

Competent, compliant and ready to grow

A guide for electrical contractors
to build stronger businesses



Welcome



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As an electrical contractor, you operate in a field that is highly regulated – and rightly so. But while the work you do must comply with statutory legislation – the Electricity at Work Regulations 1989 – electricians in the UK still don't legally have to have any specific qualifications. This is surprising given the dangers of unsafe electrical installations and the risks posed to both workers and customers.

As a result, any company or consumer employing an electrical contractor needs reassurance that it has competence at scale across its business, ensuring that the engineer undertaking the job will complete it correctly, safely and compliantly.

By securing the right professional accreditations through the relevant trade bodies, rigorously assessing its electricians through recognised benchmarks, demonstrating a commitment to regulatory compliance and using market leading equipment, contractors can instil that much-needed confidence.

These factors play a key role in meeting the strict procurement rules for larger public sector contracts and can open the doors to more specialist revenue streams. The markets for installing electric vehicle charging points, solar panels and other renewable energy systems are set to grow significantly as governments across Europe implement policy and direct funding towards the green energy transition.

Any kind of competitive advantage a company can give itself carries even greater weight in the current environment, as a backlog of delayed construction projects and non-essential work on people's homes comes back online after months of lockdown.

This report provides a guide for electrical contractors to ensure competence across their businesses - including all the challenges and opportunities it brings – to assure their clients and capitalise on new market opportunities.

Breaking down each of the four criteria into separate sections, from accreditations to equipment, it is designed to allow businesses to discover what is relevant for their company.

Brother is committed to being 'At your side' as electrical contractors work to prepare their business to grow and prosper in the future. We hope this report is useful.

Industry outlook:

Uncertainty
and opportunity

The Covid-19 pandemic has seen huge volumes of commercial projects put on hold, households postpone home improvements and maintenance and supply chains experience severe disruption across Europe. In response, firms throughout the sector are now urgently seeking opportunities to grow their businesses to make up for months of lost time and revenue.

Here, James Ellis, head of marketing at CertSure LLP – part of the National Inspection Council for Electrical Installation Contracting (NICEIC) - provides an overview of the issues topping the agenda for electrical contractors in the year ahead.

It's fair to say that 2020 was a year unlike any other. In such a challenging environment, increasing skills and competence levels could fall down the agenda as organisations are forced to prioritise cashflow and resource over investing in training and CPD.

But that may prove short-sighted.

Those that can distinguish themselves from the competition in this regard will be well placed to win work and providing the assurance that customers need will certainly open doors.



Bouncing back



The pent-up demand is supporting an increase in activity across Europe, particularly in domestic repairs and maintenance with people spending more time in their homes.

The UK government has moved to support the construction sector's recovery through its Green Homes Grant scheme, which will fund up to two-thirds of the cost of home improvements designed to make properties more energy efficient.

Alongside this, new legislation requires private landlords to ensure their properties are subjected to mandatory electrical installation testing at least every five years, providing a potential pipeline of regular work for competent firms.

Emerging opportunities

But together with this growth in more traditional installation and maintenance work, it seems clear that the drive towards carbon zero will prove to be a key driver of new business for electrical contractors moving forward.

The average number of UK domestic renewable energy installations was up 167 percent in June compared to May as demand for solar panels rocketed and the growth in the adoption of electric vehicles (EV) has continued unabated, despite lockdown restrictions.

In the UK, battery electric vehicle (BEV) sales are up 77 percent in the year to September against a backdrop of decline in the overall car market, according to the Society of Motor Manufacturers & Traders (SMMT).

And the number of public charging points is expected to grow to 2.6 million by 2050 in order to meet the government's goal of net zero emissions.

The demand for charging points has also risen significantly across Europe as sales of electric and hybrid cars have continued to grow and while registrations of petrol and diesel vehicles fell by a third year-on-year in June, EV sales were up almost two-thirds over the same period, according to JATO, a supplier of automotive data.

Capitalising on these opportunities will be vital for contractors and putting in the preparation to provide specialist expertise in these areas should be a key focus for the next 12 months.

Ensuring they have the right accreditations, expertise and equipment will be central to this.



Developing smart professionals

Securing accreditation is a key part of ensuring competence across your business, but what does the process of getting certified involve?



Ensuring your business has the right certification



Different providers in different countries will vary, but there are some general principles that apply across the industry.

Remember, it's not individual electricians who get certified, but the registered business and its designated qualified supervisor.

They are the electrically competent person with responsibility for the safety, technical standard and quality of electrical installation work completed under their supervision.

A qualified supervisor must be a full-time employee, directly employed by the business, with at least two consecutive years supervisory or managerial responsibility.

They must also have a good understanding of the Electricity at Work Regulations, the 2019 edition of BS 7671 and the Codes of Practice and guidance documents relevant to the range of electrical work firms undertake, while being familiar with inspection, testing, verification, certification and reporting procedures.

Which accreditations to target



The right independent body and certification to choose depends on the kind of work a contractor does - or wants to do.

