6806-36 Diploma in Bench Joinery at SCQF Level 6

September 2014 Version 1.1



Contents

i ask ma	inual amendments	1
Candida	ite details	2
Unit ass	essment overview	3
Practical	task completion record	3
Instruct	ions to candidates	5
Unit 308	Set up and use fixed and transportable machinery	6
Task 1	Inspect, maintain and use fixed and transportable machinery efficiently and safely	6
Unit 309	Manufacture shaped doors and frames	9
Task 1	Set out shaped frames	9
Task 2	Manufacture shaped frames	10
Unit 310	Manufacture stairs with turns	13
Task 1	Set out stairs with turns	13
Task 2	Manufacture stairs with turns	15
Task 3	Assemble and finish stairs with turns	18
Drawing	gs and diagrams	21
Unit 308	Set up and use fixed and transportable machinery	21
Unit 309	Manufacture shaped doors and frames	22
Unit 310	Manufacture stairs with turns	23

Task manual amendments

Amendments since version 1.0

Page 10 Unit 309, Task 2 duration updated.

Page 22 Unit 309, Figure 1 drawing information/specification updated.

Candidate details



This *Practical task manual* is a record of your achievement in practical assessments. You must keep it in good condition and it must be stored in a safe place by your Assessor.

Please fill in all of your details before you carry out any assessments.

Candidate Details				
Surname	Forename(s)			
City & Guilds enrolment number				
Centre Details				
Name	Centre No			
I understand the requirements of the qualification and that all the work towards the assessments must be my own.				
Candidate signature (please print)				
Assessor name (please print)	Signed			
	Date			

Unit assessment overview Practical task completion record

To be completed by Assessor:

For each task, the points for each grade are Pass = 1, Merit = 2, and Distinction = 3 points.

Where there is a weighting given, (see Assessor guide: unit assessment overview) multiply the points by the weighting to be applied (eg to apply a weighting of 2, a distinction is: $3 \times 2 = 6$ points). Do not include pass/fail only tasks in the calculation, only graded.

Conversion chart			
Average Overall Grade			
1 – 1.5	Pass		
1.6 – 2.5	Merit		
2.6 – 3	Distinction		

Unit 308 Set up and use fixed and transportable machinery

Task	Grade for task
1 Inspect, maintain and use fixed and transportable machinery efficiently and safely	P/X
End of unit knowledge test	P/X

Assessor signature and date:	Candidates must pass all tasks, and the end of unit knowledge test, for this unit to achieve a pass grade overall.	
	Overall grade	

Unit 309 Manufacture shaped doors and frames

Task	Grade for task
1 Set out shaped frames	P/X
2 Manufacture shaped frames	P/M/D/X
End of unit knowledge test	P/X

Assessor signature and date:	The overall grade will be the same as the single graded task in this unit.	
	Overall grade	

[†]All tasks must be passed for the unit to be achieved.

Unit 310 Manufacture stairs with turns

Task	Grade for task [†]	Weighting for task (if appropriate)	Weighted Points (graded tasks)	
1 Set out stairs with turns	P/M/D/X	1		
2 Manufacture stairs with turns	P/M/D/X	2		
3 Assemble and finish stairs with turns	P/M/D/X	1		
End of unit knowledge test	P/X			
Assessor signature and date:	For graded points by t	÷4		
		Average =		
	(see			

Authenticity and IQA/QC sampling

The assessor's signature on individual tasks will be taken as assurance that the judgements recorded are made on authentic candidate work produced under appropriate conditions. Please complete the declaration below to confirm this is the case.

·			
I confirm that all tasks were conducted under conditions designed to assure the authenticity of the candidate's work, and am satisfied that, to the best of my knowledge, the work assessed was solely that of the candidate. I have judged all assessments against the relevant assessment and grading criteria and award the candidate the unit grades as calculated above.			
Assessor signature	Date		
*IQA signature and date	*QC signature and date		

^{*}IQA and QC signatures attest to the evidence available on the recorded date(s).

Instructions to candidates

About this document

This *Practical task manual* contains all of the practical assessment for 6806-36 Diploma in Bench Joinery at SCQF Level 6.

Practical tasks

These tasks let you show your practical skills and are usually graded pass, merit or distinction – a few are pass only. These tasks will be assessed by your assessor watching how you carry out the tasks and checking your final pieces of work.

