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Duo reveal the mix of skills and expertise needed to keep production running smoothly at SELECT Member Bruichladdich Distillery

Safe as houses Why 'electrical MOTs' are essential for the home of the future Letting laws
What regulation updates
mean for electrical work
in rented properties

Holiday planning Your guide to the latest rules covering annual leave entitlement and pay

SELECT

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SELECT

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cabletalk

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"COVID-19 TAUGHT US THE VALUE OF ONE-TO-ONE HUMAN RELATIONSHIPS" // PAGE 5





WIN £50 OF amazon

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CELEBRATING DIVERSITY IN THE ELECTRICAL INDUSTRY

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KEWTECH

EV testing made easy

with the new KEWEVA slimline adapter.

NEW

KEWEVA

Where innovation meets simplicity

- Enables testing of EV charge points
- Single dial operation
- Automatic CP check
- No awkward adapter cable
- Compact smallest in class















Building strong connections is key to everything we do

S I'VE said many times before, one of the major strengths of SELECT is the wide range of face-to-face connections it has

If the COVID-19 pandemic taught us anything, it's the value of personal contact and one-to-one human relationships and, at SELECT, it certainly strengthened our resolve to get out of The Walled Garden and expand our physical events.

with its Members.

Following the end of the numerous lockdowns we all endured in 2020 and 2021, we worked hard on rebuilding our in-person Member contact and I'm pleased to see we will be rolling out our 2024 schedule soon.

As you'll see on **pages 22 and 23**, our Toolbox Talks will be hitting the road in May and June and are once again as popular as ever, with hundreds of Members already booked to attend at 12 locations across Scotland.

These flagship events are also extremely well supported by our Associate Members and it has been heartening to see our teams develop strong working relationships with some of the industry's leading manufacturers and service providers.

This year's Toolbox Talks will be focusing on neutral current diversion (NCD) and additions and alterations, both of which are more relevant than

ever to the modern electrical contractor. If you haven't already booked your place, there's still time to come along – check out **www.select.org.uk** to find the event nearest to you.

As well as Toolbox Talks, we've just completed our first Branch Updates of 2024. This opportunity for meeting Members all over the country is invaluable as it allows us to understand the issues they're facing as well as looking at actions we can take to help their businesses prosper.

I'm grateful to our Associate Members Acutest and Lumi-Plugin for presenting at these events and would also like to welcome the new Branch Officers who have taken up roles representing their fellow local contractors.

Ongoing contact is very important to us, which is why regular visits from our Technical Advisers and Membership Representatives also play a key role in connecting with our Members. Added to this are our Drop-In events and all the other informal ways we speak and connect with businesses.

This ongoing contact helps shape the activities which SELECT undertakes on behalf of Members and the feedback we get also assists us when we engage with politicians and policy makers.

Speaking of politicians, I'll be looking to make new political connections on behalf of SELECT when I attend a reception which is being hosted by the Construction Industry Collective Voice (CICV) at the Scottish Parliament on 24 April.

As you'll know, SELECT continues to play a central role in the CICV, communicating and cooperating with the wider construction industry and ensuring that we speak with a united voice to represent our collective members' needs.

This reception will allow us to speak directly with MSPs and decision makers and make clear our priorities and the many issues we all currently face. It's another example of the power of inperson events and I'm sure you'll agree that there is no substitute for speaking with someone face-to-face.

At SELECT, we often speak of the 'family' mentality which exists between our staff and Members and I know our Technical, Membership, Employment and Training teams spend a lot of time getting to know contractors and listening to their needs.

I know this close relationship will continue throughout 2024 and

I hope to see many of you in person at one of our upcoming events. ■

WORDS ALAN WILSON Managing Director, SELECT KEY INDUSTRY NEWS AND THE LATEST ON SELECT STRATEGY, CAMPAIGNS AND COLLABORATIONS

News

+ PAGE 8 /

Green skills video shows our firm commitment to training that focuses on the journey to net zero

+ PAGE II /

SELECT staff join delegation heading to Frankfurt for this year's Light + Building event

+PAGE IO/

Fiona Harper looks ahead to a new challenge as she takes on the CEO role at SECTT

+ PAGE 13 /

Minimum standards are needed for installers of heating to protect our industry's reputation

Hands-on approach a hit at meetings

Interactive demonstrations of the latest products and technology have been a big success at the first Branch Updates of 2024

EMONSTRATIONS, discussions and debuts for new office bearers were all on the agenda at the first Branch Updates of 2024 in March.

Jack Goodall from Associate Member Acutest delivered a talk at all eight meetings, with James Cavan from fellow Associate Lumi-Plugin also attending the Inverness and Ayrshire get-togethers, where he let Members get hands-on with the company's innovative lighting and alarm technology.

Updates on SELECT activity were also delivered by the Directors of Function and the Presidential Team, with Training Officers providing the latest news from the Scottish Electrical Charitable Training Trust (SECTT).

Each Branch Update also included an AGM, during which branch officers and committee representatives were elected.

Among the changes, Mike Campbell was elected Chair of the Inverness & North



Scotland Branch, replacing Donnie Calder. In the Ayrshire Branch, Chic Dobbie and Jim Cooper swapped places, with Chic becoming Chair and Jim moving to Vice Chair. And in the Lanarkshire Branch, Chris Liddell takes over from Paul Smith as Vice Chair.

President Alistair Grant said: "I would like to thank all Members for taking the time to attend these meetings and to Acutest and Lumi-Plugin for sharing their expertise and insights."

Five minutes with Mike Campbell: Page 62



AGM WILL KEEP MEMBERS INFORMED

The 2024 SELECT AGM will be held at the DoubleTree Edinburgh Queensferry on Thursday 6 June and will include a technical presentation and updates from the association.

SELECT's annual report will also be released ahead of the AGM and will be available to download, listing the association's milestones and achievements over the last 12 months.

For further information about attending the AGM, email memberservices@select.org.uk



FIRMS HAVE
BECOME SELECT
MEMBERS SINCE
1 FEBRUARY 2024

- D Anderson Electrical, Laurencekirk
 Techmarx (Electrical Contractors) Ltd, Ballater
- 3. Knock Out Electrical, Prestwick4. DS Electrical, Glasgow
- 5. Solar ServicesScotland Ltd, Wishaw6. S D CrawfordElectrical Ltd, Kirriemuir

Focus on the future of training

BSE Skills Ltd is among the professional bodies from across the industry who have come together to support an ongoing review of Scotland's plumbing and heating apprenticeship.

The partnership – in which SELECT plays a leading role – has joined organisations, employers and apprentices to agree the skills and training needed to continue the apprenticeship's green focus and ensure a resilient, low-carbon future.

Taking place three
years ahead of schedule,
the proactive review has put
employers and apprentices at its heart
to safeguard the sector and enhance
green technology training.

And BSE Skills has worked in close partnership with the Scottish and Northern Ireland Plumbing Employers' Federation (SNIPEF) and Skills Development Scotland (SDS) to ensure apprentices are ready to take on the challenge of decarbonising Scotland's buildings. Alan McDonald, BSE Skills Project Manager, said: "BSE Skills has been delighted to play its part in this

review and pull together the necessary paperwork for submission to the Apprenticeship Approvals Group.

"The detail and depth of thought that has gone into this review reinforces the quality of the apprenticeship and how it is being led by industry to ensure that we're net zero ready and can make a smooth transition to a renewable future."

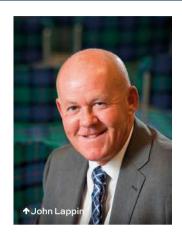
To date, the apprenticeship review has encompassed a series of comprehensive engagements, including industry-wide consultations, employee workshops

and the establishment of a series of working groups.

Stephanie Lowe, SNIPEF
Deputy Chief Executive, said:
"The review has attracted
unparalleled support from
across the profession to

advance training in low-carbon technologies and sustainability for the next generation of professionals."

The review aims to future-proof the curriculum against emerging technological advancements, the rapid progression of Scotland's Heat in Buildings strategy and anticipated environmental objectives. It also aligns with the Construction Leadership Forum's Construction Accord, which aspires to low-carbon skills development for apprentices across Scotland's construction sector.



WARM TRIBUTES ARE PAID TO JOHN LAPPIN

SELECT was saddened to learn of the recent death of former Central Board member John Lappin, who passed away on 16 March.

John was Chair of his local Ayrshire Branch between 2014 and 2018 and took a keen interest in electrical matters at both a local and national level.

A former player with Marr Rugby Club and an enthusiastic golfer, he also competed in the SELECT President's Cup, captaining the West of Scotland team to back-to-back victories in the annual competition in 2015 and 2016.

Current Ayrshire Branch Vice Chair Jim Cooper said: "John was an incredibly popular figure who was well known by everyone in the electrical trade around Ayrshire and beyond.

"We shared many good times together at SELECT events and on the fairways and he was always a knowledgeable and good-natured character to be around."

John's company, Lappin Electrics, was based in Troon and was a SELECT Member from 2007 to 2019.

Managing Director Alan Wilson added: "John is still fondly remembered and well thought of at SELECT and our condolences go out to his family and everyone who knew him."

WEBINAR'S DIGITAL DIRECTION

Our recent webinar about how to reduce paperwork and take your business digital is now available to watch again.

Held in conjunction with Associate Member Simpro, the one-hour session on 6 March aimed to show how to streamline operations and make day-to-day operations more efficient.

Among the speakers was SELECT Member Alasdair Noble, who revealed how moving operations online helped his family firm, John Noble Electrical Ltd.

He said: "There is no doubt that going digital has transformed the way

we do things and making the transition to digital isn't as daunting as you might think."







or go to bit.ly/sim-watch



Praise for our top Training team

SELECT's Training team has once again been given a glowing report by the Scottish Qualifications Authority (SQA) during its annual review of our services.

Our dedicated Training Centre and Training Development Adviser Stuart McKelvie were both highlighted for praise following the audit of our assessment and verification processes and procedures.

Following their visit to SELECT in February, the SQA External Verifier commented: "The centre is very well run and is doing an excellent job of coordinating all the courses they deliver both to Members and non-Members of SELECT.

"It is evident that Stuart McKelvie is very knowledgeable in all aspects of the electrical industry and in particular has vast knowledge in all of the courses they deliver at SELECT as well as in assessing and verifying."

An annual review is required by all SQA training centres, which must comply with quality assurance criteria and assessment of candidates in line with national standards to maintain accreditation.

SELECT Training
Manager Jenny
Cryans said:
"This is an
excellent
report with
no actions
identified,
and everyone
involved in
training at
SELECT should
be incredibly proud
of their achievements."

Training latest: Pages 40 & 41

Green skills video is fit for the future

New film shows how our industry is making renewables training a priority on the road to net zero and aims to inspire others to make a difference and boost green energy

ELECT issued
a special green
skills video for
this year's Scottish
Apprenticeship Week
to show how the electrical industry
is leading the way with renewables
training – and also urged others to
follow the sector's example to ensure
a successful transition to net zero.

The association released the film with the Scottish Joint Industry Board (SJIB) and Scottish Electrical Charitable Training Trust (SECTT) to reinforce the range of training in new technology that's currently undertaken by apprentices.

The video shows how young electricians are receiving a thorough grounding in a wide range of green skills to enable them to cater for our future heat and power needs, including

working with electric vehicles, battery storage, solar panels and air source heat pumps. And the bodies also insisted that the government, homeowners and wider construction sector must embrace the opportunities offered by renewables and work together to ensure that the transition to net zero becomes a reality.

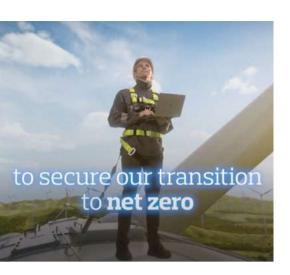
Alan Wilson, Managing Director of SELECT, said: "This video not only aims to inspire young

learners to become electrical apprentices but also to show that the electrical industry is at the heart of the move to the electrification of society. "However, we also need to

persuade those outside our industry to be equally committed to the adoption and uptake of green technology to ensure that this training is not in vain.

"To ensure that there is a sustainable and healthy pipeline of work for this





next generation of electricians, we need the government, the Scottish people and the construction industry to use renewable technology and join us on the transition to net zero.

"Such a transition needs to happen now and we all need to face the reality that we must do it sooner rather than later if we are to secure an energy-efficient future for our children and our children's children."

Running from 4-8 March, Scottish Apprenticeship Week again celebrated

the value and importance of apprenticeships, with this year's event focusing on skills generation.

Scottish
Apprenticeship
Week MSP visit:
Pages 52 & 53

Apprentice Mandeep is a net zero hero:

Pages 54 & 55





SAW24-VID



UPDATE No18: JAN-MAR 2024







19,081

55

5,264

Followers on social media

\$65

courses delivered, with free air source heat pump training for Members in January and February, in partnership with Daikin UK

533 Number of delegates trained Trained

† 1,551

Course assessments marked

89

Technical

inspections

230

Safety users

BSG Health & Technic

14 505

Technical Helpline calls SELECTcerts subscriptions



EMPLOYMENT & SKILLS

pass rate for FICA **68**%

Par for

te **79**%

1,235 F ECS HSE assessments created 838 ECS H

1,288ECS Cards issued

GET THE FACTS WITH NEW INFOGRAPHIC

The first SELECT infographic of 2024 has been released, showing the activity carried out by the association between January and March this

year. The quarterly update shows our achievements in technical, training, membership, communications, employment and skills.

INDUSTRY ISSUES TO THE FORE

SELECT Managing Director Alan Wilson was among the speakers at a recent seminar on current issues facing the construction industry.

Hosted by Morton Fraser MacRoberts, the event in Edinburgh on 21 March discussed payment, adjudication, retentions and the impact of COVID-19 on the sector.

Other speakers included Tamsie Thomson, CEO at The Royal Incorporation of Architects in Scotland (RIAS), and Norman Fiddes from the Royal Institution of Chartered Surveyors.

CERTIFICATES MADE SIMPLE

A new feature has been introduced to SELECTcerts which allows system administrators to archive company certificates automatically and manually.

The new feature is intended to help keep the workspace tidy and make locating 'live' certificates easier.

Archived certificates will be automatically deleted after 10 years, but can be restored at any time during this period

App synchronisation is now also available in archiving, with a default one-month period that can be changed to a three- or six-month period to suit.

Find out more about SELECTcerts and sign up at www.selectcerts.co.uk



Fiona is ready for her next challenge

Our skills expert takes on senior role at SECTT and continues her commitment to training the stars of the future

UTGOING SELECT skills expert
Fiona Harper says she is "looking
forward to the challenge" after
being been appointed CEO of
the Scottish Electrical Charitable
Training Trust (SECTT).

The association's former Director of Employment & Skills, who was also The Secretary of the Scottish Joint Industry Board (SJIB), assumed her new role on 1 April.

She succeeded Anne Galbraith, who stepped down after more than a decade of overseeing the development of electrical apprentices and adult trainees across Scotland and whose reign saw record numbers of young electrical learners coming through.

Fiona said: "I am delighted and honoured to have been offered this enormous opportunity and I look forward to the challenge of continuing the great work carried out under Anne's confident guidance in recent years.

"SECTT is now established as the premium provider of electrical apprenticeships, working in close partnership with SELECT, the SJIB and Unite the Union in the long-term interests of this crucially important industry.

"We must now ensure that we keep seeing record numbers of young people signing up for rewarding careers and make sure we have a steady pipeline of well-trained talent emerging to safely cater for a society in which the



future is so clearly electric." SECTT manages high quality training on behalf of the SJIB, ensuring standards and safety are consistent to ensure apprentices can pass the Final Integrated Competence Assessment (FICA).

Alan Wilson, Managing Director of SELECT, said: "Everyone here would like to thank Fiona for all the hard work, dedication and expertise she has brought to her time with SELECT and we wish her well in her new role at SECTT.

"Training is of vital importance and the enormous contribution SECTT is making to the quality and professionalism of the electrical industry in Scotland is unquestioned.

"The Modern Apprenticeship remains the only route to becoming a properly qualified electrician – there are no short cuts. SECTT performs a huge role in delivering the SJIB apprenticeship and we know Fiona will continue to grow and develop the programme."

