

Scottish Joint Industry Board

Handbook

2026 - 2028

Section K
Grading



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Grading

K1.	The ECS (Grade) Card	196
K2.	Guidance on Grading	196
K3.	Change of Address.....	197
K4.	Appeals on Grading.....	197
K5.	Cases of Fraud	198
K6.	Electrical Grading Definitions	198
K7.	Instrumentation Grading Definitions	205
K8.	Network Infrastructure Grading Definitions	209
K9.	Other Grades	212
K10.	Training and Qualification Costs	213



K1. The ECS (Grade) Card

- K1.1 Since 1969, the SJIB has administered the Grading system for Electrical Installation Operatives. More recently, the ECS (Grade) Cards were incorporated into the Electrotechnical Certification Scheme (ECS). The SJIB ECS (Grade) Card continues to show the cardholder's Grade.
- K1.2 The purpose of the ECS (Grade) Card is to ensure that Operatives in the construction industry are assessed as technically competent to defined industry standards and have the appropriate training and qualifications for the job they do, thereby helping to improve standards and safety in the industry. Most principal contractors and clients require workers on their sites to hold a valid ECS (Grade) Card.
- K1.3 Health, safety and environmental awareness is an increasingly critical issue within the construction industry. All Operatives must have an up-to-date health, safety and environmental (HS&E) certification in order to be awarded an ECS (Grade) Card. The ECS HS&E assessment is designed to prevent accidents and promote safety and quality of work and ensures all cardholders have site awareness of health and safety to industry acceptable standards.



K2. Guidance on Grading

- K2.1 These notes deal with the grading of Operatives by the SJIB:
- (a) Any Operative or registered Apprentice who satisfies the following criteria may be graded or upgraded.
 - (b) Operatives must fully complete an SJIB application for grading or upgrading along with the appropriate fee and any supporting certificates via the SJIB online portal. The SJIB may request that the application be supported with references from previous employers or clients whom they have worked for over the previous 12 months, depending on the ECS (Grade) Card being applied for.
 - (c) The grading process will be delayed if the Operative submits their application either incompletely or incorrectly. The SJIB will assess each Operative's application and issue the ECS (Grade) Card that has been applied for, so long as the criteria are met and sufficient evidence has been submitted. Confirmation and the ECS (Grade) Card will be sent directly to the Operative.
 - (d) Thereafter, the Operative will be entitled to their appropriate graded rate of pay, without retrospection, having received confirmation from the SJIB of their grade.
 - (e) Operatives wishing to appeal against the grade awarded should write to the SJIB (see Section K4.1)



K3. Change of Address

- K3.1 Operatives are required to inform the SJIB in writing of any change of address, always quoting their National Insurance number.



K4. Appeals on Grading

- K4.1 The method of appeal by an Operative is set out below in outline and is subject to regulations made by the SJIB.
- (a) Appellants must lodge an appeal in writing detailing their reasons for the appeal. They must quote their National Insurance number and state the name and address of their present employer or, if different, the name and address of the employer with whom they were originally graded.
 - (b) The grounds for the appeal must be clearly stated, with supporting documents such as authenticated certificates or evidence of courses, practical experience and years of service in the industry.
 - (c) Unjustified, unsupported, vexatious or frivolous appeals will not be entertained. Appeals will be dealt with impartially by the SJIB Grading Committee, comprising an employer representative and a Regional Officer of the Union. The Grading Committee will consider the written evidence, statements by the appellant and supporting or opposing statements. The Grading Committee may question the appellant to establish that the facts presented are completely true and will call for any oral or documentary evidence which they feel is necessary to substantiate the validity of any statement.
 - (d) If appropriate, the appellant will be given due notice of the place and time where the appeal will be held and either may be represented by SELECT or the Union, as appropriate, or another nominated representative.
 - (e) The appellant may be required to attend in person.
 - (f) The decision of the Grading Committee is final and binding and will be communicated in writing to the appellant. The appellant's record will be amended. The Board may or may not award the costs of an appeal to a successful appellant, but not damages, and there will be no retrospection of any increased payments in the case of upgrading or return of wages in the case of downgrading. Any increase in wages consequential upon an appeal shall take place from the commencement of the pay week specified by the Board.