Before you carry out the task you will be told how it will be assessed and you should read the assessment criteria checklist at the end of each task so you know what you need to do to get each grade.

You can ask your assessor for help in understanding the task instructions, but all of the work must be your own.

Health and safety

You must use safe working practices at all times.

You are responsible for your own safety and the safety of others. If you behave in an unsafe way, you will be stopped and given a warning. If you do not meet all of the Health and Safety requirements, the assessment will be stopped. Your assessor will not be able to let you try the task again until they are sure you can work safely.

Time considerations

Each task shows how long it is likely to take. This is for guidance and so you can plan your work. If you have a good reason for needing more time you must explain this to your assessor as soon as possible so they can decide whether you can have more time.

Security

Where an assignment is taken over more than one session, all documentation, paperwork and work products must be labelled carefully with your name and kept securely at the centre. Your assessor will give you directions about how to leave your work.

Opportunities to repeat tasks

The tasks are 'end tests' so you will only be asked to take the assessment when you have had the chance to do all of the learning and practice you need. You will be able to try the whole task again if you do not pass, but you will not be able to take the assessment again just to try to get a better grade.

Feedback

As well as telling you the result for the task your assessor will give you feedback. They will give you a feedback sheet with details of what you could do to improve, and also what you did well in. This will help you to prepare for other assessments or to retake the assessment if you need to.

Unit 308 Set up and use fixed and transportable machinery

Task 1 Inspect, maintain and use fixed and transportable machinery efficiently and safely

Task coversheet

Expected time	6 hours			
Task instructions	 Inspect, maintain and use a rip saw, surface planer, thicknesser, cross cut saw, narrow bandsaw and morticer to produce components A and B. 			
	 Cut wedges and glue blocks as shown in the drawing. 			
	Complete risk assessment.			
	 Work according to environmental and health and safety regulations. 			
Diagrams	Figure 1: Timber sections to be machined page 21			

AC	The candidate has	Pass	Merit	Distinction
2.1 4.1	completed the Risk Assessment form accurately, to meet current health and safety legislation			
2.2 2.6 4.3 4.8	cut material using a cross cut saw prior to use: • checked the machine was isolated			
	checked for faults			
	checked sawblade			
	checked and adjusted the guard			
	checked the return mechanism			
	cutting:			
	 timber is cut to length within 2 mm (not undersize) 			
2.2- 2.5	cut material using a surface planer and thicknesser accurately			
4.5 4.6	prior to use:checked the machine/s was isolated			
	checked for faults			
	removed knives			
	replacement knives set correctly (either surface planer or thicknesser)			

AC	The candidate has	Pass	Merit	Distinction
	Machine checked safe for use			
	cut:			
	 Plane to width and thickness within 0.5 mm 			
2.2- 2.5	cut material using a rip saw			
4.3	prior to use:			
4.4	checked the machine was isolated			
	removed sawblade			
	replacement sawblade checked prior to fitting			
	replaced sawblade			
	sawblade tightened correctly			
	set riving knife to current ACoP			
	checked and replaced guard			
	crown guard set to current ACoP			
	checked for faults			
	cutting:			
	• timber sawn to size within 0.5 mm			
	push stick used			
	 wedge is cut accurately to fit stair housing within 1 mm 			
2.2- 2.5	cut material using a narrow bandsaw			
4.2	prior to use:			
	checked the machine was isolated			
	removed sawblade and folded			
	replaced sawblade			
	tensions correct			
	guides set correctly			
	thrustwheel set correctly			
	guards in place as per regulations			
	checked for faults			
	cutting:			
	 workpiece cut as per specification within 2 mm (not undersize) 			
	conforms to template shape within 1 mm			
	cut carried out safely			

AC	The candidate has	Pass	Merit	Distinction
2.2-	cut material using a morticer			
2.5 4.7	prior to use:			
	 checked the machine was isolated 			
	checked for faults			
	removed chisel and auger			
	replaced with different chisel and auger			
	chisel checked for square to fence			
	checked for correct clearance			
	cutting:			
	 through mortice cut to size within 1 mm (without breakout) 			
	stub mortice cut to size within 1 mm			
	stub mortice cut to depth within 2 mm			
	 on completion chisel and auger removed and stored safely 			
2.6 4.8	followed current environmental and relevant health and safety regulations relating to inspecting and maintaining fixed and transportable machinery, to include:			
	 all machinery used safely, cleaned and stored away correctly 			
	 Provision and Use of Work Equipment Regulations (PUWER) 			
	 Personal Protective Equipment at work (PPE) 			
	 Approved Code of Practice (ACoP) 			