SECTT Update: Pages 52 & 53

RENEWABLES INFO GOES LIVE

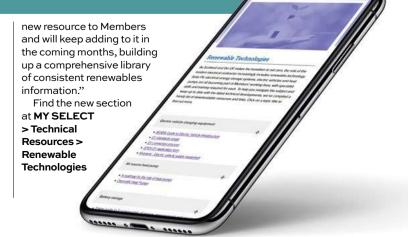
A new renewable technology section has gone live on the SELECT website, offering a wealth of useful guidance and information.

Available in the Members-only MY SELECT section of the site, the new page is designed to help Members with links and free downloads on topics including:

• Electric vehicle charging equipment

- Air source heat pumps
- Battery storage
- Solar PV and wind power.
 The new page also has DNO and local authority information, plus links to find out more about MCS and the Green Home Festival, of which SELECT remains a leading contributor.

Director of Technical Services Bob Cairney said: "We are pleased to offer this



SELECT JOINS THE DEBATE ON MAJOR INDUSTRY ISSUES

Electrical Safety First

As cabletalk went to press, SELECT's Bob Cairney was preparing to travel south of the border to take part in a high-profile seminar hosted by Electrical Safety First (ESF).

Our Director of Technical Services will be among the guest panelists at *Electrical Installation: Switch on to the big issues* at IET London on 23 April.

The half-day event will explore the key trends impacting the electrical installation industry, with topics including how to attract new talent, improving the quality of EICRs, solar PV safety, legacy RCDs, battery storage systems and prosumer installations.

Other speakers included representatives from BEAMA, NHBC, London Fire Brigade, JTL, ECA, National Residential Landlord Association, BSE, ESF and TESP.



Lighting up the conversation

SELECT staff joined other industry representatives as part of an EDA-led UK delegation to Light + Building 2024, the world's leading trade fair for lighting and building services technology.

Director of Technical Services Bob Cairney and Technical Adviser Bruce Findlay were among 33 senior wholesalers and trade body representatives who attended the event in Frankfurt from 4-6 March.

Bob said: "As always, it's useful to see the trends and technology that await us in the not-too distant future and Light + Building certainly helped us get up close to the next generation of electrical innovation."

Margaret Fitzsimons, EDA CEO, added: "Light + Building is where innovators and visionaries show us the future of the electrotechnical sector and our visit gave us plenty of opportunities to network, talk business and share ideas."

The group included representatives from Cable Makers UK Ltd (BCA), ECA, BEAMA and the Lighting Industry Association (LIA) and was the EDA's second delegation to Light + Building after visiting previously in 2018.



SPONSOR BRINGS ADDED SPARK TO GOLF EVENT

Global electrical and lighting giant Luceco Group has agreed to return as headline sponsor for our annual President's Cup golf day.

This year's event at Dunblane New Golf Club will once again be supported by the Associate Member, which has been supplying quality products worldwide for more than 70 years.

lain Mason, Director of Membership & Communications at SELECT, said: "After the success of last year's competition, we are delighted that Luceco Group will once again be the headline sponsor for the 2024 President's Cup.

"This event is keenly anticipated by golfers throughout the electrotechnical industry

> in Scotland and Luceco's involvement will help us deliver another excellent day of competition for Members and guests alike."

The event on Monday 29 July
will once again bring together
golfers from across Scotland to
compete for the coveted silver trophy
and socialise with industry colleagues.

It will feature an East v West tournament, prizes for the longest drive, a putting contest and advice for golfers of all abilities from an on-site golf pro.

John Williams, Trade & Specification Director at Luceco Group, said: "We are delighted to continue our close relationship with SELECT and put forward our name as headline sponsor of the President's Cup.

"Since becoming a founding Associate Member in 2022, Luceco has been a strong supporter of SELECT, sponsoring the President's Lunch in Glasgow in 2022, donating electric vehicle charge point equipment for training courses, and exhibiting at the association's Toolbox Talk roadshows. This activity has helped raise our profile among electrical contractors and helped us meet key decision-makers from across the industry."

Sign up for the event at bit.ly/prez-24



EQUALITY AND INCLUSION ARE HOT TOPICS

The latest international meeting of the Construction Leadership Forum (CLF) saw Alan Wilson chairing a debate on equality, diversity and inclusion in the construction industry.

The SELECT Managing Director hosted a special online session in which representatives from the built environment had their say on the importance of breaking down traditional barriers.

The event on 14 March attracted delegates from a wide range of construction bodies and included speakers from organisations in Sweden and the Netherlands.

To watch a recording of the session, scan the QR code or go to bit.ly/clf-equal



SAY HELLO TO THREE BIG NAMES

Three more big names from the construction industry have joined our expanding Associate Membership scheme as we continue to attract an impressive line-up of organisations.



market leaders. Established in the UK in 2016, Power Quality Expert is experienced in the analysis of power quality and is a specialist provider of power quality and harmonic surveys, BS:EN50160 compliance reports, UNIPEDE assessments, energy load profiling and power quality training.

KSR Lighting is a family-run manufacturer with a range of more than 2,000 products for the domestic, commercial, healthcare, education, hospitality, industrial, retail and leisure sectors. It also offers free lighting design, a madeto-measure bespoke LED strip service and a dedicated technical support team.

Fergus is a leading job management software provider, helping electricians build businesses with end-to-end job management and realtime visibility with digital job cards, quick quotes, estimates, scheduling and invoicing, plus free training and support.

All three are now keen to take part in SELECT events in 2024. Iain Mason, Director of Membership & Communications at SELECT, said: "We are delighted that Power Quality Expert, KSR Lighting and Fergus have joined us and we look forward to sharing their products and innovation with Members."







SELECT staff turned up the heat last month as they competed in another charity baking bonanza.

♦ Sam with the staff's cre

The Great SELECT Bake Off saw colleagues create a feast of sweet treats at The Walled Garden on 5 March, with all proceeds going to Marie Curie UK.

The winning creation was made by Finance Coordinator Carly Hamilton, who was voted Star Baker for her lemon drizzle cake.

Organiser and Employment & Skills Administrator Sam Moore said: "Thank you to everyone who supported the event and helped us raise more than £1,000. Marie Curie is very close to my heart and I'm grateful for everyone's generosity."

Sam with winner Carly



WARM WELCOME TO NEW ASSOCIATE MEMBER

A representative from new Associate Member Lumi-Plugin dropped into The Walled Garden recently to collect the company's membership certificate in person.

Sales & Marketing Director James Cavan was handed the official paperwork by Director of Membership & Communications Iain Mason and Director of Technical Services Bob Cairney on 29 February.

The company – which produces innovative integrated heat and smoke alarms and lighting – became our 31st Associate when it joined in January.



Standards are needed on heating

Call for minimum levels of competence to apply to installers as part of our drive to stop rogue traders taking advantage of customers and putting people and properties in danger

ELECT says any new domestic heating standards introduced by the Scottish Government need to set minimum standards of competence for installers as well as installations.

The association also says that any new plans have to take into account the capacity of the energy network as the demand for more electrically-driven technology increases.

SELECT's warnings came as it responded to a recent Scottish

Government consultation into proposals for a Heat in Buildings Bill, which plans to introduce a law requiring homeowners to ensure their homes meet minimum energy efficiency standards by 2033.

In its response, SELECT said:
"We have seen several government projects run into problems as they often leave the door open for unscrupulous traders who take advantage of the government's own messaging as a way of convincing people that work is required when often

it is not. Any demands for work need to be set in the context of availability of energy supply, material supply and labour. Added to that is the increased cost of energy – the differential between gas and electric costs.

"It is also vital that the Scottish Government legislates to ensure installations are only undertaken by properly qualified, trained and competent persons."

SELECT is now recommending that:

- Properties should be considered compliant once they have installed the measures appropriate for the building type
- Bio energy should be permitted for those buildings already using it, and
- There should be a grace period of five years to end the use of polluting energy following a property purchase.

Its response added: "The requirement to end the use of polluting heating following a property purchase will penalise those in older properties and especially those in our society less able to pay for measures such as the disabled or elderly.

"They often have asset wealth but not cash wealth, so selling their home to, say, downsize may penalise them if purchasers are either put off from buying or are told they can only buy with

a mortgage at a higher rate."

Alan Wilson, Managing
Director of SELECT, said:
"In this consultation,
we are suggesting that
while we support the
general aim to move
towards net zero, we
must be careful about
the danger of unintended
consequences."

Donation helps with EV training course

SELECT has received another generous donation from Associate Member Megger to assist with our ongoing electric vehicle (EV) training course.

Territory Sales Manager Sandy Thompson recently handed over an EV charge point adaptor to Director of Technical Services Bob Cairney and Technical Adviser Bruce Findlay.

Bob said: "We very much appreciate this kind donation from Megger, which has supported our training schemes and Toolbox Talks for many years."







TAKES just three ingredients to make Scotch whisky – malted barley, water and yeast – but on the island of Islay something magical happens as the spirit is imbued with the wonderful aromas of peat and smoke, creating the most iconic whiskies in the Scotland.

Helping to make sure that the magic continues is Islay-born Scott Lindsay, who is Bruichladdich Distillery's Maintenance and Estates Manager with responsibility for the smooth running of the operation which produces 1.2 million litres of *uisge beatha* – the Gaelic term for whisky which is described as the 'water of life'.

Although Scott left Islay for adventures abroad when he qualified as an electrician, he was drawn back to the island's soft, rolling hills, sandy beaches and slower pace of life when he started a family. The offer of a job as an electrical maintenance technician at the SELECT Member company in 2018 came at exactly the right moment.

Over the past five years, Scott's experience has continued to grow and he was promoted to his management position in 2022 with responsibility for the maintenance team, both mechanical and electrical, as well as contractors working at the site.



Scott (left) with fellow distillery electrician Neil McNaughton

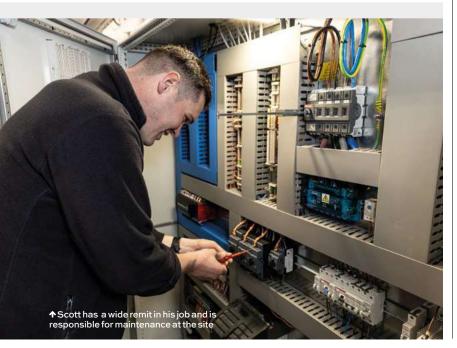
As Maintenance and Estates Manager, Scott has a wide remit, including making sure the distillery's malting, mashing, fermentation, distilling, maturation and bottling processes work efficiently so the operation hits its production targets.

Scott said: "It's a very varied role as some of the equipment we have here was installed when the distillery was built in 1881, so we are dealing with everything from Victorian engineering all the way up to our state-of-the art bottling plant which uses robots. This means the guys are jumping between 200-year-old equipment to the newest of the new programmable logic controllers – we have to know how to do everything."

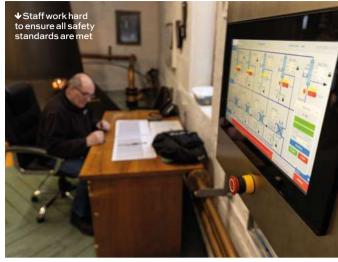
While many people would consider working in a whisky distillery a dream job, they probably don't realise that it's actually a hazardous environment, as the vapours from the distilling process are potentially dangerous.

That's why some of the electrics used across the site are explosion, or Ex, standard. This includes the still area where the whisky spirit is created as well as the site where the whisky is disgorged from barrels for blending and then put into bottles.

The potential risk is still there while the whisky spirit matures in wooden barrels over many years. Each barrel can lose up to 2% of its liquid







as it evaporates through the wood and into the atmosphere. The romantically termed 'angels' share' is carefully monitored so the vapours are vented to the outside environment and don't build up to potentially dangerous levels.

Scott said: "Some parts of the site have been classified as hazardous areas because they are subject to potentially flammable sources, so we use Ex-rated electrical equipment which is designed to contain any sparks or ignition sources within the equipment itself, preventing them from igniting flammable vapours in the surrounding atmosphere.

"This includes everything with an electrical source, from lights and pressure switches to motors and pumps, and we also have to regularly check this equipment to maintain a

"WE NEED TO PLAN
WELL IN ADVANCE,
PARTICULARLY WHEN
ORDERING PARTS, AND
THIS ALSO IMPACTS OUR
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BRING ONTO THE ISLAND"









spark-free environment. We carry out the Ex inspections ourselves and work closely with our own compliance department to ensure we meet all the Dangerous

Substances and Explosive Atmospheres Regulations (DSEAR) 2002."

The main focus at the distillery is meeting production targets so Scott has developed a programme of preventative maintenance to minimise downtime.

But with three whisky brands and a gin, he's also got to ensure that the frequent changeovers in the bottling lines go as smoothly as possible.

Getting hold of parts also needs careful planning as, unlike other electricians on the mainland, Scott can't just nip down the wholesalers to pick up supplies; he has to order them, sometimes weeks in advance, as bad weather often causes the cancellation of the ferries from the mainland.

He added: "When we are developing projects we need to plan well in advance, particularly when ordering parts, and this also has an impact on our budgets as there's a delivery cost on everything we need to bring on to the island."

This has been the case for the last couple of years as the distillery has installed a PLC-controlled cooling tower system that re-circulates the water – reducing water consumption by 75% – and embarked on the expansion of its warehouse capacity so that all the Bruichladdich whisky brands can be matured on Islay.

TRAVELS AND TRADITION

This is where the magic happens: the raw clear new-made spirit slowly matures in wooden barrels, where it takes on the flavours, colours and aromas of the cask to develop the distinctive character that is Scotch whisky. Scott added: "We are now working on fitting out the new warehouse at a site adjacent to the distillery with a racking system that can store 10,000 casks, and we are doing a full electrical installation throughout, including 250 new Ex lights.

"The whole lighting system is powered by a central battery system and control station in the switch room, which means that even if there is a power outage it continues to send power to the light fittings so they are still illuminated – it's basically an emergency lighting system controlled via one big battery bank rather than lots of little standalone ones.

"As you can imagine, there are lots of different things to keep on top of and there's only me and my other electrician Neil McNaughton to deal with the electrical issues; as I'm often busy with management issues it's regularly down to Neil, so he's always working flat out between breakdowns,

"THERE ARE MANY TIMES WE'VE BEEN ABLE TO CALL SELECT FOR ADVICE, SUCH AS QUERIES ABOUT INSPECTION REPORTS AND GUIDANCE ON REGULATIONS"

new jobs and inspections!" Scott has every confidence in Neil's abilities as the two grew up together on Islay, both trained as electricians and went off to Australia together for an adventure and worked on solar farms for a while. Scott said: "We had good fun Down Under, but it was like swapping getting soaked in the Scottish rain for getting scorched by the Australian sun. You had to keep your tools in the shade otherwise they would be too hot to touch if you left them out in the sun.

"Neil stayed out in Australia for three years and when he came back looking for a job, an opportunity came up at Bruichladdich and he was the successful candidate for the role."

Also helping the team at Bruichladdich Distillery is SELECT, as Scott explained: "There are many times we've been able to call on SELECT for advice such as for technical queries regarding inspection reports and up-to-date guidance on amendments to regulations, as well as certification to become Certifiers of Construction. The SELECT Technical Helpline is great because most of your queries can be dealt with at the end of the phone."

Scott is proud to work for Bruichladdich as it is a major employer on the island. While other



◆ Neil and Scott were reunited at the distillery after travelling to Australia together

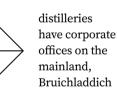




established in 1881 and operated up until 1995 when Whyte & Mackay Distillers decided to close it. It was brought out of mothballs by a consortium led by Mark Reynier in 2000, who developed a variety of innovative whiskies using Scottish barley - 40% of it grown on Islay. In

2012, Rémy Cointreau purchased the company for £58 million and has since doubled production.

Bruichladdich Distillery, which produces three Islay single malts, an unpeated Bruichladdich, a heavily peated Port Charlotte (right) and a very heavily peated Octomore.



is firmly grounded in Islay, employing around 110 people with the majority based on the island.

