

Qualification Pack



Joiner (WorldSkills)

QP Code: FFS/Q0903

Version: 1.0

NSQF Level: 4.5

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FFS/Q0903: Joiner (WorldSkills)

Brief Job Description

The WorldSkills-Certified Joiner conducts thorough site surveys, interprets complex blueprints, and prepares worksites with precision. They showcase unmatched craftsmanship through precise measuring, cutting, shaping, and assembly of wood and substitutes, utilizing diverse hand tools and machines to achieve excellence. A joiner showcases precision, attention to detail, and a commitment to preparing joinery with standards within the WorldSkills competition criteria.

Personal Attributes

The individual must have physical strength, good stamina, problem-solving, attention to detail, and analytical skills, with a willingness to learn and perform. The person must be organized, diligent, methodical, safety-conscious, and a prompt decision-maker. The individual must be a good listener with skills to comprehend and communicate. The individual should be honest, trustworthy, reliable, flexible, and innovative.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- [1. FFS/N0914: Perform site recce and prepare the product drawings](#)
- [2. FFS/N0915: Select and prepare the materials into required specifications and dimensions](#)
- [3. FFS/N0916: Prepare the components with internal and external joints to perform product assembly](#)
- [4. FFS/N0917: Perform the product finishing and installation based on design specifications](#)
- [5. FFS/N8211: Execute joinery work with safety and adherence to workplace management standards](#)
- [6. FFS/N8212: Display effective communication and professional skills at workplace](#)

Qualification Pack (QP) Parameters

Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Work Shop)
Country	India

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NSQF Level	4.5
Credits	17
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7115.0500
Minimum Educational Qualification & Experience	Basic Literacy and Numeracy (As per the WorldSkills and IndiaSkills eligibility criteria)
Minimum Level of Education for Training in School	12th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	14 Years
Last Reviewed On	NA
Next Review Date	08/02/2026
NSQF Approval Date	08/02/2024
Version	1.0
Reference code on NQR	QG-4.5-WC-01790-2024-V1-FFSC
NQR Version	1

Remarks:

i) There is no specified minimum job entry age for the skill competitions, however, the competitor(s) must not be older than 22 years in the year of the competition as per WorldSkills Standards. ii) The validity of these qualifications shall be only for two years or as per the WorldSkills competition cycle, whichever is earlier". (Please refer to clause 4.1. (d) of NCVET Order No. 32001/06/2023/NCVET, dated 26.01.2024)

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FFS/N0914: Perform site recce and prepare the product drawings

Description

This unit describes the performance outcomes required to perform site assessments with consideration for environmental factors, interpreting drawing docket, working with drawings, and accuracy in producing joint details.

Scope

The scope covers the following :

- Site Assessment and Environmental Consideration
- Drawing Docket Interpretation
- Working with Drawing
- Accurate Joint Details Production

Elements and Performance Criteria

Site Assessment and Environmental Consideration

To be competent, the user/individual on the job must be able to:

- PC1.** access the location of the finished product and environmental conditions
- PC2.** collaborate with experts to gather insights and perspectives of site that may influence the design and construction process.
- PC3.** measure and record the size and shape of the area in which the completed product will be installed

Drawing Docket Interpretation

To be competent, the user/individual on the job must be able to:

- PC4.** interpret drawing docket with precision, optimizing the potential for high-quality construction while considering design intent
- PC5.** determine and check quantities of materials required for construction, considering factors such as waste minimization and cost-effectiveness.
- PC6.** seek clarification and correct any missing or incorrect information in drawings, ensuring accuracy and eliminating potential issues in the construction process.

Working with Drawing

To be competent, the user/individual on the job must be able to:

- PC7.** produce meticulous drawings both to scale and full size, adhering to drawing docket specifications.
- PC8.** perform the drawing annotation with appropriate dimensional points, specification, conventions and notes on the full scale drawing
- PC9.** utilize geometric methods adeptly to determine missing complex angles, joints, and intersections
- PC10.** produce lines that are straight, crisp, accurate, meet clearly at intersections, and maintain consistent thickness and correct weight.

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PC11. ensure that line types effectively convey different elements of the design and construction process.

Accurate Joint Details Production

To be competent, the user/individual on the job must be able to:

PC12. produce joint details that are accurate, correctly proportioned, and aligned with the overall design intent.

