

Level 1 Diploma in Carpentry and Joinery 6706-13

September 2017 Version 1.3



Qualification at a glance

Subject area	Construction
City & Guilds number	6706-13
Age group approved	16-18, 19+
Entry requirements	None
Assessment	Multiple choice/assignment
Support materials	Centre handbook Assessor guidance Task manual
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	GLH	TQT	City & Guilds number	Accreditation number
Level 1 Diploma in Carpentry and Joinery	368	390	6706-13	600/8046/2

Version and date	Change detail	Section
1.1 July 2014	Centre staffing amended	Centre requirements
1.2 December 2015	Updated range for LO 1, 3 and 4 in unit 201	5. Units
1.3 September 2017	Added GLH and TQT details	Qualification at a Glance, Structure
	Deleted QCF	Appendix



Contents

1	Introduction	4
	Structure	5
2	Centre requirements	6
	Approval	6
	Resource requirements	6
	Continuing professional development (CPD)	7
	Learner entry requirements	7
3	Delivering the qualification	8
	Initial assessment and induction	8
	Support materials	8
4	Assessment	9
5	Units	14
Unit 101/501	Principles of building construction, information and communication	19
Unit 113	Maintain and use carpentry and joinery hand tools	24
Unit 114	Prepare and use carpentry and joinery portable power tools	29
Unit 115	Produce woodworking joints	36
Unit 201/601	Health, safety and welfare in construction	41
Appendix 1	Sources of general information	48



1 Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	It is for candidates who work or want to work as a carpenter or joiner in the construction sector.
What does the qualification cover?	It allows candidates to learn, develop and practise the skills required for employment and/or career progression in carpentry or joinery. It covers the following skills: Producing basic woodworking joints, and safely using various hand and power tools.
Is the qualification part of a framework or initiative?	No
What opportunities for progression are there?	It allows candidates to progress into employment or to the following City & Guilds qualifications: • Level 2 Diploma in Site Carpentry • Level 2 Diploma in Bench Joinery

Structure

To achieve the **Level 1 Diploma in Carpentry and Joinery**, learners must achieve **39** credits from the five mandatory units. Total GLH - 368

Unit accreditation number	City & Guilds unit number	Unit title	Credit value	Guided Learning Hours (GLH)
Mandatory				
A/504/6722	Unit 101/501	Principles of building construction, information and communication	6	52
Y/504/6615	Unit 113	Maintain and use carpentry and joinery hand tools	6	56
H/504/6617	Unit 114	Prepare and use carpentry and joinery portable power tools	6	56
R/504/6614	Unit 115	Produce woodworking joints	14	134
A/504/6719	Unit 201/601	Health, safety and welfare in construction	7	70

Total Qualification Time

Total Qualification Time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. It includes both guided learning hours (which are listed separately) and hours spent in preparation, study and assessment.

Title and level	GLH	TQT
Level 1 Diploma in Carpentry and Joinery	368	390



2 Centre requirements

Approval

The approval process for Construction qualifications is available at our website. Please visit www.cityandguilds.com/construction for further information.

Resource requirements

Physical resources and site agreements

Centres will have well equipped workshops with a comprehensive range of hand and portable power tools that meet current industry standards. All powered equipment should be well maintained and PAT certified. A Bench vice will be available to each candidate. Facilities for grinding and sharpening hand tools will be available. All equipment, powered and hand tools contained within the unit must be available to the candidate, meet industrial standards and comply with current regulations.

Centre staffing

All staff who assess (tutor/deliver) these qualifications must:

- have recent relevant experience in the specific area they will be teaching;
- be technically competent in the area for which they are delivering training and/or have experience of providing training;
- have a CV available demonstrating relevant experience and any qualifications held.

All staff who quality assure these qualifications must:

- have a good working knowledge and experience within the construction industry;
- have an established strategy and documentary audit trail of internal quality assurance;
- have a good working knowledge of quality assurance procedures;
- have a CV available demonstrating relevant experience and any qualifications held.

While the Assessor/Verifier (A/V) units/TAQA are valued as qualifications for centre staff, they are not currently a requirement for these qualifications. However, we encourage trainers and assessors to qualify to the current TAQA standard.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Learner entry requirements

City & Guilds does not set entry requirements for this qualification. However, centres must ensure that learners have the potential and opportunity to gain the qualification successfully.

Age restrictions

City & Guilds cannot accept any registrations for learners under 16 as this qualification is not approved for under 16s.



3 Delivering the qualification

Initial assessment and induction

An initial assessment of each learner should be made before the start of their programme to identify:

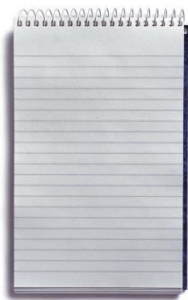
- if the learner has any specific training needs,
- support and guidance they may need when working towards their qualification
- any units they have already completed, or credit they have accumulated which is relevant to the qualification
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the qualification, their responsibilities as a learner, and the responsibilities of the centre. This information can be recorded on a learning contract.

Support materials

The following resources are available for this qualification:

Description	How to access
Assessor guide	www.cityandguilds.com
Task manual	www.cityandguilds.com
Textbook	Can be ordered from Walled Garden, via www.cityandguilds.com or from your Business Manager
Qualification approval form	www.cityandguilds.com/construction
SmartScreen	www.smartscreen.co.uk



4 Assessment

Unit	Title	Assessment method	Where to obtain assessment materials
101/501	Principles of building construction , information and communication	City & Guilds e-volve multiple choice test or on demand externally marked paper. The test covers all of the knowledge in the unit.	Examinations provided on e-volve, or question papers ordered via Walled Garden.
113	Maintain and use carpentry and joinery hand tools	Multiple choice question paper, covering knowledge outcomes. Practical assignment , covering performance outcomes. Both assessments are set by City & Guilds, delivered and marked by the tutor/assessor, and will be externally verified by City & Guilds to make sure they are properly carried out.	www.cityandguilds.com
114	Prepare and use carpentry and joinery portable power tools	Multiple choice question paper, covering knowledge outcomes. Practical assignment , covering performance outcomes. Both assessments are set by City & Guilds, delivered and marked by the tutor/assessor, and will be externally verified by City & Guilds to make sure they are properly carried out.	www.cityandguilds.com

