

Spark

the newsletter for bright sparks

elecsa newsletter issue 07 summer 10

ELECSA Website Under Construction!

When the ELECSA website was launched 3 years ago, we had just 2,400 registered contractors and were seen in the market as a minor scheme operator. Today we have over 6,000 registered contractors and are now considered the 2nd largest Part P scheme provider and our website now needs to better communicate our credibility to all.

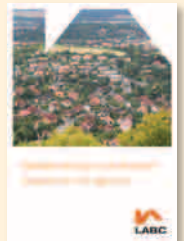
There is a project looking at introducing a new website with enhanced features to support contractors and better educate householders and other organisations about ELECSA. The new website will be even easier to use with access to more information to help you keep in touch with us as well as industry developments and the latest technical advice.

The planned launch will be September 2010 and will be the focus of the next newsletter. We will need volunteers to help test the site as the website is developed, anyone interested in being involved in this project should email feedback@elecsa.co.uk.



Jobs a Good 'Un!

The new job notification site went live at the end of March and despite a few initial problems, has now settled down. Facilities such as the postcode finder were quickly reinstated following contractor feedback and we have had a lot of positive feedback from contractors who feel the process has been simplified. Our apologies for any disruption caused during the launch of the new system.



If you have not received a copy of the LABC guidance note on the new job descriptions, please contact us on 0845 634 9043 or email enquiries@elecsa.co.uk to request a copy.

ECA Brings Extra Benefits to ELECSA Contractors

The ECA has launched its new quarterly trade publication for contractors 'ECAToday'. It will be a far reaching publication looking at all areas affecting the wider electrical contracting market. As ELECSA is part of the ECA, it will be distributed FREE to all ELECSA registrants.



New ELECSA Tradesman Insurance Coming Soon!

Through the ECA's own insurance services company (ECIS) we will shortly introduce a range of web-based insurance products and services specifically designed for ELECSA approved contractors.

The first to be launched will be a highly-competitive, specialist Public Liability, Contractors' All Risks and Personal Accident Tradesmen's policy.

Key features for ELECSA contractors include:

- Core Public Liability Insurance cover.
- Optional Employers' Liability, Contractors' All Risks, Tools and Personal Accident Insurance.
- Free 24-hour helpline service to provide legal advice on any business related issue.

These products are expected to be launched during the summer so watch the ELECSA website for further information.



Upcoming Events

ELECSA always enjoys getting face to face with contractors and here are the key events where you can come and meet us. Our website is also kept up to date so always check www.elecsa.co.uk for the latest event information including any planned local seminars.

ELEX Toolfairs

Coventry, RICOH Arena 16th & 17th September
Sandown Park Racecourse, Surrey 30th November & 1st December.
ELECSA will be delivering seminars at both of these trade shows, look out for information closer to the date.

For more information go to www.elexshow.info

Installer Live

Coventry, RICOH Arena 7th – 10th September
For more information go to www.installerlive.com



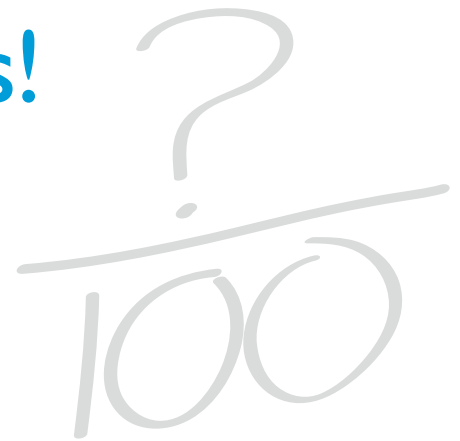
Your Chance to Rate Us!

It is that time of year again where we send out our annual customer satisfaction survey to ask you what you think of us.