K5. Cases of Fraud

- K5.1 The SJIB reserves the right to remove an Operative's existing card and will accept no further applications for a period of six years in the following situations:
- (a) If an Operative submits forged certificates to the SJIB when applying for their card.
 - (b) If an Operative is found to be in possession of a forged/fraudulent ECS (Grade) Card.
- K5.2 When a case of fraud is identified, a letter will be sent directly to the Operative from the Secretary of the SJIB. The operative will be asked to contact the Secretary regarding the issue and an investigation will be conducted. The Secretary of the SJIB will decide the appropriate level of action and may involve the SJIB National Board in this decision.



K6. Electrical Grading Definitions

- K6.1 **Electrical Labourers**
- (a) Electrical Labourers shall be employed only within the general labouring field under supervision and in accordance with the National Working Rule C15 – Installation of cables fixed to buildings or structures including cable within the perimeter of the site.
- K6.2 **Electricians**
- (a) Electricians must have satisfactorily completed a recognised apprenticeship in electrical installation.
 - (b) They must be able to carry out electrical installation work efficiently in accordance with relevant statutory regulations and industry codes of practice.
 - (c) They must have knowledge of the National Working Rules for the Electrical Contracting Industry, relevant statutory regulations and industry codes of practice, including specifically The Electricity at Work Regulations 1989, The Electricity Safety, Quality & Continuity Regulations 2002 (as amended) (so far as they deal with consumers' installation) and BS 7671 (as amended) IET Wiring Regulations.
 - (d) They must have achieved the SVQ Level 3 Certificate in electrical installation jointly awarded by the Scottish Qualifications Authority (SQA) and the SJIB or an approved equivalent.

- (e) Further information and details of the SJIB Apprentice and Adult Training Schemes for Electrical Installation can be found in Section J of the SJIB Handbook.
- (f) Operatives who are in employment on a directly employed basis and who carry out electrical installations in hazardous areas will have their CompEx initial training course and renewal costs (provided that the Operative is working at the time of renewal) paid by the employer. This is provided that the employer requires holding a CompEx qualification as a specific requirement of the Operative's role.
- (g) For Operatives already holding a CompEx qualification on this date, there is no obligation for the employer to pay the renewal costs upon expiration of the existing CompEx qualification unless it is a specific requirement of the Operative's role.

K6.3 Approved Electricians

- (a) Approved Electricians must have two years' experience as a graded Electrician immediately prior to application for this grade.
- (b) They must have successfully passed the Advanced Competence Assessment (ACA), 1995 apprentice training scheme or an approved equivalent.
- (c) Approved Electricians must possess particular practical, productive and electrical installation skills with adequate technical knowledge to work on their own proficiently and carry out electrical installation work without detailed supervision in the most efficient and economical manner.
- (d) They must have knowledge of the National Working Rules for the Electrical Contracting Industry, relevant statutory regulations and industry codes of practice including specifically The Electricity at Work Regulations 1989, The Electricity Safety, Quality & Continuity Regulations 2002 (as amended) (so far as they deal with consumers' installation) and BS 7671 (as amended) IET Wiring Regulations.
- (e) They must have supervisory knowledge and the ability to set out jobs from drawings and specifications and requisition the necessary installation materials.

K6.4 Responsibility Money for Approved Electricians

- (a) Approved Electricians in charge of work who undertake the supervision of other Operatives shall be paid responsibility money, the amount of which shall be specified by the SJIB.

K6.5 Technician Electricians

- (a) Technician Electricians must have experience as an Approved Electrician for a minimum of three years.

- (b) They must have knowledge of the most economical and effective layout of such installations together with the ability to achieve a high level of productivity in the work they control. In addition, they must have exceptional technical skills, ability and experience beyond that expected of an Approved Electrician.
- (c) They must have knowledge of the National Working Rules for the Electrical Contracting Industry, relevant statutory regulations and industry codes of practice including specifically The Electricity at Work Regulations 1989, The Electricity Safety, Quality & Continuity Regulations 2002 (as amended) (so far as they deal with consumers' installation) and BS 7671 (as amended) IET Wiring Regulations.
- (d) Technician Electricians must have completed either:
 - (i) The SQA [SELECT] Tailored Award in Design and Verification of Electrical Installation (BS 7671) (completed within the last five years); or
 - (ii) A HNC in Electrical Engineering; or
 - (iii) A HNC in Contracting Management; or
 - (iv) The City and Guilds of London Institute Electrical Installation Work Course 'C'; or
 - (v) EAL Level 4 Award in the Design and Verification of Electrical Installations (completed within the last five years) (Code: 601/8231/3).
- (e) In addition, they must complete the following training courses (available from SELECT), approved by the SJIB (within the last three years):
 - (i) Asbestos Awareness (assessed); and
 - (ii) Ashton Supervisory Management Course; and
 - (iii) Safe Isolation (assessed); and
 - (iv) Scottish Building Standards (self-study programme); and
 - (v) CITB Site Management Safety Training Scheme (SMSTS); or
 - (vi) CITB Site Supervision Safety Training Scheme (SSSTS)

