





# Scaffolder - System

QP Code: CON/Q0305

Version: 1.0

NSQF Level: 4

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# **Contents**

CON/Q0305: Scaffolder - System	3
Brief Job Description	3
Applicable National Occupational Standards (NOS)	3
Compulsory NOS	3
Qualification Pack (QP) Parameters	
CON/N0351: Erect and dismantle common customized system scaffolds	5
CON/N0352: Erect and dismantle staircase tower and mobile tower scaffold	11
CON/N8001: Work effectively in a team to deliver desired results at the workplace	17
CON/N8002: Plan and organize work to meet expected outcomes	21
CON/N9001: Work according to personal health, safety and environment protocol at constru	iction site
	25
Assessment Guidelines and Weightage	29
Assessment Guidelines	
Assessment Weightage	
Acronyms	
Glossary	



# CON/Q0305: Scaffolder - System

### **Brief Job Description**

Scaffolder - System is responsible for erecting, dismantling and maintaining of various types of scaffold including system scaffold, staircase tower and mobile tower scaffolds at specified heights. The individual should have good knowledge of safe working practices and procedures while working at heights

#### **Personal Attributes**

The individual is expected to be physically fit and should be able to work across various locations and height withstanding extreme condition while working. The individual should be organized, diligent, methodical and able to implement and maintain safety practices. The individual should have independent ability to take quick decisions and have good communication skills and shall be able to work within a team to handle various scaffolding tools and materials and work responsibly for own work within defined limit.

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

#### **Compulsory NOS:**

- 1. CON/N0351: Erect and dismantle common customized system scaffolds
- 2. CON/N0352: Erect and dismantle staircase tower and mobile tower scaffold
- 3. CON/N8001: Work effectively in a team to deliver desired results at the workplace
- 4. CON/N8002: Plan and organize work to meet expected outcomes
- 5. CON/N9001: Work according to personal health, safety and environment protocol at construction site

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

Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Scaffolding
Country	India
NSQF Level	4
Credits	NA





Aligned to NCO/ISCO/ISIC Code	NCO�2004/9313.90
Minimum Educational Qualification & Experience	5th Class with 3-5 Years of experience as a certified Assistant Scaffolder- System OR 5th Class with 3-5 Years of experience in case of a Non trained worker, in same occupation
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	Recommended training period of 8 to 12 weeks as per QP of Scaffolder System
Minimum Job Entry Age	18 Years
Last Reviewed On	23/03/2015
Next Review Date	31/03/2022
<b>Deactivation Date</b>	17/08/2023
NSQC Approval Date	19/05/2015
Version	1.0
Reference code on NQR	2015/CON/CSDCI/00073
NQR Version	1.0





# CON/N0351: Erect and dismantle common customized system scaffolds

#### **Description**

This unit describes the skills and knowledge required to erect and dismantle common system scaffold independently

#### Scope

The scope covers the following:

- Prepare work area for scaffold erection
- Erect and alter customized system scaffolds(tube and coupler, frame scaffold)
- Dismantle the scaffold at a construction site

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

#### Prepare work area for scaffold erection

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

- PC1. determine the quantity of scaffolding material and component required for erection based on type of scaffolds and height requirements
- PC2. sort out all the components prior to erection of scaffold and replace the damaged ones
- PC3. check for and ensure level, compactness of ground by visual / physical checks
- ensure all the required components, tools, equipment and material are present prior to PC4. starting scaffolding work
- check and fix guard rails and safety nets around the scaffold area to ensure safe working PC5. conditions in case of already erected scaffold or while working at heights
- prevent unauthorized access to the work area by providing proper barricades around the PC6. work area

#### Erect and alter customized system scaffolds(tube and coupler, frame scaffold)

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

- PC7. place base plates and sole boards on ground as per the marking for setting the scaffolds
- PC8. use proper components and follow erection with respect to types of scaffold used as per standard practices
- PC9. check verticality of scaffold at first level of erection and correct (if required) before moving to the next level
- **PC10.** check for rigidity and stability of scaffold
- **PC11.** provide appropriate support to the scaffold erected as per standard practice and instructions from superiors
- **PC12.** fix walk boards, guard rail, toe boards and other components on the working
- **PC13.** offer for scaffolding inspection , do any rework as suggested by inspector and get it approve Dismantle the scaffold

