

Overview of the role

Using timber products to create and install building components.

L2: Carpentry and joinery Version 2.0 DRAFT

Title of occupation

Carpentry and joinery

UOS reference number

ST0264

Core and options

Yes

Option titles

Site Carpenter

Architectural Joiner

Level of occupation

Level 2

Occupational maps data

Route: Construction and the built environment

Pathway: Onsite Construction

Cluster: Core building tradesperson

Typical duration of apprenticeship

24 months

Does professional recognition exist for the occupation?

No

Regulated occupation

Is this a statutory regulated occupation? No

Occupational summary

This occupation is found in both the new build and refurbishment construction sector. The construction industry is central to creating the homes, schools, hospitals, energy and transport infrastructure society needs. There is growing demand for carpenters and joiners to help meet the need for the transition to modern methods of construction and sustainability.

The broad purpose of the occupation is working with wood-based materials and associated products to create and install building components. This typically involves shaping and cutting materials, installing finished materials like partitions, doors, winder staircases, window frames, mouldings, timber floor coverings and erecting structural components such as floor joists and roofs. All work needs to be carried out safely, using the appropriate tools and to the quality specified.

This occupation includes two different options and people will either work on a construction site as a Site Carpenter or in a workshop as an Architectural Joiner.

A Site Carpenter will prepare and install basic building components including fire and non-fire doors, straight and winder staircases, wall and floor units and erecting structural carpentry and roof structures on a building site or in domestic and commercial premises.

An Architectural Joiner will create building components by setting out, marking out and manufacturing basic architectural products, including fire and non-fire doors, windows, straight and winder staircases and associated ironmongery.

In their daily work, an employee in this occupation interacts with other construction roles such as bricklayers, plasterers and plumbers, supervisors, site management, architects, designers, contractors and customers.

An employee in this occupation will be responsible for using machinery and tools under supervision to create structures or components from the designs, plans and specifications of architects and designers that meet the clients expectations. On site these could include roof structures, floors, partitions and second fix work such as door frames and skirting. As an architectural joiner, they could include doors, windows and stairs, including ironmongery.

Typical job titles

Architectural joiner Site carpenter

Are there any statutory / regulatory or other typical entry requirements?

No

Core occupation duties

DUTY	KSBS
Duty 1 Work in compliance with occupational health, safety and environmental requirements to ensure the health, safety and wellbeing of self and others at all times. Report in a timely manner any non-compliances against the construction programme to the appropriate person Duty 2 Work to the construction programme, adapting to changes in schedule and requirements where necessary.	K1 K2 K3 K7 K9 K14 K15 K17 K18 K19 K20 K29 K30 K31 K32 K33 K38 K39 K40 K41 K42 S1 S2 S3 S4 S5 S9 S10 S11 S13 S14 S15 S16 S17 S18 S20 S21 S22 S23 S24 S25 S30 S32 S33 B1 B2 B3 K5 K8 K20 K25 S1 S6 S15 S17 S24 B1 B5
Duty 3 Prepare the work site or workshop ready for the work and select materials and tools appropriate to the project	K1 K2 K3 K5 K6 K8 K9 K10 K11 K12 K14 K16 K19 K25 K27 K29 K30 K31 K32 K40 K41 K42 S1 S2 S3 S7 S9 S12 S13 S15 S17 S21 B1
Duty 4 Use and maintain hand tools and power tools and associated equipment to complete task to industry standards	K14 K15 K16 K17 K18 K19 K20 K26 K27 K29 K31 K32 K33 K35 K38 K39 K40 K41 S1 S2 S9 S11 S12 S13 S14 S15 S17 S18 S22 S25 B1
Duty 5 Collaborate with stakeholders including clients and other construction roles	K3 K5 K9 K13 K21 K22 K23 S8 S13 S15 S16 B1 B3 B5
Duty 6 Receive, unload, move and lift materials to site for installation following good handling practices preventing injury or damage	K1 K2 S1 S2 S15 S20 B1
Duty 7 Maintain a clear and safe worksite at all times, disposing of waste appropriately and sustainably	K1 K4 K5 K18 K19 K20 K27 K30 K32 K37 K38 K39 K40 K42 S1 S3 S5 S13 S15 S17 S18 S21 B1 B2
Duty 8 Carry out continuous professional development to maintain knowledge of current and future developments affecting the role	K12 K20 K22 K30 K40 S15 S16 S20 B1 B4

Option occupation duties

Site Carpenter duties

DUTY	KSBS
Duty 9 Use the appropriate tools, materials and equipment to carry out first and second fix site carpenter tasks including roofs	K9 K11 K14 K15 K17 K18 K19 K20 K24 K25 K26 K27 K28 K29 K31 K32 K33 K35 K37 K38 K39 K40 K41 K42 S2 S10 S12 S13 S14 S15 S17 S18 S19 S20 S21 S22
Duty 10 Carry out minor repairs or modifications.	K17 K20 K27 K36 K41 K42 S15 S17 S20 S21 S22 S23 S24
Duty 11 Carry out their work conforming to all current and relevant building regulations, quality standards and work instructions	K1 K2 K3 K7 K12 K18 K19 K20 K25 K26 K27 K28 K29 K31 K39 K40 K41 K42 S14 S15 S17 S18 S20 S21 S23 S24