K6.6

CEC Electricians

- (a) CEC Electricians must be registered on the Crediting Electrotechnical Competence (CEC) Scheme and must have completed the following training:
 - (i) The ECS Health, Safety & Environmental Assessment or a valid approved equivalent (completed within the last 30 months); and
 - (ii) Scottish Building Standards (self-study programme, completed within the last three years); and
 - (iii) SQA [SELECT] Customised Award in Requirements for Electrical Installations to BS 7671 (completed within the last five years)
 - (iv) City and Guilds IET Wiring Regulations to BS 7671 (full course, completed within the last five years); or

- (v) EAL Level 3 Award in Requirements for Electrical Installation BS 7671 (completed within the last five years) (code 601/5321/0); or
- (vi) LCL Level 3 Award in Requirements for Electrical Installations (completed within the last five years) (Code: 601/5665/x).
- (b) A CEC Electrician ECS Card is only valid for 18 months during which time an Operative must complete the CEC Scheme and have achieved an SVQ Level 3 in Electrical Installation (SCQF 7).

K6.7

Panel Builders

- (a) Panel Builders must have completed an EAL Level 3 Diploma in Installation and Commissioning, Pathway ICA: Equipment Installation (Units QICM3/001, QICM3/002, QICM3/003, QICM3/004, and QICM3/006).
- (b) They must be able to carry out panel building work efficiently in accordance with relevant statutory regulations and industry codes of practice.
- (c) They must have knowledge of the SJIB National Working Rules for the Electrical Contracting Industry, relevant statutory regulations and industry codes of practice including specifically The Electricity at Work Regulations 1989, The Electricity Safety, Quality & Continuity Regulations 2002 (as amended) (so far as they deal with consumers' installation) and BS 7671 (as amended) IET Wiring Regulations.
- (d) In addition, they must:
 - (i) Enclose a statement from an SVQ Assessor which confirms that the scope of the EAL Level 3 Diploma in Installation and Commissioning (Equipment Installation Pathway) has been met using evidence collected from the workplace by the candidate.
 - (ii) Complete the ECS Health, Safety & Environmental Assessment (within the last 30 months) or hold a valid approved equivalent; and
 - (iii) SQA [SELECT] Customised Award in Requirements for Electrical Installations (completed within the last five years); or
 - (iv) City and Guilds IET Wiring Regulations to BS 7671 (full course, completed within the last five years); or
 - (v) EAL Level 3 Award in Requirements for Electrical Installation BS 7671: June 2008 (2015) (completed within the last five years) (Code: 601/5321/0); or
 - (vi) EAL Level 4 Award in the Design and Verification of Electrical Installations (completed within the last five years) (Code: 601/8231/3); or
 - (vii) LCL Level 3 Award in Requirements for Electrical Installations (completed within the last five years) (Code: 601/5665/x).

K6.8 Wiremen

- (a) Wiremen must have completed an EAL Level 3 Diploma in Installation and Commissioning, Pathway ICA: Equipment Installation (Units QICM3/001, QICM3/002, QICM3/003, QICM3/004, and QICM3/006).
- (b) They must be able to carry out work efficiently in accordance with relevant statutory regulations and industry codes of practice.
- (c) They must have knowledge of the SJIB National Working Rules for the Electrical Contracting Industry, relevant statutory regulations and industry codes of practice including specifically The Electricity at Work Regulations 1989, The Electricity Safety, Quality & Continuity Regulations 2002 (as amended) (so far as they deal with consumers' installation) and BS 7671 (as amended) IET Wiring Regulations.
- (d) In addition, they must:
 - (i) Enclose a statement from an SVQ Assessor which confirms that the scope of the EAL Level 3 Diploma in Installation and Commissioning (Equipment Installation Pathway) has been met using evidence collected from the workplace by the operative.
 - (ii) Complete the ECS Health, Safety & Environmental Assessment (within the last 30 months) or hold a valid approved equivalent; and
 - (iii) SQA [SELECT] Customised Award in Requirements for Electrical Installations (completed within the last five years); or
 - (iv) City and Guilds IET Wiring Regulations to BS 7671 (full course, completed within the last five years); or
 - (v) EAL Level 3 Award in Requirements for Electrical Installation BS 7671: June 2008 (2015) (completed within the last five years) (Code: 601/5321/0); or
 - (vi) EAL Level 4 Award in the Design and Verification of Electrical Installations (completed within the last five years) (Code: 601/8231/3); or
 - (vii) LCL Level 3 Award in Requirements for Electrical Installations (completed within the last five years) (Code: 601/5665/x).

