



## Qualification Pack



# Assistant Shuttering Carpenter

QP Code: CON/Q0302

Version: 2.0

NSQF Level: 3

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## Qualification Pack

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### CON/Q0302: Assistant Shuttering Carpenter

#### Brief Job Description

Assistant shuttering carpenter is responsible for identification, handle and use of tools and tackles, materials and equipments. The responsibilities also include use of power tools/equipments for cutting and sizing of timber and plywood, providing support in assembling and dismantling of conventional and system formwork for R.C.C structures to complete work within specified time and tolerance.

#### Personal Attributes

The individual is expected to be physically fit and able to work across various locations in withstanding extreme conditions while working. The person should be able to work within a team to handle various shuttering carpentry tools, materials, components and works under instructions and close supervision.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

1. [CON/N0312: Use and maintain tools and equipment relevant to shuttering carpentry](#)
2. [CON/N0313: Assist in making wooden shutters boards using in shuttering carpentry](#)
3. [CON/N0314: Assist in assembling and dismantling conventional and system formwork for R.C.C structures](#)
4. [CON/N0101: Erect and dismantle temporary scaffold up to 3.6 meter height](#)
5. [CON/N8001: Work effectively in a team to deliver desired results at the workplace](#)
6. [CON/N9001: Work according to personal health, safety and environment protocol at construction site](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Shuttering Carpentry
<b>Country</b>	India
<b>NSQF Level</b>	3



## Qualification Pack

<b>Credits</b>	NA
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/7115.0201
<b>Minimum Educational Qualification &amp; Experience</b>	5th Class with 6-12 Months of experience as a certified Helper Shuttering Carpenter OR 5th Class with 1-2 Years of experience in case of a Non trained worker, in same occupation
<b>Minimum Level of Education for Training in School</b>	5th Class
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	04/03/2020
<b>Next Review Date</b>	24/07/2023
<b>NSQC Approval Date</b>	22/08/2019
<b>Version</b>	2.0
<b>Reference code on NQR</b>	2019/CON/CSDCI/03287
<b>NQR Version</b>	1.0



## Qualification Pack

# CON/N0312: Use and maintain tools and equipment relevant to shuttering carpentry

## Description

This unit describes the skills and knowledge required to use and maintain tools, components, equipment and materials relevant to shuttering carpentry under instructions and close supervision

## Scope

The scope covers the following :

- Use and maintain tools, components, and equipment relevant to shuttering carpentry

## Elements and Performance Criteria

### *Use and maintain tools, components, and equipments relevant to shuttering carpentry*

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

- PC1.** use hand tools such as claw hammer, hand saw, hack saw wooden planners, measuring tape, nailing hammer, try square, plumb bob and other relevant tools
- PC2.** use power tools for cutting, planing and drilling of timber/plywood
- PC3.** use materials such as timbers, plywood, runner pieces of different size, wooden battens for shuttering work
- PC4.** use consumable items such as nails of different size, masking tape, cotton waste, cotton and nylon line thread in relevant to shuttering works
- PC5.** use personal protective gears such as safety shoes, gloves, helmets, ear plugs, nose mask, safety goggles
- PC6.** identify and wear full and half body safety harness
- PC7.** use bamboos & ballis, props, acrow span, H-beam, shuttering sheets, foot plates, U head and other relevant components for shuttering works
- PC8.** store, stack and shift shuttering components as per standard procedure
- PC9.** use different types of slings, shackles and lifting belts for lifting operation
- PC10.** maintain tidiness at site location
- PC11.** barricade area of work to prevent unauthorized entrance

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** safety rules and regulations for handling and storing shuttering and scaffolding tools, materials and components
- KU2.** personal protection including use of safety gears and equipments
- KU3.** safe working methods and movements while performing relevant tasks
- KU4.** request procedure for tools & materials and equipment



