ECOLUTION is the new generation of split, multi-split, and VRF inverter systems from Mitsubishi Heavy Industries Ltd.

Packed with new features, our intelligent design ensures high performance combined with ultra energy efficiency. All models are now quieter, smaller and lighter, allowing a simple and neat installation for applications from a single room to an entire building.

ECOLUTION - high performance solution.
et al.: BS News  O P I N I O N

Hanco Deficit Estimated at €865,561

The Statement of Affairs issued following the voluntary liquidation of Hanco Building Services Ltd earlier this month reveals a total estimated deficit of €865,561, with €523,557.46 of that owed to trade creditors. Once the liquidator has completed his role — however long that takes — the harsh reality for creditors is that the debts owed will have to be written off.

Given the current reasonably buoyant trading levels — and considering the boom of recent years — such a collapse seems inconceivable. While the primary reasons for the company’s failure are yet to be revealed, there is no doubt that a contributory factor must have been the bizarre trading practices which now govern the building services sector.

When it comes to building services contracting — especially in the apartment sector — the whole notion of an orderly marketplace has been forsaken in favour of a sub-contracting culture which has run amok. It is not uncommon for at least a half-dozen “subbies” to be responsible for the mechanical installation alone on each project.

Such a hierarchy of individual tiers makes no sense economically and cannot be sustained at the best of times. When you have such practices in the context of the suicidal tender prices which currently prevail disaster is inevitable.

The liquidation of Hanco Building Services Ltd is already causing a ripple-effect within the business. The hit for creditors is made all the worse given that margins are at an all time low. Quite simply, there is no fat to absorb the loss.

Unfortunately, as we go to press the liquidation of another major contractor is imminent. The deficit in this case could be even greater.

In both of these cases it was common knowledge for some time that there were major difficulties but the situation was still tolerated. Surely the message for the future is that information should be shared — and acted upon — to prevent similar disasters.

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Honeywell Backflow Preventers

Honeywell has launched its BA295 series of compact backflow preventers, which ensure contaminated water cannot flow back into the public mains supply. They use the proven RPZ (reduced pressure zone) principle, featured in Honeywell’s existing products, but a thorough product redesign further simplifies servicing and greatly minimises spares holding.

The BA295 series protects drinking water systems against back pressure, back flow and back syphonage, ensuring compliance with relevant water regulations. The valves can be used for residential buildings, industrial and commercial purposes.

Fluids up to and including liquid category 4 (toxic, very toxic, carcinogenic and radioactive substances) to EN 1717 are protected. This corresponds to construction type 2 to EN 1717.

All Hands To The Pump At ITT Flygt Ireland

ITT Flygt Ireland has secured the contract to design, supply and install the new Grange pumping station, designed to discharge waste water via gravity sewers for a new private development. Located at the north end of the site, the new pumping station is designed to discharge to the North Fringe Northern Interceptor Sewer which forms part of Dublin Main Drainage. ITT Flygt will be responsible for three NT3202 30kw units; two MP3102 4.4kw units; control panel; SCADA/Telemetry; standby generator; surge equipment; gas detection; pipework; valves; penstocks; fire alarm; flow meters; heating; lighting and power.

The development is part of the Northern Fringe Action Area Plan for north Dublin City. It will be built in six phases over the course of a 10-year period, consists of 3,600 residential units and 90,000 sq m of commercial, leisure and retail units occupying 54 hectares.

Building Services Prefabrication

Dennis O’Keefe from Eurogas Pakplant examined the use of bathroom pods in most new hotel developments. Indeed, Dennis illustrated this development by featuring a number of hotel examples that were almost 80% prefabricated before being brought to site for final assembly.

He also addressed the significant increase in the use of prefabricated boiler houses and chilled water assemblies.

In doing so Dennis referred to the increased number of indigenous providers of prefabricated building services to the Irish construction sector, and examined the manner in which they are marketing their services and targeting specific market segments.

He explained that possible savings of between 10% and 30% over traditional construction methods—coupled with consistent quality control, ease of delivery, site handling and installation—was a major factor in the growth of the use of prefabricated building services.

https://arrow.tudublin.ie/bsn/vol44/iss4/1
The next generation of VRF

ECOi R410A 3 Way Multi: 8HP to 48HP

SANYO are proud to introduce the next generation of simultaneous heating and cooling VRF systems, the ECOi 3 Way Multi. Specifically designed for the UK and Irish markets, the units combine the latest DC Inverter technology and R410A refrigerant to provide dramatically improved energy efficiency, wider operating ranges and longer pipe runs than ever before.

- Simultaneous heating and cooling
- 22.4kW to 135kW nominal cooling capacity
- Industry low outdoor sound levels: 55 dB(A)
- COPs start at 4.09
- Provides cooling down to -10°C ambient
- 150m pipe separations
- Connectability of 40 indoor units
- Industry's smallest changeover boxes
- 10 indoor styles, 11 indoor capacities
- New TouchScreen controller

Simple to apply, install and maintain, the ECOi 3 Way Multi range also qualifies for the Enhanced Capital Allowance Scheme.
SANYO - a good decision all round.

www.sanyoaircon.com

Published by ARROW@TU Dublin, 2005
Art Cool — A Modern Classic

LG’s Art Cool range of designer air conditioning products more closely resemble plasma TVs than wall-hung air conditioning products. That said, underneath the stylised look is some of the most sophisticated air conditioning technology in the world.

For instance, new 3-dimensional airflow ensures even, all-round coverage, the photocatalyst Nano plasma deodorising filters capable of removing micro-organisms down to 0.1 micron in diameter.

All units use HCFC-free R410A refrigerant which is environment-friendly, has superior engineering capabilities and operates at a pressure 1.5 times that of other refrigerants. Art Cool is available in two widths — 570mm and 928mm — each one in two colours, blue and wood effect. There is also the Art Cool Mirror unit in one size only.

Measuring just 6" deep, Art Cool operates on single-phase with some of the lowest sound levels available. It is available with LG’s unique ultra-efficient inverter technology in sizes from 2.6kW to 3.5kW, and as standard units up to 5.3kW.

Features such as Gold Fin and auto-clean also result in long-term cost savings.

Contact: Paul Schewpe, Core Air Conditioning. Tel: 01 - 409 8912; email: ppschewpe@coreac.com

Revolutionary Ecolution KX4 From 3D Air Sales

Mitsubishi Heavy Industries has introduced a new high-performance VRF air conditioning system called Ecolution KX4 which is now available from 3D Air Sales Ireland. Using its long history in the development of refrigerant and compressor technology, MHI has used its extensive engineering experience to design a system which is extremely energy-efficient.

The Ecolution KX4 range operatyes with R410a refrigerant, a zero ozonedepleting gas which has superior heat transfer properties compared with most common refrigerants. allowing much greater energy efficiency. R410a also has a higher density which means smaller pipework and less refrigerant.

Utilising R410a also improves compressor performance, expansion devices and heat exchangers, resulting in more efficient heat transfer and reduced pressure drop. It also optimises the refrigerant flow under all operating conditions, thereby maximising performance and reducing energy consumption.

Almost all Ecolution KX4 systems operate with a COP of 3.6 or higher which means that for every 1kW of electricity used, the system will provide 3.6kW of heat.

Other new features include remote controllers, PC-based controls, BMS interfaces, enhanced control and diagnostic functions, remote ventilation switch, temperature limitation, and test run mode to assist commissioning and service tasks.

Contact: Michale Clancy or Darren Lowndes, 3D Air Sales Ireland. Tel: 01 - 462 7570; 3dair@eircom.net

Delta Appoints Dublin Distributor

Delta Filtration has appointed Applied Filtration as an approved distributor of its products in the Dublin Area. Customers can now contact Donal Lynch, Delta Filtration. Tel: 086 - 174 0649; or Malcolm Goggin, Applied Filtration. Tel: 087 - 795 1111.

Consolidated Pumps Direct

To further enhance the support services provided by Consolidated Pumps clients can now contact all sales and engineering personnel direct. Details are as follows:

Sales
Odran O’Connor — Tel: 464 3307;
Scott Ribey — Tel: 464 3309;
Chris Dalton — Tel: 464 3300;
Michael Hunt — Tel: 464 3304.

