

Furniture Manufacturer Apprenticeship Standard

Fitted Furniture Installer Modules of Assessment

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Introduction

It is recognised that a Furniture Maker is likely to work in a variety of different roles and this standard allows for the apprentice to demonstrate a full range of skills across a variety of job roles within the occupation. This document covers the requirements for Fitted Furniture Installer.

All apprentices must complete the core requirements (see Assessment Modules – Core Requirements).

The employer, apprentice and training provider should undertake a programme that will meet the Standard Criteria to ensure all areas of the outcomes are covered in the apprentice job role.

Training providers should be evaluated and approved by the Assessment Organisation using appropriate methods.

Requirements

A Fitted Furniture Installer is responsible for preparing and installing furniture including kitchens, bedrooms, bathrooms and offices, shops, exhibitions and boat interiors. This is onsite at the customer's commercial or domestic premises. Apprentices taking this route will experience a wide variety of projects and interface closely with customers.

In order to ensure sufficient flexibility to meet the needs of the industry whilst maintaining the rigour of every single apprenticeship within it, Installers will need to undertake all mandatory and two of the optional requirements.

Mandatory

YOU WILL KNOW HOW TO AND BE ABLE TO

Prep	Transporting & Handling of Materials	Ensure the safe transportation and handling of installation equipment and materials. The correct type and quantity of installation equipment and materials have to be located and then transported so that they arrive at the location of the installation in good order.
	Prepare Location	Prepare location for assembly and placement of furniture. This involves making the assembly and placement area ready for work and preparing the furniture components for assembly.
Installation	Measure and Mark Out	Measure and mark out materials to specification.
	Power Tools & Hand Tools	Set up and operate tools used to assemble furniture. Understand the tools used within working area and which specific job they are used in.
	Assembly	Assemble components of fitted furniture and understand the sequence of assembly and why this is important
	Installation	Install furniture on location to specification. This includes scribing, fixing and securing of furniture using correct fixings relating to foundation secured to etc., adaptations to non-standard situations to specification (i.e., pipe box, sockets, gas meter)

Post Installation	Re-instate Location	Re-instate a location after assembly and placement of furniture. This involves confirming the end of placement, ensuring all resources are cleared and maintaining customer liaison.
	Customer Service	Develop customer relationships. This includes building customer confidence in the level of service provided, meeting the ongoing needs and expectations of customers and developing relationships between customers and your organisation
	Rectification/ rework	Carry out rectification or rework. This includes changing hinges and handles. Identify snags and awareness of where to seek help and guidance.

Optional

YOU WILL KNOW HOW TO AND BE ABLE TO

Installation	Gluing	Apply adhesives to components and understand types, methods and processes involved in gluing.
	Cut Outs	Complete standard cut-outs in work surfaces for general appliances such as taps, hobs and sinks. This covers using a template, cutting out and finishing the area.
	Cramping	Position components and apply cramps to ensure products are positioned securely to specification.
	Sanding	Sand wooden work tops, trims, cornices and laminate edgings. Understand grit sizes and the process for sanding.
	Veneers & Laminates	Apply edging tape to laminate worktops to specification.
	Jigs & Templates	Use and maintain jigs and templates for furniture installation. Jigs for example hinges and templates for example sinks and work tops.
	Joints	Cut and join components on site. This could include work top jointing, up-stand, cornices and trims.
	Fittings	Prepare and assemble components to specification, finishing and checking the assembly conforms to specifications
	Electrical / Mechanical Fittings	First fit mechanical or electrical components to furniture.
	Finishing	Finish solid surface work tops to specification following manufacturers' instructions.

Assessment

On Programme

The suggested training and assessment for the apprenticeship is based on the 'Furniture Manufacturer Assessment Modules,' which detail the training modules that should be completed for the core requirements and each occupational area.

On-going reviews will be completed by the provider and employer during the apprenticeship but will not contribute to the end point assessment.

End Point Assessment

The independent assessment organisation is responsible for carrying out the end point assessment. When the apprentice, employer and provider have determined that the apprentice is ready to complete the apprenticeship they will hold a final review to go through the portfolio of work. The apprentice will need to have completed the Level 1

Functional Skills in English and Maths and taken the test for the Level 2. This will act as a gateway to the end point assessment.

Portfolio of Evidence – Guidance

Evidence should show that the apprentice can complete all of the learning outcomes for each core module and options taken.