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- KU5.** housekeeping & other site administrative rules
- KU6.** use of hand tools such as claw hammer, hand saw, hack saw wooden planners, measuring tape, nailing hammer, try square, plumb bob and other relevant tools
- KU7.** consumable materials and their optimum use
- KU8.** visual check for quality of timber and plywood
- KU9.** types of wood such as hard wood and soft wood and its common defect
- KU10.** types and thickness of plywood such as commercial , water proof, marine plywood
- KU11.** types and use of slings, shackles and lifting belts
- KU12.** height up to which each shuttering carpentry and scaffolding materials should be stacked
- KU13.** different types of hand and power tools used for cutting and planing of timber
- KU14.** stacking of various shuttering carpentry and scaffolding materials as per standard practices
- KU15.** various components and their standard sizes
- KU16.** workplace procedures and policies for manual and mechanical handling
- KU17.** standard procedure for housekeeping
- KU18.** storing and handling technique of tools
- KU19.** upkeep repair and maintenance of tools
- KU20.** how to work at heights

## 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 in one or more language, preferably in the local language of the site
- GS3.** read instructions, guidelines, sign boards, safety rules & safety tags instructions related to exit routes during emergency at the workplace
- GS4.** speak in one or more language, preferably in one of the local languages of the site
- GS5.** listen and follow instructions given by the superior
- GS6.** communicate orally and effectively communicate with team members
- GS7.** decide whether his workplace is safe for working and also his work is not creating hazardous conditions for other
- GS8.** complete work as per agreed time schedule and quality



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Use and maintain tools, components, and equipments relevant to shuttering carpentry</i>	<b>30</b>	<b>70</b>	-	-
<b>PC1.</b> use hand tools such as claw hammer, hand saw, hack saw wooden planners, measuring tape, nailing hammer, try square, plumb bob and other relevant tools	-	-	-	-
<b>PC2.</b> use power tools for cutting, planing and drilling of timber/plywood	-	-	-	-
<b>PC3.</b> use materials such as timbers, plywood, runner pieces of different size, wooden battens for shuttering work	-	-	-	-
<b>PC4.</b> use consumable items such as nails of different size, masking tape, cotton waste, cotton and nylon line thread in relevant to shuttering works	-	-	-	-
<b>PC5.</b> use personal protective gears such as safety shoes, gloves, helmets, ear plugs, nose mask, safety goggles	-	-	-	-
<b>PC6.</b> identify and wear full and half body safety harness	-	-	-	-
<b>PC7.</b> use bamboos & ballis, props, acrow span, H-beam, shuttering sheets, foot plates, U head and other relevant components for shuttering works	-	-	-	-
<b>PC8.</b> store, stack and shift shuttering components as per standard procedure	-	-	-	-
<b>PC9.</b> use different types of slings, shackles and lifting belts for lifting operation	-	-	-	-
<b>PC10.</b> maintain tidiness at site location	-	-	-	-
<b>PC11.</b> barricade area of work to prevent unauthorized entrance	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N0312
<b>NOS Name</b>	Use and maintain tools and equipment relevant to shuttering carpentry
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Shuttering Carpentry
<b>NSQF Level</b>	3
<b>Credits</b>	TBD
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Clearance Date</b>	22/08/2019





## Qualification Pack

# CON/N0313: Assist in making wooden shutters boards using in shuttering carpentry

## Description

This unit describes the skills and knowledge required to assist in making wooden shutters by cutting, sizing, planing and drilling of timber, plywood using power tools/equipment and making timber joints

## Scope

The scope covers the following :

- Perform cutting, planing and drilling of timber, plywood using power tools/equipment and make timber joints

## Elements and Performance Criteria

*Perform cutting, planing and drilling of timber, plywood using power tools/equipments and make timber joints*

