



## Getting the temperature right in a store could make or break potential sales.

No doubt we've all experienced uncomfortable shopping conditions at some point in our lives. You walk into some shops and the heat hits you straight away, and all you want to do is walk straight back out again. It's all about keeping customers happy and making them feel comfortable and relaxed within a store – not hot and flustered or freezing cold. This is where a good climate control system comes into play.

For many years air curtains have been widely used, particularly in the retail sector, to create a comfortable, sometimes 'open door', trading environment. The HEVAC air curtain guide states that 'a good air curtain installation could be up to 70 per cent effective at controlling the original energy exchange loss through a doorway without an air curtain'.

Biddle's Invisidor STYLE has been developed to bring not just performance benefits and energy savings but also high quality designer looks. Architects, M&E designers and building owners are constantly looking for ways of enhancing

the appearance of the entrance environment without compromising on performance. Responding to this demand the Invisidor Style combines the acknowledged technological expertise of Biddle with contemporary designer looks. Available in brushed or bright stainless steel, or a painted finish, Invisidor STYLE has an eye-catching cylindrical profile and a distinctive perforated grille. Because it is modular in nature any door width can be covered, and buildings requiring vertical rather than horizontal air curtains can still use Invisidor STYLE to create a 'top-end' designer look to the entrance environment.

**Air conditioning specialist Daikin says retailers can achieve significant energy savings by adopting a much more integrated 'whole building' approach to their heating, cooling, ventilation and refrigeration requirements.**

This includes reclaiming waste heat generated by refrigeration plant and IT equipment and reusing it to heat water

for radiators for domestic hot water and provide warm air for ventilation.

Based on this 'zero waste heat' principle, Daikin has developed a heat recovery air curtain in conjunction with Biddle. This is ideal for use in retail environments as it prevents the loss of conditioned air from a store by reclaiming heat from areas where there is excess and redirecting it through the air curtain to create a 'heated air barrier' in doorways. Savings over electric air curtains can be as much as 5 tonnes CO<sub>2</sub> (£1100) per two-metre section per year.

Many retailers may not be aware that a new EU regulation has just come into force that could catch them unawares. EC Ozone Regulations, which are aimed at preserving our environment, are banning the refrigerants (HCFCs) that most existing systems use. As of this month, no new or virgin HCFCs are allowed to be used. By 2015 any second-hand or recycled HCFCs will also be banned. In reality it is becoming very difficult to buy the harmful HCFCs and what is available is prohibitively expensive.



Biddle Air Systems's Invisidor STYLE, and Dimplex air curtains at Somerfield.



There are no equivalent replacements for these existing HCFCs and so if your equipment breaks down and needs new supplies of refrigerant, they will not be available and so new equipment which uses legal fluids will need to be ordered and fitted. This would be inconvenient and costly as well as leave the store without cooling while the new equipment is ordered. There are likely to be many retailers making emergency decisions this year. Many will be chasing equipment and engineers in short supply while the clever ones will have proposals in place. Failing to act now could cost retailers dearly down the line.

Nick Blyth of retail specialist 0-two maintenance, a leading retail maintenance contractor, explains: 'Planning for this event is crucial. Many retailers don't realise that they face big problems if they don't have a strategic plan in place after surveying their equipment.'

Industries likely to be affected include those that rely heavily on air conditioning to trade, including food and beverage, retail, hospitality and leisure. Put simply, any company that uses air conditioning and refrigeration systems could be at risk. 0-two maintenance has put in place a series of measures to ensure that clients are ready for the changes.

'The Kyoto protocol, signed by 184 countries to date, to combat greenhouse gasses and global warming, may seem far removed from your store but its influence is about to have a direct impact which you need to plan for,' explains Blyth. 'It means that the gas which makes many air conditioning and fridge units work is banned from sale from 1 January 2010. So, after this, if your air conditioning fails and needs to be topped up you will not be able to buy new supplies to fix it.'

Blyth warns retailers to act now.

'Understand what equipment you have and plan for next year. There are steps you can take to adapt your systems in most instances; new gas or new components may be used. Each system is different.

**Planned work will avoid the emergency costs, embarrassment and loss of sales if your AC breaks down in a heat wave next year.**

It may take some time to source the new parts, which will be in demand by your competitors. With proper planning, saving the world does not need to cost the earth.'

With the Government's Carbon Reduction Commitment (CRC) Energy Efficiency Scheme launching in April 2010, there will be a financial imperative for major retailers to reduce their energy consumption and carbon emission levels.

Somerfield is currently undertaking the mammoth project of consolidating under the Somerfield fascia more than 1,000 stores across the UK. As part of Somerfield's development plans, existing

stores are being refurbished and new ones built nationwide. Two recent projects were a store refurbishment and extension in Wareham, Dorset, and a new build store in Aberystwyth, Ceredigion. Dimplex CAB15E 1.5m air curtains with energy saving thermostatic control were specified in both stores, with the Wareham installation surface-mounted, while the Aberystwyth store incorporated the air curtains recessed in the ceiling.

The Somerfield store in Wareham is a Market Fresh convenience store, which places an emphasis on high quality fresh foods. The volume of fresh food, combined with a store layout with multiple entrances, means that control over the internal environment is essential, with an effective curtain of air required between the interior of the shop and the noise, cold (or heat, in summer) and pollution of the outside environment. Three Dimplex air curtains have been installed over separate entrances to ensure that the interior of the store remains regulated, hygienic and comfortable for shoppers.

The new Somerfield store in Aberystwyth incorporates two Dimplex recessed air curtain units, each featuring a thermostatic controller for optimum energy saving. The air curtains fit easily into the suspended ceilings for an unobtrusive, streamlined look in keeping with the modern feel of the new store.

Phil Chilton, commercial product manager at Dimplex, says the company is seeing cautious optimism return to the market. 'This echoes the latest report from RICS, which shows some stabilisation in the commercial sector.