Unit	Title	Assessment method	Where to obtain assessment materials
115	Produce woodworking joints	Multiple choice question paper, covering knowledge outcomes. Practical assignment , covering performance outcomes. Both assessments are set by City & Guilds, delivered and marked by the tutor/assessor, and will be externally verified by City & Guilds to make sure they are properly carried out.	www.cityandguilds.com
201/601	Health, safety and welfare in construction	City & Guilds e-volve multiple choice test or on demand externally marked paper. The test covers all of the knowledge in the unit.	Examinations provided on e-volve, or question papers ordered via Walled Garden.

Test specifications

The way the knowledge is covered by each test is laid out in the tables below:

Test 1: Unit 101/501 Principles of building construction, information and communication

Duration: 70 minutes

Unit	Outcome	Number of questions	%
101/501	1 Know how to identify information used in the workplace	7	20
	2 Know about environmental considerations in relation to construction	2	5.5
	3 Know about construction of foundations	4	11.5
	4 Know about construction of internal and external walls	8	23
	5 Know about construction of floors	4	11.5
	6 Know about construction of roofs	6	17
	7 Know how to communicate in the workplace	4	11.5
Total		35	100

Test 2: Unit 113 Maintain and use carpentry and joinery hand tools

Duration: 30 minutes

Unit	Outcome	Number of questions	%
113	1 Know how to maintain and use carpentry and joinery hand tools	5	25
	3 Know how to use carpentry and joinery handsaws	4	20
	5 Know how to use carpentry and joinery hand-held planes	6	30
	7 Know how to use carpentry and joinery chisels	5	25
Total		20	100

Test 3: Unit 114 Prepare and use carpentry and joinery portable power tools

Duration: 45 minutes

Unit	Outcome	Number of questions	%
114	1 Know how to maintain and store carpentry and joinery portable power tools	11	37
	3 Know how to use carpentry and joinery portable power drills	9	30
	5 Know how to use carpentry and joinery portable power saws	3	10
	7 Know how to use carpentry and joinery portable power planers and routers	4	13
	9 Know how to use carpentry and joinery portable power sanders	3	10
	Total	30	100

Test 4: Unit 115 Produce woodworking joints

Duration: 30 minutes

Unit	Outcome	Number of questions	%
115	1 Know how to select and store materials used to produce woodworking joints	8	40
	2 Know how to select and use hand tools to produce woodworking joints	5	25
	3 Know the resources required to mark out woodworking joints	3	15
	6 Know how to form a frame using woodworking joints	4	20
	Total	20	100

Test 5: Unit 201/601 Health, safety and welfare in construction

Duration: 60 minutes

Unit	Outcome	Number of questions	%
201/601	1 Know the health and safety regulations, roles and responsibilities	7	17.5
	2 Know accident and emergency reporting procedures and documentation	5	12.5
	3 Know how to identify hazards in the workplace	7	17.5

4 Know about health and welfare in the workplace	3	7.5
5 Know how to handle materials and equipment safely	2	5
6 Know about access equipment and working at heights	3	7.5
7 Know how to work with electrical equipment in the workplace	4	10
8 Know how to use personal protective equipment (PPE)	5	12.5
9 Know the cause of fire and fire emergency procedures	4	10
Total	40	100



5 Units

Availability of units

The following units can also be obtained from The Register of Regulated Qualifications: <http://register.ofqual.gov.uk/Unit>

Structure of units

These units each have the following:

- City & Guilds reference number
- unit accreditation number (UAN)
- title
- level
- credit value
- guided learning hours
- unit aim
- learning outcomes which are comprised of a number of assessment criteria

Range explained

Range gives further scope on what areas within assessment criteria must be covered. The range in a unit **must** be taught to learners and parts of the range will be assessed.

Glossary of terms

Term	Definition
Abrasive	Material used for smoothing wood, includes glass-paper
Air dried	Natural method of seasoning timber. Timber is stacked 'in-stick or pile' in open-sided covered sheds. This protects the wood from rain while allowing free air circulation.
Auger bit	Rotating cutting tool used in brace to drill holes
Belt sander	A portable sanding tool having a power-driven abrasive-coated continuous belt.
Bevel edge	To cut the edge of a board at an angle.
Block planes	A small plane that can easily be used with one hand
Boxed heart conversion	Boxing the heart refers to eliminating the heartwood from the boards that would otherwise produce shakes or may even be rotten. This can be achieved by either tangential or radial cutting.

Bridle joint	Bridle joints are very similar to the mortise and tenon joint. The difference is in the cut of both the mortise and tenon they extend to the full width of the piece being used for the tenon and the full depth of the section being used for the mortise.
Butt joint	Simple joint in which two pieces of wood are placed against each other but held with nails, screws, dowels, glue or other fasteners.
Case hardening	Case hardening caused by timber being kiln dried too rapidly, leaving the outside dry but the centre still wet which will cause it to bend when cut.
Cavity fixings	Many different types available, used to enable secure fixings when a cavity is present such as stud partition walling
Coping Saw	A saw with a thin, narrow blade used for cutting round sharp curves
Countersink	To sink the heads, screws or bolts flush with or slightly below the surface of the timber using a countersinking drill bit.
Crosscut Saw	A saw used to cut across the board perpendicular to the grain
Diamond stones	Used to hone the edges of steel tools, A diamond stone is a plate sometimes with a plastic or resin base. The plate is coated with diamond grit, an abrasive that will grind metal.
Dovetail joint	Attractive joint used for drawers and in fine furniture with interlocking teeth.
Dovetail Saw	Small saw fine-toothed saw used for cutting dovetails
Ferrule	A metal band round a wooden handle to prevent splitting
Flat bit	Used for rough boring in wood. They tend to cause splintering when they emerge from the workpiece. They are flat, with a centering point and two cutters.
G-cramp	A steel G-shaped screw cramp used for holding two materials together
Grinding angle	Angle ground on blade of plane or chisel from which the cutting edge is sharpened.
Halving joint	This is where half of each of the two boards being joined is removed, so that the two boards join together flush with one another.
High speed steel (HSS)	Often abbreviated as HSS. Material used to make planer Knives, Cutters, Saw Blades and Router Bits. Not as Hard nor as brittle as Carbide