Scott added: "Bruichladdich is a very communityfocused company and, while we are owned by a French company, all the decisions are managed from the island. Other distilleries may produce millions of litres of whisky a year but they only employ a handful of people on the island, with other functions managed from the mainland.

"At Bruichladdich, we only make 1.2 million litres a year but the majority of our employees are based on Islay, creating good sustainable jobs, and, as a proud *Ileach* (the name for someone from Islay), I think that is a big thing."

Scott said that having the senior management team 'down the corridor' means that it's easier and faster to get things done, and he's pleased that he's been able to influence the development of maintenance processes and procedures around the distillery.

He said: "I've enjoyed my experience on the management side as I've been able to develop and implement new maintenance systems and strategies by taking a more proactive approach, particularly with preventive maintenance, so we can condition monitor the assets and make sure they're getting the right attention that they need when they need it."

Outside work, Scott enjoys the all peace and tranquillity that the island has to offer, with long walks on the beach with wife Rachael and his four children - aged six, four, two and eight months or taking off in his small fishing boat and returning with fresh crab, lobster or mackerel.

He said: "We love living on the island because it is quiet and the pace of life is a lot slower than the mainland. There are no traffic lights or traffic jams and my daily commute is about 30 seconds as we live in a house next to the distillery.

"We just feel safe here - the children can go anywhere because everyone knows each other."

One of the other advantages of working in a distillery is that he occasionally gets to sample the product: "I'm not a big drinker but I can appreciate the different flavours and tastes. I certainly know a good whisky from a bad one, and Bruichladdich is definitely one of the best!" ■







QUICK **FACTS**

BRUICHLADDICH DISTILLERY

BRUICHLADDICH

BRANCH: Glasgow & West of Scotland

BASED:

WEBSITE: bruichladdich.com



"THE MAJORITY OF OUR **EMPLOYEES ARE BASED** ON ISLAY, CREATING GOOD SUSTAINABLE JOBS, AND, AS A PROUD ILEACH, I THINK THAT IS A BIG THING"

Investing in safety and skills

THE COMPEX VERDICT

ALAN MONTGOMERY Technical Development Manager, CompEx





The obvious care and attention to detail shown by Scott and his team are excellent examples of the precautions that should be taken when working in hazardous areas.

The set-up at Bruichladdich shows the value of a competent workforce that is aware of potential dangers within classified zones.

Some people working in potentially

hazardous environments lack an understanding of the associated risks, which can create a culture of complacency. In my opinion, the overarching goal is not merely regulatory compliance, but the nurturing of a sustainable safety culture to mitigate the risk of potentially life-changing incidents.

If you work in such environments, I cannot emphasise enough how vital it is to implement, follow and uphold well-defined processes to ensure employees are aware of unseen risks that may be evident in your workplace.

While general occupational safety measures are essential, they often fall short in adequately preparing workers for the industry-specific challenges that they face when working directly or indirectly with hazardous material and products.

Recognising the unique nature of risk through specialised training will equip employees with the relevant underpinning knowledge, practical skills and qualifications to navigate their roles safely.

A skilled, knowledgeable and well-trained workforce, who understand the many aspects of operating safely in accordance with their own procedures and the appropriate regulations, is an investment in the sustained welfare of both employees and the business itself and will demonstrate not just the ability of the individuals but also the capability of the business.

Scott and Bruichladdich certainly know the value of such investment, and it's about time I popped over for a visit and to raise a glass to the way they do things!

☼ CompEx is an Associate Member of SELECT.To find out more about its work, visit www.compexcertification.com

We're ready to hit the road again

- Book your FREE place now at your nearest SELECT Toolbox Talk 2024
- Presentations on neutral current diversion and additions and alterations
- Your chance to catch up with our Technical Advisers and other experts

HE presentations are polished, the goody bags packed and our teams are gearing up for eight weeks on the road as the 2024 Toolbox Talks prepare for launch.

Our ever-popular roadshows will once again be touring 12 venues across Scotland in May and June, delivering a wealth of FREE technical advice to Members far and wide.

Kicking off at SELECT HQ outside Edinburgh on Wednesday 1 May, our update sessions will this year deliver invaluable insights into neutral current diversion (NCD) and additions and alterations.

Delegates will enjoy an in-depth insight into both topics, with our technical experts and other SELECT staff on hand to answer your questions and discuss any other issues face-to-face afterwards.

As always, we're delighted that representatives from the Scottish Joint Industry Board (SJIB) and Scottish Electrical Charitable Training Trust (SECTT) will also be in attendance.

The team behind our popular SELECTcerts service will also be on hand at the Glasgow event on Thursday 23 May to answer your questions via an in-person helpdesk.



LINDA ROLFE Events, Marketing & Communications Coordinator, SELECT



PRESENTATION 1: NEUTRAL CURRENT DIVERSION (NCD)

Our first Toolbox Talk of the day will outline what NCD is, where it may be found, how to assess the associated risks and test for it, and how to work safely. We'll also cover the relevant earthing systems and how and to whom this type of problem should be reported.

And our fiendish Beat the Buzzer game will also return for 2024, with a new challenge to test competitors' skill and the chance to win plenty of great prizes.

Bob Cairney, Director of Technical Services, said: "With only a few weeks to go, the SELECT teams are looking forward to getting out there and meeting Members across Scotland.

"Neutral current diversion is a hot topic that is attracting growing interest, so we're keen to equip Members with the necessary knowledge to identify and deal with it where necessary."

Each event will feature exhibitors from a range of leading manufacturers and service providers, including Associate Members Aico, Electrium, Luceco, Scolmore and TIS, so you'll have plenty of opportunity to see the latest industry technology first-hand.

Joining us this year for the first time are new Associates Electric Heating Company, Lumi-Plugin, Power Quality Expert, Fergus, Acutest



Tuesday, II June
Shetland Arts Development
Agency, Lerwick, Shetland

Where you can meet our experts

Our team will be visiting 12 locations across Scotland. This handy map will help you find the one nearest to you.



Tuesday, 18 June
The Pickaquoy Centre,
Kirkwall, Orkney



and KSR Lighting, so make sure you drop by and see their products and services.

Wednesday, 15 May Easterbrook Hall, Dumfries

Each event kicks off at 9.15am with coffee and rolls, followed by lunch provided at the end of each session and goody bags for each delegate which will include the day's presentations.

And of course, Toolbox Talks are free to attend for all SELECT Members. So check the map for this year's dates and venues and sign up **NOW** – it's bound to be busy!

PLAGE NOW PLAGE NOW

For further details, scan the code, email memberservices@ select.org.uk, call us on 0131 445 5577 or go to 'Events' at www.select.org.uk



PRESENTATION 2: ADDITIONS AND ALTERATIONS

This discussion will focus on what's needed for compliance with BS 7671 and the requirement given in Regulation 132.16 and the checks, tests and notifications that may have to be done before and after carrying out such work. We'll also look at how to assess the rating and condition of existing equipment within the installation, including the distributor, and will include a look at the likely existing earthing and bonding arrangements that may exist.







Why electrical safety is at the heart of net zero homes

With almost three-quarters of fires in Scotland's homes caused by electricity, our quest columnist explains why mandatory home 'MOTs' are vital to help reduce risk and protect everyone as the electrification of society continues

> UR charity has long campaigned for all Scottish homes to have regular electrical checks, verified by an Electrical Inspection Condition Report (EICR). These checks are similar to an MOT you have for your car, and they can reveal dangers in the home that would otherwise be undetected.

While these checks are now required in Scotland's private and social rented sectors and for the licensing of short-term lets - there is no such protection for owner-occupiers. This group live in 60% of Scotland's housing stock, with a tendency to own older properties where, inevitably, electrical installations will deteriorate with age.

It is worrying that our own research shows potentially up to 43% of Scottish homeowners have either never had an electrical inspection of their home or are unaware if it has ever been checked by an electrician. Such a lack of essential maintenance increases the electrical risk and can have financial - and potentially dangerous consequences for home buyers.

Within the private rental sector across the whole of the UK, mandatory electrical safety inspections have been quietly but steadily increasing over the past few years - a requirement in Scotland since 2015, new legislation in 2020 brought them in for England, and Wales followed suit in 2022.

But these regulatory measures have also highlighted a need for greater clarity from industry on what should be included in an EICR, how to carry one out thoroughly, and how to report properly on any defects found.

CONSISTENCY AND TRANSPARENCY Electrical Safety First's recently-launched Best

Practice Guide 10: Electrical safety standards in the private rented sector provides consistency and transparency for electricians and all those involved in renting or owning property in understanding what inspection and testing is required, and how to produce a detailed report.

Any inconsistency in reporting can create confusion for those reading the report and may lead to safety risks being reported incorrectly or ignored.

As an EICR could cover lots of areas, it is vital for electricians to establish and agree with whoever is ordering the work what's to be included and what isn't included in the electrical safety check,









43%

of homeowners have never had an inspection or don't know if the property has ever been checked

and an agreed understanding on the minimum standard to expect from an EICR. A properly conducted EICR is a vitally important process in assessing risk, determining the safety of someone's home, and helping to protect people from danger. The information in the report is critical to identifying and rectifying any known issues while also developing safety measures to mitigate risk or danger, especially in advance of any remedial work.

Our guidance is the result of collaboration and agreement between many leading industry bodies and organisations – including SELECT – and it has also had input from several industry bodies, government departments and letting agents.

But we are also aware this is just the beginning of a long journey. Much more needs to be done, especially in helping ensure the electrical industry has the necessary skills and resources to deliver the increased demand for EICRs.

SUPPORTING THE INDUSTRY'S FUTURE

As part of that work to help improve awareness and standards, we are proud to be hosting our first Installation Seminar on 23 April exploring the



↑ Checks are essential in an electric future

key issues and trends impacting the future development and professionalisation of the electrical industry.

Held at the Institute of Engineering and Technology (IET) in London with the theme

of 'Switch on to the big issues', this free-to-attend half-day event will feature a range of engaging presentations, panel discussions and fireside chats with speakers drawn from industry, manufacturing and government.

Topics covered will include how to grow the installer base by attracting new talent and upskilling existing workers, how to improve the quality and consistency of EICRs, solar PV safety, legacy residual current devices (RCDs), modern electrical and electronic equipment, battery storage systems, prosumer installations, the consequences of ageing distribution networks, and product safety.

It is vitally important to ensure all these issues are fully explored to ensure the safe delivery of net zero future homes because the adoption of new technologies such as heat pumps, solar PVs, and electric vehicle home-chargers place additional – and often new – demands on domestic electrical installations.

The simple truth is that we need to build up the knowledge to support a comprehensive understanding of retrofit preparedness. Making electrical safety checks mandatory across all housing sectors helps protect everyone as we head into an all-electric future.

Update on the Repairing Standard: Pages 38 & 39



Guide provides the best advice

Best Practice Guide 10: Electrical safety standards in the private rented sector, is the latest in a series of ten guides offering free expert advice and information on technical issues involved in electrical installation work

Produced by Electrical Safety First in association with leading industry bodies, including SELECT, the ten downloadable guides support the work of designers, installers, verifiers, and inspectors of domestic electrical installations.

View and download all the guides by scanning the QR code or going to **bit.ly/esf-bpg**





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A double journey of discovery

An experienced lecturer and an up-and-coming learner from the same college talk about the challenges and rewards of apprenticeships in the latest SELECT podcast

NDY Mackintosh and apprentice
Ryan Murray from UHI Inverness
are the stars of our new episode
of Sparks' Remarks as they
discuss their respective
electrical journeys.
In the fourth instalment

In the fourth instalment of our popular podcast,

entitled *Telling a lock nut from a hazel nut*, Andy discusses the changes he's seen over the past 15 years, and says the end result is still just as rewarding.

The Deputy Curriculum Lead for Engineering Technology, who is also Operational Manager at the college, says: "We now have podcasts and different media, as well as online learning, videos and the use of augmented reality, so it really is exciting in terms of interactive applications.

really is exciting in terms of interactive applications.

"However, I think it's about student achievement. You see students come in just out of school and their knowledge is very limited – it's the old adage that they don't know the difference between a lock nut and a hazel nut.

"Watching them progress through their apprenticeship and return as qualified electricians is great. Then you're no longer teaching – it's a peer conversation with robust discussion. It's really enjoyable to have that, and rewarding to see that you were part of that journey.

"The challenging part is just keeping ourselves up to date and making sure that we are current and we are still effective at what we do."

Ryan – a second-year apprentice employed by ANM Electrical in Inverness – also reveals how he initially studied as a panel beater, but soon realised his future prospects lay in the electrical sector. The 24-year-old says: "It was something I always fancied doing and coming into the apprenticeship a bit later perhaps made me a bit more prepared.

"Obviously it's a completely different course, and it's definitely a lot harder in terms of the mental aspect of it with your maths, but it definitely did stand me in good stead in terms of what's expected by an employer and how to get on with the work. I'm loving it."

Like the previous three episodes, the new podcast is produced in partnership with the Scottish Electrical Charitable Training Trust (SECTT) and is hosted by journalist Kim McAllister and Barrie McKay, Training and Development Manager at SECTT.

Barrie said: "We seemed to have struck gold with the people that we've asked to come on to the podcasts, and they've really opened up about the benefits of being an apprentice."

SECTT Update: Pages 52-55



PODCAST

···and a kick up the bahookie

Listen to the new podcast and the others in the series by scanning the QR code or going to bit.ly/select-pod



Women are the stars of the show

To celebrate International Women's Day, SELECT travelled north to Orkney to meet a quartet of electrical professionals for a special film that salutes the work of Member firm RS Merriman

IAIN MASON Director of Membership & Communications



EMALE staff from an historic Member firm were the stars of a special film that was released Shaynee Moar by SELECT to mark this vear's International Women's Day.

Launched on the eve of the global event on 8 March, the video showcased the achievements of Orkney-based RS Merriman, which employs four female professionals in the front line of the electrical industry.

Entitled Inspiring Inclusion, and now available to view on SELECT's YouTube channel, the film showed the quartet discussing why they decided to get into the sector and heard how much being a part of the electrical future means to them.

Qualified electrician and former Scottish Apprentice of the Year Melanie Smith revealed why she became involved in a traditionally male-dominated industry, telling viewers: "I grew up on a farm and I wanted to be doing something outdoors and something with my hands. I just love that every day is different, going outside and doing different things."

"I LIKE PROBLEM-SOLVING AND FIDDLY THINGS, SO I THOUGHT THAT MAYBE BEING AN ELECTRICIAN WOULD SUIT ME. I REALLY, REALLY ENJOY IT"

Fellow RS Merriman spark Charlotte Jarvis also explained her reasons for taking up the tools, adding: "I also wanted a job that was out and about. I get to see all of Orkney

> this way, doing trips to the isles and everything, instead of being stuck

in an office. I like actually making something instead of just sending emails all day."

Apprentice Shaynee Moar also appeared in the film, revealing: "I'm quite a practical person. I like problem-solving and fiddly

things, so I thought that maybe being *Sadie Nerriman an electrician would suit me. I really, really enjoy it."

And Sadie Merriman also discussed her own career journey, which has seen her rise from electrician to Contracts Manager, adding: "I had a bit of an epiphany one day and thought, 'Why don't I do an apprenticeship with the family company?'. For quite a number of years

I was the only woman in the electrical trade in Orknev."

The video was shot on location in Orkney in early February, with a film crew following Melanie, Charlotte and Shaynee as they worked in several locations, and interviewing Sadie in the company's head office at Stromness.

Alan Wilson, SELECT Managing Director, said: "We'd like to thank RS Merriman and their staff for taking the time out of their busy schedule to participate in this special video.