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

**PC14.** follow and ensure standard dismantling procedure according to types of scaffold





- **PC15.** check for stability, rigidity of scaffold before dismantling and maintain during dismantling
- PC16. remove guard rails, toe boards, walk boards and components sequentially keeping the overall safety in mind
- PC17. lower scaffold components in a safe manner following the proper laid down procedure
- **PC18.** clean, repair and store scaffold components for further use

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

The individual on the job needs to know and understand:

- standard practices for scaffolding work KU1.
- KU2. safety rules and regulation for handling and storing require scaffolding tools, equipment and materials
- KU3. personal protection including the use of relevant safety gears and equipments
- service request procedures for tools, material and equipment KU4.
- KU5. statutory compliance requirements related to working at height
- KU6. sketches / schematic working drawing that may be required for setting / erection of scaffolds
- **KU7.** different types of scaffolds system such as pipe, couplers and other common scaffold system (cup-lock system, peri, doka, layher) and method of erection
- **KU8.** basic principles of measurement and marking
- KU9. how to select and use different components of scaffolds
- **KU10.** types and usage of different scaffolding components as per the site requirements
- **KU11.** how to follow a methodical scaffolding plan as per the site requirements
- KU12. maintenance of safe erection / dismantling of scaffolds
- **KU13.** selection and use of various lifting devices
- **KU14.** check and sort out all the related scaffolding components
- **KU15.** identify and replace any damaged components
- **KU16.** how to check and ensure alignment of scaffold
- **KU17.** use of single and double pole scaffold
- KU18. basic knowledge of formwork material
- **KU19.** basic process of shuttering work
- KU20. knowledge and understanding about loading
- **KU21.** importance of getting scaffolding checked by inspector

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

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

- GS1. write in one or more language, preferably the local language at the site
- GS2. read in one or more language, preferably the local language at the site
- GS3. read sketches/drawing or instruction provided for the work
- GS4. read instructions, guidelines, sign boards, safety rules, safety tag and instruction related to exit routes during emergencies at the work place





- GS5. speak in one or more language, preferably one of the local language at the site
- GS6. listen and follow instructions given by the superior
- **GS7**. decide whether workplace is safe for working and also his work is not creating hazardous conditions for other
- GS8. plan work and organize required resources in coordination with team members and superiors
- complete work as per agreed time schedule and quality GS9.
- GS10. rectify any problem in already erected scaffold
- **GS11.** resolve any conflict within the team
- **GS12.** optimize resources
- **GS13.** minimize wastage
- **GS14.** revert to superior for selection/sorting of materials
- **GS15.** evaluate the complexity of the tasks to determine if any guidance is required from the superior
- **GS16.** violation of any safety norms which may lead to accidents





### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Prepare work area for scaffold erection	4	16	-	-
<b>PC1.</b> determine the quantity of scaffolding material and component required for erection based on type of scaffolds and height requirements	1	3	-	-
<b>PC2.</b> sort out all the components prior to erection of scaffold and replace the damaged ones	-	2	-	-
<b>PC3.</b> check for and ensure level, compactness of ground by visual / physical checks	1	3	-	-
<b>PC4.</b> ensure all the required components, tools, equipment and material are present prior to starting scaffolding work	-	3	-	-
<b>PC5.</b> check and fix guard rails and safety nets around the scaffold area to ensure safe working conditions in case of already erected scaffold or while working at heights	1	3	-	-
<b>PC6.</b> prevent unauthorized access to the work area by providing proper barricades around the work area	1	2	-	-
Erect and alter customized system scaffolds(tube and coupler, frame scaffold)	8	32	-	-
<b>PC7.</b> place base plates and sole boards on ground as per the marking for setting the scaffolds	2	8	-	-
<b>PC8.</b> use proper components and follow erection with respect to types of scaffold used as per standard practices	1	4	-	-
<b>PC9.</b> check verticality of scaffold at first level of erection and correct (if required) before moving to the next level	1	4	-	-
PC10. check for rigidity and stability of scaffold	1	4	-	-
<b>PC11.</b> provide appropriate support to the scaffold erected as per standard practice and instructions from superiors	1	4	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> fix walk boards, guard rail, toe boards and other components on the working	1	4	-	-
<b>PC13.</b> offer for scaffolding inspection , do any rework as suggested by inspector and get it approve	1	4	-	-
Dismantle the scaffold	8	32	-	-
<b>PC14.</b> follow and ensure standard dismantling procedure according to types of scaffold	2	8	-	-
<b>PC15.</b> check for stability, rigidity of scaffold before dismantling and maintain during dismantling	2	8	-	-
<b>PC16.</b> remove guard rails, toe boards, walk boards and components sequentially keeping the overall safety in mind	1	4	-	-
<b>PC17.</b> lower scaffold components in a safe manner following the proper laid down procedure	2	8	-	-
<b>PC18.</b> clean, repair and store scaffold components for further use	1	4	-	-
NOS Total	20	80	-	-