Task gradi	Task grade:	
To award a pass : every activity in the checklist must be successfully achieved.		
Assessor	Signature & Date	

Unit 309 Manufacture shaped doors and frames Task 1 Set out shaped frames

Task coversheet

Expected time	9 hours
Task instructions	 Set out a replacement traditional gothic headed window incorporating frame and sash.
	Complete risk assessment.
	Produce a cutting list.
	 Work according to environmental and health and safety regulations.
Diagrams	Figure 1: Drop gothic frame page 22

AC	The candidate has	Pass	Merit	Distinction
2.1	completed the Risk Assessment form accurately, to meet current health and safety legislation			
2.2	set out shaped frames • rod accurate			
	lines clean (no double lines)			
2.3 4.5	 produced templates/jigs for curved components sash template is accurate when dropped onto the rod 			
	 sash template with clean curves (no deviations exceeding 1mm) 			
	 glazing bar formers with clean curves (no deviations exceeding 1mm) 			
2.4	 correctly completed a cutting list cutting list includes all named components required; nominal and finished sizes 			
2.5	followed current environmental and relevant health and safety regulations in relation to setting out shaped frames			

Task gradi	Task grade:	
To award a pass : every activity in the checklist must be successfully achieved.		
Assessor	Signature & Date	

Unit 309 Manufacture shaped doors and frames Task 2 Manufacture shaped frames

Task coversheet

Expected time	24 hours
Task instructions	 Make a gothic headed sash as per setting out in Task 1. Complete risk assessment Work according to environmental and health and safety regulations.
Diagrams	Figure 1: Drop gothic frame page 22

AC	The candidate has	Pass	Merit	Distinction
4.1 6.1	completed the Risk Assessment form accurately, to meet current health and safety legislation			
	(note: where a risk assessment has been carried out for a previous task, the same form may be added to for this criteria)			
4.2	selected materials for manufacturing shaped doors and frames			
	 materials correctly selected- grain configuration appropriate for curved sections 			
	 straight grained timber without knots selected for laminates 			
	 face and edge correctly selected and marked on all pieces 			
4.3	used machines to produce materials from cutting list			
	timber produced:			
	Square			
	To size	± 0.75 mm	± 0.50 mm	± 0.25 mm
4.4	marked out materials from setting out details			
	marked out from rod accurately within 1mm			
	lines clean (no double lines)			
4.6	used machines to form joints			
	mortices clean without breakout			
	no bandsaw overrun			

AC	The candidate has	Pass	Merit	Distinction
	haunches tight, with no gaps	exceeding 2 mm	exceeding 1 mm	exceeding 0.5 mm
4.7	used spindle moulder and/or router to profile materials			
	no drop-ins/bumps in mouldings exceeding 1mm			
	 no drop-ins/bumps in rebates exceeding 1mm 			
4.8	followed current environmental and relevant health and safety regulations in relation to manufacturing shaped frames			
6.3	cleaned up the inside edges of components			
6.2 6.4	selected and set up appropriate cramping techniques/Assemble with adhesive and cramp			
6.5	laminated bar section without thick glue lines exceeding	1 mm	0.5 mm	0.25 mm
	glued and wedged together with no gaps in the joints	exceeding 1 mm	exceeding 0.5 mm	0 mm
	dowelled loose tenon joint with no gaps	exceeding 1 mm	exceeding 0.5 mm	0 mm
	dowelled bridled mortice and tenon joints with no gaps	exceeding 1 mm	exceeding 0.5 mm	0 mm
	stub mortice and tenon joints with no gaps	exceeding 1 mm	exceeding 0.5 mm	0 mm
6.6	carried out quality checks			
	square (to springing line)	within 2 mm	within 1 mm	within 0.5 mm
	• overall width (450 mm)	within 3 mm	within 2 mm	within 1 mm
	overall height (710 mm)	within 4 mm	within 3 mm	within 2 mm
6.7	prepared products to receive finishes as in given specifications			
	planed and sanded to a varnish standard			
6.8	followed current environmental and relevant health and safety regulations in relation to assembling and finishing shaped frames			