We get a really good response each year to this survey and the feedback we gather helps us formulate our plans for the coming year, so its really important to get your views. In the past, some of the actions we have taken as a result of the satisfaction survey include:

- Expanding the content of the Spark newsletter as well as increasing its frequency
- Offering a monthly direct debit facility for assessment fees
- Adding personalised items into the shop
- Improvements to the technical support provided via the telephone and website
- Strengthening the link between the ECA and ELECSA

This year we have included the survey as part of this newsletter. Simply complete the enclosed survey and post it back to us. We will report back to you the results of the survey via the Spark newsletter. You are always welcome to provide your feedback via email at **feedback@elecsa.co.uk** or when you call us on **0845 634 9043**.



The ELECSA Book Review

Geoff Brittain, one of our technical helpline guru's, got hold of a book called 'The Part P Doctor' by Alan Lynch and was asked to review it for Spark.

I was sceptical when asked to review this book. I thought it was going to be yet another book saying the same old thing, leaving the interpretation of the content down to the reader (I know another well-known red book just like that). But I have to be honest, right from the beginning I was hooked with the very first lesson I had at college, Ohms Law.

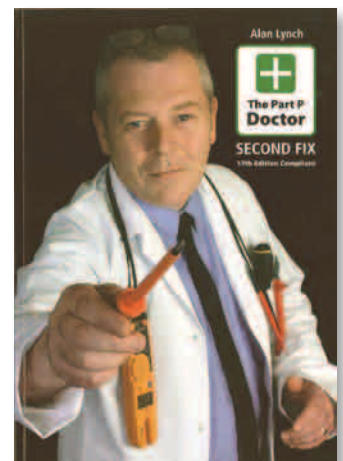
The format of the book is clear with an easy to read style. It is full of explanations, calculations and diagrams to explain the theory but adds pictures of real life installation examples for deeper understanding.

Conclusion? It can't be that easy, can it? Well now you know.... Yes it Can! This book gives practical useful advice from a time served "on the tools" electrician. Throughout the book runs a theme of 'Myths'. These are questions that you

might ask yourself from time to time and the answers may not be as you would expect!

This book has been passed around several members of staff who are of the same opinion that if every ELECSA contractor had one, there'd be no need for the technical helpline anymore!

ELECSA are giving away 20 copies of 'The Part P Doctor'. Simply email **feedback@elecsa.co.uk** with the answer to this question: **"What is the maximum Zs value in BS7671:2008 for a BSEN 60898 B32A mcb?"** The first 20 correct answers will have a free copy mailed to them. For those who want to purchase a copy, they are £15.95 in the ELECSA online shop.



ELECSA helps Worcester make MCS Easy!

ELECSA and Worcester, Bosch Group have entered into an agreement to help their installers meet the requirements of the MCS scheme.

Worcester have launched their 'MCS Made Easy' programme which provides an online resource for their installers with access to documentation that will help them keep up to date with information relating to renewable installations. Worcester will incorporate training on the documentation into their existing renewable training courses. Installers who have already attended renewable training courses with Worcester will be encouraged to attend free seminars to explain the requirements of MCS in greater detail. At the end of the programme, installers can then apply to join the ELECSA MCS scheme.

To help support this initiative, Worcester embarked on a 31 date national roadshow to explain the programme to their installer network. The roadshow presented installers with an overview of how Worcester is developing its business to support installers, along with an overview of how the market is likely to evolve and the drivers for renewable technologies.

Phil Bunce, head of training at Worcester, Bosch Group said "We chose to work with ELECSA as their approach to keeping things simple for the contractor reflects our own approach to providing the support that contractors need in a competitive marketplace."

Chris Beedel, Certification Director for EC Certification Ltd (who own the ELECSA brand) said that "Working with such a leading brand as Worcester, Bosch Group speaks volumes about the credibility that ELECSA has to offer the market and together we will be a strong force in the renewable market in the future."



From left – right: Chris Beedel, EC Certification Ltd; Phil Bunce and Neil Schofield, Worcester, Bosch Group

Please go to the ELECSA website for more information about the Microgeneration Scheme.

Are You Aware of Safe Isolation Procedures?