Architectural Joiner duties

DUTY	KSBS
Duty 12 Use the appropriate fixed workshop machinery, tools, materials and equipment to carry out architectural joinery tasks including setting, marking out and manufacturing timber products	K12 K15 K17 K18 K19 K20 K26 K27 K31 K32 K33 K34 K35 K36 K37 K38 K39 K40 K41 K42 S13 S15 S26 S27 S28 S30 S31 S32 S33
Duty 13 Assemble and fit components to timber products	K9 K10 K11 K17 K18 K19 K20 K26 K27 K29 K32 K33 K34 K35 K36 K37 K38 K39 K40 S13 S14 S15 S17 S18 S20 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30 S31 S32 S33

Architectural Joiner duties

DUTY

KSBS

Duty 14 Carry out their work conforming to all current and relevant building regulations, quality standards and work instructions

[K1 K2 K3 K7 K18 K19 K20 K21 K26 K27 K28 K29 K30 K31 K32 K33 K34 K35 K36 K37 K38 K39 K40 K41](#)
[S13 S14 S15 S17 S18 S20 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30 S31 S32 S33](#)

KSBS

Knowledge

K1: Awareness of health and safety regulations, standards, and guidance and impact on role. Control of Substances Hazardous to Health (CoSHH). Fire safety. Health and Safety at Work Act. Asbestos awareness. Manual handling. signage, fire extinguishers. Safety signage. Situational awareness. Slips, trips, and falls. Working in confined spaces. Working at height. Provision and use of work equipment regulations (PUWER) and Electrical safety.

K2: Safety control equipment and how to use personal protective equipment (PPE) respiratory protective equipment (RPE) and local exhaust ventilation (LEV).

K3: Safe systems of work: Site inductions, tool box talks, risk assessments, method statements and hazard identification in the work area.

K4: Impact of the sector on the environment: Efficient use of resources. Recycling, reuse, safe disposal of waste and sustainable forestry.

K5: Principles of building and modern methods of construction: Foundations, roofs, walls, damp proof courses, floors, timber frame, structurally insulated panels (SIPS) utilities and services, internal plaster finishes, insulation, fire protection, moisture and air protection and quality of materials.

K6: Basic principles of digital design and modelling systems.

K7: Standards and regulations associated with carpentry activities: British standards, building regulations and warranty provider standards.

K8: Methods of interpreting and extracting relevant information from drawings and specifications.

K9: Materials and their characteristics of home grown and imported timber and timber-based products. Natural timber products: Hardwood and softwood. Manufactured timber products: Board and laminated timber and carcassing.

K10: Timber decay and repair methods: Timber moisture content parameters for a range of timber and timber-based materials, wet rot and dry rot, and insect attack.

K11: Carpentry and joinery products and purpose: Mastics, preservatives, wood fillers, plastics and ironmongery.

K12: Basic material estimation techniques, calculating lengths of timber, fixing requirements and producing cutting lists.

K13: Verbal communication techniques and construction terminology.

- K14:** Hand tool use and storage methods and techniques: Chisels, planes, hand saws, hammers, squares, tri-square, bevels, marking and mortise gauges, spirit levels.
- K15:** Hand tool maintenance and sharpening techniques.
- K16:** Jig production techniques.
- K17:** Power tools use and storage methods and techniques: Portable circular saws, drills, saws, planers, routers, sanders, multi-functional tools and nail guns.
- K18:** First and second fix installation principles, methods and techniques for winder flights of stairs.
- K19:** Principles, methods and techniques for installing fire resisting timber door assemblies, doorsets and associated hardware.
- K20:** Principles and methods of quality control, including checking work against drawings, specifications, tolerances and standards, identifying defects and ensuring compliance.
- K21:** Principles of good team working.
- K22:** Inclusion, equity and diversity in the workplace.
- K23:** Well-being: Mental and physical health considerations in self and others and how to access support.
- K24:** Employment types including self-employed and employed, small business start-up principles and tax.
- K25:** Site carpentry techniques: Measuring, marking out, fitting, straight and angled cutting and mitring.
- K26:** Site carpentry: Structural fixtures and timber sizes.
- K27:** Site carpenter: Timber sizing tables purpose and use.
- K28:** Site carpentry: Timber splicing and scribing techniques.
- K29:** Site carpentry: Straight roof installation techniques for prefabricated trussed roof and traditional built on site cut roof.
- K30:** Site carpentry: Flat roofs: Warm and cold flat roofs including firrings and coverings.
- K31:** Site carpentry: First fixing installation techniques for load bearing studwork, door frames and linings, floor joists and coverings, metal and timber stud partitions.
- K32:** Site carpentry: Second fix installation techniques for installing door closers, ironmongery, glazing, architraves, skirting, dado rails, picture rails, internal and external cladding, service/column encasements, prefabricated units and fitments.
- K33:** Site carpentry: Types, use, calibration and storage of laser levels.
- K34:** Architectural joiner: Safe use of fixed machinery, inspection, preparation and operation techniques: Crosscut saw, band saw, planer and thicknesser and mortiser.
- K35:** Architectural joiner: Setting out and marking out techniques for joinery product manufacture and potential effects of marking out errors.
- K36:** Architectural joiner: Timber joints, types and production techniques: Dovetails, mortise and tenon, bridals and halvings.
- K37:** Architectural joiner: Manufacture and assembly techniques for standard right angled timber windows.
- K38:** Architectural joiner: Connection methods in joinery including dowels, biscuit, staples and adhesives.
- K39:** Architectural joiner: Manufacture and assembly techniques for timber first fix products including door frames and linings.
- K40:** Architectural joiner: Manufacture and assembly techniques for second fix timber products including timber wall and floor units, timber doors and timber mouldings.
- K41:** Architectural joiner: Finishing techniques for manufactured timber products including sanding, painting, waxing, polishing, oiling and applying preservative.
- K42:** Architectural joiner: Ironmongery installation techniques.

