



Unit title	Install Electrical Equipment for a Live Performance
SQA code	H6HX 04
SCQF level	6
SCQF credit points	7
SSC ref	COM32

History of changes

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Version number	Date	Description	Authorised by
02	20/11/2014	Update to Unit assessment information.	Qualifications Officer

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Title	Install Electrical Equipment for a Live Performance	
Learning Outcomes		Assessment Criteria
The learner will:		The learner can:
1	Understand the legislation and regulations that impact on the installation of electrical equipment.	<p>1.1 State the relevant legislation that impacts on the installation of electrical equipment in live performance scenarios.</p> <p>1.2 State the procedures that need to be followed prior to the installation.</p> <p>1.3 Describe the specific health and safety requirements related to the workplace which apply to the installation.</p> <p>1.4 Classify the hazards associated with installing electrical equipment.</p> <p>1.5 State the personal protective equipment (PPE) that should be used when installing electrical equipment.</p> <p>1.6 State the aspects of the relevant British Standards for Temporary Electrical Systems for Entertainment and Related Purposes which relate to the installation activities required.</p>
2	Know how different electrical equipment operates.	<p>2.1 Describe how a range of different items of equipment and sundries operate in a live performance scenario including:</p> <ul style="list-style-type: none"> ◆ cabling ◆ control systems ◆ lighting systems ◆ wiring enclosures <p>2.2 Describe how electrical testing equipment should be safely handled.</p> <p>2.3 Describe the safe methods for lifting and handling equipment during installation.</p>

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
	<p>2.4 Explain how components can be checked that they met the required specification using measures which include:</p> <ul style="list-style-type: none"> ◆ values ◆ tolerance ◆ current carrying capacity ◆ voltage rating ◆ power rating ◆ working temperature range <p>2.5 Describe the techniques used to terminate electrical equipment including:</p> <ul style="list-style-type: none"> ◆ plugs ◆ soldering ◆ screwed ◆ clamped ◆ crimped connections
<p>3 Know how to safely install electrical equipment.</p>	<p>3.1 Describe the different methods of attaching markers and labels to components and cables to assist with identification.</p> <p>3.2 Describe how to safely adjust components and assemblies to ensure that they function correctly.</p> <p>3.3 State the importance of making 'off-load' checks before proving the equipment with the electrical supply on.</p> <p>3.4 Describe the common problems that can occur with the installation of electrical equipment.</p> <p>3.5 Describe how common problems can be safely responded to.</p> <p>3.6 Describe suitable fault finding techniques.</p>

Learning Outcomes The learner will:	Assessment Criteria The learner can:
	<p>3.7 State the documentation that needs to be completed both during and on completion of the installation.</p> <p>3.8 State to whom problems should be reported when they exceed the Level of your own responsibility.</p>
<p>4 Be able to install electrical equipment prior to a live performance.</p>	<p>4.1 Install electrical equipment according to relevant drawings and specifications.</p> <p>4.2 Use correct tools and equipment suitable to the installation task.</p> <p>4.3 Implement equipment checks to ensure that necessary connections are operational.</p> <p>4.4 Implement action to respond to equipment faults and failures.</p> <p>4.5 Check that the full installation is complete according to the specification.</p> <p>4.6 Check that installed equipment is free from damage.</p> <p>4.7 Implement work according to health and safety and other relevant guidelines.</p>

Additional information about the Unit
Unit purpose and aim(s)
This Unit aims to assess the learners' ability to install electrical and electronic equipment that may be used to support a live performance. This includes having knowledge of how the equipment should effectively work and the regulations that may impact on its use.
Details of the relationship between the Unit and relevant national occupational standards (if appropriate)
Developed from Creative and Cultural Skills National Occupational Standards
Details of the relationship between the Unit and other standards or curricula (if appropriate)
N/A
Assessment requirements specified by a sector or regulatory body (if appropriate)
N/A

Assessment (evidence) Requirements

Assessors must ensure that learners provide evidence to cover all the Learning Outcomes and Assessment Criteria.

