



Regulated Qualifications Unit and Assessment Specification

Unit title	Establish and Maintain the Dimensional Control of Construction Works
Regulator unit code	R/616/7153
SQA unit code	H7SL 79
SSC Ref	COSCCOO11

History of changes

Publication date: August 2014

Version: 02 (July 2017)

Version number	Date	Description	Authorised by
02	July 2017	Unit Specification updated to reflect current Ofqual terminology	Qualifications Officer

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Regulated Qualifications Unit specification

Title	Establish and Maintain the Dimensional Control of Construction Works	
Level	3	
Credit value	15	
Learning Outcomes	Assessment Criteria	
The learner will:	The learner can:	
1 Be able to apply dimensional control criteria.	1.1	Obtain available survey information, check that it is up to date and resolve any problems.
	1.2	Correlate information on construction and installation which is relevant to the setting out of the project.
	1.3	Identify variations between the specified and the actual site dimensions, record them and circulate them to line manager.
	1.4	Provide the workforce with sufficient clear and accurate information to enable them to accurately position, align and level the work using relevant setting out techniques.
	1.5	Identify, develop and agree a method statement for setting out which will achieve the required degree of accuracy.
	1.6	Select, check and maintain measuring and recording equipment which meets the specified accuracy criteria.
	1.7	Apply relevant setting out techniques which meet the specified accuracy criteria.
	1.8	Set out reference markers which are suitably placed, accurately placed, identified clearly and protected from movement or removal.
	1.9	Record any setting out information which may be of later use and store it securely so that it is available when needed.

Learning Outcomes The learner will:	Assessment Criteria The learner can:
2 Understand how to apply dimensional control criteria.	2.1 Explain how to obtain available survey information and check that survey information is up to date. 2.2 Propose how to resolve any problems with survey information. 2.3 Propose how to correlate information on construction and installation which is relevant to the setting out of the project. 2.4 Describe what to identify as variations between the specified and the actual site dimensions, record them and circulate them to line manager. 2.5 Explain how to provide the workforce with sufficient clear and accurate information to enable them to accurately position, align and level the work using relevant setting out techniques. 2.6 Describe what to identify as a method statement for setting out which will achieve the required degree of accuracy. 2.7 Propose how to develop a method statement for setting out which will achieve the required degree of accuracy. 2.8 Evaluate how to agree a method statement for setting out which will achieve the required degree of accuracy. 2.9 Evaluate how to select, check and maintain measuring and recording equipment which meets the specified accuracy criteria. 2.10 Explain how to apply relevant setting out techniques which meet the specified accuracy criteria.

Learning Outcomes	Assessment Criteria
The learner will:	The learner can:
	<p>2.11 Explain how to set out reference markers which are suitably placed, accurately placed, identified clearly and protected from movement or removal.</p> <p>2.12 Explain how to record any setting out information which may be of later use and store it securely so that it is available when needed.</p>
<p>3 Be able to maintain the dimensional accuracy of works.</p>	<p>3.1 Check measuring and recording equipment, and apply the manufacturer's tolerances to adjust them to maintain the specified accuracy.</p> <p>3.2 Observe and measure dimensional controls, setting out points, lines and profiles accurately and record the results to meet quality standards.</p> <p>3.3 Identify any deviations in position, alignment and level and take the necessary corrective action.</p> <p>3.4 Revise work procedures and practices to minimise deviations and to allow for different circumstances and conditions.</p>
<p>4 Understand how to maintain the dimensional accuracy of works.</p>	<p>4.1 Explain how to check measuring and recording equipment, and apply the manufacturer's tolerances to adjust them to maintain the specified accuracy.</p> <p>4.2 Explain how to observe and measure dimensional controls, setting out points, lines and profiles accurately and record the results to meet quality standards.</p> <p>4.3 Describe what to identify as any deviations in position, alignment and level and take the necessary corrective action.</p> <p>4.4 Explain how to revise work procedures and practices to minimise deviations and to allow for different circumstances and conditions.</p>

Additional information about the unit
Unit purpose and aim(s)
<p>This unit is about obtaining and verifying dimensional control information, selecting techniques and equipment, setting out activities and ensuring accuracy of the work. You will need to obtain, collate and verify relevant information and using appropriate techniques and equipment, set out as required, recording information needed for later use. You will need to supply the workforce with dimensional control information, ensure that the results of setting out activities are accurate and also identify and deal with deviations. You will need to check and maintain equipment as specified by manufacturers.</p>
Unit start date
01 August 2014
Details of the relationship between the unit and relevant national occupational standards (if appropriate)
The unit sets out the competence and knowledge specification for COSCCOO11 in Construction Contracting Operations.
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)
<p>The following ranges apply: Learning Outcomes 1 and 2</p> <ul style="list-style-type: none"> ◆ Problems: <ul style="list-style-type: none"> — unclear and missing information — inconsistencies between documents ◆ Information: <ul style="list-style-type: none"> — dimensions — locations — levels (including inaccuracies and deviations) — grid systems — templates — schedules ◆ Variations: <ul style="list-style-type: none"> — boundaries — levels — locations ◆ Reference markers: <ul style="list-style-type: none"> — ground stations — base lines — benchmarks — elevated target positions

Additional information about the unit (cont)

Assessment requirements specified by a sector or regulatory body (if appropriate)

- ◆ Measuring and recording equipment:
 - mechanical
 - optical
 - electronic

Learning Outcomes 3 and 4

- ◆ Dimensional controls::
 - levels
 - lines
 - levels
 - angles
 - distances
 - curves
- ◆ Measuring and recording equipment:
 - mechanical
 - optical
 - electronic
- ◆ Deviations — arising from:
 - transfer of lines and levels
 - use of wrong lines and levels
 - calculations
- ◆ Circumstances and conditions:
 - land
 - water
 - obstacles
 - climatic variation
 - 'live' conditions (eg buildings and sites in use, roads, railways, runways)
 - planned circumstances
 - emergency circumstances
 - vandalism

This unit must be assessed in a work environment, in accordance with:

- ◆ the Additional Requirements for Qualifications using the title NVQ in QCF
- ◆ the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated.

Endorsement of the unit by a sector or other appropriate body (if required)

CITB

Additional information about the unit (cont)
Location of the Unit within the subject/sector classification system
4.1 Engineering, 5.2 Building and Construction
Name of the organisation submitting the unit
CITB
Guided Learning Hours
50

Regulated Qualifications Assessment specification

Assessment (evidence) requirements

The evidence requirements for this unit are shown in the main body of the unit under the section titled 'Assessment requirements or guidance specified by a sector or regulatory body'.

Guidance on methods/instruments of assessment

Occupational skills (OS) unit

This unit is designed to assess the skills of learners in the workplace. Observation of learner performance can only be carried out on-the-job and should always be the primary and preferred source of evidence of competent performance.

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 arise in situations where evidence from direct observation of the learners on-the-job is deemed insufficient to fully meet the required standards. Supplementary evidence may include:

- ◆ witness testimony
- ◆ questioning
- ◆ professional discussion
- ◆ product and photographic evidence
- ◆ relevant active documentation, reports, presentations
- ◆ other valid evidence which relates directly to learner performance on-the-job

SQA's Guide to Assessment 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.