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

- PC1.** identify power tools such as hand held circular saw, hand held zig saw, hand drill machine, table mounted saw, planing machine and power drilling machine
- PC2.** identify different types of wood & plywood
- PC3.** select circular saw blade based on thickness and type of wood to be cut
- PC4.** check cutting blade for its sharpness and bend
- PC5.** check wooden planing machine blade, auger drill bit for its sharpness
- PC6.** use measurement and marking tools for correct sizing of timber/plywood
- PC7.** use hand held power saw for cutting and sizing of timber and plywood
- PC8.** safely feed timber/ plywood to the table mounted saw
- PC9.** cut timber and plywood of different types and thickness using table mounted saw
- PC10.** use planing machine for planing of timber and finishing the rough surface
- PC11.** use power drilling machine for drilling different diameter hole in timber and plywood
- PC12.** make timber joint such as lap joint, mortis and tenon joints, dovetail joints and housing joints using appropriate hand tools
- PC13.** assist in making shutter boards as per instructions
- PC14.** maintain tidiness at site location
- PC15.** follow standard safety measure while operating power tools

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** safety rules and regulations for handling and storing shuttering and scaffolding tools, materials and components



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- KU2.** personal protection including use of safety gears and equipments
- KU3.** safe working methods and movements while performing relevant tasks
- KU4.** request procedure for tools & materials and equipment
- KU5.** housekeeping & other site administrative rules
- KU6.** use of power tools such as hand held circular saw, hand held zig saw, hand drill machine, table mounted saw, planing machine and power drilling machine
- KU7.** visual check for quality of timber and plywood
- KU8.** types of wood such as hard wood and soft wood and its common defect
- KU9.** types and thickness of plywood such as commercial , water proof, marine plywood
- KU10.** different types of hand and power tools used for cutting and planing of timber
- KU11.** standard procedure for housekeeping
- KU12.** knowledge about storing and handling technique of tools
- KU13.** knowledge about upkeep repair and maintenance of tools
- KU14.** use of measurement and marking tools
- KU15.** seasoning of timber, storage of timber to prevent decay distortion, bending, splitting and timber treatments
- KU16.** various types of timber joints
- KU17.** use of various types of file
- KU18.** different types of cutting blade, size and cutting depth
- KU19.** use of personal protective gears for cutting and sizing operations
- KU20.** electrical safety for use of power tools
- KU21.** how to make line, sketch and label

## 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 in one or more language, preferably in the local language of the site
- GS3.** read instructions, guidelines, sign boards, safety rules & safety tags instructions related to exit routes during emergency at the workplace
- GS4.** speak in one or more language, preferably in one of the local languages of the site
- GS5.** listen and follow instructions given by the superior
- GS6.** communicate orally and effectively with team members
- GS7.** decide whether his workplace is safe for working and also his work is not creating hazardous conditions for other
- GS8.** plan work & organize required resource in coordination with team members and superior
- GS9.** complete work as per agreed time schedule and quality



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Perform cutting, planing and drilling of timber, plywood using power tools/equipments and make timber joints</i>	30	70	-	-
<b>PC1.</b> identify power tools such as hand held circular saw, hand held zig saw, hand drill machine, table mounted saw, planing machine and power drilling machine	-	-	-	-
<b>PC2.</b> identify different types of wood & plywood	-	-	-	-
<b>PC3.</b> select circular saw blade based on thickness and type of wood to be cut	-	-	-	-
<b>PC4.</b> check cutting blade for its sharpness and bend	-	-	-	-
<b>PC5.</b> check wooden planing machine blade, auger drill bit for its sharpness	-	-	-	-
<b>PC6.</b> use measurement and marking tools for correct sizing of timber/plywood	-	-	-	-
<b>PC7.</b> use hand held power saw for cutting and sizing of timber and plywood	-	-	-	-
<b>PC8.</b> safely feed timber/ plywood to the table mounted saw	-	-	-	-
<b>PC9.</b> cut timber and plywood of different types and thickness using table mounted saw	-	-	-	-
<b>PC10.</b> use planing machine for planing of timber and finishing the rough surface	-	-	-	-
<b>PC11.</b> use power drilling machine for drilling different diameter hole in timber and plywood	-	-	-	-
<b>PC12.</b> make timber joint such as lap joint, mortis and tenon joints, dovetail joints and housing joints using appropriate hand tools	-	-	-	-
<b>PC13.</b> assist in making shutter boards as per instructions	-	-	-	-
<b>PC14.</b> maintain tidiness at site location	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC15.</b> follow standard safety measure while operating power tools	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N0313
<b>NOS Name</b>	Assist in making wooden shutters boards using in shuttering carpentry
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Shuttering Carpentry
<b>NSQF Level</b>	3
<b>Credits</b>	TBD
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Clearance Date</b>	22/08/2019