Types of Evidence:

Evidence of performance should be demonstrated by activities and outcomes, and should be generated in the workplace only, unless indicated under potential sources of evidence (see below). Evidence of knowledge can be demonstrated through performance or by responding to questions.

Quantity of Evidence:

Evidence should show that the apprentice can meet the requirements of the modules in a way that demonstrates that the standards can be achieved consistently over an appropriate period of time.

Potential Sources and Types of Evidence:

The main source of evidence for each module will be observation of the learner's performance and knowledge demonstrated during the completion of the module. There must also be evidence of using questioning and examination of work products. The following can be used as supplementary physical or documentary evidence:

- Responses to oral or written questioning
- Professional discussion
- Personal statements/reflective accounts
- Assessment records
- Case studies
- Evidence of feedback given
- Products of learner's work
- Expert witness testimony

Please Note that photocopied or downloaded documents are not normally acceptable evidence unless accompanied by a record of a professional discussion or assessor statement confirming learner knowledge of the subject.

Certification

Certification is claimed at the end of the apprenticeship when all components are complete.

Appeals

In the event of an appeal against the grade awarded, the Assessment Organisation will carry out an independent review of the evidence to confirm or modify the grade.

Module 1 – Transporting & Handling of Materials

What is required

Ensure the safe transportation and handling of installation equipment and materials. The correct type and quantity of installation equipment and materials have to be located and then transported so that they arrive at the location of the installation in good order.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. load equipment and materials in a way that safely balances their weight, doesn't exceed safe working load of vehicles and ensures protection of products during transit
7. use suitable transportation methods to deliver equipment and materials according to agreed schedules
8. use suitable handling methods to prevent damage to equipment and materials, individuals, products and surrounding environment
9. check all equipment and materials have been delivered, are positioned and stored securely following standard operating procedures
10. describe relevant health and safety responsibilities
11. describe the meaning of terms used in specifications
12. describe how to check equipment is set up and is in good working order
13. describe how to check materials and the common faults that can occur
14. describe types of equipment and materials that need to be transported and handled
15. describe identification markings for materials
16. describe how to load different types of equipment and materials
17. describe transportation methods used for different types of equipment and materials
18. describe safe working loads of vehicles
19. describe handling methods used for different types of equipment and materials
20. describe damage that can occur as a result of handling equipment and materials incorrectly
21. describe how different types of equipment and materials should be positioned for handling and installation

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence Transport Regulations Pedestrian safety
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets Load sheets Delivery notes Labels Job plans Drawings Packing lists
Machinery, Tools and Equipment	Battery-powered equipment Machinery Power tools Hand tools Handling equipment
Materials	All materials required to carry out installation
Handling methods	Manual Powered equipment
Transportation methods	Carrying devices Lifting devices Vehicles

Assessment:

Observed Assessment.

Module 2 – Prepare Location

What is required

Prepare location for assembly and placement of furniture. This involves making the assembly and placement area ready for work and preparing the furniture components for assembly.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. obtain agreement with relevant people to proceed before starting work
7. isolate work areas to protect areas exposed to debris
8. confirm customers have protected/removed vulnerable items to clear work areas and access routes
9. prepare work areas following standard operating procedures
10. establish safe and secure storage areas for resources and components
11. identify problems relating to the installation and deal with them in line with standard operating procedures
12. maintain effective communication with the customer in line with customer care procedures
13. check specified quality and quantity of components and resources are taken to the location
14. confirm specified resources, tools and equipment are present and are in safe working order
15. carry out preparatory work on components and materials following standard operating procedures
16. lay out resources and components in a logical order for effective working
17. describe relevant health and safety responsibilities
18. describe the meaning of terms used in specifications
19. describe how to check equipment is set up and is in good working order
20. describe how to check materials and the common faults that can occur
21. list areas to be isolated and suitable protective coverings to be used
22. list types of vulnerable objects to be moved by customers and why
23. describe when to set up storage areas and safety and security issues to consider
24. describe how to provide information clearly to customers, what information they require and why
25. describe how to dispose of waste in accordance with current legislation

26. list resources needed for furniture assembly in a location and preparation processes
27. describe types of components assembled in location and preparation needed on location
28. describe good practice methods for laying out resources and components

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets Site survey Job plans Drawings
Machinery, tools and equipment	Battery-powered equipment Machinery Power tools Hand tools Handling equipment Cleaning equipment Measuring equipment Levelling equipment Marking equipment Access equipment Service finding equipment
Materials	All materials required to carry out installation Cleaning materials
Vulnerable items	High value items Delicate items Damage to customers premises Furniture Flooring
Preparatory work	Removing existing fixtures and fittings Cleaning Levelling Existing appliances Access arrangements Measuring Components Materials Identify existing services Services turned off

Assessment:

Observed Assessment.