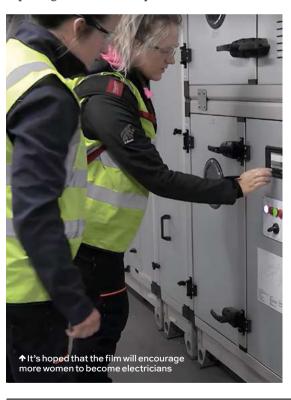




QR code or go to bit.ly/IWD24-VID



"International Women's Day celebrates the social, economic, cultural and political achievements of women and we are pleased to highlight a progressive Member company which is putting these aims into practical effect. The



QUICK **FACTS** MERRIMANI MERRIMANI MERRIMAN

BRANCH: of Scotland

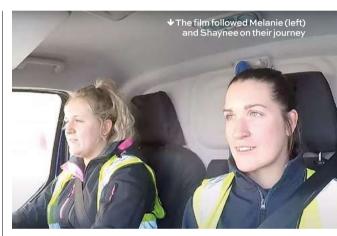
BASED:

PHONE:

01856 850 105

WEBSITE:





electrical sector in Scotland is committed to fair work for all and we applaud firms such as RS Merriman who are taking positive steps in the right direction and striving to become a shining light of quality and inclusion. However, we all have a part to play and the wider industry would do well to follow its example and aim towards a working environment in which it is unremarkable that women play a full and professional part."

Produced with the Scottish Joint Industry Board (SJIB), the Scottish Electrical Charitable Training Trust (SECTT) and Unite the Union, the video coincided with Scottish Apprenticeship Week, which ran from 4-8 March.

Firm is a shining example of innovation

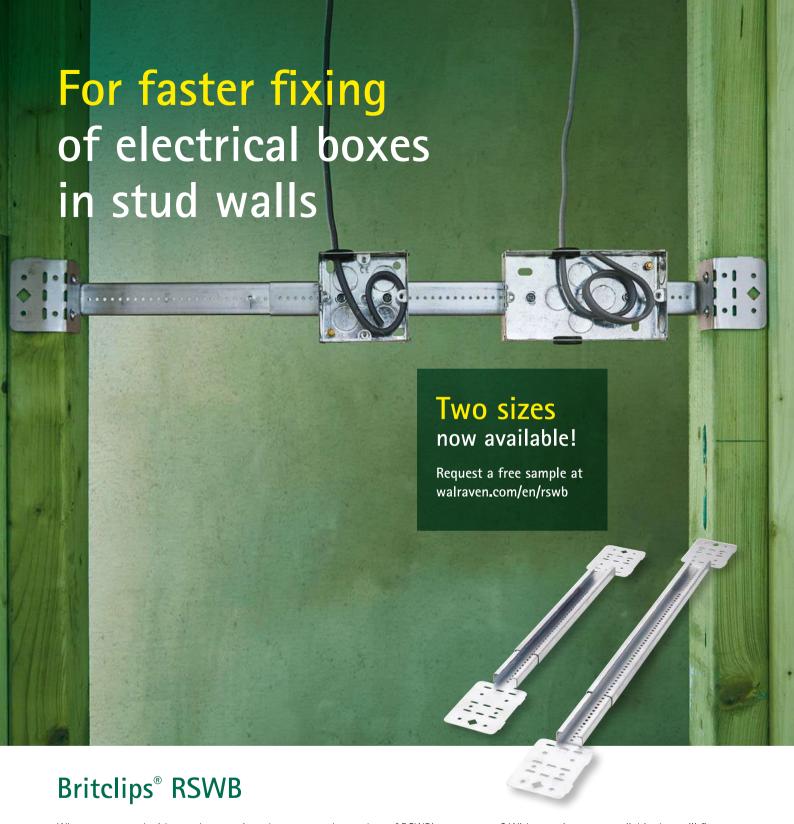
Founded just after the Second World War in 1946, RS Merriman was instrumental in bringing electricity to Orkney, installing street lighting and domestic systems and becoming a key player when oil arrived in the 1980s.

Over the years the company has continued to increase its knowledge and experience and now has a diverse portfolio of domestic, commercial and industrial work.

As well as working in schools, medical facilities and leisure amenities, its electricians also cover specialist areas such as salmon farms, fishing vessels, passenger ferries,

water treatment facilities, distilleries and dairies.

The company is also certified for the design and installation of solar PV and air source heating systems and provides custom solutions for load control, grid connections and energy storage.



Why mess around with wooden noggins when you can keep a box of RSWB's on your van? With two sizes now available they will fit any joist divide between 25 and 60cm. Simply screw into the joist at whatever depth you require for your back box. With pre-drilled holes to make fixing even easier, they can also be used to secure conduit and pipes.

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."





New seminar will cover a hot topic

We're delighted to present a technical session on embedded electrical heating that will take place at three locations in May and June

ELECT has teamed up with Associate Member Flexel to offer a special technical seminar on embedded electric heating.

Held at three locations across Scotland in May and June, the half-day session will cover the safe design, installation and verification of indoor and outdoor systems.

◆ The seminar will focus on using the right equipment for the job Stuart McKelvie, Training Development Adviser, will begin each session by explaining how Section 753 of BS 7671:2018+A2:2022 aligns with UK manufacturer Flexel.

After a short break for refreshments, Craig Herriott, Scotland Regional Manager with Flexel, will then discuss the link between its embedded heating systems and Section 753.

His presentation will also include a detailed overview

of all of Flexel products
including electric
cables, far infrared
patented inkbased solutions
and heaters.

Craig will
discuss where
each solution
should be

used to maximise efficiency and how various thermostat controls can assist with further energy savings.

The seminar will run from 8.45am until 1pm on the following dates:

- Tuesday 7 May 2024 –
 Edinburgh
- Tuesday 28 May 2024 Cambuslang
- Wednesday 5 June 2024 Glenrothes.

Jenny Cryans, Training
Manager, said: "The future
is electric, so it's important
that designers and installers
understand the requirements in
BS 7671 for embedded electric
heating systems, surface heating,
de-icing, frost protection and
similar applications."

The cost to attend is £75 + VAT per delegate, with a CPD certificate provided.

To find out more and book your place, email **training@ select.org.uk** or call the Training team on **0131 445 5577.**

1. Tuesday 7 May 2024 – Edinburgh 2. Tuesday 28 May 2024 – Cambuslang 3. Wednesday 5 June 2024 – Glenrothes

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ABOUT FIFXFI

Flexel has been manufacturing heating solutions since 1978 and is the UK expert in far infrared heating. Exporting to more than 30 countries worldwide and now part of the Fenix Group, it is one of the largest far infrared manufacturers in the world, with all products manufactured in Scotland and the Czech Republic. It is also an original

equipment manufacturer (OEM) company. Find out more at www.flexel.co.uk



WORDS ANNE GALBRAITH Outgoing Chief Executive, SECTT



Clever kids rise to the challenge

The annual CABEC contest was once again an exciting affair as youngsters gathered to solve a series of engineering problems that ranged from electrical conundrums to teapot puzzles

NE of my final tasks
at SECTT before
retiring in April
was to oversee the
grand final of the
Construction and
Built Environment
Challenge (CABEC) –

always a highlight of my calendar!

I've had the great pleasure of being involved with this annual competition for 25 years, the majority of which has been managing the event itself.

Devised and run by colleges, universities and training providers, we once again ran a series of construction, engineering and building

"I WAS PARTICULARLY IMPRESSED BY THE WAY THE YOUNG PEOPLE ENTHUSIASTICALLY ENGAGED IN THEIR COMPETITIVE CONSTRUCTION AND BUILD TASKS"

heats for 300 S2 pupils aged 13 and 14 from across Edinburgh and the Lothians.

These qualifiers culminated in the grand final on February 6, with the top ten teams of ten pupils gathering at the O2 Academy in Edinburgh for more problem-solving.

This year's activities included the Bright Sparks electrical challenge, building a picnic bench, the teapot task, using high-tech heat sensing equipment and a bricklaying puzzle called The Name is Bond!

TOP TEAMWORK

There was great excitement as the 100 competitors assembled, and this enthusiasm carried on throughout the day. Each team performed extremely well and the feedback from the challenge providers was uniformly positive, noting the excellent teamwork in particular.

I found the pupils to be engaged and interested in every challenge and I was very impressed by how hard they all worked. It also reminded me that we are fortunate to have a fantastic and diverse group of challenge providers who are only too happy to share their knowledge and expertise with the pupils and teachers.

Each team was marked on a number of criteria including teamwork, understanding and carrying out instructions, working safely and completing the tasks, with the final scores extremely close.

For the second year in a row, the winner's trophy was lifted by George Heriot's School from Edinburgh, with North Berwick High School and Armadale Academy finishing second and third respectively. All three won gift vouchers and a cheque for their CDT department.

WORKING TOGETHER

Our special guest on the day was Graeme Dey, Minister for Higher and Further Education and Minister for Veterans, who met the pupils and helped with prize-giving.







Afterwards he said:
"I was particularly
impressed by the way
the young people
enthusiastically engaged
in their competitive
construction and build tasks.

"The practical 'hands-on' nature of the competition also offered a valuable insight into the world of work as well as how engineering and building services job roles can be rewarding, creative and challenging."

Abigail Latimer from George Heriot's School said: "The CABEC event was an amazing opportunity for pupils to participate in STEM challenges and learn about related careers and also came at the perfect time as they choose their subjects for continued learning.

"It was brilliant to see everyone participating so enthusiastically and see how classroom learning applies to real-world scenarios.

"Our pupils enjoyed every moment of the day and were delighted to win. "I was also extremely proud of their teamwork and communication."

From a personal point of view, CABEC is one of the things I will miss most about SECTT, but it is also one of the achievements of which I am most proud.

The contest aims to inspire pupils at a vital stage in their education and highlight the huge variety of exciting careers that are available to them.

It has been uplifting to see thousands of pupils so engaged with construction and engineering, and has no doubt encouraged many young minds to go on to greater things and ensure a bright future for our built environment.

SECTT Update: Pages 52-55

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Technical

MORE INFORMATION For further information on our technical support and advice, please call 0131 445 9218 or email technicalhelp@select.org.uk

How to deal with power flow issues

With the advent of alternative energy supplies such as solar

PV and battery storage systems, bidirectional power flow

is something that needs to be considered with respect to

at the issue and shines a light on some suitable solutions

certain protective devices. Here, our quest columnist looks

WORDS MICHAEL PEACE CENG MIET MCIBSE

Senior Engineer, Technical Regulations,





Unidirectional protective devices are marked to indicate the line and load terminals and are designed to work when the power can only flow in one direction, i.e. from supply to load. It is vital to observe the connection details.

WHAT IS A UNIDIRECTIONAL

PROTECTIVE DEVICE?

Single-module sized residual current breakers with over-current protection (RCBOs) have been available for several decades and utilise electronic circuits to provide residual current protection. These compact RCBOs contain electronic components and are typically unidirectional. Arc fault detection devices (AFDDs) are also typically unidirectional.

The product standard for RCBOs states that if it is necessary to distinguish between the supply and load terminals, they shall be clearly marked, e.g. by line and load placed near the corresponding

terminals or by arrows indicating the direction of power flow. Therefore, if a device is marked line, load, with arrows etc, it is indicating that it is

necessary to distinguish between the supply

RCBOs are unidirectional. Some RCBOs employ technology/solutions that ensure that the RCBO is not damaged when supplied in either direction and these are bidirectional.

and the load terminals. Not all compact



A protective device that does not have markings to indicate line and load terminals is a bidirectional device, where power flow in either direction will not cause damage.

The 'typical' residual current circuit-breaker (RCCB) is an electromechanical device, however, electronic RCCBs also exist. RCCBs for consumer units are in the form of a two module-sized device. These devices are not usually marked in and out, and therefore are bidirectional. In some cases, RCCBs are marked to indicate the terminals to which the neutral or line should be connected.

"A PROTECTIVE DEVICE THAT DOES NOT **HAVE MARKINGS TO INDICATE LINE AND LOAD TERMINALS IS A BIDIRECTIONAL DEVICE,** WHERE POWER FLOW IN **EITHER DIRECTION WILL NOT CAUSE DAMAGE"**



↑ RCCBs for consumer units are multidirectional









♠AFDDs are typically unidirectional

covers prosumer's electrical installations (PEI).

Regulation 826.1.2.2 states current flow and polarity should be taken into account. As with all electrical equipment, it is important to take account of manufacturer's instructions, as referred to in Regulations 134.1.1 and 510.3 of BS7671:2018+A2:2022.

Where an additional source in parallel to the low voltage (LV) electrical supply is present, such

as a PV generator in, the installer is faced with a dilemma. The issue is that it is not possible to follow the line and load convention where two supplies are present.

Single-phase RCBOs are available in a single module, known as 'compact', and two module sizes. Two module RCBOs are not usually marked as with circuit-breakers (CBs), and thus are also bidirectional.

HOW ARE UNIDIRECTIONAL PROTECTIVE DEVICES MARKED?

Where required, protective devices such as CBs, RCCBs, RCBOs and AFDDs feature a marking on the device to distinguish between the supply and load terminals.

This can be marked in a number of ways such as line and load, in and out, or by using directional arrows to indicate the power flow. The connection details are shown in Figure 1.

CAN UNIDIRECTIONAL PROTECTIVE DEVICES BE USED FOR OTHER SOURCES. **SUCH AS PV SYSTEMS?**

In addition to Section 712 of BS 7671:2018+A2:2022, PV systems are also covered in Part 8, which

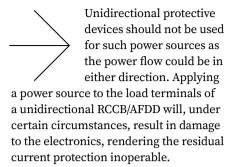
↑The installation of electrical equipment must follow certain regulations







↑ Figure 1: Protective device connection details



DOESN'T THE INVERTER SHUT **DOWN AUTOMATICALLY IN THE EVENT OF A SHORT CIRCUIT OR LOSS OF MAINS?**

The power electronic converter system (PECS) - more commonly known as the inverter - is designed to shut down very quickly, typically milliseconds, in the event of a fault or loss of supply.

The maximum trip time for loss of mains for modern PV inverters, according to EREC G98, is up to 0.5 seconds, however, some older PV inverters may have a trip time of up to 2.5 seconds.

The concern highlighted in a recent BEAMA technical bulletin, Connection of unidirectional and bidirectional protective devices, is that a voltage present on the outgoing terminals of the protective device, either due to the device operating in the event of an earth fault or by use of the functional test button, could cause irreparable damage.

ARE RESIDUAL CURRENT DEVICES (RCDS) REQUIRED FOR PV SYSTEMS?

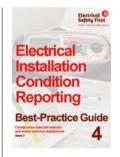
RCDs are not required for PV systems per se, but they may be required for other reasons, such as fault protection in TT systems or for additional protection where the AC PV inverter supply cable is buried in a wall.

The majority of PV systems are likely to be retrofit, where the cable used for the AC PV inverter supply circuit is installed surface mounted using steel wire armoured (SWA) cable. Therefore, RCD protection would not be required for additional protection in this case.

Some manufacturers discourage the use of RCDs for inverters due to leakage currents. Where possible, it is best to design it out and provide other methods of protection where required.

Where RCDs are required for generators intended to be used in parallel with the distribution network, it is important to ensure they are bidirectional.





HOW DOES THIS AFFECT EXISTING INSTALLATIONS?

When considering existing installations, such as when carrying out an electrical installation condition report (EICR), it is important to keep things in perspective.

If the electronic circuit within a RCBO was damaged by voltage on the outgoing terminals, the thermal/magnetic part of the device would still operate, providing overload and shortcircuit protection.

For TT systems, RCDs are installed to provide fault protection for the protective measure with automatic disconnection of supply (ADS). Failure of the RCD could be a serious safety issue and would require urgent remedial action.

In a situation where an RCD has been installed for additional protection, e.g. cables buried in a wall, if the RCD were to fail, it would be a no more dangerous situation than an electrical installation from BS 7671:1992 - AKA the 16th Edition of the IEE Wiring Regulations - when additional protection was not included in the standard at that point.

It's important to remember the requirements of the latest version of BS 7671 are not retrospective. Guidance in Best Practice Guide 4 from Electrical Safety First (ESF) states that a recommendation



"UNIDIRECTIONAL **PROTECTIVE DEVICES ARE NOT** SUITABLE FOR OTHER SOURCES, SUCH AS PV AND BATTERY STORAGE SYSTEMS"

This can be in the form of a double-pole or single-pole with switched neutral protective device. It is important to check as some compact RCBOs are only available as single-pole devices. This requirement has been included in BS 7671:2008.