Service
Andrew Tolan — Tel: 464 3302.
Revolutionary
A new concept in air conditioning

Unit A6, Centre Point Business Park, Oak Road, Clondalkin, Dublin 22
Tel: 01 - 409 8912  Fax: 01 - 409 8916
email: info@coreac.com  web: www.coreac.com

The next generation of Art Cool air conditioners
Sanyo Goes Digital In Citywest

Sanyo Air Conditioners has moved to a dedicated and prestigious new home at 8 Riverwalk, National Digital Park, Citywest, Co Dublin. The new premises, which were designed with a view to the future, boast spacious offices, a designated showroom area, state-of-the-art meeting room, and customised training facilities. This further demonstrates Sanyo’s commitment to the Irish market and also serves as a declaration of its future intent.

Since committing to Ireland’s air conditioning market by establishing a direct sales operation in 2002, Sanyo has captured a sizeable share of the market. This can be attributed mainly to its product line-up and professional partners. The company’s new state-of-the-art Head Office and warehouse facility in Dublin supports a dedicated national network of dealers and provides expert support and service which is backed by the Sanyo brand strengths of quality, flexibility and reliability.

Commenting on the move, Barry Hennessy, National Sales Manager of Sanyo Air Conditioners Ireland, said: “We have been so successful in Ireland over the past three years that we very quickly outgrew our previous accommodation. We have now established a solid foundation in the market place and these new premium-quality premises will give us the space we need to maintain our growth into the future.

“With our new showroom facilities, our latest products can be viewed in comfort and our customers can therefore properly appreciate the depth of the product range and the air conditioning solutions that we offer. In a period when service levels are paramount and legislation is changing, this move will allow Sanyo to offer the training and updates that are needed to ensure consultants and contractors alike are not left in the dark.”

Contact: Barry Hennessy, Sanyo Air Conditioners. Tel: 01-403 9900; www.sanyoaircon.com

BTU Golf Society 2005 Programme

Following the AGM on 28 Feb 2005, the following Officers & Committee were elected:
Officers
Captain: John White
President: Michael Murphy
Vice Captain: Michael Morrissey
Honorary Secretary: Michael Morrissey
Honorary Treasurer: Jim Bollard

Committee
Michael Kearney
Michael Matthews
Gerry Tobin (Ex Officio)
Graham Fay
Ger Hutchinson
Stephen Jones
Frank Lynch

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Wavin Goes Blue

Wavin has introduced a new blue watermain pressure pipe to its extensive range of below and above ground products. The new product, certified to EN1452, replaces the familiar black PVCu watermain which Wavin has produced since it began extruding watermain pressure pipe almost 50 years ago.

EN1452 is the new European Standard for piping systems intended to be used for water supply. The Standard specifies the requirements for PVC-U piping systems and their components. Following intensive testing Wavin has achieved BSI certification in the production of EN1452 which is available in 10 and 12.5 bar ratings. It replaces the Class C (9 bar) and D (12 bar) Wavin watermain.

Also replaced are the imperial dimensions. The new standard pipe is available with outer dimensions from 63mm up to and including 400mm. An extensive range of fittings is also available, making Wavin EN1452 a comprehensive system. Also available from the Wavin watermain range are Wavin AquaForce, Apollo, Wavin Sure and Wavin SupaSure.

The introduction of the new standard watermain by Wavin reflects the company's focus on innovation and constant product development. This approach has helped it remain the market leader in PVC pipe systems in Ireland for almost a half a century.

Contact: Sales Office, Wavin Ireland. Tel: 01 - 802 0200; email: ie_infor@wavin.ie

Potterton Myson Product Training

Installers and service engineers interested in product training on Potterton Myson brands are advised that the new training programme for 2005 will commence shortly. As always, the venue will be the company's purpose-designed training facility at its Belgard Road premises in Dublin 12. Interested parties should contact the Potterton Myson office at Tel: 01 - 459 0870 for details of the forthcoming schedule.

Essential to the Comfort Zone

The three systems highlighted are essential elements in achieving our goal of satisfying the needs of everybody involved in providing - and benefiting from - air conditioning.

Simplicity

Multi M, for example, reflects the simplicity of its primary function in its design, installation and operation. For example, for all its impressive capabilities, it operates using a single phase power supply.

That's not to say that it isn't sophisticated. It takes advantage of multi compressor, single phase outdoor units and heat pump technology.

Flexibility

Similarly, through its use of distributor boxes, Multi Fdx offers fantastic application potential by allowing several indoor units to be run from one outdoor unit.

MULTI M ♦ MULTI F/FDX ♦ ECO V

Core Air Conditioning Ltd
Tel: 01 - 409 8912
email: info@coreac.com
**Grundfos Energy Labelling**

While virtually every society throughout the world today has a requirement for more power, they also realise that they must consume less energy to protect the environment. The solution to this challenge is to find alternative sources of power or to find ways of maximising power while, at the same time, using less energy.

To date the motor, lighting and consumer electronics sectors have made great strides in this respect. The construction sector has also made significant advancements with some elements of the building services sector being particularly innovative.

For instance, Grundfos has been exploring energy-saving ideas since the early 1990s. The fruits of that endeavour mean that it is now easier than ever to choose a reliable, long-lasting and energy-efficient pump.

According to Gordon Barry of Grundfos Ireland, today's pump systems consume 20% of the world's electrical energy. "Grundfos believes the world has reached the point where it is no longer enough to simply be conscious of an energy-shortage problem ... we must also be active and expand our energy-conserving efforts toward all industries.

"It's about thinking ahead while, at the same time, being responsible in our daily activities. The proposed Grundfos energy label will help create a shift in the pump market towards innovative products that take responsibility for energy usage. With time, this movement will phase out older, more energy-consuming models, something which will benefit everyone."

Contact: Gordon Barry, Grundfos. Tel: 01 - 408 9800; email: info-ie@grundfos.com

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**Smedegaard Acquires VM-Range**

The Smedegaard twin-pump D range is available from Calpeda Pumps (Ireland)

Smedegaard Pumps in Denmark has taken over the production and sales activities of the inline centrifugal VM-range from ABS in Vadstena/Sweden. The integration of the VM range into the Smedegaard production and sales activity has now been completed, thereby making it available in Ireland from Calpeda Pumps (Ireland).

Smedegaard already produced a range of inline centrifugal pumps under the Omega brand and now, by merging it with the best and most efficient models from the Vadstena VM range, it has created one of the market's strongest portfolios of inline centrifugal pumps. The quality, efficiency and size of the range — coupled with capacities up to 1200 m3/h, heads up to 90 mwc and motor sizes from 0,060kw to 132kw — make for an exceptionally-strong product offering.

The merged range will be sold under two different brands — the "VM" range and the "Omega" range — which will allow for continuity in the marketing and sale of the products.

Contact: Graham Fay, Calpeda Pumps (Ireland). Tel: 01 - 825 8212; email: sales@calpeda-ireland.com

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**Main Advanced Water Heaters**

With a long-established reputation for safety, reliability, efficiency and ease of use, Main is one of the most recognised names in water heating. Now available from Potterton Myson (Irl), the advanced balanced flue (BF) and fan flue (FF) models are ideal for small homeowners with a big demand for hot water.

Space saving is assured as the need for a hot water cylinder is eliminated. This also means siting flexibility, a factor which is enhanced with the FF model because of its versatile range of flueing options and the fact that the unit can be located away from the outside wall.

Even in low water pressure areas, both models are equally at home when it comes to meeting domestic hot water needs. They are also extremely efficient as they heat only the water being used.

Other benefits include user-selectable thermostatic temperature control; simple 3-pipe connection with isolation valves; overheat protection device; and modern room-sealed design.

Applications include baths, washings machines, dishwashers, bathroom and kitchen sinks, and showers.

Contact: Potterton Myson (Irl). Tel: 459 0870; email: post@potterton-myson.ie
DIT Entrant For Refrigeration World Skills

The refrigeration section in DIT, Bolton St, ran its first Refrigeration National skills competition in June 2004 with Andrew Conaghan from Kellybegs Electrical emerging as the overall winner. As well as receiving a certificate and trophy, Mary Hanifin, Minister for Education, presented Andrew with a silver medal.