Honing	To provide the final, durable polished finish to a an edge tool after grinding
Housing/trenching joint	Joint consisting of a groove usually cut across the grain into which the end of another member is housed or fitted to form the joint. Such as stair treads in to the string.
Jack Plane	A large plane for removing large quantities of material, as in straightening surfaces or reducing the thickness.
Kiln dried	Timber dried in controlled conditions in a large oven called a kiln
Lengthening joint	Used to join two pieces of timber together to gain a longer length. There are several methods of joining timber, dependent on the strength and finish required. Names/types can include bolted joint, lapped joint, scarf joint, spliced joint, heading joint.
Local exhaust ventilation (LEV)	An engineering control system to reduce exposures to airborne contaminants such as dust in the workplace. Commonly called dust extraction.
Manufactured boards	Manufactured Boards are man-made boards and can include Plywood, MDF (Medium density fibre Board), Block Board, Chipboard, Hard Board, OSB (oriented strand board).
Mitre joint	Similar to a butt joint, but both pieces have been bevelled (usually at a 45 degree angle).
Mortise and tenon joint	A very strong joint which is formed by a tongue-like piece or tenon. The tenon then fits into a mortise or slot cut into a second piece
Mortise chisel	Mortise chisels are used for 'chopping out' joints (chiselling away the waste wood). They are particularly useful for cutting mortise joints as they are strong enough to withstand heavy blows with a mallet.
Oil stones	A stone used for sharpening cutting tools, treated with oil to prevent steel particles from clogging the pores of the stone
Orbital sander	An electric sander that moves the abrasive in an elliptical pattern
Ovolo	A convex moulding having a cross section in the form of a quarter of a circle or of an ellipse
Pad Saw	A thin saw blade in a tool pad used for cutting holes
Panel Saw	A fine-toothed saw the teeth are at about 2.5mm spacing

Philips	Screw with cross slot in simple star shape driven by matching screwdriver.
Plough plane	Used for making grooves in timber
portable appliance test (PAT)	Is a process by which electrical appliances are routinely checked for safety.
Pozi-driv	Screw with cross slot shaped in double star which must be driven by matching screwdriver.
Proprietary	Manufactured and sold only by the owner of the patent, formula, brand name, or trademark associated with the product.
Quarter sawn	Term used in timber conversion. Cutting at a 90-degree angle from the growth rings on a log to produce a vertical and uniform pattern grain. The grain on the face of a quarter-sawn board will be parallel lines that are straight, tight and run the length of the board.
Rebate	Rectangular groove or recess in the edge of a board, which holds panel or glass in a door or picture-frame.
Rebate Plane	A plane for cutting rebates in timber
Rip Saw	A saw for cutting length-ways with the grain
Sash cramp	Cramp used for work, up to about 2m long. It is an adjustable steel bar with a bolt at one end and a fixed jaw at the other.
SDS	Extremely powerful hammer drill the 'Special Direct System' is used when extra power is required, for heavy duty work. For example drilling masonry.
Smoothing Planes	All-purpose plane used mainly for cleaning up and finishing work
Specification	Instruction detailing types of materials and methods of work to be used
Spokeshaves	Used to shape curved surfaces, consists of a blade fastened between two handles, blades come in straight, concave and convex curves.
Stress grading	A stress grade is defined as the classification of timber for structural purposes by means of either visual or machine grading. The most frequently used are C16 and the stronger C24 grades for softwoods.
Tang	The metal part of a chisel which fits into the handle.
Tangential Sawn	Term used in timber conversion. When timber is sawn at a tangent to the heart. They are stronger when placed correctly

	edge up with the load in the tangential axis.
Tenon Saw	Small saw used for the cutting of the shoulders of a tenon
Through and through	Term used in timber conversion. Produces mostly tangentially sawn timber and some quarter sawn boards. Through and through timber is the most economical form of timber conversion.
Tongue and groove joint	A joint between two boards in which a raised area on the edge (tongue) of one board fits into a corresponding groove in the edge of the other to produce a flush surface. Commonly used in floor boards
Tungsten carbide tips (TCT)	Tungsten carbide tips on tooling are very abrasion resistant and can also withstand higher temperatures than standard high speed steel tools.
Twist drill	The most common and produced in largest quantity. It comprises a cutting point at the tip of a cylindrical shaft with helical flutes.
Waney edge	Boards or pieces of timber which, instead of being cut square, show the original curve of the log from which they are cut.

Unit 101/501 Principles of building construction, information and communication

UAN:	A/504/6722
Level:	1
Credit value:	6
GLH:	52
Endorsement by a sector or regulatory body:	This unit is endorsed by ConstructionSkills
Aim:	The aim of this unit is to provide the learner with the knowledge of building methods and construction technology in relation to: • Understanding a range of building materials used within the construction industry and their suitability to the construction of modern buildings • Processes for disseminating information • Basic concepts of effective communication.

Learning outcome
The learner will:
1. know how to identify information used in the workplace
Assessment criteria
The learner can:
1.1 identify information sources used in construction
1.2 identify the scale to use with drawings in relation to BS1192
1.3 identify symbols and hatchings from drawings in relation to BS1192
1.4 state the purpose of datums used in construction.

