

Unit 24: First and Second Fixings Carpentry Skills

Unit code: H/503/4936

QCF Level: 2

Credit value: 15

Guided learning hours: 150

Unit aim and purpose

This unit should provide learners with knowledge of how to operate a circular saw and then to use this knowledge in first and second fixings. This unit also illustrates the skills and knowledge required to gain first and second fixings skills.

Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

Learning outcomes	Assessment criteria
1 Be able to set up and operate fixed and transportable circular saws	1.1 describe the current legislation and good practices that apply to the use of circular saws, including risks and Personal Protective Equipment 1.2 set up circular saws according to manufacturer's instructions, including carrying out checks 1.3 select and fit saw blades appropriate to the activity being carried out 1.4 cut timber and sheet to a contractor specification
2. Be able to carry out first fixings	2.1 describe how to fix frames and linings 2.2 describe how to fit and fix floor coverings and flat roof decking 2.3 describe how to erect timber stud

	<p>partitions</p> <p>2.4 describe how to assemble, erect and fix straight flights of stairs, including handrails</p> <p>2.5 carry out first fixing to a contractor specification</p>
3. Be able to carry out second fixings	<p>3.1 describe how to install side hung doors and associated ironmongery</p> <p>3.2 describe how to install mouldings</p> <p>3.3 describe how to install service encasements and cladding</p> <p>3.4 describe how to install wall and floor units and fitments</p> <p>3.5 carry out second fixing to a contractor specification</p>

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THIS IS AN ACCREDITED SPECIFICATION AND CAN BE USED FOR TEACHING AND ASSESSMENT

Unit content

1 Be able to set up and operate fixed and portable circular saws

Procedures for circular saws: current legislation fixed and portable circular saws; potential hazards; identification and reporting of hazards; methods of dust extraction; identification of components of circular saw and purposes; sawing safety aids; safe methods of changing blades and related current legislation; importance of correctly fitting saw blades; types of saw blades and purposes; parts and purposes of parts of saw blade; effects of types of timber and sheet material on saw blades; use and purpose of lubricant; methods of timber conversion; defects found in timber

Operation of circular saws: setting up; checks; selection of saw blade for task being carried out; changing of blades; inspection of saw blades; clean in accordance with manufacturer's instructions; cut timber, timber manufactured products and non-ferrous metal to meet required specification; straight, angled and on the bevel; rectify timber defects; use safety aids appropriate to task

2 Be able to carry out first fixings

Health, safety and welfare issues (appropriate to the task and location): identification of hazards; use of personal protective equipment (PPE); safe use and storage of tools and equipment; use of fire extinguishers (water, CO₂, foam and powder); emergency procedures; working at height; manual handling

Fixing methods: frame cramps; plugged and screwed and nailed; wedged; brackets; adhesive; fixing foam; 'click in' systems; timber defects (splits, resin pockets, shakes, waney edges, knots); fungal attack; accidental damage; nailing; secret nailing; fixing clips; screwing; gluing

Tools and equipment: saws; hammers; chisels; screwdrivers; spirit levels; plumb bob; plugs; nails; electric drills; cordless drills; drill bits; screws; adhesives

Manufactured board: chipboard; plywood; medium density fibreboard (MDF); engineered floorboards

Service openings: screwed access panels; framework bearers; notching joists; timber defects (splits, resin pockets, shakes, waney edges, knots); fungal attack; accidental damage

Frames and linings: types of door frames and linings; internal and external door linings and frames; fire door linings and frames; double door linings and frames; rebated frames; linings; stops; window frames (casement, pivot, sliding sash, storm proof, tilt and turn, vent-lights)

Coverings and fixings: plasterboard; wallboard; horizontal and vertical cladding; insulation; framing brackets; nails; plugs; screws

Information: drawings; progress charts; specifications and schedules including door location, door type, door size, handing and ironmongery

Floor and roof decking: timber (nominal and finished sizes); tongued and grooved; loose tongued; softwood, hardwood

Timber stud partitions: studwork (regularised softwood); sizes and spacings to appropriate specifications; studs; noggins; sole plate; head plate

Integrating services: types of service (gas, water, waste pipes, electric cables, telecommunications); bearers; backboards; notching and drilling timbers; fixing clips; forming access panels

Straight flights of stairs: components: treads; margins; strings; risers; handrails; wedges; glue blocks; cappings; nosings; newels; balusters; adhesives; screws; nails; softwood; hardwood; manufactured boards; checking for defects; dimensional checks; levelling; adjusting; tops fixing; packings; bearers; stair strings; balustrades and handrails

3 Be able to carry out second fixings

Health, safety and welfare issues (appropriate to the task and location): identification of hazards; use of personal protective equipment (PPE); safe use and storage of tools and equipment; use of fire extinguishers (water, CO₂, foam and powder); emergency procedures; working at height; manual handling

Information: drawings; progress charts; specifications and schedules including door location, door type, door size, handing and ironmongery

Side hung doors and ironmongery: installation of side hung doors (prepare doors for hanging, hang (standard internal and external doors)); fire-resisting doors (half hour, one hour and two hour)

Door ironmongery: butt hinges; rising butt hinges; mortice latches; mortice locks; mortice deadlocks; cylinder rim locks; letterplates; pull handles; push plates; kick plates; overhead door closers; escutcheons; door selectors; bolts

Mouldings: fixing mouldings (skirtings, architraves, dado and picture rails) scribing mouldings to adjacent surfaces; transferring datum points

Joining: mortice and tenon; cross halving; half-lap; lengthening and housing

Service encasements and cladding: supporting frameworks; transfer datum points; fix timber grounds to plumb/level; methods used to construct framework to support cladding and pipe boxing

Encasements and cladding: methods used to fix internal pipeboxing, bath panels and external (timber) cladding

Wall, floor units and fitments: assembly and installation of wall and floor units and worktops; correct use of tools to specification (portable circular saw, cordless drills, set square, chisels, saws, hammers, screwdrivers, spirit level, drill bits, electric router, mallets, marking gauges, holding device, jig saw, electric mitre saw, electric hammer/SDS drill)

Methods: to return post-formed worktops using worktop jigs to specification; to form openings in worktops for hobs and sinks to specification

Installation of fitments: methods used to install fitments (pelmet, end panels, plinths, cornice) to units; materials (medium density fibreboard (MDF), plywood, blockboard, chipboard, plugs, nails, screws, adhesives, hinges, worktop clamps (bolts)); tools (saws, hammers, mallets, chisels, screwdrivers, marking gauges, set square, spirit level, holding devices, cordless drills, drill bits, jig saw, portable circular saw, electric router, electric mitre saw, electric hammer/SDS drill)

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