









# **Doors & Windows Fixer**

QP Code: CON/Q1105

Version: 3.0

NSQF Level: 3.0

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# CON/Q1105: Doors & Windows Fixer

### **Brief Job Description**

A Doors & Windows Fixer is responsible for carrying out installation of doors and windows. The responsibilities include the installation of frames and sub-frames for fixing doors and windows, installation of wooden, PVC, aluminum and pre-fabricated sliding doors and windows. The individual also installs hardware and accessories on doors and windows.

#### **Personal Attributes**

The individual should be physically fit to be able to work for long durations. The person should be able to work efficiently within a team, and possess appropriate verbal and written communication skills.

### **Applicable National Occupational Standards (NOS)**

#### **Compulsory NOS:**

- 1. CON/N1111: Install frames and sub-frames for fixing doors and windows
- 2. CON/N1112: Install wooden and PVC doors and windows
- 3. CON/N1113: Install pre-fabricated sliding doors and windows
- 4. CON/N1114: Install aluminum doors and windows with glass glazing
- 5. CON/N1115: Install hardware and accessories on doors and windows
- 6. CON/N8001: Work effectively in a team to deliver desired results at the workplace
- 7. CON/N8002: Plan and organize work to meet expected outcomes
- 8. <u>CON/N9001</u>: Work according to personal health, safety and environment protocols at construction <u>site</u>
- 9. DGT/VSQ/N0101: Employability Skills (30 Hours)

#### **Qualification Pack (QP) Parameters**

Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Interior and Exterior Finishes









Country	India
NSQF Level	3.0
Credits	13
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7115.0200
Minimum Educational Qualification & Experience	10th Class OR 8th grade pass (with 2-year of (NTC/ NAC) after 8th) OR 9th grade pass with 1 Year of experience in the relevant field OR 8th grade pass with 2 Years of experience in the relevant field OR 5th grade pass with 5 Years of experience in the relevant field OR Previous relevant Qualification of NSQF Level (2) with 3 Years of experience in the relevant field OR Previous relevant Qualification of NSQF Level (2.5) with 1.5 Years of experience in the relevant field)
Minimum Level of Education for Training in School	10th Class
Pre-Requisite License or Training	NIL
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	31/08/2026
NSQC Approval Date	31/08/2023
Version	3.0
Reference code on NQR	QG-03-CO-00800-2023-V2-CSDCI
NQR Version	1









### CON/N1111: Install frames and sub-frames for fixing doors and windows

### **Description**

This unit is about fixing frames and sub-frames to install doors and windows.

### Scope

The scope covers the following:

Install frames and sub-frames

#### **Elements and Performance Criteria**

#### Install frames and sub-frames

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

- PC1. select and organize the tools and equipment required for fixing doors and windows
- **PC2.** measure the dimensions of the door/window frame to ensure its correct size
- **PC3.** measure and check the space for the window is as per the applicable drawings/specifications
- **PC4.** ensure dimensions of the opening are as per the size of the frame
- **PC5.** carry out chipping, chiseling of masonry structure to provide gaps for fitting the frame
- **PC6.** select the correct door/window panel as per the approved drawings
- **PC7.** check for surface damage before installation and take appropriate corrective measures
- **PC8.** install the window flashing, as applicable
- **PC9.** cover the frame using appropriate means to avoid damage to the frame of before installation
- **PC10.** mark the underside of the wall or roof directly above the outline on the floor using a line
- PC11. align the door/window frame against the setting out lines, datum lines and level pegs
- **PC12.** secure the frame using timber wedges and adjust the position of wedges to obtain the required vertical and horizontal alignment
- **PC13.** ensure correct alignment and check the undercut dimensions before fastening the hinges
- PC14. apply anti-splitting agent on the surface of frame and sub frame before the installation
- **PC15.** fasten the frame in position using appropriate wall plugs or galvanized straps
- **PC16.** check the dimensions of sub-frame opening
- **PC17.** apply appropriate bonding agent over the sub-frame and main frame
- **PC18.** install the main frame over the sub-frame, securing it nails/screws as per the specification and check them for correct alignment