Range
Information sources Drawings, schedule, specifications, programme of work
Drawings Block plan, site plan, detail, section

Symbols

WC, sink, bath, door, window

Hatchings

Brickwork, timber (wrot and unwrot), blockwork, concrete, hardcore, sub soil/earth, insulation, damp proof course (DPC),damp proof membrane (DPM)

Learning outcome

The learner will:

2. know about environmental considerations in relation to construction

Assessment criteria

The learner can:

- 2.1 state **features** of a building that improves efficiency
- 2.2 state the importance of **waste management**.

Range**Features**

Design features that reduce consumption of water and energy: insulation and water harvesting/conservation

Waste management

Reduce, reuse, recycle.

Learning outcome

The learner will:

3. know about construction of foundations

Assessment criteria

The learner can:

- 3.1 identify **types of foundations**
- 3.2 identify **materials** used in concrete foundations
- 3.3 state the **information** required to work out the quantity of materials used in a foundation
- 3.4 calculate volume of concrete used in single strip foundation.

Range**Types of foundations**

Strip, raft, pile, pad

Materials

Course aggregate, fine aggregate, cement, water, steel reinforcement

Information

Specification, dimensions

Learning outcome
The learner will: 4. know about construction of internal and external walls
Assessment criteria
The learner can: 4.1 identify types of internal and external walls 4.2 identify external walling materials and components 4.3 identify internal walling materials and components 4.4 calculate the area of a wall 4.5 identify materials and mix ratios used in mortar 4.6 identify wall finishes 4.7 state paint systems for new plaster.

Range
Types Solid, cavity, timber frame, stud External walling materials and components Brick, block, timber, insulation, Damp proof course (DPC), wall ties, Internal walling materials and components Stud (timber, metal), low density blockwork, plasterboard, plaster Materials Sand, lime, plasticiser, cement Wall finishes Plaster, render Paint systems mist-coat/seal, two coats of emulsion

Learning outcome
The learner will: 5. know about construction of floors
Assessment criteria
The learner can: 5.1 identify types of floors 5.2 identify components of solid concrete ground floors 5.3 identify components of timber floors .

Range
Types of floors Solid concrete ground, timber (ground, upper) Components of solid concrete ground floors Hardcore, blinding sand, damp proof membrane (DPM), insulation, oversite concrete, screed

Components of timber

Oversite concrete, sleeper walls, wall plates, DPC, joists, insulation, floor covering

Learning outcome
The learner will: 6. know about construction of roofs
Assessment criteria
The learner can: 6.1 identify types of roofs 6.2 identify components of roofs 6.3 state paint systems for timber 6.4 calculate the linear quantity of fascia board 6.5 state the importance of thermal insulation in a roof.

Range
Types of roofs Gable-ended, flat, hipped, lean-to Roof components Ridge, batten/lathe, fascia, wall plate, felt, slate/tile, truss rafters, insulation, joists, wall plate straps. Paint systems for timber Knotting, prime, undercoat, gloss, (water-based and solvent-based)

Learning outcome
The learner will: 7. know how to communicate in the workplace
Assessment criteria
The learner can: 7.1 list job roles within construction 7.2 state information needed when recording a message 7.3 list benefits of clear and effective communication 7.4 list benefits of positive communication with colleagues and others 7.5 identify communication methods used to relay information to colleagues.

Range
Job roles Professional, technician, trade, general operative Information Date, time, content, contact name and details Benefits (AC 7.3) Preventing errors, safe working, improved productivity Benefits (AC 7.4) Improved motivation, avoid conflict, complying with equality and diversity

Communication methods

Verbal, memos, telephone, email, radio, text messages

Unit 113 Maintain and use carpentry and joinery hand tools

UAN:	Y/504/6615
Level:	1
Credit value:	6
GLH:	56
Endorsement by a sector or regulatory body:	This unit is endorsed by ConstructionSkills
Aim:	The aim of this unit is to provide the learner with the knowledge and skills to be deemed trained to maintain and use carpentry and joinery hand tools in relation to: • maintaining and storing hand tools • using a range of carpentry and joinery hand tools.

Learning outcome

The learner will:

1. know how to maintain and use carpentry and joinery hand tools

Assessment criteria

The learner can:

- 1.1 state **methods** for sharpening chisels and planes
- 1.2 identify types of **sharpening equipment**
- 1.3 state **current legislation** associated with the operation of grinding wheels
- 1.4 identify potential **hazards** associated with **hand tools** and their **causes**.

Range

Methods

Grinding and honing angles.

Sharpening equipment

Diamond and oil stones, grinders.

Current legislation

Provision and Use of Work Equipment Regulations (PUWER), Health and Safety at Work Act (HASWA), Abrasive Wheel Regulations.

Hazards

Personal injury, damaging products, materials or equipment

Hand tools

Handsaws, chisels, planes

Causes

Poorly maintained equipment, misuse, incorrectly held, used and stored tools.

Learning outcome

The learner will:

2. be able to maintain, use and store carpentry and joinery hand tools

Assessment criteria

The learner can:

- 2.1 work to a given risk assessment for using **hand tools**
- 2.2 **hone** and prepare hand tools ready for use
- 2.3 store hand tools and materials in a secure and safe manner
- 2.4 follow current environmental and relevant health and safety **regulations** relating to working with carpentry and joinery hand tools.

Range**Hand tools**

Chisels, planes

Hone

Using oilstone, diamond stone.

Regulations

Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

Learning outcome

The learner will:

3. know how to use carpentry and joinery handsaws

Assessment criteria

The learner can:

- 3.1 state types and uses of carpentry and joinery **handsaws**

3.2 state why the **shape** and size of saw teeth are different for different uses.

Range

Handsaw

Coping, tenon, panel, rip, pad, dovetail, crosscut.

Shape

Rip, crosscut.

Learning outcome

The learner will:

4. be able to use carpentry and joinery handsaws

Assessment criteria

The learner can:

4.1 use carpentry and joinery **handsaws** to perform **tasks** to given **specifications**

4.2 follow current environmental and relevant health and safety **regulations** relating to working with carpentry and joinery handsaws.

