What are Occupational Standards (OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function.
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding.

Introduction

Qualifications Pack – Doors & Windows Fixer

**SECTOR:** CONSTRUCTION

**SUB-SECTOR:** Real Estate and Infrastructure Construction

**OCCUPATION:** INTERIOR & EXTERIOR FINISHES

**REFERENCE ID:** CON/Q1105

**ALIGNED TO:** NCO-2004/7124.20

**Brief Job Description:** This person is responsible for carrying out installation of doors and windows as per instructions and able to follow safe working practices and procedures while working at heights.

**Personal Attributes:** The individual is expected to be physically fit and able to work across various locations in extreme weather/site conditions. The person must be able to perform efficiently within a team, handle the various carpentry tools and materials and work responsibly.
<table>
<thead>
<tr>
<th>Qualifications Pack Code</th>
<th>CON/Q1105</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Role</td>
<td>Doors &amp; Windows Fixer</td>
</tr>
<tr>
<td>Credits (NSQF)</td>
<td>TBD</td>
</tr>
<tr>
<td>Sector</td>
<td>Construction</td>
</tr>
<tr>
<td>Sub-sector</td>
<td>Real Estate and Infrastructure Construction</td>
</tr>
<tr>
<td>Occupation</td>
<td>Interior &amp; Exterior Finishes</td>
</tr>
<tr>
<td>NSQC Clearance on</td>
<td>22/08/2019</td>
</tr>
<tr>
<td>Version number</td>
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<tr>
<td>Drafted on</td>
<td>07/08/2015</td>
</tr>
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<td>Last reviewed on</td>
<td>24/07/2019</td>
</tr>
<tr>
<td>Next review date</td>
<td>24/07/2023</td>
</tr>
</tbody>
</table>

**Job Role**

**Doors & Windows Fixer**

**Role Description**

This job role is responsible for carrying out installation and fixing of doors and windows as per instructions.

**NSQF level**

4

**Minimum Educational Qualifications**

5th standard

**Maximum Educational Qualifications**

N.A

**Prerequisite License or Training**

**Minimum Job Entry Age**

18 years

**Experience**

Non trained worker: 18 months site experience in same occupation

**Compulsory:**

1. **CON/N1111**: Carry out preparatory works and fix frames and sub-frames for fixing doors and window
2. **CON/N1112**: Install wooden/PVC doors/windows as per instructions
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. **CON/N9001**: Work according to personal health, safety and environment protocol at construction site

**Applicable National Occupational Standards (NOS)**

**Performance Criteria**

As described in the relevant OS units
<table>
<thead>
<tr>
<th>Keywords / Terms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
<td>Sector is 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.</td>
</tr>
<tr>
<td>Sub-Sector</td>
<td>Sub-Sector is derived from a further breakdown based on the characteristics and interests of its components</td>
</tr>
<tr>
<td>Occupation</td>
<td>Occupation is a set of job roles, which perform similar/related set of functions in an industry</td>
</tr>
<tr>
<td>Job role</td>
<td>Job role defines a unique set of functions that together form a unique employment opportunity in an organization.</td>
</tr>
<tr>
<td>Occupational Standards (OS)</td>
<td>OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet the standard consistently. Occupational Standards are applicable both in the Indian contexts.</td>
</tr>
<tr>
<td>Performance Criteria</td>
<td>Performance Criteria are statements that together specify the standard of performance required when carrying out a task.</td>
</tr>
<tr>
<td>Qualifications Pack (QP)</td>
<td>Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualification Pack is assigned a unique qualification pack code</td>
</tr>
<tr>
<td>Qualification Pack Code</td>
<td>Qualification Pack Code is a unique reference code that identifies a qualifications pack.</td>
</tr>
<tr>
<td>National Occupational Standards (NOS)</td>
<td>NOS are Occupational Standards which apply uniquely in the Indian context.</td>
</tr>
<tr>
<td>Scope</td>
<td>Scope is the 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 the quality of performance required.</td>
</tr>
<tr>
<td>Knowledge and Understanding</td>
<td>Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard</td>
</tr>
<tr>
<td>Organizational Context</td>
<td>Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.</td>
</tr>
<tr>
<td>Technical Knowledge</td>
<td>Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</td>
</tr>
<tr>
<td>Core Skills / Generic Skills</td>
<td>Core Skills or Generic Skills are a group of skills that are key to learning and working 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.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Keywords / Terms</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CON</td>
<td>Construction</td>
</tr>
<tr>
<td>NSQF</td>
<td>National Skill Qualifications Framework</td>
</tr>
<tr>
<td>QP</td>
<td>Qualification Pack</td>
</tr>
<tr>
<td>OS</td>
<td>Occupational Standards</td>
</tr>
<tr>
<td>TBD</td>
<td>To Be Decided</td>
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</table>
CON/N1111 Carry out preparatory works and fix frames and sub-frames for fixing doors and window

National Occupational Standard

Overview

This NOS covers the skills and knowledge required by a workman to be proficient in carrying out preparatory works and fix frames and sub-frames for fixing doors and window.
CON/N1111  Carry out preparatory works and fix frames and sub-frames for fixing doors and window

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>CON/N1111</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Title (Task)</td>
<td>Carry out preparatory works and fix frames and sub-frames for fixing doors and window</td>
</tr>
<tr>
<td>Description</td>
<td>This unit describes the skills and knowledge required to carry out preparatory works and fix frames and sub-frames for fixing doors and window.</td>
</tr>
</tbody>
</table>
| Scope | The scope covers the following:  
  • Carry out preparatory works and fix frames and sub-frames for doors and windows as per specifications |

### Performance Criteria (PC) w.r.t. the Scope

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
</tr>
</thead>
</table>
| Carry out preparatory works and fix frames and sub-frames for doors and windows as per specifications | To be competent, the user / individual on the job must be able to:  
  PC1. select and organize required tools and equipments for fixing doors and windows  
  PC2. measure the dimensions of the door/window frame to ensure correct size of frame  
  PC3. measure out space for the window in the walls or roof as per drawings / specifications  
  PC4. verify 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 frame  
  PC6. select the correct door/window panel as per approved drawings  
  PC7. visually check any surface damage before installation  
  PC8. fit flashing to window surround as per applicability  
  PC9. ensure to cover up the frame by suitable means to avoid damage of frame 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 required vertical and horizontal alignment  
  PC13. ensure proper alignment and verify the under-cut dimensions before fastening the hinges  
  PC14. coat the surface of frame and sub frame with anti-splitting agent prior to installation.  
  PC15. fasten the frame in position using appropriate wall plugs or galvanized straps  
  PC16. verify the dimensions of sub frame opening as per applicability  
  PC17. apply appropriate bonding agent over the sub frame and main frame  
  PC18. install the main frame over the sub frame and check the alignment of main frame and sub frame as per applicability  
  PC19. secure the main frame over sub frame using nails/screws as per specification |
### Knowledge and Understanding (K)

#### A. Organizational Context

(Knowledge of the company / organization and its processes)

The user/individual on the job needs to know and understand:

- **KA1.** standard practices for installing doors and windows
- **KA2.** safety rules and regulations for installing doors and windows
- **KA3.** personal protection including the use of the related safety gears & safety equipment
- **KA4.** requesting tools and materials as per set procedures
- **KA5.** maintenance of tools and equipments

#### B. Technical Knowledge

The user/individual on the job needs to know and understand:

- **KB1.** drawings and specifications related to fixing of doors
- **KB2.** basic principles of measurement
- **KB3.** selection and use of tools and equipments including air compressors and hoses, marking equipment, measuring tapes and rules, nail bags, nail guns, power saws, protractors, saw stools, scaffolding, spirit levels, squares (combination/tri), string lines, etc.
- **KB4.** different types of joints to be used in frames including mitre joints, etc
- **KB5.** how to measure the dimensions of the door/window frame
- **KB6.** setting out lines, datum lines and level pegs
- **KB7.** methods of fastening the frame in position using correct tools and equipments
- **KB8.** application of grout between wall and door/window frames to fill the gap
- **KB9.** application of anti-splitting agent on wall and door/window frames
- **KB10.** how to assemble the pre-cut main frame using correct tools
- **KB11.** methods of checking the horizontal and vertical alignment of main frame
- **KB12.** selection and use of correct door/window panel

### Skills (S)

#### A. Core Skills/ Generic Skills

**Writing Skills**

The user/ individual on the job needs to know and understand how to:

- **SA1.** write in one or more languages, preferably in the local language of the site

**Reading Skills**

The user/ individual on the job needs to know and understand how to:

- **SA2.** read in one or more languages, preferably in the local language of the site
- **SA3.** read sketches/routine working drawing or instructions provided for the work
- **SA4.** read various sign boards, safety rules and safety tags, instructions related to exit routes during emergency at the workplace

**Oral Communication (Listening and Speaking skills)**

The user/ individual on the job needs to know and understand how to:

- **SA5.** speak in one or more languages, preferably in one of the local languages of the site
- **SA6.** listen and follow instructions given by the superior
- **SA7.** communicate orally and effectively with team members
### B. Professional Skills

