Representing the Scottish COODUCIDE COODUCIDOCUCIDE COODUCIDOCUCIDOCUCIDOCUCIDOCUCIDO

Merry and bright

SELECT team share their Christmas wishes as we look back on a year of support and successes

The hot topic Make sure you're ready to embrace the revolution in electric heating Warning signs Fire chief's advice on spotting evidence of meter tampering Safe and sound SELECT Member gives his verdict on the benefits of using AFDDs

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Jordan Davies from Amigo Electrical told us: "We use the RSWB as standard now for all our first fixing. It's so convenient, cost-effective and is a huge time-saver."

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SELECT

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cabletalk

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Best Membership Support Since Covid-19 (up to 4.000 members)

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A year of challenges, change and cheer!

RADITIONALLY, this is the time when I reflect on the successes of the past 12 months and look forward to the new year, with some resolutions or predictions thrown in for good measure. However, as the headline of my last column was *'The certainty of uncertainty'* I'm not sure if making predictions is a wise thing to do!

So let's focus on the successes instead, particularly the key objectives from the 2022 Business Plan that we achieved in the past 12 months:

DEVELOPING WORKLOAD OPPORTUNITIES FOR MEMBERS

We established a Professionals' Forum for consulting engineers, architects, designers and others to promote SELECT and provide updates. The inaugural Professionals' Day attracted more than 30 attendees and we'll repeat it in 2023, as well as launching a dedicated e-shot.

REGULATING THE INDUSTRY

The proposed Members' Bill to introduce protection of title is edging towards a parliamentary debate and new signatories to our Wall of Support include Owen Thomson MP, Fergus Ewing MSP, Certsure MD Richard Orton and more than 300 individual electricians.

ACTING AS THE AUTHORITY ON ELECTROTECHNICAL SKILLS AND QUALIFICATIONS

A huge amount of work has gone into this,

"IT'S BEEN A BUSY AND SUCCESSFUL YEAR AND I'D LIKE TO THANK ALL SELECT STAFF FOR THEIR INVALUABLE WORK"

led by Director of Employment & Skills Fiona Harper. Among other things, our team has developed fire and security qualifications and reviewed and updated the Environmental Technologies National Occupational Standards.

DEVELOPING OUR TRAINING PORTFOLIO

Led by Director of Technical Services Bob Cairney, all our training courses and certificates were updated to reflect the introduction of Amendment 2, with the number of training sessions also increasing hugely.

POSITIONING SELECT AS THE AUTHORITY ON EMERGING TECHNOLOGIES After undertaking an emerging technologies survey, we used the results to work with thirdparty providers to deliver courses on topics such as EV charging, solar PV panels and battery storage and we plan to deliver our own EV course in 2023.

PROMOTING SELECT AND COMMUNICATING OUR KEY MESSAGES

As well as overseeing the relaunch of *cabletalk*, Director of Membership & Communications Iain Mason launched our Associate Membership scheme, which attracted 23 leading manufacturers and led to excellent sponsorship support for in-person events.

It has been another busy and successful year and I would like to thank all SELECT staff, past and present, for their invaluable work. As I said at the outset, predicting the future is never easy, especially in the current climate. However, what **IS** clear is that our dependency on electricity grows and whatever the future brings, electricians will play a massive part. The 'now' is indeed electric!

Finally, it would be remiss not to pay tribute to our colleague Malcolm Duncan whom we lost at the start of 2022. His passing was a huge blow to everyone but we have worked hard in supporting each other and the SELECT family goes from strength to strength.

Best wishes to all readers of *cabletalk* for Christmas and let's all hope for a peaceful 2023.

"THE AWARD

CHRISTMAS

WAS A GREAT

PRESENT AND A

TESTAMENT TO

THE BRILLIANT

WORK OF THE

SELECT TEAM"

WORDS ALAN WILSON Managing Director, SELECT

WAS honoured to have taken on the role as President at the 2022 AGM and am pleased to see that the association has enjoyed another very successful year, culminating in Membership reaching 1,260 businesses in December – our highest figure in 122 years.

The past 12 months have been somewhat of a transitional year for SELECT, especially from a staffing perspective, as many long serving colleagues retired.

While this brings challenges, it also offers opportunities as 'new blood' brings fresh thinking and new ways of working. Despite these

ongoing hurdles, SELECT has again

continued its great work, serving Members across Scotland and ensuring that we have:

• Cemented the association at the heart of the Scottish Government Construction Leadership Forum (CLF), allowing us to influence at the highest level.

• Continued to lead the Construction Industry Collective

Voice (CICV), which held its first Green Home Festival in August and which continues to lobby in areas including procurement, payment and material shortages.

• Assisted hundreds of Members with clear advice on employment, technical, commercial and health and safety issues via phone, email and online, including our SELECT TV service.

• Hosted a number of successful events, including the Toolbox Talks,

President's Cup and President's Lunch, at which I was delighted to see so many familiar faces and colleagues old and new.

Finally, it was fantastic to see SELECT win Best Membership Support Since COVID-19 at the recent Association Excellence Awards.

We were up against a number of much larger UK-wide organisations so it was a great early Christmas present and a fitting testament to the brilliant work of the whole SELECT team.

Have a fantastic festive period when it comes and I look forward to seeing many of you in person in 2023.

WORDS ALISTAIR GRANT President, SELECT

COMMENT // CHRISTMAS WISHES



"Here's wishing all our Members. Associate Members

and their families a merry Christmas and a prosperous 2023. Let's stay positive after a strange vear in which the economic turmoil affected everyone. Here's hoping certain issues can be resolved amicably and things get better for everyone.'

Stewart Anderson, Chair, Aberdeen & North East Scotland Branch





Eric Rae, Vice-**Chair, Aberdeen** & North East Scotland Branch



"I hope we can look forward to a more settled time

next year. Apprentice numbers are up and we need to continue to develop new people and existing operatives to meet the challenges ahead, upskilling to adapt to everchanging technology."

Jim Cooper, Chair, **Avrshire Branch**

Here's all we want for Christmas

With Santa on his way, we asked the SELECT Presidential Team and Branch Officers what they wanted fellow Members and the wider industry to find in their stocking this year...



"Along with my fellow Members, I'd like to see more youngsters stepping up to become apprentices after 2022 had one of the best intakes ever. The technology we have now is incredible and they will play a key part in creating an exciting

industry that will be vital to everyone's future."

David Harris, Chair, Glasgow & West of Scotland Branch



"After the past few years, I'd like to see a return to a more stable working economy. Shortages of components and industry unrest has pushed equipment lead times and costs up, all of which impacts on contracting programmes."

Kenny Berrie, Vice-Chair, Glasgow & West of Scotland Branch

"The past three years of uncertainty have brought further disruption to payments and the supply chain, so I'd like to see further progress to help improve cashflow and ensure we all get paid on time."

lan Young, 4th Representative, Glasgow & West of Scotland Branch



"My main wish is to have protection of title for electricians in Scotland closed out once and for all. I'd also like to see the continued development of apprentices and adult trainees, who are the future of our industry."

Mike Stark, SELECT Vice-President



"I hope that protection of title will finally become a reality in 2023 and a bill is laid before the Scottish Parliament. I'd like to see more funding for apprentices too, as without it we'll face a shortage of skilled workers. I'd also like material prices to stabilise across as the current fluctuating prices make an already uncertain time even more difficult."

Alistair Grant, SELECT President



"With the uncertainty and instability over the past three years, we now find ourselves out of the frying pan and into the fire as war threatens peace in Europe. My wish is for all humans to stop and reflect on how our actions affect others and the planet. If individually we made better collection would proster better would "

decisions, then collectively we would create a better world."

Graeme Anderson, Chair, Edinburgh & South East Scotland Branch



"I'd like to see the campaign for protection of title take the final step towards reality. It's good to see

businesses busy again after the uncertainty of the last couple of years, so I hope this also continues. And finally, I wish everyone a happy and healthy year ahead."

Craig McGowan, Chair, Lanarkshire Branch



"Despite another recession looming, life and work must go on, he growing

so let's hope the growing support for regulation continues and that Members and their families stay safe and healthy."

Gordon Paterson, Chair, Dumfries & Galloway Branch



"As others have said, it would be great to see our industry regulated to deter the 'six-

week wonders' who call themselves electricians with no proper training. With the rapid advances in renewables technology, we need a competent workforce to keep everyone safe."

Donnie Calder, Chair, Inverness & North of Scotland Branch



"I hope the Scottish Government finalises the process to introduce protection of title for qualified electricians and that

the electrical contracting industry can get through the uncertain financial period we're all currently experiencing."

Tony Harvey, Chair, Tayside Branch



"It was pleasing to see such a good intake of apprentices in 2022, so next year, as the industry

continues to face many challenges, it's important that we continue to welcome a high number of trainees to show that our profession is a worthwhile career."

Keith Smith, Vice-Chair, Tayside Branch

"'d like to see the Scottish Government take regulation of the electrical industry seriously and push through the bill that would ensure all qualified electricians are registered and have a grade card, preventing nonqualified people carrying out electrical work."

Graham Lyall, 3rd Representative, Tayside Branch

KEY INDUSTRY NEWS AND THE LATEST ON SELECT STRATEGY, CAMPAIGNS AND COLLABORATIONS

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Alan Wilson's warning over the dangers of 'six-week wonders' trying to enter the industry

+ PAGE 12 /

Technical team celebrates making 24-in-a-row for inspection accreditation

+ PAGE 13/

Members enjoy catching up as in-person Branch Updates finally return after pandemic

+ PAGE 14 /

Why working together will be vital for the success of the Scottish Construction Accord

SELECT's COVID-19 support honoured with top award

Alan Wilson pays tribute to the team at The Walled Garden and beyond after we win prize for helping Members through the challenges of coronavirus

ANAGING Director Alan Wilson has paid tribute to staff, office bearers and Members after SELECT won a prestigious national award for its response to the coronavirus pandemic.

The association scooped the award for Best Membership Support Since COVID-19 at the Association Excellence Awards, which recognise the vital work carried out by organisations across the UK.

Judges praised the association for its hard work during lockdown and beyond, saying: "SELECT went the extra mile to provide the personal touch,

practical support via one-to-one contact, financial assistance and mental health support to Members."

Alan said: "This win is a brilliant recognition of all the hard work carried out by everyone at SELECT both during the initial lockdown and in the months since.

"It also testament to the contribution of our Central Board, whose personal contact with Members was rightfully praised by the judges in their comments.

"Together, we tackled one of the most challenging periods in our history and emerged stronger and more determined to help our industry thrive."

SELECT scooped the award at a special ceremony at The Kia Oval in London on Friday 14 October attended by ♦ GCN Events Director Claire Wormsley, lain Mason, Alan Wilson, Fiona Harper, Yvonne Wilson and ceremony host Jess Robinson Alan, Director of Employment & Skills Fiona Harper, Director of Membership & Communications Iain Mason and Specifier & Client Relations Manager Yvonne Wilson.

Fiona, who is also The Secretary of the SJIB, added: "This was a much-coveted award with some extremely strong competition and we were up against a number of established trade bodies from across the UK, so it was a great honour to win."

SELECT's response to the pandemic included offering Members a discounted subscription and a wealth of practical support to help electrical contractors weather the ongoing uncertainty.





PRAVE BECOME SELECT MEMBERS SINCE 1 OCTOBER 2022

- Sean McLauchlan Electrical, Pitlochry
 The EV Charging Group Limited, Armadale
- 3. Rowan Electrical Services, Kelty
- 4. Grande Construction Ltd, Kirkcaldy
- 5. AMO Security (Scotland) Ltd, Dundee
- 6. MM Electrics, Wemyss Bay
- 7. Galligan Electrical Services, Dumfries
- 8. RI Cruden Limited, Muir of Ord
- 9. EV Chargepoint Scotland Ltd, Inverness
- 10. A & D Hamill Electrical, Alexandria
- 11. Electrical Maintenance & Installation Services Ltd, Kilsyth
- 12. Airco Developments, Dalkeith



Watch the video at bit.ly/aea-22 "THIS WAS A MUCH-COVETED AWARD WITH SOME EXTREMELY STRONG COMPETITION AND WE WERE UP AGAINST A NUMBER OF ESTABLISHED TRADE BODIES FROM ACROSS THE UK, SO IT WAS A GREAT HONOUR TO WIN"

Vice-President Mike Stark said: "Congratulations to everybody concerned. SELECT showed the true value of belonging to a trade association."

Immediate Past President Donald W Orr said: "This is absolutely brilliant and a great accolade. Well done to everyone at SELECT, who should feel very proud."

Depute Vice-President Darren Crockett added: "This is an excellent achievement and recognises the hard work and effort the SELECT staff put in to keep the organisation running smoothly day in, day out in these different times."

As well as its COVID-19 nomination, SELECT was also nominated for Best Awareness Campaign or Advancement of a

Cause (launched in 2022) for its high-profile Alarm Ambassadors initiative, sponsored by Aico. It was also in the running for Best Association Newsletter, Blog, Online or Physical Publication, for the newlyrelaunched *cabletalk*.

POLITICIANS PAY TRIBUTE TO SELECT SUCCESS

MSPs from all sides of the political spectrum used a special Scottish Parliamentary motion to congratulate SELECT on its awards victory. Lodged by Monica Lennon, the Scottish Labour and Scottish Co-op MSP for Central Scotland, the motion was backed by 19 other MSPs from all parties. Tabled on 24 October, the motion noted that the Parliament "congratulates SELECT, which won the award for **Best Membership** Support Since

COVID-19 at the Association Excellence Awards, which recognise what it sees as the vital work carried out by trade organisations across the UK".

The motion also "understands that the judges praised SELECT for its hard work during lockdown and beyond and further understands that SELECT also delivered a huge range of guidance via its in-house teams and through the Construction Industry Collective Voice (CICV) and wishes SELECT all the best for the future".

Those supporting Ms Lennon's motion include fellow Labour politicians Foysol Choudhury, Paul O'Kane, Paul Sweeney and Martin Whitfield, along with the SNP's Karen Adam, Colin Beattie, Jackie Dunbar, Bill Kidd and Fulton MacGregor.

Also giving their backing were Lib Dem Willie Rennie and Conservative MSPs Miles Briggs, Alexander Burnett, Sharon Dowey, Pam Gosal, Jamie Halcro Johnston, Edward Mountain, Graham Simpson, Sue Webber and Tess White.

Alan Wilson said: "We are enormously grateful to Ms Lennon for submitting this motion, which focuses attention on this award at the very highest level."



It also delivered a huge range of employment,

financial, health and safety and contractual guidance

via its in-house teams and through the creation of the

NEWS // TRAINING

ELECT Managing Director Alan Wilson has warned

against the rising trend of "sixweek wonders" who are trying to enter the electrical industry after taking just a short course in basic skills.

In a hard-hitting interview, Alan dismissed the spread of fast-track courses and said people with inadequate training and experience pose a safety risk to both the electrical sector and consumers.

He also insisted there was no substitute for a proper apprenticeship – and warned that people with "pound signs in their eyes" faced being taken advantage of by rogue trainers offering worthless short courses.

Speaking in an interview on Fix Radio, Alan said: "We all know how safety-critical the construction industry is and the last thing I want is for anyone to spend money on a pie-in-the-sky idea that after six weeks of training they can trot out and start rewiring homes or installing solar PV and battery storage. It just doesn't happen.

"You can't become a doctor or a nurse in six weeks – experience and training are



Warning over danger of 'six week wonders'

Quick courses that only cover basic skills are a recipe for disaster and could put people at risk from unqualified electricians, SELECT MD Alan Wilson tells radio listeners

> vital. Even after a four-year apprenticeship and a final assessment, most employers say electricians need two to three years' experience on top of that. To imagine you can do in six weeks what real electricians are doing in six

or seven years just doesn't add up. We all know how dangerous electricity can be if things aren't done properly, so proper training is key.

"The last thing anyone wants to do is put themselves – or any customer they carry

NEXT GENERATION 'NEEDS MORE THAN JUST GREEN TECH'

SELECT'S Fiona Harper says the electrical talent of tomorrow needs a thorough grounding in **ALL** aspects of installation – not just the green technology that will help on the journey to net zero.

Our Director of Employment and Skills insists it is essential for would-be electricians to follow the traditional apprenticeship route and undergo full training, not just try to specialise in low carbon areas.

Speaking on the Clive Holland Show on Fix Radio on 14 November, Fiona said: "The country and the industry needs apprenticeships and fullblown electricians. But what we don't need is people who come in and can only install solar PV or electric

vehicle (EV) charging units – that doesn't work in electrical installation. "Electricians need the

foundational knowledge to apply their holistic knowledge and skills to install **ANY** technology correctly and safely, whatever it may be.

"That's not to say they might not need some upskilling, but we don't need the 'six-week wonders' and we've worked with the Scottish Government and Skills Development Scotland to really get that message across." Fiona said the industry was eager to support apprenticeships to help plug the skills gap – but financial backing was also needed at Scottish Government level.