K6.9 Electrical Fitters (ECITB)

- (a) Electrical Fitters (ECITB) must have satisfactorily completed a recognised four-year apprenticeship and hold one of the following qualifications:
 - (i) ECITB Diploma in Installing Engineering Construction Plant and Systems Electrical at SCQF Level 7; or
 - (ii) NQF/SQA equivalent accompanied with the applicable technical certificates etc, for those ECITB frameworks; or
 - (iii) ECITB NVQ Level 3 in Installing and Commissioning Electrotechnical Systems and Equipment (Plant); or
 - (iv) ECITB NVQ Level 3 in Maintaining Plant and Systems (Electrical).

- (b) In addition, they must provide certificates proving they have completed the following training:
 - (i) ECS Health, Safety & Environmental Assessment (within the last 30 months) or hold a valid approved equivalent; and either the
 - (ii) SQA [SELECT] Customised Award in Requirements for Electrical Installations (completed within the last five years)
 - (iii) City and Guilds IET Wiring Regulations to BS 7671 (full course, completed within the last five years); or
 - (iv) EAL Level 3 Award in Requirements for Electrical Installation BS 7671: June 2008 (2015) (completed within the last five years) (Code: 601/5321/0); or
 - (v) EAL Level 4 Award in the Design and Verification of Electrical Installations (completed within the last five years) (Code: 601/8231/3); or
 - (vi) LCL Level 3 Award in Requirements for Electrical Installations (completed within the last five years) (Code: 601/5665/x).
- (c) Electrical Fitter (ECITB) shall receive the appropriate rate of pay for an SJIB graded Installation Electrician.

K6.10 Approved Electrical Fitters (ECITB)

- (a) Approved Electrical Fitters (ECITB) must have completed a recognised four-year ECITB apprenticeship.
- (b) They must have two years' experience as a graded SJIB Electrical Fitter (ECITB).
 - (i) Approved Electrical Fitters (ECITB) must possess practical, productive and electrical engineering skills with additional technical and supervisory knowledge so as to be able to work on their own proficiency, connect and test and locate faults.
 - (ii) Approved Electrical Fitters (ECITB) shall receive the appropriate rate of pay for an SJIB graded Approved Electrician.

K6.11 Installation Electricians (ECITB)

- (a) Electrical Fitters (ECITB) who wish to apply for the grade of SJIB Installation Electrician must have satisfactorily completed the requirements described for Electrical Fitters (ECITB).
- (b) They must then register on the Crediting Electrotechnical Competence (CEC) Scheme and complete the following bridging assessment of competency, knowledge and skill:
 - (i) SJIB 2nd Stage Electrical Installation Project.
 - (ii) SJIB Stage 3 SVQ week.
 - (iii) The FICA (Final Integrated Competence Assessment).
- (c) Having successfully completed the CEC Scheme, they will be awarded an SVQ Level 3 in Electrical Installation.

K6.12 Winders/Electrical Fitters

- (a) Winders/Electrical Fitters must have been registered apprentices for at least four years and must have had practical training in electrical winding and/or fitting work.
- (b) They must be able to carry out armature and stator winding on AC and DC or machine assembly and test efficiently in accordance with accepted trade practice.
- (c) In addition, they must have completed the following training:
 - (i) SQA Course Certificate Parts 1 and 2; or
 - (ii) Equivalent course of study approved by the SJIB; and
 - (iii) The ECS Health, Safety & Environmental Assessment (completed within the last 30 months) or hold a valid approved equivalent.
- (d) It is accepted that there may be a few exceptional cases of apprentices with outstanding ability who could qualify as Winders or Fitters in less than four years. The Grading Committee will consider applications for grading in such cases from applicants who have obtained the SQA Certificate and completed at least three years' training.
- (e) Winders/Electrical Fitters shall receive the appropriate rate of pay for an SJIB graded Electrician.