It is important to select the correct type of RCD

according to DC residual current to prevent the RCD being blinded. Regulation 712.531.3.5.1 of BS 7671:2018+A2:2022 provides requirements for RCDs for solar PV power supply systems.

It states that where an RCD is used for protection of the PV AC supply circuit, the RCD shall be of Type B according to BS EN 62423 or BS EN 60947-2, unless the inverter or installation provides at least simple separation between the AC and DC side or the inverter does not require a Type B RCD as stated by the manufacturer, based on their instructions.

IN SUMMARY

Bidirectional power flow of generators or energy storage systems must be considered when selecting protective devices. Unidirectional protective devices are not suitable for other sources, such as PV and battery storage systems.

There is no requirement for RCDs for PV systems as such, however, this is dependent upon the installation characteristics. To avoid unwanted tripping due to leakage currents, design the circuit in such a way that RCD protection is not required.

Where RCDs are required for PV systems, they must switch all live conductors, including the neutral. It is important to select the correct type of RCD according to the expected level of DC residual current to prevent blinding, where a Type B would be most suitable. It is important to take account of manufacturer's instructions.

The product standard for RCBOs states that if it is necessary to distinguish between the supply and load terminals, they shall be clearly marked, for example by line and load placed near the corresponding terminals or by arrows indicating the direction of power flow.

It is important to check with the manufacturer of the protective devices to confirm their suitability for bidirectional power flow. ■



Along with SELECT and BEAMA, I would like to thank the following for their contributions to this article: Darren Crannis and Gary Parker (ECA), Mark Coles, Leon Markwell and Craig O'Neill (IET), Neil Bridgeman (RIA), Jon Elliot (Certsure), Frank Bertie (NAPIT).

for improvement is appropriate for the absence of an RCD for cables buried in a wall. However, the inspector must make an engineering judgement based on the situation.

The guidance in the new BEAMA technical bulletin is that "proportionate action" is required and it is recommended to contact the protective device manufacturer, seeking their advice as to the correct course of action.

OTHER CONSIDERATIONS FOR RCD **SELECTION FOR GENERATORS**

It can be easy to think only of Section 712 when considering PV systems. It sometimes gets overlooked that PV systems are in fact generators, which are covered in Section 551 of BS 7671:2018+A2:2022, and it is important to remember that the general requirements also apply.

Regulation 551.7.1 of BS 7671:2018+A2:2022 provides requirements where a generating set may operate in parallel with the distribution network, such as a PV system.

It states that where an RCD is providing additional protection in accordance with Regulation 415.1 for a circuit connecting the generator set to the installation, the RCD shall disconnect all live conductors, including the neutral conductor.



the connection of unidirectional and bidirectional devices can be found in the new BEAMA technical bulletin. To download it, simply scan the QR code or go to bit.ly/ beama-guide





TECHNICAL // ROUND-UP

To help keep Members in the loop, here is the most up-to-date information about the Repairing Standard, plus recent updates from BEAMA and Electrical Safety First

EMBERS should be aware of updated statutory guidance recently published by the Scottish Government's

Better Homes Division which provides additional clarification on landlords' responsibilities in relation to installations for the supply of electricity.

The Repairing Standard published in January 2024 replaces the version published in March 2023 and now also applies to those who operate short-term lets such as Airbnbs, as well as private rented accommodation.

The standard will also apply to some types of tenancies on agricultural holdings, but this won't come into force until 28 March 2027.

THE MAIN CHANGES

The most significant changes in the new standard relate to Annex D3: Installations for the supply of electricity.

This includes D.55, which says that in order to comply with the Repairing Standard there must be one or more residual current device (RCD) with rated residual operating current not exceeding 30 mA in the main or principal consumer unit.

Normally, as a minimum, this will cover the socket-outlet circuit.

However, the protection requirements will vary depending on the installation in the let property. D.55 also says that



Changes to the rules for landlords

landlords should ensure that an electrical inspection condition report (EICR) is completed every five years to assess the installation against BS 7671.

Landlords should refer to this EICR for the appropriate RCD protection for their installation.

Private landlords are required to have complied with all this by 1 March 2024.

COMPLIANCE AND ACTIONS

Where an electrical installation in premises to which the guidance applies does not have at least the minimum level of protection described – identified in an EICR prior to this date – the landlord should have either taken action to address the absence of RCD protection or be actively working

Wiring advice update is now online

In case you missed it, an update was recently added to the ESF website:

Q: When undertaking a periodic inspection in a single dwelling, what classification code should be applied, if any, where it is identified that wiring systems are not adequately supported to

prevent premature collapse in the event of a fire?

A: Where premature collapse of the wiring system can hinder evacuation or firefighting activities in the event of a fire due to possible entanglement, a classification code C2 would be appropriate. Where it is identified that a wiring system is not adequately

supported, however premature collapse of the system would not hinder evacuation or firefighting activities, then no classification code needs to be awarded.

• Further updates and information can be found at www.electricalsafetyfirst.org.uk



useful information if clarification on

observation codes is necessary.

Observations with classification code C1 (danger present) or C2 (potentially dangerous) must be rectified to comply with the Repairing Standard. Observations with code C3 (improvement recommended) are not considered to be a source of potential danger

action to meet with the standard.

However, in some instances where a code C3 has been allocated to the absence of an RCD where none exists at all in a property, e.g. an upper floor flat, it is clear that this should be acted upon to comply with both the guidance in D.55 and the Repairing Standard.

towards compliance within a reasonable timescale.

If a complaint should arise and be upheld by the First-Tier Tribunal for Scotland (Housing and Property Chamber), which oversees the enforcement of private landlords' statutory duties, a landlord could be forced to comply with the standard through an enforcement order.

Failure to comply with such an order could result in a rent abatement order or loss of registration as a private landlord under legislation enforced by local authorities.

When considering necessary remedial actions, landlords are advised to refer to the latest EICR provided for the installation and to take account of any allocated classification codes.

Landlords should refer to the latest version of Electrical Safety First (ESF) Best Practice Guide No 4 (Issue 7): Electrical Installation Condition Reporting: Classification Codes for domestic and similar electrical installations which may provide

ADDITIONAL CHANGES

Other changes include the use of updated terminology relating to the suitability of the person(s) who can carry out periodic inspection and testing (PI&T) in D.56 and D.88. This includes the

latter saying that landlords should advise tenants to test that the following devices operate when their integral test button is pressed at time intervals as specified:

- · RCDs six-monthly check
- · Smoke or heat detectors weekly check
- · Carbon monoxide detectors monthly check.

If you require further clarification on the Repairing Standard, please contact the Technical Helpline on

0131 445 9218. ■

GUIDE IS FULL OF FACTS ABOUT FAULTS

In addition to its new technical update on unidirectional and bidirectional residual current devices, BEAMA has also issued revised guidance on arc fault detection devices (AFDDs).

The guide provides terminology and definitions, an overview of AFDDs and why they can provide 'the missing link' to existing protection schemes, plus information about types and causes of arc fault.

The guide also covers how AFDDs work - including links to two handy videos - and how to select and install them safely, with information on AFDDs and the IET Wiring Regulations, ring

final circuits and testing, plus more than 25 FAQs.

To download it, scan the QR code or go to bit.ly/ beama-afdd

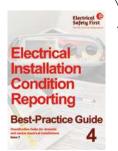




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ESF Best Practice Guide No 4 can be downloaded by scanning the QR code or going to www.electricalsafety first.org.uk





Training

MORE INFORMATION

To enquire about SELECT's range of training courses, please call 0131 445 5577

Say hello to better ways of learning

SELECT is making some important changes to its Certification of Construction Scheme that will have implications for the type of training now required

> **PPROVED** Bodies (AB) and Approved Certifiers of Construction (ACC) should be aware of a number of updates that we've introduced to our Certification of Construction Scheme. The first change means that for those applying to become ABs in the SELECT scheme, the designated ACC must meet the following criteria:

> > Be eligible for Approved

Electrician status

- Have successfully completed BS 7671 training in the last five years
- Have successfully completed electric vehicle (EV) charge point equipment training in the last five years
- · Have successfully completed the ECS Health, Safety and Environmental Assessment in the last three years
- Have successfully completed SELECT's Certification of Construction Scheme self-study programme in the last three years.

The second change means that, from 1 January 2025, there will no longer be an annual fee of £50 plus VAT for ACCs to stay in the scheme.

We will continue to e-mail renewal reminders, but this will now be an auto-renew process and will be free of charge, with no annual fee charged.



ACCs will no longer be required to attend a Scottish Building Standards (SBS) one-day or e-learning course. This will be replaced with a SELECT self-study programme and open book assessment called the Scottish Building Standards Course Renewal, AKA course 408. This programme is intended for electrical installers who are already registered as ACCs in the SBS

Certification Scheme and meets the threeyearly update training requirements set out in the scheme.

It aims to provide the necessary information for an ACC to remain up to date with current SBS guidance and legislation, with self-study that's designed to be easy and flexible.

On booking, candidates will be e-mailed the course notes along with a link for the open book assessment. The pre-study of course materials should take around 12 hours and can be completed in stages at a time that suits the individual.

Once the pre-study has been finished, there is a multiple-choice assessment with 25 questions that needs to be completed. If you're successful in passing the programme, you'll be issued with a CPD certificate.











BENEFIT OF CHANGES

No scheme renewal fee

Study in your own time rather than a full-day SBS training course

EV charge equipment training will enhance competence of ACCs The cost for SELECT Members is £75 plus VAT per delegate and the programme must be completed within one month from the date of booking.

EV CHARGE POINT INSTALLATION

In addition to course 408, ACCs are now required to undertake the SELECT EV charge point installation training course – AKA course 324 – every five years.

This is due to changes to the SBS regulations that took place in June 2023, with training now required to design, install, test, inspect and commission an EV charge point.

SELECT produced a technical circular highlighting the importance of the changes contained in these updated regulations. This information can be downloaded by scanning the QR code on this page or going to **bit.ly/sbs-update**

STAYING IN THE SCHEME

To remain in the SELECT scheme, ACCs are now required to ensure they keep up to date with all four areas of training outlined at the start of this article, i.e. BS 7671 training, EV charge point equipment training, the ECS Health, Safety and Environmental Assessment and the Certification of Construction Scheme self-study programme.

As always, I'd be happy to discuss this further in person if you have any questions. Please contact me by emailing **jenny.cryans@select.org.uk** or you can call the Training team directly on **0131 445 9206.**

Understanding the regulations

Guidance on the installation of EV charge points is laid out in Section 7.2 of the *Building Standards Division Technical Handbook*, which is applicable to works from 5 June 2023.

The handbook's Mandatory Standard says that every building must be designed and constructed in such a way that provision for EV charging is made where car parking spaces are located in the building or its curtilage, i.e. the area around it.

This does not apply to:

- A non-domestic building where ten or fewer car parking spaces are present in the building or its curtilage
- Alteration to, or extension of, a building other than major renovation works.

The guidance continues: "It is now a requirement for all new homes, where external car parking is provided, to have access to a charge point socket. It is considered that, where a property has more than one vehicle, one socket is sufficient for normal usage.

"The installation of a proprietary EV charge point socket, not a standard electrical outlet, will facilitate safe and efficient recharging of vehicles. The provision of electrical infrastructure will also 'future proof' parking spaces in response to the growing uptake of EVs.

"Installers of EV charge points should be aware of the need to notify the electricity distribution network operator (DNO) of the intent to undertake such an installation to an existing electrical supply or when applying for a new electrical supply.

"In the case of conversions, every conversion which alters the number of dwellings, or the number of building units, in the building, or which changes the occupation or use of a residential building to any other type of building, or a building so that it becomes a residential building, shall meet the requirements of this standard."

SBS REGULATIONS EXPLAINED

For more information, scan the QR code or go to bit.ly/sbs-update





Industry insight Follow the Len commandments

Our expert explains why learning to say no is essential – and suggests some rules that should be written in stone before you agree to any new projects

OR my regular sermon on payments and contracts, I'd like to share my thoughts on how we can stem the tide of unscrupulous business practices.

As you'll know, I advise clients

across a wide variety of sectors in the construction industry, a few of whom have told me that they've had enough of turning the other cheek to unfair conditions.

We've all seen how the failure of construction firms can cause a domino effect of debt that hits the supply chain hard, leaving businesses out of pocket and struggling to survive.

To avoid similar disasters of Biblical proportions, I'm working on ways to help organisations say **NO** to onerous clauses and conditions and push back on nefarious employers and contractors.

As part of this guidance, I've drafted the following list of commandments that should be adopted by every business approaching a new project.

This should be the message that we are **ALL** sending out to potential employers and contractors before signing on the dotted line: • **DON'T** send us a tender with onerous contract amendments which increase our risk and reduce yours – the documents will just be sent back to you.

• **DON'T** get us to work with you for months, using our 'know-how' to help you secure a contract, and then come

"THERE ARE
PLENTY OF GOOD
EMPLOYERS AND
CONTRACTORS
OUT THERE WHO
HAVE LONGTERM BUILDING
PROGRAMMES
AND WILL LOOK
AFTER YOU"







back to us seeking a further discount off our tender. It won't happen.

- **DON'T** include extended payment periods.
- **DON'T** include liquidate damages provisions that are completely disproportionate to the value of our work package. We won't accept them.
- **DON'T** include provisions that retention releases will be dependent upon the completion date of the main contract because we won't accept that either.
- **DON'T** issue an instruction to us for additional works before we agree a price with you, because we won't do these works without an agreement on price.
- **DON'T** tell us that you can't pay us because the client hasn't paid you – that's your problem, not ours, and paywhen-paid provisions are outlawed.
- **DON'T** keep hitting us with spurious contra charges because we won't accept them. If you don't drop them, we'll simply refer the matter to adjudication.
- **DON'T** put a clause in the contract that says if we initiate an adjudication we will be entirely responsible for your costs and for those of the adjudicator. Again, we simply won't accept it.
- **DON'T** keep telling us that there's more work in the pipeline that we'll get if we play ball with you on other contracts.
- **DON'T** include cross-contract set-off provisions. Guess what? We won't accept that either.
- **DON'T** forget that you need us to get your projects built if you don't treat your supply chain properly, you'll have no supply chain.
- **DON'T** extend the date of the final account agreement because we **DO** want to accept that.
- **DON'T** start a contract without there being clear responsibilities in relation to Contractor Designed Portions.



• **DON'T** keep telling us that certain things are 'design development' when you don't even know what that means and it's not been defined in the contract documents.

Now, I'm well aware that many readers will nod their heads to all of the above points and then say: "That's all well and good Mr Bunton, but I'm afraid we need the work."

Of course I understand that, but being brave and adopting some of these commandments really **WILL** help you manage the commercial aspects of projects more efficiently and profitably.

In my experience, there are plenty of good employers and contractors out there who have long-term building programmes and who'll look after you. Such people will value your input and want you to help them build successful projects on cost, on time and to a high quality.

So you need to have the courage to be selective in who you work for and find out which organisations have long-term programmes and with whom you can build a successful relationship.

A number of clients I work with **ARE** beginning to say no and it's working; their voices are being heard and better and fairer contracts are being entered into.

So it **CAN** work and we **CAN** change things if we all have faith in our convictions and work together.

Here endeth the lesson!■

SAYING NO // INDUSTRY INSIGHT

Pilot plan will help businesses to prosper

As part of my ongoing drive to improve industry conditions, I'm currently working with several members of the Finishes and Interiors (FIS) sector, who, like SELECT, are active members of the Construction Industry Collective Voice (CICV).

I'm now looking to run some pilots across the UK to help businesses operate the commercial side of contracts more effectively and efficiently and keep them out of trouble.

These pilots will include the implementation of the Best Practice Guide (BPG) produced by the CICV, along with a national webinar.

In addition, I'll be working with several organisations to present the BPG to their site, contract and commercial managers so that they can improve the way they manage projects. We'll also be providing these organisations with an overview of the Joint Contracts Tribunal (JCT) and Scottish Building Contracts Committee (SBCC) conditions of contract to help them look out for onerous contract amendments.

I'm always happy to share this expertise with SELECT Members too, so contact your Member Representative if you want to discuss anything in particular about contracts or payments.