Task gradi	ng rules	Task grade:	
To award a pachieved.	To award a pass : every activity in the checklist must be successfully achieved.		
	To award a merit : in addition to the above, 7 out of 10 graded activities in the checklist must be achieved to at least a merit standard.		
To award a cachieved to activities mu			
Assessor	Signature & Date		

Unit 310 Manufacture stairs with turns

Task 1 Set out stairs with turns

Task coversheet

Expected time	5 hours
Task instructions	 Set out a full size plan of the quarter turn stair with tapered steps as shown.
	 Draw auxiliary elevations of the two wall strings.
	Complete a cutting list.
	Complete risk assessment.
	 Work according to environmental and health and safety regulations.
Diagrams	Figure 1: 3/5 Scale winding stair drawing page 23

AC	The candidate has	Pass	Merit	Distinction
2.1	completed the Risk Assessment form accurately, to meet current health and safety legislation			
2.2	set out stairs with turns			
	full size plan drawn accurately	± 2 mm	± 1 mm	± 0.5 mm
	auxiliary elevations drawn accurately	± 2 mm	± 1 mm	± 0.5 mm
	cutting sheet completed accurately	± 2 mm	± 1 mm	± 0.5 mm
2.3	 produced templates for stairs with turns for pitch board accurately 	± 1 mm	± 0.5 mm	0 mm
2.4	correctly completed a cutting list			
	all components listed correctly			
	all component sizes listed correctly			
2.5	followed current environmental and relevant health and safety regulations in relation to setting out stairs with turns			

Task gradi	ng rules	Task grade:
To award a pachieved.		
To award a l		
To award a cativities in t		
Assessor	Signature & Date	

Unit 310 Manufacture stairs with turns Task 2 Manufacture stairs with turns

Task coversheet

Expected time	21 hours
Task instructions	 Select appropriate sized materials. Set up and use machines to produce materials. Mark out components. House strings (9 mm deep) and form mortice and tenon (13mm).
	 Complete risk assessment. Work according to environmental and health and safety regulations.
Diagrams	Figure 1: 3/5 Scale winding stair drawing page 23

AC	The candidate has	Pass	Merit	Distinction
4.1	completed the Risk Assessment form accurately, to meet current health and safety legislation			
	(note: where a risk assessment has been carried out for a previous task, the same form may be added to for this criteria)			
4.2	completed a resource checklist and selected materials correctly			
4.3	set up and used machines to produce materials from cutting list			
	cross cut set up safely;			
	 checked for faults 			
	checked saw blade			
	checked and adjusted the guard			
	checked the return mechanism			
	rip saw set up safely;			
	checked the machine was isolated prior to setting up			
	 removed saw blade 			
	 replacement saw blade checked prior to fitting 			
	replaced saw blade			
	 saw blade tightened correctly 			
	set riving knife to current ACoP			
	checked and replaced guard			
	crown guard set to current ACoP			
	 checked for faults 			

AC	The candidate has	Pass	Merit	Distinction
	 surface planer/thicknesser set up safely; checked machine/s was isolated checked for faults removed knives replacement knives set correctly (either surface planer or thicknesser) machine checked safe for use 			
	 bandsaw set up safely; checked machine was isolated removed saw blade and folded replaced saw blade tensions correct guides set correctly thrustwheel set correctly guards in place as per regulations checked for faults 			
	 strings prepared to size accurately newel prepared to size accurately 	±2 mm	±1 mm ±1 mm	±0.5 mm ±0.5 mm
	 risers prepared to size accurately winder/tread prepared accurately 	±2 mm	±1 mm	±0.5 mm
4.4	marked out materials from setting out details strings marked out accurately	±2 mm	±1 mm	±0.5 mm ± 0.5 mm
	 newel marked out accurately winders/tread marked out accurately 	±2 mm	±1 mm	± 0.5 mm
4.5	manufactured stair components to given specifications as per drawing • strings housed out accurately	±2 mm	±1 mm	±0.5 mm
	 strings shaped accurately winders shaped accurately 	±2 mm	±1 mm ±1 mm	±0.5 mm ±0.5 mm