She said: "We are an employer-led industry, so if an employer says they would like an apprentice, we go out of our way to supply one through the Scottish Electrical Charitable Training Trust (SECTT). However, we need government funding to do this as we have no employer levy. Instead, we do a lot through time and talent to support what we know is a good system."



out work for – at risk." Alan, who has helped spearhead SELECT's long-running campaign for the professional recognition of electricians, spoke out in conversation with Thomas Nagy and Bradley Jones on *The Electrical Show* on Fix Radio, the national station aimed at the building sector.

He said that the industry already has faster routes to entry for people with transferrable skills but said that, in general, adult apprenticeship schemes were still the best option for securing a recognised qualification for older people wanting a change in career.

Alan said: "It is a contentious topic and a response to it depends on who is doing the course. Through the Scottish Joint Industry Board (SJIB), we operate a crediting electrical competence (CEC) scheme which considers an individual's experience and qualifications, and sometimes they're only required to do updates on existing knowledge as appropriate. "But if someone doesn't have the qualifications to start with it becomes a much bigger issue. If someone is serving or cooking meals in a restaurant one week and then decides to do a six-week course to become an electrician the next, that's just a pipe dream that will end badly for them and for anyone they end up working for.

"There are opportunities for people who, for instance, have had services training or have a technical background

Listen to the interview at bit.ly/alan-fix

but no formal qualifications and who could do shorter courses to become qualified. "But we must be very, very careful about people who just want to pick

up a tool bag because they can see the pound signs in their eyes. Six-week wonders are not what the industry or the public wants."

He added: "The electrical industry isn't a closed shop but people **MUST** get into it in the right way. So yes, you might have to do an adult apprenticeship for two or three years, but that's going to give you a career for 10, 20 or even 30 years thereafter."

"TO IMAGINE YOU CAN DO IN SIX WEEKS WHAT REAL ELECTRICIANS ARE DOING IN SIX OR SEVEN YEARS JUST DOESN'T ADD UP"



CALL FOR INVESTMENT IN SKILLED WORKFORCE

SELECT has warned that "significant investment" is needed to ensure there is a sufficiently skilled workforce to install new domestic heating technology and meet net zero targets safely.

The association says investment in "proper" apprenticeships and upskilling the existing workforce is essential – and it's also vital to upgrade the nation's electrical supply to accommodate green domestic technology.

SELECT's warnings came after it responded to a recent Scottish Government consultation into the New Build Heat Standard, which is due for launch in April 2024 to reduce carbon emissions from the Scottish building stock.

The association said that while it agrees with the standard's aim of regulating direct emissions heating (DEH) in new buildings, rolling out greener options could bring unintended consequences.

In its response, SELECT said: "Zero direct emissions heating (ZDEH) installations may impact on the consumer's electrical installation and require the upgrading of some aspects of the consumer's distribution equipment. Has the availability of sufficient skilled and competent installers been considered?"

SELECT also warned that poorer households could be less likely to install new low-carbon heating technology, leaving them with outdated, expensive and unsafe systems.

APPRENTICES SHINE AT UK SKILLS CONTEST

Apprentices from two SELECT Member companies recently scooped gold and silver in the prestigious UKwide SkillELECTRIC competition.

Top spot went to Craig Fairweather, 23, who is employed by SELECT member firm McDonald & Munro in Moray and trained by Moray College and SECTT.

The runner-up was fellow Scottish apprentice Andrew Horne, who works for A Campbell Electrical Services in Stornoway, Isle of Lewis, and attends Lews Castle College. The final took place at Middlesborough College on 16 and 17 November, with the winners announced on Friday 24 November.

• Full story and pictures: Pages 54 & 55







LINDIANA'S PERU TREK IS MAKING THE NEWS

SELECT continues to hit the headlines in the electrical industry, with our very own Lindiana Jones appearing in the November edition of *Electrical Times*.

In an extended version of her *cabletalk* interview from October, Events, Marketing & Communications Coordinator Linda Rolfe revealed more about her epic trek to Macchu Pichu in Peru earlier this year in aid of the Electrical Industries Charity.

Linda's write-up comes hot on the heels of SELECT President Alistair Grant, who made a guest appearance in the September edition, talking about his music and football career. Read the article

at bit.ly/inca-trek

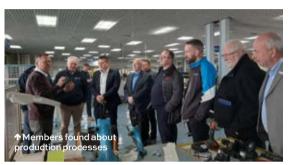
Committee's interest is switched on after factory visit

Our electrotechnical experts were back on the road for their latest meeting with a special tour of Associate Member Scolmore Group's production facilities in Greenock

ELECT'S Electrotechnical Committee hit the road for their recent meeting when they enjoyed a tour of Scolmore Group HQ. The group got a close-up look at the Associate Member's famous time switches at the Greenock site on 9 November.

SELECT staff in attendance were Director of Technical Services Bob Cairney, Technical Advisers Keith Hagan and Bruce Findlay and Training Development Adviser Stuart McKelvie.

They were joined by Glasgow & West of Scotland Branch Chair David Harris and 3rd Representative David Smith, Immediate Past President Donald W Orr and SELECT Member and Committee Chair Kevin Griffin. Also there were John Chambers from ECG Building



Maintenance Ltd, the IET's Steven Devine, Scottish Electrical Charitable Training Trust (SECTT) Training & Development Manager Barrie McKay, Mark Smith of British Gas Services Ltd, BEAMA's Neil Smith and David Henderson, Manager of the Cambuslang SECTT Assessment Centre. Bob said: "I'd like to thank Scolmore Group for hosting the meeting so well – everyone thoroughly enjoyed it."



A BADGE OF HONOUR FOR THE TOP TEAM

SELECT's Technical team is celebrating after its inspection activities received accreditation with the United Kingdom Accreditation Service (UKAS) for the 24th year in a row. Accreditation against the internationally recognised standard for inspection bodies ISO/IEC 17020:2012 means SELECT continues to be officially recognised for the quality of its electrical installation inspection service. In order for accreditation

In order for accreditation to be maintained, SELECT has been subject to rigorous annual assessment by UKAS since first attaining accredited status in 1998. Bob Cairney, Director of Technical Services, said: "Being UKAS accredited is extremely important to the association, its Members and the wider public. "I would like to congratulate all the

Technical Services



006

team on achieving a successful outcome from our UKAS audit. Holding UKAS accredited status brings confidence to consumers and the industry and demonstrates our Technical Advisers have proved their competence to carry



In-person Updates make welcome return

Members enjoy the chance to catch up and watch presentations together for the first time since the pandemic

PRESENTATIONS on electric vehicle (EV) charge point testing and arc fault detection

devices (AFDDs) were among the highlights as our Branch Updates finally returned in person.

Held across four weeks in October, the meetings were well attended as Members made the most of the first physical

the most of the first physical get-togethers since the start of the pandemic in 2020.

Guests at six updates enjoyed a technical presentation by Sandy Thompson from Megger, who discussed equipment to help test EV charge points and the impact of Amendment 2.

Danny Main of fellow Associate Member Hager

out installation inspections safely, impartially and to the highest standard."

This year's assessment was coordinated by SELECT Technical Administrator Susie Liddle, who took on the duties of quality controller following the passing of Malcolm Duncan in January 2022. Bob said: "Susie has put in a lot of work not just to maintain but also to ◆Sandy Thompson from Megger presented at six events also outlined the latest developments in AFDDs at the meetings of the Dumfries and Galloway and Edinburgh and South East Scotland Branches.

Updates on SELECT activity were delivered by the Directors of Function and the Presidential Team, with Training Officers providing latest news from the Scottish Electrical Charitable Training Trust (SECTT). At the Tayside Branch Update at Dundee &



Angus College on 27 October, SECTT Training Officer David Stebbings also gave a tour of the training facility, showing off the booths and answering questions about apprentices' progress.

SELECT President Alistair Grant said: "After two years of online meetings, it was excellent to see Members face-to-face again. The healthy attendances showed there is still a demand for the meetings and they're a good way to catch up."

BOARD MEETING

As cabletalk went to press, SELECT was preparing to host the final Central Board meeting of 2022.

Held at the Balmoral Hotel in Edinburgh, the meeting on Wednesday 7 December was followed by the first in-person Past President's Lunch since 2019. A full write-up and photographs will appear in the next isssue.



improve our procedures and she should be rightfully proud of this achievement.

"I'd also like to thank our independent adviser, Haig Hamilton, and highlight the glowing testimonial about Technical Adviser Robert McGoogan from UKAS following his assessment." UKAS is the only national

accreditation body recognised

by the government to assess, against internationally agreed standards, organisations that provide certification, testing, inspection and calibration services. Accreditation provides assurance of the consistency and quality of the inspections performed by competent organisations, giving the consumer more confidence in the safety of their environment. Mark Nelson, Assessment Manager at UKAS, said: "I would like to congratulate SELECT for continuing to maintain its accredited status and consumer confidence in its inspection services."

 For further information about UKAS, go to www.ukas.com
 Susie discusses her UKAS journey – pages 20 & 21



CICV REVEALS COVID-19 GUIDE FOR BUSINESSES

The CICV has produced another in its series of essential open source guides, this time advising businesses how to manage COVID-19 cases among their workforce as they arise.

The downloadable Q&A document, *Managing the workplace risk*, is designed to offer initial support to employers as they attempt to navigate the latest COVID-19 rules and recommendations. It also includes links to other essential resources, including Scottish Government guidelines.

The information can be downloaded for free at **www.** cicvforum.co.uk/downloads

◆The document is full of useful advice and is free to download



Accord is a step in the right direction

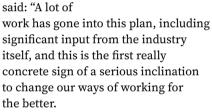
New collaboration is welcomed as it aims to improve working conditions and service delivery on the road to net zero... but we all must work together to make it a success

ELECT Managing Director Alan Wilson is among members of the Construction Industry Collective

Voice (CICV) who have welcomed the new Scottish Construction Accord and urged the construction industry to embrace it and work together to make it effective.

Launched in October by Scottish Government Minister Ivan McKee, the new initiative is a collaboration between the industry and the public sector designed to create thriving businesses, enhance working conditions, improve delivery and transition to net zero.

The CICV – of which SELECT is a leading member – said the Accord was "a significant step forward", but to make it work, adherents would have to exhibit the same spirit of collaboration, cooperation and commitment that steered the sector through the pandemic. Alan, who chairs the CICV.



"Importantly, the Accord acknowledges that there are real and longstanding issues which urgently need to be addressed and, equally importantly, it also recognises that time is running out if we are to achieve net zero targets

"However, there have been a number of false starts before, so we must all embrace this opportunity in a positive manner and demonstrate willingness to square up to the challenges that we



A shared vision to ir for industry and the

↑ The Accord offers support and advice for businesses

FOCUS ON THE FUTURE OF DRIVING

SELECT Members were among those who attended an exclusive electric vehicle (EV) open day to help them find out how the transport of tomorrow could help their business.

Organised by the CICV, Members visited the Western Commercial dealership at Broxburn on Tuesday 15 November to chat to their team.

The dealership's experts answered queries on makes and models, costs and grants and funding options, and offered test drives in Mercedes-Benz and Maxus commercial vans.

lain Mason, Director of Membership & Communications at SELECT, said: "With low emission zones being introduced across Scotland in the next few years, it's vital that Members are up to speed on the availability, affordability and performance of commercial EVs.

"The day was designed to be a no-obligation introduction to EVs."





face collectively as an industry."

The Accord sets out collaborative working arrangements to develop and deliver a transformation plan for the sector, setting the industry on a pathway to net zero and focusing on building the capability and diversity of the workforce, reforming procurement practices and increasing the use of digital technology and modern methods of construction.

Alan attended the Accord launch on 13 October, during which Mr McKee, the Minister for Business, Trade, Tourism and Enterprise, and chair of the Construction Leadership Forum (CLF), called on industry stakeholders to participate in working groups.

He added: "The Accord heralds a new shared commitment from industry and the public sector to work together to transform the construction sector, for the good of the industry, the economy and the country."

Fiona Hodgson, Chief Executive of the Scottish and Northern Ireland Plumbing Employers' Federation (SNIPEF) and vice-chair of the CICV, said: "As the first of its kind in the UK, the Accord is a significant step forward and is an opportunity to make real, practical changes that will benefit everyone who works in the construction sector."

Chris packs a punch on return to the ring

SELECT Branch Officer Chris Liddell has continued his boxing comeback with a second victory in the ring.

The 30-year-old, who is 3rd Representative for the Lanarkshire Branch, overcame Scott McCormack in a thrilling bantamweight bout at Glasgow's Crowne Plaza on 15 October.

The contest swayed back and forth over six rounds, with both men looking to get on the front foot and Chris clinching the win on points with a narrow 58-56 decision.

Afterwards he said: "It was an extremely tough fight, which can only be described as a war, but once again it went really well and I managed to come out on top.

"I had around 60 people who came to support me so you can imagine the atmosphere and I couldn't help but get emotional afterwards – I may even have shed some tears!

"Scott is no mug so I knew the fight would be a major jump up in class. But at this age, I've only got a couple of years left so I need to take these fights as winning will allow me to climb the rankings much faster."

Chris, who runs 2 Core Electrics in Lanark, added: "The fight was originally scheduled for 9 September but was cancelled at the last minute because of the passing of the Queen.

"I'd spent weeks bringing my weight down, so I was devastated. On top of this, I went on holiday to Spain on the Monday, so instead of sitting on a sun lounger, I was running around in the heat and still training!"

We told in a previous edition of *cabletalk* how Chris was making his professional boxing comeback after eight years out of the ring, winning his first bout against Luke Merrifield in June. His next fight will be over eight rounds at the Crowne Plaza on Friday 20 January, against an opponent to be announced. Find out more at 'Kynoch Boxing' on Facebook.



We wish you a very Merry Christmas and a Happy New Year

The SELECT offices will close for the Christmas holidays on **Friday 23 December.** The Walled Garden will open again at **8.30am on Wednesday 4 January.**

Dishonesty could end indisaster

With the rising cost of living, some consumers are resorting to increasingly desperate – and dangerous – measures to try to reduce their energy bills. The Scottish Fire and Rescue Service has seen a worrying rise in meter tampering, with offenders putting themselves, their properties and others at risk. So what should SELECT Members be looking out for – and what should they do if they come across obvious interference?



SEAN SMITH Fire Investigation Officers Watch Commander Scottish Fire and Rescue Service







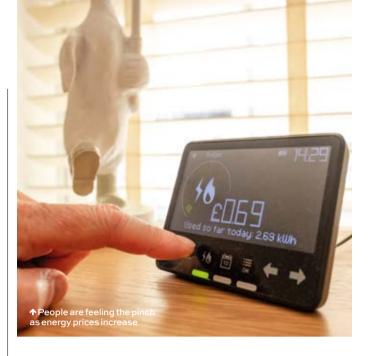
at an alarming rate, it has been widely reported that a record number of people are now engaged in 'stealing' energy as they seek to find alternative ways to reduce their energy bills.

Unfortunately, 'meter tampering' and 'meter removal' services are relatively common occurrences and the Scottish Fire and Rescue Service (SFRS) is now seeing them with increasing frequency.

Such energy theft often results in property damage and, in some of the worst cases, injury and death. Unfortunately SFRS has first-hand experience of the tragic circumstances that can occur when energy meters have been tampered with.

SFRS is therefore now engaging with communities to discourage this dangerous act and make people aware of the significant risks attached to energy theft and meter tampering.

Despite being a highly dangerous undertaking, the actual act of bypassing an energy meter is often taken by individuals living and working in their own premises, sometimes using footage widely available on social media. Other unscrupulous individuals also



offer a bypasstype service for a fee – putting householders in incredible danger. SELECT Members

will be all too aware that both these practices increase

practices increase the risk of electric shock and fire, as often the methods used are extremely dangerous and the people involved have no or very limited knowledge, skill or understanding of electricity.

As you'll see elsewhere on these pages, a number of national campaigns are now under way to make people aware of the risks and

"SELECT MEMBERS WILL BE ALL TOO AWARE THAT BOTH THESE PRACTICES INCREASE THE RISK OF ELECTRIC SHOCK AND FIRE"



HIGH PRICE OF 'BARGAIN' BILLS

The cost of living crisis has also seen a rise in desperate consumers being offered dangerous devices that claim to save on electricity bills.

Unscrupulous online traders say the gizmos, which are designed to be plugged into a domestic socket-outlet, can provide an energy saving or reduction in electricity costs of up to 35%.

But an investigation by Electrical Safety First (ESF) found no evidence of such savings – with some of the devices being dangerously substandard and posing a risk of fire and electric shock.

The charity bought four devices that claimed to either save energy or "stabilise



electrical current" and sent them to an independent lab for specialist testing. As well as making

no difference to power consumption, all four failed basic safety standards, with one exploding during a short circuit test, sending fragments of hot glowing metal into the air.

Others demonstrated basic failures in design, including

the size and dimension of plug pins, with the pins so badly positioned on one, the user risked damaging the socketoutlet trying to insert it.

Lesley Ruda, Chief Executive of ESF, said: "Claims surrounding energy savings will undoubtably be more attractive to people at this time, yet the devices we tested could cost you your safety. Given the current climate and hardship people are facing, the safety failures in these devices are even more contemptible. We urge everyone to buy from a reputable retailer you know and trust to protect yourself."