## Qualification Pack

# CON/N0314: Assist in assembling and dismantling conventional and system formwork for R.C.C structures

## Description

This unit describes the skills and knowledge required to provide support in assembling and dismantling conventional and system formwork for R.C.C structures under instructions and close supervision

## Scope

The scope covers the following :

- Assemble and dismantle conventional formwork for R.C.C structures and provide necessary assistance
- Assemble and dismantle system formwork for R.C.C structures and provide necessary assistance

## Elements and Performance Criteria

### *Assemble and dismantle conventional formwork for R.C.C structures and provide necessary assistance*

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

- PC1.** select tools and tackles, materials, components and equipments as per the instructions
- PC2.** shift and stack required quantity of materials, components at work place as per instructions
- PC3.** assist in marking, cutting and sizing of timber for making shutter boards
- PC4.** transfer level from reference points using water level tube
- PC5.** select bamboo, ballis based on height, diameter and thickness
- PC6.** ensure jute thread is kept in water before using it for tying of bamboo, ballis
- PC7.** select , cut and size timber/ plywood of required size for making shutter boards
- PC8.** carry out nailing works in making of shutter boards as per instructions
- PC9.** assist in erecting staging for shuttering using conventional formwork
- PC10.** assist and place props at marked location as per instructions
- PC11.** assist and place shutter boards at specified location as per instructions
- PC12.** assist in aligning and providing support to shutter boards as per instructions using ballis, wooden battens, pipes and props
- PC13.** assist in checking line, level and alignment and making corrective action if required
- PC14.** tie different types of knots effectively
- PC15.** follow method statement for sequence of task
- PC16.** assist in de-shuttering works for removal of shutter boards safely under instructions
- PC17.** follow standard safety procedure and housekeeping practices

### *Assemble and dismantle system formwork for R.C.C structures and provide necessary assistance*

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

- PC18.** select tools and tackles, materials, components and equipment as per instructions
- PC19.** shift and stack required quantity of materials, components at work place as per instructions
- PC20.** assist in marking, cutting and sizing of timber for making shutter boards



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- PC21.** PC21. transfer level from reference points using water level tube
- PC22.** • PC22. select, cut and size timber/ plywood of required size for making shutter  
• boards
- PC23.** carry out nailing works for making of shutter boards as per instructions
- PC24.** assist in assembling and fixing aluminum and steel formwork as per instructions
- PC25.** assist in erecting staging for shuttering using system formwork
- PC26.** assist, place and fix props at marked location as per instructions
- PC27.** assist and place shutter boards at specified location as per instructions
- PC28.** assist in aligning and providing support to shutter board as per instructions using standard components
- PC29.** • assist in checking line, level and alignment and making corrective action if  
• required
- PC30.** • assist in de-shuttering works for removal of shutter boards safely under  
• instructions
- PC31.** follow standard safety procedure and housekeeping practices

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** safety rules and regulations for handling and storing shuttering and scaffolding tools, materials and components
- KU2.** personal protection including use of safety gears and equipments
- KU3.** safe working methods and movements while performing relevant tasks
- KU4.** request procedure for tools & materials and equipment
- KU5.** housekeeping & other site administrative rules
- KU6.** units of measurements
- KU7.** use of measurements and marking tools
- KU8.** use of hand tools for carrying out shuttering works
- KU9.** standard size of hand tools
- KU10.** standard size of components
- KU11.** use of slings, shackles, and belts for lifting
- KU12.** use of water level tube, spirit level, plumb bob, tri-square
- KU13.** how to provide support in shuttering works
- KU14.** different types of tying thread
- KU15.** how to tie various types of knots and its use
- KU16.** use of materials, components and equipments for conventional and system formworks
- KU17.** different types of hand and power tools used for cutting and planing of timber
- KU18.** standard procedure for assembling and dismantling conventional and system formwork
- KU19.** knowledge about storing and handling technique of tools
- KU20.** knowledge about upkeep repair and maintenance of tools
- KU21.** use of personal protective gears