PC13. ensure that all measurements in the working drawing meet specified requirements and align with project specifications.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards
- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses
- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** the importance of assessing the location and environmental conditions.
- KU9.** the significance of collaboration with experts.
- KU10.** the process of measuring and recording site dimensions.
- KU11.** the role of drawing docket in the construction process.
- KU12.** the importance of determining material quantities.
- KU13.** the significance of clarifying and correcting information in drawings.
- KU14.** the importance of producing meticulous drawings.
- KU15.** the basics of dimensional points, specifications, conventions, and notes in full-scale drawings.
- KU16.** geometric methods for determining angles and intersections.
- KU17.** the characteristics of well-drawn lines.
- KU18.** the methods of conveying design elements through line types.
- KU19.** the importance of accurate joint details and process involved in preparing the same
- KU20.** the significance of meeting specified requirements in measurements.

Generic Skills (GS)

User/individual on the job needs to know how to:



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- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Site Assessment and Environmental Consideration</i>	6	12	2	2
PC1. access the location of the finished product and environmental conditions	2	4	-	1
PC2. collaborate with experts to gather insights and perspectives of site that may influence the design and construction process.	2	4	-	-
PC3. measure and record the size and shape of the area in which the completed product will be installed	2	4	2	1
<i>Drawing Docket Interpretation</i>	2	12	6	1
PC4. interpret drawing docket with precision, optimizing the potential for high-quality construction while considering design intent	2	4	2	1
PC5. determine and check quantities of materials required for construction, considering factors such as waste minimization and cost-effectiveness.	-	4	2	-
PC6. seek clarification and correct any missing or incorrect information in drawings, ensuring accuracy and eliminating potential issues in the construction process.	-	4	2	-
<i>Working with Drawing</i>	10	20	8	4
PC7. produce meticulous drawings both to scale and full size, adhering to drawing docket specifications.	2	4	2	1
PC8. perform the drawing annotation with appropriate dimensional points, specification, conventions and notes on the full scale drawing	2	4	2	1
PC9. utilize geometric methods adeptly to determine missing complex angles, joints, and intersections	2	4	2	1
PC10. produce lines that are straight, crisp, accurate, meet clearly at intersections, and maintain consistent thickness and correct weight.	2	4	2	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. ensure that line types effectively convey different elements of the design and construction process.	2	4	-	-
<i>Accurate Joint Details Production</i>	4	8	2	1
PC12. produce joint details that are accurate, correctly proportioned, and aligned with the overall design intent.	2	4	2	1
PC13. ensure that all measurements in the working drawing meet specified requirements and align with project specifications.	2	4	-	-
NOS Total	22	52	18	8

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National Occupational Standards (NOS) Parameters

NOS Code	FFS/N0914
NOS Name	Perform site recce and prepare the product drawings
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Work Shop)
NSQF Level	4.5
Credits	3
Version	1.0
Last Reviewed Date	08/02/2024
Next Review Date	08/02/2026
NSQC Clearance Date	08/02/2024

Qualification Pack

FFS/N0915: Select and prepare the materials into required specifications and dimensions

Description

This unit describes the performance outcomes required to perform material selection and setting out, execute material sawing and drying processes, and create jigs for stationary machines.

Scope

The scope covers the following :

- Material Selection and setting out
- Material Sawing and Drying Process
- Jig Creation for Stationery Machines

Elements and Performance Criteria

Material Selection and setting out

To be competent, the user/individual on the job must be able to:

- PC1.** select materials, avoiding defects and enhance the overall appearance of the finished product.
- PC2.** assess the suitability of chosen materials concerning functionality, durability, and industry standards as indicated in drawings
- PC3.** prepare the cutting list of the product components based on finished and raw dimension specification
- PC4.** set out materials meticulously to determine all necessary measurements, sections, angles, mitres, and joints
- PC5.** perform face marking of final dimensions and shapes for fabrication, maintaining fidelity to design specifications.
- PC6.** make use of digital tools and technology for accurate measurement determination and material set out
- PC7.** perform labelling on materials and items appropriately to maintain organization and clarity throughout the fabrication process.