<table>
<thead>
<tr>
<th>Decision Making</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td><strong>SB1.</strong> decide whether the workplace is safe for working and also the work is not creating hazardous conditions for others</td>
</tr>
<tr>
<td><strong>SB2.</strong> select appropriate tools and equipment for installing doors and windows</td>
</tr>
<tr>
<td><strong>SB3.</strong> determine that the dimensions of the opening are as per the size of the frame</td>
</tr>
<tr>
<td><strong>SB4.</strong> determine whether the correct door/window panel are used as per approved drawings</td>
</tr>
<tr>
<td><strong>SB5.</strong> determine whether dimensions of opening are as per size of frame</td>
</tr>
<tr>
<td><strong>SB6.</strong> select appropriate bonding agent for application</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plan and Organise</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td><strong>SB7.</strong> plan self-work as per the direction /close supervision of superior</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer Centricity</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td><strong>SB8.</strong> complete work as per agreed time schedule and quality</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Problem Solving</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td><strong>SB9.</strong> resolve any conflict within the team</td>
</tr>
<tr>
<td><strong>SB10.</strong> ensure alignment of the door/window frame is as per the setting out lines, datum lines and level pegs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analytical Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td><strong>SB11.</strong> optimize resources</td>
</tr>
<tr>
<td><strong>SB12.</strong> minimize wastages</td>
</tr>
<tr>
<td><strong>SB13.</strong> revert to superior for selection/sorting of materials</td>
</tr>
<tr>
<td><strong>SB14.</strong> ensure that door/window frame is aligned correctly</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Critical Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td><strong>SB15.</strong> evaluate the complexity of the tasks and determine if any guidance is required from superior</td>
</tr>
<tr>
<td><strong>SB16.</strong> check for suitability of sub frame openings</td>
</tr>
</tbody>
</table>
CON/N1111 Carry out preparatory works and fix frames and sub-frames for fixing doors and window

NOS Version Control

<table>
<thead>
<tr>
<th>NOS Code</th>
<th>CON/N1111</th>
<th>Credits (NSQF)</th>
<th>Version number</th>
<th>Industry</th>
<th>Drafted on</th>
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<th>Last reviewed on</th>
<th>Occupation</th>
<th>Next review date</th>
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<td>Construction</td>
<td>07/08/2015</td>
<td>Real Estate and Infrastructure Construction</td>
<td>24/07/2019</td>
<td>Interior &amp; Exterior Finishes</td>
<td>24/07/2023</td>
</tr>
</tbody>
</table>
National Occupational Standard

Overview

This NOS covers the skills and knowledge required by a workman to be proficient in installing wooden/PVC doors/windows as per instructions.
### Unit Code
CON/N112

### Unit Title (Task)
Install wooden /PVC doors /windows as per instructions

### Description
This unit describes the skills and knowledge required to install wooden /PVC doors /windows as per instructions.

### Scope
The scope covers the following:
- Install the door panels/window panels, decorative moldings as per specifications/instructions
- Finish the doors /windows

### Performance Criteria (PC) w.r.t. the Scope

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
</tr>
</thead>
</table>
| Install the door panels/window panels, decorative moldings as per specifications/instructions | To be competent, the user / individual on the job must be able to:  
PC1. install the door/window frame and sub-frame as per specification  
PC2. install the door/window panel as per specification  
PC3. ensure proper alignment and verify the under-cut dimensions before fastening the hinges  
PC4. ensure a consistent gap between door/window panel and door/window frame  
PC5. check and ensure the right type of decorative molding is used for installation  
PC6. apply bonding agent to the underside of the architrave (decorative molding) as per instructions  
PC7. install the decorative molding around the door/window frame as per specification  
PC8. ensure the miter joints are flat and square at corners for seamless finish  
PC9. ensure proper swinging of doors after hinging  
PC10. check that an even contact has been created between the door/window face and the weather stripping attached to the frame |
| Finish the doors/windows | PC11. insulate around the door/window frame using fiberglass insulation or low expansion foam as per applicability  
PC12. install the interior trim as per specifications  
PC13. ensure caulking of all joints of the trim and brick mold  
PC14. install the weather strip at the base of the door/window as per instructions |

### Knowledge and Understanding (K)

| A. Organizational Context (Knowledge of the company / organization and its | The user/individual on the job needs to know and understand:  
KA1. standard practices for installing doors and windows  
KA2. safety rules and regulations for installing doors and windows |
| Process | KA3. personal protection including the use of the related safety gears & safety equipment  
KA4. requesting tools and materials as per set procedures  
KA5. maintenance of tools and equipments |
|---|---|

### B. Technical Knowledge

The user/individual on the job needs to know and understand:

KA1. drawings and specifications related to fixing of doors  
KA2. basic principles of measurement  
KA3. selection and use of tools and equipments including air compressors and hoses, marking equipment, measuring tapes and rules, nail bags, nail guns, power saws, protractors, saw stools, scaffolding, spirit levels, squares (combination/tri), string lines, etc.  
KA4. different types of wooden and PVC doors and windows  
KA5. different types of joints to be used in frames including miter joints, etc.  
KA6. how to measure the dimensions of the door/window frame  
KA7. setting out lines, datum lines and level pegs  
KA8. methods of fastening the frame in position using correct tools and equipments  
KA9. application of grout between wall and door/window frames to fill the gap  
KA10. how to assemble the pre-cut main frame using correct tools  
KA11. methods of checking the horizontal and vertical alignment of main frame  
KA12. selection and use of correct door/window panel  
KA13. use correct insulation technique around the door/window frames

### Skills (S)

#### A. Core Skills/ Generic Skills

| Writing Skills | The user/individual on the job needs to know and understand how to:  
SA1. write in one or more languages, preferably in the local language of the site |
|---|---|

| Reading Skills | The user/individual on the job needs to know and understand how to:  
SA2. read in one or more languages, preferably in the local language of the site  
SA3. read sketches/routine working drawing or instructions provided for the work  
SA4. read various, sign boards, safety rules and safety tags, instructions related to exit routes during emergency at the workplace |
|---|---|

| Oral Communication (Listening and Speaking skills) | The user/individual on the job needs to know and understand how to:  
SA5. speak in one or more languages, preferably in one of the local languages of the site  
SA6. listen and follow instructions given by the superior |
CON/N112  Install wooden /PVC doors /windows as per instructions

<table>
<thead>
<tr>
<th>B. Professional Skills</th>
<th>SA7. communicate orally and effectively with team members</th>
</tr>
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<tbody>
<tr>
<td><strong>Decision Making</strong></td>
<td>The user/individual on the job needs to know and understand how to:</td>
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<tr>
<td>SB1.</td>
<td>decide whether workplace is safe for working and also the relevant work is not creating hazardous conditions for other</td>
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<tr>
<td>SB2.</td>
<td>select suitable bonding agent for application</td>
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<td><strong>Plan and Organise</strong></td>
<td>The user/individual on the job needs to know and understand how to:</td>
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<td>SB3.</td>
<td>plan self-work as per the direction /close supervision of superiors</td>
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<td><strong>Customer Centricity</strong></td>
<td>The user/individual on the job needs to know and understand how to:</td>
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<tr>
<td>SB4.</td>
<td>complete work as per agreed time schedule and quality</td>
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<tr>
<td><strong>Problem Solving</strong></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB5.</td>
<td>rectify the frames openings as per the frame fit for fixing doors and windows</td>
</tr>
<tr>
<td><strong>Analytical Thinking</strong></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB6.</td>
<td>optimize resources</td>
</tr>
<tr>
<td>SB7.</td>
<td>minimize wastages</td>
</tr>
<tr>
<td>SB8.</td>
<td>revert to superior for selection/sorting of materials</td>
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<tr>
<td><strong>Critical Thinking</strong></td>
<td>The user/individual on the job needs to know and understand how to:</td>
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<tr>
<td>SB9.</td>
<td>evaluate the complexity of the tasks and determine if any guidance is required from superior</td>
</tr>
<tr>
<td>SB10.</td>
<td>check and confirm the joints are flat and square at corners</td>
</tr>
<tr>
<td>SB11.</td>
<td>check for proper alignment of doors and windows</td>
</tr>
</tbody>
</table>
CON/N1112 Install wooden /PVC doors /windows as per instructions

## NOS Version Control

<table>
<thead>
<tr>
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<th>CON/N1112</th>
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<tr>
<td>Version number</td>
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<td>Industry</td>
<td>Construction</td>
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<tr>
<td>Drafted on</td>
<td>07/08/2015</td>
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<td>Industry Sub-sector</td>
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<tr>
<td>Last reviewed on</td>
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<tr>
<td>Occupation</td>
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</tr>
<tr>
<td>Next review date</td>
<td>24/07/2023</td>
</tr>
</tbody>
</table>
Overview

This NOS covers the skills and knowledge required by a workman to be proficient in installing pre-fabricated sliding doors and windows.
**Install pre-fabricated sliding doors and windows**