K6.13 Approved Winders/Approved Electrical Fitters

- (a) Approved Winders/Approved Electrical Fitters must have satisfactorily completed a registered apprenticeship and have had practical training in winding or electrical fitting work. They must have obtained the SQA Parts 1 and 2 Certificate. They must have had two years' subsequent Journeyman experience working as a chargehand and/or Winder/Electrical Fitter immediately prior to application for this grade. Approved Winders/Electrical Fitters must possess particular practical, productive and electrical engineering skills with additional technical and supervisory knowledge so as to be able to work on their own proficiently, connect and test windings and locate faults on windings on both AC and DC machines or assembly, and test and locate faults on a wide range of both AC and DC machines.
- (b) Approved Winders/Electrical Fitters shall receive the appropriate rate of pay for an SJIB graded Approved Electrician.



K7. Instrumentation Grading Definitions

- K7.1 The instrumentation site erection and testing/commissioning industry involves mechanical, electrical, electronic, and pneumatic work, which very often occur together on most projects. The agreed grading scheme is intended to provide opportunities for personnel engaged on this work to develop the necessary multicraft skills and to provide opportunities for advancement.
- K7.2 In brief, personnel who have completed an apprenticeship or other approved courses would enter the industry normally as Electricians, Pipefitters or Instrument Mechanics, dependent on training and interest. Electricians and Pipefitters would follow the established course progressing to Approved Grade. In addition, the achievement of appropriate academic qualifications would enable personnel to transfer to testing/commissioning work, with the ultimate goal of Instrument Technician. Similarly, an Instrument Mechanic would be able to progress through an Approved Grade to Instrument Technician.
- K7.3 **Instrument Technicians**
- (a) Instrument Technicians must have completed an approved apprenticeship course.
 - (b) They must have a minimum of five years' experience as a Senior Instrument Mechanic or Instrument Artificer.
 - (c) They must be fully conversant with all aspects of erection and testing techniques of instrumentation systems in process and production control of industrial plant.
 - (d) Instrument Technicians must have:
 - (i) Obtained Industrial Measurement and Control Technicians Certificate Part 3 (City and Guilds) or an HNC in approved subjects; or
 - (ii) Technical skill, ability and experience significantly beyond that expected of a Senior Instrument Mechanic or Instrument Artificer, and whose value to the employer would be as if they were qualified as an Instrument Technician and, with the support of their employer, is granted this grade by the SJIB.
 - (e) They must have a working knowledge of the legal requirements covering all aspects of site work, including the Health and Safety at Work Act 1974 and in particular:
 - (i) The Construction (Design and Management) Regulations, 2015
 - (ii) The Construction (Head Protection) Regulations, 1989
 - (iii) The Control of Asbestos Regulations, 2012
 - (iv) The Control of Substances Hazardous to Health Regulations, 2002

- (v) DSEAR 2002 (Dangerous Substances and Explosive Atmosphere Regulations)
- (vi) LOLER 1998 (Lifting Operations and Lifting Equipment Regulations)
- (vii) The Management of Health and Safety at Work Regulations, 1999
- (viii) Personal Protective Equipment at Work Regulations, 2002
- (ix) The Electricity at Work Regulations, 1989
- (x) Work at Height Regulations, 2005.
- (f) They must also have knowledge of:
 - (i) BS 7671 (as amended) IET Wiring Regulations
 - (ii) The ATEX Directive
 - (iii) BS EN 60079 series of standards (as amended)
 - (iv) Terms and Definitions of Automatic Control BS 1523.
- (g) It is anticipated that the Instrument Technician will become a member of staff.

K7.4 **Instrument Mechanics**

- (a) Instrument Mechanics must have completed an approved apprenticeship course and have had adequate training in instrumentation maintenance and servicing.
- (b) Instrument Mechanics must:
 - (i) Have obtained Industrial Measurement and Control Technicians Certificate Part 1 (City and Guilds); or
 - (ii) Have completed an approved craft apprenticeship course, have obtained an equivalent academic qualification, and have adequate practical training in instrumentation maintenance and servicing; and
 - (iii) Be able to carry out instrumentation maintenance and servicing work efficiently in accordance with drawings and manufacturers' instructions.
- (c) Instrument Mechanics shall receive the appropriate rate of pay for an SJIB graded Electrician.

