

Electrical Industry Bodies

There are various organisations supporting contractors working in the electrical industry. To mention a few we can distinguish between The Electrical Contractors' Association, NICEIC registration scheme or The Electrical Safety First charity and the Electrical Safety Council. The Institute of Engineering and Technology sets standards for electrical installation and most of the regulations, updates, standards and technical advice can be found on their website. The Joint Industry Board is responsible for the Electrotechnical Certification Scheme (ECS)

The Electrical Contractors' Association (ECA)

ECA represents the contractors who design, install and inspect the electrical services in the UK. It was set up in 1901 and its main aims are to provide support to members, to cooperate with the regulatory bodies in the UK and to promote the registered members. Moreover, in addition to the ECA there is a subsidiary company, EC Insurance Company (ECIC). ECIC provides insurance products specified for contractors from the UK electrical engineering and building services sector.

The members of ECA range from small contractors to large companies working on both private and public projects. The membership provides the electrical contractors with the access to technical guidance, support services, pension scheme or insurance options,

discounted training, discounts on various publications. Moreover, it provides the bond, warranty and guarantee of work schemes.

There are some joining criteria like the requirement to carry on the electrical work continuously for at least a year; the turnover level to be of minimum £30k per annum with all accounting records available for the request; valid public liability insurance of £2m; valid employer liability insurance; proper health and safety policy in place. Moreover, a contractor has to take part in the ECA Membership Certification Scheme or the 'Deemed to Satisfy' Scheme.

The contractor also has to carry out electrical work that complies with the latest Wiring Regulations from the British Standards Institution (BSI) and the Institution of Engineering and Technology (IET), or other relevant Building Regulations and British Standards. To carry out a domestic work the contractor has to be registered with the government scheme for Part P of the Building Regulations. There is a fixed basic subscription fee based on the contractor's turnover. All ECA members can register for free in the Joint Industry Board (JIB) and are entitled to join the Electrical Safety Register. If the ECA joining criteria are not met there is an option to register as the registered associate and have access to support services like advisors, work guarantee scheme or discounted training courses (annual fee of £150+VAT applies). For accurate details refer to ECA website.

Members of ECA receive the access to the online service e-RAMS. It is a tool designed to create free risk assessments and method statements for various projects. It can be used for multiple construction projects and activities and it is fully personalised with possibility to upload photos and logos. The assessments are numerical and method statements are based on templates. E-RAMS give the possibility to produce the detailed reports quickly and all created assessments are stored and available to download at all times. It is only available to members of ECA.

ECA Guarantee, Warranty Scheme and Bond provide the member's clients with the assurance that their works meet the highest standards and statutory requirements.

The Electrical Installation Certificate is issued once work completed what confirms the work has been installed correctly. Domestic Work may also require the issuing of a Part 'P' Certificate, to show the new electrical installation complies with the relevant sections of The Building Regulations.

The ECA's Guarantee Scheme provides cover on all contracts up to £50k in value, it is valid for six years from the works completion, and is subject to a maximum limit of £100,000 (incl. VAT) for the same client in any one year.

The ECA's Warranty Scheme applies for general electrical works. It is for the contract values of more than the

Guarantee's limit of £50,000. It is subject to the maximum limit that appears on the individual ECA Member Certificate.

The ECA's Bond Scheme is helpful when the member's work contract is terminated due to failing to comply with standards or due to insolvency. The claim will be possible if the Member has issued, at commencement, a valid Bond Certificate and specified costs will be reimbursed by the Association.

ECA Membership Certification Scheme is based on regular assessments to ensure the services provided by members meet the statutory requirements and industry standards. There are two options - the UKAS-accredited ECA Membership Certification Scheme for BS7671 electrical installation work and a scheme for all other areas of work, including controls, high voltage, security, audio visual, data and telecommunications, outside the scope of BS7671.

Assessments are carried on by the Assessor and usually take one working day to complete. There are non-technical reviews of all documents with the appointed principal deputy holder and qualified supervisors. The assessment involves the test of equipment and working practices. The second part involves site visits which are conducted every 3 to 6 months.

