



## Qualification Pack



# Helper Electrician

QP Code: CON/Q0601

Version: 2.0

NSQF Level: 2

Construction Skill Development Council of India || CPB 103 & 104 (1st Floor), Block 4B, DLF Corporate Park, Phase III, MG Road  
Gurgaon-122002



## Qualification Pack

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## Qualification Pack

### CON/Q0601: Helper Electrician

#### Brief Job Description

The job role is responsible for helping the construction electrician and performing tasks under instructions and close supervision. The responsibilities also include performing preparatory works prior to temporary and permanent electrical installations and handling of tools, devices, and materials used to perform electrical works.

#### Personal Attributes

This job holder is expected to be physically fit to work across various locations with varied environmental conditions. The individual should be team-oriented and safety-driven.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [CON/N0606: Handle different tools, measuring devices and materials relevant to LV\(low voltage\) electrical works](#)
2. [CON/N0607: Carry out wall chasing and external threading on MS\(mild steel\) conduit](#)
3. [CON/N0101: Erect and dismantle scaffold up to 3.6 meter height](#)
4. [CON/N8001: Work effectively in a team to deliver desired results at the workplace](#)
5. [CON/N9001: Work according to personal health, safety and environment protocols at construction site](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Construction Electrical Works
<b>Country</b>	India
<b>NSQF Level</b>	2
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/9313.0501



## Qualification Pack

<b>Minimum Educational Qualification &amp; Experience</b>	Ability to read and write
<b>Minimum Level of Education for Training in School</b>	
<b>Pre-Requisite License or Training</b>	NIL
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	31/03/2022
<b>Next Review Date</b>	31/03/2025
<b>NSQC Approval Date</b>	31/03/2022
<b>Version</b>	2.0
<b>Reference code on NQR</b>	2022/CON/CSDCI/05609
<b>NQR Version</b>	1.0



## Qualification Pack

# CON/N0606: Handle different tools, measuring devices and materials relevant to LV(low voltage) electrical works

## Description

This unit describes the skills and knowledge required to identify and handle different tools, measuring devices, and materials relevant to LV electrical works

## Scope

The scope covers the following :

- Handle tools, accessories, and electrical devices.
- Handle and shift material and fixtures relevant to LV electrical works.

## Elements and Performance Criteria

### *Handle tools, accessories and electrical devices*

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

- PC1.** use different hand tools like screw driver, pliers, wire strippers, voltage testers, insulation tapes, hacksaw and other tools relevant to LV(low voltage) electrical works
- PC2.** use power tools like drill machine, hand cutting machine, hand grinding machine required to carry out LV electrical installation work
- PC3.** use measuring tape, plumb bob, spirit level, line thread and other relevant hand tools for carrying out checks in alignment of works
- PC4.** handle common electrical measuring devices like multimeter, earth tester, tong tester and megger required to undertake LV electrical tests/ inspections
- PC5.** handle common construction equipments like steel cutting & bending machine, welding machine, vibrators, pumps, motors, tower cranes, batching plants etc
- PC6.** identify Lock Out Tag Out (LOTO) –shutdown requirements at construction sites

### *Handle and shift material and fixtures relevant to LV electrical works*

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

- PC7.** select electrical materials and fixtures like wires, cables, conduits, clamps, lights, miniature circuit breakers, switches, sockets, starters and related accessories
- PC8.** check for breakages, cracks, dampness, corrosions etc. in the electrical materials and fixtures prior to use
- PC9.** shift lights, cables, conduits, cable trays, brackets, DBs, ladders and other relevant materials to the appropriate work locations as per directions
- PC10.** inspect material storage location on-site for safe storage condition which includes avoiding vicinity of water, fire, direct sunlight, service lines, existing electrical lines and ongoing construction works etc.
- PC11.** store and stack electrical materials at work locations as per instructions/standard practices
- PC12.** provide protective cover, erect barricades, signages around the stacked materials adequately as per instructions
- PC13.** carry out housekeeping at work locations before and after completion of work