The national skills competition is run as a precursor to the World Skills competition which is held every two years. Ireland has been sending a team of competitors to the World event since the late 1950s and we were a host nation in 1964. This year’s event will take place in Helsinki in May 2005.

Because the world competition takes place early this year, the DIT-organised national competition took place in December 2004. The refrigeration section had six finalists from whom Alan Parr of Coolrite Refrigeration Ltd in Cavan emerged the outright winner. He will now represent Ireland at the World Skills event in Helsinki.

The enthusiasm and drive of Garrett Keenaghan, Refrigeration Section, School of Construction, Department of Construction Skills, Bolton St DIT, has been instrumental in this significant development. Garrett will be the first Irish refrigeration expert to help run the World Skills Event, and to submit proposals for the next event to be held in Japan.

Garrett will oversee all of Alan’s training prior to the competition and, in this capacity, he has enlisted the support of a number of sponsors and assistants. These include Danfoss Ireland who have been the primary sponsor with free equipment right from the beginning; GT Phelan who supplied a Toshiba air conditioning unit, again free of charge; Refrigeration Skillnet Ireland; The Institute of Refrigeration Ireland; Coolrite Refrigeration; Barry Leech, Dave O’Riordan and Jim McNerney of Cork Institute of Technology; and Tony O’Brien in DIT.

Contact: Garret Keenaghan, DIT Bolton St. Tel: 01 - 402 3000.

Lowara More water, less power consumption...

With Lowara products and technology.

Water is indispensable, it affects the quality of modern life. The larger and completely redesigned range of Lowara SV pumps offers improved motor and hydraulic performances, lower noise levels and greater energy savings. Life is even more comfortable with the new SV series. With its new SV pumps, Lowara improves the quality of your life. Excellence in water technology

Lowara Ireland Ltd.
59 Broomhill Drive
Tallaght Industrial Estate
Tallaght - Dublin 24 - Eire
Tel. (1) 4520266
Fax (1) 4525725
sales-irl@lowara.ittind.com

Lowara

More water, less power consumption...

With Lowara products and technology.

Water is indispensable, it affects the quality of modern life. The larger and completely redesigned range of Lowara SV pumps offers improved motor and hydraulic performances, lower noise levels and greater energy savings. Life is even more comfortable with the new SV series. With its new SV pumps, Lowara improves the quality of your life. Excellence in water technology

Lowara

ITT Industries
Engineered for Life
Win a Sanyo Hi-fi
Reader competition
Can you Spot the Difference?
Enter our reader competition and you could win a fantastic
Hi-fi in our prize draw. Simply spot the 5 differences
between the pictures below.

The changes to picture B are:
1. 
2. 
3. 
4. 
5. 

Name: 
Company: 
Address: 
Postcode: 
Email: 
Tel: 

Complete the details, copy and FAX back to BSNews
on 01 288 6966
Sponsored by

York Eurovent Certification
York International's chillers, manufactured in Basildon, have
 gained Eurovent Liquid Chiller Package (LCP) Certification.
Eurovent is a third-party organisation that independently tests
and verifies product ranges against published literature data
and certification is a mark of quality assurance to reassure
specifiers and clients alike.

Combined Magnehelic Gauge & Transmitter
Do you need a Magnehelic gauge and a transmitter? The Dwyer
Series 605 from Manotherm offers both in one product. The 605
Magnehelic indicating transmitter provides for both visual monitoring
and electronic control of very low differential pressure. The Series 605 is
ideal for control applications in building HVAC systems where local indication is desired
during routine maintenance checks or
necessary when troubleshooting the system.
The easily-read dial gauge is complemented
by the 2-wire, 4-20 mA control signal utilising
the time-proven Dwyer Magnehelic gauge
mechanical design and Series 600 transmitter
technology. The compact package reduces needed
panel space by eliminating an additional transmitter. It also
reduces installation time.
The transmitter can be surface-mounted or flush-mounted in a 4-13/16
(122mm) diameter panel hole. Hardware is
included for either option. Duplicate 1/8”

The Dwyer Series 605 combined magnehelic gauge
and transmitter from Manotherm
female NPT pressure connections on side and
back ease installation.
Based on its unique combination of price and performance, the Series
605 transmitter is ideal
for use in commercial and
industrial energy management systems.
Typical applications include control of variable speed fans and
blowers, as well as the
positioning of system dampers. Continuous
data on air velocities in
ducts and air filter
pressure drops can be fed
to the controlling
computer.
Contact: Bob Gilbert,
Robert Gilbert or Noel
Walsh, Manotherm.
Tel: 01 - 452 2355;
email:info@manotherm.ie

York Eurovent Certification
York International's chillers, manufactured in Basildon, have
gained Eurovent Liquid Chiller Package (LCP) Certification.
Eurovent is a third-party organisation that independently tests
and verifies product ranges against published literature data
and certification is a mark of quality assurance to reassure
specifiers and clients alike.
Jaga Adds DBE Intelligence To Give Heating A Boost

Jaga Heating Products — which are distributed throughout the 32 counties of Ireland by Versatile Agencies — has unveiled a revolutionary leap forward in heating solutions with its DBE (Dynamic Boost Effect) intelligent heating concept. The specially-designed DBE intelligent thermal activators have been developed to fit onto the LowH2O heat exchanger which is incorporated in the majority of the company’s products.

Speaking at the introduction of the product to Ireland earlier this month in the Clarence Hotel in Dublin, Andrew Treacy, Managing Director of Versatile Agencies, said: “The DBE concept is a heating solution that provides more heating comfort and excellent control through automatic natural comfort heating and dynamic boost output. While the exact increase in output with DBE will differ according to the model and size of Jaga radiator, indicative of the boost power of a DBE radiator is that in the case of the Strada Type 16 H35 L100 radiator the output jumps from 1593 watts up to 3193 watts with DBE.”

Three different DBE activators are available to suit Jaga’s standard heat exchangers. All are virtually noiseless in operation with an output of less than 30 decibels when operating in standard comfort mode. Depending on the length of the radiator up to six DBE activators can be added to a single LowH2O heating element. The DBE activators are controlled by a microprocessor-based comfort control unit which senses the ambient temperature, checks the availability of hot water in the heating element and boosts output as required. The comfort control unit is pre-programmed with eight different profiles to suit the likely needs of different areas of a house or building such as living, sleeping or food preparation areas. A PC link facilitates custom configuration to particular comfort levels.

Interface with the DBE radiator is through a stylish panel typically located on the top of the radiator casing. This interface has a button to manually start or stop the boost function and LEDS that indicate whether the radiator is in boost or comfort mode.

The DBE unit works in unison with the room thermostat or TRV to deliver the comfort temperature quicker than ever and to intelligently regulate temperature. The DBE (slave) unit detects the need for higher heat output by sensing a drop in room temperature and the availability of hot water in the heat exchanger. The thermal activators (smart fans) modulate their operating speed in response to the need for heat given a decrease in room temperature.

A further operational advantage is that whereas traditional steel panel radiators tend to heat up the walls around the radiator before heating up the room, DBE-enabled radiators — with their intelligent thermal activators and LowH2O technology — ensure perfect temperature spread and improved air circulation throughout the entire room.

Jaga also leads the drive towards energy-saving heating and sustainability. DBE radiators perform very effectively in low flow temperature regimes and with all modern modulating condensing boilers, delivering higher return temperatures more quickly, thus enabling the modern boiler to begin to reduce its flow temperature earlier.

Combined with its ultra-fast responsiveness, these energy saving aspects of Jaga’s DBE radiator range also correlate directly into running cost savings as their installation can save between 15% and 25% on annual heating bills.

There are also environmental advantages. For instance, it is claimed that a house heated by DBE technology emits as much as a tonne less of the environmentally damaging CO2 gas per annum.

The range of Jaga DBE radiators currently available from Versatile Agencies includes the Strada DBE; the Knockanwood DBE; the Built-in DBE; the Canal Compact DBE; and the ultra-powerful Mini-Canal DBE. Each of these small but powerful DBE radiators is claimed to be up to nine times faster than traditional steel panel radiators in delivering desired room temperature levels.

DBE activators can also be retrofitted into the existing range of Jaga’s Low-H2O and LST radiators. This means that previously-installed Low-H2O radiators can now be upgraded to deliver the additional benefits of Dynamic Boost Effect technology.