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** the standard practices for installing doors and windows
- **KU2.** the importance of personal protection and use of the relevant safety gear and equipment









- **KU3.** the basic repair and maintenance of relevant tools and equipment
- **KU4.** the use of drawings and specifications relevant to fixing doors
- **KU5.** the basic principles of measurement
- **KU6.** the selection and use of relevant tools and equipment, including air compressors and hoses, marking equipment, measuring tapes, nail guns, power saws, protractors, saw stools, scaffolding, spirit levels, squares(combination/tri), string lines, etc
- **KU7.** different types of joints in frames, e.g. mitre joints
- **KU8.** how to measure the door/window dimensions
- **KU9.** how to set out lines, datum lines and level pegs
- **KU10.** the process of fastening the frame in position
- **KU11.** the process of applying grout between wall and door/window frames to fill the gap
- KU12. the process of applying anti-splitting agent on wall and door/window frames
- **KU13.** how to assemble the pre-cut main frame using the appropriate tools
- **KU14.** how to check the horizontal and vertical alignment of main frame
- **KU15.** the selection and use of correct door/window panel

### **Generic Skills (GS)**

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

- **GS1.** maintain the appropriate data and records
- **GS2.** read the appropriate reports and literature concerning the field of work
- **GS3.** communicate professionally with all the stakeholders
- **GS4.** listen attentively to understand the information/ instructions being shared and take appropriate action
- **GS5.** coordinate with the co-workers to achieve the work objectives
- **GS6.** plan and execute tasks based on priority
- **GS7.** identify possible disruptions to work and take appropriate mitigation measures
- **GS8.** take prompt action to deal with workplace emergencies and accidents
- **GS9.** evaluate all possible solutions to work-related problems and select the best one
- **GS10.** follow the recommended practices for the timely completion of work and achievement of organizational objectives









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Install frames and sub-frames	30	60	-	10
<b>PC1.</b> select and organize the tools and equipment required for fixing doors and windows	-	-	-	-
<b>PC2.</b> measure the dimensions of the door/window frame to ensure its correct size	-	-	-	-
<b>PC3.</b> measure and check the space for the window is as per the applicable drawings/specifications	-	-	-	-
<b>PC4.</b> ensure dimensions of the opening are as per the size of the frame	-	-	-	-
<b>PC5.</b> carry out chipping, chiseling of masonry structure to provide gaps for fitting the frame	-	-	-	-
<b>PC6.</b> select the correct door/window panel as per the approved drawings	-	-	-	-
<b>PC7.</b> check for surface damage before installation and take appropriate corrective measures	-	-	-	-
PC8. install the window flashing, as applicable	-	-	-	-
<b>PC9.</b> cover the frame using appropriate means to avoid damage to the frame of before installation	-	-	-	-
<b>PC10.</b> mark the underside of the wall or roof directly above the outline on the floor using a line	-	-	-	-
PC11. align the door/window frame against the setting out lines, datum lines and level pegs	-	-	-	-
<b>PC12.</b> secure the frame using timber wedges and adjust the position of wedges to obtain the required vertical and horizontal alignment	-	-	-	-
<b>PC13.</b> ensure correct alignment and check the undercut dimensions before fastening the hinges	-	-	-	-
<b>PC14.</b> apply anti-splitting agent on the surface of frame and sub frame before the installation	-	-	-	-
<b>PC15.</b> fasten the frame in position using appropriate wall plugs or galvanized straps	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC16. check the dimensions of sub-frame opening	-	-	-	-
<b>PC17.</b> apply appropriate bonding agent over the sub-frame and main frame	-	-	-	-
<b>PC18.</b> install the main frame over the sub-frame, securing it nails/screws as per the specification and check them for correct alignment	-	-	-	-
NOS Total	30	60	-	10









# **National Occupational Standards (NOS) Parameters**

NOS Code	CON/N1111
NOS Name	Install frames and sub-frames for fixing doors and windows
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Interior & Exterior Finishes
NSQF Level	3.5
Credits	3
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023









### CON/N1112: Install wooden and PVC doors and windows

### **Description**

This unit is about the installation of wooden and PVC doors and windows.