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

NOS Code	CON/N0351
NOS Name	Erect and dismantle common customized system scaffolds
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Scaffolding
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	23/03/2015
Next Review Date	31/03/2022
NSQC Clearance Date	19/05/2015

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#### **Oualification Pack**



# CON/N0352: Erect and dismantle staircase tower and mobile tower scaffold

#### **Description**

This unit describes the skills and knowledge required to erect and dismantle staircase tower and mobile tower scaffold

#### Scope

The scope covers the following:

- Erect staircase tower scaffold at construction site
- Dismantle staircase tower scaffold at construction site
- Erect mobile tower scaffold at construction site
- Dismantle mobile tower scaffold at construction site

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

#### Erect staircase in tower scaffold

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

- **PC1.** check for and ensure level and compactness of ground by visual / physical check
- **PC2.** place base plates and sole boards on ground as per marking
- **PC3.** follow erection procedure for staircase tower scaffold as per standard practice
- **PC4.** check verticality of staircase tower scaffold at first level of erection and correct before moving on to subsequent levels
- **PC5.** check for rigidity and stability of staircase tower scaffold
- **PC6.** provide support to staircase tower scaffold as per standard practice
- **PC7.** fix guard rail, gap plates, kickboard and other related components on the staircase scaffold

#### Dismantle staircasein tower scaffold

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

- **PC8.** follow dismantling procedure as per standard practices
- **PC9.** remove guard rails, gap plates, kickboards and components sequentially
- **PC10.** check for stability, rigidity of scaffold before dismantling and maintain during dismantling
- **PC11.** lower staircase scaffold components in a safe manner
- PC12. clean, repair and store staircase scaffold components for further use

#### Erect mobile tower scaffold

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

- PC13. check for and ensure level, compactness of ground by visual / physical check
- **PC14.** check for working conduction of castor wheel
- PC15. follow erection procedure for mobile tower scaffold as per standard practice
- **PC16.** check verticality of mobile tower scaffold at first level of erection and correct before moving on to subsequent levels

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#### **Oualification Pack**



- **PC17.** check for rigidity and stability of mobile tower scaffold
- **PC18.** provide support to mobile tower scaffold as per standard practices
- PC19. fix walk boards, guard rail, toe boards and other components
- PC20. unlock castors and move scaffold as per requirement
- **PC21.** maintain prescribed distance from overhead power lines (if any)

#### Dismantle mobile tower scaffold

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

- **PC22.** follow appropriate dismantling procedure as per standard practices
- PC23. remove guard rails, toe boards, walk boards and components sequentially
- PC24. check for stability, rigidity of scaffold before dismantling and maintain during dismantling
- PC25. lower mobile tower scaffold components in a safe manner
- PC26. clean, repair and store mobile tower scaffold components for further use

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

The individual on the job needs to know and understand:

- **KU1.** standard practices for scaffolding work
- **KU2.** safety rules and regulation for handling and storing require scaffolding tools, equipment and materials
- KU3. personal protection including the use of relevant safety gears and equipments
- **KU4.** service request procedures for tools, material and equipment
- **KU5.** statutory compliance requirements related to working at height
- **KU6.** standard procedure for erection, altering and dismantling of tower scaffolds and staircases
- **KU7.** methods and sequence of loading, unloading and shifting of scaffolding components
- **KU8.** sketches / schematic working drawing that may be required for setting / erection of scaffolds
- **KU9.** basic principles of measurement and marking
- **KU10.** how to select and use components of scaffolds along with the related tools and equipments
- **KU11.** basics of various types of staircase and mobile towers along with the components details and erection procedures as per the standards practices including the following: internal access towers using working decks, bracing elements and access decks (made of steel, aluminum, plywood or any of the combination) platform stairs / towers made of aluminum to construct a landing type stair tower using standard components compact stair tower used for compact spaces such as stairwells using construction made of standard components (standards, ledgers and decks) along with other components like (stairway stringers, deck locking clamps and handrails) modular stairs using single stair components allround stairway tower suitable for stair access in public areas and escape stair towers made using standard components (standards, ledgers and decks) along with other components like (stairway stringers, deck locking clamps and handrails), height can be adjusted and stair width can be varied using different decks for treads as per the requirements
- **KU12.** how to follow a methodical scaffolding plan as per the site requirements
- **KU13.** identify and replace any damaged components before setting or erection of scaffolds