Membership Certification Scheme assessment checklist:

- An appropriate Principle Duty Holder has been appointed
- An appropriate Qualified Supervisor(s) has been nominated
- Evidence of the nominated Qualified Supervisor(s) qualifications (if applicable to the scheme, please see Appendix 1), their competence and understanding of the role
- Evidence of management control methods and policies
- Sample of company documentation
- Certificates and schedules of insurance
- Health & Safety Policy Statement and where applicable, risk assessment procedures
- A sample of written estimates and/or contracts
- Complaint log or register
- Current editions of relevant National and

Industry Standards, Statutory Legislation and guidance relevant to the work activities being assessed

- An adequate number of test instruments and test leads relevant to the work activities being assessed
- Evidence of method to maintain accuracy of test instruments
- If applicable, evidence of hired test instruments with calibration
- Procedures for isolation lock-off for live testing and energising installations, if relevant to the work activities being assessed
- A representative sample of certificates, inspection reports and a list of all installation work carried out in the last three years or since your last assessment
- A range of possible sites to assist the site visit selection process
- All the relevant documentation and certification relating to the selected sites (www.eca.co.uk)

National Inspection Council for Electrical Installation Contracting (NICEIC)

NICEIC is the voluntary registration scheme for electrical contractors. NICEIC is assessing the competence of electricians and maintaining the database of trusted contractors. Members are provided with training opportunities, updates on innovations, advice and certification. NICEIC has the reputation amongst customers and their registered contractors are recognised as working to the highest standards. To become members of NICEIC contractors have to pass the assessment process and are regularly audited to confirm the compliance with the scheme.

NICEIC certifies contractors at the range of schemes:

NICEIC Approved Contractor - this scheme covers all type of works from design or maintenance to domestic and commercial installations.

The NICEIC Domestic Installer - this scheme covers electrical contractors who do electrical projects in domestic properties. It is important to use a Domestic Installer to comply with the requirements of Part P.

Microgeneration Certification Scheme (MCS) - this scheme is specially designated for those

working with green technologies like solars, bio-mass, heat pumps or wind turbines. Using MCS approved contractor is often the requirement in the application for government grants.

Competent Persons Scheme - this scheme covers other works in domestic projects like plumbing or heating

Green Deal Installer or Green Deal Advisors - installer scheme is for contractors providing services of insulation, damp proofing, glazing and heating while advisors scheme certifies all contractors by assessing the suitability for the energy saving solutions.

PAT Testing - Portable appliance testing (PAT) supports contractors to meet their obligations under health & safety regulations.

Hazardous Areas - this scheme covers a range of services connected with flammable and explosive products, for instance at petrol filling stations.

The NICEIC registered contractors can self-certify their works meet Part P regulations on site by using the online tool, which allows notifying the Local Building Control instantly. The online account allows the contractor to keep the database of their projects and certifications and access it anytime.

Moreover, all customers are covered by the NICEIC Platinum Promise with complaints procedure. It is an assurance that any work that has not been carried out in compliance with the building regulations will be rectified. This guarantee is for 6 years and to a maximum of £25,000. Also, NICEIC offers consultancy, training and events for electrical contractors to improve the standards of their work.

To apply for NICEIC schemes visit their website and call to process the application. To apply for the for the Approved Contractor Scheme, the following requirements apply:

- You need to undertake the electrical installation work
- You need to appoint a Principal Duty Holder and nominate one or more Qualified Supervisors.
- Have premises and equipment appropriate to the range and scale of electrical work you undertake, including test instruments suitable for carrying out the range of tests required by BS 7671

- Keep records of test equipment used for certification and reporting
- Hold current editions of BS 7671 and other technical reference documents relevant to the range and scale of electrical work you undertake
- Enable the inspection of your work undertaken in the last 12 months and complying with BS 7671 and relevant codes of practice
- Hold at least £2 million Public Liability Insurance
- Maintain a record of any complaints and remedial actions
- Have a written Health and Safety Policy Statement and carry out risk assessments (www.niceic.com)



What is part P?

Part P is the legal regulations ensuring the standard in construction works of buildings covering structure, fire safety, sound insulation, drainage, ventilation and electrical safety. The Part P requirement with regards to electrical work is that "Reasonable provision shall be made in the design and installation of electrical installations in order to protect persons operating, maintaining or altering the installations from fire or injury."