Range

Handsaw

Coping, tenon, panel, rip, pad, dovetail, crosscut.

Tasks

Cutting across the grain, ripping with the grain, cutting curves and shapes, cutting manmade board.

Specifications

Working drawings, given instructions.

Regulations

Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

Learning outcome

The learner will:

5. know how to use carpentry and joinery hand-held planes

Assessment criteria

The learner can:

5.1 state types and uses of carpentry and joinery hand-held **planes**

5.2 list **parts** of a carpentry and joinery hand-held plane

5.3 state why carpentry and joinery hand-held **planes** are available in different lengths.

Range

Planes (AC 5.1)

Block, jack, smoothing, rebate and plough planes, spokeshaves.

Parts

Knob, handle, lateral and depth adjustment, cap and backing iron, cutting iron/blade, sole, toe heel, mouth, frog.

Planes (AC 5.3)

Bench planes – smoothing, jack, try

Learning outcome

The learner will:

6. be able to use carpentry and joinery hand-held planes

Assessment criteria

The learner can:

6.1 use **carpentry and joinery hand-held planes** to perform **tasks** to given **specifications**

6.2 follow current environmental and relevant health and safety **regulations** relating to working with hand-held planes.

Range

Carpentry and joinery hand-held planes

Block, jack, smoothing, rebate and plough planes, spokeshaves.

Tasks

Planing timber straight, square and to given width and thickness, forming grooves and rebates, internal and external curves, cleaning up.

Specifications

Working drawings, given instructions.

Regulations

Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

Learning outcome

The learner will:

7. know how to use carpentry and joinery chisels

Assessment criteria

The learner can: 7.1 state types and uses of carpentry and joinery chisels and mallet 7.2 list parts of a chisel.
--

Range
Chisels Bevel edge, mortice, paring and firmer chisels. Parts Blade, tang, washer, ferrule, handle.

Learning outcome
The learner will: 8. be able to use carpentry and joinery chisels
Assessment criteria
The learner can: 8.1 use carpentry and joinery chisels and mallet to perform tasks to given specifications 8.2 follow current environmental and relevant health and safety regulations related to working with carpentry and joinery chisels.

Range
Carpentry and joinery chisels Bevel edge and mortice chisels. Tasks Creating housings and mortices, stopped chamfers and recesses Specifications Working drawings, given instructions. Regulations Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

Unit 114

Prepare and use carpentry and joinery portable power tools

UAN:	H/504/6617
Level:	1
Credit value:	6
GLH:	56
Endorsement by a sector or regulatory body:	This unit is endorsed by ConstructionSkills
Aim:	The aim of this unit is to provide the learner with the knowledge and skills to be deemed trained to prepare and use carpentry and joinery portable power tools in relation to: • maintaining and storing portable power tools • using a range of carpentry and joinery portable power tools.

Learning outcome
The learner will: 1. know how to maintain and store carpentry and joinery portable power tools
Assessment criteria
The learner can: 1.1 state types of power sources used for portable power tools 1.2 state the importance of having valid portable appliance test (PAT) date certificates 1.3 identify types of tooling and their uses 1.4 state the safety equipment required when using different types of portable power tools 1.5 state the importance of maintaining tools in relation to manufacturers' instructions 1.6 state current legislation associated with the operation of portable power tools 1.7 state the importance of storing portable power tools safely and securely 1.8 identify potential hazards associated with power tools and their causes.

Range
Power sources Mains electric 240 and 110 volt, battery, gas, compressed air. Power tools Sanders, screwdrivers, drills (hammer and SDS rotary), planer, router, jigsaw, hand held circular saw, chop saw and nail guns. Tooling Router cutters, tungsten carbide tips (TCT) drill bits, saw blades and high speed steel (HSS) drill bits, auger bits, jigsaw blades, flat bits, countersink, planer blades, abrasive paper. Safety equipment Ear defenders, ear plugs, dust masks, respirators, eye protection, guarding, local exhaust ventilation (LEV). Current legislation Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations. Hazards Personal injury, damaging products, materials or equipment. Causes Poorly maintained equipment, misuse, ejected dust and materials.

Learning outcome
The learner will: 2. be able to maintain and store carpentry and joinery portable power tools
Assessment criteria
The learner can: 2.1 prepare types of power sources ready for operating portable power tools 2.2 check tools, guards and cables for damage and ensure tools have a valid test certificate 2.3 charge batteries in accordance with the manufacturers' instructions 2.4 change tooling on portable power tools in accordance with manufacturers' instructions 2.5 check for damaged or incorrectly installed tooling 2.6 clean and store portable power tools safely and securely 2.7 follow current environmental and relevant health and safety regulations relating to working with portable power tools.

Range
Power sources Mains electric 240 and 110 volt, battery. Power tools Sanders, screwdrivers, drills (hammer and SDS rotary), planer, router, jigsaw, chop saw, hand held circular saw. Tooling Router cutters, tungsten carbide tips (TCT) drill bits, saw blades and high speed steel (HSS) drill bits, auger bits, jigsaw blades, flat bits, countersink, planer blades, abrasive paper.. Regulations Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

Learning outcome
The learner will: 3. know how to use carpentry and joinery portable power drills
Assessment criteria
The learner can: 3.1 state types and uses of portable power drills 3.2 state the different types and sizes of screwdriver bits 3.3 state the different types of drill bits 3.4 identify suitable fixings for different materials and surfaces 3.5 state methods used to locate services prior to carrying out the drilling operation.

Range
Portable power drills Drills (hammer and SDS rotary), screwdrivers. Types and sizes of screwdriver bits Pozi-driv (PZ1,2,3), Philips (PH1,2,3), slotted. Types Drills bits twist, auger, flat bits, countersink. Fixings Plastic plugs, screws, cavity fixings, nails. Surfaces Masonry, metal, concrete, timber and plasterboard. Services Water pipes, waste pipes, gas pipes and electric cables.