Material Sawing and Drying Process

To be competent, the user/individual on the job must be able to:

- PC8.** perform sawing of materials to match the specifications outlined in the material list, considering factors such as grain direction and project requirements.
- PC9.** set the sawn materials for drying, ensure the right moisture content.
- PC10.** perform planing of materials to achieve "squareness" and the desired thickness

Jig Creation for Stationery Machines

To be competent, the user/individual on the job must be able to:

- PC11.** access the requirement of jigs based on part specification
- PC12.** select the appropriate tools, material and process specifications for jig fabrication

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PC13. produce jigs for stationery machines based on drawings, adhering to safety requirements and ensuring accuracy in manufacturing.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards
- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses
- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** the basics of different wood materials, identifying defects, and knowledge of techniques to enhance appearance.
- KU9.** how to identify material properties, functionality requirements, durability considerations, and industry standards indicated in drawings.
- KU10.** the process of reading and interpreting cutting lists, finished and raw dimension specifications.
- KU11.** different layout techniques, measuring methods, and the importance of precision in setting out materials.
- KU12.** face marking techniques, the significance of final dimensions, and maintaining fidelity to design specifications.
- KU13.** the basics of digital tools and technology for accurate measurement determination and material set out in fabrication processes.
- KU14.** the importance of labeling for organization and clarity in the fabrication process.
- KU15.** different sawing techniques, understanding the impact of grain direction, and project requirements on sawing.
- KU16.** the importance of drying materials, knowledge of moisture content requirements for different projects.
- KU17.** different planing techniques and the importance of achieving "squareness" and desired thickness in materials.
- KU18.** the purpose of jigs, knowledge of different types of jigs, and their applications.
- KU19.** different tools and materials suitable for jig fabrication, understanding the fabrication process.
- KU20.** the importance of safety in jig fabrication, knowledge of reading drawings and precision in manufacturing.

Generic Skills (GS)



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User/individual on the job needs to know how to:

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Material Selection and setting out</i>	10	28	14	3
PC1. select materials, avoiding defects and enhance the overall appearance of the finished product.	2	4	2	1
PC2. assess the suitability of chosen materials concerning functionality, durability, and industry standards as indicated in drawings	2	4	2	-
PC3. prepare the cutting list of the product components based on finished and raw dimension specification	-	4	2	-
PC4. set out materials meticulously to determine all necessary measurements, sections, angles, mitres, and joints	2	4	2	-
PC5. perform face marking of final dimensions and shapes for fabrication, maintaining fidelity to design specifications.	2	4	2	1
PC6. make use of digital tools and technology for accurate measurement determination and material set out	2	4	2	1
PC7. perform labelling on materials and items appropriately to maintain organization and clarity throughout the fabrication process.	-	4	2	-
<i>Material Sawing and Drying Process</i>	4	12	6	1
PC8. perform sawing of materials to match the specifications outlined in the material list, considering factors such as grain direction and project requirements.	2	4	2	-
PC9. set the sawn materials for drying, ensure the right moisture content.	2	4	2	1
PC10. perform planing of materials to achieve "squareness" and the desired thickness	-	4	2	-
<i>Jig Creation for Stationery Machines</i>	4	12	4	2

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. access the requirement of jigs based on part specification	2	4	-	1
PC12. select the appropriate tools, material and process specifications for jig fabrication	2	4	2	1
PC13. produce jigs for stationery machines based on drawings, adhering to safety requirements and ensuring accuracy in manufacturing.	-	4	2	-
NOS Total	18	52	24	6

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National Occupational Standards (NOS) Parameters

NOS Code	FFS/N0915
NOS Name	Select and prepare the materials into required specifications and dimensions
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Work Shop)
NSQF Level	4.5
Credits	4
Version	1.0
Last Reviewed Date	08/02/2024
Next Review Date	08/02/2026
NSQC Clearance Date	08/02/2024

Qualification Pack

FFS/N0916: Prepare the components with internal and external joints to perform product assembly

Description

This unit describes the performance outcomes required to prepare components, fabricate internal and external joints for product assembly, perform trial assembly, and execute the final product assembly.

Scope

The scope covers the following :

- Preparing components
- Fabricate internal and external joints for product assembly
- Perform trial assembly
- Product Assembly

Elements and Performance Criteria

Preparing components

To be competent, the user/individual on the job must be able to:

- PC1.** perform the cutting of panels into required specifications using a cutting machine
- PC2.** produce shaped elements using jigs on stationery machines, aligning with design specifications
- PC3.** utilize woodworking machines skilfully to form grooves, rebates, and mouldings
- PC4.** adapt and refine shaped elements as necessary to meet evolving project requirements and design alterations.