## Qualification Pack

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** general and electrical safety rules applicable to different activities at construction works
- KU2.** safety rules and regulations for handling and storing required tools, equipment, and materials
- KU3.** service request procedures for tools, materials and equipment as per organizational norms
- KU4.** importance of personal protection including the use of related safety gears & equipment in accordance with organizational norms
- KU5.** area of use of common electrical hand and power tools like screw drivers, wire cutters, wire strippers, pliers, hammers, hacksaws, chisels, spanners, wrenches etc.
- KU6.** use of measuring devices like ammeter, earth tester, tong tester, megger, etc.
- KU7.** various types of cables, wires, conduits and their use in LV electrical connections
- KU8.** common types of fixtures like switches, brackets, sockets, plugs, tops and their use
- KU9.** types of circuit breakers, starters, relays and their area of application
- KU10.** physical and chemical properties of materials that are good conductors, semi-conductors, and bad conductors
- KU11.** concept of electrical current flow and factors which influence electrical flow through conductors
- KU12.** use of appropriate fire safety equipment like sand bucket, fire extinguisher, goggles, gloves etc. as per requirement
- KU13.** use of measuring equipment like measuring tape, plumb bob, level tube/pipe, marking tools, etc. and their respective area of use

### Generic Skills (GS)

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

- GS1.** write in one or more languages, preferably in the local language of the site
- GS2.** read work and safety-related instructions/signboards, etc. in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more languages, preferably in one of the local language of the site
- GS4.** listen attentively to instructions communicated by supervisors
- GS5.** communicate orally and efficiently with team members
- GS6.** analyze the safety aspect of the workplace
- GS7.** plan work to achieve productivity as per the direction /close supervision of superiors
- GS8.** ensure work is done within time and as per desired quality based on instructions provided by superiors
- GS9.** identify any violation of safety norms during the work



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Handle tools, accessories and electrical devices</i>	<b>10</b>	<b>40</b>	-	-
<b>PC1.</b> use different hand tools like screw driver, pliers, wire strippers, voltage testers, insulation tapes, hacksaw and other tools relevant to LV(low voltage) electrical works	-	-	-	-
<b>PC2.</b> use power tools like drill machine, hand cutting machine, hand grinding machine required to carry out LV electrical installation work	-	-	-	-
<b>PC3.</b> use measuring tape, plumb bob, spirit level, line thread and other relevant hand tools for carrying out checks in alignment of works	-	-	-	-
<b>PC4.</b> handle common electrical measuring devices like multimeter, earth tester, tong tester and megger required to undertake LV electrical tests/ inspections	-	-	-	-
<b>PC5.</b> handle common construction equipments like steel cutting & bending machine, welding machine, vibrators, pumps, motors, tower cranes, batching plants etc	-	-	-	-
<b>PC6.</b> identify Lock Out Tag Out (LOTO) -shutdown requirements at construction sites	-	-	-	-
<i>Handle and shift material and fixtures relevant to LV electrical works</i>	<b>10</b>	<b>40</b>	-	-
<b>PC7.</b> select electrical materials and fixtures like wires, cables, conduits, clamps, lights, miniature circuit breakers, switches, sockets, starters and related accessories	-	-	-	-
<b>PC8.</b> check for breakages, cracks, dampness, corrosions etc. in the electrical materials and fixtures prior to use	-	-	-	-
<b>PC9.</b> shift lights, cables, conduits, cable trays, brackets, DBs, ladders and other relevant materials to the appropriate work locations as per directions	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> inspect material storage location on-site for safe storage condition which includes avoiding vicinity of water, fire, direct sunlight, service lines, existing electrical lines and ongoing construction works etc.	-	-	-	-
<b>PC11.</b> store and stack electrical materials at work locations as per instructions/standard practices	-	-	-	-
<b>PC12.</b> provide protective cover, erect barricades, signages around the stacked materials adequately as per instructions	-	-	-	-
<b>PC13.</b> carry out housekeeping at work locations before and after completion of work	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>80</b>	-	-





## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N0606
<b>NOS Name</b>	Handle different tools, measuring devices and materials relevant to LV(low voltage) electrical works
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Construction Electrical Works
<b>NSQF Level</b>	2
<b>Credits</b>	TBD
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	31/03/2022
<b>Next Review Date</b>	31/03/2025
<b>NSQC Clearance Date</b>	31/03/2022



## Qualification Pack

# CON/N0607: Carry out wall chasing and external threading on MS(mild steel) conduit

## Description

This unit describes the skills and the knowledge required to carry out wall chasing and external threading on MS conduit

## Scope

The scope covers the following :

- Carry out preparatory work prior to concealed wiring work
- Chase wall as per marking and assist in conduit laying as per instructions
- Carry out external threading on MS conduit

## Elements and Performance Criteria

### *Carry out preparatory work prior to concealed wiring work*

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

- PC1.** arrange and stack the required hand and power tools at the identified job location
- PC2.** arrange and stack electrical materials such as cables, wires, conduits and fixtures required for wall chasing and LV(Low Voltage) wiring work
- PC3.** carry out measurement and marking on wall surface using appropriate tools as per instruction
- PC4.** check the working condition of tools and materials and perform the required basic maintenance

### *Chase wall as per marking and assist in conduit laying as per instructions*

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

- PC5.** use appropriate PPE for carrying out chasing activity
- PC6.** carry out firm cutting on wall surface using wall chasing machine as per marking while maintaining uniform depth
- PC7.** finish the wall chasing work using hand tools as per standard practice maintaining the required dimension
- PC8.** measure, mark and cut cables and conduits as per instruction using appropriate tools
- PC9.** bend and join conduits as per requirement using appropriate tools
- PC10.** assist in placing conduits and cables/ wires and trough the same for permanent LV wiring works
- PC11.** clean the work locations after completion of work and dispose debris to appropriate location
- PC12.** assist senior in laying cables such as power and communication cables as per instructions

### *Carry out external threading on MS(mild steel) conduit*

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

- PC13.** carry out measurement & marking on the MS conduits
- PC14.** hold the conduit in pipe vice as per standard practice



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- PC15.** cut the conduit at marking point and carry out the edge finishing using appropriate tools
- PC16.** fix die cutter in die stock per instructions and use lubricants as per applicability
- PC17.** carry out the threading activity following the applicable trade safety norms
- PC18.** maintain standard housekeeping practice at the workplace

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** general and electrical safety rules applicable to different activities at construction works
- KU2.** standard organizational practices followed for the electrical works
- KU3.** safety rules and regulations for handling and storing required relevant tools, equipment, and materials
- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** hand tools to be used in wall chasing work like chisel, hammer, nails etc.
- KU6.** power tools to be used in wall chasing works like wall chasing machine, drill machine, cutting saws etc.
- KU7.** hand tools/ instruments used for marking and measurement prior to carrying out chasing activity
- KU8.** hand tools such as hacksaws, files, hand cutting machine etc. used for cutting conduits
- KU9.** how to operate hand cutting machine and hand drill machine and the PPEs required while operating these machines
- KU10.** depth of chasing as per the wall thickness and diameter of the conduit
- KU11.** how to operate vice or threading tool
- KU12.** basics of electrical charge, current flow and their types
- KU13.** concept of conductors and semiconductors including their physical properties
- KU14.** parameters involved in electrical circuits such as voltage, electrical current flow, resistance, heat etc. their signs, units, and conversions
- KU15.** electrical elements that have thermal influences on circuits
- KU16.** safe procedure of termination and joining of cables
- KU17.** hazards and risks involved in LV electrical works and standard safety norms to be followed