This Unit is designed to assess the skills of learners in the workplace. Evidence of occupational competence should be generated and collected through performance in workplace conditions. This includes the knowledge-based Learning Outcomes and Assessment Criteria of the competence Units.

These conditions would be those typical to the learner's normal place of work. The evidence collected under these conditions should also be as naturally occurring as possible. It is accepted that not all employees have identical workplace conditions and therefore there cannot be assessment conditions that are identical for all learners. However, assessors must ensure that, as far as possible, the conditions for assessment should be those under which the learner usually works.

Collection of evidence of performance can be used to substantiate, support and expand the evidence base for competent performance. This may include:

- ◆ Observation
- ◆ Product and photographic evidence
- ◆ Relevant active documentation, reports, presentations

Performance Evidence: Observation

Observation of performance at work. Assessors must provide information about the context of the assessment.

Performance Evidence: Products

Work products (such as reports, letters, memos, printouts, presentations, etc) are valuable items of performance evidence. Assessors are encouraged to assess work products and record the location of evidence within their assessment records. Assessment centres using 'paperless portfolios' should first discuss their approach to assessment with their awarding body.

Guidance on Methods/Instruments of Assessment

This Unit is designed to assess the knowledge of learners in the workplace. Learning Outcomes may be assessed by a work-based assessment or by observation/product evidence/witness testimony. Online assessment may also be used. The collection of supplementary evidence of performance can be used to further substantiate, support and expand the evidence base for competent performance where this is necessary. This may be required depending on the size of the organisation in which the learner is working.

Supplementary evidence may include:

- ◆ Questioning
- ◆ Professional discussion
- ◆ Witness testimony
- ◆ Other valid evidence which relates directly to learner performance

Guidance on Methods/Instruments of Assessment (cont)

Supporting Evidence: Questioning

Assessment by observation and examination of work products usually results in inferred knowledge. As a result, questions should only be asked to fill gaps where knowledge is not explicit. This style of assessment still requires the assessor to confirm how knowledge and understanding has been addressed but avoids over assessment of the learner.

Questioning includes: verbal and written questioning, questionnaires, work based tasks, reflective accounts, case studies, professional discussion and feedback reports.

Supporting Evidence: Professional Discussion

Professional discussion is a single, or series of structured, planned and in-depth discussions which can be recorded electronically or manually in paper, computer, audio or video files. Professional discussions can be used to support observation reports, examination of work products and knowledge questionnaires. It is more usually used to fill in gaps in existing performance and knowledge evidence. It can be used formatively and summatively, and using it enhances the assessment process for both learners and assessors.

Professional discussion is used in holistic assessment, which is rigorous, informative and cost-effective, provided the learner is competent in their job role and ready to be assessed. If these conditions are met, assessors can plan to assess naturally-occurring 'evidence-rich' opportunities at work by observation, examination of work products, professional discussion and questioning knowledge within one assessment session. It is also possible for assessors to obtain witness testimonies at the same assessment session. Such a comprehensive activity is likely to focus on major work activities that demonstrate learner competence.

Supporting Evidence: Witness Testimony

Witness testimony can provide valuable evidence of learner competence. In line with established principles it must be:

- ◆ a clear, authentic statement indicating how the learner carries out their job
- ◆ dated, signed and include the job title of the witness

Supporting Evidence: Other qualifications

Other qualifications can be used as supporting evidence in a learner's portfolio. The qualification must be current and be benchmarked to one or more of the national occupational standards. However, it will only be supporting evidence, as assessors must still make judgements about how the learner demonstrates competence at work.

SQA's Guide to Assessment provides information on appropriate instruments of assessment. This guide is designed to provide support for everyone who assesses for SQA qualifications. It looks at the principles of assessment, and brings together information on assessment in general as well as on best practice in assessment.

The *Guide to Assessment* can be downloaded free from SQA's website www.sqa.org.uk.

Creative and Cultural Skills Assessment Strategy also supports the assessment of this Unit.