Contact: Andrew Treacy, Versatile Agencies. Tel: 046 – 902 9444; www.versatile.ie
The foregoing represents an established framework upon which to build and develop clearly-defined course aimed at serving the medium and long-term industry needs.

Future Training

The additional training provision necessary to meet the requirements of the proposed legislation needs to cater for the following:
- Regular Assessments;
- Certification of Competency;
- Irish National Accreditation Board involvement;
- Continuous Course updates;
- Updates on Standards/Regulations changes;
- Best practice procedures;
- New technology.

Register of Gas Installers

The establishment of a formal Register of Gas Installers (RGI) would restore consumer confidence in the quality of workmanship and service provided by the industry and eliminate the scope for unqualified, incompetent and non-insured individuals to masquerade as bona fide installers.

It would also facilitate a professionally-run “complaints” procedure whereby consumers could, in the event of a problem, make formal representation to a controlling body who in turn could (a) investigate the matter (b) direct that the problem be rectified and (c) impose sanctions on the installer concerned should that be necessary.

Existing Training

To establish a Register of Installers demands a qualification criteria and adherence to best practice procedures. The best way to guarantee that is by way of specially-devised training and educational programmes. Among the schemes already established are the following:
- GII (basic gas safety);
- GID (Domestic gas installations);
- Among the established training providers are Fás (Cork); European Energy Skills (EES); Dublin Institutes of Technology (plumbing apprenticeships); and the Gas Training Development Group (GTDG).

The Proposed Safety Framework
Vision for the Proposed Safety Framework for the Natural Gas Market

**Commission for Energy Regulation**

**Gas Installer Certification Body** (Licensing Authority)

**Steering Committee Chair & Secretariat**

- All installations to be covered (natural gas, oil and LPG);
- Grandfather clause for long-established practitioners;
- Development of fitter competence and abilities;
- Evaluation of current education and training programmes.

**Benefits — A Safer Industry**
The potential benefits for all stakeholders in the sector — be they educators, installers, product suppliers or consumers — are enormous. A fully-qualified, licensed workforce which undergoes continuous training updates and assessments will make for a massive industry resource. Additionally, product suppliers can rest easy knowing that problems caused by incorrectly-installed units will be eliminated. Consumers too will benefit immediately from the professionalism of installers and can also feel secure in having the finished installation formerly certified. The fact that a regulatory authority carries out random inspections reassures the consumer still further.

**Key Issues**
Among the key issues to be addressed in the interim are:
- Transition arrangements;
- Cost to the industry — who pays?
- Period of license to be issued;
- All installations to be covered (natural gas, oil and LPG);
- Grandfather clause for long-established practitioners;
- Development of fitter competence and abilities;
- Evaluation of current education and training programmes.

**Aims and Objectives**
For the New Gas Installer Certification Body to be successful requires that all industry stakeholders buy in to the concept. As a body the entire industry must portray to the consumer the need for, and benefit of, a high-quality, top-performing, safe installation.

- Manufacturers and retailers need to buy into a Safety Assurance Programme;
- Housing Scheme Developers need to do likewise as a large percentage of building site installers are not qualified.

**Standards**
- IS 813: 2002
- IS 820
- NSAI
- CEN
- FETAC
- DET
- Manufactures
- Others

Registered Installers Proposed Safety Framework

**Why Does the Industry Need Legislation?**
The fact that legislation is required to oversee the industry and thereby ensure consumer safety is self-evident. With deregulation BGE can no longer be held responsible, or accountable, for the quality and/or safety of installations. Despite the fact that it does an excellent job in its current role, there are still scenarios over which it has no control. These include:
- Gas to gas works (no BGE involvement);
- Approximately 60% of certificates are not issued to customers or returned to BGE;
- Approximately 50% of existing operators in the industry are not qualified;
- Manufacturers and retailers need to buy in to a Safety Assurance Programme;
- Housing Scheme Developers need to do likewise as a large percentage of building site installers are not qualified.

**Setting Installation Standards**
This year’s AECI annual conference and trade show will take place in the Radisson SAS Hotel, Athlone, from 27 to 29 May 2005 inclusive. Networking Into the Future is the theme for the weekend, a topic BSNews featured prominently last month. 

As is now established practice the proceedings will commence on the Friday with the golf outing which, on this occasion, will be held in Glasson Golf Hotel & Country Club. This Christy O'Connor Jnr designed course enjoys a spectacular setting with the first nine holes overlooking Lough Ree and the second nine beautifully set in the stunning Killinure Bay. The presentation of prizes will take place after the informal dinner later in the evening with the customary sing-song and craic into the early hours of the morning.

That said, the business sessions will commence bright and early the next morning with the trade show being officially opened by Michael Martin, TD, Minister for Enterprise, Trade & Employment, followed by the seminars and workshops. The format comprises a repeat presentation for each session, the emphasis being on interaction and delegate participation rather than the traditional lecture format. Topics to be covered, and the times, are as follows:—

- ESB/Networks and their impact on electrical contractors (11am & 11.30am);
- Fas/Apprenticeships /Impact on electrical contracting (12pm & 12.30pm);
- Unilever/The Need for Good Marketing by SMEs (2pm & 2.30pm).

As the foregoing clearly illustrates, the intention is to hold an intense, focussed sessions where questions can be asked and ideas, information and opinions shared.

The President’s reception will be held later that evening from 6.30pm with the conference dinner commencing at approximately 7.45pm. It will be followed by entertainment and dancing.

As we go to press a number of stands are still available in the trade show, along with a limited number of delegate places.

Contact: George Kennedy, AECI.
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Electricity — Did You Know?

**Static Greeks**

Ancient Greeks knew rubbing amber generated static electricity, but they didn’t know why. The Greek word for amber is elektron. People knew about electricity for a long time but not how to explain it, or what to do with it.

**Electric Soul**

In 1660 German Otto von Guericke made the first electrostatic generator with a ball of sulfur and some cloth. The ball symbolised the earth, and he believed that this little replica would shed part of its electric “soul” when rubbed.

**Bottled Electricity**

As scientists continued to study electricity, they began thinking of it as an invisible fluid and tried to capture and store it. One of the first to do this was Pieter van Musschenbroek of Leyden, Holland. In 1746 he wrapped a water-filled jar with metal foil and discovered that this simple device could store the energy produced by an electrostatic generator. This device became known as the Leyden jar.

**First Battery**

In 1799 Alessandro Volta stacked metal disks separated by layers of cardboard soaked in salt water together. This so-called voltaic pile produced an electric current without needing to be charged like a Leyden jar. This invention is still around today, but we call it the battery.

**Magnetic Amp**

In 1820 Danish physicist Hans Oersted showed that whenever an electric current flows through a wire, it produces a magnetic field around the wire. French mathematician André-Marie Ampère used algebra to come up with a mathematical formula to describe this relationship between electricity and magnetism. The unit for current, the ampere, abbreviated as amp or as A, is named in his honour.

**Major Transformation**

Experiments in electromagnetism by Michael Faraday showed that when you move a loop of a wire in a magnetic field, a little bit of current flows through the loop for just a moment. This is called induction. This in turn led to the induction ring which engineers later used to build electrical transformers. These are still used today in thousands of electrical and electronic devices.
Light+Building, the leading trade fair for architecture and technology, will continue to expand when it is next held from 23 to 27 April 2006. Covering the fields of lighting, electrical engineering and house and building technology, the fair is the world's foremost forum for building equipment and products distinguished by innovative design.

Light+Building covers almost the entire lighting spectrum with luminaire and lamp segments presented logically and clearly in relation to the various product applications. In 2006, the product segment for "classic building lighting" will be introduced at the interface between technical and home-interior lighting.

In the electrical-engineering field, Light+Building will expand the range of products to be seen in the "security technology" and "network technology" segments. Almost half of all visitors come to the fair primarily for the electrical-engineering segment.

House and building automation is a future-oriented sector which will feature the growing significance of building automation in line with the continuing process of optimising the operating costs of buildings. Powerful impulses are expected to be generated by the "Energy Performance of Buildings" directive of the European Union, i.e., via the German Energy Saving Law, which comes into force next year.

The "architecture-relevant systems" product segment, which focuses on lift systems and technology, daylight technology and integrated facade technology, will also be expanded.

