

<b>Title:</b>	Supervising the Quality of Construction Work
<b>Level:</b>	4
<b>Credit value:</b>	19
<b>GLH</b>	64
<b>Unique Reference Number:</b>	<b>Y/618/8649</b>
<b>Aim:</b>	The aim of this unit is to provide learners with the skills and knowledge to be able to supervise the quality of construction work.
<b>Assessment</b>	Assessment of this unit will be through the completion of a mandatory project.
<b>Learning outcomes</b>	
<i>The learner will:</i>	
1. Be able to identify relevant quality standards and dimensional accuracy.	
<b>Delivery content:</b>	
<p>The aim of this learning outcome is to provide the learners with the skills and knowledge to identify <b>quality standards</b> and <b>dimensional accuracy information</b> requirements from available information and appropriate sources.</p> <p>The learner must:</p> <ul style="list-style-type: none"> <li>• know the relevant <b>sources of information regarding quality standards</b>.</li> <li>• know the different ways that standards are identified.</li> <li>• identify who is responsible for providing, implementing, maintaining and agreeing quality standards.</li> <li>• know the relevant <b>sources of dimensional information</b>.</li> <li>• explain the importance of work being completed to the required quality and dimensional standards.</li> <li>• know the impact of <b>construction site activities and practice</b> have on materials and completed work.</li> <li>• Explain the importance of having a Quality Plan and / or an Inspection and Test Plan</li> </ul>	
2. Be able to communicate the required information to relevant colleagues.	
<b>Delivery content:</b>	

The aim of this learning outcome is to provide the learners with the knowledge and skills to disseminate the quality standards and dimensional accuracy requirements to the people responsible for their implementation: before work starts and during construction.

The learner must know how to:

- identify the relevant individuals responsible for implementing and maintaining quality standards as part of a task.
- identify how to gather and present correct information to establish a quality standard
- describe the procedures used to ensure that people responsible receive appropriate information on quality standards and dimensional accuracy prior to the commencement of work.
- describe procedures used to agree on those quality standards established with project team
- inform relevant individuals of their responsibilities in maintaining quality standards and dimensional accuracy including, describing methods and techniques of communicating individual responsibilities for maintaining quality standards.

3. Be able to implement systems to inspect, control and record quality and accuracy of work.

**Delivery content:**

The aim of this learning outcome is to provide the learners with the skills and knowledge to be able to check that work is being completed to the required standard, accuracy and in line with design requirements and record the results.

The learner must:

- know the importance of regularly checking that work meets the requirements of the design and agreed quality standards.
- know and be able to select the appropriate **systems for inspecting and checking quality and accuracy of work.**
- know the methods of observing and checking dimension controls in a range of construction environments.
- know the methods for recording findings from dimensional checks and quality control inspections.
- be able to record findings of checks and inspections of work appropriately in line with organisational requirements.
- be able to assist in the **commissioning of finished construction projects.**

4. Be able to identify inaccurate work and work that fails to meet required design and quality standards.

**Delivery content:**

The aim of this learning outcome is to provide the learners with the skills and knowledge to be able to identify work that is dimensionally inaccurate, below the required quality standard or failing to meet design requirements.

The learner must be able to:

- describe the consequences of proceeding on a project with inaccurate or sub-standard quality work.
- identify **dimensional deviations** in position, alignment or level.
- compare completed and ongoing work against relevant quality standards and identify **quality deficiencies**.
- describe the difference between a dimensional deviation and a quality deviation.
- assess completed and ongoing work against design requirements and specification documentation.
- implement Build Quality Inspections (BQI), Inspection Test Plans (ITP), Quality Management Systems (QMS) and Total Quality Management (TQM).

5. Be able to identify and implement measures to rectify dimensional inaccuracies.

**Delivery content:**

The aim of this learning outcome is to provide the learners with the skills and knowledge to be able to recommend changes and **corrective action** to work practices and procedures.

The learner must:

- know why it is important that work procedures are revised and refined when dimensional inaccuracies are found.
- know why quality checks must be carried out constantly, thoroughly and as per the quality plan.
- be able to give examples of methods to correct dimensional deviations commonly found in construction environments.
- know the different ways and techniques to recommend revisions to work practices to colleagues.
- know how to update project quality standards after issues such as deviations or design changes.

6. Be able to ensure that corrective action is taken to rectify sub-standard work.

**Delivery content:**

The aim of this learning outcome is to provide the learners with the skills and knowledge to ensure that **corrective action** is taken when work fails to meet the required quality standard or the design requirements.