Module 3 – Measure and Mark Out

What is required

Measure and mark out materials to specification.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. check and calibrate marking, measuring tools and ancillary equipment following standard operating procedures
7. use marking and measuring tools and ancillary equipment following standard operating procedures and manufacturers' instructions
8. mark out from setting out details and cutting lists following standard operating procedures
9. describe relevant health and safety responsibilities
10. describe the meaning of terms used in specifications
11. describe how to check equipment is set up and is in good working order
12. describe how to check materials and the common faults that can occur
13. describe how to read cutting lists
14. describe how to mark out components from cutting lists
15. describe calibration and why this is important
16. describe how to use marking, measuring tools and ancillary equipment

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, Tools and Equipment	Hand tools Measuring devices Markers Staff

	Tri-squares Marking gauges Lasers
Materials	Timber Fabrics Metal Glass Manmade composites Foam Manufactured board
Calibrate	Measuring devices (tools and equipment) Tolerances
Faults	Material Jigs and templates Equipment

Assessment:

Observed Assessment.

Module 4 – Power Tools & Hand Tools

What is required

Set up and operate tools used to assemble furniture. Understand the tools used within working area and which specific job they are used in.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. select appropriate equipment and materials required to carry out the job following standard operating procedures
4. check equipment is calibrated, set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. check tools are in safe working order and meet PAT requirements (Portable Appliance Testing)
7. check voltage meets site requirements
8. set up tools for the job to be carried out following standard operating procedures and manufacturers' instructions
9. operate tools following standard operating procedures and manufacturers' instructions
10. describe relevant health and safety responsibilities
11. describe the meaning of terms used in specifications
12. describe how to check equipment is set up and is in good working order
13. describe how to check materials and the common faults that can occur
14. describe the PAT requirements relevant to your work
15. state the voltage requirements on site
16. list the different tools used and their uses
17. describe how to set up and operate tools used for furniture installation

Range:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, Tools and Equipment	Limitations Hand tools

	Power tools
Faults	Cables Fuses Batteries Transformers Accessories

Assessment:

Observed Assessment.

Module 5 – Assembly

What is required

Assemble components of furniture. Understand the sequence of assembly and why this is important.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. prepare to assemble, mark components to specification following standard operating procedures
7. assemble routine components in position following standard operating procedures
8. secure components to specification following standard operating procedures
9. finish assembly to specification following standard operating procedures
10. check finished assembly meets specification following standard operating procedures
11. proceed to next stage
12. describe relevant health and safety responsibilities
13. describe the meaning of terms used in specifications
14. describe how to check equipment is set up and is in good working order
15. describe how to check materials and the common faults that can occur
16. describe assembly methods and techniques
17. describe quality control procedures and recognition of assembly defects
18. describe handling equipment and procedures
19. describe preparation methods and techniques
20. describe tool and equipment care and control procedures

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets

Machinery, Tools and Equipment	Power tools Hand tools Measuring equipment Cramps Jigs and templates
Materials	Fixings Adhesives Components
Faults	Machinery, tools and equipment Materials
Marking	Face sides Sequence
Secure components	Gluing Fixing Cramping

Assessment:

Observed Assessment.

Module 6 - Installation

What is required

Install furniture on location to specification. This includes scribing, fixing and securing of furniture using appropriate methods relating to substrate. This also includes adaptations to specifications for example pipe boxes, sockets, gas meters, etc.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. maintain effective communication with supporting personnel and customers throughout the installation
7. assess any unforeseen features of locations and identify how these affect placements following standard operating procedures
8. mark out locations following standard operating procedures
9. select components as specified and confirm quality meets company standards
10. adjust components to provide best possible fit to locations following standard operating procedures
11. minimise risk of damage to components/work pieces and surrounding areas following standard operating procedures
12. cut, shape, mitre, butt and scribe components to specification following standard operating procedures
13. fit components in sequence following standard operating procedures
14. adjust components to ensure joins and alignments between components, furniture and surrounds are to required tolerances
15. level and secure components in location following standard operating procedures
16. ensure all edges are completed to specification
17. seal components following standard operating procedures
18. clean the installation following standard operating procedures
19. describe relevant health and safety responsibilities
20. describe the meaning of terms used in specifications
21. describe how to check equipment is set up and is in good working order
22. describe how to check materials and the common faults that can occur
23. describe how to maintain effective communication with supporting personnel and customers
24. describe features of locations and how these affect placements
25. describe how to mark out locations