### Scope

The scope covers the following:

- Install door panels/window panels, and decorative moldings
- Finish the doors /windows

#### **Elements and Performance Criteria**

### Install door panels/window panels, and decorative moldings

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

- **PC1.** install the door/window frame, sub-frame and panel as per specification
- PC2. ensure proper alignment and check the under-cut dimensions before fastening the hinges
- **PC3.** maintain a consistent gap between door/window panel and frame
- **PC4.** use the correct type of decorative molding for the installation
- **PC5.** apply bonding agent to the underside of the architrave (decorative molding)
- **PC6.** Install the decorative molding around the door/window frame as per the specification
- **PC7.** ensure the miter joints are flat and square at corners for seamless finish
- **PC8.** check for proper swinging of doors after hinging
- **PC9.** check for even contact between the door/window face and weather stripping attached to the frame

#### Finish the doors /windows

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

- **PC10.** insulate the door/window frame using fibreglass insulation or low expansion foam as appropriate
- **PC11.** install the interior trim as per the specifications
- PC12. carry out caulking of the trim and brick mold joints
- PC13. install the weather strip at the base of the door/window

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** how to install the door/window frame, sub-frame and panel
- **KU2.** the importance of ensuring proper alignment and checking the under-cut dimensions before fastening the hinges
- **KU3.** the importance of maintaining a consistent gap between door/window panel and frame
- **KU4.** the process of applying bonding agent to the underside of the architrave









- **KU5.** the importance of ensuring the miter joints are flat and square at corners
- **KU6.** the importance of ensuring even contact between the door/window face and weather stripping attached to the frame
- **KU7.** how to insulate the door/window frame using fibreglass insulation or low expansion foam
- **KU8.** the process of installing the interior trim
- **KU9.** the caulking of trim and brick mold joints
- **KU10.** the installation of weather strip at the base of the door/window

### **Generic Skills (GS)**

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

- **GS1.** maintain the appropriate data and records
- **GS2.** read the appropriate reports and literature concerning the field of work
- **GS3.** communicate professionally with all the stakeholders
- **GS4.** listen attentively to understand the information/ instructions being shared and take appropriate action
- **GS5.** coordinate with the co-workers to achieve the work objectives
- **GS6.** plan and execute tasks based on priority
- **GS7.** identify possible disruptions to work and take appropriate mitigation measures
- **GS8.** take prompt action to deal with workplace emergencies and accidents
- **GS9.** evaluate all possible solutions to work-related problems and select the best one
- **GS10.** follow the recommended practices for the timely completion of work and achievement of organizational objectives









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Install door panels/window panels, and decorative moldings	21	42	-	7
<b>PC1.</b> install the door/window frame, sub-frame and panel as per specification	-	-	-	-
<b>PC2.</b> ensure proper alignment and check the under-cut dimensions before fastening the hinges	-	-	-	-
PC3. maintain a consistent gap between door/window panel and frame	-	-	-	-
<b>PC4.</b> use the correct type of decorative molding for the installation	-	-	-	-
<b>PC5.</b> apply bonding agent to the underside of the architrave (decorative molding)	-	-	-	-
<b>PC6.</b> Install the decorative molding around the door/window frame as per the specification	-	-	-	-
<b>PC7.</b> ensure the miter joints are flat and square at corners for seamless finish	-	-	-	-
<b>PC8.</b> check for proper swinging of doors after hinging	-	-	-	-
<b>PC9.</b> check for even contact between the door/window face and weather stripping attached to the frame	-	-	-	-
Finish the doors /windows	9	18	-	3
<b>PC10.</b> insulate the door/window frame using fibreglass insulation or low expansion foam as appropriate	-	-	-	-
<b>PC11.</b> install the interior trim as per the specifications	-	-	-	-
<b>PC12.</b> carry out caulking of the trim and brick mold joints	-	-	-	-
PC13. install the weather strip at the base of the door/window	-	-	-	-









Assessment Criteria for Outcomes	Theory	Practical	Project	Viva
	Marks	Marks	Marks	Marks
NOS Total	30	60	-	10









# **National Occupational Standards (NOS) Parameters**

NOS Code	CON/N1112
NOS Name	Install wooden and PVC doors and windows
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Interior and Exterior Finishes
NSQF Level	3.5
Credits	2
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023









### CON/N1113: Install pre-fabricated sliding doors and windows

### **Description**

This unit is about the installation of pre-fabricated sliding doors and windows.