ESF has shared its findings with the Advertising Standards Authority and the Office for Product Safety & Standards, with eBay removing nearly 150 listings for such products.

Electrical © Safety First

ESF offers consumer information on how to stay safe and save money, including heating and running appliances. For more information visit www. electricalsafetyfirst.org.uk/ costofliving

FEATURE // METER TAMPERING

discourage tampering with energy meters. As part of this, SELECT

Members are also being urged to report anything suspicious when carrying out work in premises.

THE TELL-TALE SIGNS OF TAMPERING

Visually, there can be many signs to indicate that energy meters have been tampered with. These include:

- Scratch, burn or carbonisation marks on cables and meters
- Exposed copper wiring
- and loose connections
- Missing security seals and bogus seals
- Meters that are distressed, with additional cables connected

to supply and load

- Holes in credit meters
- Use of insulation piercing connectors or line tap
- Stub joints in supply cables
- Suspicious devices connected to meter,
- e.g. insulated blocks
- Negative monetary values on the meter's digital display.

The most common type of tampering that SFRS has observed through

CASE STUDY

In Glasgow, a son was living with his elderly and housebound mother when a bypassed electricity meter caused an electrical fire.

The flat they shared – within a block of eight similar properties – had been fitted with a normal pre-payment electricity meter. Under significant financial pressure, the son arranged to have the meter bypassed in order to save money on bill payments.

A fire was caused by an electrical spark, and in an extremely harrowing series of events, his mother was unable to exit the property in time. She died



every time they tackle a blaze

due to smoke inhalation before fire officers reached the scene.

The son admitted what he had done to police and was charged with causing her death.

A subsequent investigation showed that families in five of the eight flats had all bypassed their meters in the same way, endangering not just their own lives and property, but those of their neighbours and innocent visitors.

ource: Scottish Power





attendance post-fire is the practice of meter bypassing by introducing a 'bridge wire' across live and load meter terminals. This is most frequent where prepayment meters are installed.

When the terminal covers are removed, a cable is inserted into the terminal connections, bypassing the internal mechanism that registers the energy used.

As well as the potential for electric shock, this also causes a potential fire risk as the bridge wire is unlikely to be able to withstand the electrical load passing through "VARIOUS ITEMS OTHER THAN CABLE HAVE ALSO BEEN OBSERVED TO CREATE THE BRIDGE, INCLUDING METAL SCISSORS AND METAL CUTLERY - ALL WHICH ARE EXPOSED AND LIVE"

> Trying to save money by tampering with the meter is a dangerous idea

SPOTTING THE DANGER SIGNS

Crimestoppers is running its high-profile Stay Energy Safe campaign to raise awareness of the dangers of meter tampering.

contractors and consumers how to spot if an electricity or gas meter has been interfered with and how to speak up and stay safe.

A spokesman said: "Meter tampering risks are too high to ignore. Not only is it theft, which can lead to a fine or a prison sentence, but it is extremely dangerous and can cause injury, death and major damage to property."

The campaign is urging anyone who finds evidence of meter tampering to contact Crimestoppers anonymously on 0800 023 2777. For more information on the campaign itself, visit **www.stayenergysafe.co.uk**





it. Invariably, the connection is poor, the conductor heats up, the insulation breaks down and fire can occur.

Various items other than cable have also been observed to create the bridge, including metal scissors and metal cutlery – all which are exposed and live. I'm sure some SELECT Members will have their own experiences of seeing such items.

Other methods of bypass include 'direct to mains incoming supply' where a cable is used to fully bypass the meter, often with no fuse protection to the consumer unit as the main service fuse is removed.

It goes without saying that any such interference with an electricity supply carries a risk of serious injury or death to anyone in or around the property involved.

RAISING AWARENESS

As the cost of living crisis deepens this winter, the SFRS will continue to work closely with its partners to help prevent injury to both property and people.

We're currently delivering fire safety campaigns to support those most vulnerable in our communities who are impacted by increased energy costs,





"AS THE COST OF LIVING CRISIS DEEPENS THIS WINTER, THE SFRS WILL CONTINUE TO WORK CLOSELY WITH ITS PARTNERS TO HELP PREVENT INJURY TO BOTH PROPERTY AND PEOPLE"

which will reinforce the risks of energy theft and meter bypassing.

SELECT Members can play their part too, particularly with the vulnerable people in our communities who are most at risk. As a tradesperson, you may observe dangerous practices in a person's home or workplace and should then take the appropriate steps to mitigate the risks.

It's important that SFRS and our partners continue to work together to educate the public on the risks involved and reduce the likelihood of electric shock, fire, injury or death where possible.

SFRS has established the Electrical Safety Working Group that includes representation from SELECT, Electrical Safety First and other trade bodies. By working together, sharing information, providing sound advice and taking corrective steps to mitigate risks, we are helping to make our communities safer.

• For more information on SFRS and its work, please visit www.firescotland.gov.uk

THE Select VERDICT

WORDS

BOB CAIRNEY Director of Technical Services



The Energy Networks Association has revealed an almost 400% increase in reported meter tampering incidents in the UK between 2017 and 2021, so it's clear that this is a very real threat.

Such interference has already caused fires and electrocutions, with offenders seemingly unaware – or not caring – that it can create a ticking time bomb.

SELECT Members who come across such interference can play their part and take appropriate action to mitigate risk.

In practice, this would be to highlight any deficiencies with the supply intake equipment generally. In the first instance this should be done, preferably in writing, to the person ordering the work. To help, SELECT Members can use the Notification of Dangerous Electrical Conditions books, which can be orderd from the SELECT website. The person ordering the work then has a responsibility to inform the appropriate authority, such as the relevant Distribution Network Organisation or the electricity supplier.

To report a dangerous condition to the power supply company, the normal method would be to use their emergency contact number **105**. Alternatively, the supplier's existing contact number may be used, e.g. SPEN Central & Southern Scotland **0800 092 9290**. Information may be also available on the relevant supplier website, e.g. **www.scottishpower.co.uk** or **www.ssen.co.uk** After our technical inspection service received its UKAS accreditation for the 24th year running, we go behind the scenes to explain the rigorous processes we go through to achieve it – and why it's so important

A firm focus on quality matters

WORDS SUSIE LIDDLE

Technical Services Administrator and UKAS Quality Assurance Controller



AKING over the quality assurance (QA) role and liaising with the United Kingdom Accreditation Service (UKAS) was a daunting task as I had some pretty big shoes to fill.

The post was previously held by the late Malcolm Duncan, who created and maintained our quality management system (QMS) for 23 years, so I wanted to ensure we continued his good work and regained accreditation.

It was also quite an emotional step as Malcolm was a much-loved colleague who provided excellent support. There were times when I had to look back on his emails and documents from previous UKAS visits, so in a way he was still guiding me.

It helped that I'd assisted Malcom with the QMS administration for a few years so I already had a good idea of what was expected.

I also had a good working relationship with our QA adviser, Haig Hamilton, who helps ensure our QMS is functional and adheres to BS EN ISO 9001 *Quality Management System* and BS EN ISO/IEC 17020

Duncan

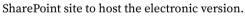
Requirements for the operation of various types of bodies performing inspection.

To get me up to speed, I took part in a two-day online awareness course with two UKAS instructors. We covered all aspects of ISO/IEC 17020 and I was pleased that most of it was

pleased that most of it was so familiar – Malcolm had clearly been an excellent tutor.

LAYING ESSENTIAL GROUNDWORK

Our in-person UKAS assessment may have taken place in October, but preparations for it started at the beginning of the year, with the main challenges being reissuing the QA manual and creating a



Major personnel changes in Technical Services had meant the manual was out of date, so Haig recommended that we start afresh – this made sense, but was a lot of work!

However, building the online version helped me learn new skills and designing the document storage system gave us a great starting point for issuing the new manual itself.

One thing that *was* out of my comfort zone was updating the team during our regular meetings – I felt like the new girl but everyone was supportive and agreed that making the QMS digital was a huge improvement that would make it easer to access and update.

As well as updating the manual, other tasks included:

 Liaising with the British Standards Institution (BSI) and Institution of Engineering and Technology (IET) to ensure all our BS 7671 resources were relevant

Storing and recording Amendment 2 certificates and reviewing others
Calibrating all test equipment and updating the register

> • Recording our Technical Advisers' (TAs) internal audit assessments.

PROGRESSED, IT WAS INVALUABLE HAVING HAIG AS AN INDEPENDENT AUDITOR" HAVING HAIG AS BS BS Md BS

"AS THE WORK



ENJOYING INVALUABLE INPUT

As the work progressed, it was invaluable having Haig as an independent auditor. He's been our QA adviser since the start of our accreditation journey and patiently answered questions and pointed me in the right direction.

Haig's deep knowledge of our QMS helped assure us that we were carrying out our inspection service according to ISO/IEC 17020 and that our operating procedures were compliant and maintained to the high standard required.

During our first management review meeting, it was also good to go over the minutes from the previous year and see all the improvements and closed actions that had been made.

Haig visited us a number of times to carry out his audit, with SELECT providing him with a sample of applicant Member assessment paperwork, including all correspondence, and some examples of periodic inspections of existing Members.

His audit of our procedures and process for technical inspections was a great exercise to check that we were performing according to the high standard of ISO/IEC 17020 and helped us prepare for the two-day UKAS surveillance visit itself.

COMING UNDER SCRUTINY

The first day of our visit was an officebased assessment, with samples of our QMS manual and procedures rigorously reviewed, along with evidence of our continued use of internal audits, current training records and document management.

As well as checking that SELECT had sufficient resources to carry out the inspection service, the UKAS assessors reviewed job descriptions and ensured that our TAs were qualified and underwent continual professional development (CPD) to meet the required standard of BS 7671. This year's Toolbox Talks were given as an example of such CPD, along with relevant IET webinars and courses.

The second day was the site witnessed assessment, conducted with a randomly chosen TA, during which UKAS accompanied our own

Robert McGoogan to a Member technical inspection with a number of electric vehicle (EV) charge point installations.

Robert was given a glowing testament for his competence in the requirements of inspection and testing to the requirements of BS 7671, with the assessors commenting that he was a credit to the association.

REAPING THE REWARDS

After all this hard work, we were delighted when it was announced that our accreditation had been recommended for another year.

As well as giving Members confidence that our inspections are carried out properly, UKAS accreditation helps consumers reduce the risk of accidents and injuries, improves productivity and also sends the right message about maintaining best practice, professionalism and integrity.

We think Malcolm would be proud that we have achieved accreditation yet again, and we'll now strive to continue the great work that he accomplished over the years. ■



PROTECT AGAINST FIRES (



SINGLE MODULE COMBINED ARC FAULT DETECTION & RCBO

AFDDs conforming to BS EN 62606 shall be provided for single-phase AC final circuits supplying socket-outlets with a rated current not exceeding 32A in:





Student Accommodation





FEATURES:

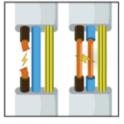
- 6-40A Rated
- · Series and parallel arc fault detection
- 30mA earth leakage Type A
- B and C curve tripping characteristics
- Switched Live & Neutral
- Fits existing busbar system
- Self testing (AFDD function only)



B & C CURVE TRIPPING CHARACTERISTICS



LED STATUS



SERIES & PARALLEL FAULT DETECTION



Installation Materials Division ...the name behind the brands





1527 517117 🛞 www.proteusswitchgear.co.uk







PARTNERSHIP // FEATURE

A great way to make an **impression**

We've joined forces with print providers Tempus to offer Members a new benefit that will help to ensure their business can stand out from the crowd

EL de an a r pa wi

ELECT is delighted to announce a new partnership with print

providers Tempus that will help Member businesses stand out in the crowded marketplace.

We've teamed up with the Edinburgh-based specialist for an exclusive new benefit delivering quality bespoke print products.

Using the dedicated SELECT online ordering portal, Members will be able to quickly access a huge range of branded business items, including:

- Business cards
- Compliment slips and stationery
- Cards, calendars and folders
- Booklets, stickers and labels

Visit the new SELECT Member

> tempusime. com

ortal at **select**.

- Signage and outdoor displays
- Flags and posters
- Roller banners
- Exhibition
- displays.

Members can

either upload precreated artwork, choose from a variety of

modern templates, or use the easy online software to design their own range of branded



ELECTRICAL SERVICES

◆ Business cards are an ideal way to engage with customers

items, with fast turnaround and delivery.

Iain Mason, Director of Membership & Communications at SELECT, said: "We are delighted to have joined forces with Tempus to offer this new benefit to our Members.

"As well as office essentials, Tempus will deliver the professional branding and design that a modern electrical business needs to stand out from the crowd and look the part."

As a respected supplier, Tempus already provides a similar service for a range of established clients, including the Scottish Parliament, Scottish Building Society and Edinburgh Chamber of Commerce.

David Laidlaw, Sales Manager at Tempus, said: "It is a pleasure to join forces with Scotland's largest construction trade association and we look forward to helping SELECT Members create the stationery and branded materials they need to do business in style."

Embracing the electric heat **revolution**

LUKE OSBORNE Energy and Emerging Technologies Solutions Advisor





With the rapid electrification of heating, Members have the chance to play a key role in the journey to decarbonisation. Here, an expert from our sister organisation outlines the many alternatives now available – and how electrical contractors can act as integrators of the next generation of technology

> HILE the results and commitment from the recent COP27

were disappointing, it's reassuring that the industry and public at large are already making significant steps towards decarbonisation.

For the electrical contractor and electrical supply chain in general, these steps present huge opportunities as most aspects of the path to decarbonisation involve the electrification of *nearly* everything.

The decarbonisation of transport is well under way through the growth and exponential uptake of electric vehicle (EV) sales, with pure electric and plug-in hybrids currently accounting for 20.8% of total car sales. However, the issue remains on how to decarbonise our built environment, particularly the aspect of heating.

Space heating and cooling account for 17% of carbon emissions in the UK, with 13-14% attributed to domestic homes.

Most of our building stock is reliant on fossil fuel heating via burning mains



gas or heating oil, both major emitters of carbon dioxide (CO2) and other climate-breakdown related emissions. Therefore, the only viable way the UK can decarbonise our heating systems is through the electrification of heat.

"WHILE 'GREEN' HYDROGEN CAN BE PRODUCED THROUGH ELECTROLYSIS OF WATER USING RENEWABLY GENERATED ELECTRICITY, IT WOULD BE MORE EFFICIENT TO USE THE ELECTRICITY DIRECTLY"

WHAT ABOUT HYDROGEN?

It's important to bear in mind that there exists an abundance of misinformation regarding how hydrogen will be the saviour to our heating problem.



It's equally important to understand that the major bodies behind the hydrogen lobby are incumbent oil and gas companies and those with vested interests in the existing supply chains and infrastructure.

While 'green' hydrogen can be produced through electrolysis of water using renewably generated electricity, it would be more efficient to use the electricity directly. Using renewable electricity to create, store, transport and use hydrogen results in heating efficiencies of around 46%. Direct use of electricity, including loss of efficiencies in transmission and distribution, is around 90%.

Secondly, the bulk of intended hydrogen use would likely come from 'blue' hydrogen, created from natural gas being put through a steam reformation process, with the CO2 byproduct captured and stored. This is a mechanism known as carbon capture and storage (CCS).

CCS is not fully developed or proven as a technology for mass deployment. Pipe embrittlement, both supply side and behind the meter, and a lower energy density requiring two and a half times the volume of natural gas are further issues often not discussed regarding hydrogen. The direct use of electricity for heat is therefore the best solution.

LET'S START WITH HEAT PUMPS

These are widely known to be a great option and are commonly available as air source heat pumps (ASHP) or ground source heat pumps (GSHP), with the latter only viable where there is a suitably sized large garden, to prevent ground freezing. Water source heat pumps are also available for extracting heat from rivers and lakes.

These pumps operate like a refrigerator in reverse, 'upscaling' the latent heat in air (ASHP) or underground (GSHP). Since the latent heat is upscaled, incredible efficiencies are realised, with typical Seasonal Coefficient of Performance (SCOP) factors being between three and four. This means that for every 1 kW of electricity used, 3-4 kW of heat will be produced.

Most heat pumps being installed in



Lising renewable electricity to create store

Using renewable electricity to create, store, transport and use hydrogen results in heating efficiencies of around 46%

> the UK are air-to-water/ground-to-water, which as the name suggests, uses a wet heating distribution system – the type most central heating systems use.

Unfortunately, due to heat pumps operating at a lower temperature,

which equates to higher SCOP values, the heating emitters and sometimes the distribution pipes may need to be upsized to allow the same amount of heat to be delivered. This can result in additional costs and upheaval to the building owner/tenant.

As an aside, it's worth noting that if heating engineers had designed and installed condensing boilers to operate efficiently and correctly, i.e. 60°C or lower, emitters would likely to have been upsized to a usable size for heat pumps, thereby removing this additional cost and negative 'narrative' that often accompanies the arguments against heat pumps. Wet distribution

"HEAT PUMPS OPERATE LIKE A REFRIGERATOR IN REVERSE, 'UPSCALING' THE LATENT HEAT IN AIR OR UNDERGROUND AND REALISING INCREDIBLE EFFICIENCIES"

25

FEATURE // THE FUTURE OF HEATING



heat pumps are a true mechanical and electrical installation, requiring the skillset of an electrician and a traditional heating

engineer, both of whom should have the relevant upskilling training.