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
</tr>
</thead>
</table>
| Install and fix pre-fabricated sliding doors and window frames, door/window panels and decorative molding as per instructions and specifications | 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 applicability  
PC2. ensure that frame should be 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. visually check any surface damage before installation  
PC5. ensure proper alignment and verify the under-cut dimensions prior to installing doors/window panels  
PC6. fit 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 if necessary  
PC8. assemble main frame at site as per size requirement  
PC9. install vertical parts of main frame using appropriate bonding agent  
PC10. fastens horizontal parts of frame after fixing and drying of vertical parts  
PC11. caulk between the siding and the frame (or brick molding) as per applicability  
PC12. install the decorative molding around the door/window frame as per specification  
PC13. ensure the miter joints are flat and square at corners  
PC14. check that an even contact has been created between the door/window face and the weather stripping attached to the frame |
| Finish the doors/windows | PC15. caulk between the siding and the frame (or brick molding) as per applicability  
PC16. insulate around the door/window frame using fiberglass insulation or low expansion foam as per applicability  
PC17. install the interior trim as per specification  
PC18. ensure caulking of all joints of the trim and brick mold |
**CON/N1113**

Install pre-fabricated sliding doors and windows

<table>
<thead>
<tr>
<th>Knowledge and Understanding (K)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Organizational Context</strong></td>
</tr>
<tr>
<td>(Knowledge of the company / organization and its processes)</td>
</tr>
<tr>
<td>The user/individual on the job needs to know and understand:</td>
</tr>
<tr>
<td>KA1. standard practices for installing sliding doors/windows</td>
</tr>
<tr>
<td>KA2. safety rules and regulations for installation of doors / windows</td>
</tr>
<tr>
<td>KA3. personal protection including the use of the related safety gears &amp; safety equipment</td>
</tr>
<tr>
<td>KA4. requesting tools and materials as per set procedures</td>
</tr>
<tr>
<td>KA5. maintenance of tools and equipments</td>
</tr>
</tbody>
</table>

| **B. Technical Knowledge** |
| The user/individual on the job needs to know and understand: |
| KB1. sketches and specifications related to fixing of installing sliding doors/windows |
| KB2. basic principles of measurement |
| KB3. selection and use of tools and equipments including marking equipment, measuring tapes and rules, stair clips and tables, steel squares and fences, string lines, etc |
| KB4. different types of joints to be used in frames including mitre joints, etc |
| KB5. how to measure the dimensions of the door frame |
| KB6. components of pocket wall frame systems |
| KB7. components of sliding doors and window frame assembly |
| KB8. setting out lines, datum lines and level pegs |
| KB9. methods of fastening the frame in position using correct tools and equipment |
| KB10. how to assemble the pre-cut main frame using correct tools |
| KB11. methods of checking the horizontal and vertical alignment of main frame |
| KB12. use correct insulation technique around the window frames |

<table>
<thead>
<tr>
<th>Skills (S)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Core Skills/ Generic Skills</strong></td>
</tr>
<tr>
<td>Writing Skills</td>
</tr>
<tr>
<td>The user/ individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SA1. write in one or more languages, preferably in the local language of the site</td>
</tr>
</tbody>
</table>

| Reading Skills |
| The user/ individual on the job needs to know and understand how to: |
| SA2. read in one or more languages, preferably in the local language of the site |
| SA3. read sketches/routine working drawing or instructions provided for the work |
| SA4. read various sign boards, safety rules and safety tags, instructions related to exit routes during emergency at the workplace |

**Oral Communication (Listening and Speaking skills)**
## Install pre-fabricated sliding doors and windows

The user/individual on the job needs to know and understand how to:

SA5. speak in one or more languages, preferably in one of the local languages of the site  
SA6. listen and follow instructions given by the superior  
SA7. communicate orally and effectively with team members

### B. Professional Skills

#### Decision Making

The user/individual on the job needs to know and understand how to:

SB1. decide whether workplace is safe for working and also the relevant work is not creating hazardous conditions for other  
SB2. determine suitability of frame by checking for squareness, plumb, etc.

#### Plan and Organise

The user/individual on the job needs to know and understand how to:

SB3. plan work and organize required resource in coordination with team member and superior

#### Customer Centricty

The user/individual on the job needs to know and understand how to:

SB4. complete work as per agreed time schedule and quality

#### Problem solving

The user/individual on the job needs to know and understand how to:

SB5. resolve any conflict within the team  
SB6. check and ensure that the frame is plumb, square and not twisted between the openings  
SB7. check the surface for damage before installation  
SB8. check and ensure that the miter joints are flat and square at corners

#### Analytical Thinking

The user/individual on the job needs to know and understand how to:

SB9. optimize resources  
SB10. minimize wastages  
SB11. revert to superior for selection/sorting of materials  
SB12. check for proper alignment of pre-fabricated doors and windows

#### Critical Thinking

The user/individual on the job needs to know and understand how to:

SB13. evaluate the complexity of the tasks and determine if any guidance is required from superior
Install pre-fabricated sliding doors and windows

## NOS Version Control

<table>
<thead>
<tr>
<th>NOS Code</th>
<th>CON/N1113</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credits (NSQF)</td>
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<tr>
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<tr>
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</tr>
<tr>
<td>Next review date</td>
<td>24/07/2023</td>
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</tbody>
</table>
Overview

This NOS covers the skills and knowledge required by a workman to be proficient in installing aluminum doors and windows with glass glazing.
CON/N1114

Install aluminum doors and windows with glass glazing

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>CON/N1114</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Title</td>
<td>Install aluminum doors and windows with glass glazing</td>
</tr>
<tr>
<td>Description</td>
<td>This unit describes the skills and knowledge required to install aluminum doors and windows with glass glazing.</td>
</tr>
<tr>
<td>Scope</td>
<td>The scope covers the following:</td>
</tr>
<tr>
<td></td>
<td>• Install aluminum doors and windows, glass door/window panels and decorative molding as per instructions and specifications</td>
</tr>
</tbody>
</table>

**Performance Criteria (PC) w.r.t. the Scope**

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install aluminum doors and windows, glass door/window panels and decorative molding as per instructions and specifications</td>
<td>To be competent, the user / individual on the job must be able to:</td>
</tr>
<tr>
<td></td>
<td>PC1. apply flexible waterproof flashing to the sides of bare wall surfaces along the frames as per applicability</td>
</tr>
<tr>
<td></td>
<td>PC2. ensure that frame should be plumb, square and not twisted between the openings</td>
</tr>
<tr>
<td></td>
<td>PC3. check inner frame and associated hardware for defects</td>
</tr>
<tr>
<td></td>
<td>PC4. weep holes in the inner frames should be cleared of blockage to allow discharge of incidental water prior to installation</td>
</tr>
<tr>
<td></td>
<td>PC5. check and confirm the sequence of panel installation</td>
</tr>
<tr>
<td></td>
<td>PC6. check labels on the glass panels against the panel fixing plan and schedule</td>
</tr>
<tr>
<td></td>
<td>PC7. standardize the orientation of the glass panels so that the positioning of logos/trademarks are consistent</td>
</tr>
<tr>
<td></td>
<td>PC8. check the gasket for any physical damages</td>
</tr>
<tr>
<td></td>
<td>PC9. ensure gasket is free from dust and dirt to ensure good grip onto the frame and beadings</td>
</tr>
<tr>
<td></td>
<td>PC10. check to confirm that profile of the gaskets is compatible with that of the beads used to secure the glass panels</td>
</tr>
<tr>
<td></td>
<td>PC11. insert glass panel into the frame for doors and windows as per specification</td>
</tr>
<tr>
<td></td>
<td>PC12. hold glass panels in place using spacer hooks</td>
</tr>
<tr>
<td></td>
<td>PC13. splice gasket to fit around corners of the glass panes</td>
</tr>
<tr>
<td></td>
<td>PC14. fix the gasket in place using appropriate tools</td>
</tr>
<tr>
<td></td>
<td>PC15. secure the gasket in place with appropriate tools and beading</td>
</tr>
<tr>
<td></td>
<td>PC16. seal the gap between the gasket and beading using appropriate sealant</td>
</tr>
<tr>
<td></td>
<td>PC17. use suitable masking tape to protect glass during sealant application</td>
</tr>
<tr>
<td></td>
<td>PC18. install the decorative molding around the door/window frame as per specification</td>
</tr>
<tr>
<td></td>
<td>PC19. ensure the miter joints are flat and square at corners</td>
</tr>
<tr>
<td></td>
<td>PC20. check that an even contact has been created between the door/window face and the weather stripping attached to the frame</td>
</tr>
<tr>
<td></td>
<td>PC21. carry out insulation around doors/windows as per specification</td>
</tr>
</tbody>
</table>

**Knowledge and Understanding (K)**

<table>
<thead>
<tr>
<th>A. Organizational Context (Knowledge of)</th>
<th>The user/individual on the job needs to know and understand:</th>
</tr>
</thead>
<tbody>
<tr>
<td>KA1. standard practices for installing doors/windows</td>
<td></td>
</tr>
<tr>
<td>KA2. safety rules and regulations for façade installation</td>
<td></td>
</tr>
</tbody>
</table>
## B. Technical Knowledge