The fringe programme of Light+Building 2006 will make the fair even more attractive as a meeting place for experts in the field of commercially-used buildings: the concept of the "Building Performance Congress".

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Other interesting events include the Design Plus competition, the Architecture & Technology Innovation Prize and Outlook, the trade-fair event for architects.

As an extra highlight, Light+Building will also provide the setting for the presentation of the European Architecture+Technology Award of Messe Frankfurt. Worth €75,000, the competition is held every three years and presented alternately at the ISH and Light+Building trade fairs. The prize is given not for plans and calculations. Instead, it honours a building that has proven itself in practice and demonstrated that it can combine architectural quality with resource conservation and user satisfaction.

Luminale, the spectacular lighting and culture event, which communicates the subject of light into the City of Frankfurt and the entire Rhine-Main region via exhibitions and vernissages, will also be held in 2006.

Contact: www.light-building.messefrankfurt.com
"Outlook – Shaping Water" was a prominent section dedicated to bathrooms at the recent ISH in Frankfurt. It comprised 12 bathroom ideas — in competition format — featuring designers and architects new to the profession. The designs and concepts on display represented a re-examination of traditional standards and consumers increasing desire to explode the idea of the bathroom as a separately-demarcated unit.

Flexibility and individualisation was the common denominator throughout the 12 concepts on show, along with unconventional interior-design concepts and product ideas, some of them highly innovative. Besides sophisticated solutions for small bathrooms, the dominant tone was designs which revealed greater freedom in room use.

The competition produced some highly-complex approaches, as well as product ideas which, using simple means, emphasised water as a valuable element needing a more deliberate approach. One of the winning designs used the characteristics of water to acclimatise a completely new type of room which functions as a "second skin", forming a soft and atmospherically-lit cocoon.

The complete bathroom — including floor and wall surfaces, seating levels and basins — are covered with elastic, water-conducting, multiple-layer plastic sheeting. Depending on the inner structure, the surface is also designed to use water conduction and pressure to act as a massage. The warming or cooling effect is based on the established principle of underfloor heating. Since the sheeting also softly envelopes all edges, the result is a quite new room feeling.

By contrast, another called "Circ" worked successfully in a different way — precisely by spurning technology. "Circ" rather stands the motto of the competition on its head. Here, instead of being shaped, water is left to forge its own way. Via a simple and flexibly-changeable pipe system, it is channelled across collection basins which can be placed in any spot desired and, having run through basins and tub, is led to a recycling system. An unconventional concept, which brings man once again into direct contact with water. "In my design I was interested not so much in lifestyle as in the sense of styling", says the young designer. "I wanted to ensure that something of the original power of water remains in the bathroom."

Finally, the third prize-winning design placed bathroom life once again in the natural surroundings of water – an open space which, through showers, cabins and washbasins, becomes a public bath in the open air. Using simple modules and room dividers – shower stones and bathing zones, supplemented by flexible wardrobes and cabins – invite the user to leave the everyday world behind for a time and to "experience the act of bathing once again as a ritual or even spiritual form".
Honeywell prides itself on the unrivalled reliability of its thermostatic radiator valves (TRVs), used exclusively by many installers to reduce costly warranty call-backs. It is also unique in offering the HR80 wireless controller head which, fitted onto standard TRV bodies as part of a CM Zone wireless zoning system, enables areas of a building to be separated as heating zones without cabling or plumbing pipework changes.

So, it is easier than ever for heating installers to split an existing heating system into zones and control every room’s temperature automatically, including the bathroom, from a central controller. Householders can programme up to six time/temperature changes per zone each day – and a different programme each day of the week. The Honeywell HR80 is supplied with a variety of adapters to fit valves from other manufacturers.

Each TRV fitted with the HR80 wireless controller head receives the same programmed set point as every other radiator controller in the same zone. If it is the only head in the zone, then it will be completely independent.

The local temperature adjustment available on all Honeywell TRVs is also offered by the HR80 head: the user simply turns the knob to override the last value transmitted by the central controller. When the central unit transmits its next set point value, the manually adjusted setting on the radiator controller is overridden.

Honeywell’s conventional TRVs combine reliability and value in a variety of good-looking styles. Installing Honeywell’s innovative VT117 and VT200 TRVs is very simple because they feature reversible flow – without any adjustment in the body – so there is no need to identify flow and return pipes when installing or upgrading a system. They eliminate the possibility of water hammer and wasteful call-backs. The defining feature is a unique insert that allows them to be fitted horizontally or vertically at either end of the radiator.

They offer complete flexibility of installation wherever the pipework runs, as models for straight pipework are available. These can be installed horizontally or vertically at either end of a radiator. The VT117 model features a wax-filled sensor within a traditional-style fluted head on a nickel-plate body, while the stylish VT200 has a chrome top and a liquid-filled sensor mounted on a special chrome body. Both valves are easily installed using 15mm copper compression connections.

Contact: Honeywell.
Enquiries: Pauline Wetherell, Honeywell.
Tel: 0044 1344 656000; email: literature@honeywell.com; www.honeywelluk.com
Add new facilities anywhere you want

An elegant, low-cost way to improve your home

The new Sololift+ lifting stations let you install a cloakroom under the stairs, a kitchen in the basement—even a bathroom in the attic. Minimum pipe work is required, so real home improvements can be made at very low cost. And the elegant design of the Sololift+ means that you won't have to compromise on style. With Grundfos Sololift+ you can add value to your house.

www.grundfos.com

Published by ARROW@TU Dublin, 2005
The Barrhead sanitaryware collection from Chadwick’s Plumb Centres is a collection of bathroom furniture based on a heritage of more than 100 years. It has been hand-crafted in the heart of Scotland using the finest, time-honoured vitreous china production techniques, along with exacting, contemporary production methods. The marriage of modern and traditional values has resulted in an exciting range of the highest-quality, in designs which are chosen to reflect and complement today’s lifestyles. The latest collection is designed with specific technical requirements very much in mind, but retains an air of quality and attention to detail. Contact: www.chadwicks.ie for a branch near you.

A number of measures have been introduced or recommended in recent times to prevent the occurrence of legionnaire’s disease in both hot and cold water systems. However, some of these failed to take account of the effect these preventative measures can have on the materials within the system.

Research has indicated that certain materials, other than copper, are potential sources of bacterium legionella pneumophila. Not only does copper tend to be legionella free, but tests also indicate that other bacteria are actually destroyed when in contact with copper-based components.

Certain treatments aimed at curbing legionella may be associated with an unacceptable rate of corrosion in copper components. For instance, the dosing of water systems with 20 - 50 ppm of free chlorine as a one-off, or occasional, disinfection measure of short duration (1 to 3 hours) is acceptable, and extremely effective. However, it is inadvisable for a copper system to be left charged with these levels for lengthy periods. Moreover, low level continuous chlorination with 1 - 2 ppm poses no problem.

With respect to hot water systems — and the recommendation to store water centrally at 60°C and to distribute water at temperatures of no less than 50°C — there is a clear need to ensure due regard is taken to avoid excessive water temperatures.

In soft water areas holding water for long periods at temperatures above 60°C can accelerate pitting corrosion of tube and, in hard water areas this situation will increase the precipitation of hardness salts in the pipes and calorifiers. Thus, calorifiers should be fitted with accurate temperature controls so as to achieve preservation of microbial quality without detriment to the longevity or cleanliness of the system.

Legionella is killed within a few minutes at 60°C and between 50/60°C survives for only 1 - 2 hours. The copper system’s viable organisms that have survived heating temperatures above 50°C may be discouraged from multiplying in the downstream water, but it should be recognised that the presence in the water system of other unsuitable materials may protect the organism from the relatively hostile environment within a copper calorifier and pipes.

All drinking water outlets should be connected to either the main supply directly or through a properly-constructed and protected storage cistern. Oversized and unprotected cisterns provide opportunities for microbial growth and contamination of the water entering the system. Detailed advice on the design, construction and commissioning of water services is given in BS 6700 and these should be following while also taking into account any relevant local water quality characteristics.

The CIBSE has produced Technical Memorandum TM13 which gives guidance on minimising the risk of legionnaire’s disease. It sets out general principles and has been written on the understanding that their successful implementation requires careful attention to the practical requirements of each water system and the building function involved.

