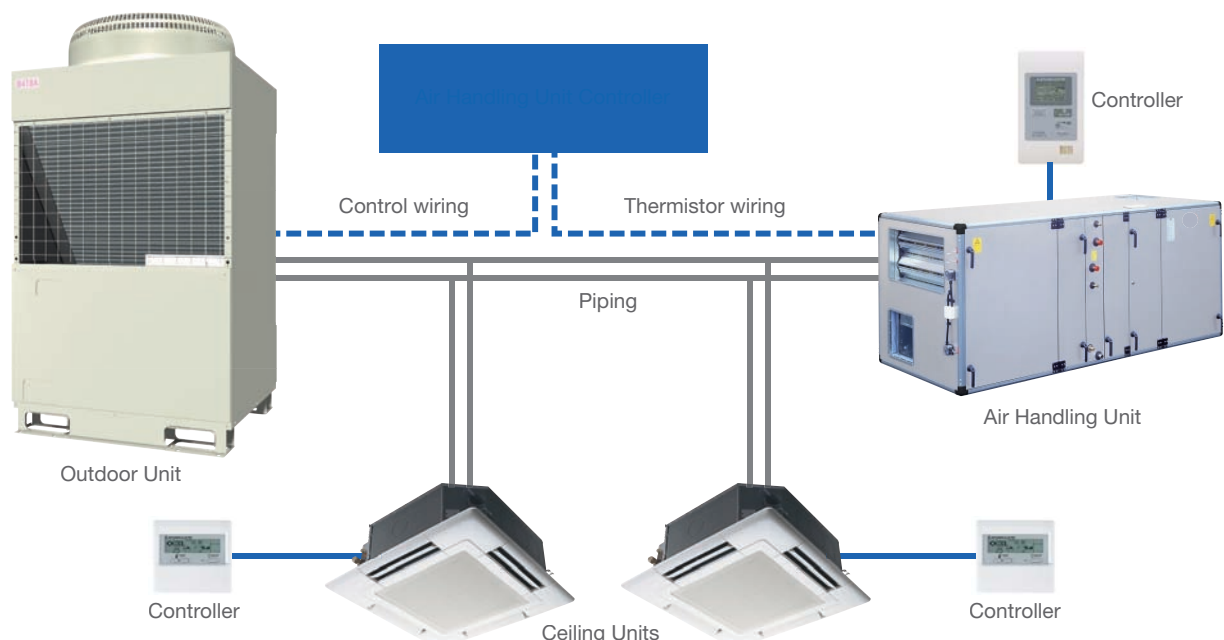
Room Air Conditioning

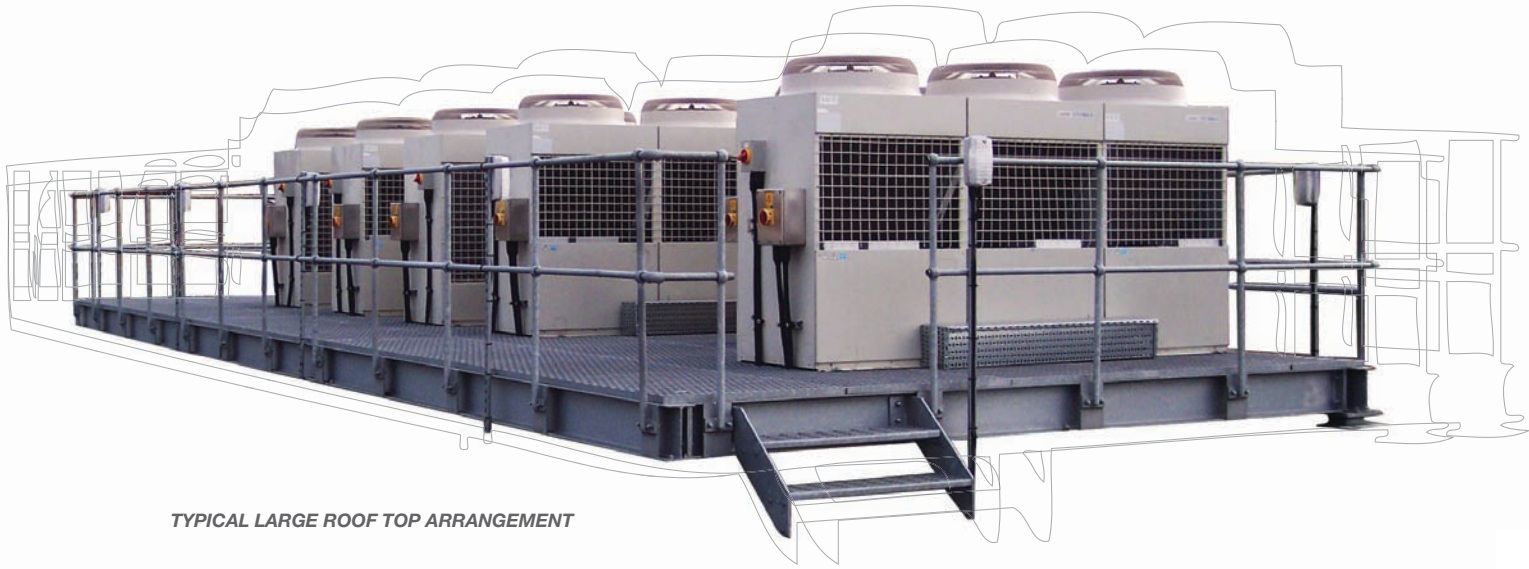
Designed to heat or cool small to medium sized applications, this range provides a versatile yet affordable air conditioning solution. Not only does it cool in the summer months, but can also heat, doing away with the need for separate heating systems altogether. Flexible enough to suite a range of applications with up to 8 indoor units per outdoor unit.