## Generic Skills (GS)

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

- GS1.** write in one or more languages, preferably in the local language of the site
- GS2.** read work and safety-related instructions/signboards, etc. in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more languages, preferably in one of the local language of the site
- GS4.** listen attentively to instructions communicated by supervisors
- GS5.** communicate orally and efficiently with team members
- GS6.** analyze the safety aspect of the workplace



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- GS7.** plan work to achieve productivity as per the direction /close supervision of superiors
- GS8.** • ensure work is done within time and as per desired quality based on instructions provided by  
• superiors
- GS9.** identify any violation of safety norms during the work



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### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out preparatory work prior to concealed wiring work</i>	<b>4</b>	<b>16</b>	-	-
<b>PC1.</b> arrange and stack the required hand and power tools at the identified job location	-	-	-	-
<b>PC2.</b> arrange and stack electrical materials such as cables, wires, conduits and fixtures required for wall chasing and LV(Low Voltage) wiring work	-	-	-	-
<b>PC3.</b> carry out measurement and marking on wall surface using appropriate tools as per instruction	-	-	-	-
<b>PC4.</b> check the working condition of tools and materials and perform the required basic maintenance	-	-	-	-
<i>Chase wall as per marking and assist in conduit laying as per instructions</i>	<b>8</b>	<b>32</b>	-	-
<b>PC5.</b> use appropriate PPE for carrying out chasing activity	-	-	-	-
<b>PC6.</b> carry out firm cutting on wall surface using wall chasing machine as per marking while maintaining uniform depth	-	-	-	-
<b>PC7.</b> finish the wall chasing work using hand tools as per standard practice maintaining the required dimension	-	-	-	-
<b>PC8.</b> measure, mark and cut cables and conduits as per instruction using appropriate tools	-	-	-	-
<b>PC9.</b> bend and join conduits as per requirement using appropriate tools	-	-	-	-
<b>PC10.</b> assist in placing conduits and cables/ wires and trough the same for permanent LV wiring works	-	-	-	-
<b>PC11.</b> clean the work locations after completion of work and dispose debris to appropriate location	-	-	-	-
<b>PC12.</b> assist senior in laying cables such as power and communication cables as per instructions	-	-	-	-



## Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out external threading on MS(mild steel) conduit</i>	8	32	-	-
<b>PC13.</b> carry out measurement & marking on the MS conduits	-	-	-	-
<b>PC14.</b> hold the conduit in pipe vice as per standard practice	-	-	-	-
<b>PC15.</b> cut the conduit at marking point and carry out the edge finishing using appropriate tools	-	-	-	-
<b>PC16.</b> fix die cutter in die stock per instructions and use lubricants as per applicability	-	-	-	-
<b>PC17.</b> carry out the threading activity following the applicable trade safety norms	-	-	-	-
<b>PC18.</b> maintain standard housekeeping practice at the workplace	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>80</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N0607
<b>NOS Name</b>	Carry out wall chasing and external threading on MS(mild steel) conduit
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Construction Electrical Works
<b>NSQF Level</b>	2
<b>Credits</b>	TBD
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	31/03/2022
<b>Next Review Date</b>	31/03/2025
<b>NSQC Clearance Date</b>	31/03/2022



## Qualification Pack

# CON/N0101: Erect and dismantle scaffold up to 3.6 meter height

## Description

This unit describes the skills and knowledge required to erect and dismantle a temporary scaffold up to 3.6 meters in height

## Scope

The scope covers the following :