AC	The candidate has	Pass	Merit	Distinction
	morticer set up safely; prior to use:			
	 checked machine was isolated checked for faults removed chisel and auger replaced with different chisel and auger chisel checked for square to fence checked for correct clearance 			
	mortice and tenon positioned accurately	±2 mm	±1 mm	±0.5 mm
4.6	followed current environmental and relevant health and safety regulations in relation to manufacturing stairs with turns, to include:			
	 all power tools used safely, cleaned and stored away correctly Provision and Use of Work Equipment Regulations (PUWER) 			
	 Personal Protective Equipment at work (PPE) Approved Code of Practice (ACoP) 			

Task gradi	Task grade:	
To award a pachieved.		
To award a r		
To award a cachieved to activities mu		
Assessor	Signature & Date	

Unit 310 Manufacture stairs with turns

Task 3 Assemble and finish stairs with turns

Task coversheet

Expected time	10 hours
Task instructions	 Fit up and dry assemble all component parts. Clean up inside faces for a paint finish. Assemble stair, wedge steps and draw bore tenon. Flush wedges and dowels. Complete risk assessment.
Diagrams	Work according to environmental and health and safety regulations. Figure 1: 3/5 Scale winding stair drawing page 23

AC	The candidate has	Pass	Merit	Distinction
6.1	completed the Risk Assessment form accurately, to meet current health and safety legislation			
	(note: where a risk assessment has been carried out for a previous task, the same form may be added to for this criteria)			
6.2	dry fit to check the joints, finished size and shape • joints dry fitted			
	winders correct shape to rod	± 2 mm	±1 mm	±0.5 mm
	 wedges fitted and numbered 			
6.3	 cleaned up the inside edges of components (all machine marks sanded out) 			
	arrises removed			
6.4	selected and set up appropriate cramping techniques			
	 string to newel joint draw dowelled 			
	 corner housing joint to string prepared for assembly with screws. 			
6.5	assembled with adhesive, cramps and wedges			
	 all cramps positioned and used appropriately 			
	all riser wedges driven			
	all tread wedges driven			

AC	The candidate has	Pass	Merit	Distinction
	all glue blocks placed			
	all screws driven			
6.6	Carried out quality checks			
	overall width 400mm	±2 mm	±1 mm	±0.5 mm
	• total rise 480mm	±2 mm	±1 mm	±0.5 mm
	• corner square	±2 mm	±1 mm	±0.5 mm
	gaps around square winder within 1 mm			
	gaps around kite winder within 1 mm			
	gaps around skew winder within 1 mm			
	gaps around tread within 1 mm			
	gaps at tenon joint within 1 mm			
	gaps at corner housing within 1 mm			
	easings to wall strings to finish level at corner	±3 mm	±2 mm	±1 mm
6.7	prepared products to receive finishes as in given specification			
	all external surfaces prepared to receive painted finish			
6.8	followed current environmental and relevant health and safety regulations in relation to assembling and finishing stairs with turns, to include:			
	 all power tools used safely, cleaned and stored away correctly 			
	 Provision and Use of Work Equipment Regulations (PUWER) 			
	 Personal Protective Equipment at work (PPE) 			
	Approved Code of Practice (ACoP)			

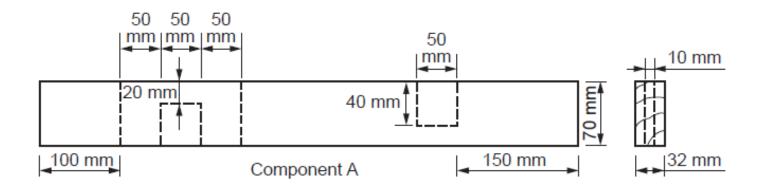
Task grading rules		Task grade:
To award a pass : every activity in the checklist must be successfully achieved.		
To award a r		
To award a cativities in t		
Assessor	Signature & Date	

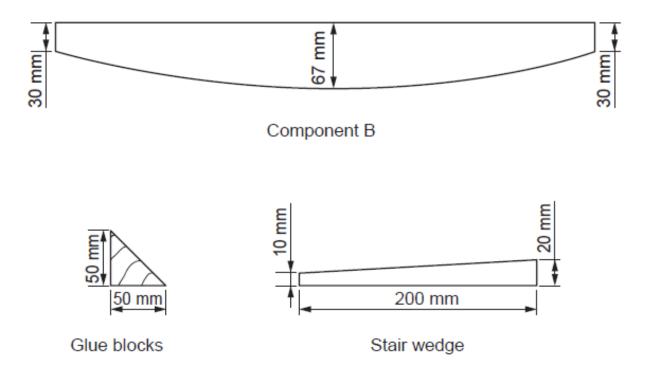
Drawings and diagrams

Unit 308 Set up and use fixed and transportable machinery

Task 1 Inspect, maintain and use fixed and transportable machinery efficiently and safely