26. describe how to select components as specified and confirm quality meets company standards
27. describe how to adjust components to provide best possible fit to locations
28. describe how to minimise risk of damage to components/work pieces and surrounding areas
29. describe how to cut, shape, mitre, butt and scribe components to specification
30. describe how to fit components and the sequence to follow
31. describe how to adjust components to ensure joins and alignments between components, furniture and surrounds are to required tolerances
32. describe how to level and secure components in location
33. describe how to ensure all edges are completed to specification
34. describe how to seal components
35. describe how to clean the installation and why this is important

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, Tools and Equipment	Power tools Hand tools Measuring equipment Cramps Jigs and templates Cleaning equipment
Materials	Materials you need to carry out the installations Cleaning materials
Faults	Damage Marks Wrong specification Walls and floors

Assessment:

Observed Assessment.

Module 7 – Finish composite worktops

What is required

Finish work tops to specification following manufacturers' instructions.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. sand surfaces following company procedures and manufacturers' instructions
7. apply appropriate compounds and polish surfaces following company procedures and manufacturers' instructions
8. carry out quality checks on materials following company procedures and manufacturers' instructions
9. describe relevant health and safety responsibilities
10. describe the meaning of terms used in specifications
11. describe how to check equipment is set up and is in good working order
12. describe how to check materials and the common faults that can occur
13. describe sanding methods including pattern and procedure
14. describe how to remove minor scratches when polishing
15. describe the advantages and disadvantages of different finishes
16. describe the recommended sandpapers and tooling to use
17. describe lighting considerations to be taken into account
18. describe application considerations to be taken into account
19. describe the sensitive solid surface colours and patterns

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence COSHH
Specifications and Requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, Tools and	Hand tools

Equipment	Power tools Sanding tools and equipment
Materials	Polish
Faults	Scratches

Assessment:

Observed Assessment.

Module 8 - Re-instate Location

What is required

Re-instate a location after assembly and placement of furniture. This involves confirming the end of placement, ensuring all resources are cleared and maintaining customer liaison.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements following standard operating procedures
3. check installations are to required quality in the specification
4. check decorative effects are to the required quality and fixed following standard operating procedures
5. deal with problems that occur following standard operating procedures
6. maintain effective communication with customers
7. complete work in the required time following standard operating procedures
8. complete documentation following standard operating procedures
9. confirm tools and items of equipment leave locations
10. clear all debris and other waste materials from locations
11. check mains services have been re-instated following standard operating procedures
12. confirm customer sign off of installation following standard operating procedures
13. describe relevant health and safety responsibilities
14. describe the meaning of terms used in specifications
15. describe why it is important to check specifications have been completed and how to do this
16. describe why it is important to check and confirm quality of installations and how to do this
17. describe why it is important to check all decorative effects and their fixings and how to do this
18. describe how to provide information clearly to customers
19. describe information customers require and why it is important
20. describe how to organise for tools and equipment to leave locations
21. describe methods to clear debris and other waste items safely from locations
22. describe how to check re-instatement of mains services
23. describe how to confirm customer sign off of installation

Range:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets

	Work tickets
Faults	Size Shape Snagging list

Assessment:

Observed Assessment.

Module 9 - Customer Service

What is required

Develop customer relationships. This includes building customer confidence in the level of service provided, meeting the ongoing needs and expectations of customers and developing relationships between customers and your organisation.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. make realistic customer service promises to your customers
4. ensure that your promises balance the needs of your customers and your organisation
5. keep your promises to your customers
6. inform your customers if you cannot keep your promises due to unforeseen circumstances
7. recognise when your customers' needs or expectations have changed and adapt your service to meet their new requirements
8. keep your customers informed if delivery of the service needs to involve passing them on to another person or organisation
9. act in a professional manner whilst on location
10. describe relevant health and safety responsibilities
11. describe the meaning of terms used in specifications
12. describe how to check equipment is set up and is in good working order
13. describe realistic customer service promises and how you deliver these
14. describe how to recognise when customers' needs or expectations have changed and how to adapt your service to meet new requirements
15. describe how to keep your customers informed if delivery of the service needs to involve passing them on to another person or organisation
16. describe how to behave professionally and what is expected of you

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets

Assessment:

Observed Assessment.