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**KU22.** standard procedure for housekeeping

### 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 in one or more language, preferably in the local language of the site
- GS3.** read instructions, guidelines, sign boards, safety rules & safety tags instructions related to exit routes during emergency at the workplace
- GS4.** speak in one or more language, preferably in one of the local languages of the site
- GS5.** listen and follow instructions given by the superior
- GS6.** communicate orally and effectively with team members
- GS7.** decide whether his workplace is safe for working and also his work is not creating hazardous conditions for other
- GS8.** plan work & organize required resource in coordination with team members and superior
- GS9.** complete work as per agreed time schedule and quality





## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assemble and dismantle conventional formwork for R.C.C structures and provide necessary assistance</i>	15	35	-	-
<b>PC1.</b> select tools and tackles, materials, components and equipments as per the instructions	-	-	-	-
<b>PC2.</b> shift and stack required quantity of materials, components at work place as per instructions	-	-	-	-
<b>PC3.</b> assist in marking, cutting and sizing of timber for making shutter boards	-	-	-	-
<b>PC4.</b> transfer level from reference points using water level tube	-	-	-	-
<b>PC5.</b> select bamboo, ballis based on height, diameter and thickness	-	-	-	-
<b>PC6.</b> ensure jute thread is kept in water before using it for tying of bamboo, ballis	-	-	-	-
<b>PC7.</b> select , cut and size timber/ plywood of required size for making shutter boards	-	-	-	-
<b>PC8.</b> carry out nailing works in making of shutter boards as per instructions	-	-	-	-
<b>PC9.</b> assist in erecting staging for shuttering using conventional formwork	-	-	-	-
<b>PC10.</b> assist and place props at marked location as per instructions	-	-	-	-
<b>PC11.</b> assist and place shutter boards at specified location as per instructions	-	-	-	-
<b>PC12.</b> assist in aligning and providing support to shutter boards as per instructions using ballis, wooden battens, pipes and props	-	-	-	-
<b>PC13.</b> assist in checking line, level and alignment and making corrective action if required	-	-	-	-
<b>PC14.</b> tie different types of knots effectively	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC15.</b> follow method statement for sequence of task	-	-	-	-
<b>PC16.</b> assist in de-shuttering works for removal of shutter boards safely under instructions	-	-	-	-
<b>PC17.</b> follow standard safety procedure and housekeeping practices	-	-	-	-
<i>Assemble and dismantle system formwork for R.C.C structures and provide necessary assistance</i>	<b>15</b>	<b>35</b>	-	-
<b>PC18.</b> select tools and tackles, materials, components and equipment as per instructions	-	-	-	-
<b>PC19.</b> shift and stack required quantity of materials, components at work place as per instructions	-	-	-	-
<b>PC20.</b> assist in marking, cutting and sizing of timber for making shutter boards	-	-	-	-
<b>PC21.</b> PC21. transfer level from reference points using water level tube	-	-	-	-
<b>PC22.</b> • PC22. select, cut and size timber/ plywood of required size for making shutter • boards	-	-	-	-
<b>PC23.</b> carry out nailing works for making of shutter boards as per instructions	-	-	-	-
<b>PC24.</b> assist in assembling and fixing aluminum and steel formwork as per instructions	-	-	-	-
<b>PC25.</b> assist in erecting staging for shuttering using system formwork	-	-	-	-
<b>PC26.</b> assist, place and fix props at marked location as per instructions	-	-	-	-
<b>PC27.</b> assist and place shutter boards at specified location as per instructions	-	-	-	-
<b>PC28.</b> assist in aligning and providing support to shutter board as per instructions using standard components	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC29.</b> <ul style="list-style-type: none"> <li>assist in checking line, level and alignment and making corrective action if required</li> </ul>	-	-	-	-
<b>PC30.</b> <ul style="list-style-type: none"> <li>assist in de-shuttering works for removal of shutter boards safely under instructions</li> </ul>	-	-	-	-
<b>PC31.</b> follow standard safety procedure and housekeeping practices	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