Commonly installed throughout continental Europe, air-to-air heat pumps are also a valid option and are well suited for installation solely by an electrical contractor. Split-systems resemble common air conditioning units and are similar, but with the option of providing both heating and cooling.

Individual rooms can have their own heat pump or the property can be satisfied via a common ducting system. While the air-handling unit may be unsightly to some, they're quicker and cheaper to deploy.

The only slight sticking point for an electrical contractor? Air-to-air heat pumps commonly use fluorinated gas, so you'd need to be suitably trained.

WHAT ARE THE ALTERNATIVES?

There are also a number of other viable low-carbon electric technologies, particularly for properties with lowthermal demand such as new builds or buildings that have undergone extensive renovations to

Passivhaus standard or similar. These options include infrared (IR) and smart electric thermal storage, both of which have high efficiency and can be assumed to have an efficiency ratio of 1:1, i.e. 1kW of electricity in equals 1kW of heat output, albeit with minor losses.

Additionally, these systems require no to low maintenance once installed, as opposed to heat pumps which have more components and moving parts, thereby requiring regular servicing.

Due to the extended operation time of an electrical heater, a dedicated heating circuit should be provided. BS 7671 Appendix 15 should also be considered with regards the following statement relating to ring final circuits:

The load current in any part of the circuit should be unlikely to exceed for long periods the currentcarrying capacity of the cable (Regulation 433.1.204 refers). This can generally be achieved by: (ii) not supplying immersion heaters, comprehensive electric space heating or loads of a similar profile from the ring circuit.

THE ADVANTAGE OF INFRARED

IR heaters can be rapidly deployed and are relatively unobtrusive, with a number of



manufacturers offering slim IR panels for walls and ceilings and even disguised as picture frames.

The technology works by heating objects in a room through emission of IR radiation which is absorbed and re-emitted. As a result, properties are less affected by loss of heat through draughts, and doors opening.

While individual IR panels can be plugged in via a BS 1363 plug and socket, it's advisable for professional installation and connection via a fused spur on a dedicated circuit.

HOW ABOUT SMART ELECTRIC STORAGE HEATERS?

Used in the UK for decades, today's storage heaters are greatly improved and efficient, particularly since the adoption of Lot 20 compliance, which enforced strict efficiency requirements.

Smart electrical storage heaters can be compared to Economy 7 style heaters of the late 20th century,

"IR HEATERS CAN BE RAPIDLY DEPLOYED AND ARE RELATIVELY UNOBTRUSIVE, WITH A NUMBER OF MANUFACTURERS OFFERING SLIM IR PANELS FOR WALLS AND CEILINGS AND EVEN DISGUISED AS PICTURE FRAMES"



but with better thermal delivery and user comfort.

Electrical thermal storage of all forms, e.g. immersion heaters, is generally favoured by Distribution Network Operators (DNOs) as they offer low-cost grid flexibility. Through time-ofuse (ToU) tariffs, users can be encouraged to take energy from the grid during times of excess generation, e.g. late at night or during high amounts of wind-power generation, and reducing usage during 'peak-times' such as 4-7pm. The result is a smoother network energy demand curve as well as lower costs to customers.

Smart electric thermal storage could be configured to operate according to DNO signals, like smart EV charge point regulation requirements, or work with load control to ensure

that a user's maximum electrical demand does not exceed the fused rating. Alternatively, they could operate on a separate circuit controlled by the smart meter in a similar fashion to 'traditional' night storage heaters, although not all smart meters provide this functionality.

"IT IS IMPERATIVE THAT THE HEAT LOSS IS UNDERSTOOD AT A ROOM BY ROOM LEVEL"

FABRIC-FIRST

Some 80% of the buildings that will be with us in 2050 already exist and most of these will need to be retrofitted to increase their energy efficiency.

Regardless of the type of heating being deployed, reducing the thermal loss of a building should always be the first port of call. While often outside the scope and remit of an electrical contractor, this will offer the best energy and emission reductions for the client and then allow for a correct heating design to be carried out.

Holistic retrofitting requires a coordinated approach, so if a heating source is designed and installed prior to reducing the heat loss, the heating system will be oversized and inefficient. For holistic retrofits the PAS 2035 retrofit standard found at **knowledge.bsigroup.com** should be followed. While currently a paid-for publication, it is due to be made freely available soon.

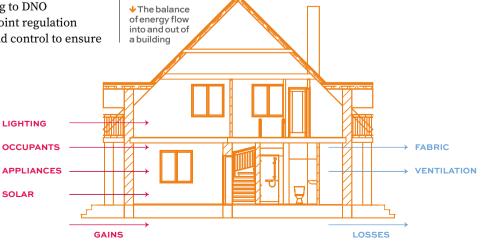
HEAT LOSS CALCULATIONS

In order to ensure that the heat source, i.e. heat pump, and the heating emitters, i.e. radiator, IR panel or smart thermal storage, are correctly sized, it is imperative that the heat loss is understood at a room by room level.

This entails analysis of the building structure, including the make up of the walls, type and size of windows and doors and dimensions of the rooms. While this may sound onerous, this can be easily worked out through freely available tools, such as the MCS heat pump calculator which is available at **www.mcscertified.com** and is compliant with BS EN 12831. Alternatively, this can be undertaken by specialists.

SMART HEATING CONTROLS

Smart controls are another growing opportunity for today's electrical contractor. Customers have already



FEATURE // THE FUTURE OF HEATING

тне SELECT /ERDICT

WORDS

FIONA HARPER Director of Employment and Skills



It's clear a revolution in heating is coming, so it's vital that we maximise the available workforce to keep pace with the technology outlined on these pages.

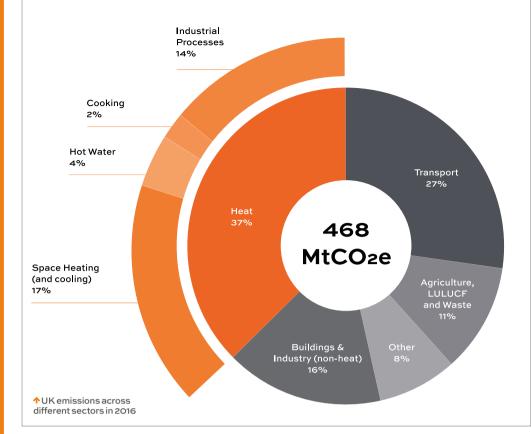
With electrification at the heart of nearly everything that lies ahead, electrical contractors have an excellent opportunity to upskill and grab new chances with both hands.

It's also a real opportunity to break down the traditional barriers which have portrayed heating as something that's only ever done by plumbers.

As a sector, we have to embrace a skills crossover, with a greater understanding between the different disciplines, and electricians playing a more active and holistic role in heating.

Above all, we need to make the heating and electrical sectors one and the same - with electricians leading the way and acting as integrators, not just installers, of this exciting new technology.

Mobile phone apps can help control heating more efficiently



invited the notion of a 'smart home' into their dwellings through the adoption of plug-and-play smart speakers, video doorbells and similar.

The smart ecosystem includes a whole raft of devices that offer solid energy savings, particularly with

"THE HEATING WITHOUT WASTING heating and lighting. Combinations of smart thermostats along with smart thermostatic radiator valves (TRVs) allow users increased comfort customisation as well as running a more efficient building.

Mobile phone apps can be used to adjust individual room temperatures or set heating profiles, as well as sensing when a registered user has left the property and automatically reduce the temperature, a process known as 'geofencing'.

When the user returns within a certain distance of the property, the heating gradually increases so the house is at the right temperature when required, without wasting undue heat due to being unoccupied.

IN CONCLUSION

All this means that, as our buildings become smarter, our devices will need to work better together and energy flexibility will be key to maximising our electrical energy systems.

Opportunities lie with the role of the technology 'integrator' and being the trusted individual for your client and the expert who can join the dots and make these systems work.

GRADUALLY **INCREASES SO** THE HOUSE IS AT THE RIGHT TEMPERATURE WHEN REQUIRED, **UNDUE HEAT DUE TO BEING** UNOCCUPIED"

Changes for the better

Changes to the format and production of the Certificate of Construction in SELECTcerts are being introduced next month, along with a few other updates

> E'RE having to update SELECTcerts as BS 7671:2018 +A2:2022 includes an amended version of the Electrical

Installation Certificate (EIC) which supersedes the one that is currently part of the single Certificate of Construction introduced in July 2020.

The changes come into effect on 9 January and are particularly relevant for Approved Bodies (AB) and Approved Certifiers of Construction (ACC) registered in SELECTs Certification of Construction Scheme who verify compliance with Building (Scotland) Regulations for work carried out under a building warrant.

The opportunity to make a number of other changes has also been taken and follows up on suggestions for improvements to the certificate from ABs and ACCs using the scheme.

The changes should make the production of the Certificate of Construction simpler, with the drop-down option for adding a new certificate containing an updated version that is clearly identifiable as the '2022 Certificate of Construction'. Other new features include:

• A new table in the body of the Certificate of Construction to enable the AB/ACC to indicate the nature of the work that has been undertaken and how the work has been checked for compliance

• Options to choose the relevant supplementary certificates that relate to how the nature of the work has been checked when creating the Certificate of Construction

Options for relevant supplementary

"THE CHANGES SHOULD MAKE THE PRODUCTION OF THE CERTIFICATE OF CONSTRUCTION SIMPLER" certificates, including BS 7671:2018 +A2:2022 model certificates such as the Electrical Installation Certificate and single signature version of the EIC and Minor Electrical Installation Works Certificate.

Other new supplementary certificate options include, where relevant, BS 5266 certification for emergency lighting systems for premises other than dwellings, BS 5839-6 certification for fire detection and fire alarms in dwellings, and BS 5839-1 certification for fire detection and fire alarms for buildings other than dwellings.

The updates will come into effect in January

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SIGN UP NOW

SELECTcerts is available from Google Play, Windows App Store and the Apple App Store for £240 + VAT annually or a monthly payment of just £20 + VAT. For a free trial, go to www.selectcerts.co.uk/login



#AlarmsSaveLives

Innovation of multi-sensor alarms continues with new product range

Aico have launched two new products, the **Ei660i** and **Ei660iRF** multi-sensor fire alarms. These brand-new additions to Aico's **600 Series**, include all of the benefits of their award-winning multi-sensor fire alarm in a self-contained battery-powered unit.

More UK homes trust Aico to protect them

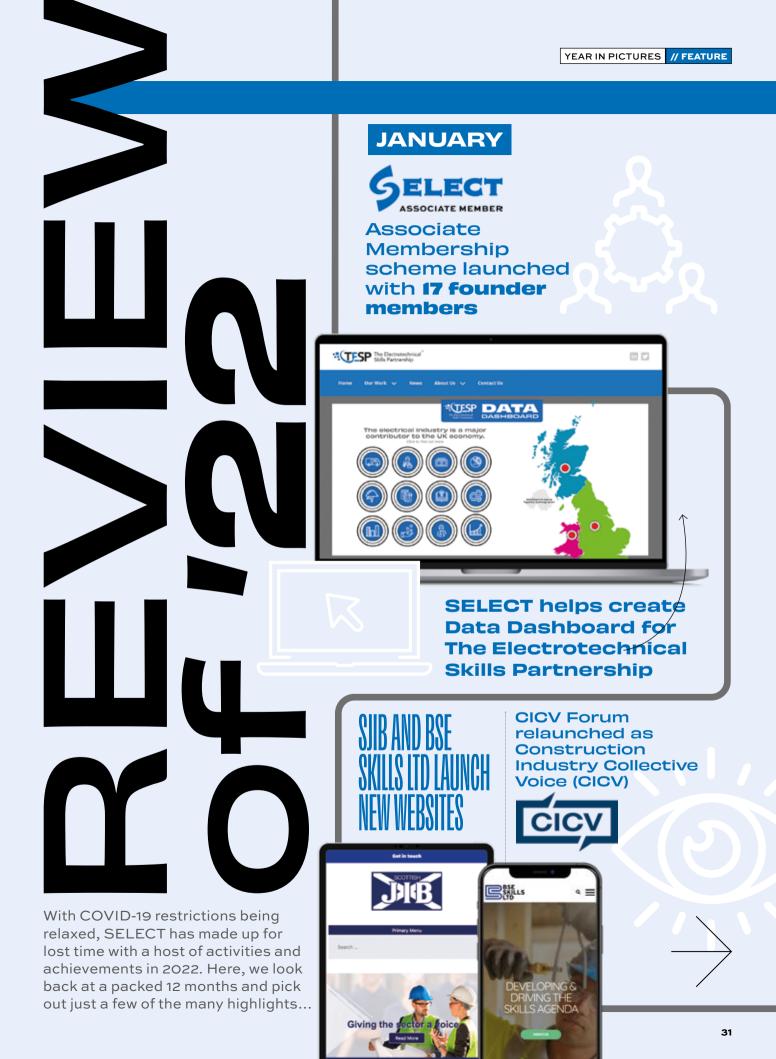
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FEATURE // YEAR IN PICTURES

FEBRUARY

Alarm Ambassadors campaign with Aico sees Members install free alarm systems for vulnerable householders across Scotland



Electrotechnical Committee visit BE-ST for first-hand glimpse of cobotics

JUNE



Toolbox Talks begin with a packed house at The Walled Garden

MEMBERS GET IN THE SWING AT THE President's cup in dunblane

Greens co-leader Lorna Slater stars in an exclusive video for SELECT Kevin Griffin finally receives his Past President's medal





FEATURE // YEAR IN PICTURES



Certsure MD **Richard Orton** signs up to the Wall of Support



Jamie Halcro Johnston tables a Members' **Bill calling for** regulation of the industry



AUGUST

SELECT PLAYS A

STARRING ROLE IN THE

ORGANISED BY THE CICV

WEEK-LONG GREEN

HOME FESTIVAL,

SELECTcerts is relaunched with Amendment 2 updates



Linda Rolfe visits Peru on her charity trek for the Electrical **Industries Charity**

OCTOBER

SELECT wins **Best Support** Since COVID-19 at the Association **Excellence Awards**

Branch Updates return in person for the first time in three years

wards 2022

ALAN WILSON HELPS LAUNCH THE NEW SCOTTISH CONSTRUCTION ACCORD

The SJIB launches its new Craft Certificate

Greener living for

Scotland

nhomefestiv

cicvforum.co.ul JOYDA

Record number of apprentices announced for second year in a row



SEPTEMBER

Members of Central Board are among 100 guests at the inaugural President's Lunch, which sees Len Bunton receive the Lifetime Achievement Award Scotland's largest trade asso





Industry experts attend our first Professionals' Day in Glasgow



NOVEMBER UKAS ACCREDITATION IS SECURED FOR THE 24TH YEAR RUNNING

Members attend special EV open day as part of CICV initiative



DECEMBER

Central Board and Past President's Christmas Lunch held at Balmoral Hotel

Together, we can shape the future

WORDS ALAN WILSON Managing Director, SELECT

The new Scottish Construction Accord is a welcome indication that the industry needs to change – but it needs some quick wins to maximise engagement and convince the wider sector of its value



ROM discussing the new Construction Accord with fellow trade bodies, it's clear there is a degree of realism about its aims, but if the industry can see early evidence of its

success I'm confident it will prove to be a real turning point.

As a realist myself, I know the Accord isn't going to change things overnight, but I think it will reset the direction of travel and I'm keen to encourage my colleagues to look at it differently.

Obviously we're facing a very difficult time with skills and material shortages, payment issues and budget cuts, so it's going to take a bit of time. But if we can highlight some early wins to prove to people that it is working, it might change a few mindsets.

At the end of the day, we're all human and we all want something out of it for ourselves. However, I'm convinced that seeing some early successes will help people recognise the benefits of the Accord and encourage them to participate.

LET'S LISTEN TO EACH OTHER

Of course, one of the biggest challenges will be engaging the whole industry. It's becoming increasingly evident that the industry can't do things in isolation, and

"IT'S BECOMING INCREASINGLY EVIDENT THAT THE INDUSTRY CAN'T DO THINGS IN ISOLATION, AND ONE OF THE ACCORD'S LAUDABLE OBJECTIVES IS TO BRING EVERYONE AROUND THE TABLE"

36 cabletalk DECEMBER 2022/JANUARY 2023

one of the Accord's laudable objectives is to bring everyone around the table.

We're obviously never going to agree on everything. Even in the Construction Industry Collective Voice (CICV), which has been very successful, there are still areas where we don't have unanimity. But what's important is that people understand and listen to each other.

We're currently at the nadir of so many challenges, so this is an opportunity to reset the industry and think what we want, not now, but in two, three or five years' time. And hopefully people will get engaged enough to make those changes.