Module 10 – Rectification/ rework

What is required

Carry out rectification or rework. This includes changing hinges and handles. Identify snags and awareness of where to seek help and guidance.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. identify any snags and report
7. carry out rectification/rework under supervision following standard operating procedures
8. seek help and guidance on any snags or problems following standard operating procedures
9. describe relevant health and safety responsibilities
10. describe the meaning of terms used in specifications
11. describe how to check equipment is set up and is in good working order
12. describe how to check materials and the common faults that can occur
13. describe how to identify any snags and how to report these
14. describe how to carry out rectification/rework and your responsibilities for this
15. describe how to seek help and guidance on any snags

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, tools and equipment	Power tools Hand tools Measuring equipment Cramps Jigs and templates

	Cleaning equipment
Faults/Snags	Broken fittings Scuffs Scratches Fitting errors

Assessment:

Observed Assessment.

Module 11 – Gluing

What is required

Apply adhesives to components. Understand types, methods and processes involved in gluing.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. prepare surfaces to specification following standard operating procedures
7. apply adhesives to specification following standard operating procedures
8. remove excess adhesives to specification following standard operating procedures
9. cure components to specification following standard operating procedures
10. progress to next stage following standard operating procedures
11. describe relevant health and safety responsibilities
12. describe the meaning of terms used in specifications
13. describe how to check equipment is set up and is in good working order
14. describe how to check materials and the common faults that can occur
15. describe how to prepare surfaces to specification
16. describe how to apply adhesives to specification
17. describe how to remove excess adhesives to specification
18. describe how to cure components to specification
19. describe the different adhesives used and why
20. state the curing times of different adhesives used

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, Tools and Equipment	Glue guns Brushes

	Glue rollers Glue machinery
Materials	Adhesives
Faults	Machinery, tools and equipment Materials Shelf life of adhesives

Assessment:

Observed Assessment.

Module 12 - Cut Outs

What is required

Complete standard cut-outs in work surfaces for general appliances such as taps, hobs and sinks. This covers using a template, cutting out and finishing the area.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults
6. use appropriate jigs and templates to measure and mark out cuts to be made
7. select appropriate cutting tools following manufacturers' instructions
8. cut surfaces accurately following company procedures and manufacturers' instructions following the cutting list
9. process to next stage
10. describe relevant health and safety responsibilities
11. describe the meaning of terms used in specifications
12. describe how to check equipment is set up and is in good working order
13. describe how to check materials and the common faults that can occur
14. describe how to use jigs and templates to measure and mark out cuts to be made
15. describe the different cutting tools used and why
16. describe how to cut surfaces accurately

Range:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, Tools and Equipment	Cutting tools Jigs and Templates
Faults	Cuts

Assessment:

Observed Assessment.

Module 13 - Cramping

What is required

Position components and apply cramps to ensure products are positioned securely to specification.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. position materials to specification following standard operating procedures
7. apply adhesives to specification following standard operating procedures
8. assemble components to specification following standard operating procedures
9. apply cramps to specification following standard operating procedures
10. check piece is square and true to specification following standard operating procedures
11. rectify any faults to specification following standard operating procedures
12. remove excess adhesives following standard operating procedures
13. allow piece to dry to specification following standard operating procedures
14. pass on/store piece following standard operating procedures
15. describe relevant health and safety responsibilities
16. describe the meaning of terms used in specifications
17. describe how to check equipment is set up and is in good working order
18. describe how to check materials and the common faults that can occur
19. adhesive drying times

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Materials	Appropriate Adhesives Timber

	Metal Glass Manmade composites Manufactured board
Faults	Materials Cramps Positon
Cramps	G-cramps/G-clamps Sash cramps Presses Quick cramps

Assessment:

Observed Assessment.