### Scope

The scope covers the following:

- Install sliding door and window frames, panels and decorative molding
- Finish the doors /windows

#### **Elements and Performance Criteria**

### Install sliding door and window frames, panels and decorative molding

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

- **PC1.** apply flexible waterproof flashing to the sides of bare wall surfaces along the frames
- **PC2.** ensure the frame is plumb, square and not twisted between the openings
- **PC3.** install sliding door frame or pocket wall frame as per specification for sliding doors/windows fixing
- **PC4.** check for surface damage before installation and take appropriate corrective measures
- **PC5.** check for correct alignment and under-cut dimensions before installing doors/window panels
- **PC6.** set up the sliding door into the frame and check that it glides well and is parallel to the frame sides
- **PC7.** adjust the rollers under the sliding panel as necessary
- **PC8.** assemble the main frame at site as per the size requirement
- **PC9.** install vertical parts of main frame using appropriate bonding agent, and fasten the horizontal parts of frame after fixing and drying of vertical parts
- **PC10.** caulk between the siding and frame (or brick molding) as applicable
- PC11. install the decorative molding around the door/window frame as per the specification
- **PC12.** check the miter joints are flat and square at corners
- **PC13.** check for even contact between the door/window face and weather stripping attached to the frame

#### Finish the doors /windows

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

- **PC14.** caulk between the siding and the frame (or brick molding)
- **PC15.** insulate the door/window frame using fibreglass insulation or low expansion foam as appropriate
- **PC16.** install the interior trim as per the specification
- **PC17.** caulk the trim and brick mold joints
- PC18. install the weather strip at the base of the door/window

# **Knowledge and Understanding (KU)**









The individual on the job needs to know and understand:

- **KU1.** the selection and use of relevant tools and equipment, such as marking equipment, measuring tapes, stair clips, steel squares and fences, string lines, etc.
- **KU2.** how to measure the dimensions of the door frame
- **KU3.** the components of pocket wall frame systems
- **KU4.** the components of sliding doors and window frame assembly
- **KU5.** how to set out lines, datum lines and level pegs
- **KU6.** how to assemble the pre-cut main frame using correct tools
- **KU7.** the methods of checking the horizontal and vertical alignment of main frame
- KU8. the insulation technique for window frames

### **Generic Skills (GS)**

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

- **GS1.** maintain the appropriate data and records
- **GS2.** read the appropriate reports and literature concerning the field of work
- **GS3.** communicate professionally with all the stakeholders
- **GS4.** listen attentively to understand the information/ instructions being shared and take appropriate action
- **GS5.** coordinate with the co-workers to achieve the work objectives
- **GS6.** plan and execute tasks based on priority
- **GS7.** identify possible disruptions to work and take appropriate mitigation measures
- **GS8.** take prompt action to deal with workplace emergencies and accidents
- **GS9.** evaluate all possible solutions to work-related problems and select the best one
- **GS10.** follow the recommended practices for the timely completion of work and achievement of organizational objectives









## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Install sliding door and window frames, panels and decorative molding	22	44	-	7
<b>PC1.</b> apply flexible waterproof flashing to the sides of bare wall surfaces along the frames	-	-	-	-
<b>PC2.</b> ensure the frame is plumb, square and not twisted between the openings	-	-	-	-
PC3. install sliding door frame or pocket wall frame as per specification for sliding doors/windows fixing	-	-	-	-
<b>PC4.</b> check for surface damage before installation and take appropriate corrective measures	-	-	-	-
<b>PC5.</b> check for correct alignment and under-cut dimensions before installing doors/window panels	-	-	-	-
<b>PC6.</b> set up the sliding door into the frame and check that it glides well and is parallel to the frame sides	-	-	-	-
<b>PC7.</b> adjust the rollers under the sliding panel as necessary	-	-	-	-
<b>PC8.</b> assemble the main frame at site as per the size requirement	-	-	-	-
<b>PC9.</b> install vertical parts of main frame using appropriate bonding agent, and fasten the horizontal parts of frame after fixing and drying of vertical parts	-	-	-	-
<b>PC10.</b> caulk between the siding and frame (or brick molding) as applicable	-	-	-	-
<b>PC11.</b> install the decorative molding around the door/window frame as per the specification	-	-	-	-
<b>PC12.</b> check the miter joints are flat and square at corners	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> check for even contact between the door/window face and weather stripping attached to the frame	-	-	-	-
Finish the doors /windows	8	16	-	3
<b>PC14.</b> caulk between the siding and the frame (or brick molding)	-	-	-	-
<b>PC15.</b> insulate the door/window frame using fibreglass insulation or low expansion foam as appropriate	-	-	-	-
<b>PC16.</b> install the interior trim as per the specification	-	-	-	-
PC17. caulk the trim and brick mold joints	-	-	-	-
<b>PC18.</b> install the weather strip at the base of the door/window	-	-	-	-
NOS Total	30	60	-	10









# **National Occupational Standards (NOS) Parameters**

NOS Code	CON/N1113
NOS Name	Install pre-fabricated sliding doors and windows
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Interior & Exterior Finishes
NSQF Level	3.5
Credits	2
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023









### CON/N1114: Install aluminum doors and windows with glass glazing

### **Description**

This unit is about the installation of aluminum doors and windows with glass glazing.

### Scope

The scope covers the following:

• Install aluminium doors, windows, glass door/window panels and decorative molding

#### **Elements and Performance Criteria**

### Install aluminium doors, windows, glass door/window panels and decorative molding

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

- **PC1.** apply flexible waterproof flashing to the sides of bare wall surfaces along the frames as per applicable
- **PC2.** check the frame is plumb, square and not twisted between the openings
- **PC3.** check the inner frame and associated hardware for defects and take appropriate corrective measures
- **PC4.** check for and clear any blockage in the weep holes in the inner frames to allow discharge of incidental water before the installation
- **PC5.** follow the recommended sequence of panel installation
- **PC6.** check the labels on the glass panels against the panel fixing plan and schedule
- **PC7.** follow the standard orientation of glass panels for the consistent positioning of logos/trademarks
- **PC8.** check the gasket for physical damages and take appropriate corrective measures
- **PC9.** ensure the gasket is free from dust and dirt to ensure a good grip onto the frame and beadings
- **PC10.** check the profile of gaskets is compatible with that of the beads used to secure the glass panels
- **PC11.** insert glass panel into the frame for doors and windows and hold it in place using spacer hooks
- **PC12.** splice gasket to fit around corners of the glass panes and secure it using appropriate tools and beading
- **PC13.** seal the gap between the gasket and beading using an appropriate sealant, using suitable masking tape to protect glass during sealant application
- **PC14.** install the decorative molding around the door/window frame as per specification
- **PC15.** check the miter joints are flat and square at corners
- **PC16.** check for even contact between the door/window face and the weather tripping attached to the frame
- **PC17.** carry out insulation around doors/windows as per the specification









### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** the use of sketches and specifications relevant to fixing and installing sliding doors/windows
- **KU2.** the use of relevant tools and equipment
- **KU3.** the process of fixing aluminum doors and windows
- **KU4.** the process of fastening glass panels to doors and windows
- **KU5.** how to hold glass panels in place using spacer hooks
- **KU6.** how to estimate the length of gasket
- **KU7.** the use of different sealants for fixing beading
- **KU8.** different gaskets and their fixing procedure
- **KU9.** how to check the horizontal and vertical alignment of main frame
- **KU10.** use correct insulation technique around the door/window frames