There are some great professionals out there, really bright people who are

◆ Alan, far right, attended the launch of the Accord in October



committed to the industry and who can make a real difference, so it's vital that we get them together and ensure everyone is moving in the same direction.

We can't underestimate enough how much collaborating and understanding each other's position does to help change

A COMMITMENT TO QUALITY

Launched in October, the Construction Accord is a shared commitment to help businesses thrive, enhance working conditions for employees, improve the delivery of construction quality, and assist with net zero goals. Described as the first of

its kind in the UK, the Accord highlights the need to improve the "capability and diversity" of the construction workforce, reform procurement practices and increase the use of digital technology and modern methods of construction.

The document was launched by Business Minister Ivan McKee and industry leaders acting through the Construction Leadership Forum and its implementation will now be driven by a Transformation Action Plan, with SELECT among the working groups focusing on priorities.

Find out more at www.constructionforum.scot



minds, so now we need to have grown-up conversations about the way we work in construction.

MAKE CHANGE HAPPEN

A good example of current strife is cash retentions, where there are differing opinions among contractors, subcontractors, architects and clients.

We need to engage on things like this because it's all too easy to sit on the sidelines and snipe and say: "Nothing's going to change." Well, nothing will change unless you **WANT** to and actually get involved to make things happen.

There **IS** appetite for change within the industry, with a growing realisation that issues such as tackling skills shortages and

"IT'S GREAT TO SEE THAT LEVEL OF ENGAGEMENT AND HOPEFULLY GOVERNMENT – OF WHATEVER FLAVOUR – WILL BE INTERESTED IN TAKING LONG-TERM DECISIONS FOR THE BENEFIT OF THE WHOLE NATION"

meeting ambitious environmental targets will only work through cooperation.

I'm confident that those who choose to embrace such change will be rewarded and the Accord will emphasise the clear blue water between those trying to do the right thing and those who are stuck in the past.

DIVERSITY MATTERS

Above all, I see procurement as the biggest issue that the Accord will seek to address. If we're talking about the building you've got to start at the beginning, with the foundations.

How do we procure work? How do we pay for it? How do we engage with our clients and contractors? How do we build things that are going to have a long life and be easier to maintain and run rather than just being built and forgotten about?

Then we've got issues about capacity, capability and diversity of the workforce, because we've got a terribly poor record on that at the moment. I've got seven grandchildren – soon to be eight – and five of them are girls. I would be really disappointed if at least one of the girls doesn't end up in construction.

One thing that is a promising sign is the genuine support from senior politicians. It's great to see that level of engagement and hopefully government – of whatever flavour – will be interested in taking long-term decisions for the benefit of the whole nation.

Adapted from an interview with Project Scotland published on 6 November.



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Technical

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Exploding the common **AFDD myths**

Since being introduced to the IET Wiring Regulations in 2018, AFDDs have been the subject of much debate. Unfortunately, these discussions have also led to some misunderstanding about the technology, so our Associate Member is here to shatter five frequent misconceptions

WORDS DAVID ENEFER Product Manager, Circuit Protection Systems



electrium

MYTH NO.1: AFDDS AREN'T REALLY REQUIRED

Regulation 421.1.7 of BS 7671:2018 +A2:2022 now states that AFDDs conforming to BS EN 62606 **SHALL** be provided for single phase AC final circuits serving socket outlets not exceeding 32A in:

- Higher risk residential buildings (HRRB)
- Houses in multiple occupation (HMO)
- Purpose-built student accommodation
- Care homes.

For all other premises, the use of AFDDs conforming to BS EN 62606 is recommended for single phase AC final circuits supplying socket outlets not exceeding 32A. Amendment 2 also provides further guidance, on the terms 'shall' and

"AFDDS DETECT AND DISCONNECT ARC FAULTS ON RING CIRCUITS, RADIAL CIRCUITS, SPURS AND LEADS, WHATEVER THE MODE OF CONNECTION" 'recommended' to help users understand the verbal forms used within BS 7671. 'Shall' is a requirement, 'recommended' means should. This clarification was necessary because the term 'recommended' in BS 7671 was either misunderstood or not being taken seriously by some organisations.

MYTH NO.2: AFDDS WON'T WORK ON RING CIRCUITS

I wish I had a fiver for every time I've heard this. It's simply not true! AFDDs detect and disconnect arc faults on ring circuits, radial circuits, spurs and leads, whatever the mode of connection. Even if a ring becomes broken it becomes two radial circuits - and as we know, AFDDs work on radial circuits! The confusion may have come from the belief that arc faults can't occur on a ring circuit because a broken ring is two radials and there is no potential difference at the break in the ring. This means that there can be no arc fault



at that precise point, but it doesn't mean that arc faults can't occur at other points on that same circuit. Ring or radial, AFDDs will detect arc faults wherever they can occur in such final circuits.

MYTH NO.3: AFDDS ARE SUSCEPTIBLE TO NUISANCE TRIPPING

Once again, this is simply not the case. The microprocessor in an AFDD is looking for a specific arc fault signature on the wave form and uses a sophisticated algorithm. In addition, the product standard, BS EN 62606, includes a range of tests to ensure AFDDs won't respond to expected conventional

AFDD MYTHBUSTING // TECHNICAL

requirements and processes, refer to BS 7671 and the manufacturer's instructions.

MYTH NO.5: AFDDS ARE TRICKY TO TEST

In an effort to become familiar with AFDD technology, some early adopters made DIY test rigs and did 'tests' by touching wires together to create an arc. However, all this did was replicate the switching arcs which AFDDs are designed to ignore. It is therefore essential that valid tests are performed in an accurate and repeatable way in accordance with the relevant product standard, i.e. BS EN 62606. Such tests must be conducted by qualified competent persons in suitably equipped and approved test facilities. DIY tests will produce inconsistent and erroneous results.

For AFDDs installed in an electrical installation, there is no requirement in the IET Wiring Regulations to test them with an external test instrument. However, AFDDs include a self-test function which activates when the device is first energised and repeats this process at regular intervals. Self-testing intervals are timed so the self-test is done at least daily without tripping the device, unless a malfunction is detected.

Where installations include AFDDs with a

SELECT Member on the benefits of using AFDDs: Pages 40 & 41

manual test facility, i.e. a test button, these should be pressed every six months and when an EICR is carried out. In all cases, the manufacturer's

instructions and the requirements of BS 7671 shall be followed with respect to all testing activity and test button operation. ■

'operational arcing' conditions when loads such as vacuum cleaners, washing machines, switches, etc are used.

MYTH NO. 4: AFDDS ARE COMPLICATED TO INSTALL

Early versions of AFDDs were often odd modular sizes and had unusual termination layouts that weren't compatible with standard busbars in consumer units (CUs) and distribution boards (DBs). Consequently, installers were concerned about complicated assemblies and wiring arrangements. However, that's changed and there is now a wide choice of AFDDs to suit standard CUs. One or two AFDDs

fit standard DBs, which is ideal for landlords' socketoutlets in care homes, while there are also some off-theshelf boards/enclosures designed specifically for accommodating AFDD circuits. Although it depends which brand is chosen, AFDDs are now more regular in shape and size and are as easy to integrate into installations as miniature circuit breakers (MCBs) and residual current breakers with overcurrent (RCBOs).

If you have a question about how AFDDs work and which consumer units to choose, it's best to contact the manufacturer of those particular circuit protection systems. For installation ↑ There are still some misconceptions surrounding AFDDs

Technology helps put safety first

He might be a relatively new convert to arc fault detection devices, but SELECT Member Craig McGowan quickly saw the advantages, both for the business he works for and its customers

WORDS TIM POWER



HEN a client came to Craig McGowan to discuss the specification for rebuilding their house that

fault, he had no hesitation in recommending the installation of arc fault detection devices (AFDDs) as part of the electrical safety system.

Craig, who has been Electrical Manager with housing construction services company Macform Ltd for the past 12 years, is a relatively new convert to AFDDs, but after attending a presentation this year by AFDD manufacturer Electrium he admits he was "blown away" by the technology and the ease by which the units can be retrofitted into existing consumer units and commercial fuse boards.

"AS AN ELECTRICIAN, I HAD ALL THESE QUESTIONS, AND I ALSO NEEDED TO GET **UP TO SPEED WITH** THE TECHNOLOGY **AS AMENDMENT 2** WAS READY TO COME OUT SOON"

He first came across AFDDs in 2018 when he attended a SELECT training course about the 18th Edition of the Wiring **Regulations. He explained:** "Malcolm Duncan, Senior Training Adviser from SELECT, was taking the course on the 18th Edition and he spoke about AFDDs and their use. I remember

him saying that once the technology had developed into single module AFDDs then they would be very useful, particularly as the 18th Edition of BS 7671 recommends the use of these devices to provide additional protection against fire.

"At the time, I didn't know of anyone who was fitting AFDDs and because they were still considerably more expensive than traditional protective devices such as residual current breakers with over-current (RCBOs), there was a bit of reluctance from the UK industry about their adoption."

Craig admitted he was one of these AFDD sceptics as he'd never installed an AFDD or seen the device in operation.

He added: "It's obviously interesting technology as a single AFDD unit combines three functions: a miniature circuit breaker (MCB); an RCBO to protect a circuit from short circuits, overload and earth leakage faults; and the AFDD to detect dangerous arcs - but the great thing is it only take up one space in a consumer unit per circuit.

"My main concern was how do you know what actually happens when it trips and how do you know what type of arc fault it is indicating. So, as an electrician, I had all these questions, and I also needed to get up to speed with the technology with Amendment 2 ready to come out soon."

Craig is Chair of SELECT's Lanarkshire Branch, whose Members received a presentation by AFDD manufacturer Electrium on the technology at a Branch Update in March, during which they also asked questions about its capabilities. Craig said:





"When the Electrium representative showed us the technology I was actually blown away by it. It does the job of both an MCB and RCBO, but is also able to detect and disconnect arc faults which could lead to an electrical fire.

"Fault finding is very simple as the amber fault status indicator on the unit flashes in a series of formats: a single repeated flash indicates an arc fault; a twin repeated flash indicates an overvoltage; and a triple repeated flash indicates an earth leakage fault.

"The new single modules are the same as existing circuit breakers and can be easily retrofitted into existing boards – it's the same process that is used for installing RCBOs – so you don't need any extra installation time.

"Now you've got a fair choice of AFDDs on the market such as Wylex, Fusebox or Hagar; and a wide range of different ampere units."

However, despite the impressive capabilities of the AFDDs, Craig said there was still an 'elephant in the room' – the price. He said: "Some of the guys complained about the price of the AFDDs: a typical AFDD costing around £125 at the time compared with RCBO of about £25. With the increased adoption of AFDDs we could see the costs come down a bit – I think they are around £85 now – but ◆Craig McGowan and 3rd year apprentice Ben McLeish

WHAT ARE AFDDS?

The microprocessor in an AFDD

is able to identify arc faults by

analysing the arc 'signature' or

its waveform. This enables it to

differentiate between normal arcs – created by switching lights or

appliances on or off – and arcs due

through parallel and/or series faults

to a fault created by discharges

that result in arcing in the fixed wiring of the installation <u>and the</u>

connected equipment. Once the

AFDD detects an arc due to a fault,

affected circuit and cuts the power.

the device automatically trips the

"THE NEW SINGLE MODULES ARE THE SAME AS EXISTING CIRCUIT BREAKERS AND CAN BE EASILY RETROFITTED INTO EXISTING BOARDS"

you really can't compare the two units on price as the technology between an AFDD and RCBO is night and day.

"At Macform, we undertake a wide range of electrical contracting work, such as CCTV and smart lighting

systems installation, so I'm very interested in the technology in our industry.

"I came away from our Branch Update very impressed with the capabilities of AFDDs and their contribution to electrical safety."

Craig was soon recommending the installation of AFDDs on two high-specification construction projects his company was undertaking: a new build property and a retrofit of an existing house.

The retrofitted property was 10 years old and, as the electrical installation condition report showed that the cabling was in good condition, Craig was planning to upgrade the house's consumer units.

> Before he approached this part of the work, he took the time to explain to the client about the safety benefits of AFDDs and they agreed that it would be a good idea to install them on all the socket circuits in the house.

Craig said: "I knew the client from previous work, so he took me at my word about the benefits of AFDDs and was reassured that it would improve the safety of the property for his family.

"I was happy enough to install them but as the kitchen had fridges, freezers and other



TECHNICAL // MEMBER

electrical equipment that was probably 10 years old, I was worried

that these relatively old appliances might trip the AFDD units. Switching on and off older appliances will create what we call normal arcs, which are not safety issues but could be a nuisance if they trip the system frequently. However, after testing it showed that the AFDDs were unaffected by the day-to-day use of this equipment."



However, the AFDDs did trip, much to the annoyance of a carpenter working outside until he realised that it was his faulty equipment that had caused the power cut.

Craig said: "The job also involved replacing the outside soffit board on the house. When the joiner came in to complain that the socket had tripped, we checked the AFDD and it was flashing and indicating an arc fault. On further investigation, we checked his grinder tool and found that a cable inside his equipment had come loose and was sparking, so it showed that the AFDD worked perfectly and highlighted a potentially dangerous situation with one of our colleagues' tools.

"That's the only time I've actually seen AFDDs work, so it proved to me that the device can tell the difference between a normal arc – such as when you turn a light switch or an appliance off or on – and an arc which is due to a fault, which we experienced with the grinder."

Craig and his team installed five AFDDs in the new consumer unit in the house and three in the unit for the garage/annexe flat and, as they were single module AFDDs, the new consumer units fitted

perfectly into the spaces of the old units that formally housed RCBOs.

Craig has also installed AFDDs in a £1.5 million new build house being constructed to replace a property which had been destroyed by a fire a few years previously.

Obviously, electrical safety was a paramount concern to the client.

He added: "This is another high-specification construction project where the client insisted on the very best safety features, so AFDDs



have been fitted on the single-phase consumer unit's socket circuits and will be retrofitted in the three-phase board in near future, as these were not available at the time."

Both the examples where Craig installed AFDDs

"AS AN ELECTRICIAN, I HAD ALL THESE QUESTIONS, AND I ALSO NEEDED TO GET UP TO SPEED WITH THE TECHNOLOGY AS AMENDMENT 2 WAS READY TO COME OUT SOON"

were on highbudget, highspecification projects, so while he appreciates that some of his fellow electricians and their clients may be put off with the higher costs of installing the

AFDDs, he believes the extra protection they provide is worth the premium price in many cases.

He said: "I can appreciate the situation where you might be upgrading an RCBO consumer board where the materials cost around £400-£500, and you might be doubling this cost to incorporate AFDDs, but you have to bear in mind that AFDDs are already mandatory in a number of properties, such as high risk residential buildings, houses in multiple occupation, purpose-built student accommodation and care homes.

"While AFDDs are not mandatory in a number of other properties at the moment, you have to appreciate that they are now 'recommended' in Amendment 2:2022 to the 18th Edition of the Wiring Regulations.

"Choosing to ignore a recommendation contained in a national standard is not a decision to be taken lightly, especially when it concerns fire safety.

"From my point of view, as an electrician, the two main things that concern me are a fire or somebody getting a shock, and this device prevents both.

"That's why I believe it's important to keep trying to get the message across to people about the safety



QUICK FACTS

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PHONE: 01555 752 790

WEBSITE: www.macform. co.uk



aspects of installing AFDDs; at Macform we highly recommend that our clients fit them on at least their socket circuits within a property.

"I know that cost is an issue for many, and we will never see AFDDs at the same level of RCBO prices because of the advanced technology they contain, but it is a price worth paying in some situations as AFDDs have taken circuit protection and safety to a new level."■

Established in 1997, Macform is a family business based in Wishaw, North Lanarkshire, which has grown and diversified over the years into a company which delivers multi-trade construction services to the commercial and domestic sectors.

"CHOOSING TO IGNORE A RECOMMENDATION CONTAINED IN A NATIONAL STANDARD IS NOT A DECISION TO BE TAKEN LIGHTLY, ESPECIALLY WHEN IT CONCERNS FIRE SAFETY"

THE Select VERDICT

WORDS STUART MCKELVIE Training Development Adviser



Following their inclusion in BS 7671:2018 +A2:2022, it's clear that AFDDs are going to play an increasing part in contractors' lives.

We know there's been plenty of hearsay about them but, as this article and the one on pages 38 and 39 shows, a lot of these preconceptions can be dismissed with a little practical application.

It was certainly enlightening to hear Craig's views and see his conversion from sceptic to enthusiast, and also encouraging to hear him wax lyrical about AFDDs taking safety "to a new level".

I just hope his enthusiasm encourages more Members to consider using them during design and installation – in line with the updated IET Wiring Regulations, of course!

All our BS 7671 SQA customised award training courses have been updated and

now include the required information for the design, installation and inspection and testing of AFDDs.

You can also find a more detailed technical breakdown of the implications of Amendment 2 for AFDDs – including

where they should be installed – in our brochure which can be downloaded from the 'Free training guides' section at select.org.uk

What's hanging?

> And finally, if you're in any doubt about the use of AFDDs, please speak to one of our Technical Advisers on the SELECT Technical Helpline by calling **0131 445 9218.**



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its training courses and engage better with Members, so we're delighted with the latest high-tech addition to our classroom.