K7.5 **Approved Instrument Mechanics**

- (a) Approved Instrument Mechanics must have completed an approved apprenticeship and qualified as an Instrument Mechanic.
- (b) Approved Instrument Mechanics must have:
 - (i) Two years' experience working as an Instrument Mechanic subsequent to the completion of the apprenticeship; or
 - (ii) An equivalent academic qualification and also have passed an approved manufacturer's training course or other approved course such as at a Government Training Centre; and
 - (iii) Obtained practical experience in techniques of instrumentation

maintenance and servicing on industrial process plant control systems and be able to work on their own proficiently and in accordance with associated safety codes and practices.

- (c) Approved Instrument Mechanics shall receive the appropriate rate of pay for a SJIB graded Approved Electrician.

K7.6 Senior Instrument Mechanics

- (a) Senior Instrument Mechanics must have completed an approved apprenticeship course, have qualified as an Approved Instrument Mechanic with at least two years' practical experience in all aspects of instrumentation maintenance and servicing, i.e. mechanical, electrical, electronic, and pneumatic.
- (b) Senior Instrument Mechanics must:
 - (i) Have obtained Industrial Measurement and Control Technicians Certificate Part 2 (City and Guilds); or
 - (ii) Have an equivalent academic qualification and have had a minimum of three years' comparable experience in techniques of instrumentation maintenance and servicing after completing an approved instrumentation training course; and
 - (iii) Be familiar with correct application of measurement and control systems, interpretation of drawings and associated safety codes and practices.
- (c) This grade will be an endorsement on the ECS (Grade) Card of an Approved Instrument Mechanic and there is a corresponding additional payment equivalent to the maximum Responsibility Money contained within the SJIB Agreement.
- (d) Whether an Operative who has this endorsement is entitled to receive the additional payment will be determined by the job title and the engagement terms stipulated in their Statement of Employment Particulars.

K7.7 Instrument Artificers

- (a) Instrument Artificers must have completed an approved apprenticeship course and have qualified as an Approved Instrument Electrician or an Approved Instrument Pipefitter.
- (b) Instrument Artificers must have:
 - (i) At least two years' practical experience in all aspects of instrumentation installation, i.e. mechanical, electrical, electronic and pneumatic, and have obtained Instrument Maintenance Craft Certificate Part 2 (City and Guilds); or

- (ii) The technical skill, ability and experience beyond that expected of an Approved Grade Craftsman and whose value to the employer would be as if they were qualified as an Instrument Artificer and with the support of their employer, is granted this grade by the SJIB; and
 - (iii) The ability to work proficiently without detailed supervision, be able to interpret instrumentation drawings and requisitions and be familiar with instrumentation installation techniques.
- (c) This grade will be an endorsement on the ECS (Grade) Card of an Approved Instrument Electrician or an Approved Instrument Pipefitter and there is a corresponding additional payment equivalent to the maximum Responsibility Money contained within the SJIB Agreement.
- (d) Whether an Operative who has this endorsement is entitled to receive the additional payment will be determined by the job title and the engagement terms stipulated in their Statement of Employment Particulars.

K7.8

Instrument Pipefitters

- (a) Instrument Pipefitters must have completed the ECITB Diploma in Installing Engineering Construction Plant & Systems – Small Bore Tubing Assemblies. They must be able to carry out pipefitting work efficiently in accordance with statutory regulations and industry code of practice.
- (b) The size of work this discipline covers is up to a maximum of 15mm nominal bore.
- (c) In addition, Instrument Pipefitters must have completed at least one of the relevant ECITB Technical Small Bore Tubing (TSBT) Tests:
 - (i) TSBTO1 – Assemble and Install Small Bore Tubing Assemblies – Twin Ferrule; or
 - (ii) TSBTO2 – Disassemble and Reinstall Small Bore Tubing Assemblies; or
 - (iii) TSBTO3 – Assemble and Install Small Bore Tubing Assemblies – Cone and Threaded; or
 - (iv) TSBTO4 – Hydrotest SBT Assemblies; and
 - (v) Complete the ECS Health, Safety & Environmental Assessment (within the last 30 months) or hold a valid approved equivalent.
- (d) A graded Electrician or Approved Electrician who has passed the relevant ECITB Technical Test can have Small Bore Tubing added as an Occupation onto their ECS (Grade) Card.
- (e) An Instrument Pipefitter shall receive the appropriate rate of pay for an SJIB graded Electrician.