EXPERT ADVICE IS CLOSE AT HAND

The CICV's Best Practice Guide is available to download by scanning the QR code or going to bit.ly/CICV-BPG



The qualities that count in a leader

An effective leader possesses a combination of skills, qualities and behaviours key attributes that those at the top should strive for



EFORE looking at the attributes developing such skills.

under their wing during your career.

investment in leadership training, either formal to step up and lead a project or lead a team and





The first essential aspect of effective leadership is integrity and ethical behaviour.

A good leader consistently acts with their interactions. They uphold high ethical decision-making and inspire trust and respect from their team members.

Through integrity, a leader can create a culture of accountability, build credibility and set a positive example for others. Without integrity, it's impossible to build trust with your team.

Managing Director of McDevitt & Co, people, improve productivity and at www.mcdevitt.co

CLARITY IS CRUCIAL

INTEGRITY MATTERS

for a leader to succeed in their role. A leader must be able to clearly convey their vision, expectations and goals to their team in a way that's easily understandable.

a leader who can listen and communicate

DECISIONS, DECISIONS

informed decisions in a timely manner.

BE AN INSPIRATION

is the ability to inspire and motivate others. and goals. They lead by example, exhibiting a positive attitude that energises and motivates those around them.

By providing encouragement, recognition and

THE IMPORTANCE OF EMPATHY

Emotional intelligence plays a key role in effective leadership. A leader who possesses emotional intelligence can understand and manage their own emotions, as well as those of others.



"THEY LEAD BY EXAMPLE, EXHIBITING A POSITIVE ATTITUDE THAT ENERGISES AND MOTIVATES THOSE AROUND THEM"

They are empathetic, able to build strong relationships and skilled at resolving conflicts. Emotional intelligence enables a leader to connect with their team on a deeper level, build trust and loyalty and create a cohesive and harmonious work environment.

A STRATEGIC APPROACH

In addition to these interpersonal skills, a good leader must also possess strong organisational and strategic competence. Effective leaders set clear goals, create action plans and delegate tasks efficiently to their team. They are also not afraid to hold others to account.

They can manage resources effectively, make strategic decisions that align with the organisation's objectives and monitor the team's performance towards the desired outcomes. A leader who is well organised and strategic in their attitude is more likely to achieve success.

THE KEY INGREDIENTS

In today's hyper-paced and ever-changing world, leaders must be able to expertly navigate uncertainty, overcome challenges and adapt to new situations quickly. A resilient leader will bounce back from setbacks, they learn from failure, both theirs and others, and they lead their team through challenges with composure. By remaining calm, flexible and agile, a leader can guide their team through change and uncertainty with confidence and determination.

To conclude, effective leadership is multifaceted and encompasses a broad range of skills, qualities and behaviours.

A great leader will effectively communicate the organisation's purpose, make sound decisions, inspire and motivate others, demonstrate emotional intelligence, possess strong organisational and strategic competence, exhibit adaptability and resilience and, most importantly, act with integrity and ethics.

By demonstrating these characteristics, a leader can guide their team towards success, foster a positive work environment and achieve exceptional results.

Leadership is a journey of continuous learning and growth. Few people naturally possess all these abilities so they need to be observed, learned and worked on, so that they become second nature.

The construction industry is a complex and challenging environment that requires effective leadership for businesses to thrive. To me, the industry needs to invest more in developing these competences. It is far too important to leave it to chance.

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Access to health & safety technical support hotline

videos and toolbox talks offering a huge range of guidance



Do adjudicators need to address every point raised by parties?

A recent ruling on a case surrounding a payment dispute gives an interesting insight into legal procedures and the reasoning behind court decisions

ARTIES to an adjudication might expect that the adjudicator is bound to address every single disparate point raised by the parties throughout. The recent case of Bexhill Construction v

Kingsmead Homes Ltd [2023] EWHC 2344 (TCC) provides useful insight to the contrary.

Following an adjudication regarding Interim Application No8, Kingsmead was directed to pay £49,664.80 to Bexhill. Kingsmead failed to pay and Bexhill made an application for summary judgement to enforce the adjudicator's decision.

Kingsmead subsequently attested that the adjudicator had breached the rules of natural justice on the basis that, in reaching his final decision, he had not considered all the arguments they made in relation to the validity of a payment notice.

Although reasoning for the decision was provided, the adjudicator made no explicit

DAVID WILSON Partner





reference to that line of argument, and, to Kingsmead, it was therefore clear he had not considered it.

The court rejected Kingsmead's arguments on three main points:

- There was no evidence that the adjudicator had deliberately overlooked the argument
- The adjudicator had expressly confirmed all submissions had been considered
- Despite not being asked to do so, the adjudicator provided reasoning for the decision.

As a rule of thumb, the court will assume that the adjudicator took what was submitted to them into account "unless his decision and his reasons suggest otherwise" (Gillies Ramsay Diamond v PJW Enterprises Ltd 2004 SC 430). It will not amount to a breach of the rules of natural justice if the adjudicator simply fails to address an aspect of evidence or submissions, particularly when they had expressly confirmed everything had been considered appropriately.

In this case, the court found that although the adjudicator had opted to provide reasons for the decision (even though the parties had not requested it), there was no obligation to offer explicit reasoning for his position on every point raised. It was enough for the court that the adjudicator dealt with the question adequately and reached conclusions on the factual and legal points put forth by the parties.

David Wilson regularly advises on arbitration and adjudication matters, often providing legal advice to adjudicators. As a litigator, he has extensive experience of acting for pursuers and defenders in commercial disputes in the Court of Session.



LEGAL HELPLINE 0141 303 IIII

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

The latest facts about holiday pay

There's still some speculation about holiday entitlement and pay after a new law came into effect earlier this year, so here's a quick update on the main talking points

S you may be aware, the Retained EU Law
(Revocation and Reform) Act 2023 was introduced
on 1 January 2024, and since then we've received
a number of queries about the changes and
their impact on Member businesses.
To help keep you in the picture, here are

some of the most common questions we've been asked about holiday entitlement and pay.

WHAT IS THE CURRENT STATUTORY HOLIDAY ENTITLEMENT?

Employees will continue to receive a statutory entitlement of four weeks/20 days of paid holiday leave under the EU Working Time Directive, with an additional 1.6 weeks/eight days of paid holiday leave under UK domestic rights.

Four weeks will be paid as 'normal pay', and 1.6 weeks paid at 'basic pay', and an employee

will accrue holiday days at a rate of 2.33 days per month.

WHAT IS BASIC PAY AND NORMAL PAY?

Basic pay is the salary rate or hourly rate that applies to the employee. **Normal pay** will reflect basic pay and will include:

- Payments intrinsically related to performance, i.e. commission
- Payments related to status or length of service, e.g. Responsibility Money
- Regular bonuses and regular overtime.

 An employer must reasonably determine what is classed as 'regular' when considering if a bonus or overtime applies. You should consider if these factors occur weekly, monthly or seasonally, or if it's expected as a matter of normal practice.



ERIKA FERGUSON

Employment



HOW DO YOU CALCULATE AVERAGE WEEKLY EARNINGS?

Average weekly earnings should be calculated as per the diagram shown above right. If an employee has worked less than 52 weeks, please use the number of weeks applicable.

Employees with fixed salary and hours should receive the same pay while on holiday leave as they would while working.

WHEN CAN HOLIDAYS CARRY OVER INTO THE NEXT YEAR?

An employee on family leave can carry over 28 holiday days



into the next calendar year. An employee who cannot use their holiday entitlement due to illness absence can carry over a maximum of 20 days, to be used within 18 months of the accrual year.

A significant change under the new legislation means that if an employee isn't aware that they'll lose untaken holiday days at the end of the holiday year, or if they're not granted leave or given opportunity to use their holiday entitlement during the holiday year, the remaining holiday days **MUST** carry over into the next holiday year.

Holidays can be carried over if agreed between employee and employer, or if the company policy states this is the case. Company policy cannot offer **LESS** than the statutory requirements.

WHAT DOES THIS MEAN FOR COMPANIES THAT FOLLOW THE SJIB NATIONAL WORKING RULES?

The Scottish Joint Industry Board (SJIB) takes consideration of the statutory requirements and offers an enhanced holiday entitlement per year. The above-mentioned guidance for calculating average weekly earnings applies.

WHAT ABOUT IRREGULAR HOURS AND PART-YEAR WORKERS?

There has been substantial change to holiday entitlement and calculation of holiday pay for employees who work irregular hours or who work part-year.

If this applies to your company, please consult gov.uk's published guidance Holiday pay and Entitlement Reforms from 1 January 2024, which can be download by scanning the QR code on this page or going to bit.ly/hols-pay



SELECT's Employment team is here to help if you have any questions. Call us on **0131 445 5577** or email **employment.affairs@select.org.uk**

UPDATED BS 7671 COURSES AVAILABLE



All training modules now revised in line with Amendment 2 of the IET Wiring Regulations

- REQUIREMENTS FOR ELECTRICAL INSTALLATIONS (218)
- INSPECTION AND TESTING, INCLUDING PERIODIC INSPECTION (214)
- INITIAL VERIFICATION (209)

TO BOOK, CALL

O131 445 5577 www.select.org.uk





SJIB Bulletin

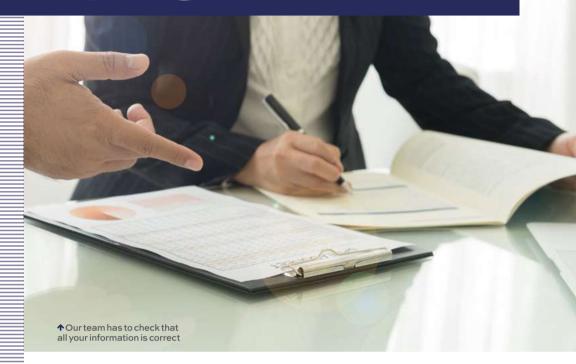
BE FIRST TO TRIAL NEW FIRE SAFETY AND SECURITY **ASSESSMENT**

As revealed in the last issue of cabletalk, we'd like to remind readers that the SJIB is launching a new Fire Emergency and Security Systems (FESS) Assessment this spring, which will enable operatives to apply for the FESS Systems Operative ECS Card.

The SJIB will initially go live with the FESS assessment with a soft launch. If you or anyone you know is looking to apply for an FESS Systems Operative card and would be interested in trialling the assessment, please email natalie.scott@ select.org.uk

Limited spaces are available and will be allocated on a first-come, first-served basis.





Make sure your details pass the test

E'D like to remind all **SELECT** Members of the importance of ensuring that all criteria are met before applying for an SJIB ECS Card.

All card applications should be made through the dedicated SJIB ECS Card Portal, which can be found by scanning the QR code on the page opposite or going to www.select.org.uk/SJIB

For each card available, there is a clear description of the criteria and requirements in order to obtain it.

Please ensure that you meet all of the card's criteria before submitting and paying for an online application.

The SJIB is a small team that goes through each individual application it receives to check that all of the information is correct, as well as ensuring any evidence or certification uploaded as part of the application meets the criteria.

Part of this process also involves contacting awarding bodies and external organisations in order to confirm certain qualifications.

As you can imagine, the process that the SJIB team follows takes a great deal of time and attention to detail and, for this reason, applications for SJIB ECS Cards are non-refundable, as stated as part of the online application.

If you have any questions about the criteria for cards, please contact us by scanning the OR code on the opposite page or going to www.sjib.org.uk/aboutus/contact-us - someone from the team will get back to you as soon as they can. ■

Shop Rate or Travel Rate? It pays to know

THE SJIB has been receiving an increased number of calls regarding Shop Rate versus Travel Rate and questions on when operatives should be paid one or the other.

Shop Rate is applicable for operatives who are required to start and finish at an employer's shop/office each day.

These operatives are entitled to be paid from booking on until booking off, with overtime if the agreed time worked exceeds the normal working day. If an operative receives Shop Rate and transport is not provided by their employer, they are also eligible to mileage allowance when required to work 15 miles or more away from shop. This is paid at £0.22 per mile.

Travel Rate is applicable when operatives are required to start and finish at the normal start and finish times on the job or at a site. On jobs lasting more than one day, the operative shall travel the first day and return the last day in their employer's time. On intervening days they shall travel both ways in their



own time. If an operative receives Travel Rate and is required to work at a site 15 miles or more from the shop they would also be eligible for:

- Mileage allowance, paid at £0.22 per mile, if transport is not provided by their employer, or
- Mileage rate, paid at £0.12 per mile, if transport is provided by the employer.

Further information on Shop and Travel Rates, as well as mileage rate and allowance, can be found in Section B of the SJIB Handbook – scan the QR code on this page to find out more.

We've also produced a handy FAQ factsheet about mileage with all the information in one place – scan the QR code on the right to download the most recent version.



↑You can download our handy factsheet

SHORT CUTS

01



SJIB ECIS

02



♠ Contact the SJIB

οз



Section B of the SJIB Handbook

04



Mileage FAQ
 factsheet

05



♠ Amendment to Wages Promulgation for 2024-25

06



National
Minimum Wage
and National Living
Wage rates

07



♠ Increase to Lodging Allowance for 2024

WE'VE GOT THE X FACTOR

Get the latest SJIB news and updates on X – formerly Twitter – by following @The SJIB

REMEMBER!

Our small team is still extremely busy and receiving a high volume of calls. The best way to get in touch with us is the 'Contact Us' form at www.sjib.org.uk which ensures your query goes directly to the team member responsible.

ABOUT THE SJIB

SJIB regulates relations between employers and employees engaged in the Scottish electrotechnical industry. To find out more about SJIB and its work, visit our website at www.sjib.org.uk



AND FINALLY...

Everyone at the SJIB would like to wish Fiona Harper the very best of luck in her new role as Chief Executive of the Scottish Electrical Charitable Training Trust (SECTT).

As The Secretary of the SJIB, Fiona has been a key driver of skills and training in Scotland for many years and the team looks forward to working with her in a different capacity in the coming weeks and months.

Thanks for everything, Fiona!

SECTT Update

Greeting the electrical stars of the future

SELECT Member company Aird Walker & Ralston enjoyed a visit from MSP Brian Whittle during Scottish Apprenticeship Week as SECTT once again gave a voice to the talent of tomorrow

HE value of apprenticeships was very much on the agenda when SECTT arranged for Brian Whittle MSP to take a tour of the Aird Walker

& Ralston head office in Kilmarnock.
During his visit to the SELECT
Member firm on 4 March, the
Conservative MSP for South Scotland
met 3rd Year apprentices Kieran
McMillan and Greg Fraser and
heard their verdicts on the
Modern Apprenticeship.

He was also given a guided tour by Aird Walker & Ralston Managing Director Gordon Christie, ably assisted by SECTT Training Officer Daniel Flanigan, who looks after apprentices at Ayrshire College and adult trainees at West College Scotland, Paisley.

382

electrical apprentices enrolled for 2023-2024 intake

During the tour, Mr Whittle heard how the company has a proud track record of investing in the talent of tomorrow, and saw first-hand how it provides a range of practical, hands-on experience for its young learners.

Afterwards he said: "It was a pleasure to visit Aird Walker & Ralston and meet with some of its apprentices.

"Apprenticeships are a great way to enter the workplace and learn skills that can serve you for life. With renewable energy and green industries becoming a bigger and bigger part of our economy, there's never been a better time to consider building a career as an electrician or electrical engineer."

The visit also gave Kieran and Greg the chance to demonstrate some of their work and explain what they enjoy most about their training.

Kieran said: "An electrical apprenticeship has been a great career choice for me as it's provided both an intellectual and physical challenge, which suits me best.

"I've thoroughly enjoyed my apprenticeship and am continuing to gain more experience on site, taking what I've learned in college into the "APPRENTICESHIPS ARE A GREAT WAY TO ENTER THE WORKPLACE AND LEARN SKILLS THAT CAN SERVE YOU FOR LIFE"



QUICK



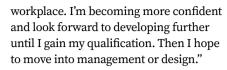
AIRD WALKER & RAISTON

BRANCH Ayrshire

BASED: Kilmarnock

PHONE: 01563 522 236

WEBSITE: airdwalker.co.uk



A GREAT MIX OF KNOWLEDGE

Greg was equally enthusiastic about his apprenticeship, adding: "I feel that I'm picking up the knowledge and skills that will benefit me when I qualify, thanks to the mix of college study and practical onsite work. The experience I've gained with Aird Walker & Ralston is mainly industrial but I've also learned a lot about domestic installations at college, which has given me broad overall knowledge.