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### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N0314
<b>NOS Name</b>	Assist in assembling and dismantling conventional and system formwork for R.C.C structures
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Shuttering Carpentry
<b>NSQF Level</b>	3
<b>Credits</b>	TBD
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Clearance Date</b>	22/08/2019



## Qualification Pack

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

## Description

This unit describes the skills and knowledge required to erect and dismantle 3.6 meter temporary scaffold

## Scope

The scope covers the following :

- Erect and dismantle temporary scaffold up to 3.6 meter height

## Elements and Performance Criteria

- *Erect and dismantle temporary scaffold up to 3.6 meter height*

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

- PC1.** level area where scaffold need to be erected and check for ground compactness if required
- PC2.** shift and stack required materials, components, tools and tackles at the instructed location
- PC3.** wear and use required safety gadgets and follow trade safety
- PC4.** place base plates and sole boards on the ground as per markings and instructions
- PC5.** use proper components and follow standard procedure for erecting temporary scaffold up to 3.6 m
- PC6.** check verticality of scaffold at first level of erection and correct (if required) before moving to the next level
- PC7.** check for rigidity, stability and support of erected scaffold
- PC8.** fix walk-boards, guard rails, toe-boards and other components on working platform
- PC9.** follow standard procedure for dismantling of 3.6 m temporary scaffold
- 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.** personal protection including use of safety gears and equipment
- KU4.** safe working methods and movements while performing relevant tasks
- KU5.** request procedure for tools & materials
- KU6.** housekeeping & other administrative rules



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- KU7.** use of different types of scaffolds (cup-lock , frame scaffold)
- KU8.** use of tools and tackles in scaffolding works
- KU9.** identification and use of different components
- KU10.** use of tools for measurements and marking
- KU11.** basic arithmetic calculation
- KU12.** units of measurements
- KU13.** standard size of scaffolding components
- KU14.** personal protective equipment for safety
- KU15.** importance of housekeeping
- KU16.** standard procedure for erection and dismantling of 3.6 m temporary scaffold
- KU17.** tools and equipment used for erecting and dismantling 3.6 meter 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 one or more language, preferably the local language of the site
- GS3.** read instructions, guidelines, sign boards, safety rules & safety tags instruction related to exit routes during emergency at the workplace
- GS4.** speak in one or more language, preferably in one of the local languages of site
- GS5.** listen and follow instructions / communication shared by superiors/ co- workers regarding team requirements or interfaces during work processes
- GS6.** orally communicate with co-workers regarding support required to complete the respective work
- GS7.** decide whether the workplace is safe for working and also whether the relevant work is not creating hazardous conditions for others
- GS8.** identify and organize right scaffolding materials
- GS9.** identify and use relevant tools effectively
- GS10.** complete work as per agreed time and quality
- GS11.** minimize wastages
- GS12.** revert to superior for selection/sorting of materials
- GS13.** identify location at which violation of any safety norms may lead to accidents



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
• <i>Erect and dismantle temporary scaffold up to 3.6 meter height</i>	<b>30</b>	<b>70</b>	-	-
<b>PC1.</b> level area where scaffold need to be erected and check for ground compactness if required	-	-	-	-
<b>PC2.</b> shift and stack required materials, components, tools and tackles at the instructed location	-	-	-	-
<b>PC3.</b> wear and use required safety gadgets and follow trade safety	-	-	-	-
<b>PC4.</b> place base plates and sole boards on the ground as per markings and instructions	-	-	-	-
<b>PC5.</b> use proper components and follow standard procedure for erecting temporary scaffold up to 3.6 m	-	-	-	-
<b>PC6.</b> check verticality of scaffold at first level of erection and correct (if required) before moving to the next level	-	-	-	-
<b>PC7.</b> check for rigidity, stability and support of erected scaffold	-	-	-	-
<b>PC8.</b> fix walk-boards, guard rails, toe-boards and other components on working platform	-	-	-	-
<b>PC9.</b> follow standard procedure for dismantling of 3.6 m temporary scaffold	-	-	-	-
<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>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N0101
<b>NOS Name</b>	Erect and dismantle temporary scaffold up to 3.6 meter height
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Masonry
<b>NSQF Level</b>	3
<b>Credits</b>	TBD
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Clearance Date</b>	22/08/2019