It applies to fixed electrical installations in domestic properties including gardens and shared amenities in case of blocks of flats. Under Part P of the Building Regulations all electrical works have to be notified to and inspected by the local authority Building Control department. The homeowner must prove that all electrical installations on their property meet the requirements of Part P. If unable to prove it is a criminal offence. Contractors approved and registered with the ECA or NICEIC schemes can self-certify their work complies with the Part P of the Building Regulations.

Other electrical works regulations include electrical industry standards and legal requirements:

- The British standard 7671 is referred to indirectly in the Electricity at Work (1989) Regulations (via the HS(R)25 document) and directly in the Approved Document for Part P of the Building Regulations. It does not form a law but plays a significant role in the electrical industry.
- The Electricity at Work Regulations 1989 – impose regulations on employers with regards to their electrical work and health and safety. It covers the design, construction, operation and maintenance of electrical systems.
- The Building Act 1984 & 2000: The Building Regulations - stem from the main Act of Parliament, the Building Act 1984. Part P legal requirement.

Electrical work that has to be notified to a local building authority in England:

- circuit alteration or addition in a special location (certain zones within a room containing a bath or shower, or a room containing a swimming pool or sauna heater)
- installation of one or more new circuits
- installation of a replacement consumer unit (fuse box)
- rewire of all circuits
- partial rewire
- new full electrical installation (new build)

Please note that this requirement varies for Wales and for a detailed information contact your local building authority.



The Electrical Safety First

The Electrical Safety First is the UK leading charity and technical authority on the electrical safety which aims to educate to use electricity safely and reduce deaths and injuries caused by electrical accidents.

It campaigns to improve the electrical regulations and provide information. The Electrical Safety First recommends using the government backed up registration schemes to all contractors working with electricity and to all customers looking for the professional installers. The Registered Competent Person Electrical Search is a facility for clients to choose the competent and registered electrician who works on domestic projects, meets requirements and can self-certify work under the Building Regulations. (www.electrical-safetyfirst.org.uk)

The Joint Industry Board (JIB)

The Joint Industry Board provides various benefits for electrical contractors and assurance to clients that they choose the skilled contractor. The JIB is assessing the contractors experience and qualifications and grade them from students to approved electricians. The JIB is responsible for the Electrotechnical Certification Scheme (ECS). To gain the card contractor has to pass the health and safety exam. It is

established to reduce the amount of accidents and promote health and safety standards. Moreover JIB offers two membership options, one for Electrical Contractors and other for Cabling and Jointing Contractors. The main benefit of the JIB membership is the advice and support on the employment. Membership provides contractor with up to date contracts of employment, good rates of pay and benefits to keep best employees, unlimited free advice on employment issues. There are training courses. (www.jib.org.uk)

The Electrotechnical Certification Scheme (ECS)

The ECS card is equivalent to the CSCS card but for electrical industry. It displays the qualifications

and status of electrical professionals. The JIB grades are displayed on the card, for instance: the apprentice electrician, installation electrician, electrical fitter etc. To apply for the ECS card contractor has to have a UK electrotechnical Level 3 NVQ qualifications or equivalent. In case where contractor does not hold the required certificates there is a JIB Mature Candidate assessment or possibility to apply for a different grade card and upgrade it in future. To hold the ECS card contractor has to pass the health and safety test specifically designated to electrotechnical safety.

If candidate successfully pass the ECS assessment he will be able to apply for card within two years of passing. The ECS card expiry date varies depending on the grade. In most cases the ECS card

is valid for 3 years but trainee cards are issued for 24 months only. Card can be renewed by passing the H&S test if its expiry date is within 3 months. For card types and eligibility criteria visit www.ecscard.org.uk

The Institute of Engineering and Technology

It is the global institution governing the electrical industry which is a source of information for the design, inspection, maintenance and installation of electrical work. IET publish the BS7671 standard.

It has members in 127 countries and is the world leading institution for electrical work. IET provides updates on the regulations and law governing the electrical industry. (www.theiet.org)