



Connells forward thinking on R22 pays dividends right across the estate

Businesses with old air conditioning systems face a new challenge at the end of 2014, when the use of R22 refrigerant is banned.

Many forward-thinking companies have started to address this challenge and in the case of The Connells Group, the company has already begun a replacement programme which will save the company over £150,000 each year in running costs and cut carbon emissions in half.



Air Conditioning | Heating
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Air Conditioning



The industry-leading Connells Group is the most profitable UK estate agency network with 486 branches nationwide.

Typical installation summary

Installation date:	October 2011
Location:	Holborn
Old system:	PEA-3HGH
Cost per day:	£3.75
Kg/CO ₂ :	15.46
Estimated repair costs:	£3,419.00
Approximate replace costs:	£2,468.00
New system:	PEAD-PR71JAQ
Cost per day:	£1.35
Kg/CO ₂ :	5.58
Annual run costs savings with replace:	£732.00
Kg/CO ₂ % saving	64%

Case Study

The Connells Group

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Whether operating equipment in a single building or across a nationwide network, the ban on R22 means that it will no longer be possible to maintain old air conditioning properly. Systems will therefore need to be replaced when maintenance issues requiring de-gassing occur.

Leaving things to chance was not an option for The Connells Group, and the forward-thinking company has already begun a replacement programme across 203 affected branches.

Not only is this increasing the efficiency and performance of the air conditioning within each branch, it is estimated that it will also save The Connells Group over £150,000 each year in running costs and cut overall carbon emissions in each branch by more than half.

Connells was approached initially by specialist supplier Air Conditioning Solutions (UK) Ltd (ACS), which has developed a close working relationship with The Connells Group, since commencing work for it in 2000. ACS has over 20 years' experience of the design, installation and maintenance of heating, cooling and ventilation equipment and could see what the implications of the R22 ban would be on its customers.

R22 refrigerant was used in the majority of air conditioning systems until about 10 years ago, but it has been shown to have ozone-depleting potential, so the use of virgin R22 gas was banned in 2010, although companies have been able to use recycled and reclaimed R22 to maintain equipment.

As there are estimated to be over 750,000 R22 systems still in use in the UK, the ban poses a real challenge for businesses that will face maintenance issues with old systems.



In addition to operating under The Connells brand, the Group trades under other well-known local names including Allen & Harris, Bagshaws Residential, Barnard Marcus, Brown & Merry, Fox & Sons, Jones & Chapman, Manners & Harrison, Roger Platt, Shipways, Swetenhams, William H Brown, Sharman Quinney, Pattison Lane, Burchell Edwards and Ashley Adams.



The Connells Group estate had a real mix of brands and equipment from all the major air conditioning manufacturers.

“In the case of The Connells Group, the estate had a real mix of equipment from all the major air conditioning manufacturers, due to the historic development and expansion of the Group,” explained ACS Commercial Director, Neil Moran.

“We undertook an initial assessment of ten branches that The Connells Group chose at random to produce a detailed report comparing the potential savings of a phased replacement programme against the likely repair and running costs of existing kit.”

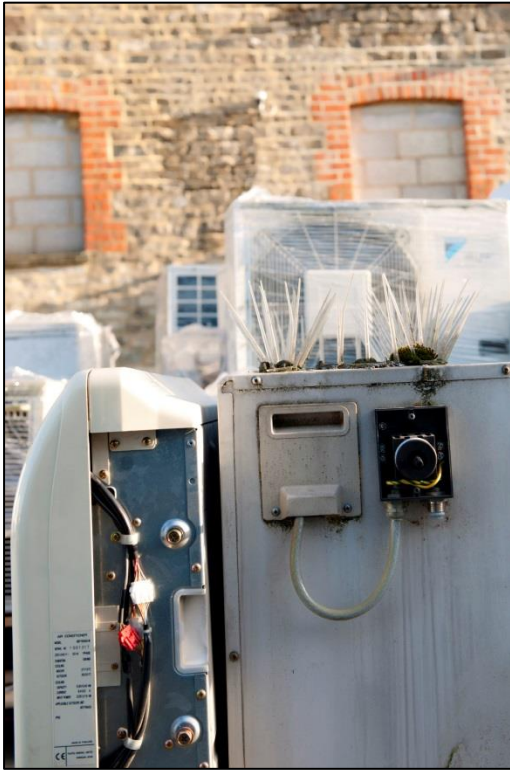
The report helped secure agreement for a full design specification and Connells and ACS started looking at replacement options whilst assessing the best ways of keeping disruption in each branch to a minimum.

“This is where Mitsubishi Electric's Replace technology comes into its own,” added Moran.

“In some cases replacing the pipework is challenging so we are looking to reuse existing pipework wherever possible and this allows us to just change the outdoor and indoor units, regardless of the original manufacturer.”

Replace technology, which is available across the City Multi and Mr Slim air conditioning ranges, allows for the reuse of the existing copper pipes to save on both installation time and costs. Disruption has been kept to a bare minimum for Connells with the average installation taking a two-man ACS team just a day to complete for each unit.

As a Mitsubishi Electric Business Solutions Partner (BSP), ACS are also able to offer The Connells Group an extended 7-year warranty on all new equipment, giving the company further confidence in the decision to upgrade.



The Connells Group has an historic mix of equipment from all major air conditioning manufacturers, due to the way the Group has developed and expanded.

Mitsubishi Electric's recycling scheme is designed to cope with almost any brand.

"The Connells Group has grown into the most profitable UK estate agency based business by careful planning and expansion since we started in 1936," explained Group Purchasing Director, Joanne Jackson.

"When ACS first approached me, I could see that we faced some real issues managing the cost and disruption so it was important to us that we could provide real evidence of the need and benefits to the business."

The project quickly became a true, three-way collaboration between ACS, Mitsubishi Electric and The Connells Group, with the manufacturer and ACS keen to demonstrate the business case for a replace programme.

ACS used Mitsubishi Electric's unique Audit Tool – a specially designed piece of software that assesses the running costs, maintenance expenditure and CO₂ emissions of existing equipment and compares it to modern, inverter-driven replacement systems.

"The results from the Audit Tool helped justify the investment and convinced the Group that a phased programme was the right way to go," added Jackson.

The analysis from the audit tool demonstrated that:

- Annual running costs would be reduced by 61% - from £250,859 to £98,872
- Carbon emissions would drop 60% - from 1,249,242kg to 493,760kg.

Another important factor for The Connells Group was the comprehensive recycling programme for old air conditioning systems that Mitsubishi Electric has developed with Overton Recycling Ltd.

www.recycling.mitsubishielectric.co.uk

Air Conditioning

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ACS has developed a close working relationship with the Connells Group and could see what the implications of the R22 ban would mean.

The old equipment is collected from each store and sent to Overton's Stourbridge plant, where the equipment is carefully stripped so that around 99% of all materials can be collected and recycled.

"We really liked the fact that Mitsubishi Electric offer a full 'cradle to grave' approach and seem to have thought of just about everything," said Jackson.

Work on the replacement programme started in October 2012 and is scheduled to run until the end of 2013. To date, 81 branches have been upgraded and each has seen an improvement in performance in line with the analysis by the audit tool.

"The final benefit for Connells is that the equipment we are installing is all listed on the Government's Enhanced Capital Allowance scheme, so the capital costs can be offset against the annual tax bill," added Moran.



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