Learning outcome
The learner will: 4. be able to use carpentry and joinery portable power drills
Assessment criteria
The learner can: 4.1 use portable power drills to perform tasks to given specifications 4.2 follow current environmental and relevant health and safety regulations relating to working with portable power drills.

Range
Portable power drills Battery, screwdrivers. Tasks Drilling (auger, flat, twist), countersinking, fixing. Specifications Working drawings, given instructions. Regulations Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

Learning outcome
The learner will: 5. know how to use carpentry and joinery power saws
Assessment criteria
The learner can: 5.1 state uses of portable power saws 5.2 state the purpose of operation guards on portable power chop saws.

Range
Uses straight, angled cutting; cutting of curves and shapes Saws chop saw, reciprocating saw/jigsaw, hand held circular saw

Learning outcome
The learner will: 6. be able to use carpentry and joinery portable power saws
Assessment criteria
The learner can:

- 6.1 use portable power chop saw to **cut** timber to given **specifications**
- 6.2 use portable power jigsaw to **cut** board materials to given **specifications**
- 6.3 follow current environmental and relevant health and safety **regulations** relating to working with portable power saws.

Range
Cut (AC 6.1) Straight, angled. Cut (AC 6.2) Internal and external curves. Specifications Working drawings, given instructions. Regulations Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

Learning outcome
The learner will: 7. know how to use carpentry and joinery portable power planers and routers
Assessment criteria
The learner can: 7.1 state uses of a portable power planer 7.2 state uses of a portable power router 7.3 identify types of router cutters 7.4 identify the components used to make adjustments to cutting depths and widths.

Range
Uses (AC7.1) Finishing timber, rebating, bevelling, sizing. Uses (AC 7.2) Moulding, rebating, grooving, trimming, edging, housing trenching. Router cutters Straight, ovolo, chamfer.

Components Fence, depth stop gauge.

Learning outcome The learner will: 8. be able to use carpentry and joinery portable power planers and routers
Assessment criteria The learner can: 8.1 adjust and use portable power planer to work timber to given specifications 8.2 adjust and use portable power router to work timber to given specifications 8.3 follow current environmental and relevant health and safety regulations relating to working with portable power planers and routers.

Range Specifications Working drawings, given instructions. Regulations Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

Learning outcome The learner will: 9. know how to use carpentry and joinery portable power sanders
Assessment criteria The learner can: 9.1 state uses of portable power sanders 9.2 identify grades and uses of abrasive paper.

Range Sanders Belt, orbital. Uses (AC 9.1) Belt – stock removal, orbital – finishing. Grades 60 – 240 grit. Uses (AC 9.2) Fine grit – finishing, coarse grit – stock removal.
--

Learning outcome
The learner will: 10. be able to use carpentry and joinery portable power sanders
Assessment criteria
The learner can: 10.1 use portable power orbital sander to finish work to given specifications 10.2 follow current environmental and relevant health and safety regulations relating to working with portable power sanders.

Range
Specifications Working drawings, given instructions. Regulations Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

UAN:	R/504/6614
Level:	1
Credit value:	14
GLH:	134
Endorsement by a sector or regulatory body:	This unit is endorsed by ConstructionSkills
Aim:	The aim of this unit is to provide the learner with the knowledge and skills to be deemed trained to produce basic woodworking joints in relation to: • forming basic woodworking joints • selecting and marking out materials • selecting and using hand tools.

Learning outcome
The learner will: 1. know how to select and store materials used to produce woodworking joints
Assessment criteria
The learner can: 1.1 state methods of timber conversion 1.2 state methods of seasoning timber 1.3 state the importance of storing and protecting woodworking materials 1.4 state the characteristics of different woodworking materials 1.5 identify common defects founds in timber.

Range
Methods (AC1.1) Through and through and quarter sawn, boxed heart, tangential. Methods (AC1.2) Air dried and kiln dried. Importance To prevent theft, damage (weather, accidental), defects (warping, twisting).

Woodworking materials

Softwood, hardwood, timber manufactured boards (chipboard, plywood, medium density fibreboard (MDF).

Characteristics

Workability, durability, cell structure, tree growth, stress grading, hardwood and softwood, origin of timber, planed and sawn, common sizes.

Defects

Natural (live knots, dead knots, cup shakes, sap ducts, waney edge, starshake, heartshake), seasoning (twists, cupping, springing, bowing), case hardening.

Learning outcome

The learner will:

2. know how to select and use hand tools to produce woodworking joints

Assessment criteria

The learner can:

- 2.1 state uses of woodworking **hand tools** when producing woodworking joints
- 2.2 identify the **holding devices** used to support the work
- 2.3 list common **faults** with woodworking hand tools.

Range**Hand tools**

Chisels (bevel edged and mortice), mallets, tenon saw, handsaws, hammers, smoothing plane, wood-boring tools, marking squares, screwdrivers, mortice gauge, measuring tapes and rules, sash cramp, G-cramp, F-cramp.

Holding devices

Bench hook, vice, proprietary cramps.

Faults

Bluntness, split handles, loose parts, damaged.

Learning outcome

The learner will:

3. know the resources required to mark out woodworking joints

Assessment criteria

The learner can:

- 3.1 state the **importance** of using working drawings and setting out rods
- 3.2 identify **marking out tools**.

Range

Importance To ensure accuracy, consistency.
Marking out tools Tape measure, set square, compasses, dividers, rulers, marking gauges, pencils and trammels.

Learning outcome
The learner will: 4. be able to mark out woodworking joints
Assessment criteria
The learner can: 4.1 produce a setting out rod 4.2 use a setting out rod when marking out woodworking joints to form a frame 4.3 use appropriate marking out tools to produce woodworking joints to form a frame 4.4 follow current environmental and relevant health and safety regulations relating to marking out woodworking joints.

