City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) (6571-51,52,53,54,55,56,57)

September 2020 Version 1.1





Qualification at a glance

Subject area	Wood Occupations (Construction)
City & Guilds number	6571
Age group approved	16-18,19+
Assessment	Portfolio of evidence
Support materials	Centre handbook Candidate logbook
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	City & Guilds number	Accreditation number
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Site Carpentry	6571-51	603/5962/6
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Architectural Joinery	6571-52	603/5962/6
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Wheelwrighting	6571-53	603/5962/6
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Shopfitting Site Work	6571-54	603/5962/6
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Shopfitting Bench Work	6571-55	603/5962/6
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Structural Post and Beam Carpentry	6571-56	603/5962/6
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Timber Frame Erection	6571-57	603/5962/6

Version and date	Change detail	Section
v1	CITB incremental changes from 6571-27/33	
June 2020	TQT and GLH updated throughout	
Julic 2020	Units have new unit numbers and	
	101 changed to 102	
	301 changed to 303	
	302 changed to 300	
	344 changed to 354	
	501 changed to 502	
	651 changed to 653	
	614 changed to 615	
	727 changed to 728	
	336 changed to 366	
	329 changed to 330	
	342 changed to 352	
	326 changed to 327	
	603 changed to 624	
	606 changed to 607	
	719 changed to 721	
	334 changed to 364	
	277 changed to 289	
	278 changed to 288	
	279 changed to 297	
	605 changed to 625	
	325 changed to 355	
	652 changed to 655	
	718 chagned to 724	
	333 changed to 363	
	680 changed to 681	
	305 changed to 306	
	304 changed to 384	
	315 changed to 318	
	715 changed to 723	
	247 changed to 249	
	248 changed to 250	
	313 changed to 314	
	348 changed to 349	
	346 Changed to 349	
	The section becomes the blood following	
	The main changes are in the following	
	units - 305, 315, 327, 329, 236, 329, 352, 353, 355, 356, 357, 364, 363, 366. 624,	
	607, 615, 625, 653, 716, 721, 724, 728	
	007, 013, 023, 033, 710, 721, 724, 720	
	Summary of changes can vary from unit	
	to unit typically	
	Minor amendments in AC, 1.1, 1.2, 2.1,.2.2,2.4 3.1, 3.3, 3.4, 4.6, 4.7 5.2, 6.2	
	Additions/deletions to lists within ACs typically includes 1.4, 2.1, 4.2, LO7 (e.g.7.4/7.5)	

	Addition of new ACs typically 3.2, 4.3, 7.2 and LO 7	
	Signification changes to ACs within LO 7 usually includes deletion of AC 7.4 , 7.5 and 7.6 and renumbering of remaining ACs	
5.0 July 2020	Structural changes and TQT	
V1.1 August 2020	Title updated; minor amendments to formatting	



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1 Introduction



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

Area	Description
Who is the qualification for?	This qualification is for candidates who work or want to work as a site carpenter, architectural joiner, wheelwrighter, or a shopfitter 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 and joinery. It covers the following specialist areas: • Site carpentry • Architectural joinery • Wheelwrighting • Shopfitting bench work.
Is the qualification part of a framework or initiative?	This qualification forms the competence-based element of the Advanced Apprenticeship in Construction Building (Level 3), Pathway 2: Wood Occupations.
What opportunities for progression are there?	Apprentices who follow the Site Carpentry/Shopfitting pathway can have a varied career working on new builds, refurbishments or in specialist areas. Architectural Joinery apprentices will see a variety of wood products in production, depending upon the company. This apprenticeship will enable progression to: NVQ Level 6 Diploma in Construction Contracting Operations NVQ Level 6 Diploma in Construction Site Management After gaining work experience in the chosen occupational area there are also opportunities to progress into occupational work supervision, management or technical support areas or a higher level qualification in construction.

Structure

To achieve the **City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Site Carpentry (6571-51)**, learners must achieve **9 units** in total; **7 units** must be achieved from the mandatory units and a minimum of **2 units** from the optional units available.

City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Site Carpentry

Unit accreditation number	City & Guilds unit number	Unit title	TQT	Level
Mandatory				
T/618/1367	102	Conforming to General Health, Safety and Welfare in the Workplace	20	1
F/618/1386	303	Confirming the Occupational Method of Work in the Workplace	110	3
R/618/1389	300	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	100	3
L/618/1665	356	Installing Bespoke First Fixing Components in the Workplace	180	3
R/618/1666	357	Installing Bespoke Second Fixing Components in the Workplace	230	3
Y/618/1393	502	Developing and Maintaining Good Occupational Working Relationships in the Workplace	80	3
Y/618/1667	716	Setting Up and Using Transportable Cutting and Shaping Machines in the Workplace	240	2
Optional				
D/618/1668	236	Erecting Structural Carcassing Components in the Workplace	200	2
H/618/1669	314	Erecting Roof Structure Carcassing Components in the Workplace	260	3
Y/618/1670	353	Maintaining Non-structural and structural Components in the Workplace	290	3

To achieve the City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Architectural Joinery (6571-52),

learners must achieve **10** units in total; **9** units must be achieved from the mandatory units and a minimum of **1 unit** from the optional units available.

City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Architectural Joinery

Unit accreditation number	City & Guilds unit number	Unit title	TQT	Level
Mandatory				_
T/618/1367	102	Conforming to General Health, Safety and Welfare in the Workplace	20	1
F/618/1386	303	Confirming the Occupational Method of Work in the Workplace	110	3
R/618/1389	300	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	100	3
A/618/1676	354	Manufacturing Bespoke Architectural Joinery Products in the Workplace	260	3
Y/618/1393	502	Developing and Maintaining Good Occupational Working Relationships in the Workplace	80	3
F/618/1677	653	Manufacturing Routine Architectural Joinery Products in the Workplace	190	2
J/618/1678	615	Marking Out from Setting Out Details for Routine Architectural Joinery Products in the Workplace	120	2
L/618/1679	728	Producing Setting Out Details for Routine Architectural Joinery Products in the Workplace	140	3
F/618/1680	366	Setting up and Using Fixed Machinery in the Workplace	260	3
Optional				
J/618/1681	330	Producing CAD Setting Out Details in the Workplace	300	3
L/618/1682	352	Producing Setting Out Details for Bespoke Architectural Joinery Products in the Workplace	200	3
R/618/1683	681	Producing Wood and Wood-based Products Using Computer Numerically Controlled / Numerically Controlled Machinery (CNC/NC) in the Workplace	200	2

To achieve the City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Wheelwrighting (6571-53), learners must achieve 9 units in total; 8 units must be achieved from the mandatory units and a minimum of 1 unit from the optional units available.

City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Wheelwrighting

Unit accreditation number	City & Guilds unit number	Unit title	TQT	Level
Mandatory				
T/618/1367	102	Conforming to General Health, Safety and Welfare in the Workplace	20	1
F/618/1386	303	Confirming the Occupational Method of Work in the Workplace	110	3
R/618/1389	300	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	100	3
Y/618/1684	327	Manufacturing Bespoke Wheelwrighting Products in the Workplace	250	3
Y/618/1393	502	Developing and Maintaining Good Occupational Working Relationships in the Workplace	80	3
D/618/1685	624	Manufacturing Routine Wheelwrighting Products in the Workplace	190	2
H/618/1686	607	Marking Out from Setting Out Details for Routine Wheelwrighting Products in the Workplace	120	2
K/618/1687	721	Producing Setting Out Details for Routine Wheelwrighting Products in the Workplace	140	2
Optional				_
T/618/1742	364	Producing Setting Out Details for Bespoke Wheelwrighting Products in the Workplace	200	3
F/618/1680	366	Setting Up and Using Fixed Machinery in the Workplace	250	3

To achieve the City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Shopfitting Site Work (6571-54), learners must achieve a total of **9 units** from the mandatory units.

City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Shopfitting Site Work

Unit accreditation number	City & Guilds unit number	Unit title	TQT	Level
Mandatory				
T/618/1367	102	Conforming to General Health, Safety and Welfare in the Workplace	20	1
Y/618/1698	289	Installing Shopfitting Fitments in the Workplace	130	2
R/618/1697	288	Installing Shopfitting Frames and Finishings in the Workplace	127	2
D/618/1699	297	Installing Shopfronts and Finishings in the Workplace	150	2
F/618/1386	303	Confirming the Occupational Method of Work in the Workplace	110	3
R/618/1389	300	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	100	3
K/618/1690	625	Marking Out from Setting Out Details for Routine Shopfitting Products in the Workplace	120	2
Y/618/1393	502	Developing and Maintaining Good Occupational Working Relationships in the Workplace	80	3
Y/618/1667	716	Setting Up and Using Transportable Cutting and Shaping Machines in the Workplace	240	2

To achieve the City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Shopfitting Bench Work (6571-55), learners must achieve 10 units in total; 9 units must be achieved from the mandatory units and a minimum of 1 unit from the optional units available.

City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Shopfitting Bench Work

Unit accreditation number	City & Guilds unit number	Unit title	TQT	Level
Mandatory				
T/618/1367	102	Conforming to General Health, Safety and Welfare in the Workplace	20	1
F/618/1386	303	Confirming the Occupational Method of Work in the Workplace	110	3
R/618/1389	300	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	100	3
M/618/1688	355	Manufacturing Bespoke Shopfitting Products in the Workplace	250	3
Y/618/1393	502	Developing and Maintaining Good Occupational Working Relationships in the Workplace	80	3
T/618/1689	655	Manufacturing Routine Shopfitting Products in the Workplace	190	2
K/618/1690	625	Marking Out from Setting Out Details for Routine Shopfitting Products in the Workplace	120	2
M/618/1691	724	Producing Setting Out Details for Routine Shopfitting Products in the Workplace	140	2
F/618/1680	366	Setting Up and Using Fixed Machinery in the Workplace	250	3
Optional				
J/618/1681	330	Producing CAD Setting Out Details in the Workplace	300	3
T/618/1692	363	Producing Setting Out Details for Bespoke Shopfitting Products in the Workplace	200	3
R/618/1683	681	Producing Wood and Wood- based Products Using Computer Numerically Controlled / Numerically Controlled Machinery (CNC/NC) in the Workplace	220	2

To achieve the City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Structural Post and Beam Carpentry (6571-56), learners must achieve 7 units in total; 5 units must be achieved from the mandatory units and a minimum of 2 units from the optional units available.

City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Structural Post and Beam Carpentry

Unit accreditation number	City & Guilds unit number	Unit title	TQT	Level
Mandatory				
T/618/1367	102	Conforming to General Health, Safety and Welfare in the Workplace	20	1
F/618/1386	303	Confirming the Occupational Method of Work in the Workplace	110	3
R/618/1389	300	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	100	3
A/618/1693	306	Designing and Fabricating Structural Timber Connections in the Workplace	350	3
Y/618/1393	502	Developing and Maintaining Good Occupational Working Relationships in the Workplace	80	3
Optional				
F/618/1694	384	Conserving or Restoring Heavy Timber Framework in the Workplace	320	3
J/618/1695	318	Fabricating Post and Beam Components in the Workplace	330	3
J/618/1681	330	Producing CAD Setting Out Details in the Workplace	300	3
R/618/1683	681	Producing Wood and Wood- based Products Using Computer Numerically Controlled/Numerically Controlled (CNC/NC) Machinery in the Workplace	220	2
L/618/1696	723	Slinging and Hand Signalling the Movement of in the Workplace	100	2

To achieve the City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Timber Frame Erection (6571-57), learners must achieve 9 mandatory units in total.

City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Timber Frame Erection

Unit accreditation number	City & Guilds unit number	Unit title	TQT	Level
Mandatory				
T/618/1367	102	Conforming to General Health, Safety and Welfare in the Workplace	20	1
J/618/1700	249	Erecting timber roof structures in the workplace	230	2
L/618/1701	250	Erecting timber walls and floors in the workplace	230	2
F/618/1386	303	Confirming the Occupational Method of Work in the Workplace	110	3
R/618/1389	300	Confirming Work Activities and Resources for an Occupational Work Area in the Workplace	100	3
H/618/1669	314	Erecting roof structure carcassing components in the workplace	260	3
R/618/1702	349	Co-ordinating and confirming the dimensional control requirements of the work in the workplace	90	3
Y/618/1393	502	Developing and Maintaining Good Occupational Working Relationships in the Workplace	80	3
L/618/1696	723	Slinging and Hand Signalling the Movement of Suspended Loads in the Workplace	100	2

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	тот
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Site Carpentry	724	1260
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Architectural Joinery	779	1260
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Wheelwrighting	644	1050
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Shopfitting Site Work	662	1050
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Shopfitting Bench Work	779	1260
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Structural Post and Beam Carpentry	349	720
City & Guilds Level 3 NVQ Diploma in Wood Occupations (Construction) – Timber Frame Erection	597	1060



2 Centre requirements

Approval

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

Resource requirements

Centre staffing

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Centres may design course programmes of study in any way which:

- best meets the needs and capabilities of their candidates
- satisfies the requirements of the qualification.

When designing and delivering the course programme, centres might wish to incorporate other teaching and learning that is not assessed as part of the qualification. This might include the following:

- literacy, language and/or numeracy
- personal learning and thinking
- personal and social development
- employability.

Where applicable, this could involve enabling the candidate to access relevant qualifications covering these skills.

Centre staff may undertake more than one role, eg tutor and assessor or internal verifier, but cannot internally verify their own assessments.

Assessors and internal verifiers

Assessors must have sufficient, verifiable, relevant current industry experience, knowledge and understanding of the occupational working area at, or above, the level being assessed.

This must be of sufficient depth to be effective and reliable when judging candidates' competence. Assessors' experience, knowledge and understanding could be verified by a combination of

- curriculum vitae and employer endorsement
- references
- possession of a relevant NVQ/SVQ, or vocationally related qualification

- corporate membership of a relevant professional institution
- interview.

(The verification process must be recorded and available for audit)

Assessors **must** have sufficient occupational expertise so they have up to date experience, knowledge and understanding of the particular aspects of work they are assessing. This could be verified by records of continuing professional development achievements. Assessors:

- should only assess in their acknowledged area of occupational competence
- shall be prepared to participate in training activities for their continued professional development
- must have a sound, in-depth knowledge of, and uphold the integrity of, the sector's NOS and the Assessment Strategy
- must hold, or be working towards, a qualification as listed within 'Assessing and Assuring Quality of Assessment', either in the Regulated Qualification Framework (RQF), or the Scottish Credit and Qualifications Framework (SCQF):
 - o Level 3 Award in Assessing Competence in the Work Environment
 - o Level 3 Certificate in Assessing Vocational Achievement
 - o SVQ (SCQF level) Assessing Competence in the Work Environment
 - o SVQ (SCQF level) Assessing Vocational Achievement

or hold one of the following:

- A1 Assess candidates using a range of methods
- D32/33 Assess candidate performance, using differing sources of evidence

Holders of A1 and D32/33 must assess to the reviewed National Occupational Standards (NOS) for Learning and Development.

In Scotland, approval for exemptions must be obtained from the Scottish Qualifications Authority.

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.

Candidate entry requirements

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

Age restrictions

These qualifications are approved for 16-18, and 19+ learners. There are no age limits attached to learners undertaking the qualification unless this is a legal requirement of the process or the environment.



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 qualifications
- any units they have already completed, or credit they have accumulated which is relevant to the qualifications
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the qualifications, 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 these qualifications:

Description	How to access
Candidate logbook	Available to download from the City & Guilds website

Recording documents

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several ePortfolio systems, including our own, **Learning Assistant**, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications. Further details are available at: **www.cityandguilds.com/eportfolios**.

City & Guilds has developed a set of Recording Forms including examples of completed forms, for new and existing centres to use as appropriate. *Recording forms* are available on the City & Guilds website.

Although new centres are expected to use these forms, centres may devise or customise alternative forms, which must be approved for use by the external verifier, before they are used by candidates and assessors at the centre. Amendable (MS Word) versions of the forms are available on the City & Guilds website.



4 Assessment

Assessment of the qualification

Candidates must have a completed portfolio of evidence for each unit. Centres are able to download the 6571 logbook from the City & Guilds website.

Aspects to be assessed through performance in the workplace

Direct evidence produced through normal performance in the workplace is the primary source for meeting the requirements. This includes naturally occurring documentary evidence (hard copy and electronic), direct observation of activities and witness testimony as relevant. Individual units will specify any exceptions to this position.

Workplace evidence must be supported by the required evidence of knowledge and understanding. This evidence may be identified by:

- questioning the candidate
- recognised industry education and training programme assessment or professional interview assessment that has been matched to NOS requirements
- performance evidence.

A holistic approach towards the collection of evidence should be encouraged. The focus should be on assessing activities generated by the whole work experience rather than focusing on specific tasks. This would show how evidence requirements could be met across the qualification to make the most efficient use of evidence.

Grading

This qualification is graded pass/fail.



5 Units

Structure of units

These units each have the following:

- City & Guilds reference number
- Title
- Level
- GLH
- Unit aim
- Learning outcomes which are comprised of a number of assessment criteria
- Notes for guidance.

Unit 102 Conforming to general health, safety and welfare in the workplace

Level:	1
GLH:	17
Aim:	This unit is about awareness of relevant current statutory requirements and official guidance, responsibilities, to self and others, relating to workplace health, safety and welfare, personal behaviour and security in the workplace.

The learner will:

1. comply with all workplace health, safety and welfare legislation requirements

Assessment criteria

The learner can:

- 1.1 comply with information from workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area
- 1.2 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements
- 1.3 comply with statutory requirements, safety notices and warning notices displayed within the workplace and/or on equipment
- 1.4 state why and when health and safety control equipment, identified by the principles of protection, should be used relating to types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 1.5 state how the health and safety control equipment relevant to the work should be used in accordance with the given instructions
- 1.6 state which types of health, safety and welfare legislation, notices and warning signs are relevant to the occupational area and associated equipment
- 1.7 state why health, safety and welfare legislation, notices and warning signs are relevant to the occupational area
- 1.8 state how to comply with control measures that have been identified by risk assessments and safe systems of work.