Safe isolation is one of the most important aspects for safely undertaking electrical installation work and is often something that we contractors are flippant about or even completely ignore! Numerous legal documents including the Health And Safety at Work Act (1974) and the Electricity At Work Regulations (1989) talk about working in safe conditions. Regulation 14 from EAWR states:

No person shall be engaged in any work activity on or near any live conductors unless:

- **It is unreasonable in all circumstances for it to be dead; and**
- **It is reasonable in all circumstances for him/her to be working on or near it while it is live, and**
- **Suitable precautions are undertaken to prevent injury**

Safe isolation is something that is easy to do correctly but if done incorrectly, can cost lives. The basic principle is that the energy to the system is isolated and controlled by the person working on the system.

The procedure for proving dead should be by using a suitable voltage detector. Many electricians have dedicated voltage detectors but the voltage range of electrical test equipment is also an acceptable method of testing.

Summary

Step 1

Check it is safe and acceptable to isolate. If the isolator is an off load device, remove the load. Open the means of isolation for the circuit(s) to be isolated and secure the isolating device in the open (off) position with a locking device and padlock.

Step 2

Prove the correct operation of a suitable voltage detection instrument, against a known live source.

Step 3

Using a voltage detection instrument, check that there is no dangerous voltage present on the circuit conductor(s) to be worked on.

Step 4

Prove the voltage detection instrument again against the known source of supply to ensure that the instrument was functioning correctly when testing the circuit for presence of voltage.

See Electrical Safety Council Best Practice Guide No 2 for further information available from the ELECSA website or call us on 0845 634 9043 to request a printed copy. The ELECSA online shop will be stocking a number of safe isolation kits starting at £33.00 from the 1st October.

New ELECSA Logo Now Available!

Since the beginning of this year we have been slowly introducing the new ELECSA logo incorporating the 'Part of the ECA Group' tagline. The logo has also been adapted in colour as well as font style to better reflect the ECA heritage and ownership of ELECSA.

The brand guidelines have now been updated to give guidance as to how you can use this new logo on your own materials such as stationery, van stickers etc. Don't worry if you are using the old style of the logo, it is still being supported by us and it makes sense to update your materials at a time that suits you.

Personalised items that can be ordered through the ELECSA online shop (such as stationery or clothing) have already been updated to reflect the new logo.

The logo and brand guidelines are available to download from the contractors area of the ELECSA website. If you have any queries or questions using the logo, please call us on **0845 634 9043** or email enquiries@elecsa.co.uk.



Atlas Kablo and Electrium Product Recalls

Electrical contractors should be aware of two product recalls in the marketplace.

The British Approvals Service for Cables (BASEC) has suspended the product certification license for non-compliant cable made by Atlas Kablo. According to BASEC, this is because of a serious decline in quality where the affected cable has excessive conductor resistance (insufficient copper).

Atlas Kablo has notified their customers and posted a list of affected batches of cable on their website www.atlaskablo.com. If you think you have installed cable from the affected batches, check that the necessary electrical installation verification tests (eg R1 +R2 / loop impedance) have been carried out satisfactorily. If you are still concerned, contact Atlas Kablo direct through their website.

Online electrical wholesaler Electrium has also issued a product recall notice for miniature circuit breakers sold under the brand names Wylex, Crabtree (Loadstar only) and Volex. The company says the MCBs are not performing to the

required characteristics, and can lead to a potential risk of burning in a small number of installations.

The affected MCBs were supplied from April 2009 to February 2010 and are listed below.

MCB Rating	Wylex	Crabtree (Loadstar only)	Volex
6 Amp	NSB06	6MIB06	VB06
10 Amp	NSB10	6MIB10	VB10
16 Amp	NSB16	6MIB16	VB16

Electrium is undertaking a free retrofit of replacement parts, so if you have purchased or installed one of the affected MCBs, contact Electrium by registering at www.mcbexchange.co.uk/electrium or call them on **0844 556 4787**.

It's Payback Time for Solar PV!