- Perform erection and dismantling of 3.6-metre scaffold

## Elements and Performance Criteria

### *Perform erection and dismantling of 3.6-metre scaffold*

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

- PC1.** use required PPE and safety gadgets for scaffold erection
- PC2.** prepare a compacted and leveled surface for the erection of scaffold as per requirement
- PC3.** shift and stack required materials, components, tools and tackles at the instructed location
- PC4.** place base plates and sole boards on the ground as per markings and instructions
- PC5.** erect temporary scaffold up to 3.6 meters' height using proper components and standard erection procedure following trade safety
- PC6.** check the verticality of the scaffold at every level of erection before moving to the next level
- PC7.** check for rigidity, stability and support of the erected scaffold
- PC8.** fix walk-boards, guard rails, toe-boards, and other components on the working platform
- PC9.** dismantle the temporary scaffold following the standard procedure
- PC10.** remove guard rails, toe boards, walk boards and other components sequentially
- PC11.** clean and stack all components properly after dismantling
- PC12.** maintain tidiness at work location

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard procedure for scaffolding works
- KU2.** safety rules and regulations for handling and storing scaffolding tools, materials and components
- KU3.** importance of personal protection including the use of safety gears and equipment
- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** housekeeping works as per environmental norms
- KU6.** use of different types of scaffolds (cup-lock , frame scaffold)
- KU7.** use of various tools and tackles in scaffolding works





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- KU8.** identification, standard size, and use of different components of the scaffold
- KU9.** basic arithmetic calculation
- KU10.** units of measurements
- KU11.** importance of housekeeping
- KU12.** standard procedure for erection and dismantling of 3.6 m temporary scaffold

## Generic Skills (GS)

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

- GS1.** write in one or more language, preferably in the local language of the site
- GS2.** read work and safety-related instructions/signboards in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more language, preferably in one of the local languages of site
- GS4.** listen attentively to instructions communicated by superiors
- GS5.** communicate orally and efficiently with team members
- GS6.** plan work to achieve productivity as per the direction /close supervision of superiors
- GS7.** ensure work is done within time and as per desired quality based on instructions provided by superiors
- GS8.** analyze the safety aspect of the workplace
- GS9.** identify any violation of safety norms during the work



## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform erection and dismantling of 3.6-metre scaffold</i>	<b>20</b>	<b>80</b>	-	-
<b>PC1.</b> use required PPE and safety gadgets for scaffold erection	-	-	-	-
<b>PC2.</b> prepare a compacted and leveled surface for the erection of scaffold as per requirement	-	-	-	-
<b>PC3.</b> shift and stack required materials, components, tools and tackles at the instructed location	-	-	-	-
<b>PC4.</b> place base plates and sole boards on the ground as per markings and instructions	-	-	-	-
<b>PC5.</b> erect temporary scaffold up to 3.6 meters' height using proper components and standard erection procedure following trade safety	-	-	-	-
<b>PC6.</b> check the verticality of the scaffold at every level of erection before moving to the next level	-	-	-	-
<b>PC7.</b> check for rigidity, stability and support of the erected scaffold	-	-	-	-
<b>PC8.</b> fix walk-boards, guard rails, toe-boards, and other components on the working platform	-	-	-	-
<b>PC9.</b> dismantle the temporary scaffold following the standard procedure	-	-	-	-
<b>PC10.</b> remove guard rails, toe boards, walk boards and other components sequentially	-	-	-	-
<b>PC11.</b> clean and stack all components properly after dismantling	-	-	-	-
<b>PC12.</b> maintain tidiness at work location	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>80</b>	-	-



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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N0101
<b>NOS Name</b>	Erect and dismantle scaffold up to 3.6 meter height
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Masonry, Construction Electrical Works
<b>NSQF Level</b>	2
<b>Credits</b>	TBD
<b>Version</b>	5.0
<b>Last Reviewed Date</b>	31/03/2022
<b>Next Review Date</b>	31/03/2025
<b>NSQC Clearance Date</b>	31/03/2022



## Qualification Pack

# CON/N8001: Work effectively in a team to deliver desired results at the workplace

## Description

This unit describes the skills and knowledge required to work effectively within a team to achieve the desired results

## Scope

The scope covers the following :

- Interact and communicate effectively with co-workers, superiors and sub-ordinates across different teams
- Support co-workers, superiors and sub-ordinates within the team and across interfacing teams to ensure effective execution of assigned task
- Acknowledge and show sensitivity to disability, culture and gender diversity