Range
Marking out tools Tape measure, set square, compasses, dividers, rulers, marking gauges, pencils and trammels.
Regulations Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), environmental regulations.

Learning outcome
The learner will: 5. be able to select and use hand tools and materials to produce basic woodworking joints
Assessment criteria
The learner can: 5.1 select woodworking materials in accordance with given specifications to produce woodworking joints 5.2 work to a given risk assessment for using hand tools 5.3 select and use woodworking hand tools to produce woodworking joints 5.4 use holding devices to support the work 5.5 identify faults with woodworking hand tools as appropriate 5.6 follow current environmental and relevant health and safety regulations relating to using woodworking hand tools.

Range
Woodworking materials

Softwood, hardwood, timber manufactured boards (chipboard, plywood, medium density fibreboard (MDF).

Specifications

Working drawings, given instructions.

Hand tools

Chisels (bevel edged and mortice), mallets, tenon saw, handsaws, hammers, smoothing plane, wood-boring tools, screwdrivers, sash cramp, G-cramp, F-cramp.

Woodworking joints

Housing, mortice and tenon, lengthening, bridle, halving, dovetail, mitre, butt and edge.

Holding devices

Bench hook, vice, proprietary cramps.

Faults

Bluntness, split handles, loose parts, damage.

Regulations

Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

Learning outcome

The learner will:

6. know how to form a frame using woodworking joints

Assessment criteria

The learner can:

6.1 identify different **woodworking joints** used to form frames

6.2 state different **uses** for woodworking joints.

Range

Woodworking joints

Housing, mortice and tenon, lengthening (scarf, heading), bridle, halving, dovetail, mitre, butt and edge, widening (rubbed, loose tongue).

Uses

Framing, widening, lengthening.

Learning outcome

The learner will:

7. be able to form a frame using woodworking joints

Assessment criteria

The learner can:

7.1 produce and assemble **woodworking joints** to form a frame

7.2 follow current environmental and relevant health and safety **regulations** relating to using woodworking joints.

Range

Woodworking joints

Housing, mortice and tenon, bridle, halving, dovetail.

Regulations

Provision and Use of Work Equipment Regulations (PUWER), Personal Protective Equipment at Work (PPE), Control of Substances Hazardous to Health (COSHH), abrasive wheels regulations, vibration at work regulations, control of noise at work regulations, environmental regulations.

Unit 201/601 Health, safety and welfare in construction

UAN:	A/504/6719
Level:	2
Credit value:	7
GLH:	70
Endorsement by a sector or regulatory body:	This unit is endorsed by Construction Skills, the Sector Skills Council for the construction industry.
Aim:	The aim of this unit is to provide the learner with the knowledge to carry out safe working practices in construction, in relation to sourcing relevant safety information and using the relevant safety procedures at work

Learning outcome
The learner will:
1. know the health and safety regulations, roles and responsibilities
Assessment criteria
The learner can:
1.1 identify health and safety legislation relevant to and used in the construction environment
1.2 state employer and employee responsibilities under the Health and Safety at Work Act (HASWA)
1.3 state roles and responsibilities of the Health and Safety Executive (HSE)
1.4 identify organisations providing relevant health and safety information
1.5 state the importance of holding on-site safety inductions and toolbox talks.

Range
Health and safety legislation Health and Safety at Work Act, Reporting Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), Control of Substances Hazardous to Health (COSHH), Construction, Design and Management (CDM) regulations , Provision and Use of Work Equipment Regulations (PUWER), manual handling operations Regulations, Personal Protective Equipment (PPE) at Work

Regulations, Work at Height Regulations, Control of Noise at Work Regulations, Control of Vibration at Work Regulations, Electricity at Work Regulations, Lifting operations and Lifting Equipment Regulations (LOLER)

Employer responsibilities

Safe working environment, adequate staff training, health and safety information, site inductions, toolbox talks, risk assessment, supervision, PPE, reporting hazards, accidents and near misses, sections 2 to 9 of Health and Safety at Work Act, CDM reg's, construction phase plans, welfare, display public liability Insurance and health and safety law poster.

Employee responsibilities

Working safely, working in partnership with the employer, reporting hazards, accidents and near misses, following organisational procedures as per Sections 2 to 9 of Health and Safety at Work Act.

Roles and responsibilities:

Enforcement (including fees for intervention), legislation and advice, inspection, investigation eg site investigations.

Organisations

Health and Safety Executive (HSE) website, Institute of Occupational Safety and Health, British Safety Council, 'manufacturer', ROSPA.

Learning outcome

The learner will:

2. know accident and emergency reporting procedures and documentation

Assessment criteria

The learner can:

- 2.1 state legislation used for reporting accidents
- 2.2 state major **types of emergencies** that could occur in the workplace
- 2.3 identify reportable injuries, diseases and dangerous occurrences as per RIDDOR
- 2.4 state main types of **records** used in the event of an accident, emergency and near miss and reasons for reporting them
- 2.5 identify **authorised personnel** involved in dealing with accident and emergency situations
- 2.6 state **actions** to take when discovering an accident.

Range

Types of emergencies

Fires, security incidents, gas leaks.

Records:

Accident book, first aid records, organisational records and documentation.

Authorised personnel

First aiders, supervisors/managers, health and safety executive, emergency services, safety officer.

Actions

Area made safe, call for help, emergency services.

Learning outcome

The learner will:

3. know how to identify hazards in the workplace

Assessment criteria

The learner can:

- 3.1 state the importance of **good housekeeping**
- 3.2 state reasons for risk assessments and method statements
- 3.3 identify **types of hazards** in the workplace
- 3.4 state the importance of the correct storage of combustibles and chemicals on site
- 3.5 identify different **signs and safety notices** used in the workplace.

Range**Good housekeeping:**

Cleanliness, tidiness, use of skips and chutes, segregation of materials, clear access to fire escapes, clear access to fire extinguishers.