The user/individual on the job needs to know and understand:

| KB1. | sketches and specifications related to fixing of installing sliding doors/windows |
| KB2. | basic principles of measurement |
| KB3. | selection and use of tools and equipments including marking equipment, measuring tapes and rules, stair clips and tables, steel squares and fences, string lines, etc |
| KB4. | different types of joints to be used in frames including mitre joints, etc |
| KB5. | how to measure the dimensions of the door frame |
| KB6. | components of pocket wall frame systems |
| KB7. | setting out lines, datum lines and level pegs |
| KB8. | methods of fastening the frame in position using correct tools and equipments |
| KB9. | method of fixing aluminum doors and windows |
| KB10. | method of fastening glass panels to doors and windows |
| KB11. | how to hold glass panels in place using spacer hooks |
| KB12. | estimate the length of the gasket required |
| KB13. | different sealants used for fixing beading |
| KB14. | different gasket and their fixing procedure |
| KB15. | methods of checking the horizontal and vertical alignment of main frame |
| KB16. | use correct insulation technique around the door/window frames |

## Skills (S)

### A. Core Skills/ Generic Skills

#### Writing Skills

The user/individual on the job needs to know and understand how to:

- **SA1.** write in one or more languages, preferably in the local language of the site

#### Reading Skills

The user/individual on the job needs to know and understand how to:

- **SA2.** read in one or more languages, preferably in the local language of the site
- **SA3.** read sketches/routine working drawing or instructions provided for the work
- **SA4.** read various sign boards, safety rules and safety tags, instructions related to exit routes during emergency at the workplace

#### Oral Communication (Listening and Speaking skills)

The user/individual on the job needs to know and understand how to:

- **SA5.** speak in one or more languages, preferably in one of the local languages of the site
- **SA6.** listen and follow instructions given by the superior
- **SA7.** communicate orally and effectively with team members

#### Decision Making
### B. Professional Skills

| SB1. | decide whether workplace is safe for working and also the relevant work is not creating hazardous conditions for other |
| SB2. | determine whether aluminum frame is suitable after checking for plumb, squareness, etc. |
| SB3. | determine whether profile of the gaskets is compatible with that of the beading used to secure the glass panels |

#### Plan and Organise

| SB4. | plan work and organize required resource in coordination with team member and superior |

#### Customer Centricity

| SB5. | complete work as per agreed time schedule and quality |

#### Problem Solving

| SB6. | resolve any conflict within the team |
| SB7. | check for defects in hardware and inner frame |
| SB8. | ensure that dust and dirt has been removed from the gasket |

#### Analytical Thinking

| SB9. | optimize resources |
| SB10. | minimize wastages |
| SB11. | revert to superior for selection/sorting of materials |
| SB12. | assess whether miter joints are flat and square at corners |

#### Critical Thinking

| SB13. | evaluate the complexity of the tasks and determine if any guidance is required from superior |
| SB14. | assess whether installation is being carried out as per required sequence |
## NOS Version Control

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Overview

This NOS covers the skills and knowledge required by a workman to be proficient in installing hardware and accessories on doors and windows.
**CON/N1115**

**Install hardware and accessories on doors and windows**

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>CON/N1115</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Title</td>
<td>Install hardware and accessories on doors and windows</td>
</tr>
<tr>
<td>Description</td>
<td>This unit describes the skills and knowledge required to install hardware and accessories on doors and windows.</td>
</tr>
</tbody>
</table>
| Scope        | The scope covers the following:  
   - Install hardware and accessories on doors and windows as per instructions except electronic hardware |

### Performance Criteria (PC) w.r.t. the Scope

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
</tr>
</thead>
</table>
| Install hardware and accessories on doors and windows as per instructions except electronic hardware | To be competent, the user / individual on the job must be able to:  
   PC1. identify the type of door and window hardware from the job specifications  
   PC2. identify and use required tools and tackles for installing hardware on doors and windows  
   PC3. mark level and point for fixing doors and windows hardware  
   PC4. drill holes or cut through doors/windows to accommodate for hardware fixing  
   PC5. install latch assembly in accordance with the job and manufacturer specifications  
   PC6. install handles and cylinder locks as per specifications  
   PC7. fasten face plates and keepers in place as per specification  
   PC8. adjust hardware to suit the alignment and level to match with job specification  
   PC9. fix other hardware such as stoppers, door closers etc as per specifications |

### Knowledge and Understanding (K)

**A. Organizational Context**  
(Knowledge of the company / organization and its processes)

- KA1. standard practices for installing doors and windows  
- KA2. safety rules and regulations for façade installation  
- KA3. personal protection including the use of the related safety gears & safety equipment  
- KA4. requesting tools and materials as per set procedures  
- KA5. maintenance of tools and equipments

**B. Technical Knowledge**

- KB1. sketches and specifications related to fixing of hardware for doors and windows  
- KB2. basic principles of measurement  
- KB3. selection and use of tools and equipments including marking equipment, measuring tapes and rules, stair clips and tables, steel squares and fences,
**Install hardware and accessories on doors and windows**

- KB4. component 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
- KB5. methods of fastening the hardware in position using correct tools and equipments
- KB6. tools used for installing various hardware such as screwdriver, drilling machines, screws, fasteners, screw drill etc
- KB7. methods of installing correct lockset and architraves for the windows
- KB8. method of installing latch assembly
- KB9. method of installing handles and cylinder lock
- KB10. method of fastening face plates and keepers
- KB11. method of check line and level and adjusting alignment of hardware to suit requirement

### Skills (S)

#### A. Core Skills/ Generic Skills

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<td>The user/ individual on the job needs to know and understand how to:</td>
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<td>SA1. write in one or more languages, preferably in the local language of the site</td>
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<thead>
<tr>
<th>Reading Skills</th>
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<tbody>
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<td>SA2. read in one or more languages, preferably in the local language of the site</td>
</tr>
<tr>
<td>SA3. read sketches/routine working drawing or instructions provided for the work</td>
</tr>
<tr>
<td>SA4. read various, sign boards, safety rules and safety tags, instructions related to exit routes during emergency at the workplace</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oral Communication (Listening and Speaking skills)</th>
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<tbody>
<tr>
<td>The user/ individual on the job needs to know and understand how to:</td>
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<tr>
<td>SA5. speak in one or more languages, preferably in one of the local languages of the site</td>
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<tr>
<td>SA6. listen and follow instructions given by the superior</td>
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<tr>
<td>SA7. communicate orally and effectively with team members</td>
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#### B. Professional Skills

<table>
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<tr>
<th>Decision Making</th>
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<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB1. decide whether workplace is safe for working and also the relevant work is not creating hazardous conditions for other</td>
</tr>
<tr>
<td>SB2. determine the type of hardware required as per specifications</td>
</tr>
<tr>
<td>SB3. determine suitable tools and tackles required for installing hardware</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Plan and Organise</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB4. plan and organise the installation of hardware in doors and windows</td>
</tr>
<tr>
<td>SB5. ensure that the installation is done according to the specifications</td>
</tr>
<tr>
<td>SB6. handle any unforeseen situations that may arise during the installation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication Management</th>
</tr>
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<tbody>
<tr>
<td>The user/ individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB7. communicate effectively with the team members</td>
</tr>
<tr>
<td>SB8. handle customer complaints and queries</td>
</tr>
<tr>
<td>SB9. follow up on the installation progress</td>
</tr>
<tr>
<td>SB10. ensure that the installation meets the required standards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Critical Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB11. identify potential problems and find solutions</td>
</tr>
<tr>
<td>SB12. make decisions based on the available information</td>
</tr>
<tr>
<td>SB13. evaluate the effectiveness of the installation</td>
</tr>
<tr>
<td>SB14. adapt to new situations and changes in the workplace</td>
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</table>

<table>
<thead>
<tr>
<th>Analytical Skills</th>
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<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB15. analyse the data and information related to the installation</td>
</tr>
<tr>
<td>SB16. interpret the results of the installation</td>
</tr>
<tr>
<td>SB17. derive conclusions from the data and information</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Problem Solving Skills</th>
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<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB18. identify the root cause of a problem</td>
</tr>
<tr>
<td>SB19. develop a plan to solve the problem</td>
</tr>
<tr>
<td>SB20. implement the plan to solve the problem</td>
</tr>
<tr>
<td>SB21. monitor the results of the solution</td>
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</table>