Learning outcome

The learner will:

2. recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures

Assessment criteria

- 2.1 report any hazards created by changing circumstances within the workplace in accordance with organisational procedures
- 2.2 list typical hazards associated with the work environment and occupational area in relation to resources, substances, asbestos, equipment, obstructions, storage, services and work activities
- 2.3 list the current Health and Safety Executive top ten safety risks
- 2.4 list the current Health and Safety Executive top five health risks
- 2.5 state how changing circumstances within the workplace could cause hazards

2.6 state the methods used for reporting changed circumstances, hazards and incidents in the workplace.

Learning outcome

The learner will:

3. comply with organisational policies and procedures to contribute to health, safety and welfare

Assessment criteria

The learner can:

- 3.1 interpret and comply with given instructions to maintain safe systems of work and quality working practices
- 3.2 contribute to discussions by offering/providing feedback relating to health, safety and welfare
- 3.3 contribute to the maintenance of workplace welfare facilities in accordance with workplace welfare procedures
- 3.4 safely store health and safety control equipment in accordance with given instructions
- 3.5 dispose of waste and/or consumable items in accordance with legislation
- 3.6 state the organisational policies and procedures for health, safety and welfare, in relation to:
 - a. dealing with accidents and emergencies associated with the work and environment
 - b. methods of receiving or sourcing information
 - c. reporting
 - d. stopping work
 - e. evacuation
 - f. fire risks and safe exit procedures
 - g. consultation and feedback
- 3.7 state the appropriate types of fire extinguishers relevant to the work
- 3.8 state how and when the different types of fire extinguishers are used in accordance with legislation and official guidance.

Learning outcome

The learner will:

4. work responsibly to contribute to workplace health, safety and welfare whilst carrying out work in the relevant occupational area

Assessment criteria

- 4.1 demonstrate behaviour which shows personal responsibility for general workplace health, safety and welfare
- 4.2 state how personal behaviour demonstrates responsibility for general workplace health, safety and welfare, in relation to:
 - a. recognising when to stop work in the face of serious and imminent danger to self and/or others
 - b. contributing to discussions and providing feedback
 - c. reporting changed circumstances and incidents in the workplace

- d. complying with the environmental requirements of the workplace
- 4.3 give examples of how the behaviour and actions of individuals could affect others within the workplace.

The learner will:

5. comply with and support all organisational security arrangements and approved procedures

Assessment criteria

- 5.1 provide appropriate support for security arrangements in accordance with approved procedures:
 - a. during the working day
 - b. on completion of the day's work
 - c. for unauthorised personnel (other operatives and the general public)
 - d. for theft
- 5.2 state how security arrangements are implemented in relation to the workplace, the general public, site personnel and resources.

Unit 102 Conforming to general health, safety and welfare in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 236 Erecting structural carcassing components in the workplace

Level:	2	
GLH:	107	
Aim:	The aim of this unit is to provide you with an awareness of:	
	 interpreting information 	
	 adopting safe and healthy working practices 	
	 selecting materials, components and equipment 	
	 preparing and carrying out the erection of carcassing components for roofs and floors. 	

The learner will:

1. Interpret the given information relating to the work and resources when erecting structural carcassing components.

Assessment criteria

The learner can:

- 1.1 interpret and extract information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. oral and written instructions
 - h. sketches
 - i. electronic data
 - j. official guidance and current building regulations associated with erecting structural carcassing components.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when erecting structural carcassing components.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. at height
 - d. in confined spaces
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement and storage of materials by manual handling and mechanical lifting

- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 state the types of fire extinguishers available when erecting structural carcassing components and describe how and when they are used.

The learner will:

3. Maintain safe working practices when erecting structural carcassing components.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with work methods to carry out the activity in accordance with legislation and organisational requirements when erecting structural carcassing components
- 3.2 demonstrate compliance with given information and relevant legislation when erecting structural carcassing components for at least two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to erecting structural carcassing components, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to erect structural carcassing components.

Assessment criteria

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. plastic mouldings
 - e. metals
 - f. trussed rafters
 - g. adhesives
 - h. sealants
 - i. fixings
 - j. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform to the specification
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and method of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to erect structural carcassing components.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when erecting structural carcassing components.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when erecting structural carcassing components.

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. Comply with the given contract information to erect structural carcassing components to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when erecting structural carcassing components:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. finishing
 - e. positioning
 - f. securing.
- 7.2 use and maintain hand and power tools
- 7.3 erect one of the following to given working instructions:
 - a. inclined roofs with gables
 - b. load bearing partitions
 - c. joists (ground, upper or flat roof), including coverings (flat roofs, decks or floors)
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. prepare and fix gable roof trussed rafters, cut roofs, ground, upper and flat roof joists, load bearing partitions
 - b. form joints associated with carcassing
 - c. recognise and determine when specialist skills and knowledge are required and report accordingly
 - d. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - e. identify and follow the installation quality requirements
 - f. work with, around and in close proximity to plant and machinery
 - g. use hand and power tools
 - h. work at height
 - i. use access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when erecting structural carcassing components
- 7.6 describe the methods of sharpening the hand tools used when erecting structural carcassing components
- 7.7 describe how to maintain the tools and equipment used when erecting structural carcassing components

Unit 236 Erecting structural carcassing components in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 249 Erecting timber roof structures in the workplace

Level:	2	
GLH:	110	
Aim:	The aim of this unit is to provide you with an awareness of:	
	 interpreting information 	
	 adopting safe and healthy working practices 	
	 selecting materials, components and equipment 	
	 erecting wall and floor structures 	

The learner will:

1. Interpret the given information relating to the work and resources when erecting timber roof structures.

Assessment criteria

The learner can:

- 1.1 interpret and extract information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. digital information and 3D modelling
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
 - h. official guidance and current regulations governing buildings associated with erecting timber frame roof structure

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when erecting timber roof structures.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. in confined spaces
 - c. at height
 - d. with tools and equipment
 - e. with materials and substances
 - f. with movement and storage of materials by manual handling and mechanical lifting.
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

2.4 describe the types of fire extinguishers available when erecting timber roof structures and describe how and when they are used.

Learning outcome

The learner will:

3. Maintain safe and healthy working practices when erecting timber roof structures.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when erecting timber roof structures
- 3.2 demonstrate compliance with given information and relevant legislation when erecting timber roof structures in relation to:
 - a. safe use of access equipment and /or working platforms
 - b. safe use and storage of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to erecting timber roof structures, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities.

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to erect timber roof structures.

Assessment criteria

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber

- b. metal and timber based materials
- c. sheet materials
- d. trussed rafters
- e. fire stops
- f. vapour control layers
- g. insulation
- h. preservatives
- i. adhesives
- i. sealants
- k. fittings
- I. fixings and associated ancillary items
- m. hand tools, portable power tools
- 4.3 Describe how to confirm that the resources and materials conform to the specification
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to erect timber roof structures.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when erecting timber roof structures.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when erecting timber roof structures.

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. comply with the given contract information to erect timber roof structures to the required specification

Assessment criteria

- 7.1 demonstrate the following work skills when erecting timber roof structures:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. aligning
 - e. finishing
 - f. positioning
 - g. securing
- 7.2 use and maintain hand tools, portable power tools and ancillary equipment
- 7.3 construct, erect roof and/or structures to given working instructions to the following:
 - a. in-situ roofs (manually and/or mechanically handled)
 - b. pre-assembled roof structures (mechanically handled)
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. extract and transfer data from drawings for the erection of timber roof structures
 - b. provide information for Building Information Modelling (BIM)
 - c. identify roof components
 - d. construct in-situ, and install flat and pitched roof structures
 - e. erect and install (manually and/or mechanically handled) pre-assembled, flat and pitched roof structures
 - f. take account of other methods of roof construction
 - g. install fire stops, cavity barriers and vapour control layers
 - h. install insulation to achieve the specified energy and carbon performance
 - i. avoid thermal bridging, bypassing and condensation
 - j. apply the principles of airtightness and ventilation
 - k. erect and install temporary propping, bracing and protection measures
 - I. install permanent roof bracing by lateral restraint and holding down methods
 - m. form openings

- n. work with plant and machinery to lift and transfer loads
- o. unload and store roof components
- p. recognise and determine when specialist skills and knowledge are required and report accordingly
- q. identify and follow the installation quality requirements
- r. work with, around and in close proximity to plant and machinery
- s. direct and guide the operations and movement of plant and machinery
- t. use hand tools, portable power tools and equipment
- u. work at height
- v. use access equipment
- w. economise use of water, report leaks and turn taps off
- x. recycle materials and minimise waste.
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when erecting timber roof structures
- 7.6 describe how to maintain the hand tools, portable power tools and ancillary equipment used when erecting timber roof structures.

Unit 249 Erecting timber roof structures in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 250 Erecting timber walls and floors in the workplace

Level:	2
GLH:	150
Aim:	The aim of this unit is to provide you with an awareness of:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 erecting wall and floor structures

The learner will:

1. Interpret the given information relating to the work and resources when erecting timber walls and floors.

Assessment criteria

The learner can:

- 1.1 interpret and extract information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. digital information and 3D modelling
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
 - h. official guidance and current regulations governing buildings associated with erecting timber walls and floors.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when erecting timber walls and floors.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. in confined spaces
 - c. at height
 - d. with tools and equipment
 - e. with materials and substances
 - f. with movement storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

2.4 describe the types of fire extinguishers available when erecting timber walls and floors and describe how and when they are used.

Learning outcome

The learner will:

3. Maintain safe and healthy working practices when erecting timber walls and floors.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when erecting timber walls and floors
- 3.2 demonstrate compliance with given information and relevant legislation when erecting timber walls and floors in relation to:
 - a. safe use of access equipment and/or working platforms
 - b. safe use and storage of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to erecting timber walls and floors., and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to erect timber walls and floors.

Assessment criteria

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment

- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based materials
 - c. sheet materials
 - d. wall and floor panels
 - e. timber and metal columns and beams
 - f. damp-proof courses
 - g. damp-proof membranes
 - h. breather membranes
 - i. fire stops
 - j. cavity barriers, and vapour control layers
 - k. preservatives
 - l. adhesives
 - m. sealants
 - n. fittings
 - o. fixings and associated ancillary items
 - p. hand and portable power tools and equipment
- 4.3 describe how to confirm that the resources and materials conform to the specification
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to erect timber walls and floors.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when erecting timber walls and floors.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities

- b. organisational procedures
- c. manufacturers' information
- d. statutory regulations
- e. official guidance.

The learner will:

6. Complete the work within the allocated time when erecting timber walls and floors.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to erect timber walls and floors to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when erecting timber walls and floor structures:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. aligning
 - e. positioning
 - f. securing
- 7.2 use and maintain hand tools, portable power tools and ancillary equipment
- 7.3 erect or install the following to given working instructions:
 - a. sole plates
 - b. timber frame walls and floors (structural and non-structural)
 - c. incorporated structural columns and beams
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. extract and transfer data from drawings for the erection of timber walls and floors
 - b. provide information for Building Information Modelling (BIM)
 - c. identify wall and floor components
 - d. line, level and fix sole plates, including damp-proof courses, damp- proof membrane and interaction criteria

- e. erect and install both manually and with mechanical lifting equipment: wall and floor panels, loose joist and decking, incorporated structural columns and beams (timber and steel)
- f. erect and install temporary propping, bracing and protection measures
- g. form joints associated with timber frame construction
- h. from openings
- i. install fire stops, cavity barriers, breather membranes and vapour control layers
- j. form openings
- k. install floating floors
- I. install insulation to achieve the specified energy and carbon performance
- m. avoid thermal bridging, bypassing and condensation
- n. apply the principles of airtightness and ventilation
- o. install disproportionate collapse components
- p. identify differential movement and settlement
- q. identify transfer of line and load point positions in load bearing walls and floors including temporary load points
- r. identify and follow the installation quality requirements
- s. work with, around and in close proximity to plant and machinery
- t. work with plant and machinery to lift and transfer loads
- u. direct and guide the operations and movement of plant and machinery
- v. unload and store wall and floor components
- w. recognise and determine when specialist skills and knowledge are required and report accordingly
- x. use hand tools, portable power tools and equipment
- y. work at height
- z. use access equipment
- aa. economise use of water, report leaks and turn taps off
- bb. recycle materials and minimise waste
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when erecting timber walls and floors.
- 7.6 describe how to maintain the hand tools and/or portable power tools and equipment used for erecting timber walls and floors.

Unit 250 Erecting timber walls and floors in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 288 Installing shopfitting frames and finishings in the workplace

Level:	2
GLH:	127
Aim:	The aim of this unit is to provide the learner with an awareness of:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 preparing and fixing internal timber and/or non-ferrous metal shopfitting frames and finishings

The learner will:

1. Interpret the given information relating to the work and resources when installing shopfitting frames and finishings.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. oral and written instructions
 - h. sketches
 - i. electronic data
 - j. official guidance and current building regulations associated with installing shopfitting frames and finishings.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when installing shopfitting frames and finishings.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement and storage of materials and by manual handling and mechanical lifting

- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when installing shopfitting frames and finishings and describe how and when they are used.

The learner will:

3. Maintain safe and healthy working practices when installing shopfitting frames and finishings.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and comply to methods of work to carry out the activity in accordance with legislation and organisational requirements when installing shopfitting frames and finishings.
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to installing shopfitting frames and finishings, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV).
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to install shopfitting frames and finishings.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. metals
 - e. plastics
 - f. fabrics
 - g. door frames
 - h. linings
 - i. doors
 - j. paneling and cladding
 - k. staircases
 - I. mouldings and trims
 - m. ironmongery
 - n. adhesives and sealants
 - o. fittings and fixings
 - p. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform to the specification including suitability, moisture and durability.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate quantity, length, area and wastage associated with the method and procedure to install shopfitting frames and finishings.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when installing shopfitting frames and finishings.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with legislation

- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. Complete the work within the allocated time when installing shopfitting frames and finishings.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to install shopfitting frames and finishings to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when installing shopfitting frames and finishings:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. finishing
 - e. positioning
 - f. securing
- 7.2 Use and maintain hand and power tools.
- 7.3 install at least six of the following in timber, timber based products and/or composite materials and/or metal to given working instructions:
 - a. door frames
 - b. hung doors
 - c. door sets
 - d. mouldings or trims
 - e. ironmongery
 - f. service encasement
 - g. linings
 - h. paneling or cladding
 - i. partition walling
 - j. staircase finishings and balustrading

- k. staircases
- I. bulkheads and soffits
- m. units and fitments
- n. window frames
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. prepare and fix timber and/or metal: door frames, hung doors (fire resisting and non-fire resisting), door sets, ironmongery, trims, mouldings, paneling and cladding, service encasements, partition walling, staircase finishings and balustrades, staircases, baulkheads and soffits
 - b. form joints associated with shopfitting
 - c. recognise and determine when specialist skills and knowledge are required and report accordingly
 - d. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - e. identify and follow the installation quality requirements
 - f. work with, around and in close proximity to plant and machinery
 - g. use hand and power tools and equipment
 - h. work at height
 - i. use access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when installing shopfitting frames and finishings.
- 7.6 describe how to maintain the tools and equipment used when installing shopfitting frames and finishings.
- 7.7 describe how to sharpen the hand tools used when installing shopfitting frames and finishes.

Unit 288 Installing shopfitting frames and finishings in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 289 Installing shopfitting fitments in the workplace

Level:	2
GLH:	83
Aim:	The aim of this unit is to provide the learner with an awareness of:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 preparing and fixing timber and/or non- ferrous metal internal shopfitting counters, units and fixed seating arrangements

The learner will:

1. Interpret the given information relating to the work and resources when installing shopfitting fitments.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturer's information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement.
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. oral and written instructions
 - h. sketches
 - i. electronic data
 - official guidance and current building regulations associated with associated with installing shopfitting fitments.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when installing shopfitting fitments.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement and storage of materials by manual handling and mechanical lifting

- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when installing shopfitting fitments and describe how and when they are used.

The learner will:

3. Maintain safe working practices when installing shopfitting fitments.

Assessment criteria

- 3.1 use health and safety control equipment safely and methods of work to carry out the activity in accordance with legislation and organisational requirements when installing shopfitting fitments
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to installing shopfitting fitments, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to install shopfitting fitments.

Assessment criteria

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. manufactured sheet material
 - e. metals
 - f. plastics
 - g. fabrics
 - h. counters
 - i. display units
 - i. shelving units
 - k. fixed seating
 - I. adhesives and sealants
 - m. fittings and fixings
 - n. hand and power tools.
- 4.3 Describe how to confirm that the resources and materials conform with the specification including suitability, moisture and durability.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate quantity, length, area and wastage associated with the method and procedure to install shopfitting fitments.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when installing shopfitting fitments.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when installing shopfitting fitments.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time.
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to install shopfitting fitments to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when installing shopfitting fitments:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. finishing
 - e. positioning
 - f. securing
- 7.2 use and maintain hand and power tools.

- 7.3 install at least two of the following in timber and/or timber based materials and/or composite materials and metal to given working instructions:
 - a. counters
 - b. display units
 - c. shelving units
 - d. fixed seating.
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. prepare and fix timber, timber based products and/or composite materials and metal counters, display units, shelving units and fixed seating
 - b. form joints associated with shopfitting including but not limited to housings, dovetail dowel, cam and stud biscuit
 - c. recognise and determine when specialist skills and knowledge are required and report accordingly
 - d. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - e. identify and follow the installation quality requirements
 - f. work with, around and in close proximity to plant and machinery
 - g. use hand and, power tools
 - h. work at height
 - i. use access equipment.
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when installing shopfitting fitments.
- 7.6 describe how to maintain the tools and equipment used when installing shopfitting fitments.
- 7.7 describe how to sharpen the hand tools used when installing shopfitting fitments.

Unit 289 Installing shopfitting fitments in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 297 Installing shopfronts and finishings in the workplace

Level:	2
GLH:	93
Aim:	The aim of this unit is to provide the learner with an awareness of:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 preparing and fixing internal timber and/or non-ferrous metal shopfitting frames and finishings

The learner will:

1. Interpret the given information relating to the work and resources when installing shopfronts and finishings.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specification
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. oral and written instructions
 - h. sketches
 - i. electronic data
 - j. official guidance and current building regulations associated with installing shopfronts and finishings.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when installing shopfronts and finishings.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement and storage of materials by manual handling and mechanical lifting

- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when installing shopfronts and finishings and describe how and when they are used.