## Elements and Performance Criteria

*Interact and communicate effectively with co-workers, superiors and sub-ordinates across different teams*

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

- PC1.** pass on work related information/ requirement clearly to the team members
- PC2.** inform co-workers and superiors about any kind of deviations from work
- PC3.** address the problems effectively and report if required to immediate supervisor appropriately
- PC4.** receive instructions clearly from superiors and respond effectively on the same
- PC5.** communicate to team members/subordinates for appropriate work technique and method
- PC6.** seek clarification and advice as per the requirement and applicability

*• Support co-workers, superiors and sub-ordinates within the team and across interfacing teams to ensure effective execution of assigned task*

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

- PC7.** hand over the required material, tools tackles, equipment and work fronts timely to interfacing teams
- PC8.** work together with co-workers in a synchronized manner

*Acknowledge and show sensitivity to disability, culture and gender diversity*

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

- PC9.** follow practices which are sensitive to disability, culture and gender diversity.
- PC10.** respond to attitude and behaviour which are aggressive, abusive or discriminatory, in a professional manner and as per organizational policy

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:



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- KU1.** own roles and responsibilities
- KU2.** importance of effective communication and establishing strong working
- KU3.** risks of a failure in teamwork in terms of effects on project outcomes, timelines, safety at the construction site, etc.
- KU4.** different modes of communication, and its appropriate usage
- KU5.** importance of creating healthy and cooperative work environment among the gangs of workers
- KU6.** different activities within his work area where an interaction with other workers is required
- KU7.** applicable techniques of work, properties of materials used, tools and tackles used, safety standards that co-workers might need as per the requirement
- KU8.** 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
- KU9.** importance and need of supporting co-workers facing problems for smooth functioning of work
- KU10.** the fundamental concept of gender equality
- KU11.** how to recognise and be sensitive to issues of disability, culture and gender

## Generic Skills (GS)

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

- GS1.** write in at least one language, preferably in the local language of the site
- GS2.** read in one or more languages, preferably the local language of the site
- GS3.** read communication from team members regarding work completed, materials used, tools and tackles used, support required
- GS4.** speak in one or more languages, preferably in one of the local language of the site
- GS5.** listen and follow instructions / communication shared by superiors/ co-workers regarding team requirements or interfaces during work processes
- GS6.** communicate orally with co-workers regarding support required to complete the respective work
- GS7.** decide on what information is to be shared with co-workers within the team or from interfacing gang of workers
- GS8.** plan work and organize required resources in coordination with team members
- GS9.** complete all assigned task in coordination with team members
- GS10.** take initiative in resolving issues among co-workers or report the same to superiors
- GS11.** ensure best ways of coordination among team members
- GS12.** communicate with co-workers considering their educational / social background
- GS13.** evaluate the complexity of task and determine if any guidance is required from superiors



## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interact and communicate effectively with co-workers, superiors and sub-ordinates across different teams</i>	<b>12</b>	<b>48</b>	-	-
<b>PC1.</b> pass on work related information/ requirement clearly to the team members	-	-	-	-
<b>PC2.</b> inform co-workers and superiors about any kind of deviations from work	-	-	-	-
<b>PC3.</b> address the problems effectively and report if required to immediate supervisor appropriately	-	-	-	-
<b>PC4.</b> receive instructions clearly from superiors and respond effectively on the same	-	-	-	-
<b>PC5.</b> communicate to team members/subordinates for appropriate work technique and method	-	-	-	-
<b>PC6.</b> seek clarification and advice as per the requirement and applicability	-	-	-	-
• <i>Support co-workers, superiors and sub-ordinates within the team and across interfacing teams to ensure effective execution of assigned task</i>	<b>4</b>	<b>16</b>	-	-
<b>PC7.</b> hand over the required material, tools tackles, equipment and work fronts timely to interfacing teams	-	-	-	-
<b>PC8.</b> work together with co-workers in a synchronized manner	-	-	-	-
<i>Acknowledge and show sensitivity to disability, culture and gender diversity</i>	<b>4</b>	<b>16</b>	-	-
<b>PC9.</b> follow practices which are sensitive to disability, culture and gender diversity.	-	-	-	-
<b>PC10.</b> respond to attitude and behaviour which are aggressive, abusive or discriminatory, in a professional manner and as per organizational policy	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>80</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N8001
<b>NOS Name</b>	Work effectively in a team to deliver desired results at the workplace
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Generic 2
<b>NSQF Level</b>	2
<b>Credits</b>	TBD
<b>Version</b>	5.0
<b>Last Reviewed Date</b>	31/03/2022
<b>Next Review Date</b>	31/03/2025
<b>NSQC Clearance Date</b>	31/03/2022