<table>
<thead>
<tr>
<th>Teamwork Skills</th>
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<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB22. work effectively with team members</td>
</tr>
<tr>
<td>SB23. contribute to the team's objectives</td>
</tr>
<tr>
<td>SB24. resolve conflicts within the team</td>
</tr>
<tr>
<td>SB25. collaborate with other teams</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Safety Skills</th>
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<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB26. follow safety procedures and guidelines</td>
</tr>
<tr>
<td>SB27. recognise and report safety hazards</td>
</tr>
<tr>
<td>SB28. handle emergency situations</td>
</tr>
<tr>
<td>SB29. ensure the safety of others</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Customer Service Skills</th>
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<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB30. communicate effectively with customers</td>
</tr>
<tr>
<td>SB31. handle customer complaints and queries</td>
</tr>
<tr>
<td>SB32. follow up on customer feedback</td>
</tr>
<tr>
<td>SB33. ensure customer satisfaction</td>
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<table>
<thead>
<tr>
<th>Professional Development Skills</th>
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<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB34. continuously improve their skills and knowledge</td>
</tr>
<tr>
<td>SB35. stay updated with new technologies and trends</td>
</tr>
<tr>
<td>SB36. seek feedback from supervisors and peers</td>
</tr>
<tr>
<td>SB37. set and achieve personal goals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leadership Skills</th>
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</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB38. lead and motivate team members</td>
</tr>
<tr>
<td>SB39. make decisions that align with the team's goals</td>
</tr>
<tr>
<td>SB40. handle conflicts and disagreements in the team</td>
</tr>
<tr>
<td>SB41. provide constructive feedback to team members</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Management Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB42. plan and organise their work efficiently</td>
</tr>
<tr>
<td>SB43. prioritise tasks based on importance and urgency</td>
</tr>
<tr>
<td>SB44. manage their time effectively to meet deadlines</td>
</tr>
<tr>
<td>SB45. handle unexpected situations and changes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decision Making Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB46. make decisions that align with the organisation's goals</td>
</tr>
<tr>
<td>SB47. evaluate the possible outcomes of decisions</td>
</tr>
<tr>
<td>SB48. make decisions based on the available information</td>
</tr>
<tr>
<td>SB49. adapt to new situations and changes in the workplace</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Creative Thinking Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB50. generate new and innovative ideas</td>
</tr>
<tr>
<td>SB51. think outside the box</td>
</tr>
<tr>
<td>SB52. solve problems from a new perspective</td>
</tr>
<tr>
<td>SB53. find creative solutions to complex problems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interpersonal Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB54. communicate effectively with others</td>
</tr>
<tr>
<td>SB55. handle conflicts and disagreements in the workplace</td>
</tr>
<tr>
<td>SB56. build and maintain positive relationships</td>
</tr>
<tr>
<td>SB57. provide constructive feedback to colleagues</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Negotiation Skills</th>
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</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB58. negotiate effectively with stakeholders</td>
</tr>
<tr>
<td>SB59. resolve conflicts and disagreements</td>
</tr>
<tr>
<td>SB60. influence others to achieve desired outcomes</td>
</tr>
<tr>
<td>SB61. handle negotiations with empathy and respect</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Management Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB62. plan and organise projects effectively</td>
</tr>
<tr>
<td>SB63. manage resources and allocate tasks</td>
</tr>
<tr>
<td>SB64. monitor project progress and performance</td>
</tr>
<tr>
<td>SB65. adapt to changes and uncertainties in the project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compliance Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB66. comply with legal and regulatory requirements</td>
</tr>
<tr>
<td>SB67. follow company policies and procedures</td>
</tr>
<tr>
<td>SB68. handle confidential information</td>
</tr>
<tr>
<td>SB69. report incidents and concerns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Continuous Improvement Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB70. continuously improve processes and systems</td>
</tr>
<tr>
<td>SB71. identify areas for improvement</td>
</tr>
<tr>
<td>SB72. implement improvements effectively</td>
</tr>
<tr>
<td>SB73. evaluate the impact of improvements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional Development Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB74. continuously improve their skills and knowledge</td>
</tr>
<tr>
<td>SB75. stay updated with new technologies and trends</td>
</tr>
<tr>
<td>SB76. seek feedback from supervisors and peers</td>
</tr>
<tr>
<td>SB77. set and achieve personal goals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leadership Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB78. lead and motivate team members</td>
</tr>
<tr>
<td>SB79. make decisions that align with the team's goals</td>
</tr>
<tr>
<td>SB80. handle conflicts and disagreements in the team</td>
</tr>
<tr>
<td>SB81. provide constructive feedback to team members</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time Management Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB82. plan and organise their work efficiently</td>
</tr>
<tr>
<td>SB83. prioritise tasks based on importance and urgency</td>
</tr>
<tr>
<td>SB84. manage their time effectively to meet deadlines</td>
</tr>
<tr>
<td>SB85. handle unexpected situations and changes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decision Making Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB86. make decisions that align with the organisation's goals</td>
</tr>
<tr>
<td>SB87. evaluate the possible outcomes of decisions</td>
</tr>
<tr>
<td>SB88. make decisions based on the available information</td>
</tr>
<tr>
<td>SB89. adapt to new situations and changes in the workplace</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Creative Thinking Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB90. generate new and innovative ideas</td>
</tr>
<tr>
<td>SB91. think outside the box</td>
</tr>
<tr>
<td>SB92. solve problems from a new perspective</td>
</tr>
<tr>
<td>SB93. find creative solutions to complex problems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interpersonal Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB94. communicate effectively with others</td>
</tr>
<tr>
<td>SB95. handle conflicts and disagreements in the workplace</td>
</tr>
<tr>
<td>SB96. build and maintain positive relationships</td>
</tr>
<tr>
<td>SB97. provide constructive feedback to colleagues</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Negotiation Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
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<tr>
<td>SB98. negotiate effectively with stakeholders</td>
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<td>SB99. resolve conflicts and disagreements</td>
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<tr>
<td>SB100. influence others to achieve desired outcomes</td>
</tr>
<tr>
<td>SB101. handle negotiations with empathy and respect</td>
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<tr>
<th>Project Management Skills</th>
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<tbody>
<tr>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB102. plan and organise projects effectively</td>
</tr>
<tr>
<td>SB103. manage resources and allocate tasks</td>
</tr>
<tr>
<td>SB104. monitor project progress and performance</td>
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<tr>
<td>SB105. adapt to changes and uncertainties in the project</td>
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<td>The user/individual on the job needs to know and understand how to:</td>
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<tr>
<td>SB106. comply with legal and regulatory requirements</td>
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<td>SB107. follow company policies and procedures</td>
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<tr>
<td>SB108. handle confidential information</td>
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<td>SB109. report incidents and concerns</td>
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<td>The user/individual on the job needs to know and understand how to:</td>
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<tr>
<td>SB110. continuously improve processes and systems</td>
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<tr>
<td>SB111. identify areas for improvement</td>
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<tr>
<td>SB112. implement improvements effectively</td>
</tr>
<tr>
<td>SB113. evaluate the impact of improvements</td>
</tr>
<tr>
<td>SB4.</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>SB5.</td>
</tr>
<tr>
<td>SB6.</td>
</tr>
<tr>
<td>SB7.</td>
</tr>
<tr>
<td>SB8.</td>
</tr>
<tr>
<td>SB9.</td>
</tr>
<tr>
<td>SB10.</td>
</tr>
<tr>
<td>SB11.</td>
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### NOS Version Control

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<td></td>
<td></td>
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<td>07/08/2015</td>
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<td>Last reviewed on</td>
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<td>Occupation</td>
<td>Interior &amp; Exterior Finishes</td>
<td>Next review date</td>
<td>24/07/2023</td>
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<td></td>
</tr>
</tbody>
</table>
Overview

This NOS covers the skill and knowledge required to work effectively within a team to achieve the desired results.
CON/N8001  Work effectively in a team to deliver desired results at the workplace

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>CON/N8001</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit Title</strong></td>
<td>Work effectively in a team to deliver desired results at the workplace</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>This unit describes the skills and knowledge required to work effectively within a team to achieve the desired results.</td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td>The scope covers the following:</td>
</tr>
<tr>
<td></td>
<td>• Interact and communicate effectively with co-workers, superiors and subordinates across different teams</td>
</tr>
<tr>
<td></td>
<td>• Support co-workers, superiors and subordinates within the team and across interfacing teams to ensure effective execution of assigned task</td>
</tr>
</tbody>
</table>

**Performance Criteria (PC) w.r.t. the Scope**

<table>
<thead>
<tr>
<th><strong>Element</strong></th>
<th><strong>Performance Criteria</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interact and communicate effectively with co-workers, superiors and subordinates across different teams</td>
<td>To be competent, the user / individual on the job must be able to:</td>
</tr>
<tr>
<td></td>
<td>PC1. pass on work related information/ requirement clearly to the team members</td>
</tr>
<tr>
<td></td>
<td>PC2. inform co-workers and superiors about any kind of deviations from work</td>
</tr>
<tr>
<td></td>
<td>PC3. address the problems effectively and report if required to immediate supervisor appropriately</td>
</tr>
<tr>
<td></td>
<td>PC4. receive instructions clearly from superiors and respond effectively on the same</td>
</tr>
<tr>
<td></td>
<td>PC5. communicate to team members/subordinates for appropriate work technique and method</td>
</tr>
<tr>
<td></td>
<td>PC6. seek clarification and advice as per the requirement and applicability</td>
</tr>
<tr>
<td>Support co-workers, superiors and subordinates within the team and across interfacing teams to ensure effective execution of assigned task</td>
<td>PC7. hand over the required material, tools tackles, equipment and work fronts timely to interfacing teams</td>
</tr>
<tr>
<td></td>
<td>PC8. work together with co-workers in a synchronized manner</td>
</tr>
</tbody>
</table>