Contact: Conor Lennon, IMI.
Tel: 01 - 295 2355; email: conor.lennon@irish-metallindustries.com
Innovative Programmer design
There are two new controllers from Siemens — RWB27 for use with central heating systems; RWB29 for dual hot water and central heating. Compact design coupled with innovative features ensures that operation is simple. Simple push-buttons on the front of the controller enable it to be programmed in-situ.

Benefits
- Programming flexibility
- Up to three on/off settings
- Three hour boost facility
- Holiday programme that overrides other settings
- Large liquid crystal, backlit, display

Siemens TRVs
Today's range of Siemens TRVs is one of the widest selections of HVAC control valves on the market, ranging from radiator valves up to large DN150 / PN40 valves for district heating plants.

The rooms and zones portfolio comprises a full modular range of 2.5mm and 5.5mm stroke valves. In combination with thermal or electromotoric actuators and on/off, 3-position and DC0...10V control signals, any preferred choice is available.

The MiniCombiValve, a world novelty for automatic balancing, is the ideal answer for trouble-free radiator installations, both new and retrofit.

FläktWoods
Fläkt Woods (Ireland) Ltd
Unit 1, Broomhill Business Park, Tallaght, Dublin 24
Tel +353 (0) 1 463 4600
Fax +353 (0) 1 463 4650
www.flaktwoods.com
Myson Electric Underfloor Heating

Myson has introduced a new line in underfloor heating (UFH) — an electric version of the product in the company’s already popular hot water-based system — which is ideal for installation in bathrooms, kitchens and conservatories.

Quick and easy to install, Myson Electric Underfloor heating is economical, running at 150w per square metre. It is ideal for renovation projects, or simply to help give a new look to a bathroom or similar area, with no need to adjust the existing plumbing system.

This new product, including its digital clock thermostat to regulate temperature, has the added benefit of being supplied all in one box, making it even easier for the installer. The system already meets the new European safety standards that come into effect in June 2005.

Underfloor products are the ultimate in designer warmth, giving carte blanche to those wanting to make the most of their rooms, without taking up wall space with radiators and other visible heating products.

Vincent Broderick, Potterton Myson (Irl) said: “Myson Electric Underfloor heating system is ideal for kitchens, bathrooms and conservatories. Not only does a warm floor give you a warm room, it also frees up more space for cupboards, cabinets or simply to create a minimalist look.

“Flexible and economical to use, Myson gives an underfloor solution to heating and space saving all in one box.”

Contact: Potterton Myson (Irl). Tel: 01 - 459 0870; email: post@potterton-myson.ie

Siemens Control Valves From Fläkt Woods

Siemens control valves are based on the combined expertise of the former Landis & Gyr and Staefa Control System companies who were leading developers and manufacturers in the field.

Today’s range offers one of the widest selections of HVAC control valves on the market, ranging from radiator valves up to large DN150 / PN40 valves for district heating plants.

The rooms and zones portfolio comprises a full modular range of 2.5mm and 5.5mm stroke valves. In combination with thermal or electromotoric actuators and on/off, 3-position and DCO ...10V control signals, any preferred choice is available.

The MiniCombiValve, a world novelty for automatic balancing, is the ideal answer for trouble free radiator installations, both new and retrofit.

Contact: Fläkt Woods (Ireland). Tel: 01 - 463 4600 www.flaktwoods.com
Grundfos Sololift+ lifting stations facilitate the installation of toilets, cabinet showers, washbasins and similar services in places where the wastewater cannot flow directly to the main sewer by means of a natural downward slope. Whether it is a basement, ground or loft-level installation there is a Sololift+ model to pump the wastewater to the soil pipe without the need for costly piping.

Operation is simple with wastewater from the units connected being led to the lifting station. When the liquid level reaches the start level, the pump automatically starts and continues in operation until the liquid level has fallen back to the stop level. The start and stop levels vary according to the Sololift+ model, each of which is specifically designed to accommodate different applications. These include floor-standing and wall-hung toilets; wash basins; cabinet showers; bidets; washing machines; and dishwashers.

The tanks of all Grundfos Sololift+ lifting stations are made from specially-developed light plastic material which have an easy-to-clean surface and are virtually maintenance-free once installed correctly.

There are six Sololift+ models in all, brief features and application details being as follows—

**Sololift+ WC** — This compact, automatic lifting station has an integrated cutter system and is designed for pumping sewage water containing toilet paper and faeces. It is a plug-and-go product with low noise level, discharge pipe connection to the side, and thermal overload switch.

**Sololift+ WC-1** — Also a small, compact, automatic lifting station with integrated cutter system which, in addition to pumping sewage water containing toilet paper and faeces, will also handle wastewater from a cabinet shower and washbasin. Features and benefits are as for Sololift+ WC;

**Sololift+ WC-3** — Automatic lifting station with integrated cutter system and designed for pumping sewage water containing toilet paper and faeces, in addition to wastewater from a wash basin and cabinet shower. Three possible inlets in the top and side ensure easy connection of extra sanitary appliances;

**Sololift+ CWC-3** — Automatic lifting station specially designed for wall-hung toilets to pump sewage water containing toilet paper and faeces, along with wastewater from a wash basin and cabinet shower. Three possible inlets in the top and side ensure easy connection of extra sanitary appliances. Discharge pipe connection in the side ensures easy maintenance;

**Sololift+ C-3** — Automatic lifting station specifically designed for cabinet showers, wash basins, washing machines or dishwashers. It has all the benefits and features of the aforementioned models but is ultra-compact and slim for easy installation under a wash basin or in a closet. Three possible inlets in the top and side ensure easy connection of extra sanitary appliances;

**Sololift+ D-3** — This compact automatic lifting station is designed for pumping grey wastewater from wash basins or cabinet showers. It can be installed underneath the cabinet shower or alongside it, and its low activation level means that the pump automatically starts when the water is turned on.

Correct application and installation is essential for optimum performance and, to assist installers in this respect, Grundfos has produced Win CAPS, a Windows-based computer-aided product selection programme which includes detailed technical information on each pump, along with wiring diagrams, installation and operating instructions, dimensional drawings, an optimum pump solution selection guide.

Apart from details on the Sololift+, WinCAPS contains similar information on more than 90,000 other Grundfos products.

Contact: Gordon Barry, Grundfos Ireland.
Tel: 01 - 408 9800;
email: info-ie@grundfos.com
It's reassuring to know you can keep ahead of the game with Honeywell. We have been making energy saving controls for over 100 years. So people trust us to provide quality, reliability and good value.

Our top quality range of thermostatic valves includes the smart chrome-top VT200, as well as the VT15 and VT117. All offer energy savings and reversible flow bodies to give unrivalled performance, individual room temperature control and stylish appearance.

Make the smart move - use Honeywell
Ideal Standard Create — Unique Bathroom Solutions

Planning a new bathroom can be a bit like completing a jigsaw ... sometimes the pieces just don’t fit together in the way you’d like. Create from Ideal Standard solves this problem. Designed by Robin Levien, this new concept provides three distinctive basin shapes which can be combined with a range of core pieces to offer a unique breadth of choice.

Create allows for bathroom design which can be customised to suit each individual preference, even when it comes to positioning bath taps. For example, if you love luxurious bathing and like to top up the hot water without stretching forwards, you can position the taps within easy reach on the side of the bath (excluding 170 x 70cm bath).

The Create collection is all about clean lines and elegant styling, in keeping with the emerging trend for rectilinear styling.

Additionally, for a chic contemporary look the bath panels are tailored to sit flush with the rim of the bath so that contours and curves are emphasised. Not only does it look beautiful but the streamlined design is also great for low-maintenance cleaning.

The same dedication is applied to Ideal Standard’s bath screens. The new collection incorporates an innovative double-flap seal which ‘deflects’ water into the bath and prevents it from splashing out.

For those who prefer the feel of a shower cubicle Ideal Standard has developed the Create ‘bath enclosure’. This practical over-bath shower system is made up of two hinged screens which fasten together with a magnetic strip. Both screens fold out of the way so that a comfortable bath can still be enjoyed.