Large Building Systems

The answer to large scale applications would be the VRF (Variable Refrigerant Volume). The efficiency of this type of system is second to none and offers a substantial increase in energy efficiency. Building regulations have placed new standards on design of plant for heating and cooling and legislation states all new installations must conform with the energy performance directive, geared to reducing energy consumption and therefore CO2 emissions.

This unique technology can be used where there is a demand for changeover capability between heating and cooling, known as the Y type system, helping to ensure a constant comfortable indoor climate, with a wide range of up to 32 units can be connected to a single outdoor unit. This system also has the ability to provide simultaneous heating and cooling through its 'R2' type system, where substantial savings can be made on annual running costs.





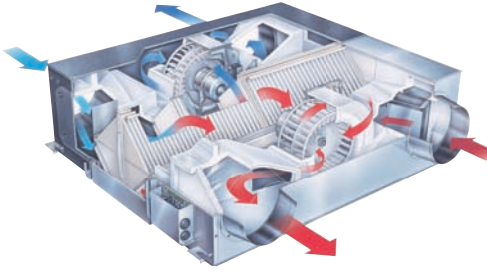
TYPICAL LARGE ROOF TOP ARRANGEMENT



TYPICAL OFFICE APPLICATION



TYPICAL EQUIPMENT WITHIN CEILING VOID



UTILISED WITHIN RESIDENTIAL/COMMERCIAL APPLICATIONS

Energy Recovery Unit

The secret of the energy recovery system lies in the crossflow, plate fin structure of the unit. A diaphragm made of specially processed paper fully separates inlet and exhaust air supplies, ensuring that only fresh air is introduced to the indoor environment. The superior heat transfer and moisture permeability of the special paper ensures highly efficient total heat-exchange when inlet and exhaust air supplies cross within the recovery unit.