Skills

- S1:** Comply with health and safety regulations, standards, and guidance.
- S2:** Identify and use safety control equipment, for example, RPE, dust suppression, PPE and LEV.
- S3:** Comply with environmental and sustainability regulations, standards, and guidance. Segregate resources for reuse, recycling and disposal.
- S4:** Comply with industry regulations, standards, and guidance.
- S5:** Prepare and maintain a safe working area.
- S6:** Interpret and use information from drawings and specifications.
- S7:** Estimate required materials and produce a cutting list.
- S8:** Verbally communicate with others, applying construction terminology.
- S9:** Select, use and store hand tools.
- S10:** Select, use and store power tools.
- S11:** Maintain and sharpen hand tools.
- S12:** Produce jigs.
- S13:** Apply first and second fix methods and techniques for installing winder flights of stairs, spindles and balustrades.
- S14:** Apply methods and techniques to install fire resisting timber door assemblies, doorsets and associated hardware.
- S15:** Apply principles and methods to quality control own work.
- S16:** Identify well-being support available to self and others.
- S17:** Site carpenter: Apply first fix carpentry techniques and methods for installing load bearing studwork, door frames and linings, straight timber or metal partition walls, floor joists and joist coverings.
- S18:** Site carpenter: Apply structural fixing installation techniques.
- S19:** Site carpenter: Size timber from sizing tables.
- S20:** Site carpenter: Apply second fix carpentry techniques and methods for installing door sets, mouldings, architrave, skirting, ironmongery, glazing, service or column encasement, prefabricated units or fitments, cladding or panelling.
- S21:** Site carpenter: Apply carpentry techniques and methods for installing prefabricated trussed roofs and traditional built-on-site roofs including verge and eaves.
- S22:** Site carpenter: Use and store laser levels for example cross line laser.
- S23:** Site carpenter: Apply carpentry connection methods including joints, nails, screws, bolts and adhesive.
- S24:** Site carpenter: Apply measuring, marking out, square and angled cutting, mitring, hinging and recessing techniques.
- S25:** Site carpenter: Apply splicing and scribing techniques.
- S26:** Architectural joiner: Apply setting out and marking out techniques for joinery product manufacture.
- S27:** Architectural joiner: Apply woodworking techniques and methods to produce joints including dovetail, bridal, mortice and tenon and halving.
- S28:** Architectural joiner: Apply joinery connection methods including dowels, biscuit, staples and adhesives.
- S29:** Architectural joiner: Apply techniques and methods for manufacturing and assembling timber windows with casements, glazing rebates and associated ironmongery.
- S30:** Architectural joiner: Apply techniques and methods for manufacturing and assembling first fix products including door frames and linings.
- S31:** Architectural joiner: Apply techniques and methods for manufacturing and assembling first fix products including door frames and linings.
- S32:** Architectural joiner: Apply ironmongery installation techniques including for door locks, door handles, door hinges, latches and draw runners.
- S33:** Architectural joiner: Inspect, prepare and operate fixed machinery.

Behaviours

B1: Put health, safety and wellbeing first.

B2: Consider the environment when using resources and carrying out processes.

B3: Contribute to an inclusive and diverse culture.

B4: Seek learning and development opportunities.

B5: Team-focus to meet team goals including, considering the wider build team.

Qualifications

English and maths

English and maths qualifications must be completed in line with the apprenticeship funding rules.

Does the apprenticeship need to include any mandated qualifications in addition to the above-mentioned English and maths qualifications?

No

Progression routes

A carpenter and joiner could progress to become a Craft Site Carpenter and Craft Architectural Joiner which will provide them with the leadership and supervision experience as well as the experience of specialist projects. This could then lead on to them moving further into site supervision roles or specialising in their craft such as heritage projects .

Involved employers

Institute of Carpenters, National Association of Shopfitters, Cambridge Regional College, Beal-Homes, Brian Fell (Level) Ltd, British Woodwork Federation, CITB, H&H Joiners and Builders, Houghtons of York, Leeds College of Building (LCB) , Levens, Lignum Associates, North York Moors, York College

Other involved stakeholders

Subject sector area

5.2 Building and construction