Our Training team recently took delivery of a giant interactive touchscreen from Clevertouch® Technologies that has revolutionised the way we deliver courses at

"FROM A TEACHING STANDPOINT, IT'S ABSOLUTELY FANTASTIC AND REALLY PROVIDES A MORE ENGAGING ENVIRONMENT"

The Walled Garden.

Designed by teachers for teachers, the awardwinning technology features a host of built-in apps designed to make note-taking, brainstorming and presentation-building simple and intuitive.



The next generation training tool works like a giant whiteboard, and also allows us to screen videos and webinars and deliver traditional PowerPoint presentations – all in high-definition 4K.

It also allows us to share content from multiple sources to help with hybrid learning. Plus, its sheer size and clarity means that presentations can be seen by those who like to hide away at the back of the classroom!

As always, our Technical Advisers and Training team couldn't wait to get hands-on with the new technology – quite literally.

After putting it through its paces, Training Development Adviser Stuart McKelvie said: "Our previous technology consisted of traditional projectors that provided some engagement, but we were really looking for a more cutting-edge solution that reflected the technological advances we discuss in the classroom.

WORDS JENNY CRYANS Training Manager



Course moves with the times

Our recent Branch Updates provided the opportunity for Members to come together and ask questions. Here are just a couple of training queries raised at the events that we were happy to answer to provide clarity:

Q. Why should I do a training course on electric vehicle (EV) charge point installation? It isn't a legal requirement is it? And isn't it just a case of running a cable? A. It's correct that there is no legal requirement to attend a training course to learn how to install EV charging units but, like every specialised piece of equipment, it's in every electrician's best interests to upskill their knowledge before they attempt such projects. The technology involved in charge points is changing and advancing rapidly and it's certainly not just a case of 'running a cable'! Like every part of electrical installation, it's therefore vital to gain an understanding of EVs, their charging requirements and the many safety considerations and characteristics involved. Training provides a thorough grounding in the specific requirements relating to Section 722 of BS 7671, including modes of charging, requirements and



restrictions, supply, earthing, planning permission, protection, labelling, control and risk assessment. In addition, it covers practical domestic and commercial installations, inspection, testing, certification and commissioning, including Distribution Network Operator (DNO) paperwork. Such training gives a contractor more confidence in the installation and commissioning of EV charge points and the knowledge that they're carrying out the installation to the correct standards. It also gives consumers confidence that they're using a professional installer who's been properly trained, reducing the risk of any issues further down the line.

Q. Do we need to do Amendment 2 training courses? Or is it only for Grade Card renewals?

A. We get asked this a lot, but the simple answer is that a Qualified Supervisor is required to update their BS 7671 training every five years. So if you've attended a BS 7671 course within the last five years, then there's no *requirement* to attend an Amendment 2 training course just yet – but with the many changes included in the amendment, it's always worth topping up your knowledge.

O If you have any other questions about SELECT Training, please email **training@** select.org.uk or call the Training team on 0131 445 5577.

It was a challenge to find a suitable alternative as we wanted to ensure we offer Members the most engaging and interactive experience, but the Clevertouch® ticks every box.

"In essence, it works like a giant tablet, helping us communicate quickly and clearly to delegates and giving us a broader set of tools and far more flexibility than before."

The screen has already been used for a variety of in-house courses and hybrid meetings, with excellent feedback from instructors and delegates.

One Member said: "The smart board is a fantastic addition and really allows you to explain things so much more clearly."

Stuart added: "From a teaching standpoint, it

provides a more engaging environment. And from the Members' point of view, it's really enhanced the learning experience.

"It's already allowed us to increase opportunities for users to collaborate and engage, optimising our teaching and learning

"WE WERE REALLY LOOKING FOR A MORE CUTTING-EDGE SOLUTION THAT REFLECTED THE TECHNOLOGICAL ADVANCES WE DISCUSS IN THE CLASSROOM"



environment for all sessions, including SQA customised award courses.

"It's the perfect demonstration of our mission to deliver the very best in everything we do, encouraging Members to come together to explore and expand on ideas, and empowering them to achieve more."

If you've not already seen the screen in action, we look forward to welcoming you to The Walled Garden for your next training course so Stuart can show off his new toy! ADVICE AND OPINION ON THE ISSUES AFFECTING OUR SECTOR FROM OUR PANEL OF LEADING EXPERTS

Industry insight Watch out, For cash? An inflationbusting fiver!

Watch out, there are criminals about

What is your position if you've purchased goods and materials from a party which, unbeknown to you, has obtained them illegally? Our expert is here to help keep you on the straight and narrow...



S we all know, it's very easy to register a company and provide false identities

for the directors. For example, one company was recently registered with the name of a director being Adolf Tooth Fairy Hitler!

The Westminster Government is currently considering legislation to tighten up the company registration process, which is particularly timely given the case of Nobleread Ltd.

Nobleread had very little by way of assets and operated two businesses – NB Construction and NB Wholesale – which only dealt in cash.

The company created fake directors and at the beginning of 2021 went on a mass purchasing spree from suppliers of construction materials and equipment, such as lighting, insulation, combi boilers, etc. Unbelievably, the two businesses were able to obtain favourable credit terms from suppliers.

As the goods were being delivered, both NB Construction and NB Wholesale were phoning around and WhatsApping potential customers.

"UNBELIEVABLY, THE TWO BUSINESSES WERE ABLE TO OBTAIN FAVOURABLE CREDIT TERMS FROM SUPPLIERS"

PROFESSOR

RUDI KLEIN

Barrister & SELECT Consultant Plumbers, electricians and builders were offered discounted prices in return for cash and representatives from the two businesses visited sites to collect the loot – their cash

Then, at the end of 2021, both businesses shut down and their websites disappeared from view. Nobleread's trading practices were, of course, fraudulent, i.e. it was committing theft since it had no intention of

ever paying its suppliers.

DEFINITELY NOT. CODDER WIRE

The company was shut down by the High Court in London and a government official, the Official Receiver, was appointed to put it through the process of liquidation.

So what were the implications for all those construction businesses who bought the equipment? And what would happen if you did something similar?

Well, let's get the criminal side of things out of the way first. If you knew or were willfully blind as to the provenance of the goods in question, i.e. that they were obtained by fraud, you could be prosecuted for the crime of reset. How much?

CRIME // INDUSTRY INSIGHT

WATCH ONLINE

Rudi has made a series of exclusive SELECT TV videos on topics including design liability, reading the small print, material price increases and other essential contract advice. Watch them at **bit.ly/SELECT-TV**

"THERE IS A KEY EXCEPTION IN THE ACT, WHICH APPLIES WHERE YOU HAVE BOUGHT GOODS IN GOOD FAITH WITHOUT KNOWLEDGE OF THE SELLER'S LACK OF TITLE"

However, there is a key exception in the act, which applies where you have bought goods in good faith without knowledge of the seller's lack of title.

5

In this situation, the act enables you to obtain title provided your seller was in possession

of the goods with the owner's consent and they were being sold in the course of a business transaction.

Something to remember also is that once goods and materials are incorporated in a building or structure they belong to the building owner.

So if you happened to have purchased items from Nobleread you may be able to rely on the above statutory exception to the *nemo dat non quod habet* rule.

With that out of the way, let's quickly move on to the civil side of things.

There is a general principle of law which is usually expressed as a Latin phrase – *nemo dat non quod habet* – which means that you cannot pass on a better title to that held by your seller.

Thanks to this principle, which is enshrined in the 1979 Sale of Goods Act, it means that if your seller was a thief they cannot pass this title on to you and it remains with the owner.

KEY TAKEAWAYS

• Do due diligence on your suppliers, especially those you haven't dealt with before.

• It is implied in contracts with your suppliers that they have a right to sell the goods, as set out in s.12 Supply of Goods and Services Act 1979

THANK YOU!

This is my final regular column for cabletalk but I will reappear in future issues if any legal matters arise. Thank you for all your comments and queries and I hope you've found my advice useful. Have a very successful 2023!

There may be trouble ahead

In this uncertain world, things can go wrong so it's important that you minimise any potential risks that could lead to disputes

OVID-19, Brexit and the Ukraine war have created a perfect storm leading to inflation, material cost increases and delays throughout the construction industry.

As a lawyer specialising in construction disputes, I see more and more cases come across my desk where disputes have arisen which may not have done so had it not been for the financial and political climate.

So how do you minimise the risks arising from these "unprecedented times"?

Although it may seem like a negative mindset, even before you take on a contract, start thinking about what might go wrong, and draft your contract accordingly.

For example:

• **Scope:** Does the contract properly describe the works? Are there any important caveats to be included?

• Allocation of risk: Does the contract deal with responsibility for certain risks? Is it clear where a contractor will become entitled to a variation?

• **Price:** How are the works and variations valued? Have possible price increases been considered?

• **Programme and delay:** Does the programme provide enough contingency for delay? If delays do happen, who bears the risk? Are there



clear provisions dealing with extensions of time and liquidated damages?

Considering all these issues won't guarantee that everything will run smoothly but it will assist if things do go wrong.

OK, so now you are in throes of a project. How can you protect yourself from problems? Proper contract management is key:

• Payment mechanisms: Are parties clear on the deadlines for applications and payment notices? Failure to issue notices properly under payment mechanisms can have draconian consequences so it is very important to follow the contract.

• **Programme:** Keep an eye on your programme. Are delays looking likely? If so, have you considered if an extension of time is needed? Do you need to issue an early warning?

• Changes to scope: Make

sure any changes to scope are properly documented and valued in compliance with the requirements of your contract.

• **Communication:** Regular progress meetings and good communication between parties and supply chains can help to avoid problems turning into disputes later down the line.

Rebecca Barrass is a Senior Associate in MacRoberts' Construction Department. MacRoberts advises on all elements of construction contracts and disputes.

LEGAL HELPLINE 0141 303 1111

As a Member of SELECT, you have access to the Legal Helpline operated by MacRoberts LLP. This helpline covers advice and assistance on commercial, contractual and employment matters under Scots law which concern your business.

WORDS REBECCA BARRAS Senior Associate





If you want to avoid problems with clients, there are a few simple rules you should follow that will help things to run smoothly ...

Get things sorted before you begin

WORDS **IFN BUNTON** FRICS FCIArb, HON FRIAS Contract Expert



ING'S College London has just published a report called 2022 Construction Adjudication in the United Kingdom: Tracing trends and guiding reform, which is a

very good snapshot of current trends. Some key outcomes of the report are:

• There were 1,903 adjudication referrals between May 2021 and April 2022, meaning a total of 3,806 organisations were in dispute during that period

• There are currently 541 registered adjudicators in the UK

• The most common value of disputes was in the range of £125,000 and £500,000

• The pandemic made no difference to the number of disputes

• Adjudicators' fees ranged from £8,000 to £23,000. The survey also identified 29 different causes of disputes, including inadequate contract administration, client changes, exaggerated claims,

"THE RECENT PUBLICATION OF THE CONSTRUCTION ACCORD IS A STEP IN THE RIGHT DIRECTION, WITH THE SCOTTISH GOVERNMENT SETTING OUT ITS WISH-LIST TO IMPROVE THE **SECTOR IN A NUMBER OF KEY AREAS"**

lack of competence of project participants, adversarial culture, unclear risk allocation and inadequate contract documentation.

Other causes included inadequate design documentation, unrealistic cost targets, poor communications,

STEPS TO SUCCESS

As I mentioned in my last column, the recent publication of the Construction Accord is a step in the right direction, with the Scottish Government setting out its wish-list to improve the sector in a number of key areas.

However, this is only the first step and the real work will start with the rollout of Stage 2 - the Transformation Plan – which is the practical part of the Accord that will outline how to actually deliver major change. No doubt SELECT will be heavily involved but it's an also opportunity for all electrical businesses everywhere to get involved and make a difference, so take the opportunity when it comes!

POSITIVE PLEDGE

I'm extremely pleased to see that leading Scottish services business James Frew Ltd has signed the Conflict Avoidance Pledge.

I was impressed at the willingness of the company's senior management team to understand how the CAP operates and hopefully they have set the standards for others to follow.

unrealistic tender pricing, inappropriate payment

Adjudicati

mechanisms and lack of information from the client. So what is my takeaway for SELECT Members?

Simple - get things sorted out before you start on site!

As I've stressed in previous articles, stick to these mantras and you can't go far wrong:

• If you buy work, you buy trouble

2022 Construction Adjudication

Tracing trends and guiding reform

in the United Kingdom:

- · Only work for good honest clients/customers
- · Be more efficient in managing your operatives
- Be more alert to the financial aspects of projects

• Use the Conflict Avoidance Process (CAP) to allow early intervention into issues on site, and get them resolved.

A copy of the report can be downloaded at bit.ly/kc-report and is well worth a read.

AND FINALLY...

Thank you to everyone who has sent kind wishes and congratulations for my recent SELECT Lifetime Achievement Award. I have been truly humbled at the level of support and goodwill, which only goes to show what a great industry we work in. Merry Christmas to you all!



Finding the way to wellbeing

The stress that comes with the festive season can often leave us not knowing which way to turn, but our Associate Member can help point you in the right direction

Client Relationship Manager, EC



∇ ecis

E know that Christmas can be particularly hard financially and emotionally, so if you're a member of the SELECT private medical insurance (PMI) scheme, an expert team is here to help stop the spiral of anxiety, debt and depression.

Run as part of the PMI scheme, the Bupa Employee Assistance Programme (EAP) is a free, completely confidential telephone support line that is open to you and your family 24 hours a day, seven days a week.

Just call **0800 269 616** and the qualified Bupa EAP team will listen, suggest ways to resolve the problem and point you in the right direction to get you back on track and feeling more like yourself again.

When you call the helpline, you'll be put through to a fully qualified and experienced counsellor. Depending on the reason for your call, they'll either help you in person or, if you need practical support or information, they'll put you through to a relevant specialist.

The EAP service is a lifeline for Members who may be struggling to keep their finances afloat, or who may be feeling isolated, have social anxiety, are recovering from addiction or are away from families and friends.

It's just one of the many ways the exclusive SELECT PMI scheme can help keep you – and your employees – in the best of health and keep your business thriving through the winter.

KEEPING YOUR TEAM ON TRACK

Having a healthy and productive team is the foundation of success, with healthcare not only keeping staff fit and boosting productivity, but also helping to attract and retain the best people.

Construction sector skills shortages and increasing NHS waiting times mean that the benefits of offering private medical cover to your employees have never been more apparent.

The SELECT PMI scheme is designed to cover the cost of private treatment for acute conditions. Cover will typically provide access to reduced hospital waiting times, increased medical resources and a more comprehensive range of specialist treatments – helping to ensure your staff get back on their feet and back to work quicker.

EASY TO JOIN, EASY TO ADMINISTER

Joining the scheme is easy – simply speak to your Member Representative, request a quotation through the ECIS website at **www.ecins.co.uk** or contact the team at **ecis@ecins.co.uk**

Once you've agreed terms and completed the simple application, you can easily administer the benefits for

"HAVING A HEALTHY AND PRODUCTIVE TEAM IS THE FOUNDATION OF SUCCESS, WITH HEALTHCARE NOT ONLY KEEPING STAFF FIT AND BOOSTING PRODUCTIVITY, BUT ALSO HELPING TO ATTRACT AND RETAIN THE BEST PEOPLE"



each employee via ECIS's online Canopy portal, through which you can:

- Make changes to your policies, such as adding or removing employees
- View all of your statements and payment history

Download key policy documents, guides and supporting documentation
Manage renewals.

ECIS can help protect you from large year-on-year increases driven by high-value individual claims by pooling Members into a single scheme. As a result, scheme members have benefitted from years of premium stability relative to the wider market, helping to ensure that the cost of providing this valuable benefit remains sustainable.

A WEALTH OF HEALTH

As well as the EAP and access to inpatient, day-patient and outpatient care, SELECT Members can also benefit from other expert help and support:

• Direct Access Services – whether it's muscle, bone and joint conditions, cancer or mental health, these services allow scheme members to call Bupa without needing a GP referral. Employees can directly speak to a specialist team who will assess their condition and guide them to the most appropriate course of action.

• Babylon Digital app – this mobile app uses artificial intelligence to analyse symptoms, giving initial health advice within seconds. It also lets your employees book and speak to a doctor on the same day, with appointments available 24/7. Babylon can send prescriptions straight to a chosen pharmacy for collection within the hour or delivery to the door. If necessary, referral letters can be issued within minutes and used with Bupa and some NHS pathways.

HOW ECIS CAN HELP

ECIS has been helping people get great healthcare cover for their needs since 1980 and is committed to helping SELECT Members and their businesses.

Its independence means ECIS is not tied to just one insurer. So, for example, if the Bupa scheme isn't the right fit for you and your staff, ECIS will search for a PMI product that is.