Fabricate internal and external joints for product assembly

To be competent, the user/individual on the job must be able to:

- PC5.** undertake the preparation of joints with accurate measurements and intersections with no gaps
- PC6.** use appropriate hand tools and machines for joint preparation
- PC7.** produce mortices and haunches to the specified depth, width, and length as specified in drawing.
- PC8.** prepare joints that are parallel, clean, and correct in size to the drawing
- PC9.** ensure faces, edges, and all shoulders are square straight and to the drawing
- PC10.** achieve snug fit for the joints, ensuring a smooth "push fit" without excessive tightness or looseness.
- PC11.** ensure proper checking of joints for strength and durability
- PC12.** check and confirm the joint geometry conforms with the product drawing

Perform trial assembly

To be competent, the user/individual on the job must be able to:

- PC13.** perform trial assembly to check that components fit together seamlessly, with no gaps, and conform to the specifications outlined in the working drawing.

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PC14. perform rectification to address any discrepancies identified during the trial assembly.

Product Assembly

To be competent, the user/individual on the job must be able to:

PC15. select and prepare the appropriate glue for assembly, considering factors such as material compatibility and project requirements.

PC16. apply glue evenly and attach the edging, ensuring there are no "twists" and that the attachment is "square."

PC17. ensure that joints are complete, well-finished, and aligned with project specifications.

PC18. verify the completeness and quality of joints in the assembled components.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc

KU2. the products and services provided by the company to clients and its quality standards

KU3. the Key Result Areas (KRA) and its importance in the employee performance and growth

KU4. different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses

KU5. common hazards in the worksite and relevant safety and security procedures/manuals to be followed

KU6. the procedures for conducting visual checks required during the various stages of operations and their importance

KU7. the importance of reporting relevant information to the appropriate authority

KU8. the cutting procedures and specifications for woodworking panels.

KU9. how to use jigs on stationary machines for shaping elements according to design specifications.

KU10. the usage of woodworking machine operations for forming grooves, rebates, and moldings.

KU11. the process of adapting and refining shaped elements to meet evolving project requirements and design alterations.

KU12. the principles and importance of accurate measurements and gap-free intersections in joint preparation.

KU13. the selection and usage of appropriate hand tools and machines for joint preparation.

KU14. the specifications and requirements for producing mortices and haunches as per drawing.

KU15. the principles ensuring parallelism, cleanliness, and correct sizing in joint preparation as per drawing specifications.

KU16. the importance of squareness in faces, edges, and shoulders in joint preparation to drawing specifications.

KU17. the process of achieving snug fits in joints and the importance of a smooth "push fit" without excessive tightness or looseness.

KU18. the checks necessary for assessing the strength and durability of joints.

KU19. how to compare joint geometry with product drawing and the significance of confirmation.

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- KU20.** the importance of trial assembly in verifying seamless fit, gap-free joints, and conformity to drawing specifications.
- KU21.** the rectification processes and their significance in addressing discrepancies found during trial assembly.
- KU22.** the types of glues, their properties, and factors influencing glue selection for different materials and project requirements.
- KU23.** techniques for applying glue evenly and attaching edging with precision, avoiding twists, and ensuring square attachment.
- KU24.** the criteria for complete, well-finished joints aligned with project specifications.
- KU25.** different inspection techniques to verify the completeness and quality of joints in assembled components.

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Preparing components</i>	2	16	8	1
PC1. perform the cutting of panels into required specifications using a cutting machine	1	4	2	-
PC2. produce shaped elements using jigs on stationery machines, aligning with design specifications	-	4	2	-
PC3. utilize woodworking machines skilfully to form grooves, rebates, and mouldings	1	4	2	1
PC4. adapt and refine shaped elements as necessary to meet evolving project requirements and design alterations.	-	4	2	-
<i>Fabricate internal and external joints for product assembly</i>	7	24	8	2
PC5. undertake the preparation of joints with accurate measurements and intersections with no gaps	1	4	2	1
PC6. use appropriate hand tools and machines for joint preparation	1	4	2	-
PC7. produce mortices and haunches to the specified depth, width, and length as specified in drawing.	-	4	2	-
PC8. prepare joints that are parallel, clean, and correct in size to the drawing	1	4	2	-
PC9. ensure faces, edges, and all shoulders are square straight and to the drawing	1	2	-	-
PC10. achieve snug fit for the joints, ensuring a smooth "push fit" without excessive tightness or looseness.	1	2	-	-
PC11. ensure proper checking of joints for strength and durability	1	2	-	-
PC12. check and confirm the joint geometry conforms with the product drawing	1	2	-	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform trial assembly</i>	-	8	4	-
PC13. perform trial assembly to check that components fit together seamlessly, with no gaps, and conform to the specifications outlined in the working drawing.	-	4	2	-
PC14. perform rectification to address any discrepancies identified during the trial assembly.	-	4	2	-
<i>Product Assembly</i>	3	12	4	1
PC15. select and prepare the appropriate glue for assembly, considering factors such as material compatibility and project requirements.	1	4	2	-
PC16. apply glue evenly and attach the edging, ensuring there are no "twists" and that the attachment is "square."	-	4	2	1
PC17. ensure that joints are complete, well-finished, and aligned with project specifications.	1	2	-	-
PC18. verify the completeness and quality of joints in the assembled components.	1	2	-	-
NOS Total	12	60	24	4