The learner must:

- know why it is important that work meets the design and quality requirements.
- know the corrective actions that can be taken to rectify work that does not meet design or quality standards.
- describe measures that should be taken to ensure corrective actions are taken when work does not meet the design, quality or dimensional standards.

7. Be able to inform relevant stakeholders on significant variations in quality standards and the implications.

**Delivery content:**

The aim of this learning outcome is to provide the learners with the skills and knowledge to inform decision makers regularly about significant variations in quality standards, programme and safety implications, and suggest improvements.

The learner must be able to:

- describe the implications of significant variations in quality standards.
- communicate with decision makers and operatives on issues with quality standards, programme and safety implications.
- Identify, explain and recommend solutions to ensure that work meets agreed quality standards.
- explain when decision makers should be informed about major variations in quality standards, programmes and possible safety implications.
- describe techniques and methods of communicating improvements to decision makers.

8. Be able to use feedback to identify and make improvements.

**Delivery content:**

The aim of this learning outcome is to provide the learners with the skills and knowledge to use two-way communication between relevant **stakeholders** to promote improvements in the quality of the construction work.

The learner must know how:

- to develop a culture to allow for feedback on the quality of the work to be made available.
- to communicate with the relevant **stakeholders** to encourage feedback.
- improvements in quality can be explained to those responsible for implementing them.

### Scope of Training

The Scope of Training identifies areas that must be covered during the delivery of this unit. This is the minimum that is expected, but tutors are expected to include other areas of knowledge which will benefit their learners, based on location, types of work available and from the tutor's own professional experience.

### Scope of Assessment

This unit is assessed by a project. The project is available from NOCN.

### Requirements

<b>Sources of information on quality standards</b>	Statutory requirements British Standards (Kitemark) International Standards Codes of Practice Organisational standards Building Regulations Agrément certificates Specifications	Trade advisory guidance Best practice Benchmarks Key performance indicators Quality management systems (QMS) Considerate Constructors Certificate
<b>Dimensional information</b>	Lines (including placing of loads) Levels (including load levels) Angles (including lift accessory angles) Distances	Curves Positions Setting out points Loads Centres of gravity
<b>Sources of dimensional information</b>	Job specifications Drawings	
<b>Systems for inspecting and checking quality and accuracy of work</b>	Visual inspections Checks with design requirements Checks with standard documentation Checks with manufacturer's documentation Checks with delivery notes Sampling and mock-ups	Site inspection reports Contractor's reports Site meetings Dimensional checks Handover checks Build Quality Inspection (BQI) Handover Quality Inspection (HQI)

	Testing	NHBC minimum standard and points rating
<b>Commissioning of finished construction projects</b>	Activities including: Commissioning utilities Commissioning services Completion of handover pack for client / end user Transfer of responsibilities (e.g. insurances etc.)	
<b>Dimensional deviations</b>	Transfer of lines and levels Use of incorrect lines and levels	Calculations Given information
<b>Quality deficiencies</b>	Deficiencies in materials Deficiencies in components Incorrect use of materials Not working to specification	Incorrect use of components Methods of construction The impacts of using recycled and / or recovered materials
<b>Corrective action</b>	Snagging and snagging lists: 5 days and 48 days etc.	Sampling of materials Remedial work
<b>Construction site activities and practice</b>	Material requisition Material receipt Handling of resources	Movement of resources Storage and protection Mechanisation of tasks
<b>Stakeholders</b>	Clients, customers and / or their representatives Contractors Consultants Construction managers Sub-contractors	Suppliers Site workforce Architects and design professionals Construction professionals
<b>Coverage of the Construction Site Supervisor Standard</b>		
<b>K6 Monitor Quality</b>	Able to define the quality required on a finished construction project	
<b>S6 Monitor Quality</b>	Assess and report on quality standards and assist in the commissioning of finished construction projects	
<b>B1 Professional Judgement</b>	Be able to work within own level of competence and know when to seek advice from others.	
<b>B2 Commitment to Code of Ethics</b>	Work within Rules and Regulations of Professional Competence and Conduct for the industry's recognised professional bodies	
<b>B5 Communicate Effectively</b>	Be able to contribute effectively to meetings and present information in a variety of ways including oral and written.	
<b>B6 Work in Teams</b>	Be able to work with others in a collaborative and non-confrontational way.	
<b>B7 Demonstrate Innovation</b>	Be able to identify areas for improvement and suggest innovative solutions	