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





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

- **GS1.** write in one or more language, preferably the local language at the site
- **GS2.** read in one or more language, preferably the local language at the site
- **GS3.** read sketches/drawing or instruction provided for the work
- **GS4.** read instructions, guidelines, sign boards, safety rules and safety tags at the construction site
- **GS5.** speak in one or more language, preferably one of the local language at the site
- **GS6.** listen and follow instructions given by the superior on the appropriate process to be followed
- **GS7.** orally communicate to people from scaffolding trade on the surface preparation, erection and dismantling procedure, mobility of tower, etc.
- **GS8.** decide whether his workplace is safe for working and also his work is not creating hazardous conditions for other
- GS9. plan work and organize require resource in coordination with team members and superior
- **GS10.** complete work as per agreed time schedule and quality
- **GS11.** rectify any problem in already erected scaffold
- **GS12.** resolve any conflict within the team
- GS13. erect staircase tower in and around obstruction or in case of any opening area
- **GS14.** optimize resources
- **GS15.** minimize resources
- **GS16.** revert to superior for selection/sorting of materials
- **GS17.** evaluate the complexity of the tasks to determine if any guidance is required from the seniors at the construction site
- **GS18.** evaluate violation of any safety norms which may lead to accidents





### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Erect staircase in tower scaffold	5	20	-	-
<b>PC1.</b> check for and ensure level and compactness of ground by visual / physical check	-	3	-	-
<b>PC2.</b> place base plates and sole boards on ground as per marking	1	4	-	-
<b>PC3.</b> follow erection procedure for staircase tower scaffold as per standard practice	1	3	-	-
<b>PC4.</b> check verticality of staircase tower scaffold at first level of erection and correct before moving on to subsequent levels	1	3	-	-
<b>PC5.</b> check for rigidity and stability of staircase tower scaffold	1	2	-	-
<b>PC6.</b> provide support to staircase tower scaffold as per standard practice	-	3	-	-
<b>PC7.</b> fix guard rail, gap plates, kickboard and other related components on the staircase scaffold	1	2	-	-
Dismantle staircasein tower scaffold	5	20	-	-
<b>PC8.</b> follow dismantling procedure as per standard practices	1	4	-	-
<b>PC9.</b> remove guard rails, gap plates, kickboards and components sequentially	1	4	-	-
<b>PC10.</b> check for stability, rigidity of scaffold before dismantling and maintain during dismantling	1	4	-	-
<b>PC11.</b> lower staircase scaffold components in a safe manner	1	4	-	-
<b>PC12.</b> clean, repair and store staircase scaffold components for further use	1	4	-	-
Erect mobile tower scaffold	5	20	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> check for and ensure level, compactness of ground by visual / physical check	-	3	-	-
<b>PC14.</b> check for working conduction of castor wheel	1	2	-	-
<b>PC15.</b> follow erection procedure for mobile tower scaffold as per standard practice	1	4	-	-
<b>PC16.</b> check verticality of mobile tower scaffold at first level of erection and correct before moving on to subsequent levels	-	3	-	-
<b>PC17.</b> check for rigidity and stability of mobile tower scaffold	-	2	-	-
<b>PC18.</b> provide support to mobile tower scaffold as per standard practices	1	2	-	-
<b>PC19.</b> fix walk boards, guard rail, toe boards and other components	-	2	-	-
<b>PC20.</b> unlock castors and move scaffold as per requirement	1	1	-	-
<b>PC21.</b> maintain prescribed distance from overhead power lines (if any)	1	1	-	-
Dismantle mobile tower scaffold	5	20	-	-
<b>PC22.</b> follow appropriate dismantling procedure as per standard practices	1	4	-	-
<b>PC23.</b> remove guard rails, toe boards, walk boards and components sequentially	1	4	-	-
<b>PC24.</b> check for stability, rigidity of scaffold before dismantling and maintain during dismantling	1	4	-	-
<b>PC25.</b> lower mobile tower scaffold components in a safe manner	1	4	-	-
<b>PC26.</b> clean, repair and store mobile tower scaffold components for further use	1	4	-	-
NOS Total	20	80	-	-