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National Occupational Standards (NOS) Parameters

NOS Code	FFS/N0916
NOS Name	Prepare the components with internal and external joints to perform product assembly
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Work Shop)
NSQF Level	4.5
Credits	4
Version	1.0
Last Reviewed Date	08/02/2024
Next Review Date	08/02/2026
NSQC Clearance Date	08/02/2024

Qualification Pack

FFS/N0917: Perform the product finishing and installation based on design specifications

Description

This unit describes the performance outcomes required to perform product finishing and product installation.

Scope

The scope covers the following :

- Product Finishing
- Product Installation

Elements and Performance Criteria

Product Finishing

To be competent, the user/individual on the job must be able to:

- PC1.** complete the product to the specifications outlined in the drawing
- PC2.** interpret the quality standard required by customers or trades for further processes
- PC3.** use appropriate tools to smoothen the surface of the product through sanding by machine and/or by hand to a specified standard
- PC4.** prepare edging for protection, ensuring durability and longevity.
- PC5.** maintain the quality of the surface during assembly and installation, e.g., free from glue and any defects or chips
- PC6.** address and resolve any defects identified during the quality checking process

Product Installation

To be competent, the user/individual on the job must be able to:

- PC7.** plan installations, repairs, or maintenance to meet customer and related trades needs and expectations
- PC8.** check the quality and completeness of all components before installation, addressing any discrepancies or issues identified.
- PC9.** evaluate and select fittings based on both functional requirements and aesthetic considerations
- PC10.** check where changes may be necessary to the positioning/fixing of components
- PC11.** ensure prevention of any damage to finishes during the installation process
- PC12.** ensure quality checks at regular intervals during installation to avoid any defects/ error detection at a later stage
- PC13.** perform the cleaning of the installed product thoroughly before handover

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

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- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards
- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses
- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** the process of interpreting and following design specifications.
- KU9.** different quality standards in woodworking.
- KU10.** different sanding techniques and tools for woodworking.
- KU11.** edging techniques for protection and durability in woodworking.
- KU12.** the process and significance of maintaining surface quality during assembly and installation in woodworking.
- KU13.** the basics of defect identification and resolution in woodworking.
- KU14.** the process of planning and coordination for installations, repairs, or maintenance in woodworking.
- KU15.** quality checks and discrepancy resolution in woodworking.
- KU16.** the factors involved in fittings selection considering both functional and aesthetic aspects.
- KU17.** the process and importance of evaluating and adjusting component positioning or fixing during installation.
- KU18.** the significance of preventing damage to finishes during woodworking installations.
- KU19.** the significance of regular quality checks during woodworking installations for defect prevention.
- KU20.** the post-installation cleaning procedures for woodworking products.

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor



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- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Product Finishing</i>	5	28	16	3
PC1. complete the product to the specifications outlined in the drawing	-	6	4	-
PC2. interpret the quality standard required by customers or trades for further processes	1	6	4	-
PC3. use appropriate tools to smoothen the surface of the product through sanding by machine and/or by hand to a specified standard	1	6	4	1
PC4. prepare edging for protection, ensuring durability and longevity.	1	6	4	1
PC5. maintain the quality of the surface during assembly and installation, e.g., free from glue and any defects or chips	1	2	-	1
PC6. address and resolve any defects identified during the quality checking process	1	2	-	-
<i>Product Installation</i>	7	26	12	3
PC7. plan installations, repairs, or maintenance to meet customer and related trades needs and expectations	1	6	4	-
PC8. check the quality and completeness of all components before installation, addressing any discrepancies or issues identified.	1	2	-	1
PC9. evaluate and select fittings based on both functional requirements and aesthetic considerations	1	6	4	1
PC10. check where changes may be necessary to the positioning/fixing of components	1	2	-	-
PC11. ensure prevention of any damage to finishes during the installation process	1	2	-	-
PC12. ensure quality checks at regular intervals during installation to avoid any defects/ error detection at a later stage	1	2	-	-



Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. perform the cleaning of the installed product thoroughly before handover	1	6	4	1
NOS Total	12	54	28	6

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N0917
NOS Name	Perform the product finishing and installation based on design specifications
Sector	Furniture & Fittings
Sub-Sector	Furniture Design & Production
Occupation	Furniture Production (Work Shop)
NSQF Level	4.5
Credits	3
Version	1.0
Last Reviewed Date	08/02/2024
Next Review Date	08/02/2026
NSQC Clearance Date	08/02/2024

Qualification Pack

FFS/N8211: Execute joinery work with safety and adherence to workplace management standards

Description

This unit describes the performance outcomes required to adhere to health and safety standards, ensure tools/material safety, plan work areas efficiently, and improve work efficiency through self-evaluation.

Scope

The scope covers the following :

- Adherence to Health and Safety Standards
- Tools, Equipment, and Material Safety
- Work Area Planning and Efficiency
- Work Efficiency and Self-Evaluation

Elements and Performance Criteria

Adherence to Health and Safety Standards

To be competent, the user/individual on the job must be able to:

- PC1.** follow health and safety standards, rules, and regulations governing the construction environment.
- PC2.** uphold a safe working environment, implementing measures to ensure the well-being of oneself and others.
- PC3.** identify and employ the necessary personal protective equipment, including safety footwear, ear and eye protection, and dust protection.

Tools, Equipment, and Material Safety

To be competent, the user/individual on the job must be able to:

- PC4.** prudently use, clean, maintain, and store all hand and powered tools and equipment safely, following recommended procedures.
- PC5.** safely select, use, and store all materials, adhering to established safety guidelines.

Work Area Planning and Efficiency

To be competent, the user/individual on the job must be able to:

- PC6.** plan the work area to optimize efficiency, incorporating regular tidying and cleaning practices.
- PC7.** measure accurately to avoid wastage, ensuring efficient use of resources.

Work Efficiency and Self-Evaluation

To be competent, the user/individual on the job must be able to:

- PC8.** perform work efficiently, regularly checking progress and outcomes to maintain high productivity.
- PC9.** evaluate personal work, identifying areas for improvement and implementing corrective measures.

Knowledge and Understanding (KU)

Qualification Pack

The individual on the job needs to know and understand:

- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards
- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses
- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** the role of health and safety standards in the construction environment.
- KU9.** strategies for maintaining a safe working environment in construction.
- KU10.** knowledge of personal protective equipment (PPE) in construction.
- KU11.** the safe and proper use, cleaning, maintenance, and storage of tools and equipment.
- KU12.** the significance of safe material handling and storage practices.
- KU13.** the basics of workspace planning and optimization for efficiency.
- KU14.** accurate measurement techniques to minimize wastage.
- KU15.** efficient work practices and productivity monitoring.
- KU16.** self-assessment techniques and corrective measures in woodworking.

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Adherence to Health and Safety Standards</i>	6	18	4	2
PC1. follow health and safety standards, rules, and regulations governing the construction environment.	2	6	-	1
PC2. uphold a safe working environment, implementing measures to ensure the well-being of oneself and others.	2	6	-	-
PC3. identify and employ the necessary personal protective equipment, including safety footwear, ear and eye protection, and dust protection.	2	6	4	1
<i>Tools, Equipment, and Material Safety</i>	4	12	8	2
PC4. prudently use, clean, maintain, and store all hand and powered tools and equipment safely, following recommended procedures.	2	6	4	1
PC5. safely select, use, and store all materials, adhering to established safety guidelines.	2	6	4	1
<i>Work Area Planning and Efficiency</i>	4	12	8	-
PC6. plan the work area to optimize efficiency, incorporating regular tidying and cleaning practices.	2	6	4	-
PC7. measure accurately to avoid wastage, ensuring efficient use of resources.	2	6	4	-
<i>Work Efficiency and Self-Evaluation</i>	4	12	4	-
PC8. perform work efficiently, regularly checking progress and outcomes to maintain high productivity.	2	6	4	-
PC9. evaluate personal work, identifying areas for improvement and implementing corrective measures.	2	6	-	-
NOS Total	18	54	24	4