The learner will:

3. Maintain safe and healthy working practices when installing shopfronts and finishings.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and comply with work methods to carry out the activity in accordance with legislation and organisational requirements when installing shopfronts and finishings
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to installing shopfronts and finishings, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities.

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to install shopfronts and finishings.

Assessment criteria

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components

- c. fixings
- d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials and metal
 - d. plastics
 - e. shopfront surrounds
 - f. stall risers
 - g. mouldings and trims
 - h. window beds
 - i. fascias
 - j. signs
 - k. adhesives and sealants
 - I. fittings and fixings
 - m. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform with the specification including suitability, moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate quantity, length, area and wastage associated with the method and procedure to install shopfronts and finishings.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when installing shopfronts and finishings.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. Complete the work within the allocated time when installing shopfronts and finishings.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to install shopfronts and finishings to the required specification.

Assessment criteria

7.1 describe how to sharpen the hand tools used when installing shopfronts and finishings

Unit 297 Installing shopfronts and finishings in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 300 Confirming work activities and resources for an occupational work area in the workplace

Level:	3
GLH:	43
Aim:	This unit aims to provide the learner with the necessary skills and knowledge to:
	 interpret information
	 adopt safe and healthy working practices
	• identify resources to carry out the work
	 confirm work programme/schedule for own occupational area of work being carried out

The learner will:

1. Identify work activities, assess required resources and plan the sequence of work.

Assessment criteria

The learner can:

- 1.1 identify work activities, assess required resources and plan the sequence of work
- 1.2 identify work activities and formulate a plan for their own sequence of work
- 1.3 explain the types of work relative to the occupational area and how to identify different work activities
- 1.4 explain methods of assessing the resources needed from a range of available information
- 1.5 explain the required information and the different methods used to prepare a work programme relative to the occupational area.

Learning outcome

The learner will:

2. Obtain clarification and advice where the resources required are not available.

Assessment criteria

The learner can:

- 2.1 seek advice and clarity from appropriate sources on resources available and the alternatives that can be used for the work when required resources are not available
- 2.2 explain the different sources and methods that can be used to obtain clarification and advice when the required resources are not available.

Learning outcome

The learner will:

3. Evaluate the work activities and the requirements of any significant external factors against the project requirements.

Assessment criteria

- 3.1 assess progress of work against project requirements, taking into account external factors relating to:
 - a. other occupations and /or customers
 - b. resources
 - c. weather conditions
 - d. health and safety requirements.
- 3.2 explain different methods of evaluating work activities against the following project requirements:
 - a. contract conditions
 - b. contract programme
 - c. health and safety requirements of operatives.

- 3.3 evaluate the requirements of significant external factors that could affect the progress of work, in relation to:
 - a. other related programmes
 - b. special working conditions
 - c. weather conditions
 - d. other occupations/people
 - e. resources
 - f. health and safety requirements.

The learner will:

4. Identify work activities which influence each other and make the best use of the resources available.

Assessment criteria

The learner can:

- 4.1 determine work activities that have an influence on each other
- 4.2 evaluate which work activities make the best use of available resources in relation to:
 - a. occupations and/or customers associated with the work
 - b. tools, plant and/or ancillary equipment
 - c. materials and components
- 4.3 explain different methods and sources that can identify which work activities influence each other
- 4.4 describe how to determine the sequence of work activities and how long each work activity will take
- 4.5 describe what zero and low carbon requirements are
- 4.6 explain how work activities and different ways of using resources can impact on zero and low carbon requirements, and make a positive contribution to the environment.

Learning outcome

The learner will:

5. Identify changed circumstances that require alterations to the work programme and justify them to decision makers.

Assessment criteria

- 5.1 evaluate project progress against the work programme to identify any changed circumstances
- 5.2 inform line management and/or customers on the type and extent of any required changes to the work programme
- 5.3 explain how to identify possible alterations to the work programme to meet changed circumstances relating to action lists, method statements, duration, schedules and/or occupation specific requirements
- 5.4 explain how to assess contractual/work effects resulting from alterations to the work programme
- 5.5 explain the methods used to justify to decision makers on the effects resulting from alterations to the work programme.

Unit 300 Confirming work activities and resources for an occupational work area in the workplace

Supporting information

Assessment Guidance

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

- the Additional Requirements for Qualifications using the title NVQ in RQF
- 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 303 Confirming the occupational method of work in the workplace

Level:	3
GLH:	47
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 assessing project data to determine occupational work methods
	 adopting safe and healthy working practices
	 selecting the methods of work
	 confirming the methods of work to the relevant people associated with the occupation
	 sourcing additional information

The learner will:

1. Assess available project data accurately to determine the occupational method of work.

Assessment criteria

The learner can:

- 1.1 interpret and extract information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. manufacturer's information
 - e. methods of work
 - f. risk assessments
 - g. programmes of work
- 1.2 explain how to summarise the following project data:
 - a. required quantities
 - b. specifications
 - c. detailed drawings
 - d. health and safety requirements
 - e. timescales
 - f. scope of works
- 1.3 explain the different methods of assessing available project data
- 1.4 explain how to use project data to interpret the work method, in relation to:
 - a. standard work procedures
 - b. sequence of work
 - c. organisation of resources (people, equipment, materials)
 - d. work techniques
 - e. working conditions (health, safety and welfare)
 - f. risk assessment.

Learning outcome

The learner will:

2. Obtain additional information from alternative sources in cases where the available project data is insufficient.

Assessment criteria

- 2.1 collect and collate additional information from alternative sources to clarify the work to be carried out
- 2.2 explain different methods and techniques of obtaining additional information from the following alternative sources when available project data is insufficient:
 - a. customers or representatives
 - b. suppliers
 - c. regulatory authorities
 - d. manufacturer's literature.

The learner will:

3. Identify work methods that will make best use of resources and meet project, statutory and contractual requirements.

Assessment criteria

The learner can:

- 3.1 examine potential work methods to carry out the occupational work activity
- 3.2 determine which work methods will make best use of relevant resources and meet health and safety requirements relating to technical and/or project criteria
- 3.3 explain how to identify work methods that make best use of resources and meet project, statutory and contractual requirements against technical criteria, in relation to:
 - a. health and safety welfare (principles of protection)
 - b. fire protection
 - c. access and egress
 - d. equipment availability
 - e. availability of competent workforce
 - f. pollution risk
 - g. waste and disposal
 - h. zero and low carbon outcomes
 - i. weather conditions
- 3.4 explain how to identify work methods that make best use of resources and meet project, statutory and contractual requirements against project criteria, in relation to:
 - a. conforming to statutory requirements
 - b. customer and user needs
 - c. contract requirements in terms of time, quantity and quality
 - d. environmental considerations
- 3.5 explain how different methods of work can achieve zero/low carbon outcomes.

Learning outcome

The learner will:

4. confirm and communicate the selected work method to relevant personnel

Assessment criteria

- 4.1 confirm the selected occupational work method that meets project, statutory and contractual requirements
- 4.2 communicate appropriately to relevant people on the selected occupational work method
- 4.3 describe the different techniques and methods of confirming and communicating work methods to relevant people
- 4.4 explain the principles of equality and diversity and how to apply them when working and communicating with others.

Unit 303 Confirming the occupational method of work in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 306 Designing and fabricating structural timber connections in the workplace

Level:	3
GLH:	157
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 designing, preparing and fabricating structural pegged timber connections

The learner will:

1. Interpret the given information relating to the work and resources when designing and fabricating structural timber connections.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. oral and written instructions
 - h. sketches
 - i. electronic data
 - official guidance and current building regulations associated with designing and fabricating structural timber connection

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when designing and fabricating structural timber connections.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances

- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when designing and fabricating structural timber connections and describe how and when they are used.

The learner will:

3. Maintain safe working practices when designing and fabricating structural timber connections.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment and comply with methods of work to carry out the activity in accordance with legislation and organisational requirements when designing and fabricating structural timber connections.
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to designing and fabricating structural timber connections, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV).
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to design and fabricate structural timber connections.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. measuring and marking equipment
 - b. draw pins or podgers, wedges, clamps and trestles
 - c. lifting equipment and ancillaries
 - d. fittings and fixings
 - e. hand and power tools
- 4.3 describe how to confirm resources and materials conform to the specification, including suitability, moisture and durability.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to design and fabricate structural timber connections.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when designing and fabricating structural timber connections.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 5.2 maintain a clear and tidy work space.
- 5.3 dispose of waste in accordance with legislation.
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

The learner will:

6. Complete the work within the allocated time when designing and fabricating structural timber connections.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to design and fabricate structural timber connections to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when designing and fabricating structural timber connections:
 - a. designing
 - b. measuring
 - c. marking out
 - d. cutting
 - e. fitting
 - f. finishing
 - g. positioning
 - h. securing
- 7.2 use and maintain equipment
- 7.3 design and fabricate the following structural pegged timber connections for post and beam floor, roof, wall or cross frames to given working instructions:
 - a. mortice and tenon
 - b. barefaced tenon
 - c. stopped tenon
 - d. bevelled-shoulder tenon
 - e. dovetailed tenon
 - f. bridle joint
 - g. tusk tenon
 - h. pegged scarf joint for top plate, cill plate, purlin and tie beam
 - i. dovetailed, secret dovetailed or cogged lap joint
 - j. free/slip tenon or spline joint

- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. design pegged post and beam connections suitable for frames
 - b. identify loads that will act on a frame (dead, live and wind)
 - c. identify the effects of loads on a frame (sustained load, load duration, purlin load, floor joist loads, braces and wind loading and beam sizes)
 - d. identify the types of stress acting on a frame (compression, tension, shear and bending)
 - e. identify criteria to determine peg hole size and position
 - f. identify changes that will occur to connections with shrinkage.
 - g. apply the theorem of Pythagoras
 - h. determine geometrical angles
 - i. determine graded timber tree anatomy and growth rates, shrinkage and defects
 - j. ensure safe and practical erection of components
 - k. work with lifting and hoisting equipment (an awareness of the necessity for user certification)
 - I. recognise and determine when specialist skills and knowledge are required and report accordingly
 - m. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - n. identify and follow the installation quality requirements
 - o. work with, around and in close proximity to plant and machinery
 - p. use hand and power tools
 - q. work at height
 - r. use access equipment.
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when designing and fabricating structural timber connections.
- 7.6 describe how to maintain the tools and equipment used when designing and fabricating structural timber connections.

Unit 306 Designing and fabricating structural timber connections in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 314 Erecting roof structure carcassing components in the workplace

Level:	3
GLH:	105
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 preparing and carrying out carcassing for roofs with gables, hips, valleys and dormers

The learner will:

1. Erecting roof structure carcassing components in the workplace

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. digital information
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. digital information and 3D modelling
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
 - h. official guidance and current regulations governing buildings associated with erecting roof structure carcassing components

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when erecting roof structure carcassing components.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. in confined spaces
 - c. at height
 - d. with tools and equipment
 - e. with materials and substances
 - f. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles.

- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when erecting roof structure carcassing components and describe how and when they are used.

The learner will:

3. Maintain safe working practices when erecting roof structure carcassing components.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and comply with methods of work to carry out the activity in accordance with legislation and organisational requirements when erecting roof structure carcassing components
- 3.2 Demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to erecting roof structure carcassing components, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to erect roof structure carcassing components.

Assessment criteria

The learner can:

4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment

- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timer based materials
 - c. sheet material
 - d. metals
 - e. trussed rafters
 - f. prefabricated frames
 - g. adhesives
 - h. sealants
 - i. fixings
 - j. fittings
 - k. associated ancillary items equipment
- 4.3 describe how to confirm that the resources and materials conform to the specification.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to erecting roof structure carcassing components.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when erecting roof structure carcassing components.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clean work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures

- c. manufacturers' information
- d. statutory regulations
- e. official guidance.

The learner will:

6. Complete the work within the allocated time when erecting roof structure carcassing components.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to erect roof structure carcassing components to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when erecting roof structure carcassing components:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. finishing
 - e. positioning
 - f. securing
- 7.2 use and maintain hand tool, portable power tools and ancillary equipment
- 7.3. Incorporate at least two of the following to given working instructions on time frame roofs
 - a. hips and/or valleys
 - b. roof verge and eaves
 - c. parapet finishings
 - d. false chimneys
 - e. openings (e.g. windows, hatches, dormers, roof lights and vents)
- 7.2 determine the specification of cut roof component bevels and lengths
- 7.3 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. extract and transfer data from drawings for the installation of roof structure carcassing

- b. provide information for Building Information Modelling (BIM)
- c. identify roof structure carcassing components
- d. check existing levels and setting out lines
- e. prepare and fix trussed rafters
- f. prepare and fix trussed rafters, cut roofs, timber and plastic verge and eaves finishings
- g. apply geometry to determine bevels and lengths for cut, equal and unequal, gabled and hipped roofs, with valleys and dormers
- h. form joints associated with carcassing
- i. make and assemble cut roofs
- j. install on timber frame roofs: hips and valleys, timber and plastic verge and eaves, parapet finishings, false chimneys, openings (e.g. windows, hatches, dormers, roof lights and vents)
- k. work with plant and machinery to lift and transfer loads
- l. install insulation to achieve the specified energy and carbon performance
- m. avoid thermal bridging, bypassing and condensation
- n. apply the principles of airtightness and ventilation
- o. recognise and determine when specialist skills and knowledge are required and report accordingly
- p. identify and follow the installation quality requirements
- q. work with, around and in close proximity to plant and machinery
- r. direct and guide the operations and movement of plant and machinery
- s. work at height
- t. use access equipment and working platforms
- u. economise use of water, report leaks and turn taps off
- v. recycle materials and minimize waste
- 7.4 describe the needs of other occupations and how to effectively communicate within a team when erecting roof structure carcassing components
- 7.5 describe how to sharpen hand tools used when erecting roof structure carcassing components
- 7.6 describe how to maintain the tools and equipment used when erecting roof structure carcassing components.

Unit 314 Erecting roof structure carcassing components in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 318 Fabricating post and beam components in the workplace

Level:	3
GLH:	150
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, tools and equipment
	 preparing and fabricating post and beam components for heavy structural timber frames

The learner will:

1. Interpret the given information relating to the work and resources when fabricating post and beam components.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements.
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. oral and written instructions
 - h. sketches, electronic data
 - i. official guidance and current building regulations associated fabricating structural timber connection

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when fabricating post and beam components.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, vehicles and operative

- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when fabricating post and beam components and describe how and when they are used.

The learner will:

3. Maintain safe working practices when fabricating post and beam components.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and methods or work to carry out the activity in accordance with legislation and organisational requirements when fabricating post and beam components
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- explain why and when health and safety control equipment identified by the principles of prevention, should be used, relating to fabricating post and beam components, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to fabricate post and beam components.

Assessment criteria

The learner can:

4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment

- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. measuring and marking equipment
 - b. draw pins or podgers, wedges, clamps and trestles
 - c. lifting equipment and ancillaries
 - d. fittings and fixings
 - e. hand and power tools
- 4.3 describe how to confirm resources and materials conform to the specification, including suitability, moisture and durability.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate quantity, length, area and wastage associated with the method and procedure to fabricating post and beam components.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when fabricating post and beam components.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when fabricating post and beam components.

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated

c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to fabricate post and beam components to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when fabricating post and beam components:
 - a. levelling
 - b. plumbing
 - c. measuring
 - d. marking out
 - e. cutting
 - f. shaping
 - g. fitting
 - h. finishing
 - i. positioning
 - j. securing
- 7.2 use and maintain equipment
- 7.3 fabricate and carpenter mark post and beam components for the following assemblies to given working instructions:
 - a. wall frame with soleplate, post or jowl post, stud, rail, wall braces and top plate
 - b. tied or closed truss to include: king post truss with tie beam, king post, king struts and principal rafters or heavy tied truss with tie beam, principle rafters and curved internal members (collar or queen struts)
 - c. hip and valley construction to include hip beam or rafter, dragon beam, dragon tie, valley beam or rafter and jack rafters.
- 7.4 fabricate and carpenter mark post and beam components for trusses with at least two of the following to given working instructions:
 - a. interrupted tie
 - b. curved sling brace
 - c. hammer beams and braces
 - d. collar and arched braces
 - e. scissor braces
 - f. curved tension braces
 - g. cruck blades
- 7.5 fabricate and carpenter mark post and beam components for roof construction to include wind bracing and at least two of the following to given working instructions:
 - a. purlins scarfed
 - b. purlins trenched and cogged
 - c. purlins secured with free and/or slip tenons or splines
 - d. clasped purlins
 - e. crown plate and or collar purlins

- 7.6 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. lay out frames
 - b. mark out components for fabrication, plumb scribe, square rule and mapping
 - c. apply the theorem of Pythagoras
 - d. determine geometrical angles
 - e. determine graded timber tree anatomy and growth rates, shrinkage and defects
 - f. fabricate post and beam components for roof, wall, cross and floor frames
 - g. form specialist joints associated with heavy structural timber framework
 - h. identify principle structural components and load paths
 - i. work with lifting and hoisting equipment (an awareness of the necessity for user certification)
 - j. recognise and determine when specialist skills and knowledge are required and report accordingly
 - k. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - I. work with, around and in close proximity to plant and machinery
 - m. identify and follow the installation quality requirements
 - n. use hand and power tools
 - o. work at height
 - p. use access equipment
- 7.7 describe the needs of other occupations and how to effectively communicate within a team when fabricating post and beam components
- 7.8 describe how to maintain the tools and equipment used when fabricating post and beam components.

Unit 318 Fabricating post and beam components in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 327 Manufacturing bespoke wheelwrighting products in the workplace

Level:	3
GLH:	123
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 fitting and assembling plain and circular bespoke products for wheelwrighting (carriage construction)

The learner will:

1. Interpret the given information relating to the work and resources when manufacturing bespoke wheelwrighting products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
 - h. component standards
 - i. oral and written instructions
 - i. sketches
 - k. electronic data
 - I. official guidance and current building regulations associated with manufacturing bespoke products

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when manufacturing bespoke wheelwrighting products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment

- f. with materials and substances
- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when manufacturing bespoke wheelwrighting products and describe how and when they are used.