There has long been a perception that installing renewable technologies would only be done by those customers looking to satisfy their own green agenda as the return on investment argument wasn't attractive enough on its own.

However, the introduction of the Feed in Tariffs (FIT) in April 2010 has dramatically cut the payback period for solar PV installations and can show a return on investment better than what any bank will offer!

Looking at an average 3 bedroom house and considering the cost of electricity with no renewable input compared to the income generated by solar PV from Feed in Tariffs (FIT), consumers can expect the installation to pay back in **just over 7 years**.

Size of Pv system kWp	2.42	
Import Tariff	0.12	(cost of electricity purchased from the grid)
FIT (£/kWhr)	0.413	(amount paid to you by the energy supplier for EVERY unit generated)
Export tariff (£/kWhr)	0.03	(amount paid to you by the energy supplier for every unit exported to the grid, ie the difference between what is generated by the pv and what is used on site at the time that the pv is operational)
Usage factor	0.5	(This is the proportion of the generated electricity that is used at the same time as it is being produced)
Electricity used per year	6,000	(average 3 bed semi consumption)

Figures for a whole year	Without renewables			FIT & renewables		
	kWh/yr	Tariff p/kWh	Cost or income	kWh/yr	Tariff p/kWh	Cost or income
Electricity used	6,000			6,000		
Electricity generated	0	0.413	0.00	1,936	0.413	£800
Exported	0	0.03	0.00	968	0.03	£29
Total FIT Income			0.00			£829
Amount saved by not importing energy	0	0.12	0.00	968	0.12	£116
Electricity imported	6,000	0.12	720.00	5,032	0.12	£604
Amount payable for electricity imported			720.00	5,032		£604
Net income (PA)			-720.00			£225

gross benefit £944.77

Cost of PV system	Module cost per Wp	1.55
Cost for modules		3751
Cost for inverter + ancillary wiring		1030.2
Scaffolding cost		450
Cost for mounting frame / roof work		605.1
Installation cost (at cost not including any profit)		855.18
	grand total	£6,691

Period to see return in investment (years) 7.08

If you would like a copy of the ELECSA Solar PV Calculator, contact us on **0845 634 9043** or email enquiries@elecsa.co.uk.

The ABC's of the Building Regulations

In the course of undertaking electrical installation work in dwellings contractors will inevitably come into contact with other aspects of construction such as the structure of the building, the ventilation and the conservation of fuel and power. Alongside Part P (hopefully we all know that one!) there are 7 other building regulations that electrical contractors can be involved in, these are:



Document A – Structure:

Where the positioning of holes in a joist and the depths of chases in a masonry wall are affected



Document B – Fire safety:

Considers smoke alarm systems and what must be done to maintain any fire barriers that have been breached during work in a dwelling i.e. between 2 flats in a building



Document C – Resistance to passage of moisture:

Looks at the ingress of moisture through a wall and the requirement to limit moisture build up



Document E – Resistance to passage of sound:

Often overlooked when fitting equipment in ceilings and walls. On new builds incorporating multiple dwellings in a single construction, the sound barrier is to be maintained



Document F – Ventilation:

Requirements for fitting of ventilation in certain rooms within a dwelling and the required amount of air flow



Documents LIA & LIB – Conservation of fuel & power:

Covers both new and existing dwellings for fitting or recommending a certain amount of low energy light fixtures



Document M – Accessibility:

Applies when working in new build premises with reference to the heights of sockets and switches in habitable rooms (NOTE that consumer units do not come under this particular requirement but are still required to be accessible)



Document P – Electrical safety:

Introduced standards for electrical safety in dwellings.

It is important that contractors are aware of all elements of the Building Regulations that they are working towards as the self-certification process means you are signing your work off against all sections of the Building Regulations, not just Part P! There is a useful ELECSA guide (The Electricians Guide to the Building Regulations) that explains the typical problems contractors can face with guidance as to how to avoid them. It is on the ELECSA website as a download or call us on **0845 634 9043** to request a printed copy.