"I'm eager to sit my FICA when I become eligible and hope to stay at Aird Walker & Ralston when I qualify. It's given me this opportunity and a great learning experience and I want to develop into the best electrician I possibly can be."

Also singing the praises of the Modern Apprenticeship was MD Gordon, who said: "Training is the lifeblood of the electrical industry and history clearly shows that if you don't train electricians there will be a serious skills shortage.

"This shortage won't only be of electricians, but of competent people



who progress with experience and further education to become technicians, supervisors, specialised engineers and leaders – all of whom started their journey with an electrical apprenticeship."

THE BEST SOLUTION

Aird Walker & Ralston provides fully integrated electrical engineering solutions and support services to industrial, commercial and utility markets.

Its many services include site cabling, motor control, switchboard and control panels, intelligent motor control centre systems and electric motor rewinds, refurbishments supply and installation.

Gordon added: "The apprenticeship provided by the Scottish Joint Industry Board (SJIB), SECTT, employers and colleges is quite simply the best and only solution when training electricians for the future.

"The blend of classroom theory and

on-site practical experience with seasoned professionals is invaluable. Each apprentice has a structured four-year programme to learn their required skillset, combined with the underpinning knowledge to progress in the electrotechnical industry and achieve industry-recognised qualifications and life skills that are invaluable for their career pathway.

"This type of apprenticeship takes far more commitment by employers and apprentices and is more expensive, but provides the best results for all.

"Such apprentices also have a greater understanding of practical elements as well as a greater health and safety awareness."

Award-winner Mandeep: Pages 54-55



Meet our netzero

hero

Colleagues and college staff have paid tribute to an "enthusiastic and engaging" young apprentice from a SELECT Member firm, who recently picked up a prestigious award for his passion for renewables

PPRENTICE Mandeep Singh saw his name up in lights at this year's Scottish Apprenticeship Awards as he impressed judges with his talent for the technology of tomorrow.

The 20-year-old, who works with FES Group Ltd, was named Supporting Net Zero Apprentice of the Year at the event, which marked the culmination of Scottish Apprentice Week 2024.

Mandeep, from Renfrew, is currently in the second year of a Modern Apprenticeship in Electrical Installation, studying at West College Scotland in Paisley, Renfrewshire.

And lecturers and colleagues from FES's Energy and Renewables Division rushed to heap praise on the talented youngster, whom they described as having "excellent engineering skills".

Mandeep was recognised for his work on solar farms and district heating projects at the awards in Aberdeen on 8 March, with judges praising him for his communication skills, ability to plan ahead and talent for developing and pitching solutions to on-site challenges.

Afterwards, James Reid, Group Operations
Director at FES, said: "Mandeep shows a fantastic
drive to learn not only his electrical trade, but also
the net zero industry, through his involvement in
low carbon heat and electricity generating projects.

"He continually strives to develop his knowledge base in sustainable net zero technologies and systems and his commitment will provide the foundation and inspiration for future generations to meet the decarbonisation challenges required to meet net zero."

Former Renfrew High School pupil Mandeep added: "Helping work towards net zero through my Modern Apprenticeship is really important to me because it will have an impact on all of our futures.

"Doing the apprenticeship has improved my confidence and communication skills – I feel much more comfortable talking to people at work or in college.

"A Modern Apprenticeship is the best of both worlds. The college learning is really in-depth and then you go out on site and put your learning into practice."



College lecturers and staff from lecturers and SECTT staff also heaped praise on the youngster, who applied for a Modern Apprenticeship after completing an 18-week electrical course at West College Scotland.

Paul Harland, Curriculum Lecturer Building Services (Electrical) at the college, said: "Mandeep is a very self-directed student who has excellent communication and practical engineering skills. He is committed to progressing his career in renewable and sustainable projects."

Gordon Murray, Building Services Lecturer at the college, added: "I'm delighted for Mandeep as it just shows that a good attitude and keenness



WORDS
IAIN MASON
Director of
Membership &
Communications



"DOING THE APPRENTICESHIP HAS IMPROVED MY CONFIDENCE AND COMMUNICATION SKILLS"

> to learn will always be rewarded in some way or another. Mandeep is a very enthusiastic and engaging learner in college who is keen to develop his skills to the best of his ability. He shows a great positive attitude and backs this up with highquality work displaying very good knowledge and understanding.

"He is also hungry and motivated to learn as much as he can about every subject and this attitude and skillset will carry him far in the industry."

And Frankie Greig, SECTT
Training Officer, said: "Mandeep has been a model apprentice in college.
He is always on top of his OneFile tasks and regularly asks questions about them.

"He has a great attitude to work and college and is very well thought of on-site."

A TRUE INSPIRATION

Mandeep was presented with his award by Maggie McGinlay, Chief Executive of the Energy Transition Zone, at the event at P&J Live, which was hosted by TV presenter Joy Dunlop.

Among the guests was Gillian Martin, Minister for Energy, Just Transition and Fair Work, who handed the overall Apprentice of the Year award to young butcher Marc Ingram.

Afterwards she said: "It's been absolutely tremendous to be here and celebrate both the talent that's out there in Scotland and the value of apprenticeships in harnessing that talent.

"I congratulate all of the award finalists and winners. They are an inspiration and I wish them well in their future careers." ■

ProZone

CONTACT OUR TEAM TO SHOWCASE YOUR GREAT NEW PRODUCTS HERE

David Hughes: 07767 407 402 davidh@connectcommunications.co.uk

DAIKIN DELIVERS WIRING KNOW-HOW

Daikin is offering a new heat pump wiring course specifically tailored for qualified electricians.

Available at training locations across the UK, the free Altherma 3 Product Wiring (DUK-H31) session focuses on the electrical wiring aspects of Daikin Altherma 3 systems, specifically detailing the required electrical supplies and controller connections.

Aimed at electricians who only need to work on the electrical aspect, not the hydraulic side, it takes around five hours and covers all Altherma 3 systems, including Monobloc, LT-Split and H-HT.

The course covers a full overview of the Altherma product range and installation types and ensures a complete understanding of the principles of wiring Altherma 3 systems, along with system control components, including third-party controls.

Find out more via the Daikin training portal at www.daikintraining.co.uk





Alta Wi-Fi is smart and stylish choice

DIMPLEX'S Alta Wi-Fi is a Scandinavianinspired panel heater that combines minimalist styling with Wi-Fi connectivity, allowing effortless control of multiple heaters remotely via a CapaConnect app.

Ultra slim, unobtrusive and lightweight, it features sleek rounded edges and fits seamlessly into any domestic setting, as well as light commercial applications where aesthetics are important.

Alta Wi-Fi comes in a range of outputs and sizes and can be transformed in seconds with elegant clip-on glass accessories (sold separately). The topfacing grille delivers natural heat, while the highly accurate digital electronic thermostat efficiently regulates the desired temperature.

Alta Wi-Fi heaters are Lot 20 compliant and have intuitive onboard user controls with a seven-day programmable timer. Installation is simple with an H-frame wall mounting bracket, plastic tilt strap and a 1.3m two-core fitted cable for fused spur installation. Alta Wi-Fi has a five-year guarantee through online registration.

Find out more at www.dimplex.co.uk

ESP'S SIMPLE SOLUTION FOR CCTV SYSTEMS

For large, commercial projects requiring robust and reliable CCTV, ESP can provide an allembracing solution.

From the initial stages through to the specification of the CCTV system that will best suit the application, contractors can rely on a team of qualified experts.
ESP's
24/7
Colour IP
POE range
is designed to offer
superior, reliable
and straightforward
installation solutions.

Guaranteeing sharp detail, day or night, the range includes a variety of cameras offering 5MP and 8MP resolutions and a choice of 8MP NVRs with a range of ←ESP's design service will help you choose the perfect products for whatever system you need

channel options.
For CCTV projects that need larger systems and specific cameras, ESP believes pre-planning is vital and working to a professional design will the best possible system

a professional design will mean the best possible system is specified.

The ESP design service can provide computer-generated models of a system's live view,

ensuring clients have a good understanding of camera angles and views before committing to the system.

The service will also provide recommendations for the total amount of cable required for installation, suitable hard drive capacity and will highlight the record duration, resolution and ESP camera part number required – making specifying an installation simpler.

♦ Visit www.espuk.com

BECOME AN ASSOCIATE MEMBER

To inquire about becoming an Associate Member, email memberservices@select.org.uk

HERE'S a lot of instrumentation available for testing solar PV installations, but what's needed and when?
TIS can help with every aspect.

An irradiance meter and clampmeter is an easy way to establish if a system is behaving as it should, giving the expected power generated in W/m2. Users can measure the voltage and current outputs from the array to give the power output and confirm if the expected power correlates with the value measured.

A solar PV commissioning instrument is usually used when installing grid-connected PV systems and/or meeting the requirement for MCS compliance.

The Code of Practice for such systems has a long list of minimum test requirements, including continuity of earthing and/or equipotential bonding conductors, polarity test, combiner box test and insulation resistance test. For small to medium installations, DC side MFTs are available with insulation



TIS shines a light on test equipment for solar PV installations

and open circuit voltage tests of up to 1,000V and short circuit current tests up to 15 A, and TIS offers the PVCHECKs for such applications.

Larger commercial and industrial installations require insulation and open circuit voltage tests of up to 1,500V and short circuit current tests of 40 A. The new PVCHECKS PRO can carry out all these requirements, plus test at 1500V and measure short circuit currents of 40 A.

PV system maintenance is also vital. One factor which can affect performance is if a panel develops an insulation fault down to earth or has been wired incorrectly. PVCHECKS PRO and PVISOTEST have a ground fault locator function, which can pinpoint a faulty panel in a string of up to 35 with one connection and key press.

Find out more at www.testinstrumentsolutions.co.uk

OVIA'S INNOVATION IN ILLUMINATION

The Inceptor Rio is a cutting-edge range of ultra low glare (UGR >19) LED batten luminaires from Ovia. It's packed with innovative features and is engineered to meet the needs of modern environments.

As with most of Ovia's Inceptor luminaires, the Inceptor Rio meets the requirements of TM66 Assured Product Verification Scheme.

It is available in two sizes and in Standard, Microwave, Emergency and Microwave and Emergency versions. It is CCT switchable between 3000k, 4000k and 6000k colour temperatures and includes a multi-current driver to allow a choice between various wattages. There is a choice of four different wattages with each size of batten. These features allow the installer to customise the luminaire and adjust the design to a client's individual needs.

The Microwave version features a step dim corridor function. The built-in sensor technology allows the luminaire to respond to occupancy, contributing to both energy savings and increased convenience.

Benefiting from a reliable emergency

battery

as back-up, the emergency version ensures that there is sufficient optimal lighting to maintain visibility in critical situations and guarantees functionality during power outages.

The Inceptor Rio has a five-year warranty and promises hassle-free installation – the piano key terminal design features four distinct poles that allow for easy access.

Rio is also ideal for education and office applications. The luminaire ensures a visually

comfortable environment while providing optimal light distribution.

Find out more at www.oviauk.com

← The Interceptor Rio range comes in a range of sizes and specifications

ACUTEST Test inscriment Specialists



VNSOSV,







DAIKIN



deta*

∝Dimplex



electrium























Megger.



ROBUS

Schneider

Scolmore

(s)ignify

SIMPRO









NEW LOOK FOR VISNET WEBSITE

VisNet® from EA Technology has updated its branding and launched a new website, so it can better communicate the products and services it offers customers in the field of low voltage (LV) network management.

With some of the most advanced and reliable LV monitoring and visibility tools in the industry, the VisNet promise is to 'anticipate tomorrow's grid, today' - reflecting a forward-thinking approach on futureproofing solutions and a commitment to creating value.

Developed to communicate the unique VisNet offering, the new website makes it simpler to learn about the range of solutions, review research and data and discover how to buy

products. it will also feature new content such as news, blog posts, case studies and more.

From real-time monitoring to fault detection, VisNet offers user-friendly LV power solutions that improve efficiency and reduce costs.



↑The new site makes it easier to find out about the range of products

Visit www.visnet.tech

Make solar simple with **Wylex PV**

NTEGRATING solar PV into homes can be tricky, but luckily Wylex offers a range of PV consumer units that are factory built and pre-wired so that installation time is easier and quicker.

Wylex PV units are ready to install, with two double pole isolators - one for the grid supply and one for the solar power supply. Both are lockable.

The units also include a 30mA type A, two pole bidirectional RCBO for the power supply to the inverter and are supplied with a DIN mounted electricity meter that will record how much electricity is generated by the PV system. This is more than useful to know as it can be a source of revenue if



the mains electricity supplier is willing to purchase excess units (KWh) that are produced.

The range includes main switch, split load and high-integrity consumer units with up to 14 usable ways - enough for a full installation alongside the PV.

There's also an add-on PV-only unit for use where the existing consumer unit can stay in service.

Find out more at www.electrium.co.uk

KEWTECH KIT IS AN ALL-IN-ONE ESSENTIAL

The new PTKIT1 from Kewtech is your essential testing accessory kit all in one purposedesigned case.

This kit includes everything to make testing easier, safer, faster and more accurate, including a new-look KEWCHECK 103DL socket tester and KEWCHECK R2DL socket testing adapter, Lightmate adapters BC, ES & GU10 and TP4 test pins.

The new TP4s are designed for faster and safer testing with a two-pole tester, allowing access to 4mm connection adapters and giving confidence that a connection to the circuit has been made safely. You don't even need to remove the socket from the wall!

Find out more at www.kewtechcorp.com



UNICRIMP TRADE TUBS ARE FIRST FOR FIXINGS

Unicrimp has recently extended its comprehensive range of Q-Crimp accessories with the addition of three new trade tubs. Comprising a variety of essential fixings and clips, the new tubs offer reliability and versatility and are ideal for any job - big or small.

These robust new tradesman tubs feature a resealable plastic lid and carry handle, and the tub itself is manufactured from recycled material. The



First Fix Kit tub includes 400 x red wall plugs, 400 x 8x1 1/2 screws and 100 x 20mm open grommets - bringing together all the elements in one handy pack to make back box essential installs that much easier for the contractor. The Fire Alarm

Installer Kit comprises 200 x red 28 LSF P clips, 200 x red 32 LSF P clips and 100 x red 302 LSF saddle designed for use on mineral insulated or soft skin fire cables.

They are manufactured from copper and are LSF powder

coated. They have been approved for the requirements of BS476 Pt.6 and BS476 Pt.7 and are designed to assist the installation of fire cable to meet BS 5839-1:2027 requirements.

For additional support with projects, the Multipurpose Q-Fire tub combines 70 x 25mm, 20 x 40mm and 10 x 50mm fire clips, 100 x 8x1 1/2 screws and 100 x red wall plugs.

The various fire-rated clips sizes are suitable to be fixed to substrates or in PVC trunkings. They are 18th Edition compliant.

Check out www.unicrimp.com

ASBESTOS CAN BE A BARRIER TO MAINS POWERED ALARMS

A property's age can cause issues around the presence of asbestos, either in the fabric of the building or Artex, where it was used until a ban in the early 2000s.

Due to the risk – and a lack of contractors qualified to work with asbestos – housing providers are turning to battery-powered F1 alarms in place of mains-powered D1 and D2 units, like Aico's 3000 Series.

BS 5839-6 recommends the use of a D1 or D2 system, which is defined as one or more mains-powered detectors, each with a tamper-proof standby battery supply. In contrast, an F1 system is one or more battery powered detectors powered by a tamper-proof primary battery.

The issue with an F1 system is the lack of secondary power supply, meaning there's no failsafe or notification of failure. Hardwired alarms are connected to a consistent power supply and significantly more dependable.

One obstacle with mains-powered alarms is the need for cables between alarms if



asbestos is present. One way to overcome this is radio frequency interconnectivity, which only requires power from a local lighting circuit, reducing the inconvenience of tricky wiring runs.