The learner will:

3. Maintain safe working practices when manufacturing bespoke wheelwrighting products.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with methods of work to carry out the activity in accordance with legislation and organisational requirements when manufacturing bespoke wheelwrighting products
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment identified by the principles of prevention should be used, relating to manufacturing bespoke wheelwrighting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities

The learner will:

4. Select the required quantity and quality of resources for the methods of work to manufacture bespoke wheelwrighting products.

Assessment criteria

- 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment
- 4.2 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. metal
 - e. pre-machined components
 - f. setting out rods
 - g. glass
 - h. plastics
 - i. fabrics
 - j. ironmongery
 - k. metal and rubber wheel rims
 - I. adhesives
 - m. sealants
 - n. fittings and fixings
 - o. hand and/or powertools
- 4.3 describe how to confirm that the resources and materials conform to the specification including suitability, moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.6 describe any potential hazards associated with the resources and methods of work.
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to manufacturing bespoke wheelwrighting products.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when manufacturing bespoke wheelwrighting products.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when manufacturing bespoke wheelwrighting products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to manufacture bespoke wheelwrighting products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when manufacturing bespoke wheelwrighting products:
 - a. measuring
 - b. marking out
 - c. fitting

- d. finishing
- e. positioning
- f. securing
- 7.2 use and maintain hand and power tools
- 7.3 fit and assemble to form wheels to given working instructions;
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. fit and assemble bespoke products
 - b. produce straight in plan and elevation; door sets, doors, sliding sash windows, units and fitments and paneling and cladding
 - c. produce wooden framed vehicles, shafts, wheels, welded carriage components, metal and rubber tyring
 - d. produce staircases, handrails and balustrades straight and with turns
 - e. assemble and bond veneers hand and machine
 - f. produce products with single and double curvature features
 - g. produce bespoke products that incorporate associated materials (glass, plastics, fabrics, etc.)
 - h. take site and workplace dimensions
 - i. proportion joints associated with the product and construction method
 - j. recognise and determine when specialist skills and knowledge are required and report accordingly
 - k. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - I. identify and follow the installation quality requirements
 - m. work with, around and in close proximity to plant and machinery
 - n. use hand and power tools and equipment
 - o. requisition material
 - p. work at height
 - q. use access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when manufacturing bespoke wheelwrighting products
- 7.6 describe how to maintain the tools and equipment used when manufacturing bespoke wheelwrighting products.
- 7.7 Describe how to sharpen the hand tools used when manufacturing bespoke wheelwrighting products

Unit 327 Manufacturing bespoke wheelwrighting products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 330 Producing CAD setting out details in the workplace

Level:	3
GLH:	90
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 producing setting out details and/or working drawings using computer aided design (CAD)

The learner will:

1. Interpret the given information relating to the work and resources when producing CAD setting out details.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. oral and written instructions
 - h. sketches
 - i. electronic data
 - official guidance and current building regulations associated with producing CAD setting out details.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when producing CAD setting out details.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. with tools and equipment
 - c. with materials and substances
 - d. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.

2.4 describe the types of fire extinguishers available when producing CAD setting out details and describe how and when they are used.

Learning outcome

The learner will:

3. Maintain safe and healthy working practices when producing CAD setting out details.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when producing CAD setting out details
- 3.2 demonstrate compliance with give information and relevant legislation when producing CAD setting out details for the following
 - a. methods of work
 - b. safe use of visual display equipment
 - c. safe use of health and safety control equipment
 - d. safe use, storage and handling of materials
 - e. specific risks to health
- explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to producing CAD setting out details, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to
 - a. correct position and type of workstation equipment (anti-glare monitor, mouse arm supports, seat, keyboard).
 - b. collective protective measures
 - c. personal protective equipment (PPE)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to produce CAD setting out details.

Assessment criteria

- 4.1 select resources associated with own work in relation to:
 - a. materials

- b. components
- c. fixings
- d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. metals
 - e. plastics
 - f. fabrics
 - g. glass
 - h. ironmongery
 - i. fittings and fixings
 - j. computers setting out programmes
 - k. CAD equipment
- 4.3 describe how to confirm that the resources and materials conform to the specification including suitability, moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to produce CAD setting out details.

The learner will:

5. Minimise risk of damage to the work and the surrounding area when producing CAD setting out details.

Assessment criteria

The learner can:

- 5.1 maintain a clear and tidy work space
- 5.2 dispose of waste in accordance with current legislation.
- 5.3 describe how to protect work from loss and damage from general workplace activities
- 5.4 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

Learning outcome

The learner will:

6. Complete the work within the allocated time when producing CAD setting out details

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time.
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome

The learner will:

7. Comply with the given contract information to produce CAD setting out details to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when producing CAD setting out details:
 - a. inputting data using a keyboard
 - b. operating a mouse
 - c. customising settings
 - d. file managing
 - e. backing-up information
 - f. enhancing features
 - g. coding components and multi-layering details
- 7.2 use and maintain equipment
- 7.3 produce CAD setting out details, by use of pre-developed programme, to given working instructions for:
 - a. products straight in plan and elevation
 - b. products with single curvature details
- 7.4 produce working drawings to given working instructions
- 7.5 produce cutting lists complete with details of materials to given working instructions
- 7.6 monitor and validate the accuracy of output of the CAD setting out details.
- 7.7 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. set out by CAD; products straight in plan and elevation
 - b. set out by CAD; products with single curvature details
 - c. monitor and validate output
 - d. take site and workplace dimensions
 - e. produce cutting lists with materials
 - f. proportion joints associated with the products to be produced
 - g. requisition material
 - h. present products on visual display unit equipment

- i. use visual display unit equipment (including but not limited to anti-glare monitor, mouse arm supports, seat type and position, keyboard position)
- j. provide information for Building Information Modelling (BIM)
- k. recognise and determine when specialist skills and knowledge are required and report accordingly
- I. use CAD equipment
- 7.8 describe the needs of other occupations and how to effectively communicate within a team when producing CAD setting out details
- 7.9 describe how to maintain CAD tools and equipment

Unit 330 Producing CAD setting out details in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 349 Co-ordinating and confirming the dimensional control requirements of the work in the workplace

Level:	3
GLH:	40
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 Co-ordinating and confirming dimensional control requirements

The learner will:

1. Co-ordinate with and communicate accurate work information to work colleague.

Assessment criteria

The learner can:

- 1.1 source accurate dimensional work information to allow the work being carried out to be:
 - a. positioned
 - b. aligned
 - c. levelled
- 1.2 provide work colleagues with accurate dimensional work information to allow conformance with contract specifications
- 1.3 explain different methods of co-ordinating with work colleagues in order to enable them to position, align and level the work
- 1.4 explain the different methods of communicating dimensional information with work colleagues

Learning outcome

The learner will:

2. Confirm and measure dimensional controls and maintain them to the specified work requirements.

Assessment criteria

- 2.1 identify, establish and confirm a range of dimensional controls, setting out points, lines and profiles to meet contract specifications
- 2.2 maintain accurate dimensional controls, setting out points, lines and profile in accordance with contract specifications
- 2.3 explain the different methods of measuring the following dimensional controls and setting out points, lines and profiles:
 - a. lines
 - b. levels
 - c. angles
 - d. distances
 - e. curves
 - f. calibrations
 - g. tolerances
- 2.4 describe different methods of confirming and maintaining dimensional control, setting out points, lines and profiles.

The learner will:

3. Check and adjust measuring and recording equipment to the specified accuracy.

Assessment criteria

The learner can:

- 3.1 undertake checks and adjustments to a range of measuring and recording equipment relative to the occupational work environment or project type
- 3.2 explain the methods used to check mechanical, optical and electronic measuring and recording equipment applicable to the occupational area
- 3.3 describe how to apply manufacturers' tolerances to adjust equipment to maintain the specified accuracy.

Learning outcome

The learner will:

4. Identify any deviations in dimensional controls and ensure they are corrected in accordance with work requirements.

Assessment criteria

The learner can:

- 4.1 locate and establish possible deviations in dimensional control on a range of work being undertaken
- 4.2 plan and implement corrective action that allows the work to meet project requirements
- 4.3 describe the methods used to identify deviations in positioning, aligning and levelling, arising from:
 - a. transfer of lines and levels
 - b. use of wrong lines and levels
- 4.4 explain the different methods of correcting deviations in position, level and alignment to meet work requirements.

Learning outcome

The learner will:

5. Identify circumstances and conditions that require revision of work practices.

Assessment criteria

- 5.1 investigate and establish ongoing work and compare to the contract specifications
- explain how to identify circumstances and conditions associated with the following that may affect the work and require revisions to the work procedure/practice:
 - a. land
 - b. water
 - c. obstacles
 - d. climate variation

- e. live conditions
- f. utilities
- g. health and safety.

Unit 349 Co-ordinating and confirming the dimensional control requirements of the work in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 352 Producing setting out details for bespoke architectural joinery products in the workplace

Level:	3
GLH:	67
Aim:	The aim of this unit is to provide the learner with an awareness of:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 producing setting out rods and marking out plain and circular bespoke products for architectural joinery

The learner will:

1. Interpret the given information relating to the work and resources when producing setting out details for bespoke architectural joinery products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
 - h. official guidance
 - i. component standards
 - j. oral and written instructions
 - k. sketches
 - I. current regulations governing buildings associated with producing setting out details for bespoke products.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when producing setting out details for bespoke architectural joinery products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment

- f. with materials and substances
- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when producing setting out details for bespoke architectural joinery products and describe how and when they are used.

The learner will:

3. Maintain safe working practices when producing setting out details for bespoke architectural joinery products.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when producing setting out details for bespoke architectural joinery products
- 3.2 demonstrate compliance with given information and relevant legislation when producing setting out details for bespoke architectural joinery products for at least two of the following
 - a. safe use of access equipment
 - b. safe use and storage and handling of materials,
 - c. tools and equipment
 - d. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention should be used, relating to producing setting out details for bespoke architectural joinery products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

Learning outcome

The learner will:

4. select the required quantity and quality of resources for the methods of work to produce setting out details for bespoke architectural joinery products.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. paper rods
 - e. glass
 - f. plastic
 - g. fabric
 - h. metal
 - i. ironmongery
 - i. adhesives
 - k. fittings and fixings
 - I. marking and testing tools, hand and power tools
- 4.3 describe how to confirm resources and materials conform to the specification, including suitability, moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to produce setting out details for bespoke architectural joinery products.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when producing setting out details for bespoke architectural joinery products.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clean work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions

5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when producing setting out details for bespoke architectural joinery products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to produce setting out details for bespoke architectural joinery products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when producing setting out details for bespoke architectural joinery products:
 - a. measuring
 - b. marking out
 - c. drawing
- 7.2 use and maintain hand marking and testing tools and power
- 7.3 produce setting out details, marking out and cutting lists for bespoke architectural joinery products to given working instructions; for at least three of the following:
 - a. door sets
 - b. doors
 - c. open windows
 - d. units and/or fitments
 - e. paneling and/or cladding
 - f. staircases (straight and with turns)
 - g. handrails and balustrading
 - h. joinery products incorporating any of the following: glass, metal, fabrics, veneers, laminates
 - i. joinery products with single curvature features
 - j. joinery products with double curvature features
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:

- a. set out, mark out and produce cutting lists for bespoke products
- b. produce straight in plan and elevation: door sets, doors, sliding sash windows, units and fitments, paneling and cladding
- c. produce staircases, handrails and balustrades, straight and with turns
- d. produce products with single and double curvature features by geometrical development relating to the above items
- e. take site and workplace dimensions
- f. proportion joints associated with the product and construction methods
- g. requisition material
- h. recognise and determine when specialist skills and knowledge are required and report accordingly
- i. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
- j. identify and follow the installation quality requirements
- k. work with, around and in close proximity to plant and machinery
- l. use hand, marking and testing tools, and power tools m. work at height
- n. use access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when producing setting out details for bespoke architectural joinery products.
- 7.6 describe how to maintain the tools and equipment used when producing setting out details for bespoke architectural joinery products.

Unit 352 Producing setting out details for bespoke architectural joinery products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 353 Maintaining non-structural and structural components in the workplace

Level:	3
GLH:	137
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 repairing non-structural and/or structural components

The learner will:

1. Interpret the given information relating to the work and resources when maintaining non-structural and structural components.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. oral and written instructions
 - h. sketches
 - i. electronic data
 - j. official guidance and current building regulations associated with maintaining non-structural and structural components

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when maintaining non-structural and structural components.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances

- g. with movement and storage of materials by manual handling and mechanical lifting.
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when maintaining non-structural and structural components and describe how and when they are used.

The learner will:

3. Maintain safe and healthy working practices when maintaining non-structural and structural components.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when maintaining non-structural and structural components
- 3.2 demonstrate compliance with given information and relevant legislation when maintaining non-structural and structural components in relation to
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to maintaining non-structural and structural components, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV).
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to maintain non-structural and structural components.

Assessment criteria

- 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. metals
 - e. mouldings
 - f. sash cord
 - g. paint
 - h. bricks
 - i. tiles
 - i. cement
 - k. sand
 - I. plaster
 - m. preservatives
 - n. adhesives
 - o. sealants
 - p. ironmongery
 - q. fittings and fixings
 - r. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform with the specification including suitability, moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to maintain non-structural or structural components.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when maintaining non-structural and structural components.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when maintaining non-structural and structural components.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to maintain nonstructural and structural components to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when maintaining nonstructural and structural components:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. splicing
 - e. finishing
 - f. positioning

- g. securing
- 7.2 use and maintain hand and power tools
- 7.3 repair and/or replace at least three of the following nonstructural components to given working instructions in timber, timber based products, composite materials and metal:
 - a. frames (to include priming the repair)
 - b. mouldings (to include priming the repair)
 - c. floor joist covering (or flat roof)
 - d. sash cords
 - e. windows replacement glazing
 - f. fascias, soffits and barge boards.
 - g. non-structural stair components
 - h. false ceiling
- 7.4 repair and/or replace at least two of the following structural components to given working instructions in timber, timber-based products, composite materials and metal:
 - a. stall risers
 - b. structural joists (including support)
 - c. structural rafters (including support)
 - d. structural stair components
 - e. load bearing partitions
 - f. form openings
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. replace and repair the following structural components in timber, timber based products, composite materials and metal: stall risers, structural joist (including support), structural rafters (including support) structural stair components, load bearing partitions and form openings
 - replace and repair the following structural components in timber, timber based products, composite materials and metal: stall risers, structural joist (including support), structural rafters (including support) structural stair components, load bearing partitions and form openings
 - c. replace and splice door and window frames, mouldings and structural timbers
 - d. replace sash cords
 - e. re-glaze
 - f. re-lay brick/blockwork
 - g. make good paintwork, plasterwork, brickwork, wall tiling
 - h. identify load bearing points
 - i. prop and support existing structures
 - j. replace frames and mouldings
 - k. repair or replace door and window ironmongery
 - I. repair and replace guttering and downpipes
 - m. repair and replace fascias, soffits and barge boards
 - n. form joints associated with repairs
 - o. recognise and determine when specialist skills and knowledge are required and report accordingly

- p. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
- q. identify and follow the installation quality requirements
- r. work with, around and in close proximity to plant and machinery
- s. use hand and power tools
- t. work at height
- u. use access equipment
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when maintaining non-structural and structural components
- 7.7 describe how to maintain the tools and equipment used when maintaining non-structural and structural components.
- 7.8 describe how to sharpen the hand tools used when maintaining non-structural and structural components

Unit 353 Maintaining non-structural and structural components in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 354 Manufacturing bespoke architectural joinery products in the workplace

Level:	3
GLH:	123
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 fitting and assembling plain and circular bespoke products for architectural joinery

The learner will:

1. Interpret the given information relating to the work and resources when manufacturing bespoke architectural joinery products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. cutting lists
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
 - h. oral and written instructions
 - i. sketches
 - j. electronic data
 - k. official guidance and current building regulations associated with manufacturing bespoke products

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when manufacturing bespoke architectural joinery products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances

- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to
 - a. site
 - b. workplace
 - c. company
 - d. operative
 - e. vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when manufacturing bespoke architectural joinery products and describe how and when they are used.

The learner will:

3. Maintain safe and healthy working practices when manufacturing bespoke architectural joinery products.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when manufacturing bespoke architectural joinery products.
- 3.2 demonstrate compliance with given information and relevant legislation when
 - a. safe handling of materials
 - b. safe use and storage of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to manufacturing bespoke architectural joinery products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to manufacture bespoke architectural joinery products.

Assessment criteria

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. metal
 - e. pre-machined components
 - f. setting out rods
 - g. glass
 - h. plastics
 - i. fabrics
 - j. veneers
 - k. ironmongery
 - I. adhesives
 - m. sealants
 - n. fittings and fixings
 - o. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform to the specification including suitability, moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.6 describe any potential hazards associated with the resources and methods of work.
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to manufacturing bespoke architectural joinery products.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when manufacturing bespoke architectural joinery products.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations and official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when manufacturing bespoke architectural joinery products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to manufacture bespoke architectural joinery products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when manufacturing bespoke architectural joinery products:
 - a. measuring
 - b. marking out
 - c. fitting

- d. finishing
- e. positioning
- f. securing
- 7.2 use and maintain hand and power tools
- 7.3 fit and assemble to form bespoke manufactured architectural joinery products to given working instructions, for at least three of the following:
 - a. door sets
 - b. doors
 - c. opening windows
 - d. units and fitments
 - e. panelling or cladding
 - f. joinery products incorporating any of the following: glass, metal, fabrics, veneers and laminates
 - g. staircases (straight and with turns)
 - h. handrails and balustrades
 - i. joinery products with single curvature features
 - j. joinery products with double curvature features
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. fit and assemble bespoke products
 - b. produce straight in plan and elevation; door sets, doors, opening windows, units and fitments and paneling and cladding
 - c. produce staircases, handrails and balustrades straight and with turns
 - d. assemble and bond veneers hand and machine
 - e. produce products with single and double curvature features
 - f. produce bespoke products that incorporate associated materials (glass, plastics, fabrics, etc.)
 - g. take site and workplace dimensions
 - h. proportion joints associated with the product and construction method
 - i. recognise and determine when specialist skills and knowledge are required and report accordingly
 - j. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - k. identify and follow the installation quality requirements
 - I. work with, around and in close proximity to plant and machinery
 - m. use hand and power tools and equipment
 - n. requisition material
 - o. work at height
 - p. use access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when manufacturing bespoke architectural joinery products
- 7.6 describe how to maintain the tools and equipment used when manufacturing bespoke architectural joinery products.
- 7.7 describe how to sharpen the hand tools used when manufacturing bespoke shopfitting products.