**Knowledge and Understanding (K)**
CON/N8001  Work effectively in a team to deliver desired results at the workplace

<table>
<thead>
<tr>
<th>A. Organizational Context</th>
<th>The user/individual on the job needs to know and understand:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Knowledge of the company / organization and its processes)</td>
<td>KA1. own roles and responsibilities</td>
</tr>
<tr>
<td></td>
<td>KA2. importance of effective communication and establishing strong working relationships with co-workers</td>
</tr>
<tr>
<td></td>
<td>KA3. risks of a failure in teamwork in terms of effects on project outcomes, timelines, safety at the construction site, etc.</td>
</tr>
<tr>
<td></td>
<td>KA4. different modes of communication, and its appropriate usage</td>
</tr>
<tr>
<td></td>
<td>KA5. importance of creating healthy and cooperative work environment among the gangs of workers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Technical Knowledge</th>
<th>The user/individual on the job needs to know and understand:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KB1. different activities within the work area where an interaction with other workers are required</td>
</tr>
<tr>
<td></td>
<td>KB2. applicable techniques of work, properties of materials used, tools and tackles used, safety standards that co-workers might need as per the requirement</td>
</tr>
<tr>
<td></td>
<td>KB3. importance of proper and effective communication and the expected adverse effects in case of failure relating to quality, timelines, safety, risks at the construction project site</td>
</tr>
<tr>
<td></td>
<td>KB4. importance and need of supporting co-workers facing problems for smooth functioning of work</td>
</tr>
</tbody>
</table>

**Skills (S)**

<table>
<thead>
<tr>
<th>A. Core Skills/ Generic Skills</th>
<th>Writing Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The user/ individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td></td>
<td>SA1. write in one or more languages, preferably in the local language of the site</td>
</tr>
</tbody>
</table>

|                               | Reading Skills |
|                               | The user/ individual on the job needs to know and understand how to: |
|                               | SA2. read in one or more languages, preferably in the local language of the site |
|                               | SA3. read communication from team members regarding work completed, materials used, tools and tackles used, support required |

<p>|                               | Oral Communication (Listening and Speaking skills) |
|                               | The user/ individual on the job needs to know and understand how to: |
|                               | SA4. speak in one or more languages, preferably in one of the local languages of the site |
|                               | SA5. listen and follow instructions / communication shared by superiors/ co-workers regarding team requirements or interfaces during work processes |
|                               | SA6. orally communicate with co-workers regarding support required to |</p>
<table>
<thead>
<tr>
<th>B. Professional Skills</th>
<th>Decision Making</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td></td>
<td>SB1. decide on what information is to be shared with co-workers within the team or from interfacing gang of workers</td>
</tr>
<tr>
<td></td>
<td>Plan and Organise</td>
</tr>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td></td>
<td>SB2. plan work and organize required resources in coordination with team members</td>
</tr>
<tr>
<td></td>
<td>Customer centricity</td>
</tr>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td></td>
<td>SB3. complete all assigned task in coordination with team members</td>
</tr>
<tr>
<td></td>
<td>Problem solving</td>
</tr>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td></td>
<td>SB4. take initiative in resolving issues among co-workers or report the same to superiors</td>
</tr>
<tr>
<td></td>
<td>Analytical Thinking</td>
</tr>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td></td>
<td>SB5. ensure best ways of coordination among team members</td>
</tr>
<tr>
<td></td>
<td>SB6. communicate with co-workers considering their educational / social background</td>
</tr>
<tr>
<td></td>
<td>Critical Thinking</td>
</tr>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td></td>
<td>SB7. evaluate the complexity of task and determine if any guidance is required from superiors</td>
</tr>
</tbody>
</table>
Work effectively in a team to deliver desired results at the workplace

## NOS Version Control

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<tr>
<th>NOS Code</th>
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</table>
Overview

This NOS covers the skills and knowledge required to plan and organize work in order to meet expected quality in established time frame.
### CON/N8002

#### Plan and organize work to meet expected outcomes

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>CON/N8002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Title</td>
<td>Plan and organize work to meet expected outcomes</td>
</tr>
<tr>
<td>Description</td>
<td>This unit describes the knowledge and the skills required for an individual to plan and organize own work in order to meet expected outcome.</td>
</tr>
</tbody>
</table>
| Scope       | This scope covers the following:  
- Prioritize work activities to achieve desired results  
- Organize desired resources prior to commencement of work |
| Performance Criteria (PC) w.r.t. the Scope |

#### Prioritize work activities to achieve desired results

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC1.</td>
<td>understand clearly the targets and timelines set by superiors</td>
</tr>
<tr>
<td>PC2.</td>
<td>plan activities as per schedule and sequence</td>
</tr>
<tr>
<td>PC3.</td>
<td>provide guidance to the subordinates to obtain desired outcome</td>
</tr>
<tr>
<td>PC4.</td>
<td>plan housekeeping activities prior to and post completion of work</td>
</tr>
</tbody>
</table>

#### Organize desired resources prior to commencement of work

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC5.</td>
<td>list and arrange required resources prior to commencement of work</td>
</tr>
<tr>
<td>PC6.</td>
<td>select and employ correct tools, tackles and equipment for completion of desired work</td>
</tr>
<tr>
<td>PC7.</td>
<td>complete the work with allocated resources</td>
</tr>
<tr>
<td>PC8.</td>
<td>engage allocated manpower in an appropriate manner</td>
</tr>
<tr>
<td>PC9.</td>
<td>use resources in an optimum manner to avoid any unnecessary wastage</td>
</tr>
<tr>
<td>PC10.</td>
<td>employ tools, tackles and equipment with care to avoid damage to the same</td>
</tr>
<tr>
<td>PC11.</td>
<td>organize work output, materials used, tools and tackles deployed,</td>
</tr>
<tr>
<td>PC12.</td>
<td>processes adopted to be in line with the specified standards and instructions</td>
</tr>
</tbody>
</table>

#### Knowledge and Understanding (K)

| A. Organizational Context  
(Knowledge of the company / organization and its processes) | The user/individual on the job needs to know and understand: |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KA1. importance of proper housekeeping</td>
<td></td>
</tr>
<tr>
<td>KA2. policies, procedures and work targets set by superiors</td>
<td></td>
</tr>
<tr>
<td>KA3. roles and responsibilities in executing the work for subordinates and self</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Technical Knowledge</th>
<th>The user/individual on the job needs to know and understand:</th>
</tr>
</thead>
<tbody>
<tr>
<td>KB1. standard practices of work to be adopted for assigned task</td>
<td></td>
</tr>
<tr>
<td>KB2. how to use available resources in a judicious and appropriate manner to minimize wastages or damage</td>
<td></td>
</tr>
</tbody>
</table>

#### Skills (S)

| Writing Skills |
### A. Core Skills/ Generic Skills

| SA1. | write in one or more languages, preferably in the local language of the site |
| SA2. | list out the assigned works and targets |

#### Reading Skills

| SA3. | read in one or more languages, preferably in the local language of the site |
| SA4. | read communication from co-workers, superiors and notices from other departments as per requirement of the level |

#### Oral Communication (Listening and Speaking skills)

| SA5. | speak in one or more languages, preferably in one of the local languages of the site |
| SA6. | listen and follow communication shared by co-workers regarding standard work processes, resources available, timelines, etc. |
| SA7. | communicate effectively with co-workers and subordinates |

### B. Professional Skills

#### Decision Making

| SB1. | decide on what sequence is to be adopted for execution of work |

#### Plan and Organise

| SB2. | plan and organize the materials, tools, tackles and equipment required to execute the work |

#### Customer Centricity

| SB3. | complete all assigned task with proper planning and organizing |

#### Problem solving

| SB4. | arrange or seek help to arrange for material, tools and tackles in case of shortfall |

#### Analytical Thinking

| SB5. | analyze areas of work which could result in a delay of work, wastage of material or damage to tools and tackles |

#### Critical Thinking

| SB6. | evaluate potential solutions to minimize avoidable delays and wastages at the construction site |
Plan and organize work to meet expected outcomes

NOS Version Control

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<td>Occupation</td>
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</tr>
</tbody>
</table>
Overview

This NOS covers the skill and knowledge required for an individual to work according to personal health, safety and environmental protocol at construction site.
CON/N9001  Work according to personal health, safety and environment protocol at construction site

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>CON/N9001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Title (Task)</td>
<td>Work according to personal health, safety and environment protocol at construction site</td>
</tr>
<tr>
<td>Description</td>
<td>This NOS covers the skill and knowledge required for an individual to work according to personal health, safety and environmental protocol at construction site</td>
</tr>
</tbody>
</table>
| Scope | The scope covers the following:  
- Follow safety norms as defined by organization  
- Adopt healthy & safe work practices  
- Implement good housekeeping and environment protection process and activities |
| Performance Criteria (PC) w.r.t. the Scope |