K7.9 Approved Instrument Pipefitters

- (a) Approved Instrument Pipefitters must have qualified as an Instrument Pipefitter and gained experience in small bore stainless steel and mild steel pipework and PVC-covered copper tubing installation and termination.
- (b) They must be able to set out jobs from drawings and specifications and requisition the necessary materials and have a thorough knowledge of the National Working Rules for the Electrical Contracting Industry.
- (c) Approved Instrument Pipefitters shall receive the appropriate rate of pay for an SJIB graded Approved Electrician.



K8. Network Infrastructure Grading Definitions

K8.1 Advanced Datacomms Specialist

- (a) Advanced Datacomms Specialists are responsible for the installation, commissioning and maintenance of structured cabling systems for datacomms systems. They must be able to conduct testing of structured cabling, including all necessary containment as well as any associated connection units; installation and testing and bonding cables. In addition, they must be able to work as part of a team or independently.
- (b) Advanced Datacomms Specialists must have completed:
 - (i) A Level 3 Datacomms Specialist apprenticeship; or
 - (ii) The City and Guilds Level 2 Award in Communications Cabling (3667); or
 - (iii) EAL Level 3 NVQ Diploma in Cabling Installations (601/3023/4)
 - (iv) EAL Level 3 NVQ Diploma in Cabling Installations (QCF); or
 - (v) A BTEC Level 3 Diploma in Professional Competence for IT and Telecoms Professionals; and have
 - (vi) Completed the ECS Health, Safety & Environmental Assessment (within the last 30 months) or hold a valid approved equivalent.

K8.2 Network Infrastructure Advanced Installer

- (a) Network Infrastructure Advanced Installers are responsible for installing, commissioning and maintaining all aspects of copper and fibre structured cabling for datacomms systems. They must have a working knowledge of services including IPCCTV, Wireless, A/V and building management systems, commonly run over network cabling.
- (b) Network Infrastructure Advanced Installers must have:
 - (i) Held, or fully met the requirements for the Network Infrastructure Installer (Gold) card for at least three years, and

- (ii) An additional Network Infrastructure Specialist Continuing Professional Development (CPD) qualification in at least one specialist network infrastructure area that may include AV, IP Security, Wireless and VOIP.
- (iii) Completed the ECS Health, Safety & Environmental Assessment within the last 30 months or hold a valid approved exemption.

K8.3 **Network Infrastructure Installer (Gold)**

- (a) Network Infrastructure Installers (Gold) are data network installers who are responsible for installing, commissioning and maintaining all aspects of copper and fibre structured cabling for network infrastructure systems.
- (b) Network Infrastructure Installers (Gold) must have successfully completed either:
 - (i) The industry Level 3 Apprenticeship Standard, the Network Cable Installer Apprenticeship, or have previously met the requirements of the ECS Advanced Datacomms Specialist Card or;
 - (ii) The Copper and Fibre Network Infrastructure Experienced Worker Assessment [under development]; and
 - (iii) Completed the ECS Health, Safety & Environmental Assessment within the last 30 months or hold a valid exemption.
- (c) Network Infrastructure Installers (Gold) must also provide the SJIB with an employer statement or project reference confirming at least 12 months' installation experience post qualification completion.

K8.4 **Network Infrastructure Installer (Level 3)**

- (a) Network Infrastructure Installers (Level 3) are responsible for installing and maintaining structured cabling systems for datacomms systems. They also carry out work on all necessary containment and associated connection units; installation of earthing and bonding cables, the fitting out of enclosures with structured cable termination equipment (connect units, hubs, switches, routers, patch panels etc).
- (b) There are two types of Network Installer (Level 3):
 - (i) Network Infrastructure Installer – Copper
Network Infrastructure Installers – Copper are typically responsible for the installation of structured cabling such as UTP, STP, FTP, Co-AX and general common copper cables.
 - (ii) Network Infrastructure Installers – Fibre are typically responsible for the work on single-mode and multi-mode fibre cables.
- (c) Network Infrastructure Installers (Level 3) must have completed one of the following:
 - (i) Level 3 industry-recognised qualification in copper, such as the BTEC Level 3 Advanced Award in Data Communications Cable Installation or the BTEC Level 3 in Certified Network Cable Installer (Copper)