Unit 354 Manufacturing bespoke architectural joinery products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 355 Manufacturing bespoke shopfitting products in the workplace

3
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The aim of this unit is to provide the learner with the necessary skills and knowledge for:
 interpreting information
 adopting safe and healthy working practices
 selecting materials, components and equipment
 fitting and assembling plain and circular bespoke products for shopfitting products (timber and/or non-ferrous metal)

The learner will:

1. Interpret the given information relating to the work and resources when manufacturing bespoke shopfitting products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
 - h. oral and written instructions
 - i. sketches
 - i. electronic data
 - k. official guidance and current building regulations associated with manufacturing bespoke products

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when manufacturing bespoke shopfitting products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances

- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when manufacturing bespoke shopfitting products and describe how and when they are used.

The learner will:

3. Maintain safe working practices when manufacturing bespoke shopfitting products.

Assessment criteria

The learner can:

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when manufacturing bespoke shopfitting products
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to manufacturing bespoke shopfitting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards.

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to manufacture bespoke shopfitting products.

Assessment criteria

- 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment.
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. metal
 - e. pre-machined components
 - f. setting out rods
 - g. glass
 - h. plastics
 - i. fabrics
 - i. veneers
 - k. ironmongery
 - I. adhesives
 - m. sealants
 - n. fittings and fixings
 - o. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform to the specification including suitability, moisture and durability.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to manufacturing bespoke shopfitting products.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when manufacturing bespoke shopfitting products.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions

5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when manufacturing bespoke shopfitting products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome

The learner will:

7. Comply with the given contract information to manufacture bespoke shopfitting products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when manufacturing bespoke shopfitting products:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. finishing
 - e. positioning
 - f. securing
- 7.2 use and maintain hand power tools
- 7.3 fit and assemble to form bespoke manufactured shopfitting products (timber, timber based products and/or composite materials and/or metal) to given working instructions; for at least three of the following:
 - a. door sets
 - b. internal screens
 - c. frames and linings
 - d. shopfront sashes, including associated elements
 - e. paneling or cladding
 - f. units and fitments
 - g. products incorporating any of the following: glass, fabrics, veneers, laminates
 - h. staircases (straight with turns)
 - i. handrails and balustrades
 - j. shopfitting products with single curvature features
 - k. shopfitting products with double curvature features

- l. soffits and bulkheads.
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. fit and assemble bespoke products
 - b. produce straight in plan and elevation; door sets, doors, sliding sash windows, units and fitments and paneling and cladding
 - c. produce staircases, handrails and balustrades straight and with turns
 - d. assemble and bond veneers hand and machine
 - e. produce products with single and double curvature features
 - f. produce bespoke products that incorporate associated materials (glass, plastics, fabrics, etc.)
 - g. take site and workplace dimensions
 - h. proportion joints associated with the product and construction method
 - i. recognise and determine when specialist skills and knowledge are required and report accordingly
 - j. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - k. identify and follow the installation quality requirements
 - l. work with, around and in close proximity to plant and machinery
 - m. use hand and power tools and equipment
 - n. requisition material
 - o. work at height
 - p. use access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when manufacturing shopfitting bespoke products
- 7.6 describe how to maintain the tools and equipment used when manufacturing bespoke shopfitting products.
- 7.7 describe how to sharpen the hand tools used when manufacturing bespoke shopfitting products.

Unit 355 Manufacturing bespoke shopfitting products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 356 Installing bespoke first fixing components in the workplace

Level:	3
GLH:	100
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information adopting safe and healthy working practices selecting materials, components and equipment preparing and carrying out first fixing

The learner will:

1. Interpret the given information relating to the work and resources when installing bespoke first fixing components.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. oral and written instructions
 - h. sketches
 - i. electronic data
 - j. official guidance and current building regulations associated with installing first fixing components.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when installing bespoke first fixing components.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. below ground level
 - f. in confined spaces
 - g. with tools and equipment
 - h. with materials and substances

- i. with movement/storage of materials and by manual handling and mechanical lifting.
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to
 - a. site
 - b. workplace
 - c. company
 - d. operative
 - e. vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when installing bespoke first fixing components and describe how and when they are used.

The learner will:

3. Maintain safe and healthy working practices when installing bespoke first fixing components.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when installing bespoke first fixing components
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health.
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to installing bespoke first fixing components, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV).
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to install bespoke first fixing components.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
- describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. manufactured sheet material
 - e. metals
 - f. frames
 - g. linings
 - h. staircases
 - i. adhesives
 - i. sealants
 - k. fixings

 - I. hand and power tools.
- describe how to confirm that the resources and materials conform to the specification
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- describe any potential hazards associated with the resources and methods of work
- describe how to calculate quantity, length, area and wastage associated with the method and procedure to install bespoke first fixing components.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when installing bespoke first fixing components.

Assessment criteria

- protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- dispose of waste in accordance with current legislation

- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

The learner will:

6. Complete the work within the allocated time when installing bespoke first fixing components.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to install bespoke first fixing components to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when installing bespoke first fixing components:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. finishing
 - e. positioning
 - f. securing
- 7.2 use and maintain hand and power tools
- 7.3 install at least three of the following to given working instructions:
 - a. bespoke frames (door and/or window)
 - b. shaped linings (door and/or hatch)
 - c. partitions (with openings and change of direction)
 - d. staircases (with turns).

- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. prepare and fix bespoke door and window frames, window boards, shaped linings, partitions full or partial height (with openings and change of direction), plasterboard, staircases (with turns)
 - b. form joints associated with bespoke first fixing
 - c. recognise and determine when specialist skills and knowledge are required and report accordingly
 - d. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - e. identify and follow the installation quality requirements
 - f. work with, around and in close proximity to plant and machinery
 - g. use hand and power tools
 - h. work at height
 - i. use access equipment.
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when installing bespoke first fixing components
- 7.6 describe how to maintain the tools and equipment used when installing bespoke first fixing components.
- 7.7 describe how to sharpen the hand tools used when installing bespoke first fix components.

Unit 356 Installing bespoke first fixing components in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 357 Installing bespoke second fixing components in the workplace

Level:	3
GLH:	133
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information adopting safe and healthy working practices selecting materials, components and equipment preparing and carrying out second fixing

The learner will:

1. Interpret the given information relating to the work and resources when installing bespoke second fixing components.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. oral and written instructions
 - g. sketches
 - h. electronic data
 - official guidance and current building regulations associated with installing bespoke second fixing components

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when installing bespoke second fixing components.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement and storage of materials by manual handling and mechanical lifting.

- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
 - a. site
 - b. workplace
 - c. company
 - d. operative
 - e. vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when installing second fixing components and describe how and when they are used.

The learner will:

3. Maintain safe and healthy working practices when installing bespoke second fixing components.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when installing bespoke second fixing components
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to installing bespoke second fixing components, and the types, purpose and limitations of each type the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to install bespoke second fixing components.

Assessment criteria

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment.
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. timber boarding
 - e. plastics
 - f. metals
 - g. doors
 - h. mouldings
 - i. ironmongery
 - i. prefabricated units
 - k. adhesives
 - I. sealants
 - m. fixings
 - n. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform to the specification.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.6 describe any potential hazards associated with the resources and methods of work.
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to install bespoke second fixing components.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when installing bespoke second fixing components.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations and official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when installing bespoke second fixing components.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information and the required specification to install bespoke second fixing components.

Assessment criteria

- 7.1 demonstrate the following work skills when installing bespoke second fixing components:
 - a. measuring
 - b. marking out
 - c. fitting

- d. finishing
- e. positioning
- f. securing
- 7.2 use and maintain hand and power tools
- 7.3 install to given working instructions: side hung doors (double or pairs); ironmongery (in pair or sets); mouldings (detailed architrave, skirting)

plus at least one of the following

- a. accessible service encasement
- b. bespoke units or fitments
- c. cladding or panelling
- d. stair components (balustrades, handrails, spindles with turns)
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. prepare and fix internal and external side hung doors (double or pairs), fire resisting and non-fire resisting doors, door closers, ironmongery (in pairs or sets), detailed architraves, skirting, dado rails, picture rails, internal and external cladding, accessible service encasements, bespoke prefabricated units and stair components (with turns)
 - b. form joints associated with bespoke second fixing
 - c. recognise and determine when specialist skills and knowledge are required and report accordingly
 - d. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - e. identify and follow the installation quality requirements
 - f. work with, around and in close proximity to plant and machinery
 - g. use hand and power tools
 - h. work at height
 - i. use access equipment.
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when installing bespoke second fixing components.
- 7.6 describe how to maintain the tools and equipment used when installing bespoke second fixing components.
- 7.7 describe how to sharpen the hand tools used when installing bespoke second fix components

Unit 357 Installing bespoke second fixing components in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 363 Producing setting out details for bespoke shopfitting products in the workplace

3
07
The aim of this unit is to provide the learner with the necessary skills and knowledge or:
interpreting information
adopting safe and healthy working practices
selecting materials, components and equipment
producing setting out rods and marking out plain and circular bespoke products for shopfitting products (timber and/or non-ferrous metal)

The learner will:

1. Interpret the given information relating to the work and resources when producing setting out details for bespoke shopfitting products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
 - h. oral and written instructions
 - i. sketches
 - j. electronic data
 - k. official guidance and current building regulations associated with producing setting out details for bespoke products

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when producing setting out details for bespoke shopfitting products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. below ground
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances

- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles.
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when producing setting out details for bespoke shopfitting products and describe how and when they are used

The learner will:

3. Maintain safe working practices when producing setting out details for bespoke shopfitting products.

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when producing setting out details for bespoke shopfitting products.
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention should be used, relating to producing setting out details for bespoke shopfitting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards

The learner will:

4. Select the required quantity and quality of resources for the methods of work to produce setting out details for bespoke shopfitting products.

Assessment criteria

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. paper rods
 - e. glass
 - f. plastic
 - g. fabric
 - h. metal
 - i. ironmongery
 - i. adhesives
 - k. marking and testing tools and equipment
- 4.3 describe how to confirm resources and materials conform to the specification, including suitability, moisture and durability.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method/procedure to produce setting out details for bespoke shopfitting products.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when producing setting out details for bespoke shopfitting products.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with legislation.
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when producing setting out details for bespoke shopfitting products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to produce setting out details for bespoke shopfitting products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when producing setting out details for bespoke shopfitting products:
 - a. measuring
 - b. marking out
 - c. drawing

- 7.2 Use and maintain hand marking and testing tools, and-power tools.
- 7.3 produce setting out details, marking out and cutting lists for bespoke shopfitting products (timber, timber based products and/or composite materials and /or metal) to given working instructions; for four of the following:
 - a. doors
 - b. frames and linings
 - c. shopfront sashes, including associated elements
 - d. units and fitments
 - e. framed paneling and/or cladding
 - f. products incorporating any of the following: glass, fabrics, veneers
 - g. staircases (straight and with turns)
 - h. handrails and balustrades
 - i. shopfitting products with single curvature features
 - j. shopfitting products with double curvature features
 - k. soffits and bulkheads
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. set out, mark out and produce cutting lists for bespoke products
 - b. produce straight in plan and elevation: door sets, doors, sliding sash windows, units and fitments, paneling and cladding
 - c. produce staircases, handrails and balustrades, straight and with turns
 - d. produce products with single and double curvature features by geometrical development relating to the above items
 - e. take site and workplace dimensions
 - f. proportion joints associated with the product and construction methods
 - g. requisition material
 - h. recognise and determine when specialist skills and knowledge are required and report accordingly
 - i. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - j. identify and follow the installation quality requirements
 - k. work with, around and in close proximity to plant and machinery
 - l. use hand, marking and testing tools, and power tools m. work at height
 - n. use accesss equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when producing setting out details for bespoke shopfitting products
- 7.6 describe how to maintain the tools and equipment used when producing setting out details for bespoke shopfitting products.

Unit 363 Producing setting out details for bespoke shopfitting products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualifications/occupational area in which the candidate is being assessed.

Unit 364 Producing setting out details for bespoke wheelwrighting products in the workplace

Level:	3
GLH:	107
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 producing setting out rods and marking out plain and circular bespoke products for wheelwrighting (carriage construction)

The learner will:

1. Interpret the given information relating to the work and resources when producing setting out details for bespoke wheelwrighting products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
 - h. component standards
 - i. oral and written instructions
 - i. sketches
 - k. electronic data
 - I. official guidance and current building regulations associated with producing setting out details for bespoke products.

Learning outcome

The learner will:

2. know how to comply with relevant legislation and official guidance when producing setting out details for bespoke wheelwrighting products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment

- f. with materials and substances
- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when producing setting out details for bespoke wheelwrighting products and describe how and when they are used.

The learner will:

3. Maintain safe working practices when producing setting out details for bespoke wheelwrighting products.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when producing setting out details for bespoke wheelwrighting products.
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention should be used, relating to producing setting out details for bespoke wheelwrighting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV).
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to produce setting out details for bespoke wheelwrighting products.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. paper rods
 - e. glass
 - f. plastic
 - g. fabric
 - h. no metal
 - i. ironmongery
 - i. adhesives
 - k. fittings and fixings
 - I. marking and testing tools, hand and power tools
- 4.3 describe how to confirm resources and materials conform to the specification including suitability, moisture and durabilitydescribe how the resources should be used correctly and how problems associated with the resources are reported
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.5 describe any potential hazards associated with the resources and methods of work
- 4.6 describe how to calculate quantity, length, area and wastage associated with the method and procedure to produce setting out details for bespoke wheelwrighting products.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when producing setting out details for bespoke wheelwrighting products.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space

- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

The learner will:

6. Complete the work within the allocated time when producing setting out details for bespoke wheelwrighting products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to produce setting out details for bespoke wheelwrighting products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when producing setting out details for bespoke wheelwrighting products:
 - a. measuring
 - b. marking out
 - c. drawing
- 7.2 produce setting out details, marking out and cutting lists for wheels to given working instructions
- 7.3 use and maintain hand marking and testing tools and power tools
- 7.4 produce setting out details, marking out and cutting lists for bespoke wheelwrighting products (carriage construction) to given working instructions: wheels plus at least two of the following:
 - a. doors
 - b. frames
 - c. wooden framed vehicles

- d. shafts
- e. steps
- f. wooden framed vehicles with single curvature features
- g. wooden framed vehicles with double curvature features
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. set out, mark out and produce cutting lists for bespoke products
 - b. produce straight in plan and elevation: door sets, doors, sliding sash windows, units and fitments, paneling and cladding
 - c. wooden framed vehicles, shafts and wheels
 - d. produce staircases, handrails and balustrades, straight and with turns
 - e. produce products with single and double curvature features by geometrical development relating to the above items
 - f. take site and workplace dimensions
 - g. proportion joints associated with the product and construction methods
 - h. requisition material
 - i. recognise and determine when specialist skills and knowledge are required and report accordingly
 - j. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - k. identify and follow the installation quality requirements
 - I. work with, around and in close proximity to plant and machinery
 - m. use hand, marking and testing tools, and power to
 - n. work at height
 - o. use access equipment
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when producing setting out details for bespoke wheelwrighting products
- 7.7 describe how to maintain the tools and equipment used when producing setting out details for bespoke wheelwrighting products.

Unit 364 Producing setting out details for bespoke wheelwrighting products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 366 Setting up and using fixed machinery in the workplace

Level:	3
GLH:	130
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 setting up fixed machinery and working timber and/or non-ferrous metal

The learner will:

1. Interpret the given information relating to the work and resources when setting up and using fixed machinery.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
 - h. operating instructions
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
 - h. oral and written instructions
 - i. sketches
 - j. electronic data
 - k. official guidance and current building regulations associated with set up and use of fixed machinery

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when setting up and using fixed machinery.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances

- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 describe the types of fire extinguishers available when setting up and using fixed machinery and describe how and when they are used.

The learner will:

3. Maintain safe and healthy working practices when setting up and using fixed machinery.

Assessment criteria

- 3.1 use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when setting up and using fixed machinery
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to setting up and using fixed machinery, and the types, purpose and limitations of each type the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV).
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given instructions.
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to set up and use fixed machinery

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment.
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to
 - a. hand and power tools
 - b. accessories
- 4.3 describe how to confirm that the resources and materials conform to the specification including suitability, moisture and durability.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.6 describe any potential hazards associated with the resources and methods of work.
- 4.7 describe how to calculate quantity, length, area and wastage associated with the method and procedure to set up and use fixed machinery.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when setting up and using fixed machinery.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance

Learning outcome

The learner will:

6. Complete the work within the allocated time when setting up and using fixed machinery.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time.
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information when setting up and using fixed machinery.

Assessment criteria

- 7.1 demonstrate the following work skills when setting up and using fixed machine
 - a. measuring
 - b. marking out
 - c. fitting
 - d. finishing
 - e. positioning and securing
- 7.2 use and maintain hand and power tools and safety aids
- 7.3 set up and operate at least six of the following machines:
 - a. circular saw
 - b. planer
 - c. thicknesser
 - d. bandsaw
 - e. morticer
 - f. tenoner
 - g. spindle moulder
 - h. drill
 - i. grinder
 - j. sander
 - h. overhead router
- 7.4 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to
 - a. set up machines: circular saw, planer, thicknesser, bandsaw, morticer, tenoner, spindle moulder, overhead router, drill, grinder and sander
 - b. check the operation of machines
 - c. cut material to size and shape
 - d. plane materials to size
 - e. change sawblades (circular and band), planer knives, morticer tooling, tenoner and spindle moulder cutting blocks
 - f. form mortice in materials
 - g. change abrasive wheels and discs

- h. cut section straight and shaped
- i. grind, linish and texture surfaces
- j. drill and tap materials
- k. recognise and determine when specialist skills and knowledge are required and report accordingly
- I. identify and follow the quality requirements
- m. use hand and power tools, and equipment
- n. requisition material
- o. work at height
- p. use access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when setting up and using fixed machinery.
- 7.6 describe how to maintain the safety aids, tools and equipment used when setting up and using fixed machinery.