Each organisation will offer a range of schemes, from more general qualifications to those tailored to specialised work.

In the UK, for example, the NICEIC offers a wide-ranging approved contractor scheme, which covers all types of electrical work including, design, installation, commissioning and maintenance of commercial, industrial and domestic electrical installations.

More specialist programmes include microgeneration certification, which incorporates the installation of renewable and green technologies, like solar photovoltaic panels and wind turbines.

Using a certified supplier for renewables work like this is often a pre-requisite for homeowners and businesses to access government funds and grants.

What's the process?



The accreditation process can take up to a full day and starts with an initial assessment by an engineer, which generally has two elements: in the office and on-site.

The office assessment will check that the right paperwork and processes are in place, including adequate public liability insurance, as well as the right equipment for the range and scale of electrical work being undertaken.

The site assessment would then confirm that the work done in the field is competent. Among other things, they'll be checking for adequate and compliant labelling.

How to prepare



There are some simple steps to prepare for an assessment, and the certifier will often provide support by sending a checklist in advance.

Before the office visit, firms should make sure that all relevant policies, procedures and insurance documents are readily available.

That includes the latest technical reference documents, installation records and certificates raised against completed work, such as applicable building regulations notifications.

Equipment, including instruments to test voltage, continuity, residual current, insulation resistance and earth fault loop impedance, must all have up-to-date service records and accuracy logs too.

If the assessor finds any shortcomings, they may ask for evidence that any non-compliant processes or documents have been fixed or schedule a repeat assessment.

Benchmarking your employees



While individual electricians can't be certified in the same way, they should ensure that they are assessed against a recognised benchmark to provide clients with the assurance that each of a firm's employees are competent, smart professionals.

In the UK, the Institution of Engineering and Technology (IET) works with the Engineering Council (the regulatory body for the UK engineering profession) to award electricians with professional qualifications and registration, such as the Chartered Engineer (CEng) or the Electrician Technician (EngTech).

Contractors who meet the UK Standard for Professional Engineering Competence (UK-SPEC) demonstrate their engineering competence and commitment.

Each individual is rigorously assessed by a peer-reviewed panel, made up of qualified electricians - it's not something which will be achieved by those who have just done a week-long course.



Continuous internal training to remain compliant



To maintain membership of a professional body, contractors are generally reassessed every year.

Part of this focuses on the processes in place for ongoing CPD, which ensures electricians are kept abreast of any changes to wiring regulations and compliance laws.

Updates don't happen that regularly – in the UK the rulebook has only been refreshed 10 times in the last century – but when they do, they can have wide-reaching repercussions for contractors.

The 2019 edition of the UK rules, which came into effect last year, include significant revisions on safety, energy efficiency and electric vehicles, for example.

At the same time, an effective CPD programme is vital for bringing new skills into an organisation.

There are dozens of training providers offering CPD training, both in person and online, and businesses should research to find one that fits their specific needs.

Done well, CPD doesn't just support competency, it creates versatile, smart professionals who can also support younger colleagues who are just setting out on their learning journey.

The right equipment for electricians

A focus on labelling



To stay compliant, firms also have a responsibility to make sure their test instruments are accurate and consistent, and each asset should be clearly and uniquely identified for record and traceability purposes, for example with durable labels.

There's an entire section of the 2019 UK wiring regulations that is dedicated to labelling, and ensuring installations are correctly labelled is a prerequisite for businesses looking to be accredited by a professional body.

There are two main areas to consider where consistent labelling can prove crucial to compliance.

Firstly, all test instruments must be clearly and uniquely identified for record and traceability purposes.

Electricians often find that unclear or poor-quality labelling can lead to mistakes when using equipment on-site, or with the testing, accreditation or documentation of equipment.

This can lead to non-compliance with insurance policies, which could be invalidated.

Secondly, the 2019 UK wiring regulations state that "any electrical device/item must be labelled for the life and duration of use otherwise it loses its certification of compliance."

While handwritten labels are technically compliant, creating them is time-consuming and the labels and the ink used are often not long lasting or weatherproof.

Over time, they can deteriorate, meaning jobs are no longer compliant and they will have to be revisited and repaired.

As a result, mobile label printers have become essential tools that enable electricians and installers to professionally create compliant and durable labels for cables, conduits, switches, fuse boxes and plug sockets in the field, without the need for a laptop or any pre-printed documentation.