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
</tr>
</thead>
</table>
| Follow safety norms as defined by organization | To be competent, the user / individual on the job must be able to:  
PC1. identify and report any hazards, risks or breaches in site safety to the appropriate authority  
PC2. follow emergency and evacuation procedures in case of accidents, fires, natural calamities  
PC3. follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable  
PC4. participate in safety awareness programs like Tool Box Talks, safety demonstrations, mock drills, conducted at site  
PC5. select and operate different types of fire extinguishers corresponding to types of fires as per EHS guideline  
PC6. identify near miss, unsafe condition and unsafe act |
| Adopt healthy & safe work practices | PC7. use appropriate Personal Protective Equipment (PPE) as per work requirements including:  
- Head Protection (Helmets)  
- Ear protection  
- Fall Protection  
- Foot Protection  
- Face and Eye Protection,  
- Hand and Body Protection  
- Respiratory Protection (if required)  
PC8. handle all required tools, tackles, materials & equipment safely  
PC9. follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines  
PC10. install and apply properly all safety equipment as instructed  
PC11. follow safety protocol and practices as laid down by site EHS department |
CON/N9001  Work according to personal health, safety and environment protocol at construction site

| Implement good housekeeping and environment protection process and activities | PC12. undertake and pass height pass test as per EHS guideline |
| PC13. collect and deposit construction waste into identified containers before disposal, separate containers that may be needed for disposal of toxic or hazardous wastes |
| PC14. apply ergonomic principles wherever required |

### Knowledge and Understanding (K)

| A. Organizational Context (Knowledge of the company / organization and its processes) | The user/individual on the job needs to know and understand: |
| KA1. reporting procedures in cases of breaches or hazards for site safety, accidents, and emergency situations as per guidelines |
| KA2. types of safety hazards at construction sites |
| KA3. basic ergonomic principles as per applicability |

| B. Technical Knowledge | The user/individual on the job needs to know and understand: |
| KB1. the procedure for responding to accidents and other emergencies at site |
| KB2. use of appropriate personal protective equipment to be used based on various working conditions |
| KB3. importance of handling tools, equipment and materials as applicable |
| KB4. health and environmental effect of construction materials as per applicability |
| KB5. various environmental protection methods as per applicability |
| KB6. storage of waste including the following at appropriate location: |
| • non-combustible scrap material and debris |
| • combustible scrap material and debris |
| • general construction waste and trash (non-toxic, non-hazardous) |
| • any other hazardous wastes |
| • any other flammable wastes |
| KB7. how to use hazardous material, in a safe and appropriate manner as per applicability |
| KB8. types of fire |
| KB9. procedure of operating different types of fire extinguishers |
| KB10. safety relevant to tools, tackles, & requirement as per applicability |
| KB11. housekeeping activities relevant to task |

### Skills (S)

| A. Core Skills/ Generic Skills | Writing Skills |
| The user/ individual on the job needs to know and understand how to: |
| SA1. write in one or more languages, preferably in the local language of the site |
| SA2. fill safety formats for near miss, unsafe conditions and safety suggestions |

| Reading Skills |
### B. Professional Skills

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SA3.</td>
<td>read in one or more languages, preferably in the local language of the site</td>
</tr>
<tr>
<td>SA4.</td>
<td>read sign boards, notice boards relevant to safety</td>
</tr>
</tbody>
</table>

#### Oral Communication (Listening and Speaking skills)

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SA5.</td>
<td>speak in one or more languages, preferably in one of the local languages of the site</td>
</tr>
<tr>
<td>SA6.</td>
<td>listen instructions / communication shared by site EHS and superiors regarding site safety, and conducting tool box talk</td>
</tr>
<tr>
<td>SA7.</td>
<td>communicate reporting of site conditions, hazards, accidents, etc.</td>
</tr>
</tbody>
</table>

#### Decision Making

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB1.</td>
<td>maintain safe conditions for others</td>
</tr>
<tr>
<td>SB2.</td>
<td>keep the workplace clean and tidy</td>
</tr>
</tbody>
</table>

#### Plan and Organise

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N.A.</td>
<td></td>
</tr>
</tbody>
</table>

#### Customer centricity

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N.A.</td>
<td></td>
</tr>
</tbody>
</table>

#### Problem solving

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB3.</td>
<td>identify safety risks that affect the health, safety and environment for self and others working in the vicinity, tackle it if within limit or report to appropriate authority</td>
</tr>
</tbody>
</table>

#### Analytical Thinking

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB4.</td>
<td>assess and analyze areas which may affect health, safety and environment protocol on the site</td>
</tr>
</tbody>
</table>

#### Critical Thinking

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The user/individual on the job needs to know and understand how to:</td>
</tr>
<tr>
<td>SB5.</td>
<td>ensure personal safety behavior</td>
</tr>
<tr>
<td>SB6.</td>
<td>respond to emergency</td>
</tr>
</tbody>
</table>
CON/N9001  Work according to personal health, safety and environment protocol at construction site

### NOS Version Control

<table>
<thead>
<tr>
<th>NOS Code</th>
<th>CON/N9001</th>
<th>Credits (NSQF)</th>
<th>TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>Construction</td>
<td>Drafted on</td>
<td>07/08/2015</td>
</tr>
<tr>
<td>Industry Sub-sector</td>
<td>Real Estate and Infrastructure Construction</td>
<td>Last reviewed on</td>
<td>24/07/2019</td>
</tr>
<tr>
<td>Occupation</td>
<td>Construction Painting</td>
<td>Next review date</td>
<td>24/07/2023</td>
</tr>
</tbody>
</table>
Annexure

Nomenclature for QP and NOS

Qualifications Pack

[Insert 3 letter code for SSC- CON]

Q denoting Qualifications Pack

Occupational Standard

An example of NOS with ‘N’

[Insert 3 letter code for SSC- CON]

N denoting National Occupational Standard

9 characters

[ABC]/ Q 0101

QP number (2 numbers)

Occupation (2 numbers)

9 characters

[ABC] / N 0101

OS number (2 numbers)

Occupation (2 numbers)
Assessment Criteria for Doors & Windows Fixer

The following acronyms/codes have been used in the nomenclature above:

<table>
<thead>
<tr>
<th>Sub-sector</th>
<th>Range of Occupation numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Estate and Infrastructure</td>
<td>1-35</td>
</tr>
<tr>
<td>Rural Infrastructure Construction</td>
<td>36-50</td>
</tr>
<tr>
<td>Scope for new Sub-Sectors</td>
<td>51-99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three letters</td>
<td>Construction Skill Development Council of India</td>
<td>CON</td>
</tr>
<tr>
<td>Slash</td>
<td>/</td>
<td>/</td>
</tr>
<tr>
<td>Next letter</td>
<td>Whether QP or NOS</td>
<td>Q</td>
</tr>
<tr>
<td>Next two numbers</td>
<td>Occupation code</td>
<td>12</td>
</tr>
<tr>
<td>Next two numbers</td>
<td>OS number</td>
<td>01</td>
</tr>
</tbody>
</table>
CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role: Doors and Windows Fixer

Qualification Pack: CON/Q1105

Sector Skill Council: Construction

Guidelines for Assessment

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 70%. To pass the Qualification Pack, every trainee should score a minimum of 70% 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 the specified timeframe set by SSC.

10. Minimum duration of Assessment of each QP shall be of 4hrs/trainee.

Marks Allocation

<table>
<thead>
<tr>
<th>Assessment outcomes</th>
<th>Assessment Criteria for outcomes</th>
<th>Total Mark</th>
<th>Out Of</th>
<th>Theory</th>
<th>Skills Practical</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON/N1111: Carry out preparatory works and fix frames and sub-frames for fixing doors and window</td>
<td>PC1. select and organize required tools and equipments for fixing doors and windows</td>
<td>100</td>
<td>100</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>PC2. measure the dimensions of the door/window frame to ensure correct size of frame</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC3. measure out space for the window in the walls or roof as per drawings/specifications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC4. verify dimensions of the opening are as per the size of the frame</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC5. carry out chipping, chiseling of masonry structure to provide gaps for fitting frame</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC6. select the correct door/window panel as per approved drawings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