- (ii) Level 3 industry-recognised qualification in fibre, such as the BTEC Level 3 Advanced Award in Data Communications Cable Installation or the BTEC Level 3 in Certified Network Cable Installer (Fibre)
- (iii) City and Guilds Level 3 Certificate in Communications Cabling (3668-03)
- (iv) EAL Level 3 Award in Telecoms, Fibre and Copper
- (v) Open Awards Level 3 Award in Copper Datacoms Cable Installation and Testing
- (vi) Open Awards Level 3 Award in Fibre Optics Installation and Testing
- (vii) Experienced Worker Assessment Copper or Fibre.
- (d) Network Infrastructure Installers (Level 3) must also provide the SJIB with an employer statement or project reference confirming at least 12 months' installation experience post qualification completion; and
- (e) Completed the ECS Health, Safety & Environmental Assessment within the last 30 months or hold a valid exemption.

K8.5 Network Infrastructure Installation Assistant

- (a) Network Infrastructure Installation Assistants work in the Network Infrastructure industry in a supportive role to assist qualified staff with the installation of cables and other work under supervision.
- (b) Network Infrastructure Installation Assistants must have completed either:
 - (i) An award in Communication Cabling at Level 2 (such as City and Guilds 3666/3667/3668) or;
 - (ii) The ECS Network Infrastructure Awareness Assessment; and
 - (iii) Completed the ECS Health, Safety & Environmental Assessment within the last 30 months or hold a valid approved exemption.

K8.6 Network Infrastructure Trainee

- (a) Network Infrastructure Trainees are new entrants to the industry and are on a supervised training programme (not an apprenticeship).
- (b) Network Infrastructure Trainees must be enrolled on an industry training programme and working to complete the underpinning knowledge and performance assessments prior to completing their final network infrastructure end point assessment.
- (c) Network Infrastructure Trainees must also provide evidence of the industry training programme being undertaken; and confirmation from the employer stating that they support the training; and
- (d) Completed the ECS Health, Safety & Environmental Assessment within the last 30 months or hold a valid exemption.

K8.7 **Network Infrastructure Apprentice**

- (a) Network Infrastructure Apprentices must be completing the Level 3 Network Infrastructure Apprenticeship Standard (the Network Cable Installer Apprenticeship) that leads to the network infrastructure end point assessment.
- (b) Network Infrastructure Apprentices must provide evidence of the industry Level 3 Apprenticeship Standard (the Network Cable Installer Apprenticeship) training programme being undertaken with confirmation from the employer stating that they support the apprenticeship; and
- (c) Have completed the ECS Health, Safety & Environmental Assessment within the last 30 months. There are no exemptions that can be used when applying for the card.



K9. Other Grades

K9.1 The following grades are also awarded by the SJIB from time to time in cases where the SJIB has issued an Operative one of the below cards before, or where the Operative holds one of the below cards with the JIB and has relocated to Scotland. Please note the SJIB conditions need not necessarily apply to these grades:

- (a) Electrician (Marine)
- (b) Radio/Television Operative
- (c) Refrigeration Operative
- (d) Service Fitter
- (e) Telecommunications Operative
- (f) Approved Electrician (Instrumentation Artificer)
- (g) Approved Electrician (Marine)
- (h) Approved Instrument Pipefitter (Instrumentation Artificer)
- (i) Approved Panel Builder
- (j) Approved Radio/Television Operative
- (k) Approved Refrigeration Operative
- (l) Approved Service Fitter
- (m) Approved Telecommunications Operative
- (n) Electrical Machinery Technician
- (o) Panel Builder Technician
- (p) Radio/Television Technician
- (q) Refrigeration Technician
- (r) Technician (Marine)
- (s) Technician (Winder)
- (t) Telecommunication Technician.



K10. Training and Qualification Costs

- K10.1 Should an employer require their employees to undertake BS 7671 (IET 18th Edition Wiring Regulations) training then the costs involved will be met by the employer. Possible funding avenues will be ascertained and utilised where employees are not required by their employers to undertake BS 7671 (IET 18th Edition Wiring Regulations) training.

The Scottish Joint Industry Board (SJIB) was founded in 1969 by SELECT and Unite the Union.

Its principal objectives are to regulate relations between employers and employees, provide benefits for people engaged in the industry in Scotland, stimulate and further the progress of the industry and regulate and control employment, the level of skill and proficiency, health and safety competence, wages and welfare benefits.

The main functions are the maintenance of the National Working Rules, the registration and licensing of apprentices, grading and registration of employees, the resolution of disputes and the provision of welfare benefits.



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