Making labelling more efficient

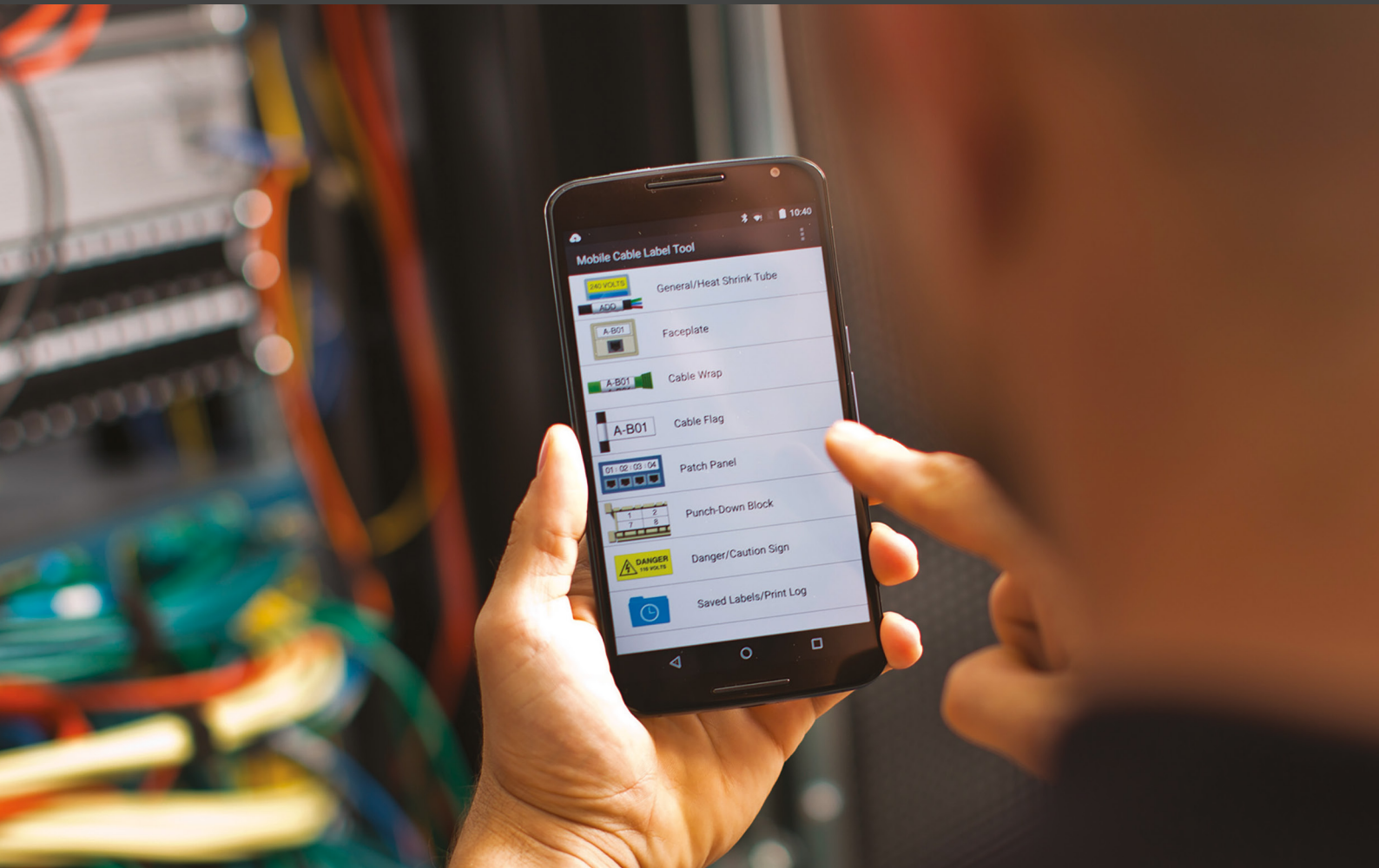


Digital connectivity can help speed up labelling and increase productivity.

Many equipment manufacturers, including Brother, provide apps which enable label printing directly from a smartphone or tablet, with a library of up-to-date compliant label templates for all the different applications electricians will need.

These are frequently updated to incorporate new assets. For example, the Brother Cable Label Tool app now includes a section of templates for labelling electrical vehicle charging stations in accordance to the amendments made in the 19th edition of the UK wiring regulations.

Apps like these are enabling electricians across Europe to save time and ensure accuracy.





Fit for the future



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In an increasingly competitive environment, anything firms can do to win new business will be welcome.

Customers need to be sure of competence at scale and reliability, and membership of a professional body gives them the confidence that the quality of service a business provides is assured.

It can also open doors to new revenue streams and contracts with larger customers, including in the public sector, which have strict procurement rules.

Alongside the right certifications and accreditations, CPD and internal regulatory compliance, equipment plays a vital role.

And labelling is a vital part of ensuring each electrician across a business is delivering compliant installation and maintenance work.

Leaving customers with an electrical system that is labelled with clear and customised labels will give them the confidence that the work is safe, in line with wiring regulations and has been completed by smart, competent professionals.

Not only will this help uphold the reputation of firms and their electricians, it will also make things simpler and safer for customers in the long term, increasing the potential for repeat business.

Ultimately, customers want to know that work is completed safely and it will be done right first time, every time.

At Brother, we're here to support the industry with the best-in-class labelling solutions that firms need to work to the highest standards.

It's all part of the toolkit that electrical contractors will need to build a prosperous, resilient business in such a challenging environment.

To learn more about how the latest in label printing technology can ensure simple, durable and compliant electrical labelling, [click here](#).