Unit 366 Setting up and using fixed machinery in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 384 Conserving or restoring heavy timber framework in the workplace

Level:	3
GLH:	117
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge to:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 preparing, renewing, repairing or refurbishing heavy timber framework in conservation or restoration projects

The learner will:

1. Interpret the given information relating to the work and resources when conserving or restoring heavy timber framework.

Assessment criteria

The learner can:

- 1.1 interpret and extract information from:
 - a. drawings
 - b. specifications
 - c. method statements
 - d. schedules
 - e. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and/or method statement
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. method statements
 - d. schedules
 - e. manufacturers' information
 - f. archaeological watching brief
 - g. historical conservation plans and charters
 - h. legislation and regulations governing buildings.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when conserving or restoring heavy timber framework.

Assessment criteria

- 2.1 describe their responsibilities under current legislation and official guidance whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials and by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative

2.3 state what the accident reporting procedures are and who is responsible for making reports

Learning outcome

The learner will:

3. Maintain safe working practices when conserving or restoring heavy timber framework.

Assessment criteria

The learner can:

- 3.1 use personal protective equipment (PPE), lifting equipment and access equipment safely to carry out the activity in accordance with legislation and organisational requirements when conserving or restoring heavy timber framework
- 3.2 explain why and when personal protective equipment (PPE) should be used, relating to conserving or restoring heavy timber framework, and the types, purpose and limitations of each type
- 3.3 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to conserve or restore heavy timber framework.

Assessment criteria

- 4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. pre-fabricated components
 - c. pegs
 - d. metal fixings
 - e. glues and resin products
 - f. mechanical lifting equipment
 - g. hand tools and hand-held portable power tools
 - h. power tools/machines
 - i. ancillary equipment
- 4.2 select resources associated with own work in relation to materials, components, fixings, tools and equipment
- 4.3 state how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used
- 4.4 outline potential hazards associated with the resources and method of work

4.5 describe how to calculate quantity, length, area and wastage associated with the method/procedure to conserve or restore heavy timber framework.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when conserving or restoring heavy timber framework.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage
- 5.2 minimise damage and maintain a clean work space
- 5.3 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.4 dispose of waste in accordance with legislation
- 5.5 state why the disposal of waste should be carried out in relation to the work.

Learning outcome

The learner will:

6. Complete the work within the allocated time when conserving or restoring heavy timber framework.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to conserve or restore heavy timber framework to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when conserving or restoring heavy timber framework:
 - a. measuring
 - b. marking out
 - c. cutting
 - d. jointing
 - e. shaping
 - f. fitting
 - g. fixing
 - h. finishing
 - i. positioning

- j. securing
- k. recording
- 7.2 prepare, conserve, restore, renew, repair or refurbish heavy timber framework to given working instructions for at least one of the following:
 - a. walls (structural and/or non-structural)
 - b. floors
 - c. roofs
- 7.3 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. determine angles and lengths
 - b. brace in-situ components to form or support structural and/or non-structural frameworks
 - c. determine graded timber tree anatomy and growth rates, shrinkage and defects
 - d. assess the milling and cleaving process
 - e. determine how the conversion affects the end use
 - f. form joints associated with structural and non-structural timber frame components
 - g. work with lifting and hoisting equipment
 - h. finish surfaces
 - i. validate appropriate ways in which the work should be carried out
 - j. recognise sensitive areas
 - k. maintain heritage and archaeological integrity
 - I. maintain the principles of minimum intervention and reversible alterations
 - m. stop work at the point when conjecture begins and report findings
 - n. record work carried out (written, photographic or digital)
 - o. recognise and/or report endangered/protected flora and fauna
 - p. remove deteriorated and/or inappropriate materials
 - q. maintain existing structure
 - r. integrate existing and new constructional components or finishes
 - s. store salvageable components
 - t. use hand tools, power tools and equipment
 - u. work at height
 - v. use access equipment.
- 7.4 safely use and store materials, hand tools, hand-held portable power tools, power tools/machines and ancillary equipment
- 7.5 state the needs of other occupations and how to communicate within a team when conserving or restoring heavy timber framework
- 7.6 describe how to and maintain the tools and equipment used when conserving or restoring heavy timber framework.

Unit 384 Conserving or restoring heavy timber framework in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment and in accordance with 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 Assessment Strategy

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of conserving or restoring heavy timber framework to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Unit 502 Developing and maintaining good occupational working relationships in the workplace

Level:	3
GLH:	37
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 working with, informing and supporting people
	 developing and maintaining good occupational working relationships.

The learner will:

1. Develop, maintain and encourage working relationships to promote good will and trust.

Assessment criteria

The learner can:

- 1.1 give appropriate advice and information to relevant people about the occupational work activities and/or associated occupations involved
- 1.2 apply the principles of equality and diversity by considering the needs of individuals when working and communicating with others
- 1.3 explain the methods and techniques used and personal attributes required to encourage and maintain working relationships that promote goodwill and trust with relevant people
- 1.4 explain the principles of equality and diversity and how to apply them when working and communicating with others.

Learning outcome

The learner will:

2. Inform relevant people about work activities in an appropriate level of detail, with the appropriate level of urgency.

Assessment criteria

- 2.1 communicate on the following work activity information to relevant people following organisational procedures:
 - a. appropriate timescales
 - b. health and safety requirements
 - c. co-ordination of work procedures
- 2.2 explain the different methods and techniques used to inform relevant people about work activities
- 2.3 explain the effects of not informing relevant people with the expected level of urgency
- 2.4 explain the different types of work activity related information and to what level of detail the following people would expect to receive:
 - a. colleagues
 - b. employers
 - c. customers
 - d. contractors
 - e. suppliers of products and services
 - f. other people affected by the work/project.

The learner will:

3. Offer advice and help to relevant people about work activities and encourage questions/requests for clarification and comments.

Assessment criteria

The learner can:

- 3.1 give appropriate advice and information to relevant people about the different methods of carrying out occupational work activities to achieve the required outcome
- 3.2 explain the techniques of encouraging questions and/or requests for clarification and comments
- 3.3 explain the different ways of offering advice and help to different people about work activities, in relation to:
 - a. progress
 - b. results
 - c. achievements
 - d. occupational problems
 - e. occupational opportunities
 - f. health and safety requirements
 - g. co-ordinated work.

Learning outcome

The learner will:

4. Clarify proposals with relevant people and discuss alternative suggestions.

Assessment criteria

The learner can:

- 4.1 engage regular discussions with relevant people about the occupational work activity and/or other occupations involved
- 4.2 explain the methods of clarifying alternative proposals with relevant people
- 4.3 explain the methods of suggesting alternative proposals.

Learning outcome

The learner will:

5. Resolve differences of opinion in ways that minimise offence and maintain goodwill, trust and respect.

Assessment criteria

- 5.1 examine and agree the work activities that satisfy all people involved and will meet the required outcome of the proposed method of work
- 5.2 explain the methods and techniques used to resolve differences of opinion in ways which minimise offence and maintain goodwill, trust and respect.

Unit 502 Developing and maintaining good occupational working relationships in the workplace

Supporting information

Assessment Guidance

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

- the Additional Requirements for Qualifications using the title NVQ in RQF
- 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 624 Manufacturing routine wheelwrighting products in the workplace

Level:	2
GLH:	103
Aim:	The aim of this unit is to provide the learner with an awareness of:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 fitting and assembling products for wheelwrighting (carriage construction)

The learner will:

1. Interpret the given information relating to the work and resources when manufacturing routine wheelwrighting products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. cutting lists
 - g. manufacturers' information
 - h. oral and written instructions
 - i. sketches
 - j. electronic data
 - k. official guidance and current building regulations associated with
 - I. with manufacturing routine wheelwrighting prod

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when manufacturing routine wheelwrighting products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances

- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative.
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.
- 2.4 state the types of fire extinguishers available when manufacturing routine wheelwrighting products and describe how and when they are used.

The learner will:

3. Maintain safe working practices when manufacturing routine wheelwrighting products.

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when manufacturing routine wheelwrighting products.
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to manufacturing routine wheelwrighting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV).
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.
- 3.5 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to manufacture routine wheelwrighting products.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment.
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. pre-machined components
 - e. setting out rods
 - f. metal
 - g. fabric
 - h. metal and rubber rims
 - i. glass
 - j. plastic
 - k. ironmongery
 - I. adhesives
 - m. fixings and fittings
 - n. use hand power tools
- 4.3 describe how to confirm that the resources and materials conform to the specification including suitability, moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to manufacture routine wheelwrighting products.

Learning outcome

The learner will:

5. minimise the risk of damage to the work and surrounding area when manufacturing routine wheelwrighting products.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 5.2 maintain a clear and tidy work space.
- 5.3 dispose of waste in accordance with legislation.
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations and official guidance.

The learner will:

6. Complete the work within the allocated time when manufacturing routine wheelwrighting products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to manufacture routine wheelwrighting products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when manufacturing routine wheelwrighting products:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. finishing
 - e. positioning
 - f. securing
- 7.2 use and maintain hand and power tools
- 7.3 fit and assemble to form routine manufactured wheelwrighting products (carriage construction) to given working instructions; wheels (including butt welded rim) and at least one of the following:
 - a. doors
 - b. wooden framed vehicles

- c. shafts
- 7.4 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. fit and assemble routine products
 - b. produce straight in plan and elevation: doors, windows with opening lights, units, fitments and paneling and cladding, staircases
 - c. produce wooden framed vehicles, shafts and wheels
 - d. produce metal carriage components.
 - e. check and work to marked dimensions
 - f. form joints associated with the product and construction method
 - g. recognise and determine when specialist skills and knowledge are required and report accordingly
 - h. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - i. identify and follow the installation quality requirements
 - j. work with, around and in close proximity to plant and machinery
 - k. use hand and power tools
 - I. use access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when manufacturing routine wheelwrighting products.
- 7.6 describe how to maintain the tools and equipment used when manufacturing routine wheelwrighting products.
- 7.7 describe how to sharpen the hand tools used when manufacturing routine wheelwrighting products.

Unit 624 Manufacturing routine wheelwrighting products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 607 Marking out from setting out details for routine wheelwrighting products in the workplace

Level:	2
GLH:	80
Aim:	The aim of this unit is to provide the learner with an awareness of:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 marking out from routine product setting out for wheelwrighting (carriage construction)

The learner will:

1. Interpret the given information relating to the work and resources when marking out from setting out details for routine wheelwrighting products.

Assessment criteria

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
 - h. component standards
 - i. oral and written instructions
 - i. sketches
 - k. electronic data
 - official guidance and current building regulations associated with associated with marking out from setting out details for routine wheelwrighting.

The learner will:

2. Know how to comply with relevant legislation and official guidance when marking out from setting out details for routine wheelwrighting products.

Assessment criteria

The learner can:

- 2.1 describe their responsibilities potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.
- 2.4 describe the types of fire extinguishers available when producing setting out details for routine wheelwrighting products and describe how and when they are used.

Learning outcome

The learner will:

3. Maintain safe working practices when marking out from setting out details for routine wheelwrighting products.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when marking out from setting out details for routine wheelwrighting products
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to marking out from setting out details for routine wheelwrighting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)

- c. respiratory protective equipment (RPE)
- d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.
- 3.5 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to mark out from setting out details for routine wheelwrighting products.

Assessment criteria

- 4.1 select resources associated with own work in relation to materials, components, fixings, marking and testing tools and equipment.
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. manufactured sheet material
 - e. metal
 - f. ironmongery
 - g. adhesives
 - h. fixings
 - i. marking and testing tools and equipment
 - j. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform to specification including moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.5 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.6 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.7 describe any potential hazards associated with the resources and methods of work
- 4.8 describe how to calculate:
 - a. quantity
 - b. length
 - c. area

d. wastage associated with the method and procedure to mark out from setting out details for routine wheelwrighting products.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when marking out from setting out details for routine wheelwrighting products.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when marking out from setting out details for routine wheelwrighting products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to mark out from setting out details for routine wheelwrighting products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when marking out from setting out details for routine wheelwrighting products:
 - a. measuring
 - b. marking out

- c. drawing
- 7.2 use and maintain marking and testing tools, hand and power tools
- 7.3 mark out from setting out rods (template) routine wheelwrighting products (timber and/or timber based products and/or composite materials, metal) to given working instructions; one of the following:
 - a. doors
 - b. frames
 - c. wooden framed vehicles
 - d. shafts wheels.
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. mark out from setting out details and cutting lists
 - b. produce straight in plan and elevation: doors and frames (glazed and/or non-glazed), windows with opening lights, linings, units, fitments and paneling and cladding, staircases
 - c. produce wooden framed vehicles, shafts and wheels
 - d. transfer and mark dimensions
 - e. proportion joints associated with the product and construction method
 - f. use marking and testing tools
 - g. requisition material
 - h. recognise and determine when specialist skills and knowledge are required and report accordingly
 - i. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - j. identify and follow the installation quality requirements
 - k. work with, around and in close proximity to plant and machinery
 - I. use hand and power tools
 - m. work at height
 - n. use access equipment
- 7.5 describe the needs of other occupations and how to communicate within a team when marking out from setting out details for routine wheelwrighting products
- 7.6 describe how to maintain the tools and equipment used when marking out from setting out details for routine wheelwrighting products.

Unit 607 Marking out from setting out details for routine wheelwrighting products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 615 Marking out from setting out details for routine architectural joinery products in the workplace

Level:	2
GLH:	80
Aim:	 The aim of this unit is to provide the learner with an awareness of: interpreting information adopting safe and healthy working practices selecting materials, components and equipment marking out from routine product setting out for architectural joinery

The learner will:

1. Interpret the given information relating to the work and resources when marking out from setting out details for routine architectural joinery products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. cutting lists
 - h. manufacturers' information
 - i. component standards
 - j. oral and writing instructions
 - k. sketches
 - I. electronic data
 - m. official guidance and current building regulations.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when marking out from setting out details for routine architectural joinery products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. confined spaces
 - d. at height

- e. with tools and equipment
- f. with materials and substances
- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to
 - a. site
 - b. workplace
 - c. company
 - d. operative
 - e. vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.
- 2.4 describe the types of fire extinguishers available when producing setting out details for routine architectural joinery products and describe how and when they are used.

3. Maintain safe and healthy working practices when marking out from setting out details for routine architectural joinery products.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when marking out from setting out details for routine architectural joinery products
- 3.2 demonstrate compliance with given information and relevant legislation when marking out from setting out details for routine architectural joinery products for at least two of the following
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to marking out from setting out details for routine architectural joinery products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires

- b. spillages
- c. injuries
- d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to mark out from setting out details for routine architectural joinery products.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. marking and testing tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. metal
 - e. ironmongery
 - f. adhesives and fixings
 - g. marking and testing tools and equipment
 - h. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform to specification including moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and method of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to mark out from setting out details for routine architectural joinery products.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when marking out from setting out details for routine architectural joinery products.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with legislation
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations and official guidance.

The learner will:

6. Complete the work within the allocated time when marking out from setting out details for routine architectural joinery products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to mark out from setting out details for routine architectural joinery products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when marking out from setting out details for routine architectural joinery products:
 - a. measuring
 - b. marking out
 - c. drawing
- 7.2 use and maintain marking and testing tools, hand and power
- 7.3 mark out from setting out rods (template) routine architectural joinery products to given working instructions; for at least two of the following:
 - a. doors

- b. windows with opening lights
- c. units and/or fitments (paneling or cladding)
- d. staircases
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. mark out from setting out details and cutting lists
 - produce straight in plan and elevation: doors, frames (glazed and non-glazed), windows with opening lights, linings, units, fitments and paneling and cladding, staircases
 - c. transfer and mark dimensions
 - d. proportion joints associated with the product and construction method
 - e. use marking and testing tools
 - f. requisition material describe how to confirm that the resources and materials conform to specification including moisture and durability
 - h. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - i. identify and follow the quality requirements
 - j. work with, around and in close machinery proximity to plant and machinery
 - k. work at height
 - I. use access equipment
- 7.5 describe the needs of other occupations and how to communicate within a team when marking out from setting out details for routine architectural joinery products
- 7.6 describe how to maintain the tools and equipment used when marking out from setting out details for routine architectural joinery products.

Unit 615 Manufacturing routine architectural joinery products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 625 Marking out from setting out details for routine shopfitting products in the workplace

Level:	2
GLH:	80
Aim:	The aim of this unit is to provide the learner with an awareness of:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 marking out from routine product setting out for shopfitting products (timber and/or non-ferrous metal)

The learner will:

1. Interpret the given information relating to the work and resources when marking out from setting out details for routine shopfitting products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. cutting lists
 - h. manufacturers' information
 - i. component standards
 - j. oral and written instructions
 - k. sketches
 - I. electronic data
 - m. official guidance and current building regulations associated with marking out from setting out details for routine products.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when marking out from setting out details for routine shopfitting products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces

- d. at height
- e. with tools and equipment
- f. with materials and substances
- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.
- 2.4 describe the types of fire extinguishers available when producing setting out details for routine shopfitting products and describe how and when they are used

The learner will:

3. Maintain safe working practices when marking out from setting out details for routine shopfitting products.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when marking out from setting out details for routine shopfitting products
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to marking out from setting out details for routine shopfitting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to mark out from setting out details for routine shopfitting products.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to materials, components, fixings, marking and testing tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. metal
 - e. ironmongery
 - f. adhesives
 - g. fixings
 - h. marking and testing tools and equipment
 - i. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform to specification including moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to mark out from setting out details for routine shopfitting products.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when marking out from setting out details for routine shopfitting products.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with legislation

- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

The learner will:

6. Complete the work within the allocated time when marking out from setting out details for routine shopfitting products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to mark out from setting out details for routine shopfitting products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when marking out from setting out details for routine shopfitting products:
 - a. measuring
 - b. marking out
 - c. drawing
- 7.2 use and maintain marking and testing tools, hand and power tools.
- 7.3 mark out from setting out rods (template) routine shopfitting products (timber, timber based products and /or composite materials and/or metal) to given working instructions; for at least two of the following:
 - a. doors
 - b. frames and linings
 - c. shopfront sashes including associated elements
 - d. paneling or cladding
 - e. units and fitments

- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. mark out from setting out details and cutting lists
 - b. produce straight in plan and elevation: doors, frames (glazed and/or non-glazed), windows with opening lights, linings, units, fitments and paneling and cladding, staircases
 - c. transfer and mark dimensions
 - d. proportion joints associated with the product and construction method
 - e. use marking and testing tools
 - f. requisition material
 - g. recognise and determine when specialist skills and knowledge are required and report accordingly
 - h. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - i. identify and follow the installation quality requirements
 - j. work with, around and in close proximity to plant and machinery
 - k. use hand tools and power tools
 - I. work at height
 - m. use access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when marking out from setting out details for routine shopfitting products
- 7.6 describe how to maintain the tools and equipment used when marking out from setting out details for routine shopfitting products.