Process Applications

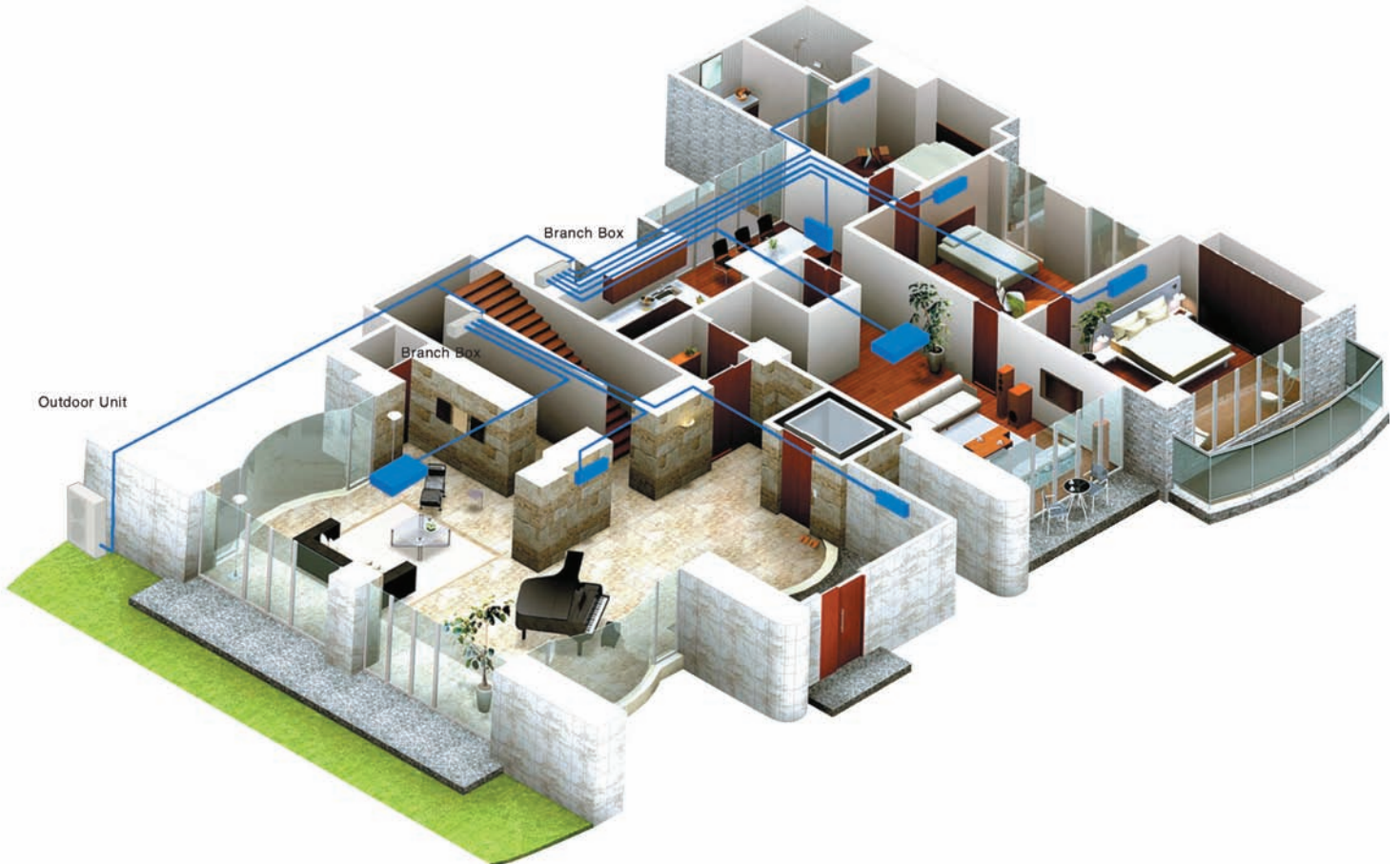
We at Environmental Climate Systems can provide a suitable environment for any process being carried out, regardless of internal heat loads and external weather conditions. Where temperature and humidity is crucial to the process, we can design a close control environment within the necessary tolerance levels. Process applications typically include:

- Data processing centres.
- Industrial Environments.
- Food processing areas.



Sustainable Homes and Renewable Energy

In order to meet the growing needs of the changes in climate and the effects of global warming, legislation under part L of the building regulations encourages us to use more energy efficient solutions. We at Environmental Climate Systems can provide standard Air Conditioning Systems and installations, utilising heat pump boiler technology, providing hot water to supply under floor heating. The use of water cooled condensers coupled with ground source technology can provide an energy efficient solution to heating and cooling your home. Thus minimising the running costs using free natural resources.



Ground Source Application

One of the increasingly attractive renewable energy options is ground source cooling and heating. These systems use pipes running into the earth to gain or lose heat from the buildings system. They can be closed loop, running in a single connection, or open loop into an underground water source. Effectively, the ground source technology uses heat from the earth which stays at an almost constant temperature. The underground nature of this technology also means that it is very useful in urban areas.

Water Cooled Condensers are available to harness ground source energy i.e. Bore Hole water or lake water as the Cooling Media. We at Environmental Climate Systems have actual Installation experience in this ground breaking technology. Innovation in air conditioning technologies continue, with much emphasis placed on energy efficiency and for improving indoor air quality. We at Environmental Climate Systems are well placed to provide cost effective solutions to you requirements.



Upgrading Existing Installations

Upgrading existing R22 systems to efficient modern practices has previously been a difficult or expensive option due to the need to replace existing pipe work. We at Environmental Climate Systems have adopted new technology allowing the use of existing pipe work to run modern efficient R410A systems. Thereby reducing installation time and therefore causing less down time and disruption.



Accredited Installer

Having some 20 years experience installing Mitsubishi equipment, we at Environmental Climate Systems have been authorised by Mitsubishi as an accredited installer. This allows us important links with the manufacturer ensuring priority assistance and technical support throughout the installation and life cycle of the products used.



Helping the Environment

To encourage efficient use of energy, the UK government have introduced a list of qualifying products, offering benefits of efficiency, both environmentally and financially. Sophisticated technology, combined with a high level of control and a level of energy efficiency that exceeds any penalty that the climate change levy may have otherwise eaten into an end user's bottom line. Our applications are perfectly positioned to meet the demands of today's markets.

Enhanced Capital Allowances

The Enhanced Capital Allowance scheme is a Government sponsored initiative designed to promote the use of higher efficiency appliances and allows end users to offset 100% of the cost of the appliance plus associated installation costs against Corporation Tax Liabilities in the first 12 months thereby providing significant capital savings and reduced annual running costs.



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