It's important to recognise that the switch to F1 should only be used as a temporary measure until the property can be properly assessed and upgraded to D1 or D2, as recommended by the British Standard.

Find out more about Aico's 3000 Series at www.aico.co.uk/series/3000-series

SAFE AND SECURE WITH SCOLMORE

Click Scolmore continues to expand its Elucian consumer unit range to provide electricians with the broadest possible range of units and protective devices.

The latest addition is a new REC Isolator Switch, designed to make the connection of consumer unit tails to the electricity supply highly secure as well as much easier and more convenient.

In several UK regions, REC isolator units are an integral component of the residential power supply set-up. They feature a front cover divided into two segments, allowing contractors and supply authorities to securely seal and lock off their respective ends, thwarting unauthorised access.

By connecting the supply tails directly to the REC unit, it obviates the need for repeat visits by contractors to establish the final connection.

Unlike most REC units which do not come with a lid, Click has kept the Elucian design in line with the rest of the range. The lid is also compatible with CUELOCK which can help ensure there is no unauthorised

↑The new addition to the Elucian range

access. The unit also includes a 100A mains switch and SPD module.

Find out more at www.scolmore.com



ACTIVATE YOUR ENERGY IN SCHNEIDER COMPETITION

Schneider's new Activate Your Energy campaign is giving contractors the chance to win when they buy any selected Acti9 distribution board.

Simply scan the QR code on the packaging, fill in your details and you could be a winner.

Prizes include a tour of Schnieder's Grenoble facilities, EV charge points and Virgin Experience Day e-gift cards. Everyone who enters will also get a £10 Greggs e-gift card, limited to one per entrant.

♦ Visit www.se.com/uk/activate

Spotlight on power quality

ACUTEST has released a new blog post focusing on the issue of power quality.

The advice covers the six main areas of concern – harmonics, dips and swells, transients (spikes), interference, voltage imbalance and poor power factor – and can be found at **www.acutestdirect.**

co.uk/blog/power-quality

In addition, the company is offering a **FREE** demonstration of any power quality analyser or logger from its product range.



To find out more, call **01782 563 030** or visit **www.acutestdirect.co.uk**

NEW BOSS FOR AURORA LIGHTING

Aurora Lighting has appointed Matt Burton as its new Managing Director, heralding a new era of innovation.

Sébastien Bonneville, CEO of GALAED Group, said: "Matt's strategic insight and leadership skills will be invaluable as we continue our journey of growth and expansion."

Matt added: "It's an honour to lead such a talented and passionate team."

Find out more at auroralighting.com

PROZONE // TECHNOLOGY



↑The air monitor is one of 15 new products that have been launched

BREATHE EASY WITH HISPEC

Hispec has launched 15 new products, including a range of 110v and rechargeable site lighting, versatile switch input module and flush mount CO2 and temperature monitor.

The new air quality product offers precise CO2 level readings and temperature monitoring in a sleek and easy-to-install design. With adjustable alarm thresholds and compatibility with 1G 35mm back boxes, it seamlessly integrates into various building configurations.

The monitor also provides comprehensive data, including eight- and 24-hour CO2 averages and 24-hour peak concentration levels. This not only helps monitor indoor air quality but also facilitates proactive measures to maintain a healthy environment.

In line with Section 3.14 of the Scottish Building Standards Technical Handbooks, the monitor serves as a valuable tool, contributing to compliance with ventilation requirements and promoting the wellbeing of building occupants.

To find out more, visit www.hispec.co.uk

ThornEco has pages of bright new ideas

THORNECO has unveiled its new catalogue featuring upgrades to luminaires Boris, Anna and Julie, and offering greater flexibility, efficiency and ease of installation.

The Boris high bay luminaire now boasts improved efficiency of up to 162lm/W and low glare of <25 UGR.

The new FLEX feature makes adjusting the lumen output easier than ever, allowing on-site customisation to meet every lighting need.

The improved Anna recessed LED panel features VARIO technology for customisable colour temperature and



FLEX for effortless lumen adjustment. Ideal for retrofits, Anna provides gentle, soft and glare-free.

Designed for reliability and easy installation, Julie is the perfect solution for indoor applications. With a clip-less diffuser for increased durability and the addition of FLEX for customisable lumen output, it offers energy savings of over 50% compared to traditional lighting.

Download the new catalogue at www.thorn-eco.com

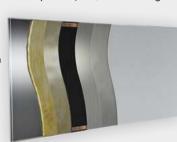
THE PRICE IS RIGHT AGAIN FOR FLEXEL

During COVID-19 and the Ukraine war, the price of raw steel trebled in the UK, preventing Flexel from manufacturing its ECOSUN C+ ceiling panels at a reasonable cost.

Now that prices are slowly reducing, fully UK manufactured far infrared units will be back in production in May 2024,

using British steel and Flexel's EU patented inked cloth element.

Designed to replace standard 600x600mm ceiling tiles in offices, corridors, toilets, canteens, classrooms and any other location with a grid system, the heaters can also be mounted with the special bracket.



↑The ceiling panels will be back in production from May this year

They also use less energy by heating people and objects rather than the all the air in a room, making them ideal for complete or supplemental heating in commercial, residential and public buildings.

The updated product has an IP55 rating and reduced wattage

of 300w and 600w. plus an increased thermal cutout to allow higher ceiling heights.

To pre-order or discuss your next heating project and free design service, call **01592760** 928 or email enquiries@ flexel.co.uk. You can also visit www.flexel.co.uk

COOL COMFORT FOR WORKING WOMEN

For professional craftswomen

There are women's work jackets,

jacket, high-vis tops and t-shirts.

durability and sustainability. They're the optimal choice for women comfortably and efficiently.

Oall 01484 854788, visit sales@hultaforsgroup.co.uk

Snickers has a wide range of work clothing designed for women





New meter measures short circuit loop impedance at solar PV farms and power plants

ITH the rise of solar photovoltaic (PV) farms and power plants, there is a growing demand for proper short circuit loop impedance measurement between the inverter and the LV/MV transformer.

With ever larger solar PV installations being built, designers are starting to employ inverters to convert the 1500V DC power into 800V AC.

To enable these tests to be made, Sonel has developed the MZC-340-PV high current fault loop impedance meter, the world's first meter designed for measuring short circuit loop impedance in networks with voltages as high as 900V AC.

Measurements at voltages this high on inverters and transformers used at large

PV power plants are made possible due to the fact that the MZC-340-PV is designed and manufactured to CAT IV 1000V.

The meter has the ability to measure very low short circuit loop impedances, with a resolution of 0.1 m Ω , with a measurement current of 130A at 230V, 305A at 550V AC and 250A at 900V AC. The meter also measures using the four wire (4P) method, in which the measuring wires do not affect the value of the measured impedance.

Although intended for solar PV farms, the Sonel MZC-340-PV can also be used to carry out measurements on other renewable sites such as wind farms as well as low voltage transformer substations and even in heavy industry.

Find out more at www.powerqualityexpert.com

CORGI ON COURSE TO BOOST SKILLS

CORGI Technical Services delivers a range of services to support landlords, housing providers and facilities managers to help keep their customers safe.

As part of this service, it offers a comprehensive range of industry recognised qualifications and safety and compliance development for boards and senior managers.

Ideal for upskilling current staff, training new teams or succession planning, courses include electrical safety management in social housing and asset and building management compliance.

All courses are
delivered by the same
technical experts who
also deliver its auditing
services and know the daily
challenges faced by landlords
and compliance teams.

Find out more at www.corgitechnical. com/training or email training@ corgitechnical.com

TCW DISHES UP PARTNERSHIP WITH ROADCHEF

TCW continues to demonstrate the diversity of its software after announcing a new partnership with hospitality firm Roadchef.

The premier provider of motorway services has chosen TCW's state-of-the-art data management software to

> streamline operations, establish a consistent approach and optimise decisionmaking.

TCW CEO
Ryan Dempsey
said: "This
partnership
underscores our
commitment to
providing tailored
solutions that empower

businesses to unlock the full potential of their data."

To find out more, go to www.tcwin.co.uk

SCHEDULING MADE SIMPLE

In the dynamic landscape of electrical contracting, Simpro is your go-to for handling all your workflows seamlessly.

Offering an integrated all-inone solution to simplify project management, it enhances workflow automation, optimises field operations and customer engagement and improves profitability.

It also enables you to effortlessly schedule jobs, dispatch teams and track project progress in real-time, helping projects remain on schedule and within.

Find out more at www.simprogroup.com

◆Simpro's software helps you keep on top of all your projects



FIVE MINUTES WITH...

MIKE CAMPBELL

CHAIR, INVERNESS BRANCH

HELLO MIKE. HOW LONG HAVE YOU BEEN INVOLVED WITH SELECT?

I began attending SELECT meetings on a regular basis when I started with SECTT as a Training Officer in 2019, although I've worked with a number of SELECT companies in the Highlands over the past 20 years.

TELL US A BIT ABOUT YOUR BUSINESS, WHERE YOU'RE BASED AND HOW LONG YOU'VE BEEN AN ELECTRICIAN.

RSE offers a specialist fullservice engineering capability, delivering a wide range of engineered solutions for the treatment and purification of water. I started my apprenticeship in 2002 and qualified in 2006 before going on to work in a number of industries. I'm now based in the RSE Inverness office.

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

I'm responsible for training mechanical and electrical apprentices, carrying out site and college visits to ensure they get the right training.

WHAT'S A TYPICAL DAY LIKE FOR YOU AT WORK?

No two days are the same; I could be conducting site visits with apprentices in London one day and then be at the University of the Highlands and Islands in Inverness the next.

DO YOU GET THE CHANCE TO MEET OTHER SELECT MEMBERS?

I was in regular contact with SELECT Members in my previous role with SECTT, which I left last June. Having just taken over as Branch Chair, I'm looking forward to meeting Members again.

WHAT DO THINK ARE THE MAIN BENEFITS OF SELECT MEMBERSHIP?

SELECT keeps you up to date with the latest changes and

developments
in the industry
and provides
invaluable
technical
support. The
Branch Updates are
also a great opportunity
to meet other local Members
and exchange thoughts
and experiences.

WHAT DO YOU FIND MOST ENJOYABLE ABOUT YOUR JOB?

Mentoring and influencing the next generation, witnessing their growth from inexperienced newcomers to fully-qualified professionals and seeing the improvement in skills, attitude and overall approach to work.

HAVE COVID-19, BREXIT AND SUPPLY CHAIN ISSUES AFFECTED YOUR BUSINESS?

Massively. COVID-19 affected us from a labour and apprentice perspective, Brexit has an impact on us from a skills shortage perspective and, due to supply chain issues, costs have increased.

HOW DO YOU SEETHE FUTURE OF THE INDUSTRY?

Renewables and automation are the future and AI will play a big part too – I've already seen it starting to be used.

Quickfire questions:

Cheese or chocolate?
Chocolate
Dog or cat person? Dog
First car owned? J-reg
Peugeot 106
Favourite film? The Goonies
Favourite TV show? Gladiators
Favourite holiday spot?

Dream date? A nice dinner followed by an evening walk Favourite colour? Blue One thing people might not know about you? I was on a TV quiz show with Carol Smillie

Your Branch Officers:

ABERDEEN & NORTH EAST OF SCOTLAND

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

AYRSHIRE

CHIC DOBBIE, Chair JIM COOPER, Vice-Chair

DUMFRIES & GALLOWAY

GORDON
PATERSON, Chair
JOHN WILSON,
Vice-Chair

EDINBURGH & SOUTH EAST OF SCOTLAND

GRAEME ANDERSON, Chair PAUL ERASMUSON, Vice-Chair

ALASDAIR NOBLE, 3rd Representative

GLASGOW & WEST OF SCOTLAND

DAVID HARRIS, Chair SEAN HARKIN, Vice-Chair ALAN WATT,

3rd Representative

INVERNESS & NORTH OF SCOTLAND

MIKE CAMPBELL, Chair ALISTAIR GRANT, Vice-Chair

LANARKSHIRE

CRAIG MCGOWAN, Chair CHRIS LIDDELL, Vice-Chair

TAYSIDE

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

SELECT Events 2024:

Catch up with colleagues at Branch Updates, Toolbox Talks and our other events.

CENTRAL BOARD

Thu 6 June – Doubletree Edinburgh North Queensferry (Includes SELECT AGM and technical presentation)

Thu 5 September – online **Thu 5 December –** venue TBC



Wed 1 May – Edinburgh, The Walled Garden

Thurs 2 May – Borders, Macdonald Cardrona Hotel, Peebles

Wed 8 May – Dundee, The Apex Hotel

Tue 14 May – Ayrshire, Fenwick Hotel

Competition

Scottish bridges wordsearch



G	Н	Е	S	K	Υ	Е	ı	S	W	М	С	М	N	F	Х	E	N	Т
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I	J	D	L	J	U	K	s	Р	D	Z	L	0	Υ	Q	K	W	W	F
S	D	1	Ε	Υ	N	В	С	Р	U	F	L	Н	В	X	٧	G	С	М
S	Z	R	N	Z	K	U	Х	0	С	Н	0	U	K	S	Ε	L	Υ	K
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С	Z	L	N	Ν	D	В	L	٧	Α	I	N	G	U	I	K	Α	U	z
Υ	В	0	N	E	L	R	Т	Х	Т	Α	٧	R	D	Υ	С	L	Х	Α
R	В	Υ	Α	I	R	1	G	D	I	K	I	K	Q	L	R	L	U	В
R	Q	D	N	С	D	G	В	U	М	Р	Α	U	Х	W	Α	Α	Т	М
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F	V	В	1	D	В	D	F	Α	E	ı	U	Н	N	U	D	Н	N	E
S	R	1	Α	Н	L	0	Р	K	Н	N	С	Т	Α	Υ	Υ	U	Р	G
N	I	L	D	ı	R	0	Н	٧	0	D	Т	D	Т	F	L	L	Е	Υ
E	Н	L	U	М	Ε	N	ı	K	s	R	Ε	Х	Ε	Н	С	ı	ı	s
E	Р	U	С	D	Т	0	W	Z	Q	G	I	L	Р	В	Q	S	K	Р
U	Р	Т	Т	E	ı	S	L	U	D	Ε	G	Т	D	N	В	Н	D	E
Q	Т	Р	V	М	E	G	D	ı	R	В	Υ	Α	Т	R	L	J	В	L

Ballachulish Bridge Of Dee Brig O Doon Culloden

Viaduct

Dulsie

Dunkeld Frskine

Forth

Glenfinnan Viaduct

Hermitage

Kylesku

Skye

Clyde Arc

Tay Bridge

Queensferry Crossing

Tullibody Old

Bridge

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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.ora.uk or submit an online enquiry.

Here's your chance to win £50 of Amazon vouchers by completing our prize wordsearch with a Scottish bridges theme.

Find the hidden words then take a photo of your completed puzzle and email it to memberservices@select.org.uk by 10 May. The winner will be drawn at random. Ts&Cs are online. Congratulations to February/March 2024 winner Robert Massie of R Massie Electrical and Boiler Services.

Wed 15 May - Dumfries, Easterbrook Hall

Wed 22 May - Oban, The Corran Halls

Thu 23 May - Glasgow, Hampden Park

Wed 29 May - Aberdeen, Pittodrie Stadium

Thu 30 May - Inverness. Leonardo Hotel

Tue 11 June - Shetland, Shetland Arts Development Agency, Lerwick

Tue 18 June - Orkney, The Pickaquoy Centre Wed 26 June - Islay, The Machrie



Mon 29 July - Dunblane New Golf Club, Perthshire

Mon 12 August-Fri 16 August - venues TBC



Get expert advice and technical tips with the huge range of videos available for Members on SELECTTV.



bit.ly/SELECT-TV

CABLE SIZING

This easy-to-follow session demonstrates a method of calculation in line with the requirements of BS 7671.

Watch at bit.ly/STV-cable

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.lv/STV-EICR1
- Watch Part 2 at bit.ly/STV-EICR2
- ♦ Watch Part 3 at bit.ly/STV-EICR3