## Qualification Pack

# CON/N9001: Work according to personal health, safety and environment protocols at construction site

## Description

This NOS covers the skill and knowledge required for an individual to work according to personal health, safety and environmental protocol at construction site

## 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
- Follow infection control guidelines as per applicability

## Elements and Performance Criteria

### *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.** follow all the protocols and safety techniques conveyed during safety awareness programs like Tool Box Talks, safety demonstrations and mock drills conducted at the site
- PC5.**
  - select and operate different types of fire extinguishers corresponding to various types of fires
  - as per EHS guideline
- PC6.** identify near miss , unsafe condition and unsafe act

### *Adopt healthy & safe work practices*

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

- 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.** check and install all safety equipment as per standard guidelines
- PC11.** follow safety protocol and practices as laid down by site EHS department
- PC12.** obtain "height pass" clearance for working at heights

### *Implement good housekeeping practices*

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

- PC13.**
  - collect, segregate and deposit construction waste into appropriate containers based on their
  - toxicity or hazardous nature





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**PC14.** apply ergonomic principles wherever required

*Follow infection control guidelines as per applicability*

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

**PC15.** follow recommended personal hygiene, workplace hygiene and sanitization practices

**PC16.** clean and disinfect all materials, tools and supplies before and after use

**PC17.** • report immediately to concerned authorities regarding signs and symptoms of illness of self  
• and others

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

**KU1.** reporting procedures in cases of breaches or hazards for site safety, accidents, and emergency situations as per guidelines

**KU2.** types of safety hazards at construction sites

**KU3.** basic ergonomic principles as per applicability

**KU4.** the procedure for responding to accidents and other emergencies at site

**KU5.** use of appropriate personal protective equipment based on various working conditions

**KU6.** importance of handling tools, equipment, and materials as per applicable norms

**KU7.** effect of construction material on health and environments as per applicability

**KU8.** various environmental protection methods as per applicability

**KU9.** storage of waste including non-combustible scrap material and debris, combustible scrap material and debris, general construction waste and trash (non-toxic, non-hazardous), any other hazardous wastes and any other flammable wastes at the appropriate location

**KU10.** how to keep the workplace neat and tidy so as to be safe

**KU11.** how to use hazardous material in a safe and appropriate manner as per applicability

**KU12.** types of fire

**KU13.** procedure of operating different types of fire extinguishers

**KU14.** safety relevant to tools, tackles, and equipment as per applicability

**KU15.** housekeeping activities relevant to task

**KU16.** ways of transmission of infection

**KU17.** ways to manage infectious risks at the workplace

**KU18.** different methods of cleaning, disinfection, sterilization, and sanitization

**KU19.** symptoms of infection like fever, cough, redness, swelling, and inflammation

## Generic Skills (GS)

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

**GS1.** write in at least one language, preferably in the local language of the site

**GS2.** fill safety formats for near miss, unsafe conditions and safety suggestions

**GS3.** read in one or more language, preferably in the local language of the site

**GS4.** speak in one or more language, preferably in one of the local language of the site



## Qualification Pack

- GS5.** listen to instructions/communication shared by site EHS and superiors regarding site safety, and conducting the toolbox talk
- GS6.** identify potential safety risks and report to the appropriate authority
- GS7.**
- assess and analyze areas which may affect health, safety and environment protocol on the
  - site