Types of hazards:

Fires, slips, trips and falls, hazardous substances (relating to inhalation, absorption, exposure, ingestion, cross-contamination), electrical, asbestos, manual handling, plant and vehicle movement, adverse weather.

Signs and safety notices:

Prohibition, mandatory, warning, safe condition, supplementary.

Learning outcome

The learner will:

4. know about health and welfare in the workplace

Assessment criteria

The learner can:

- 4.1 identify requirements for welfare facilities in the workplace as per Construction Design Management (CDM)

- | | |
|-----|---|
| 4.2 | state health effects of noise and precautions that can be taken |
| 4.3 | state risks associated with drugs, alcohol and medication which could affect performance in the workplace. |

Range

Precautions

Reducing noise at source, PPE, isolation, exposure time.
--

Risks

Reduced risk perception, loss of concentration, balance problems, absenteeism and reduced productivity.

Learning outcome

The learner will:

- | |
|--|
| 5. know how to handle materials and equipment safely |
|--|

Assessment criteria

The learner can:

- | |
|--|
| 5.1 identify legislation relating to safe handling of materials and equipment |
| 5.2 state procedures for safe lifting and manual handling activities in accordance with guidance and legislation |
| 5.3 state the importance of using lifting aids when handling materials and equipment. |

Range

Lifting aids

Wheelbarrow, sack barrow, mechanical lifting aids, pallet truck.
--

Learning outcome

The learner will:

- | |
|---|
| 6. know about access equipment and working at heights |
|---|

Assessment criteria

The learner can:

- | |
|--|
| 6.1 identify legislation relating to working at heights |
| 6.2 identify types of access equipment |
| 6.3 state safe methods of use for access equipment |
| 6.4 identify dangers of working at height. |

Range

Access equipment:

Stepladders, ladders (pole, extension), trestles, hop-ups, proprietary scaffolding, podium, stilts
--

Safe methods

Regular inspection, check for broken, damaged or missing components,
responsible use, consideration of adverse weather conditions,
good housekeeping

Dangers

Falling tools, falling equipment, falling materials, persons falling from height (injuries to themselves and others).

Learning outcome

The learner will:

7. know how to work with electrical equipment in the workplace

Assessment criteria

The learner can:

- 7.1 state **precautions** to take to avoid risks to self and others when working with electrical equipment
- 7.2 state **dangers** of using electrical equipment
- 7.3 identify **voltages** and voltage colour coding that are used in the workplace
- 7.4 state **methods** of storing electrical equipment.

Range**Precautions**

Check leads, check plugs, use of cable hangers, check tools and equipment, current valid PAT certificate

Dangers:

Burns, electrocution, fire.

Voltages

Battery powered, 110/115 volts, 230/240 volts and 415 volts.

Methods

Components present, equipment cleaned, checked for damage, stored in a clean and secure location.

Learning outcome

The learner will:

8. know how to use Personal Protective Equipment (PPE)

Assessment criteria

The learner can:

- 8.1 state the legislation governing use of Personal Protective Equipment (PPE)
- 8.2 state **types of PPE** used in the workplace
- 8.3 state the importance of PPE

8.4	state why it is important to store, maintain and use PPE correctly
8.5	state the importance of checking and reporting damaged PPE.

Range
PPE: Head protection, eye protection, ear protection, face/dust masks, breathing apparatus, high visibility clothing, safety footwear, gloves, sun protection, barrier cream, water proofs, knee pads, overalls/disposable clothing

Learning outcome
The learner will:
9. know the cause of fire and fire emergency procedures
Assessment criteria
The learner can:
9.1 state elements essential to creating a fire
9.2 identify methods of fire prevention
9.3 state actions to be taken on discovering a fire
9.4 state types of fire extinguishers and their uses.

Range
Elements Oxygen, fuel, heat.
Types of fire extinguishers: Water, foam, CO2, dry powder.



Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on www.cityandguilds.com.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- Regulatory Arrangements for the Qualifications and Credit Framework (2008)
- SQA Awarding Body Criteria (2007)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information on such things as:

- **Walled Garden:** how to register and certificate candidates on line
- **Events:** dates and information on the latest Centre events
- **Online assessment:** how to register for e-assessments.

City & Guilds
Believe you can



www.cityandguilds.com

Useful contacts

UK learners General qualification information	T: +44 (0)844 543 0033 E: learnersupport@cityandguilds.com
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: intcg@cityandguilds.com
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: centresupport@cityandguilds.com
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: singlesubjects@cityandguilds.com
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: intops@cityandguilds.com
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: walledgarden@cityandguilds.com
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: business@cityandguilds.com
Publications Logbooks, Centre documents, Forms, Free literature, Textbooks, Smartscreen	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

Every effort has been made to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement and the right is reserved to change products and services from time to time. City & Guilds cannot accept liability for loss or damage arising from the use of information in this publication.

If you have a complaint, or any suggestions for improvement about any of the services that we provide, email: feedbackandcomplaints@cityandguilds.com

About City & Guilds

As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Licence to Practice (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

Copyright

The content of this document is, unless otherwise indicated, © The City and Guilds of London Institute and may not be copied, reproduced or distributed without prior written consent. However, approved City & Guilds centres and candidates studying for City & Guilds qualifications may photocopy this document free of charge and/or include a PDF version of it on centre intranets on the following conditions:

- centre staff may copy the material only for the purpose of teaching candidates working towards a City & Guilds qualification, or for internal administration purposes
- candidates may copy the material only for their own use when working towards a City & Guilds qualification

The *Standard Copying Conditions* (see the City & Guilds website) also apply.

Please note: National Occupational Standards are not © The City and Guilds of London Institute. Please check the conditions upon which they may be copied with the relevant Sector Skills Council.

Published by City & Guilds, a registered charity established to promote education and training

City & Guilds

1 Giltspur Street

London EC1A 9DD

T +44 (0)844 543 0000

F +44 (0)20 7294 2413

www.cityandguilds.com