Ring Continuity Testing Explained

Most dwellings in the UK contain one or more Ring Final Circuit and testing them thoroughly can take time. Perhaps for this reason some electrical contractors fail to complete the ring final circuit test as per current IET guidance.

The Ring Final Circuit Continuity test is completed in order to establish that:

- **No interconnections exists**
- **Correct polarity exists**
- **Prove each conductor is continuous and provide R1 +R2 values**

There are 3 stages to undertaking a ring final circuit test but before starting it is always worthwhile reiterating that this test is done with the power off and safe isolation procedures (see page 5 in Spark!) must be followed prior to working on a system. In some instances it may be more favourable to undertake these tests from a socket outlet rather than working in the consumer unit, this may be true whilst completing a periodic inspection and test.

Stage one:

Using a low reading ohmmeter test that the ends of each conductor and record as r1, rn and r2 for line, neutral and CPC respectively. Line and neutral should be approximately the same reading though the CPC will be higher if a smaller cross sectional area conductor is used, for 2.5mm² twin +CPC cable a 1.5mm² conductor is used and therefore the result will be giving a reading of 1.67 time higher.

Stage two:

This requires interconnections between the line and neutral of opposing cables to form a 'figure of eight' shape. The testing is then done at the other outlets on the ring final circuit between line and neutral conductors. Each point should give the same reading as the one before, higher values can indicate a spur is present, the interconnection has not been completed correctly or that the wiring is not actually a ring.

Our technical helpline takes over 1000 calls per month answering all sorts of queries from contractors. When you need a help or advice, call us on **0845 634 9043** or **email technical@elecsa.co.uk**.

Stage three:

Similar to Stage two but interconnecting the line and CPC of the opposite cables. Again this test is completed at the sockets on the ring and again the values at each socket should be the same as the previous outlet and are recorded in the R1 +R2 column of the BS7671 certificate. The readings can be compared to the figures from stage one by the following formula $\frac{r1+r2}{4} = R1+R2$.

Important News for Microgeneration Installers

You may be aware that the Low Carbon Building Programme (LCBP) grant funding program for HEAT ONLY ceased on Monday 24th May as part of the Governments deficit reduction measures (note that the Feed in Tariff for electricity is unaffected).

Understandably this has raised many concerns throughout our installer base, especially where companies have invested time and money to gain MCS registration.

At ELECSA we would like to reassure contractors by highlighting the following

- The new Government has stated “Legislation will be introduced to improve energy efficiency in British homes and businesses, to promote low carbon energy production”
- The UK has legally binding targets set by the EU to reduce its carbon emissions, these include a target of sourcing 15% of the UK’s energy from renewable technologies by 2020
- Around 73% of energy used in the home can be attributed to heating and hot water, making reductions in carbon outputs more easily achieved using heat producing technologies
- The new Government has announced an “Energy Bill” which has the potential to deliver the previous administrations plans for a renewable heat incentive (RHI) and has outlined an aspiration to make the installation of these technologies zero upfront cost by means of its “Green Deal” and “Pay as you save” scheme.



ELECSA has learned that any funding and incentives would still be linked to both installers and products being certificated and further information is expected within 4-6 weeks.

We believe that the potential for renewable technology uptake may be greater than under previous administrations, and as such contractors should equip themselves to cater for the likely demand, we will of course keep all of our contractors up to date as and when Government policy is confirmed.

Contractors installing renewable technologies and interested in becoming registered on the MCS scheme should visit the ELECSA website www.elecsa.co.uk/microgeneration for further details. MCS Assessments can be combined with Part P assessments to reduce assessment time and fees.

Exciting Opportunity for ELECSA Contractors in THOMSONLocal™

ELECSA and Thomson Local are pleased to announce a partnership allowing members to take advantage of some fantastic Corporate Advertising opportunities with Thomson Local online and in the print directory.

Thomson Local has been operating for over 25 years and has established itself as the leading local search company in the UK. Today, business listings are available in print and online following the launch of ThomsonLocal.com in 2003.