Unit 625 Marking out from setting out details for routine shopfitting products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 653 Manufacturing routine architectural joinery products in the workplace

Level:	2
GLH:	103
Aim:	This unit aims to provide you with the

necessary skills and knowledge to:
• interpret information

- adopt safe and healthy working practices
- select quantity and quality of resources
- manufacture routine architectural joinery products.

The learner will:

1. Interpret the given information relating to the work and resources when manufacturing routine architectural joinery products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information.
- 1.2 comply with information and/or instructions derived from risk assessments and method statements.
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
 - h. component standard
 - i. oral and written instructions
 - i. sketches
 - k. electronic data
 - I. official guidance and current regulations

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when manufacturing routine architectural joinery products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment

- f. with materials and substances
- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
 - a. site
 - b. workplace
 - c. company
 - d. operative
 - e. vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.
- 2.4 describe the types of fire extinguishers available when manufacturing routine architectural joinery products and describe how and when they are used.

The learner will:

3. Maintain safe and healthy working practices when manufacturing routine architectural joinery products.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when manufacturing routine architectural joinery products.
- 3.2 demonstrate compliance with given information and relevant legislation when manufacturing routine architectural joinery products for at least two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3. explain why and when health and safety control equipment identified by the principles of prevention should be used, relating to manufacturing routine architectural joinery products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires

- b. spillages
- c. injuries
- d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to manufacture routine architectural joinery products.

Assessment criteria

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. pre-machined components
 - e. setting out rods
 - f. metal
 - g. fabric
 - h. metal and rubber rims
 - i. glass
 - j. ironmongery
 - k. adhesives
 - I. fixings and fittings
 - m. hand and powered tools.
- 4.3 describe how to confirm that the resources and materials conform to the specification including suitability, moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.5 describe any potential hazards associated with the resources and methods of work.
- 4.6 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to manufacture routine architectural joinery products.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when manufacturing routine architectural joinery products.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 5.2 maintain a clear and tidy work space.
- 5.3 dispose of waste in accordance with current legislation.
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations and official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when manufacturing routine architectural joinery products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time.
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to manufacture routine architectural joinery products to the required specification.

Assessment criteria

The learner can:

7.1 demonstrate the following work skills when manufacturing routine bench/architectural joinery products:

- a. measuring
- b. marking out
- c. fitting
- d. finishing
- e. positioning and securing.
- 7.2 use and maintain hand too power tools
- 7.3 fit and assemble to form routine manufactured architectural joinery products to given working instructions; for at least two of the following:
 - a. doors
 - b. windows with opening lights
 - c. units and/or fitments
 - d. paneling and cladding
 - e. staircases
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. fit and assemble routine products
 - b. produce straight in plan and elevation: doors, windows with opening lights, units, fitments and paneling and cladding, staircases
 - c. check and work to marked dimensions
 - d. form joints associated with the product and construction method
 - e. recognise and determine when specialist skills and knowledge are required and report accordingly
 - f. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - g. identify and follow the installation quality requirements
 - h. work with, around and in close proximity to plant and machinery
 - i. use hand and power tools
 - j. work at height
 - k. use of access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when manufacturing routine architectural joinery products.
- 7.7 describe how to maintain the tools and equipment used when manufacturing routine architectural joinery products.

Unit 653 Manufacturing routine architectural joinery products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 655 Manufacturing routine shopfitting products in the workplace

Level:	2
GLH:	103
Aim:	This unit aims to provide you with the necessary skills and knowledge to:
	 interpret information
	 adopt safe and healthy working practices
	• select quantity and quality of resources
	 manufacture routine shopfitting products.

The learner will:

1. Interpret the given information relating to the work and resources when manufacturing routine shopfitting products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement.
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. cutting lists
 - h. manufacturers' information
 - i. oral and written instructions
 - j. sketches
 - k. electronic data
 - I. official guidance and current building regulations associated with manufacturing routine shopfitting products

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when manufacturing routine shopfitting products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment

- f. with materials and substances
- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.
- 2.4 state the types of fire extinguishers available when manufacturing routine shopfitting products and describe how and when they are used.

The learner will:

3. Maintain safe working practices when manufacturing routine shopfitting products.

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when manufacturing routine shopfitting products.
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment identified by the principles of prevention should be used, relating to manufacturing routine shopfitting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.
- 3.5 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to manufacture routine shopfitting products.

Assessment criteria

- 4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment.
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. timber based products
 - c. composite materials
 - d. pre-machined components
 - e. setting out rods
 - f. metal
 - g. fabric
 - h. metal and rubber riims
 - i. glass
 - j. ironmongery
 - k. fixings and fittings
 - I. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform to the specification including suitability, moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.5 describe any potential hazards associated with the resources and methods of work.
- 4.6 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to manufacture routine shopfitting products.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when manufacturing routine shopfitting products.

Assessment criteria

The learner can:

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 5.2 maintain a clear and tidy work space.
- 5.3 dispose of waste in accordance with legislation.
- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

Learning outcome

The learner will:

6. Complete the work within the allocated time when manufacturing routine shopfitting products.

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time.
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. Comply with the given contract information to manufacture routine shopfitting products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when manufacturing routine shopfitting products:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. finishing
 - e. positioning and securing
- 7.2 use and maintain hand and power tools
- 7.3 fit and assemble to form routine manufactured shopfitting products (timber, timber based products and/or composite materials and/or metal) to given working instructions; for at least two of the following:
 - a. shop doors
 - b. frames and linings
 - c. shopfront sashes including associated elements
 - d. paneling and cladding
 - e. units and fitments
- 7.4 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. fit and assemble routine products
 - b. produce straight in plan and elevation: doors, windows with opening lights, units, fitments and paneling and cladding, staircases
 - c. check and work to marked dimensions
 - d. form joints associated with the product and construction method
 - e. recognise and determine when specialist skills and knowledge are required and report accordingly
 - f. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
 - g. identify and follow the installation quality requirements
 - h. work with, around and in close proximity to plant and machinery
 - i. use hand and power tools
 - j. work at height
 - k. use of access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when manufacturing routine shopfitting products.
- 7.6 describe how to maintain the tools and equipment used when manufacturing routine shopfitting products.
- 7.7 describe how to sharpen the hand tools used when manufacturing routine shopfitting products.

Unit 655 Manufacturing routine shopfitting products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 681

Producing Wood and Woodbased products using Computer Numerically Controlled/Numerically Controlled (CNC/NC) machinery in the workplace

Level:	2
GLH:	103
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 preparing, setting up, operating and maintaining CNC/NC machinery to produce wood and wood-based products

The learner will:

1. Interpret the given information relating to the work and resources when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. risk assessments
 - f. manufacturers' information and legislation governing wood machining.

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.

Assessment criteria

- 2.1 describe their responsibilities under current legislation and official guidance whilst working:
 - a. in the workplace
 - b. with tools
 - c. tooling and equipment
 - d. with materials and substances,
 - e. with movement of materials and by manual and mechanical lifting.
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 2.3 state what the accident reporting procedures are and who is responsible for making reports

The learner will:

 Maintain safe working practices when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.

Assessment criteria

The learner can:

- 3.1 use personal protective equipment (PPE) safely to carry out the activity in accordance with all current legislation and approved Codes of Practice when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery
- 3.2 explain why and when personal protective equipment (PPE) should be used, relating to producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery, and the types, purpose and limitations of each type
- 3.3 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. accidents
 - e. other task-related hazards.

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to produce wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.

Assessment criteria

- 4.1 describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to:
 - a. CNC machinery
 - b. NC machinery
 - c. wood materials
 - d. wood-based materials
 - e. lubricants
 - f. hand tools and ancillary equipment
- 4.2 select resources associated with own work in relation to materials, components, tools, tooling and equipment and dimensional control aids as appropriate
- 4.3 state how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used
- 4.4 outline potential hazards associated with the resources and method of work

- 4.5 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method/procedure to produce wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.

The learner will:

5. Minimise the risk of damage to the work and surrounding area when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.

Assessment criteria

The learner can:

- 5.1 protect the work, equipment and its surrounding area from damage
- 5.2 minimise damage and maintain a clean work space
- 5.3 describe how to protect work and equipment from damage and the purpose of protection in relation to general workplace activities and other occupations
- 5.4 remove waste in accordance with legislation
- 5.5 state why the removal of waste should be carried out in relation to the work.

Learning outcome

The learner will:

6. Complete the work within the allocated time when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.

Assessment criteria

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of progress charts, estimated times and deadlines
 - b. organisational procedures for reporting circumstances which will affect the work programme.

The learner will:

7. Comply with the given contract information to produce wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery to the required specification.

Assessment criteria

The learner can:

- 7.1 demonstrate the following work skills when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery:
 - a. measuring
 - b. marking out
 - c. adjusting
 - d. fitting
 - e. finishing
 - f. positioning
 - g. securing
- 7.2 prepare, set up, operate and maintain the following CNC/NC machines (one from list A or two from list B) to produce wood and wood- based products to given working instructions:

List A:

- a. high-speed router
- b. window centre

List B:

- c. single-end tenoner
- d. double-end tenoner
- e. panel saw
- f. morticing machines
- g. lathe
- h. four-sided planer
- i. sanding machine
- j. boring machine
- k. shaping machine
- I. edge bander
- m. spindle moulder
- n. beam saw
- 7.3 set up and change appropriate tooling to meet the requirements
- 7.4 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. prepare and set up the CNC/NC machinery
 - b. operate the CNC/NC machinery
 - c. maintain the CNC/NC machinery
 - d. identify the compatibility of materials with machines
 - e. identify how damage to materials and machines can be avoided
 - f. identify the correct use of lubricants
 - g. identify the relevant dimensional control aids and their uses

- h. identify and report defects and discrepancies in materials and machines
- i. set up and change appropriate tooling
- j. identify the types and suitability of tooling
- k. identify the scope and limitations of the machine
- I. select the appropriate machine for the work to be carried out

m. use hand tools, power tools and equipment.

- 7.5 safely use and store hand tools and ancillary equipment.
- 7.6 state the needs of other occupations and how to communicate within a team when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.
- 7.7 describe how to maintain the tools and equipment used when producing wood and wood-based products using computer numerically controlled/numerically controlled (CNC/NC) machinery.

Unit 681

Producing Wood and Woodbased products using Computer Numerically Controlled/Numerically Controlled (CNC/NC) machinery in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment and in accordance with 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 Assessment Strategy.

Note: Learning Outcome 7 – contract information can relate to drawings, specifications, schedules, cuttings lists, manufacturer's information and oral instruction.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 716 Setting up and using transportable cutting and shaping machines in the workplace

Level:	2
GLH:	130
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 setting up, preparing and using cutting and shaping machines

The learner will:

1. Interpret the given information relating to the work and resources when setting up and using transportable cutting and shaping machines.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. manufacturers' information
 - g. oral and written instructions
 - h. sketches
 - i. electronic data
 - j. official guidance and current building regulations associated with setting up and using transportable cutting and shaping machines

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when setting up and using transportable cutting and shaping machines.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances

- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports
- 2.4 Describe the types of fire extinguishers available when setting up and using transportable cutting and shaping machines and describe how and when they are used.

The learner will:

3. Maintain safe and healthy working practices when setting up and using transportable cutting and shaping machines.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when setting up and using transportable cutting and shaping machines
- 3.2 demonstrate compliance with given information and relevant legislation when setting up and using transportable cutting and shaping machines in relation to:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to setting up and using transportable cutting and shaping machines, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task related activities

The learner will:

4. Select the required quantity and quality of resources for the methods of work to set up and use transportable cutting and shaping machines.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components and fixings
 - c. tools
 - d. equipment
 - e. accessories
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. accessories
 - b. attachments
 - c. hand and power tools
- 4.3 describe how to confirm that the resources and materials conform to the specification including suitability, moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and method of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to process materials when setting up and using transportable cutting and shaping machines.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when setting up and using transportable cutting and shaping machines.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation

- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

The learner will

6. Complete the work within the allocated time when setting up and using transportable cutting and shaping machines

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme

Learning outcome

The learner will:

7. Comply with the given contract information to set up and use transportable cutting and shaping machines to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when setting up and using transportable cutting and shaping machines:
 - a. measuring
 - b. marking out
 - c. fitting
 - d. fixing
 - e. positioning
 - f. securing
 - g. operating
- 7.2 use and maintain hand and power tools
- 7.3 set up and use three of the following powered cutting machines to given working instructions:
 - a. saw (at least three from the following: circular, chop, mitre, bench or table, jig, reciprocating, oscillating)
 - b. drill

- c. planer
- d. biscuit jointer
- e. disc cutter
- f. morticer
- 7.4 set up and use at least two of the following powered shaping machines to given working instructions:
 - a. thicknesser
 - b. sander (orbital, belt, disc)
 - c. router
 - d. laminate trimmer
 - e. planer
- 7.5 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. check powered transportable cutting and shaping machines (fuel and electric mains/battery) for serviceability
 - b. set up machines in preparation for use
 - check voltage requirements, safety cut offs and circuit breakers
 - d. check fuel, type, mix and additives
 - e. fix and secure work
 - f. select and ensure safety guards are in place in accordance with machine instructions
 - g. select accessories for the machine and the work
 - h. identify maintenance requirements for accessories, sharpening and aligning
 - i. cut and shape materials to agreed tolerance
 - j. change accessories: drill bits, router bits, discs, planner blades, saw blades, tools, abrasives
 - k. use templates profiles and jigs
 - l. recognise and determine when specialist skills and knowledge are required and report accordingly
 - m. use hand and power tools
 - n. work at height
 - o. use access equipment
- 7.6 describe the needs of other occupations and how to effectively communicate within a team when setting up and using powered transportable cutting and shaping machines
- 7.7 describe how to maintain the tools, accessories and ancillary equipment used when setting up and using transportable cutting and shaping machines.

Unit 716 Setting up and using transportable cutting and shaping machines in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 721 Producing setting out details for routine wheelwrighting products in the workplace

Level:	2
GLH:	87
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 producing plain setting out details for wheelwrighting (carriage construction)

The learner will:

1. Interpret the given information relating to the work and resources when producing setting out details for routine wheelwrighting products.

Assessment criteria

The learner can:

- 1.1 interpret and extract information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information.
- 1.2 comply with information and/or instructions derived from risk assessments and method statement
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
 - h. oral and written instructions
 - i. sketches
 - j. electronic data
 - k. official guidance and current building regulations associated with producing setting out details for routine wheelwrighting products

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when producing setting out details for routine wheelwrighting products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. with tools and equipment
 - c. with materials and substances
 - d. with movement/storage of materials and by manual handling and mechanical lifting

- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.
- 2.4 describe the types of fire extinguishers available when producing setting out details for routine wheelwrighting products and describe how and when they are used.

The learner will:

3. Maintain safe working practices when producing setting out details for routine wheelwrighting products.

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when producing setting out details for routine wheelwrighting products
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to producing setting out details for routine wheelwrighting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions.
- 3.5 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to produce setting out details for routine wheelwrighting products.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. metal
 - c. ironmongery
 - d. adhesives
 - e. fixings
 - f. marking and testing tools and equipment
- 4.3 describe how to confirm that the resources and materials conform to specification including moisture and durability
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate quantity, length, area and wastage associated with the method and procedure to produce setting out details for routine wheelwrighting products.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when producing setting out details for routine wheelwrighting products.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 5.2 maintain a clear and tidy work space.
- 5.3 dispose of waste in accordance with legislation.
- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions.

- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

The learner will:

6. Complete the work within the allocated time when producing setting out details for routine wheelwrighting products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to produce setting out details for routine wheelwrighting products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when producing setting out details for routine wheelwrighting products:
 - a. measuring
 - b. marking out
 - c. drawing
- 7.2 use and maintain hand and power tools
- 7.3 produce setting out details and cutting lists for routine wheelrighting products (carriage construction) wheels to given working instructions for one of the following:
 - a. doors
 - b. wood framed vehicles
 - c. shafts
- 7.4 describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to:
 - a. set out and produce cutting lists for routine products
 - b. produce straight in plan and elevation: doors, frames (glazed and non-glazed), windows with opening lights, linings, units, fitments and paneling and cladding, staircases
 - c. produce wooden framed vehicles, shafts and wheels
 - d. take dimensions

- e. proportion joints associated with the product and construction method
- f. use marking and testing tools
- g. requisition material
- h. recognise and determine when specialist skills and knowledge are required and report accordingly
- i. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
- j. identify and follow the installation quality requirements
- k. work with, around and in close proximity to plant and machinery
- I. use hand tools and power tools
- m. work at height
- n. use of access equipment
- 7.5 describe the needs of other occupations and how to communicate within a team when producing setting out details for routine wheelwrighting products
- 7.6 describe how to maintain marking and testing tools, hand and power used when producing setting out details for routine wheelwrighting products.