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Follow safety norms as defined by organization</i>	<b>4</b>	<b>16</b>	-	-
<b>PC1.</b> identify and report any hazards, risks or breaches in site safety to the appropriate authority	-	-	-	-
<b>PC2.</b> follow emergency and evacuation procedures in case of accidents, fires, natural calamities	-	-	-	-
<b>PC3.</b> follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable	-	-	-	-
<b>PC4.</b> follow all the protocols and safety techniques conveyed during safety awareness programs like Tool Box Talks, safety demonstrations and mock drills conducted at the site	-	-	-	-
<b>PC5.</b> • select and operate different types of fire extinguishers corresponding to various types of fires • as per EHS guideline	-	-	-	-
<b>PC6.</b> identify near miss , unsafe condition and unsafe act	-	-	-	-
<i>Adopt healthy &amp; safe work practices</i>	<b>10</b>	<b>40</b>	-	-
<b>PC7.</b> 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)	-	-	-	-
<b>PC8.</b> handle all required tools, tackles , materials & equipment safely	-	-	-	-
<b>PC9.</b> follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines	-	-	-	-
<b>PC10.</b> check and install all safety equipment as per standard guidelines	-	-	-	-



## Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> follow safety protocol and practices as laid down by site EHS department	-	-	-	-
<b>PC12.</b> obtain "height pass" clearance for working at heights	-	-	-	-
<i>Implement good housekeeping practices</i>	<b>4</b>	<b>16</b>	-	-
<b>PC13.</b> • collect, segregate and deposit construction waste into appropriate containers based on their • toxicity or hazardous nature	-	-	-	-
<b>PC14.</b> apply ergonomic principles wherever required	-	-	-	-
<i>Follow infection control guidelines as per applicability</i>	<b>2</b>	<b>8</b>	-	-
<b>PC15.</b> follow recommended personal hygiene, workplace hygiene and sanitization practices	-	-	-	-
<b>PC16.</b> clean and disinfect all materials, tools and supplies before and after use	-	-	-	-
<b>PC17.</b> • report immediately to concerned authorities regarding signs and symptoms of illness of self • and others	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>80</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N9001
<b>NOS Name</b>	Work according to personal health, safety and environment protocols at construction site
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Generic Safety
<b>NSQF Level</b>	2
<b>Credits</b>	TBD
<b>Version</b>	7.0
<b>Last Reviewed Date</b>	31/03/2022
<b>Next Review Date</b>	31/03/2025
<b>NSQC Clearance Date</b>	31/03/2022

### Assessment Guidelines and Assessment Weightage

#### Assessment Guidelines

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



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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 NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack within the specified time frame set by SSC.
10. Minimum duration of Assessment of each QP shall be of 4hrs/trainee.

### Minimum Aggregate Passing % at QP Level : 50

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

## Assessment Weightage

### Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N0606. Identify and handle different tools, measuring devices and materials relevant to LV electrical works	20	80	-	-	100	30
CON/N0607. Carry out wall chasing and external threading on MS(mild steel) conduit	20	80	-	-	100	35
CON/N0101. Erect and dismantle scaffold up to 3.6 meter height	20	80	-	-	100	10
CON/N8001. Work effectively in a team to deliver desired results at the workplace	20	80	-	-	100	10
CON/N9001. Work according to personal health, safety and environment protocols at construction site	20	80	-	-	100	15



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National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
<b>Total</b>	<b>100</b>	<b>400</b>	<b>-</b>	<b>-</b>	<b>500</b>	<b>100</b>



## Qualification Pack

### Acronyms

<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training





## Qualification Pack

### Glossary

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



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