When the requirement is for a bath and a shower but space limitations don’t allow for both, an over-bath shower is the obvious solution. The Create 170cm shower-bath is shaped for comfortable bathing and has extra space at the ‘foot’ end to allow plenty of room for showering.

For that special luxury Create does not require a king-size bathroom. Create’s 160cm offset corner bath is cleverly designed to provide a generous amount of bathing space and is specially contoured for a high degree of comfort. A screen is available for an over-bath shower and the bath comes in a left- or right-handed version.

To ensure total flexibility all Create baths are available with their own bath screen. Smart and minimal, all screens fold back for bathing and cleaning.

So many bathrooms look great in the brochure but recreating that look in real homes is another matter. Create rethinks every component to make the bathroom easier to plan and install. Thinking creatively is at the heart of this collection so whether it’s hiding ugly plumbing or perfecting over-bath showering, Create from Ideal Standard has the solution.

Contact: Ideal Standard Ireland.
Tel: 01 - 456 4525;
email: obrienm@aseur.com

Edge 42cm vessel basin, Create vessel drawer unit in oak finish with solid surface worktop. Create wall-hung wc with Edge set. Create shower-bath (left handed) with bath screen and overbath enclosure door. Silver monoblock single lever vessel basin mixer and 2 hole deck mounted bath filler, TT Ascarí built-in thermostatic shower valve, Moonshadow standard shower kit. The ultimate in fine-lined simplicity, Edge is a modern classic which will look good for years to come. It offers you a wide range of basins to give you real breadth of choice when designing your bathroom and includes the Edge vessel basin, a stunning example of designer style for an everyday bathroom.

Square 50cm pedestal basins, Create furniture pedestal units in walnut finish. Create 170 x 75cm bath. Silver monoblock single lever basin mixers. Cone towel rail. The subtle geometric outline of Square feels both timeless and contemporary. Ideal for today’s lifestyle, the basin has a generous capacity within a compact form and features a useful deck space for soap and toiletries. If you’re after a smart, simple look, Square will make a quiet statement in any type of bathroom.
Just like the rest of the country, house building in the Kerry region is extremely active. This is especially true in respect of the one-off, self-build, sector where the owners of such properties take a very active interest in what goes into the house. For the most part they are environmentally responsible and driven by the desire to erect eco-friendly homes that maximise the benefits of modern technologies such as underfloor heating, solar energy and condensing boilers.

Conscious of this trend and anxious to provide a comprehensive support package to the professional design team — and system installers in particular — Brendan O’Sullivan of Heatmerchants Tralee Branch has devised a day-long training/educational programme which will take place on 6 May next.

The main focus of the proceedings will be on underfloor heating but there will also be a breakout lecture of approximately one hour duration each on solar energy and condensing boiler technology.

Heatmerchants is now very strong in underfloor heating, thanks largely to its partnership with REHAU who has over 25 years experience in underfloor heating and supplies high-quality systems suitable for a wide range of applications. Over the years it has extruded and installed millions of metres of its Pe-Xa pipe which is manufactured from cross-linked polyethylene and has a co-extruded eval oxygen diffusion barrier.

Heatmerchants has dedicated design and development teams which get involved in each project from the outset and work in tandem with a Heatmerchants-approved contractor panel who do the installation and commissioning.

Additional support is provided in the form of on-site visits and training, with ongoing technical support for installers only a phone call away.

REHAU’s fittings are manufactured from DZR brass and manifolds made from high-quality brass, the main body being a one-piece design. A compact mixer and a range of controls that simplify the operation of the underfloor heating system are also available.

Control systems supplied by Heatmerchants to manage the underfloor system are Horstmann, Mullenhoff, Heatmiser and the Danfoss wireless system. There are also weather-compensation systems from Heatmiser and Danfoss.

Typical installations include domestic housing, sports halls, community halls, nursing homes, crèches, refurbished old cottages, factory outlets, showrooms, etc.

To support the REHAU underfloor heating system, Heatmerchants also offers a wide range of options for high-efficiency boilers from the Baxi or Keston commercial range; high-recovery calorifiers from Assos; and the Dunstar Heatpump system.

Heatmerchants also stocks the REHAU “Smartsystem 16” which is a system designed for the conservatory and small extension market. It runs directly off the existing heating system within the property and is extremely easy to install. It can also be used as a separate heating system, with its own controls.

Contact: Brendan O’Sullivan, Heatmerchants, Tralee. Tel: 066 718 0600; email: ufhinfo@heatmerchants.ie www.heatmerchants.ie
Refrigeration Technology Skillnet Secures New Funding

Institute of Refrigeration Ireland

Refrigeration Technology Skillnet, the enterprise-led training network for the refrigeration sector in Ireland, has secured further government funding to support its work to the end of 2005. The new funding was announced at a seminar in Dublin earlier this month, co-hosted by the Institute of Refrigeration Ireland and Refrigeration Technology Skillnet, and attended by 80 refrigeration and air conditioning professionals from around Ireland.

Refrigeration Technology Skillnet was established in November 1999 and has been developing and implementing training programmes for network members ever since. During this time over 180 companies have been involved in network activities of one kind or another, whether through attendance at seminars or participation in training programmes. This reflects the broad support for the aims of the network and a growing recognition of the need for lifelong learning in the workforce. Companies that have been involved in the network from day one are already five years ahead of their competitors in terms of training.

Back in 1999, Refrigeration Technology Skillnet was part of a wider "pilot" initiative to kick-start training in Irish industry using enterprise-led training networks. The case for using enterprise-led networks to meet training needs had yet to be proven. This is no longer the case. In March 2005, the government allocated an additional budget of €55 million to Skillnets, the funding agency for training networks, extending their mandate for at least another five years.

"The new funding is a huge vote of confidence in enterprise-led training networks", says Enda Hogan, Network Manager. "Refrigeration Technology Skillnet is one of the networks that has earned that confidence from government and employers. It has produced tangible results for the enterprises and individuals involved and it reflects a new level of maturity within our sector."

Seamus Kerr, Chairman of the Network Board, agrees. "The network has given companies and individuals within our sector an opportunity to work together to meet common training needs. Network members have grasped this opportunity and have consistently demonstrated their ability to co-operate in achieving common goals."

Speakers at the seminar were Enda Hogan, Refrigeration Technology Skillnet, with Jane Gartshore, Cool Concerns, and Seamus Kerr, Institute of Refrigeration Ireland and RSL Ireland

Philip McGovern, IT Tallaght, with Kevin Hoey, IFEP

Zac Keane and Micael Cleary, both Paragon Air Conditioning

Declan Fitzmaurice, PED Consultants with Paul Tingle, Paul Tingle & Associates

https://arrow.tudublin.ie/bsn/vol44/iss4/1

PAGE 28 BSN ews APRIL 2005
Refrigeration Technology Skillnet Secures New Funding

Refrigeration Technology Skillnet can be particularly proud of one of the more unique outcomes from the work of enterprise-led networks. The relationships that have been built over the last five years have led directly to the formation of a new learning institute for refrigeration and air-conditioning professionals in Ireland. The Institute of Refrigeration Ireland was established in November 2004 and will work alongside the training network to meet the many challenges facing the sector.

Refrigeration Technology Skillnet will launch a new training programme very shortly, as soon as the funding is fully in place. Meanwhile, the Institute of Refrigeration Ireland expects to publish a programme of CPD events very shortly and is planning an AGM and technical seminar in early June. Both organisations offer refrigeration and air-conditioning professionals, and their employers, the opportunity to acquire new skills, knowledge and competences in order to compete effectively going forward.

"Companies that haven't yet got to grips with the challenge of training their workforce need to be aware of one simple demographic", says Enda Hogan, Network Manager. "Eighty-five per cent of the workforce in 2015 will be made up of people who are already in the workforce today."

To those who ask the question, “what happens if I train my employees and they leave?” the reply is straightforward — “what happens if you don’t train them ... and they stay?”