45
# Assessment Criteria for Doors & Windows Fixer

<table>
<thead>
<tr>
<th>PC7.</th>
<th>visually check any surface damage before installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC8.</td>
<td>fit flashing to window surround as per applicability</td>
</tr>
<tr>
<td>PC9.</td>
<td>Ensure to cover up the frame by suitable means to avoid damage of frame before installation</td>
</tr>
<tr>
<td>PC9.</td>
<td>mark the underside of the wall or roof directly above the outline on the floor using a line</td>
</tr>
<tr>
<td>PC10.</td>
<td>align the door/window frame against the setting out lines, datum lines and level pegs</td>
</tr>
<tr>
<td>PC11.</td>
<td>secure the frame using timber wedges and adjust the position of wedges to obtain required vertical and horizontal alignment</td>
</tr>
<tr>
<td>PC12.</td>
<td>ensure proper alignment and verify the undercut dimensions before fastening the hinges</td>
</tr>
<tr>
<td>PC13.</td>
<td>coat the surface of frame and sub frame with anti-splitting agent prior to installation.</td>
</tr>
<tr>
<td>PC14.</td>
<td>fasten the frame in position using appropriate wall plugs or galvanized straps</td>
</tr>
<tr>
<td>PC15.</td>
<td>verify the dimensions of sub frame opening as per applicability</td>
</tr>
<tr>
<td>PC16.</td>
<td>apply appropriate bonding agent over the sub frame and main frame</td>
</tr>
<tr>
<td>PC17.</td>
<td>install the main frame over the sub frame and check the alignment of main frame and sub frame as per applicability</td>
</tr>
<tr>
<td>PC18.</td>
<td>secure the main frame over sub frame using nails/screws as per specification</td>
</tr>
</tbody>
</table>

| Total | 100 | 30 | 70 |

<table>
<thead>
<tr>
<th>CON/N1112: Install wooden/PVC doors/windows as per instructions</th>
<th>PC1. Install the door/window frame and sub-frame as per specification</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC2. Install the door/window panel as per specification</td>
<td>PC3. Ensure proper alignment and verify the undercut dimensions before fastening the hinges</td>
<td>100</td>
</tr>
<tr>
<td>PC4. Ensure a consistent gap between door/window panel and door/window frame</td>
<td>PC5. Check and ensure the right type of decorative molding is used for installation</td>
<td>100</td>
</tr>
<tr>
<td>PC6. Apply bonding agent to the underside of the architrave (decorative molding) as per instructions</td>
<td>PC7. Install the decorative molding around the door/window frame as per specification.</td>
<td>100</td>
</tr>
<tr>
<td>PC8. Ensure the miter joints are flat and square at corners for seamless finish</td>
<td>PC9. Ensure proper swinging of doors after hinging</td>
<td>100</td>
</tr>
</tbody>
</table>
### Assessment Criteria for Doors & Windows Fixer

| PC10. Check that an even contact has been created between the door/window face and the weather stripping attached to the frame |
| PC11. Insulate around the door/window frame using fiberglass insulation or low expansion foam as per applicability |
| PC12. Install the interior trim as per specifications |
| PC13. Ensure caulking of all joints of the trim and brick mold |
| PC14. Install the weather strip at the base of the door/window as per instructions |

<table>
<thead>
<tr>
<th>Total</th>
<th>100</th>
<th>30</th>
<th>70</th>
</tr>
</thead>
</table>

| CON/N 1113: Install pre-fabricated sliding doors and windows |
| PC1. apply flexible waterproof flashing to the sides of bare wall surfaces along the frames as per applicability |
| PC2. ensure that frame should be 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. visually check any surface damage before installation |
| PC5. ensure proper alignment and verify the undercut dimensions prior to installing doors/window panels |
| PC6. fit 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 if necessary |
| PC8. assemble main frame at site as per size requirement |
| PC9. install vertical parts of main frame using appropriate bonding agent. |
| PC10. fasten horizontal parts of frame after fixing and drying of vertical parts |
| PC11. caulk between the siding and the frame (or brick molding) as per applicability |
| PC12. install the decorative molding around the door/window frame as per specification |
| PC13. ensure the miter joints are flat and square at corners |
| PC14. check that an even contact has been created between the door/window face and the weather stripping attached to the frame |
| PC15. caulk between the siding and the frame (or brick molding) as per applicability |
| PC16. insulate around the door/window frame using fiberglass insulation or low expansion foam as per applicability |
| PC17. install the interior trim as per specification |

| Total | 100 | 30 | 70 |
| CON/N 1114: Install aluminum doors and windows with glass glazing | PC1. Apply flexible waterproof flashing to the sides of bare wall surfaces along the frames as per applicability | 100 |
| | PC2. Ensure that frame should be plumb, square and not twisted between the openings | 100 |
| | PC3. Check inner frame and associated hardware for defects. | |
| | PC4. Weep holes in the inner frames should be cleared of blockage to allow discharge of incidental water prior to installation | |
| | PC5. Check and confirm the sequence of panel installation | |
| | PC6. Check labels on the glass panels against the panel fixing plan and schedule | |
| | PC7. Standardize the orientation of the glass panels so that the positioning of logos/trademarks is consistent | |
| | PC8. Check the gasket for any physical damages | |
| | PC9. Ensure gasket is free from dust and dirt to ensure good grip onto the frame and beadings | |
| | PC10. Check to confirm that profile of the 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 as per specification | |
| | PC12. Hold glass panels in place using spacer hooks | |
| | PC13. Splice gasket to fit around corners of the glass panes | |
| | PC14. Fix the gasket in place using appropriate tools | |
| | PC15. Secure then gasket in place with a appropriate tools and beading | |
| | PC16. Seal the gap between the gasket and beading using appropriate sealant | |
| | PC17. Use suitable masking tape to protect glass during sealant application | |
| | PC18. Install the decorative molding around the door/window frame as per specification | |
| | PC19. Ensure the miter joints are flat and square at corners | |
| | PC20. Check that an even contact has been created between the door/window face and the weather stripping attached to the frame | |
### Assessment Criteria for Doors & Windows Fixer

<table>
<thead>
<tr>
<th>Assessment Criteria</th>
<th>PC21. Carry out insulation around doors/windows as per specification</th>
<th>Total</th>
<th>30</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CON/N 1115:</strong> Install hardware and accessories on doors and windows</td>
<td>PC1. Identify the type of door and window hardware from the job specifications.</td>
<td>100</td>
<td>100</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>PC2. Identify and use required tools and tackles for installing hardware on doors and windows</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC3. Mark level and point for fixing doors and windows hardware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC4. Drill holes or cut through doors/windows to accommodate for hardware fixing.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>PC5. Install latch assembly in accordance with the job and manufacturer specifications.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC6. Install handles and cylinder locks as per specifications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC7. Fasten face plates and keepers in place as per specification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC8. Adjust hardware to suit the alignment and level to match with job specification.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC9. Fix other hardware such as stoppers, door closers etc as per specifications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CON/N8001:</strong> Work effectively in a team to deliver desired results at the workplace</td>
<td>PC1. pass on work related information/requirement clearly to the team members</td>
<td>60</td>
<td>18</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>PC2. inform co-workers and superiors about any kind of deviations from work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC3. address the problems effectively and report if required to immediate supervisor appropriately</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC4. receive instructions clearly from superiors and respond effectively on same</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC5. communicate to team members/subordinates for appropriate work technique and method</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC6. seek clarification and advice as per requirement and applicability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC7. hand over the required material, tools tackles, equipment and work fronts timely to interfacing teams</td>
<td>40</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>PC8. work together with co-workers in a synchronized manner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CON/N8002:</strong> Plan and organize work to meet expected outcomes</td>
<td>PC1. understand clearly the targets and timelines set by superiors</td>
<td>40</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>PC2. plan activities as per schedule and sequence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC3. provide guidance to the subordinates to obtain desired outcome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC4. plan housekeeping activities prior to and post completion of work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC5. list and arrange required resources prior to commencement of work</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Assessment Criteria for Doors & Windows Fixer

| PC6. select and employ correct tools, tackles and equipment for completion of desired work | 60 |
| PC7. complete the work with allocated resources | 18 |
| PC8. engage allocated manpower in an appropriate manner | 42 |
| PC9. use resources in an optimum manner to avoid any unnecessary wastage | 60 |
| PC10. employ tools, tackles and equipment with care to avoid damage to the same | 18 |
| PC11. organize work output, materials used, tools and tackles deployed, | 42 |
| PC12. processes adopted to be in line with the specified standards and instructions | 60 |
| Total | 100 |

### CON/N9001:

<p>| Work according to personal health, safety and environment protocol at construction site | 30 |
| PC1. identify and report any hazards, risks or breaches in site safety to the appropriate authority | 9 |
| PC2. follow emergency and evacuation procedures in case of accidents, fires, natural calamities | 21 |
| PC3. follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable | 30 |
| PC4. participate in safety awareness programs like Tool Box Talks, safety demonstrations, mock drills, conducted at site | 9 |
| PC5. select and operate different types of fire extinguishers corresponding to types of fires as per EHS guideline | 21 |
| PC6. identify near miss, unsafe condition and unsafe act | 30 |
| PC7. use appropriate Personal Protective Equipment (PPE) as per work requirements including: | 50 |
| • Head Protection (Helmets) | 15 |
| • Ear protection | 35 |
| • Fall Protection | 50 |
| • Foot Protection | 15 |
| • Face and Eye Protection, | 35 |
| • Hand and Body Protection | 50 |
| • Respiratory Protection (if required) | 15 |
| PC8. handle all required tools, tackles, materials &amp; equipment safely | 50 |
| PC9. follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines | 15 |
| PC10. install and apply properly all safety equipment as instructed | 35 |
| PC11. follow safety protocol and practices as laid down by site EHS department | 50 |
| PC 12. undertake and pass height pass test as per EHS guidelines | 35 |</p>
<table>
<thead>
<tr>
<th>PC13.</th>
<th>collect and deposit construction waste into identified containers before disposal, separate containers that may be needed for disposal of toxic or hazardous wastes</th>
<th>20</th>
<th>6</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC14.</td>
<td>apply ergonomic principles wherever required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>30</td>
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