Module 14 - Sanding

What is required

Sand materials for preparation prior to assembly, post-assembly and de-nibbing.
Understand grit sizes and the process of sanding.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. sand wooden components using appropriate grade sizes and blocks following standard operating procedures
7. clean wooden components between sanding following standard operating procedures
8. scrape tight corners following standard operating procedures
9. raise fibres of the grain following standard operating procedures
10. describe relevant health and safety responsibilities
11. describe the meaning of terms used in specifications
12. describe how to check equipment is set up and is in good working order
13. describe how to check materials and the common faults that can occur
14. describe when machine and hand sanding is appropriate
15. describe how to recognise different grades of abrasives and their uses
16. state the order different abrasives grades need to be used
17. describe faults/defects that can occur and how to recognise and how these can be rectified during the production process
18. explain why it is important to sand with the grain
19. describe how to prevent the appearance of a raised grain
20. describe how to sand different components
21. describe what de-nibbing is and how this is done
22. describe the different pads available and their uses
23. describe fillers used within the preparation process
24. describe different machinery and equipment to use and why

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
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	COSHH
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Materials	Timber Fabrics Metal Glass Manmade composites Foam Manufactured board
Faults	Grade Materials

Assessment:

Observed Assessment.

Module 15 - Veneers and Laminates

What is required

Select, prepare and apply veneers to items of furniture.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. check grain structure, shade and direction following standard operating procedures
7. measure, mark out and cut veneers within the specified tolerances following standard operating procedures
8. minimise waste in cutting following standard operating procedures
9. handle veneers in ways that avoid damage following standard operating procedures
10. transfer surplus veneers to designated storage locations following standard operating procedures
11. joint veneers ensuring edges are correctly aligned and jointed to required tolerances, without distortion of veneers following standard operating procedures
12. prepare surfaces to receive veneers, making sure they are free of irregularities, defects, dust and debris following standard operating procedures
13. prepare and apply adhesives following manufacturers' instructions and standard operating procedures
14. press veneers to meet specifications following standard operating procedures
15. trim, cut and finish veneered panels to specification following standard operating procedures
16. pass onto next process following standard operating procedures
17. describe relevant health and safety responsibilities
18. describe the meaning of terms used in specifications
19. describe how to check equipment is set up and is in good working order
20. describe how to check materials and the common faults that can occur
21. describe the handling characteristics of veneers and how to protect them from damage during cutting and storage
22. describe the consequences of inaccurate measuring and cutting
23. describe the handling characteristics and effects of pressing different types of veneers

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, Tools and Equipment	Wood working machinery CNC Machinery Hand tools Electric and air powered tools Hand crafting tools Measuring devices
Materials	Timber Fabrics Metal Glass Manmade composites Foam Manufactured board
Faults	Machinery, Tools and equipment Materials
Quality Assurance	Colour Grain Grade Quality Shade

Assessment:

Observed Assessment.

Module 16 – Jigs and Templates

What is required

Use and maintain jigs and templates for furniture production. Jigs are used to ensure repeatability and accuracy in the production of furniture. These can be hand held or mounted on workbenches.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is calibrated, set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. use jigs and templates to specification following standard operating procedures
7. handle jigs and templates in ways that protect them from damage following standard operating procedures
8. store completed jigs and templates under suitable conditions to keep them in good order following standard operating procedures
9. routinely examine jigs and templates for signs of damage following standard operating procedures
10. identify damage that affects use of jigs or templates following standard operating procedures
11. clean jigs and templates using suitable methods and equipment following standard operating procedures
12. remove and report jigs and templates which are damaged beyond use following standard operating procedures
13. describe relevant health and safety responsibilities
14. describe the meaning of terms used in specifications
15. describe how to check equipment is set up and is in good working order
16. describe how to check materials and the common faults that can occur
17. describe how to protect jigs and templates from damage
18. explain why it is important to examine jigs and templates on a routine basis
19. describe damage that can occur to jigs and templates used
20. describe tolerance levels when assessing if jigs or templates are beyond use

Range:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
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Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, Tools and Equipment	Hand tools Power tools Measuring equipment Cleaning products
Materials	Jigs Templates
Faults	Size Shape Wear and tear

Assessment:

Observed Assessment.