## 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

## Elements and Performance Criteria

### *Interact and communicate in effective and conclusive manner*

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 to execute project requirements*

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

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- 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



## Qualification Pack

- 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
- KU9.** importance and need of supporting co-workers facing problems for smooth

## 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.** orally communicate 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



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interact and communicate in effective and conclusive manner</i>	<b>18</b>	<b>42</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 to execute project requirements</i>	<b>12</b>	<b>28</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	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</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>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Clearance Date</b>	22/08/2019



## Qualification Pack

# CON/N9001: Work according to personal health, safety and environment protocol 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

## 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.** 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*

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.** install and apply properly all safety equipment as instructed
- PC11.** follow safety protocol and practices as laid down by site EHS department
- PC12.** undertake and pass height pass test as per EHS guideline

### *Implement good housekeeping practices*

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

- 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



## Qualification Pack

### 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 to be used based on various working conditions
- KU6.** importance of handling tools, equipment and materials as per applicable
- KU7.** health and environments effect of construction materials as per applicability
- KU8.** various environmental protection methods as per applicability
- KU9.** 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 and any other flammable wastes
- KU10.** how to use hazardous material, in a safe and appropriate manner as per applicability
- KU11.** types of fire
- KU12.** procedure of operating different types of fire extinguishers
- KU13.** safety relevant to tools, tackles, & requirement as per applicability
- KU14.** housekeeping activities relevant to task

### 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.** read sign boards, notice boards relevant to safety
- GS5.** speak in one or more language, preferably in one of the local language of the site
- GS6.** listen instructions / communication shared by site EHS and superiors regarding site safety, and conducting tool box talk
- GS7.** communicate reporting of site conditions, hazards, accidents, etc.
- GS8.** not create unsafe conditions for others
- GS9.** keep the workplace clean and tidy
- GS10.** 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
- GS11.** assess and analyze areas which may affect health, safety and environment protocol on the site
- GS12.** ensure personal safety behavior



## Qualification Pack

**GS13.** respond to emergency



## 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>9</b>	<b>21</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> participate in safety awareness programs like Tool Box Talks, safety demonstrations, mock drills, conducted at site	-	-	-	-
<b>PC5.</b> select and operate different types of fire extinguishers corresponding to 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>15</b>	<b>35</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> install and apply properly all safety equipment as instructed	-	-	-	-





## 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> undertake and pass height pass test as per EHS guideline	-	-	-	-
<i>Implement good housekeeping practices</i>	<b>6</b>	<b>14</b>	-	-
<b>PC13.</b> collect and deposit construction waste into identified containers before disposal, separate containers that may be needed for disposal of toxic or hazardous wastes	-	-	-	-
<b>PC14.</b> apply ergonomic principles wherever required	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</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 protocol at construction site
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Clearance Date</b>	22/08/2019

### Assessment Guidelines and Assessment Weightage

#### Assessment Guidelines

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



## Qualification Pack

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 timeframe 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/N0312.Use and maintain tools and equipment relevant to shuttering carpentry	30	70	-	-	100	10
CON/N0313.Assist in making wooden shutters boards using in shuttering carpentry	30	70	-	-	100	25
CON/N0314.Assist in assembling and dismantling conventional and system formwork for R.C.C structures	30	70	-	-	100	30
CON/N0101.Erect and dismantle temporary scaffold up to 3.6 meter height	30	70	-	-	100	10



## Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N8001.Work effectively in a team to deliver desired results at the workplace	30	70	-	-	100	10
CON/N9001.Work according to personal health, safety and environment protocol at construction site	30	70	-	-	100	15
<b>Total</b>	<b>180</b>	<b>420</b>	<b>-</b>	<b>-</b>	<b>600</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.



## Qualification Pack

<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.