### **Generic Skills (GS)**

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

- **GS1.** maintain the appropriate data and records
- **GS2.** read the appropriate reports and literature concerning the field of work
- **GS3.** communicate professionally with all the stakeholders
- **GS4.** listen attentively to understand the information/ instructions being shared and take appropriate action
- **GS5.** coordinate with the co-workers to achieve the work objectives
- **GS6.** plan and execute tasks based on priority
- **GS7.** identify possible disruptions to work and take appropriate mitigation measures
- **GS8.** take prompt action to deal with workplace emergencies and accidents
- **GS9.** evaluate all possible solutions to work-related problems and select the best one
- **GS10.** follow the recommended practices for the timely completion of work and achievement of organizational objectives









## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Install aluminium doors, windows, glass door/window panels and decorative molding	30	60	-	10
<b>PC1.</b> apply flexible waterproof flashing to the sides of bare wall surfaces along the frames as per applicable	-	-	-	-
<b>PC2.</b> check the frame is plumb, square and not twisted between the openings	-	-	-	-
<b>PC3.</b> check the inner frame and associated hardware for defects and take appropriate corrective measures	-	-	-	-
<b>PC4.</b> check for and clear any blockage in the weep holes in the inner frames to allow discharge of incidental water before the installation	-	-	-	-
<b>PC5.</b> follow the recommended sequence of panel installation	-	-	-	-
<b>PC6.</b> check the labels on the glass panels against the panel fixing plan and schedule	-	-	-	-
<b>PC7.</b> follow the standard orientation of glass panels for the consistent positioning of logos/trademarks	-	-	-	-
<b>PC8.</b> check the gasket for physical damages and take appropriate corrective measures	-	-	-	-
<b>PC9.</b> ensure the gasket is free from dust and dirt to ensure a good grip onto the frame and beadings	-	-	-	-
<b>PC10.</b> check the profile of gaskets is compatible with that of the beads used to secure the glass panels	-	-	-	-
<b>PC11.</b> insert glass panel into the frame for doors and windows and hold it in place using spacer hooks	-	-	-	-
<b>PC12.</b> splice gasket to fit around corners of the glass panes and secure it using appropriate tools and beading	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> seal the gap between the gasket and beading using an appropriate sealant, using suitable masking tape to protect glass during sealant application	-	-	-	-
<b>PC14.</b> install the decorative molding around the door/window frame as per specification	-	-	-	-
<b>PC15.</b> check the miter joints are flat and square at corners	-	-	-	-
<b>PC16.</b> check for even contact between the door/window face and the weather tripping attached to the frame	-	-	-	-
<b>PC17.</b> carry out insulation around doors/windows as per the specification	-	-	-	-
NOS Total	30	60	-	10









# **National Occupational Standards (NOS) Parameters**

NOS Code	CON/N1114
NOS Name	Install aluminum doors and windows with glass glazing
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Interior and Exterior Finishes
NSQF Level	3.5
Credits	1
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023









### CON/N1115: Install hardware and accessories on doors and windows

### **Description**

This unit is about the installation of hardware and accessories on doors and windows.

### Scope

The scope covers the following:

Install hardware and accessories on doors and windows

#### **Elements and Performance Criteria**

#### Install hardware and accessories on doors and windows

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

- **PC1.** determine the type of door and window hardware from the job specifications
- PC2. use the appropriate tools and equipment for installing hardware on doors and windows
- PC3. identify and mark the level and point for fixing door and window hardware
- **PC4.** drill holes or cut through doors/windows to accommodate hardware installation
- PC5. install latch assembly, handles and cylinder locks as per the specifications
- **PC6.** fasten the face plates and keepers appropriately and adjust the hardware to suit the alignment and level to match with job specification
- **PC7.** install other hardware, such as stoppers and door closers as per the requirement

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** the components of handle and lock set including interior/exterior handles, lock body, face plate, cylinder locks, lock keeper, key and assembly screws, hinges, rollers for sliding door, door closers, etc
- **KU2.** the methods of fastening the hardware in position
- **KU3.** the use of relevant tools for installing various hardware, such as screwdriver, drilling machine, screws, fasteners, screw drill. etc
- **KU4.** the process of installing correct lockset and architraves for windows
- **KU5.** how to install the latch assembly, handles and cylinder lock
- **KU6.** how to fasten face plates and keepers
- **KU7.** how to check line and level and adjust alignment of hardware to suit the requirement