Module 17 - Joints

What is required

Joint components and understand the principles of joints used in making hand-crafted furniture.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. identify joints required and type of joint to be made following standard operating procedures
7. mark out components following standard operating procedures
8. set machinery, jigs and equipment following standard operating procedures and manufacturers' instructions
9. cut joints to within required tolerances following standard operating procedures
10. check joints fit to specification following standard operating procedures
11. describe relevant health and safety responsibilities
12. describe the meaning of terms used in specifications
13. describe how to check equipment is set up and is in good working order
14. describe how to check materials and the common faults that can occur
15. describe different types of joints and their uses
16. describe how to mark out components and acceptable tolerances
17. describe how to set up machinery, jigs and templates
18. describe how to cut joints and tolerances allowed
19. describe how to check joints fit for accuracy and why this is important

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, Tools and	Wood working machinery

Equipment	CNC Machinery Hand tools Electric and air powered tools Hand crafting tools Measuring devices
Materials	Timber Fabrics Metal Glass Manmade composites Foam Manufactured board
Faults	Materials Fit Cut
Joints	Scarf, rub joints, knock-down, dove-tail, mitred dove-tail, mortise and tenon, mitred tenon, bridle, lap, mitre, tongue and groove, loose tongue, housing, dowel, biscuit and butt joints

Assessment:

Observed Assessment.

Module 18 – Fittings

What is required

Prepare and assemble components to specification, finishing and checking the assembly conforms to specifications.

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. ensure surfaces are in a suitable condition following standard operating procedures
7. position fittings for correctness of fit within the required tolerances to specification
8. attach fittings using required methods following standard operating procedures
9. check fittings are plumb, level and free from binding to specification following standard operating procedures
10. complete quality checks and confirm they have been met before passing on work following standard operating procedures
11. process to following stage
12. describe relevant health and safety responsibilities
13. describe the meaning of terms used in specifications
14. describe how to check equipment is set up and is in good working order
15. describe how to check materials and the common faults that can occur
16. describe quality checks to be made before fittings are used and consequences of not doing these
17. describe consequences of incorrect positioning of furniture fittings
18. describe consequences of not securing furniture fittings correctly
19. describe different methods for attaching furniture fittings
20. describe how to handle powered tools safely in ways that protect yourself and others from risk
21. describe handling characteristics of natural timber and wood composites and how these affect fitting of doors, falls and drawers and making good of fitting faults

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and	Specification sheet

requirements	Work to lists Job sheets Batch info Work tickets
Machinery, Tools and Equipment	Power tools hand tools
Materials	Components
Faults	Machinery, tools and equipment Materials Fit

Assessment:

Observed Assessment.

Module 19 – Electrical/Mechanical Fittings

What is required

First fit mechanical or electrical components to furniture. You will be required to fit a range of mechanical, electrical and electronic components.

Electrical installations can be divided into first, second and third fixes:

- First Fix: Positioning and securing of accessory boxes
- Second Fix: Preparation and positioning of cables
- Third Fix: Termination of conductors to accessories and protective devices

Learning Outcomes:

The learner can:

1. comply with health and safety requirements and procedures at all times
2. obtain specifications and requirements of the items to be produced following standard operating procedures
3. obtain equipment and materials required to carry out the job following standard operating procedures
4. check equipment is set up correctly and in good working order following standard operating procedures and any manufacturer's instructions
5. check all materials required are to specification and free from faults following standard operating procedures
6. follow instructions, assembly drawings and any other specifications following standard operating procedures
7. ensure specified components are available and they are in a usable condition following standard operating procedures
8. assemble components in position following manufacturers' instructions and standard operating procedures
9. secure components following manufacturers' instructions and standard operating procedures
10. check completed assembly to ensure all operations have been completed and finished assembly meets specification following standard operating procedures
11. process to following stage
12. describe relevant health and safety responsibilities
13. describe the meaning of terms used in specifications
14. describe how to check equipment is set up and is in good working order
15. describe how to check materials and the common faults that can occur
16. describe purpose and function of components including identification systems including colour codes and manufacturer's specification
17. describe preparations that need to be undertaken on components prior to fitting
18. describe assembly and securing methods and procedures used, and importance of adhering to them
19. describe quality control procedures to be followed during the fitting and assembly operation

20. describe how to conduct any necessary checks to ensure the accuracy, position, security, function, completeness and electrical continuity of the assembly
21. describe extent of first fitting of electrical components

Range/Scope:

Health and Safety	PPE Safe System of Work Risk Assessment Training documents / evidence
Specifications and requirements	Specification sheet Work to lists Job sheets Batch info Work tickets
Machinery, Tools and Equipment	Power tools hand tools
Materials	Components
Faults	Machinery, tools and equipment Materials Fit

Assessment:

Observed Assessment.