If you're thinking of a PMI policy for your employees, or if you would like ECIS to review your current arrangements, speak to the ECIS team by calling **0330 221 0241**, visit them at **www.ecins.co.uk** or email **ecis@ecins.co.uk**

LATEST NEWS FROM THE SCOTTISH JOINT INDUSTRY BOARD

SJIB Bulletin

#@*

There's no excuse for abuse

Our staff are doing their best for Members, so abusive and aggressive language from callers won't be tolerated. It's all about respect

HE SJIB recently joined with SELECT to issue a joint reminder that aggression towards our staff will not be tolerated.

The warning comes after a number of incidents of abusive callers, including one where a young staff member was left extremely upset after being sworn at by an operative.

Both bodies have now reminded Members that they take a zero tolerance approach to such behaviour and will escalate the issue to employers if required.

Fiona Harper, The Secretary of the SJIB, said: "We strongly condemn any form of abuse or aggression towards our colleagues, who should not have to put up with such behaviour.

"We understand that people can become frustrated when they feel that matters aren't being dealt with as they might wish, but if that anger escalates into aggression, that is unacceptable and simply won't be tolerated.

"Such behaviour can include language that

may cause our staff to feel afraid or threatened, and includes swearing, threats, personal verbal abuse and derogatory remarks."

Phone calls to both the SJIB and SELECT will now be monitored, and staff will end conversations if they consider the caller to be aggressive or offensive.

If abuse from an individual persists, the SJIB and SELECT will consider escalating the matter to their employer.

Alan Wilson, Managing Director of SELECT, added: "Our staff work incredibly hard to help operatives and in return they have the right to carry out their job in peace.

"Unfortunately, we have endured a number of unpleasant incidents recently, and while most callers are patient and understanding, these isolated incidents are upsetting for staff and must be addressed." "WE STRONGLY CONDEMN ANY FORM OF ABUSE OR AGGRESSION TOWARDS OUR COLLEAGUES"

A RISING TIDE OF ABUSE TOWARDS WORKERS

Trades unions and industry bodies have reported growing public hostility and verbal abuse towards public-facing workers since the end of the COVID-19 lockdowns.

The Institute for Customer Service (ICS) says 50% of all shop, transport, restaurant and hotel workers have experienced abuse in the past six months, up 6% since May. Usdaw, the shopworkers' union, said 88% of its members had been verbally abused

in the past year – up from 68% in 2019 – and 9% had been physically assaulted. RMT said 58% of workers on trains, buses and ferries had been threatened,

assaulted or spat at since the pandemic began, and 88% had been verbally abused. And the British Retail Consortium said incidents of violence and abuse had risen to 455 a day in 2020-21, compared with 350 a day in 2017-18.

OUR NEW TOP TEAM IS HERE TO HELP

The SJIB team has undergone a great deal of change this year, with some longstanding team members retiring, new colleagues joining and other staff moving internally.

We're pleased to announce that we're now back at full strength and, while we're deep in the throes of training the new team members, they're getting on very well and you'll be speaking to them in no time.

Among the new arrivals is a familiar face after Riki Gillespie returned to The Walled Garden for a few months to assist with our workload. Riki previously retired on 31 March after 18 years with SELECT and the SJIB, but we're glad to welcome her back – her experience has already proved invaluable!

To see our team, visit sjib.org.uk/about-us/ meet-the-team



INCREASES FOR FEES AND ALLOWANCES

Members should be aware that there has been an increase in the SJIB Lodging Allowance and Retention Fee.

The Lodging Allowance is based on a formula which tracks the movement in the catering element of the Consumer Price Index.

At its meeting on 5 October, the SJIB National Board endorsed an increase in accordance with this formula from £42.66 to £44.79 per night.

The Lodging Retention Fee will increase to up to a maximum of £14.74 per night, while the Weekend Retention Fee will increase to £44.79 per night. These rates are effective Monday 2 January 2023.

For more information, please visit **sjib.org. uk/category/circulars/ circulars-2022**

What you need to know about applying for an ECS Card

REMEMBER! Before applying for an ECS Card, please ensure you read through the criteria carefully to ensure you understand exactly what's required.

> Many of our electrotechnical ECS Cards have a requirement of completion of the ECS Health, Safety and **Environmental Assessment** within the last 30 months, or possession of a valid, approved exemption. A list of these exemptions can be found on our ECS Card Portal, or on our website at www.sjib.org.uk/ecs-hseassessment/ecs-approvedequivalent-exemptions Please note that CITB Health, Safety and



↑ The ECS Card is an important part of your working life as an electrician in Scotland

Environmental Tests are not an approved exemption. Please also be aware that qualifications cannot be added to an ECS Card unless a copy of a valid certificate has been provided as part of the application.

If, at a later stage, you decide you wish to have additional qualifications on the back of your ECS Card, then you must

at twitter.com, The_SJIB

apply for a replacement or wait until renewal.

ABOUT SJIB

SJIB regulates relations between employers and employees engaged in the Scottish electrotechnical industry. To find out more about SJIB and its work, call **0131 445 9216**, or visit **www.sjib.org.uk**

NEWS FROM THE SCOTTISH ELECTRICAL CHARITABLE TRAINING TRUST

<section-header>SECTUDATE Top spot for Craig in UK skills contest

ECTT was celebrating recently after two apprentices from north of the border triumphed in the prestigious SkillELECTRIC competition.

Craig Fairweather and Andrew Horne clinched gold and silver respectively in the UK-wide contest – making it yet another Scottish victory at the finals.

Craig, 23, was crowned the 2022 SkillELECTRIC champion after a challenging two-day final which saw the cream of young electrical talent from across the UK battle it out for top spot.

Employed by SELECT Member firm McDonald & Munro in Moray, and trained by Moray College and SECTT, Craig excelled in a complicated task to install a range of first and second fix items including PVC/PVC surface clipping, plastic conduit, trunking and fireproof cable.

The runner-up spot went to his fellow Scottish apprentice Andrew, who works for SELECT Member firm A Campbell Electrical Services in Stornoway, Isle of Lewis, and is trained by Lews Castle College and SECTT.

Anne Galbraith, CEO of SECTT, said: "Craig and Andrew should be extremely proud of their achievements as they had to overcome some extremely tough competition to win.

"Scottish apprentices previously won silver and gold at SkillELECTRIC in 2018 and silver and bronze in 2019, so they are continuing the fine tradition of apprentices being produced by Scotland.

"This victory also reinforces the importance of the excellent SJIB Modern Apprenticeship in Electrical Installation and demonstrates the ongoing commitment from employers, apprentices, colleges and the SJIB and SECTT teams."

The SkillELECTRIC final took place at Middlesbrough College on 16 and 17 November, with the winners announced on Friday 24 November during a live WorldSkills UK broadcast with TV presenter Steph McGovern.

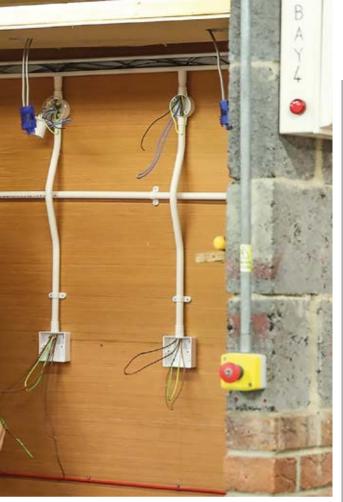
Craig at work during the final

> Judges assessed the competitors in areas such as measuring accuracy within 2mm, horizontal and vertical alignment, electrical terminations, functionality, containment symmetry, inspection and testing, and safe working practices.

The final included two other Scottish apprentices – Robert Rae of Dumfries & Galloway College, employed by SELECT Member firm Lotus Electrical Services, and Robbie Neave of Borders College and Braidwood Building Contractors.

Fiona Harper, The Secretary of the Scottish Joint Industry Board (SJIB), said: "This is a stunning victory and testament





"CRAIG AND ANDREW SHOULD BE EXTREMELY PROUD OF THEIR ACHIEVEMENTS AS THEY HAD TO OVERCOME SOME EXTREMELY TOUGH COMPETITION TO WIN"

to the strength and quality of electrical apprenticeships in Scotland, which saw record numbers recruited in 2022 for the second year in a row.

"It is vital that we now keep investing in our apprentices and adult trainees to ensure we have a pipeline of talent who can follow in the footsteps of Craig and Andrew."

Alan Wilson, Managing Director of SELECT, added: "We are delighted to see apprentices from two SELECT Member firms come home with gold and silver. Craig and Andrew are both a credit to their companies and their colleges." All finalists



received a range of prizes including equipment from CK Tools and SELECT Associate Members Megger and Scolmore, with Craig also receiving a Megger multifunction tester, an iPad, a 10-piece electrician's tool kit, MightyRod PRO Cable Rod Kit, automatic wire stripper, voltage detector and trimming knife.

Scolmore

Andrew with SkillELECTRIC Project Manager Jennie Phung

MEGGER GIFT FOR FICA CANDIDATES

SELECT Associate Member Megger has kindly donated TPT420 voltage testers and MPU690 proving units for use by candidates undertaking their FICA at SECTT assessment centres.

Assessment Centre Manager David Henderson received the kits from Sandy Thompson, Megger Territory Sales Manager, during a recent visit to the centre in Cambuslang.

David said: "The Megger brand is highly regarded in the industry and this generous donation will be welcomed by both staff and candidates."



NEW BOOTHS ARE NOW IN BUSINESS

The new booths at Cambuslang Assessment Centre are now up and running, with Daryl Aitchison also joining the SECTT team as an assessor.

SECTT is also excited to be in a position to increase the number of candidates attending the centre which, along with Edinburgh, has minimal waiting times. Anne Galbraith, CEO

Anne Galbraith, CEO of SECTT, said: "We recommend that those who are ready to sit their FICA, no matter where they live, consider travelling to the Central Belt where they will be able to sit the FICA within a short time.

"SECTT has made each centre a good environment to help candidates relax, which is not always easy under any test conditions."

55

SECTT UPDATE // CONTEST

FTER some extremely tough competition, we are pleased to announce the winners of the 2022 SECTT Apprentice of the Year contest.

The 1st Stage apprentice winners are:

Gold – Milly Smith, C S McKerlie Electrical Services, Dumfries & Galloway College
Silver – Adam Middlemiss, W P Purves, Borders College
Bronze – Kalum Low, M S Electrical, Moray College,

The winners from the 2nd Stage apprentice category are:

Gold – Danny McBean, Grants (Dufftown) Ltd, Moray College (*see facing page*)
Silver – Andrew Campbell, Jordan Electrics Ltd, Edinburgh College, Sighthill Campus

• **Bronze** – Nathan Mills, Intelligent Electrical Solutions, New College Lanarkshire, Motherwell Campus.

The results are the culmination of a long process, which began when SECTT Training Officers and college staff held discussions in May to select the best 1st and 2nd Stage apprentice for each college in Scotland.

Regional competitions were then held in June for the North, East and

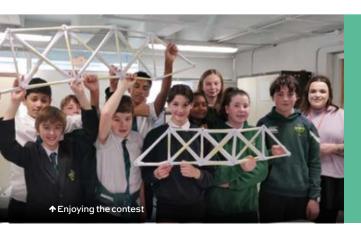


The next generation's **rising stars**

West, consisting of a threeand-a-half hour practical assessment of lighting and power circuits.

After the exercise was assessed by Training &

Development Manager Barrie McKay and Senior Training Officer Craig Johnston, the apprentices undertook a one-hour theory assessment of 50 questions based on



Pupils rise to the Challenge

The first heats in this year's Construction and Built Environment Challenge (CABEC) have been held, with great enthusiasm from challenge providers and schools alike. As cabletalk went to press, eight out of 10 heats had been completed, with the excited winners looking forward to the final at the Edinburgh Corn Exchange in January.

Anne Galbraith, CEO of SECTT, said: "So far, 240 S2 pupils have taken part in a series of challenges from building wooden picnic tables to understanding how to assess heat loss in buildings.

"The final will hold plenty of further challenges and I'm delighted that Jamie Hepburn, Minister for Higher Education



"THE STANDARD OF ENTRANTS THIS YEAR WAS ONCE AGAIN EXTREMELY HIGH"

topics they had covered at college.

The scores from both assessments were then collated to provide North, East and West winners for both stages, with all six apprentices facing an interview panel on 26 October.

After being quizzed on a range of industry-based questions by The Secretary



and Further Education, Youth Employment and Training, has agreed to present the prizes."

ABOUT SECTT

of the SJIB, Fiona Harper,

SJIB Trustee Alick Smith and

Scott Foley, Regional Officer

at Unite the Union and Chair

of the SECTT Trustees, the

of entrants this year was

once again extremely

candidate."

high and the panel was

impressed by the maturity

and professionalism of each

winners were then decided.

Barrie said: "The standard

SECTT manages high-quality training on behalf of the SJIB. To find out more about SECTT and its work, call **0131 445 5659**, email **admin@** sectt.org.uk or visit www. sectt.org.uk

THE TALENT OF TOMORROW

Danny McBean

NAME: Danny McBean AGE: 20 POSITION: Electrical apprentice, Stage 3. WORKS: Grants (Dufftown) Ltd STUDIES AT: UHI Moray HOBBIES: Mountain biking and electronics.

WHAT MADE YOU THINK OF BECOMING AN ELECTRICIAN?

It started with school. As soon as I could choose my own subjects, I got rid of anything to do with English and instead studied maths, physics, chemistry and engineering – basically, all the STEM subjects I could take! What also helped was that my dad is the college lecturer for electrical installation.

WAS IT DIFFICULT TO GET AN APPRENTICESHIP?

No, not really. I sent in my CV and my qualifications, then got an interview, and about a week or two later they said I had got the job.

HOW HAVE YOU FOUND IT?

It's been pretty good. It's not particularly nice when it's minus two degrees and you're working outside, but that's part of the job, and I wouldn't change it.

WAS THE COLLEGE TRAINING WHAT YOU EXPECTED? WHAT DO YOU ENJOY THE MOST AND WHAT'S THE MOST

CHALLENGING? I studied Advanced Higher Physics, so I knew most of the physics behind the theory in college. Anything tradespecific, like phases and inductor circuits, I hadn't done before and didn't know but, I did find most of it pretty easy thanks to studying physics in school.

HOW ABOUT WORKING ON SITE?

I like doing trade work, especially anything industrial, which is great because Grants is an industrial company so I get to do that a lot.

HAS THERE BEEN ANYTHING ABOUT THE JOB THAT'S SURPRISED YOU?

No, I don't think so. My dad explained everything before, so I was ready and knew what I was going to be doing.

HOW HELPFUL HAVE SECTT AND YOUR TRAINING OFFICERS BEEN DURING YOUR JOURNEY?

If I have any questions to do with college or what I'm entitled to, I'm able to phone my training officer. My training officer changed recently, but they were both helpful.

WHAT DOES THE FUTURE HOLD?

I've got three different options. One would be studying electrical engineering at uni because that was something I had aimed to do before taking on my apprenticeship. The reason I didn't was because I had thought it would just be better to learn hands-on at the job. Grants are currently putting someone through their degree, and they do about two days a week at uni, and three days working for Grants, so I'm looking to do something like that to get my degree as my second option. Or, third, wait until I can become an approved electrician and start my own company and go into an upcoming technology like renewables.

ProZone



PRODUCTS PUT YOU IN CONTROL

Sangamo has recently expanded its range of timers and heating controls to introduce two additional colour options across all products

offered.

The full range of Sangamo Timer Controllers, Thermostats, Programmable Thermostats and Programmers

in a choice of three colours, with silver and black added to the original white finish – taking the full range up to 30 individual product lines.

ESP believes this will satisfy a fast-growing demand among end users and building owners for a departure from the usual white finish to add a more stylish look to an interior



Energy efficiency remains at the top of the agenda for the economy, businesses and householders. The Sangamo

controls offers features that will assist with efficiency and performance and will ultimately help drive down energy usage and costs.

For further information, visit www.sangamo.co.uk





Lighting the way to more efficiency

IGNIFY has launched its Ultra Efficient product line, featuring its most energyefficient LED lighting solutions to date. The products include A-class MASTER LEDbulbs and MASTER LEDtubes, which

meet the highest level in new energy labelling legislation. With energy savings of up to 60% compared with

standard LED lamps and a lifespan of up to three and a half times longer, the range is the perfect choice to help consumers lower their carbon footprint in the global energy crisis.

A typical small business using 100 fluorescent tubes would save £15,487 per year on energy bills by switching to the A-class Philips MASTER LEDtube Ultra Efficient.

The new Philips MASTER LED UE lighting range can also reduce CO2 emissions by up to 2,285 kg over its lifetime – equivalent to the emissions absorbed by 99 trees.

Find out more at bit.ly/Philips_UltraEfficient

FIRE ALARMS OF THE FUTURE

Innovation continues for Aico, the European market leader in home life safety, with the launch of the Ei660i and Ei660iRF multi-sensor fire alarms.

The new additions to Aico's 600 Series boast all of the benefits found in their awardwinning multi-sensor fire alarm in a self-contained batterypowered unit.

The Ei660i is a stand-alone device, while the Ei660iRF includes built-in RadioLINK+ technology, offering wireless interconnection with compatible Aico alarms via radio frequency.