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N8211
NOS Name	Execute joinery work with safety and adherence to workplace management standards
Sector	Furniture & Fittings
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4.5
Credits	1
Version	1.0
Last Reviewed Date	08/02/2024
Next Review Date	08/02/2026
NSQC Clearance Date	08/02/2024

Qualification Pack

FFS/N8212: Display effective communication and professional skills at workplace

Description

This unit outlines the performance outcomes required to perform and foster customer trust, decision-making, supplier relations, cost estimation, industry awareness, adaptability, innovation, quality improvement, and effective communication.

Scope

The scope covers the following :

- Customer Trust and Relationship Management
- Decision-Making and Supplier Relations
- Cost Estimation and Industry Awareness
- Adaptability and Innovation
- Quality Improvement and Communication

Elements and Performance Criteria

Customer Trust and Relationship Management

To be competent, the user/individual on the job must be able to:

- PC1.** gain the trust of customers by interpreting their requirements, managing expectations positively, and delivering on commitments.
- PC2.** visualize and translate customer wishes, providing advice and recommendations that meet or improve their design and budgetary requirements.

Decision-Making and Supplier Relations

To be competent, the user/individual on the job must be able to:

- PC3.** positively support and lead decision-making assertively, ensuring alignment with project objectives.
- PC4.** perform liaising with suppliers to negotiate prices, place orders, and maintain positive relations.

Cost Estimation and Industry Awareness

To be competent, the user/individual on the job must be able to:

- PC5.** produce accurate cost and time estimates for customers, demonstrating financial and temporal competency.
- PC6.** keep up to date with changes in the construction industry, staying informed about trends and advancements.

Adaptability and Innovation

To be competent, the user/individual on the job must be able to:

- PC7.** display willingness to try new methods and embrace change, contributing to a culture of innovation.
- PC8.** recognize and understand problems swiftly, following a self-managed process for resolution, and challenging incorrect information to prevent future issues.

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PC9. perform tasks, fulfil deadlines, and report progress properly.

Quality Improvement and Communication

To be competent, the user/individual on the job must be able to:

- PC10.** regularly scrutinize work for accuracy/standard, aiming to minimize potential issues in later stages.
- PC11.** recognize and comprehend problems as they arise, applying a self-managed process for resolution to prevent escalation.
- PC12.** proactively challenge incorrect information to avert potential problems and ensure the accuracy of work.
- PC13.** recognize opportunities to contribute ideas that improve the product and overall industry quality.
- PC14.** keep abreast of industry developments, ensuring a current understanding of changes and trends.
- PC15.** display willingness to experiment with new methods, fostering an environment of adaptability and change embracement.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the organization structure, its purpose, and objective, various departments, hierarchy, reporting matrix, code of conduct, etc
- KU2.** the products and services provided by the company to clients and its quality standards
- KU3.** the Key Result Areas (KRA) and its importance in the employee performance and growth
- KU4.** different types of personal protective equipment such as gloves, goggles, masks, etc. and their uses
- KU5.** common hazards in the worksite and relevant safety and security procedures/manuals to be followed
- KU6.** the procedures for conducting visual checks required during the various stages of operations and their importance
- KU7.** the importance of reporting relevant information to the appropriate authority
- KU8.** importance of gaining customer trust through interpreting requirements, managing expectations, and delivering on commitments.
- KU9.** process of visualizing and translating customer wishes, providing advice that meets design and budgetary requirements.
- KU10.** importance of assertive decision-making aligned with project objectives.
- KU11.** different techniques and importance of supplier liaison for negotiation, ordering, and relationship maintenance.
- KU12.** methods and principles of cost and time estimation in joinery projects.
- KU13.** current trends, advancements, and changes in the construction industry.
- KU14.** importance of innovation and adaptability in joinery.
- KU15.** the significance of problem-solving techniques in joinery.
- KU16.** project management principles and reporting procedures in joinery.
- KU17.** importance of quality control and standards in joinery.



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- KU18.** the techniques associated with problem recognition and resolution strategies in joinery.
- KU19.** importance of accuracy and vigilance in joinery work.
- KU20.** role of innovation and continuous improvement in joinery.
- KU21.** significance of staying informed about industry developments in joinery.
- KU22.** importance of adaptability and openness to new methods in joinery.

Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1.** read company policy documents, information displayed at the worksite, job cards, etc.
- GS2.** effectively communicate with team members and supervisors respectfully as per the protocol of the organization
- GS3.** work constructively and collaboratively with others
- GS4.** fill up documents about one's role at the worksite (involves attendance, daily work update, etc.)
- GS5.** apply domain information/ knowledge and assess day to day tasks through experience and observation
- GS6.** evaluate the complexity of the tasks to determine if any guidance is required from the supervisor
- GS7.** interpret instructions related to the usage of machines and tools for fabrication, assembling, and installation of the various products
- GS8.** use reasoning skills to make appropriate decisions and troubleshoot concerns related to own responsibilities
- GS9.** plan and prioritize the tasks efficiently and accurately within the specified time frame
- GS10.** build and maintain positive and effective relationships with clients

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Customer Trust and Relationship Management</i>	4	8	2	-
PC1. gain the trust of customers by interpreting their requirements, managing expectations positively, and delivering on commitments.	2	4	-	-
PC2. visualize and translate customer wishes, providing advice and recommendations that meet or improve their design and budgetary requirements.	2	4	2	-
<i>Decision-Making and Supplier Relations</i>	2	8	4	-
PC3. positively support and lead decision-making assertively, ensuring alignment with project objectives.	-	4	2	-
PC4. perform liaising with suppliers to negotiate prices, place orders, and maintain positive relations.	2	4	2	-
<i>Cost Estimation and Industry Awareness</i>	4	8	2	-
PC5. produce accurate cost and time estimates for customers, demonstrating financial and temporal competency.	2	4	2	-
PC6. keep up to date with changes in the construction industry, staying informed about trends and advancements.	2	4	-	-
<i>Adaptability and Innovation</i>	6	12	4	-
PC7. display willingness to try new methods and embrace change, contributing to a culture of innovation.	2	4	-	-
PC8. recognize and understand problems swiftly, following a self-managed process for resolution, and challenging incorrect information to prevent future issues.	2	4	2	-
PC9. perform tasks, fulfil deadlines, and report progress properly.	2	4	2	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Quality Improvement and Communication</i>	4	24	8	-
PC10. regularly scrutinize work for accuracy/standard, aiming to minimize potential issues in later stages.	-	4	2	-
PC11. recognize and comprehend problems as they arise, applying a self-managed process for resolution to prevent escalation.	-	4	2	-
PC12. proactively challenge incorrect information to avert potential problems and ensure the accuracy of work.	-	4	2	-
PC13. recognize opportunities to contribute ideas that improve the product and overall industry quality.	-	4	2	-
PC14. keep abreast of industry developments, ensuring a current understanding of changes and trends.	2	4	-	-
PC15. display willingness to experiment with new methods, fostering an environment of adaptability and change embracement.	2	4	-	-
NOS Total	20	60	20	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	FFS/N8212
NOS Name	Display effective communication and professional skills at workplace
Sector	Furniture & Fittings
Sub-Sector	Generic
Occupation	Generic
NSQF Level	4.5
Credits	1
Version	1.0
Last Reviewed Date	08/02/2024
Next Review Date	08/02/2026
NSQC Clearance Date	08/02/2024

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each Element/ PC.
2. The assessment for the theory part will be based on a knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score a minimum aggregate passing percentage of 70% for the QP and a minimum of 70% for each NOS.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

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Minimum Aggregate Passing % at QP Level : 70

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Minimum Passing % at NOS Level: 70

(Please note: A Trainee must score the minimum percentage for each NOS separately as well as on the QP as a whole.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
FFS/N0914.Perform site recce and prepare the product drawings	22	52	18	8	100	15
FFS/N0915.Select and prepare the materials into required specifications and dimensions	18	52	24	6	100	25
FFS/N0916.Prepare the components with internal and external joints to perform product assembly	12	60	24	4	100	25
FFS/N0917.Perform the product finishing and installation based on design specifications	12	54	28	6	100	15
FFS/N8211.Execute joinery work with safety and adherence to workplace management standards	18	54	24	4	100	10
FFS/N8212.Display effective communication and professional skills at workplace	20	60	20	-	100	10
Total	102	332	138	28	600	100

Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
NCO	National Classification of Occupation
ISCO	International Standard Classification of Occupations
ISIC	International Standard Industrial Classification
NCVET	National Council for Vocational Education and Training
SSC	Sector Skill Council

Qualification Pack

Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.

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Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.