

## Unit 22: Installation of Structural Carcassing

Unit code: Y/503/4934

QCF Level: 2

Credit value: 5

Guided learning hours: 30

### Unit aim and purpose

This unit should enable learners to develop knowledge and skills to safely undertake the erection of structural timber members found in domestic buildings. Roofs and floors will be erected and their necessary components created to form a finished and serviceable product.

### 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 Know how to erect structural carcassing	1.1 describe methods used to erect trussed rafter roofs, including use of tools and equipment 1.2 describe methods used to construct gables, verge and eaves, including use of tools and equipment 1.3 describe methods used to install floor joists, including moisture protection 1.4 select tools and equipment appropriate to erect trussed rafter roofs to a contract specification
2 Be able to erect trussed rafter roofs	2.1 erect trussed rafter to a contract specification, including timber bracings 2.2 construct associated requirements, including openings, timber tanks and joints
3 Be able to construct gables, verge and eaves	3.1 construct gables, verge and eaves to a contract specification

4 Be able to install floor joists	4.1 install floor joists, including appropriate strutting and forming openings with associated joists to a contract specification
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THIS IS AN ACCREDITED SPECIFICATION AND CAN BE USED FOR TEACHING AND ASSESSMENT

## Unit content

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### 1 Know how to erect structural carcassing

*Methods for erecting truss rafter roofs:* procedures for transporting and lifting truss rafters; importance of working drawings and schedules; proprietary fixing methods; procedures for forming openings in truss rafter roofs; alternative methods of constructing truss rafter roofs at ground level; tools and equipment used to erect trussed rafter roofs; methods for finishing gables; method of finishing eaves; closed eaves; boxed eaves; tools and equipment for constructing gables and eaves finishes; methods of support joints; method of forming an opening in floor joists; methods of strutting floor joists; types of floor joists; importance of moisture protection

*Tools:* claw hammer; combination square; set square; sliding bevel; screwdrivers; pencil; bevel-edged chisels; panel saw; smoothing plane; wheel brace; bradawl; nail pincers; nail punch; spirit level; drill bits; chop saw; cordless drills and drivers; nail guns; jigsaw; laser level

*Equipment:* abrasive paper; proprietary brackets and hangers; work from scaffold platform

*Materials and equipment:* softwoods; nails; woodscrews; polyvinyl acetate glue; timber bracing to include softwood, chipboard, medium density fibreboard (MDF)

### 2 Be able to erect trussed rafter roofs

*Specification:* architect's drawings/instructions (trussed rafter erection, fixing and bracing requirements); construct components (loft hatch, roof light aperture, timber tank stand); joints to timber components (mortice and tenon, housing, half-lap, cross halving).

### 3 Be able to construct gables, verge and eaves

*Specifications:* architect's drawings/instructions to construct and fix components (gable ladders, verges and eaves, end roof components, bracing requirements, barge boards, joints to timber)

### 4 Be able to install floor joists

*Specifications:* working from architect's drawings/instructions to construct and fix components (I Beams, solid timber, laminated); strutting (solid, herringbone, galvanised steel); form openings (service access, staircases, chimneys)