### **Generic Skills (GS)**

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

**GS1.** maintain the appropriate data and records









- GS2. read the appropriate reports and literature concerning the field of work
- **GS3.** communicate professionally with all the stakeholders
- **GS4.** listen attentively to understand the information/ instructions being shared and take appropriate action
- **GS5.** coordinate with the co-workers to achieve the work objectives
- **GS6.** plan and execute tasks based on priority
- **GS7.** identify possible disruptions to work and take appropriate mitigation measures
- **GS8.** take prompt action to deal with workplace emergencies and accidents
- **GS9.** evaluate all possible solutions to work-related problems and select the best one
- **GS10.** follow the recommended practices for the timely completion of work and achievement of organizational objectives









## **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Install hardware and accessories on doors and windows	30	60	-	10
<b>PC1.</b> determine the type of door and window hardware from the job specifications	-	-	-	-
<b>PC2.</b> use the appropriate tools and equipment for installing hardware on doors and windows	-	-	-	-
<b>PC3.</b> identify and mark the level and point for fixing door and window hardware	-	-	-	-
<b>PC4.</b> drill holes or cut through doors/windows to accommodate hardware installation	-	-	-	-
<b>PC5.</b> install latch assembly, handles and cylinder locks as per the specifications	-	-	-	-
<b>PC6.</b> fasten the face plates and keepers appropriately and adjust the hardware to suit the alignment and level to match with job specification	-	-	-	-
<b>PC7.</b> install other hardware, such as stoppers and door closers as per the requirement	-	-	-	-
NOS Total	30	60	-	10









# **National Occupational Standards (NOS) Parameters**

NOS Code	CON/N1115
NOS Name	Install hardware and accessories on doors and windows
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Interior and Exterior Finishes
NSQF Level	3.5
Credits	1
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023









### **DGT/VSQ/N0101: Employability Skills (30 Hours)**

### **Description**

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

### Scope

The scope covers the following:

- Introduction to Employability Skills
- Constitutional values Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

### **Elements and Performance Criteria**

#### Introduction to Employability Skills

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

**PC1.** understand the significance of employability skills in meeting the job requirements

#### Constitutional values - Citizenship

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

**PC2.** identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

#### Becoming a Professional in the 21st Century

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

**PC3.** explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

#### Basic English Skills

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

**PC4.** speak with others using some basic English phrases or sentences

#### Communication Skills

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

**PC5.** follow good manners while communicating with others

**PC6.** work with others in a team









#### **Diversity & Inclusion**

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

- **PC7.** communicate and behave appropriately with all genders and PwD
- PC8. report any issues related to sexual harassment

#### Financial and Legal Literacy

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

- **PC9.** use various financial products and services safely and securely
- PC10. calculate income, expenses, savings etc.
- **PC11.** approach the concerned authorities for any exploitation as per legal rights and laws

### Essential Digital Skills

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

- PC12. operate digital devices and use its features and applications securely and safely
- PC13. use internet and social media platforms securely and safely

#### Entrepreneurship

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

- PC14. identify and assess opportunities for potential business
- PC15. identify sources for arranging money and associated financial and legal challenges

#### **Customer Service**

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

- **PC16.** identify different types of customers
- **PC17.** identify customer needs and address them appropriately
- **PC18.** follow appropriate hygiene and grooming standards

#### Getting ready for apprenticeship & Jobs

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

- PC19. create a basic biodata
- **PC20.** search for suitable jobs and apply
- PC21. identify and register apprenticeship opportunities as per requirement

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** need for employability skills
- **KU2.** various constitutional and personal values
- **KU3.** different environmentally sustainable practices and their importance
- **KU4.** Twenty first (21st) century skills and their importance
- **KU5.** how to use basic spoken English language
- **KU6.** Do and dont of effective communication
- **KU7.** inclusivity and its importance
- KU8. different types of disabilities and appropriate communication and behaviour towards PwD
- **KU9.** different types of financial products and services