Contact:
www.instituteofrefrigerationireland.ie;
www.refrigerationskillnet.ie

John Brogan, Coolrite, with Richard Ellis, Obel Refrigeration
Mark Kiely, Gasco, with Tom Bennett, Tom Bennett Refrigeration
Kevin Kehoe, Herbert Levinson
Don Hoban, Fridge Spares, with Michael Murphy, Murphy Refrigeration; and John Agnew, Murphy Refrigeration

David Killilea, Cross Technical Solutions, with Michael Dooley, Dunnes Stores
Joe Brennan, Euro Cooling Services, with Frank O'Sullivan

David Roome, DC Compute Air

Published by ARROW@TU Dublin, 2005
After staff costs rent is commonly the second highest cost for a business and the rent review is probably the most important event under the lease of a premises. The way the review is to be conducted is set out in the lease and it comes into play at certain intervals, usually every five years.

The wording can vary greatly from lease to lease and there are a variety of methods of implementing a review. Some require specific forms of notice and counter notice while others state simply a rent “as may be agreed from time to time”.

The valuation of the rent can also vary from full open market rent to an index-linked increase.

The lease must be read carefully and fully understood and this is where the chartered surveyor’s skill is required. It is common for rent reviews to be upward only.

For the purposes of this article I will assume that most businesses hold leases and the readers of this article are tenants.

The operation of the rent review provisions can be broken down into a number of elements:

- Service of Notice
  This notice normally activates the rent review and is usually served by the landlord. If it is not in the form required by the lease there might be grounds for the tenant to challenge its validity. Where a counter-notice is needed then it must be prepared and served by the tenant in accordance with the lease. Failure to serve a counter notice properly can, in some cases, result in the tenant paying an excessive rent.
  In some leases there is an option for the tenant to initiate the review

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Valuation
It is common for the rent to be valued at the full open-market yearly rent at the review date where the premises is let as a whole without fine or premium on the basis of vacant possession, by a willing landlord to a willing tenant, for a certain term. The length of the term for the purpose of the review can, in some cases, have a significant influence on the level of rent determined. For example, a term of five years may attract a higher rent than a term of 25 years.

It is commonly assumed for the purpose of the review that the tenant has:
- complied with all the obligations as to repair and decoration imposed by the lease;
- that, in the event of the premises having been destroyed or damaged, the same shall then have been fully re-built repaired or re-instated (as the case may be) in a good and substantial manner;
- that no work has been carried out by the tenant or their predecessors in title during the term of the lease which may diminish the premises;

and this should be seriously considered by the tenant in circumstances where the rental market is rising as it can force the landlord into addressing the review sooner rather than later. This would have the advantage for the tenant firstly, of avoiding the payment of interest on the additional rent resulting from the review to the date of payment and secondly, it may deny the landlord from using market evidence helpful to his position which may emerge at a later date.
Businesses, Be Prepared at Rent Review

— that the tenant can obtain a credit as allowable input tax in respect of any VAT charged on rent or other sums payable under the lease;
— that the premises are in good and substantial repair and condition and have been fully fitted out and equipped by the tenant so that they are capable of being used for all permitted purposes by the tenant.

Following are normally to be disregarded:
— the fact that the tenant is in occupation;
— the goodwill which shall attach to the premises by reason of the tenant's business;
— any increase in rental value attributed to any improvements executed by, or at the expense of, the tenant with the consent of the landlord;
— the taxable status for the purposes of VAT of the landlord and the tenant.

Other factors are also considered such as the level and form of any service charge payable; the insurance provisions; rates liability; the repairing liabilities; the effects of compliance with statutory provisions (such as planning, public health, fire and safety, etc); break options; alienation provisions; the user clause; and security of tenure.

The valuation encompasses the interpretation of the lease, knowledge of the effects of relevant legalisation, the analyses of rental market information for comparable situations, and a mathematical exercise. The mathematical method can vary. For example, in retail situations it may be appropriate for the area to be divided up into zones.

Third Party Determinations
If no agreement is reached within the time set out in the lease then the matter can be put to a third party to determine the rent. It may be an arbitrator or an expert. There are time scales for either the landlord or the tenant to have a third party appointed, usually by agreement or on application by the President of the Society of Chartered Surveyors (or some other appropriate person). In these circumstances, the third party asks for submissions by landlord and the tenant within a time scale and a determination is made. This is a more costly route as the fees of the third party have to be paid and sometimes the decisions are difficult to predict. It is a mechanism, however, which can be used to bring the review to an early conclusion.

Interest
It is a common provision where the rent is agreed after the review date, for the landlord to charge interest to the tenant on the additional rent resulting from the review to the date of payment. The possible liability for interest should be kept in mind when faced with a delay in reaching agreement.

Conclusion
A rent review can be a complex matter involving lease interpretation, knowledge of the property market, the application of all the other relevant factors to the valuation and negotiation with the landlord. How it is approached can have a significant bearing on the outcome level. It is prudent to get advice from a skilled practitioner, such as a chartered surveyor, at least six to nine months prior to the review date (earlier if the notice requirement is over six months). It is also important to have a considered strategy prepared to minimise the increase.
Plumb Lines

Heard it on the grapevine ...

LESS VOLUME ... MORE QUALITY
Anyone monitoring the commercial property sections of the leading daily and weekly newspapers over the last few weeks would be forgiven for thinking a massive upswing in construction activity is in the offing. The number of development sites for sale in Dublin and throughout the country is staggering, as are the prices quoted. Typical examples include €50 million for an apartment site in Leopardstown; Up to €15 million for housing site in Mullingar; €6.75 million for housing site in Carlow; €12 million for industrial site in Ballymount, Dublin 12; €9 million for site at The Curragh; etc. etc. Given that scenario construction activity in respect of volume would appear to be assured but what about quality, especially in apartment complexes?

LG BY NUMBERS
LG says it has reduced the production time of a single air conditioner unit to 10 seconds, and that of a compressor to five seconds. Moreover, of the estimated 51.5 million ac units sold worldwide last year, it claims a market share of almost 20%, or 10 million units.

MIX 'N MATCH
Don't know what I think of the growing trend towards high-density mix 'n match projects incorporating residential and commercial schemes. We are all familiar with the traditional "living over the shop" scenario, and the later development of that theme into relatively small-scale mixed retail/residential developments. Now, however, we have major apartment complexes sitting cheek-by-jowl with commercial buildings in locations that would previously be thought of as exclusively commercial. Sandyford in Dublin 18 is a typical case in point. Can't say it would appeal to me but then, everyone to his own.

VEHA 'SHOCK'
While Siptu representatives described Quinn Group's decision to close the Veha plant in Wicklow as "completely out of the blue", industry insiders cannot claim to be surprised. For the near 100 plus employees and the town itself it is undoubtedly a major blow but the rapidly-changing radiator marketplace, coupled with the age and condition of the manufacturing plant, made the closure almost inevitable.

ULTIMATE POWER DRESSING
A Japanese chemistry professor has devised a system for producing solar panels that are less than 0.5mm thick, are as pliable as fabric, cheap to produce, and can be dyed any colour. Applications envisaged include everything from umbrellas that can charge mobile phones to tents capable of powering a laptop computer. A deal with a fashion company has resulted in a satin jacket, embroidered with a strip of these panels in the shape of colourful stars, which can keep an iPod constantly charged.

KERR COOL DELIVERY
The combined Refrigeration Technology Skillnet and Institute of Refrigeration meeting in Dublin recently saw Seamus Kerr of RSL excell, yet again, in the art of public speaking. Despite dealing with a subject which can, at times, be very technical and detailed, Seamus can still hold the audience with an under-stated delivery which is direct and to the point. He can even interject some humour and levity, without ever distracting from the seriousness of the topic. Well done Seamus.

EXTREME SUSTAINABILITY
Jaga, the Belgium-based heating specialist whose Irish representative is Versatile Agencies, is totally committed to sustainability. As sales of its unique Knockonwood wooden radiators took off it acquired a vast tract of forest to ensure responsible harvesting of, and sustainable use of, wood for its own needs.

CORK CAPITAL
Cork has always maintained that it is the real capital of the country, much to the amusement of the Dubs. However, more and more Dublin-based construction professionals — from builders through to consultants and contractors — are heading south to capitalise on the massive development programme now underway in the city. It is imperative that Cork looks to Dublin's experience in recent years, not so much to emulate the plus points but rather to avoid, the mistakes that were made.

SANYO WINNER
The Killarney hills are alive with the sound of music now that Robin Bruton, Killarney Mechanical in Farranfore, Co Kerry, won the Sanyo hi-fi in last month's spot-the-difference competition. See page 10 for this month's competition.

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