CONTACT OUR TEAM TO SHOWCASE YOUR GREAT NEW PRODUCTS HERE David Hughes: 07767 407 402 davidh@connectcommunications.co.uk

BECOME AN ASSOCIATE MEMBER To inquire about becoming an Associate Member, email memberservices@select.org.uk









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DEHN

deta^{*}

electrium

FLEXEL

ForrestBrown

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Heat Mat

LINIAN 💎

Megger.

Scolmore

(s)ignify

simPRO





OTIS

Heaters provide a handy solution

FLEXEL has expended its range of radiant heaters with the launch of the TH 2Kw and TH 3Kw models, designed for conservatories, enclosed balconies, terraces, pergolas, garden tents, retail units, garden rooms and similar structures protected against direct weather.

Ideal for clients who need to heat a larger zone but don't have enough space for multiple panels, they have a significantly lower surface temperature than halogen heaters, so they don't waste energy creating light, produce nearly instant heat and are maintenance-free.

Supplied with a 2m-long cold lead and tiltable wall brackets – enabling the

S. C.P. DO TOL HEDD



↑ The heaters don't waste energy

installation of panels at different angles – the new units are aluminium, reducing the weight by 40%.

Intended for use in temperatures of 5°C and above, the recommended minimum installation height is 1.8m above the floor level, with at least 300mm between the upper edge of the panel and the horizontal structure.

S For further details or a free quotation, email **ch@flexel.co.uk**

GUIDE HELPS YOU TO GET IT RIGHT

LINIAN and Doncaster Cables have joined forces to design an EV-Ultra® and Firesure® LINIAN Clip Cable Sizing Guide, to help you choose the right products for safe, compliant and tidy installations.

Check it out now at bit.ly/LINIANSizing Guide-EVUItraFiresure

The new products also include Aico's award-winning AudioLINK+ technology, making it simple to get realtime data directly from the alarm head via a mobile app, reporting on information such as activations, sensor status and record of testing.

Find out more at bit.ly/AICO_alarms





SCOLMORE'S HEALTHY CHOICE

Scolmore continues to build its portfolio of products and solutions dedicated to healthcare settings, with the introduction of a range of equipotential bonding busbars (EBBs).

In accordance with the Requirements for Electrical Installations BS 7671:2018 AMD2 Section 710 (Medical Locations) and the Health Technical Memorandum HTM06 01:2017, all Group 1 and 2 Medical Locations are to have an EBB and associated supplementary protective equipotential bonding installed.

The EBB plays a major role in ensuring patient and clinician safety. It is a key component of the supplementary protective equipotential bonding system which is designed to substantiall reduce touch voltages between exposed and extraneous conductive parts located within or that may be moved into the patient environment of Group 1 and 2 medical locations.

EBBs are installed within or immediately outside the medical locations they serve.

An informative guide to a medical locations group classification is provided within 3S 7671 on page 287 (Annexe 4710).

For more information about Scolmore's products, visit www.scolmore.com



FIRST CLASS PROTECTION

DEHNpatch from DEHN is a universal surge protection device for Gbit ethernet, power over ethernet, Cat 5 and Cat 6 applications.

Available in a variety of different configurations – Type 1 lightning arrest, Type 2 surge protection, IP66 rated, with patch leads and without – it offers unrivalled protection for all pairs with a gas discharge tube device and a suppressor diode for the smoothing component.

Find out more at bit.ly/dehn-patch

Bring bright ideas to life with Aurora

URORA Lighting has launched its LEDLineCOB Strip, offering a continuous run of light and eliminating hot spots found in other standard LED strip products.

Ideal for use on reflective surfaces in kitchens and bathrooms, it offers a higher-quality finish and overall look, ensuring customers will be happy with the result and specification. Provided with 3M[™] self-adhesive tape, the LEDLineCOB Strip is easy to install, with cut points every 45mm and a maximum run of 5m. For runs over this, the product can be connected in parallel.

Backed up by a three-year warranty and a lifetime of 35,000 hours, a range of channel and diffusers to complement the range are available to purchase



↑ The lighting is ideal for kitchens and bathrooms

separately. The LED strip is available in a choice of colour temperatures. For low-maintenance areas such as living rooms and ambient hospitality lighting, a non-IP rated version is available, while the IP67 variant is suitable for kitchens, bathrooms, and outdoor settings.

Find out more at bit.ly/Aurora_COB

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↑ ACI makes overcurrent protection simple

Peace of mind is standard with DEHNGuard ACI

DEHNGUARD Advanced Circuit Interruption (ACI) means you never need to worry about overcurrent protection – i.e. no fuse or MCCB – for your surge protection device (SPD) regardless of the size of the incoming supply.

DEHNguard ACI is a combined Type 2 and Type 3 SPD, offering very low letthrough voltage and very low residual energy levels to protect even the most sensitive equipment.

The real benefit of the ACI technology is the safe protection of the Surge Protection Device Assembly (SPDA) via the built-

in spark gap technology and thermal disconnection.

Even at 'end of life', this puts the SPD into a safe parallel open circuit status, with clear visual indication on the device and remote indication via volt-free contactors for BMS.

All of this with no disruption of supply and no risk to the load side equipment, saving space, time and money and offering protection and peace of mind.

Find out more by emailing david.white@dehn.co.uk



The products come in a variety of colours

STRONG CHOICE FOR CABLE CLIPS

Unicrimp, part of the Scolmore Group of companies, offers an extensive range of cable accessories. The company has a vast range of 18th edition compliant fire-rated Metal Twin and Earth Cable Clips which include red and white options.

The 18th Edition wiring regulations stipulate that cable support systems must be constructed with materials that will withstand premature collapse caused by direct exposure to heat.

Part of Unicrimp's Q-Fire range, the fire-rated T&E Cable Clips are manufactured from zinc plated carbon steel and are available in two sizes – 1-2.5mm and 4-6mm – and in a choice of uncoated or with a grey PPA LSF coating.

For further information contact Unicrimp on 01827 300600, sales@ unicrimp.com or visit www.unicrimp.com



ZUMTOBEL MD ROLE FOR PAUL

Zumtobel Group has announced the appointment

of Paul Kilburn as its new Managing Director, UK & Ireland.

Paul joins from Volution Group Plc, a FTSE250 company and manufacturer of ventilation products. He said: "The Zumtobel brands, Thorn and Zumtobel, are renowned in the industry. It will be an honour to work with its talented teams."



SNICKERS IS A GOOD FIT

Snickers Workwear's innovative and sustainable mid-layer clothing has excellent breathability for efficient body-temperature management when you're working hard.

The body-mapping designs and sustainable fabrics keep you ventilated as the heat from your body is regulated to give you winter warmth and cooling comfort when you need it. • For more information on the Snickers Workwear

 Biole information of the sinckers workwear mid-layer clothing range, call the Helpline on O1484
 854788, check out www.snickersworkwear.co.uk or email sales@hultaforsgroup.co.uk

NEW INCEPTOR DELIVERS BIG BENEFITS

The new Inceptor U-Lite from Ovia will join the existing, highly successful U-Lite luminaire and is designed to bring even more benefits to the installer. Inceptor U-Lite is a slimline, noncorrosive utility LED luminaire, designed to offer protection against the elements. With an integrated diffuser and gear tray anchored to the base, the Inceptor U-Lite ensures a hasslefree installation.

Features that are new to this Inceptor model include switchable CCT: 4000K, 5000K and 6500K and improved assembly. The gear tray and diffuser assembly can be disconnected and removed for lighter/ simple installation of the base, while multiple positions for the terminal block allows greater flexibility for retrofit installations. The luminaire offers emergency self-test as standard.



The full range can be seen in the new Ovia Issue 4 catalogue which can be downloaded from the Ovia website – www.oviauk.com

DIARY // EMPLOYMENT

FIVE MINUTES WITH...

BRUCE FINDLAY

HELLO BRUCE. HOW LONG HAVE YOU BEEN AT SELECT?

I joined SELECT in September and I'm currently learning the ropes by shadowing the other members of the Technical team.

TELL US A BIT ABOUT YOUR WORK LIFE SO FAR AND HOW YOU ENDED UP AT THE WALLED GARDEN.

From school, I joined the Royal Corps of Signals as an electrician where I served for 24 years worldwide in some glamorous - and not so glamorous - locations. This was mainly providing power for deployed strategic communications equipment with mobile power generating sets. On leaving the forces I worked with Edinburghbased John G Mackintosh, starting as an Adult Trainee, and progressing to Approved Electrician. After stints in management with Interserve and Carillion Amey I found myself working with SECTT in the FICA Assessment Centre at Edinburgh College, then briefly as a Training Officer looking after apprentices. I jumped at the chance to join SELECT when the opportunity arose as chances like this don't come round very often.

WHAT DOES YOUR JOB ENTAIL? TELL US MORE ABOUT WHAT YOU DO.

The role of Technical Adviser is varied. It includes everything from new Member and Member inspections to providing technical assistance on the helpline and keeping Members' skills up to date by providing the latest industry standards via face-to-face and online training courses. WHAT'S A TYPICAL DAY BEEN LIKE FOR YOU SO FAR? So far, I've

attended several training courses to make sure I'm armed with the latest standards and information. This should stand me in good stead for when I man the helpline further down the line. I've also been out and about with the other Technical Advisers in Tayside, Glasgow and the Borders, witnessing how to conduct Member inspections.

HAVE YOU HAD CHANCE TO MEET SELECT MEMBERS?

I've met a few Members already and look forward to meeting and building a relationship with others over the coming months. I'll be covering the Edinburgh and south east Scotland area, so my patch will be pretty big!

Quickfire questions:

Cheese or chocolate? Cheese Dog or cat person? Boxer lover First car owned? Ford Capri Favourite film? Stand By Me Favourite TV show? The Grand Tour Favourite holiday spot? Zell am See in Austria #stunning Dream date? Skyline Lounge, Tynecastle One thing people might not know about you? I'm a qualified skiing instructor

"I'VE MET A FEW MEMBERS ALREADY AND LOOK FORWARD TO MEETING AND BUILDING A RELATIONSHIP WITH OTHERS OVER THE COMING MONTHS"

Your Branch Officers:

ABERDEEN & NORTH EAST OF SCOTLAND

STEWART ANDERSON, Chair ERIC RAE, Vice-Chair ALICK J SMITH, 3rd Representative

AYRSHIRE

JAMES COOPER, Chair CHARLES DOBBIE, Vice-Chair

DUMFRIES & GALLOWAY

GORDON PATERSON, Chair JOHN WILSON, Vice-Chair

EDINBURGH & SOUTH EAST OF SCOTLAND

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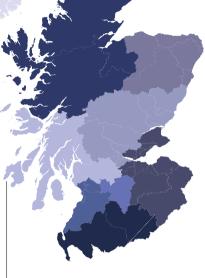
GLASGOW & WEST OF SCOTLAND

DAVID HARRIS, Chair KENNY BERRIE, Vice-Chair DAVID W H SMITH, 3rd Representative IAN YOUNG, 4th Representative

Upcoming SELECT events:

CENTRAL BOARD

Wed 22 March – venue TBC Thu 1 June – includes SELECT AGM, venue TBC Thu 7 September – venue TBC Thu 7 December – venue TBC



INVERNESS & NORTH OF SCOTLAND

DONNIE CALDER, Chair ALISTAIR GRANT, Vice-Chair

LANARKSHIRE

CRAIG MCGOWAN, Chair PAUL SMITH, Vice-Chair CHRISTOPHER LIDDELL, 3rd Representative

TAYSIDE

TONY HARVEY, Chair KEITH SMITH, Vice-Chair GRAHAM LYALL, 3rd Representative

Branch UPDATE

BRANCH UPDATES

w/c 6 March – in person, with AGM, venues TBC w/c 2 October – in person, venues TBC



TOOLBOX TALKS Tue 2 May – Edinburgh, Murrayfield Stadium Wed 3 May – Borders, venue TBC

Competition

Christmas songs wordsearch

FAIRYTALEOFNEWYORKABCDB s s Т UJATUVWX Υ Ζ ACVNC А V I F Α т CAHMGDSSRQPONM LKJIHGFB TLETOEDS хwвм Т S ANTABABY н CQBYLT Е R мD Y JМ JY т P 0 LSWH F R o s Т YTHESNOWMA NKJ ΗA Α F Т RNDG R FQM T V м Υ J R Y НJ UY т S H S R Ν мн G N J 1 NGLEBEL 1 SDGT ດ JC JMSY YUI O P L KJHGS S М Y Т Ν DMO ECHRI S ΚF Т SТ A S F т W н 11 м 1 WGI RERYMGHJKLPO IUYTR Ν Т 1 RID 0 R S LQ WMARY S B ОҮСН Т LDH Е DO F Υ S S EPOSGFQWERT Υ U 1 ос Р SU AVNLKJFTHG L R 1 Ν Υ LOHO L ΕT S N D X B T M N B V C X A S D F D GHT KRS х A G F Z W I N T E R W O N D E R L A N D т 1 D в SWQSCV ΙΟυΥΤ REWQ D ΗD Y 1 G F F AJDRTYUGOPUTR ΕWU R P TVF NRY BLUECHR sт ΜА S Е MS J А Υ Υ JWOPDRTH ΙΟΡΚΙΗΤ ĸ 1 Т F н U R A INAMANGERFGHJKLSMLW AWAY G H J K M R T H W J I N G I F B F I I R O C K

Here's your chance to win £50 of Amazon vouchers with our prize wordsearch about Christmas songs compiled by SELECT Training Administrator Laurie Burns. Find the words, take a pic of your finished grid and email it to memberservices@ select.org.uk by 15 January. The winner will be drawn at random. T&Cs are online. Congratulations to October/November 2022 winner Steven Kalvn from Edinburgh-based Kalvn Ltd.

Wed 10 May - Dundee, The Apex Hotel Thu 11 May - Glasgow, Hampden Park Tue 16 May – Dumfries, Easterbrook Hall Wed 17 May - Ayrshire, Rugby Park, Kilmarnock Wed 24 May - Falkirk, Falkirk Stadium Tue 6 June – Inverness, Drumossie Hotel Wed 7 June – Aberdeen. Pittodrie Stadium Tue 13 June - Orkney, The Pickaguoy Centre

Wed 14 June - Shetland, venue TBC Wed 21 June -

Stornoway, Caladh Inn

OTHER EVENTS

Mon 31 July -President's Cup, **Dunblane New Golf Club** Sat 12 August – Summer Carnival, The Walled Garden Fri 29 September – President's Lunch, Grand

Central Hotel

Showing now on S SELECT

EICR CODING

Three-part tutorial on Electrical Inspection **Condition Reports** (EICRs), and use of classification codes in accordance with BS 7671:2018. Watch Part 1 at bit.ly/STV-EICR1 Watch Part 2 at bit.ly/STV-EICR2 Watch Part 3 at bit.ly/ STV-EICR3

CABLE SIZING

WIN

£50 OF

amazon

VOUCHERS

Away in

Baby its

Fairytale

Frosty the

Snowman

Jingle Bells

Mary's Boy

Child

Mistletoe

O Holy Night

Santa Baby

Silent Night

Christmas

Christmas

Wonderland

The First Noel

Step into

White

Winter

Oct/Nov 2022 Answers

R E T H E M I S T F

M H M P G A Q R E T U D E S P E R A T I O N

H P Q R T H I N N E R T H E S H I N I N G G F

I saw Mommy

Kissing Santa

• Jingle Bell Rock

Last Christmas

a Manger

Cold Outside

Blue Christmas

of New York

This easy-to-follow method of calculation in line with the requirements of BS 7671. Watch at bit.ly/STV-cable

HOME OFFICES AND HOT TUBS

This special online Toolbox Talk was held on 7 July 2021, and saw Bob Cairney discuss the rise of hot tubs and home offices during lockdown. Watch now at bit.ly/TTalk-3

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Visit our websites at: select.org.uk cabletalkmagazine.com selectawards.co.uk

Membership **Enquiries:**

Please phone our membership team on 0131 445 5577 to apply to become a Member of SELECT or if you would like more information about joining. Alternatively you can email us on memberservices@ select.org.uk or submit an online enquiry.

READING THE SMALL PRINT

Expert Professor Rudi Klein explains why it's vital to always check a supplier's terms and conditions. Watch now at bit.ly/STV-TCs

BIDDING STRATEGIES

In this useful film, we offer exclusive quidance and practical advice on bidding strategies. Watch it now at **bit.ly/STV**matbid

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- Fully supports Amendments 1 and 2
- Use on as many devices as you want PC, Mac, Android, iOS
- Cloud-based syncs across your devices and between users
- Works really well offline (no Internet connection) then automatically syncs up when you come back online
- Wide range of certificates including MEW, EIC, EICR, EV, Fire alarm, Emergency lighting, PV, etc.

Cloud based certification for PC, Mac, Android, iOS, smartphones and tablets.

- Dedicated EV certificates or you can include an EV Charging Point in an EIC or EICR.
- Add photos to illustrate your observations whether they're problems, limitations or something done really well
- Quick and easy if you're working single-handed
- Great features for larger companies Multi-user, work flow, groups, imports



For help visit: Certsuite.app or contact Megger by email: software@megger.com