Unit 721 Producing setting out details for routine wheelwrighting products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Unit 723 Slinging and hand signalling the movement of suspended loads in the workplace

Level:	2
GLH:	43
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:
	 interpreting information
	 adopting safe and healthy working practices
	 selecting materials, components and equipment
	 preparing for and slinging and signalling the movement of loads.

The learner will:

1. Interpret the given information relating to the preparation for and the slinging and signalling of loads.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. risk assessments
 - e. method statements (lift plans)
 - f. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. method statements
 - e. risk assessments
 - f. lift plans
 - g. work instructions
 - h. manufacturers' information
 - i. approved procedures and codes of practice.

Learning outcome

The learner will:

2. Organise with others the sequence and operation in which the slinging and signalling of loads is to be carried out

Assessment criteria

- 2.1 organise the work according to given information or instructions
- 2.2 describe how to communicate ideas between team members
- 2.3 organise and communicate with team members and other associated occupations
- 2.4 describe how to organise resources prior to and when slinging and signalling of loads.

The learner will:

3. Know how to comply with relevant legislation and official guidance to carry out slinging and signalling of loads.

Assessment criteria

The learner can:

- 3.1 describe their responsibilities regarding potential accidents, health hazards and the environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances
 - g. with movement/storage of materials and by manual handling and mechanical lifting
- 3.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative
- 3.3 explain what the accident reporting procedures are and who is responsible for making reports.

Learning outcome

The learner will:

4. Maintain safe and healthy working practices when preparing for and slinging and signalling loads.

Assessment criteria

- 4.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with legislation and organisational requirements when slinging and signalling loads
- 4.2 demonstrate compliance with given information and relevant legislation when carrying out the slinging and signalling of loads in relation to at least three of the following:
 - a. safe use and storage of tools and equipment
 - b. safe use, storage and handling of lifting accessories
 - c. safe use of access equipment
 - d. specific risks to health
- 4.3 explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to slinging and signalling of loads, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 4.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions

- 4.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related activities

The learner will:

5. Select the required quantity and quality of resources to prepare for and when slinging and signalling loads.

Assessment criteria

The learner can:

- 5.1 select resources associated with slinging/signalling in relation to lifting accessories/aids, hand tools and ancillary equipment
- 5.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources, and how they should be used correctly, relating to:
 - a. lifting accessories
 - b. signalling and communication equipment
 - c. hand tools and ancillary equipment
- 5.3 describe how the resources should be used correctly, and how problems associated with the resources are reported
- 5.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 5.5 describe any potential hazards associated with the resources and methods of work
- 5.6 describe how to identify weight, quantity, length and area associated with the method/procedures to carry out slinging/signalling.

Learning outcome

The learner will:

6. Minimise the risk of damage to the work and surrounding area when preparing to and slinging and signalling loads

Assessment criteria

- 6.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 6.2 prevent damage and maintain a clean work space
- 6.3 dispose of waste in accordance with legislation
- 6.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions
- 6.5 Explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures

- c. manufacturers information
- d. statutory regulations
- e. official guidance.

The learner will:

7. Complete the work within the allocated time when preparing to and slinging and signalling loads.

Assessment criteria

The learner can:

- 7.1 demonstrate completion of the work within the allocated time
- 7.2 describe the purpose of the work programme and describe why deadlines should be kept in relation to:
 - a. types of progress charts, timetables and estimated times
 - b. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

8. Comply with the given contract information to prepare to and sling and signal suspended loads for movement to the required specification.

Assessment criteria

- 8.1 demonstrate the following work skills when preparing to and slinging and signalling loads:
 - a. measuring
 - b. gauging
 - c. estimating
 - d. calculating
 - e. fitting
 - f. fixing
 - g. testing
 - h. balancing
 - i. interpreting
 - j. inspecting
 - k. judging
 - explaining
 - m. preparing
 - n. indicating
 - o. informing
 - p. instructing
 - q. signing
 - r. positioning
 - s. adjusting
 - t. configuring
 - u. moving
 - v. securing
 - w. signalling

- x. relaying
- 8.2 use and maintain lifting accessories, lifting aids and equipment
- 8.3 inspect and prepare lifting accessories prior to slinging
- 8.4 prepare to and attach suspended loads to lifting equipment, using appropriate lifting accessories and load securing methods, to given working instructions for three of the following:
 - a. balanced
 - b. unbalanced
 - c. loose
 - d. bundled
 - e. container
 - f. drum
 - g. a load where the machine operator cannot observe its full movement path.
- 8.5 guide, move and place suspended loads to specified destinations, using hand signals, to given working instructions for three of the following:
 - a. balanced
 - b. unbalanced
 - c. loose
 - d. bundled
 - e. container
 - f. drum
 - g. a load where the machine operator cannot observe its full movement path.
- 8.6 describe how to apply safe and healthy work practices, follow procedures, report problems and establish authority needed to rectify, to:
 - identify the differences between: slinging and signalling, directing and guiding movement of vehicles, plant and machinery, and directing and guiding operations of plant and machinery not being used for lifting operations
 - b. confirm the authority, duties and responsibilities allocated
 - c. identify characteristics of lifting equipment and lifting accessories
 - d. identify and interpret valid certification for maintenance, inspection and thorough examination
 - e. lift and transfer people
 - f. sling balanced, unbalanced, loose, live, bundled, container drum loads and loads that are blind to the equipment operator
 - g. communicate using hand signals, hand signalling equipment (lights, wands, fluorescent gloves, flags) and electronic communication equipment (loud hailers, radios)
 - h. confirm methods of communication
 - recognise blind-spots, potential crush zones and other limitations to driver visibility
 - j. consider the load characteristics including centre of gravity and lifting points to determine the method of slinging
 - k. determine and check the route of the load before and during the lift including distances, clearances and landing position

- l. select, handle, inspect and use (assemble, set up and adjust) lifting accessories and aids
- m. identify rejection criteria for removing lifting accessories from service
- n. recognise and determine when specific skills and knowledge are required and report accordingly
- o. attach lifting accessories and sling loads securely
- p. ensure balance and stability of loads
- q. attach and use load guidance equipment (tag lines)
- r. guide and place suspended loads by recognised methods of communication and agreed operational procedures
- s. land and position loads safely and securely
- t. remove and store lifting accessories
- u. use hand tools and ancillary equipment.
- 8.7 describe the needs of other occupations and how to communicate within a team when preparing to and slinging and signalling loads
- 8.8 describe how to maintain the lifting accessories, lifting aids and signalling and communication equipment used to sling and signal loads.

Unit 723 Slinging and hand signalling the movement of suspended loads in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment and in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 724 Producing setting out details for routine shopfitting products in the workplace

Level:	2	
GLH:	87	
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for:	
	 interpreting information 	
	 adopting safe and healthy working practices 	
	 selecting materials, components and equipment 	
	 producing plain setting out details for shop-fitting products (timber and/or non-ferrous metal) 	

The learner will:

1. Interpret the given information relating to the work and resources when producing setting out details for routine shopfitting products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information.
- 1.2 comply with information and/or instructions derived from risk assessments and method statements.
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented.
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
 - h. component standards
 - i. oral and written instructions
 - i. sketches
 - k. electronic data
 - official guidance and current building regulations associated with producing setting out details for routine shopfitting products

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when producing setting out details for routine shopfitting products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working:
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height

- e. with tools and equipment
- f. with materials and substances
- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company, operative and vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.
- 2.4 describe the types of fire extinguishers available when producing setting out details for routine shopfitting products and describe how and when they are used.

The learner will:

3. Maintain safe working practices when producing setting out details for routine shopfitting products.

Assessment criteria

- 3.1 use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when producing setting out details for routine shopfitting products
- 3.2 demonstrate compliance with given information and relevant legislation when designing and fabricating structural timber connections for two of the following:
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to produce setting out details for routine shopfitting products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 state how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries
 - d. other task-related hazards.

The learner will:

4. Select the required quantity and quality of resources for the methods of work to produce setting out details for routine shopfitting products.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment.
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. timber
 - b. metal
 - c. ironmongery
 - d. adhesives
 - e. fixings
 - f. marking and testing tools and equipment.
- 4.3 describe how to confirm that the resources and materials conform to specification including moisture and durability.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported.
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources.
- 4.6 describe any potential hazards associated with the resources and methods of work.
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to produce setting out details for routine shopfitting products.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when producing setting out details for routine shopfitting products.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures.
- 5.2 maintain a clear and tidy work space.
- 5.3 dispose of waste in accordance with legislation.

- 5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions.
- 5.5 explain why the disposal of waste should be carried out in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations
 - e. official guidance.

The learner will:

6. Complete the work within the allocated time when producing setting out details for routine shopfitting products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 state the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to produce setting out details for routine shopfitting products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when producing setting out details for routine shopfitting products:
 - a. measuring
 - b. marking out
 - c. drawing
- 7.2 use and maintain hand and power tools
- 7.3 produce setting out details and cutting lists for routine shopfitting products (timber and/or timber based products and/or composite materials and/or metal) for two of the following:
 - a. doors
 - b. frames and linings
 - c. shopfront sashes including associated elements
 - d. panelling or cladding
 - e. units and fitments
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:

- a. set out and produce cutting lists for routine shop fitting products
- b. produce straight in plan and elevation: doors, frames (glazed and non-glazed), windows with opening lights, linings, units, fitments and paneling and cladding, staircases
- c. take dimensions
- d. proportion joints associated with the product and construction method
- e. use marking and testing tools
- f. requisition material.
- g. recognise and determine when specialist skills and knowledge are required and report accordingly
- h. determine specific requirements for structures of special interest, traditional build (pre 1919) and historical significance
- i. identify and follow the installation quality requirements
- j. work with, around and in close proximity to plant and machinery
- k. use hand tools and power tools
- I. work at height
- m. use access equipment
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when producing setting out details for routine shopfitting products
- 7.6 describe how to maintain marking and testing tools, hand and power tools when producing setting out details for routine shopfitting products.

Unit 724 Producing setting out details for routine shopfitting products in the workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the endorsements detailed within the relevant NVQ Structure. Please refer to the NVQ Structure applicable to the qualification/occupational area in which the candidate is being assessed.

Unit 728 Producing setting out details for routine architectural joinery products in the workplace

Level:	2	
GLH:	87	
Aim:	The aim of this unit is to provide the learner with the necessary skills and knowledge for: interpreting information adopting safe and healthy working practices selecting materials, components and equipment producing plain setting out details for bench joinery	

The learner will:

1. Interpret the given information relating to the work and resources when producing setting out details for routine architectural joinery products.

Assessment criteria

The learner can:

- 1.1 interpret and extract relevant information from:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
- 1.2 comply with information and/or instructions derived from risk assessments and method statements
- 1.3 state the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented
- 1.4 describe different types of information, their source and how they are interpreted in relation to:
 - a. drawings
 - b. specifications
 - c. schedules
 - d. cutting lists
 - e. method statements
 - f. risk assessments
 - g. manufacturers' information
 - h. oral and written instructions
 - i. sketches
 - j. electronic data
 - k. official guidance and current regulations

Learning outcome

The learner will:

2. Know how to comply with relevant legislation and official guidance when producing setting out details for routine architectural joinery products.

Assessment criteria

- 2.1 describe their responsibilities regarding potential accidents, health hazards and environment whilst working :
 - a. in the workplace
 - b. below ground level
 - c. in confined spaces
 - d. at height
 - e. with tools and equipment
 - f. with materials and substances

- g. with movement and storage of materials by manual handling and mechanical lifting
- 2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to:
 - a. site
 - b. workplace
 - c. company
 - d. operative
 - e. vehicles
- 2.3 explain what the accident reporting procedures are and who is responsible for making reports.
- 2.4 describe the types of fire extinguishers available when producing setting out details for routine architectural joinery products and describe how and when they are used.

The learner will:

3. Maintain safe and healthy working practices when producing setting out details for routine architectural joinery products.

Assessment criteria

- 3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when producing setting out details for routine architectural joinery products
- 3.2 demonstrate compliance with given information and relevant legislation when producing setting out details for routine architectural joinery products in relation to
 - a. safe use of access equipment
 - b. safe use, storage and handling of materials, tools and equipment
 - c. specific risks to health
- 3.3 explain why and when health and safety control equipment, identified by the principles of prevention, should be used, relating to producing setting out details for routine architectural joinery products, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:
 - a. collective protective measures
 - b. personal protective equipment (PPE)
 - c. respiratory protective equipment (RPE)
 - d. local exhaust ventilation (LEV)
- 3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions
- 3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with:
 - a. fires
 - b. spillages
 - c. injuries

d. other task-related activities.

Learning outcome

The learner will:

4. Select the required quantity and quality of resources for the methods of work to produce setting out details for routine architectural joinery products.

Assessment criteria

The learner can:

- 4.1 select resources associated with own work in relation to:
 - a. materials
 - b. components
 - c. fixings
 - d. tools and equipment.
- 4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:
 - a. metal
 - b. ironmongery
 - c. adhesives and fixings
 - d. marking and testing tools and equipment
- 4.3 describe how to confirm that the resources and materials conform to specification including moisture and durability.
- 4.4 describe how the resources should be used correctly and how problems associated with the resources are reported
- 4.5 explain why the organisational procedures have been developed and how they are used for the selection of required resources
- 4.6 describe any potential hazards associated with the resources and methods of work
- 4.7 describe how to calculate:
 - a. quantity
 - b. length
 - c. area
 - d. wastage associated with the method and procedure to produce setting out details for routine architectural joinery products.

Learning outcome

The learner will:

5. Minimise the risk of damage to the work and surrounding area when producing setting out details for routine architectural joinery products.

Assessment criteria

- 5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures
- 5.2 maintain a clear and tidy work space
- 5.3 dispose of waste in accordance with current legislation

- 5.4 describe how to protect work from damage and the purpose of protection in relation to:
 - a. general workplace activities
 - b. other occupations
 - c. adverse weather conditions
- 5.5 explain why the disposal of waste should be carried out safely in accordance with:
 - a. environmental responsibilities
 - b. organisational procedures
 - c. manufacturers' information
 - d. statutory regulations and official guidance.

The learner will:

6. Complete the work within the allocated time when producing setting out details for routine architectural joinery products.

Assessment criteria

The learner can:

- 6.1 demonstrate completion of the work within the allocated time
- 6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:
 - a. types of productivity targets and time scales
 - b. how times are estimated
 - c. organisational procedures for reporting circumstances which will affect the work programme.

Learning outcome

The learner will:

7. Comply with the given contract information to produce setting out details for routine architectural joinery products to the required specification.

Assessment criteria

- 7.1 demonstrate the following work skills when producing setting out details for routine architectural joinery products:
 - a. measuring
 - b. marking out
 - c. drawing
- 7.2 use and maintain hand and power tools
- 7.3 produce setting out details and cutting lists for routine architectural joinery products to given working instructions; for at least two of the following:
 - a. doors
 - b. windows with opening lights
 - c. units and/or fitments
 - d. paneling or cladding
 - e. staircases
- 7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:

- a. set out and produce cutting lists for routine products
- b. produce straight in plan and elevation: doors, frames (glazed and non-glazed), windows with opening lights, linings, units, fitments and paneling and cladding, staircases
- c. take and record dimensions
- d. proportion joints associated with the product and construction method
- e. use marking and testing tools
- f. requisition material
- g. recognise and determine when specialist skills and knowledge are required and report accordingly
- h. identify and follow the quality requirements
- i. work with, around and in close proximity to plant and machinery
- j. use hand tools and power tools
- k. work at height
- 7.5 describe the needs of other occupations and how to effectively communicate within a team when producing setting out details for routine architectural joinery products
- 7.6 describe how to maintain marking and testing tools, hand and power tools used when producing setting out details for routine architectural joinery products.

Unit 728 Producing setting out details for routine architectural joinery products in the

workplace

Supporting information

Assessment Guidance

This unit must be assessed in a work environment, in accordance with the Construction Skills' 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 Assessment Strategy.

Workplace evidence of skills cannot be simulated.



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**.

City & Guilds Centre Manual

This document 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
- •Examination roles at the centre
- •Registration and certification of candidates
- Non-compliance
- •Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- •Maintaining records.

Our Quality Assurance Requirements

This document explains the requirements for the delivery, assessment and awarding of our qualifications. All centres working with City & Guilds must adopt and implement these requirements across all of their qualification provision. Specifically, this document:

- Specifies the quality assurance and control requirements that apply to all centres
- Sets out the basis for securing high standards, for all our qualifications and/or assessments
- Details the impact on centres of non-compliance.

Our Quality Assurance Requirements document encompasses the relevant regulatory requirements of the following documents, which apply to centres working with City & Guilds:

• Ofqual's General Conditions of Recognition

Access Arrangements and Special Considerations

This document 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.

Appendix 2 Useful contacts

 $\begin{tabular}{ll} \textbf{Please note} - \textbf{calls to } 0844 \ numbers \ cost 5 \ pence \ per \ minute \ plus \ your \ telephone \ company's \ access \ charge. \end{tabular}$

UK and Republic of Ireland Centres	General support	T: +44 (0)844 543 0000		
		E: centresupport@cityandguilds.com		
Registrations, Exam entries, Invoices, Missing	e-assessment support	T: +44 (0)844 543 0000		
or late exam materials, Results entries, Certification. Publication enquiries: logbooks, centre documents, forms, free literature		E: evolvesupport@cityandguilds.com		
	Sales support	T: +44 (0)844 846 0969		
New centres		E: directsales@cityandguilds.com		
Sales advice and support and quality assurance	Quality support	T: +44 (0)844 846 0969		
,,		E: csdirect@cityandguilds.com		
International centres		Please contact your local office:		
Quality assurance, sales advi entries, enrolments, invoices exam materials		www.cityandguilds.com/about- us/international		
UK learners		T: +44 (0)844 543 0033		
General qualification informa	ation	E: learnersupport@cityandguilds.com		
International learners		Please contact your local office:		
General qualification informa	ation	www.cityandguilds.com/about- us/international		
Employer		T: +44 (0)207 294 8128		
Employer solutions including Recognition: Endorsement, A Quality Mark, Consultancy, N Specialist Training Delivery	Accreditation and	E: business@cityandguilds.com		

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