- **KU10.** how to compute income and expenses
- **KU11.** importance of maintaining safety and security in financial transactions
- **KU12.** different legal rights and laws
- **KU13.** how to operate digital devices and applications safely and securely
- KU14. ways to identify business opportunities
- KU15. types of customers and their needs
- **KU16.** how to apply for a job and prepare for an interview
- **KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

### **Generic Skills (GS)**

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

- **GS1.** communicate effectively using appropriate language
- GS2. behave politely and appropriately with all
- **GS3.** perform basic calculations
- **GS4.** solve problems effectively
- GS5. be careful and attentive at work
- **GS6.** use time effectively
- **GS7.** maintain hygiene and sanitisation to avoid infection









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the job requirements	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
<b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
<b>PC3.</b> explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	2	3	-	-
<b>PC4.</b> speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	1	1	-	-
<b>PC5.</b> follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
<b>PC7.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial and Legal Literacy	3	4	-	-
<b>PC9.</b> use various financial products and services safely and securely	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
<b>PC11.</b> approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	4	6	-	-
<b>PC12.</b> operate digital devices and use its features and applications securely and safely	-	-	-	-
<b>PC13.</b> use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	3	5	-	-
<b>PC14.</b> identify and assess opportunities for potential business	-	-	-	-
<b>PC15.</b> identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
<b>PC17.</b> identify customer needs and address them appropriately	-	-	-	-
<b>PC18.</b> follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
<b>PC21.</b> identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-









### **National Occupational Standards (NOS) Parameters**

NOS Code	DGT/VSQ/N0101
NOS Name	Employability Skills (30 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	2
Credits	1
Version	1.0
Last Reviewed Date	08/05/2025
Next Review Date	08/05/2028
NSQC Clearance Date	08/05/2025

# Assessment Guidelines and Assessment Weightage

#### **Assessment Guidelines**

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
- 2. The assessment for the knowledge part will be based on knowledge bank of questions created by Assessment Bodies subject to approval by SSC.
- 3. Individual assessment agencies will create unique question papers for knowledge/theory part for assessment of candidates as per assessment criteria given below.
- 4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on assessment criteria.
- 5. The passing percentage for each QP will be 50%. To pass the Qualification Pack, every trainee should score a minimum of 50% individually in each NOS.
- 6. The Assessor shall check the final outcome of the practices while evaluating the steps performed to achieve the final outcome.









- 7. The trainee shall be provided with a chance to repeat the test to correct his procedures in case of improper performance, with a deduction of marks for each iteration.
- 8. After the certain number of iteration as decided by SSC the trainee is marked as fail, scoring zero marks for the procedure for the practical activity.
- 9. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOSs to pass the Qualification Pack within
- 10. Minimum duration of Assessment of each QP shall be of 4hrs/trainee.

Minimum Aggregate Passing % at QP Level: 50

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

### **Assessment Weightage**

#### Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N1111.Install frames and sub-frames for fixing doors and windows	30	60	0	10	100	20
CON/N1112.Install wooden and PVC doors and windows	30	60	0	10	100	15
CON/N1113.Install pre- fabricated sliding doors and windows	30	60	0	10	100	20
CON/N1114.Install aluminum doors and windows with glass glazing	30	60	0	10	100	15
CON/N1115.Install hardware and accessories on doors and windows	30	60	0	10	100	10
CON/N8001.Work effectively in a team to deliver desired results at the workplace	30	70	0	0	100	5









National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N8002.Plan and organize work to meet expected outcomes	30	70	0	0	100	5
CON/N9001.Work according to personal health, safety and environment protocols at construction site	30	70	0	0	100	5
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	5
Total	260	540	0	50	850	100









# **Acronyms**

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
EHS	Environmental, Health, and Safety
MCQ	Multiple-Choice Questions
PPE	Personal Protective Equipment
PVC	Polyvinyl Chloride









# 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.









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.