174 editions of the Thomson Local Directory are produced and delivered free of charge to over 22 million homes and businesses throughout the UK. Following the partnership formed in 2006, Thomson Local is the only classified directory that rewards people with Nectar points for calling businesses listed in either its online or printed directory.

ThomsonLocal.com is powered by the most comprehensive database of its kind in the UK with over 1.8 million businesses

listed and additional content provided. With a variety of online advertising options, as well as being a Google Qualified Company and the preferred supplier of local business data for Google Maps, Thomson Local's tailor made packages help promote businesses to an online audience that makes over 275 million searches a month across its partner network, which includes Bing, Streetmap, Pipex and Skype.

In 2009 ThomsonLocal.com was awarded 'Consumer Directory of the Year' and 'Outstanding Achievement of the Year' at the prestigious Data Publishers Association Awards ceremony.

As an ELECSA approved contractor you can really make your business stand out by joining your Corporate Advertising Scheme. Your business listing will appear in a stand out advert, maximising the opportunity to generate high quality business leads.

By listing your business in a Corporate Advertising box, you have the endorsement of ELECSA. This could be vital based on the fact that 94% of directory users say they are more likely to contact a company that is a member of a professional body or trade association.*

To talk to someone at Thomson Local about this fantastic opportunity please call **0800 037 0858** quoting "Corporate Advertising" or email **corporateadvertising@thomsonlocal.com**

ELECSA

Use an
ELECSA
Part of the ECA Group

Approved Contractor for safe electrical work in the home

ELECSA is a government authorised Part P scheme for electrical contractors.

Go to **www.elecsa.co.uk** for more information.

ALL AREAS

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Text 1
Text 2
Text 3
Text 4
Text 5
01234 567891
Address 1

NAME
Text 1
Text 2
Text 3
01234 567891
Address 1

NAME
Text 1
Text 2
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Address 1



*BMRB 2007

Game On – Game Over!

ELECSA's Game On competition drew to a close as England was sadly eliminated from the FIFA world cup. Emotions were high as Frank Lampard's second goal was disallowed against a world class German team, who were then knocked out by Holland in the semi-finals.

But proving that the England team are not the only ones to score, student Luke Kershaw from Surrey won an Xbox 360 for the fastest penalty scored in ELECSA's online Game On competition. With a record beating 5 goals scored in 8.45 seconds, Luke was over the moon with his prize.

Building on the theme of ELECSA's friendly team approach, other prizes included HDD recorders and a personalised England shirt awarded for the best advice you could give England manager Fabio Capello. Geoffrey Harding of OCON Fire &

Security in Milford Haven came up with the winning comment "Not even ELECSA can provide the warranties needed to protect you from the fans if you don't win the world cup!" However, Fabio seems to have survived the backlash from the fans for the time being...

Johnny Moore from Hertfordshire was one of the first HDD winners, and heard about the competition from reading Spark. He was delighted to receive his prize and said "the game became like an addiction – I improved my score over a couple of days trying to get a faster time."

NAME	COMPANY	TOWN
Simon Bunker		Doddinghurst, Essex
Johnny Moore	Moore & Moore	Sawbridgeworth, Herts
Mr W Blake	Willpower Electrical	Rudgwick, West Sussex
Paul Coppen	Paul Coppen	Manchester
Lewis Charles	Sigma Building Services	Gravesend, Kent
Luke Kershaw		Cranleigh, Surrey
Visar Begiri	Electrical Installations Solutions UK	Dover, Kent
Mat Buckley	MBE Services	Banbury, Oxon
Steve Holt	Holt Electrical	Manchester
Rob Cassie	RGC Electrics	South Norwood, London
David Doy		Hull, Yorkshire
Tim Fox	Fox Electrical	Coventry, West Midlands
Sally Hurman	Firedrocks	Alfold, Surrey
Dave Beechy	Electric Medic	London
Lee Bromby	Batty Ltd	Hull, Yorkshire
John Boylett	John Boylett Electrical Services	Yelverton, Devon