Figure 1: Timber sections to be machined



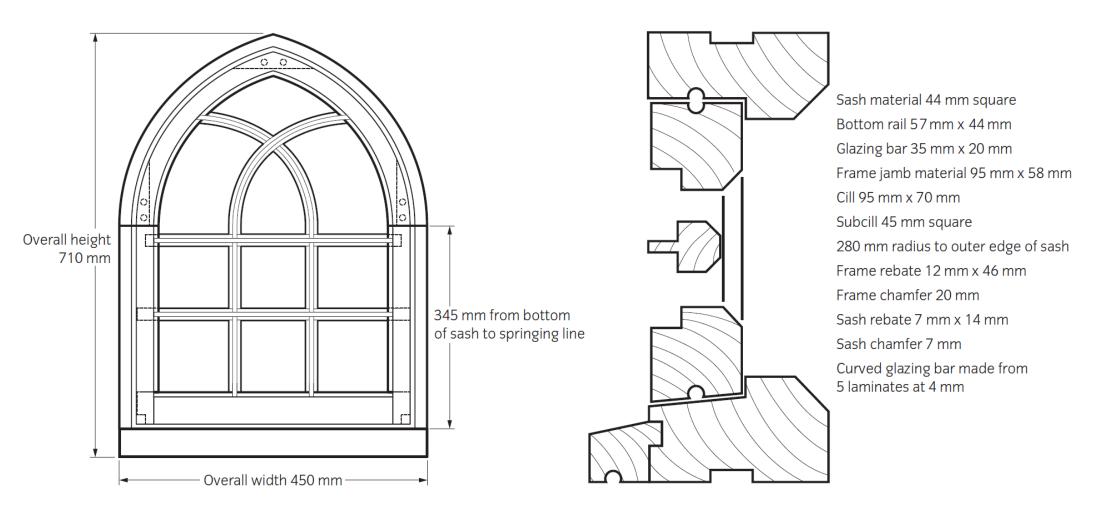


50 mm x 50 mm to be supplied to cut glue blocks, 18 mm thick timber to be supplied to cut 8 No stair wedges as shown centre to supply appropriate jig + saddle

Drawings and diagrams

Unit 309 Manufacture shaped doors and frames Task 1 and 2 Set out shaped frames

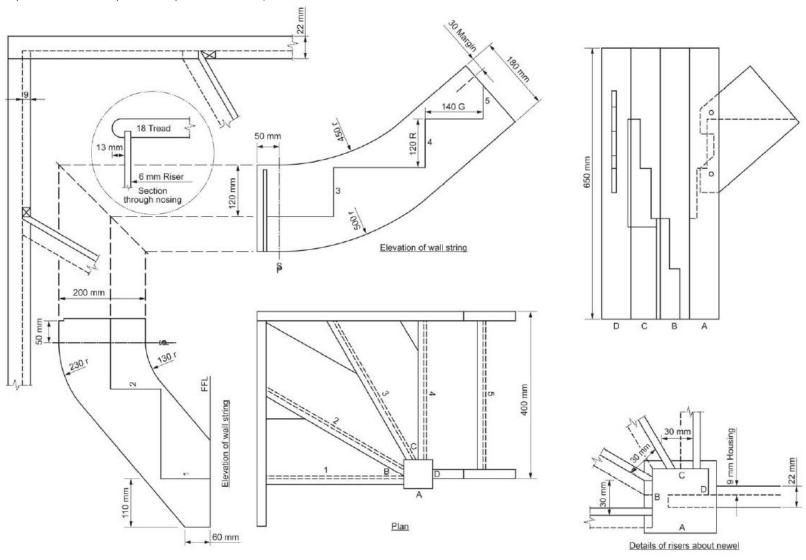
Figure 1: Drop gothic frame



Drawings and diagrams

Unit 310 Manufacture stairs with turns Task 1, 2 and 3 Set out stairs with turns

Figure 1: 3/5 Scale winding stair drawing The drawing shows a quarter turn of tapered steps (traditionally known as winders).



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