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

NOS Code	CON/N0352
NOS Name	Erect and dismantle staircase tower and mobile tower scaffold
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Scaffolding
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	23/03/2015
Next Review Date	31/03/2022
NSQC Clearance Date	19/05/2015

# Skill Development Council

#### **Oualification 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





- 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





### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Interact and communicate in effective and conclusive manner	14	34	-	-
<b>PC1.</b> pass on work related information/ requirement clearly to the team members	2	5	-	-
<b>PC2.</b> inform co-workers and superiors about any kind of deviations from work	2	5	-	-
<b>PC3.</b> address the problems effectively and report if required to immediate supervisor appropriately	3	7	-	-
<b>PC4.</b> receive instructions clearly from superiors and respond effectively on the same	2	5	-	-
<b>PC5.</b> communicate to team members/subordinates for appropriate work technique and method	3	7	-	-
<b>PC6.</b> seek clarification and advice as per the requirement and applicability	2	5	-	-
Support co-workers to execute project requirements	16	36	-	-
<b>PC7.</b> hand over the required material, tools tackles, equipment and work fronts timely to interfacing teams	8	18	-	-
<b>PC8.</b> work together with co-workers in a synchronized manner	8	18	-	-
NOS Total	30	70	-	-





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

NOS Code	CON/N8001
NOS Name	Work effectively in a team to deliver desired results at the workplace
Sector	Construction
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	TBD
Version	1.1
Last Reviewed Date	23/05/2015
Next Review Date	31/03/2022
NSQC Clearance Date	21/07/2016

# Skill Development Council

#### **Oualification Pack**



# CON/N8002: Plan and organize work to meet expected outcomes

#### **Description**

This unit describes the knowledge and the skills required for an individual to plan and organize own work in order to meet expected outcome

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

#### Prioritize work activities to achieve desired results

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

- **PC1.** understand clearly the targets and timelines set by superiors
- **PC2.** plan activities as per schedule and sequence
- **PC3.** provide guidance to the subordinates to obtain desired outcome
- **PC4.** plan housekeeping activities prior to and post completion of work

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

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

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

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

The individual on the job needs to know and understand:

- **KU1.** importance of proper housekeeping
- **KU2.** policies, procedures and work targets set by superiors
- KU3. roles and responsibilities in executing the work for subordinates and self
- **KU4.** standard practices of work to be adopted for assigned task
- **KU5.** how to use available resources in a judicious and appropriate manner to minimize wastages or damage

#### **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.** list out the assigned works and targets





- **GS3.** read in one or more language, preferably the local language at the site
- **GS4.** read communication from co-workers, superiors and notices from other departments as per requirement of the level
- **GS5.** speak in one or more language, preferably one of the local language at the site
- **GS6.** listen and follow communication shared by co-workers regarding standard work processes, resources available, timelines, etc.
- **GS7.** communicate effectively with co-workers and subordinates
- **GS8.** decide on what sequence is to be adopted for execution of work
- **GS9.** plan and organize the materials, tools, tackles and equipment required to execute the work
- GS10. complete all assigned task with proper planning and organizing
- **GS11.** arrange or seek help to arrange for material, tools and tackles in case of shortfall
- **GS12.** analyze areas of work which could result in a delay of work, wastage of material or damage to tools and tackles
- **GS13.** evaluate potential solutions to minimize avoidable delays and wastages at the construction site





### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Prioritize work activities to achieve desired results	9	22	-	-
<b>PC1.</b> understand clearly the targets and timelines set by superiors	2	5	-	-
<b>PC2.</b> plan activities as per schedule and sequence	2	5	-	-
<b>PC3.</b> provide guidance to the subordinates to obtain desired outcome	3	7	-	-
<b>PC4.</b> plan housekeeping activities prior to and post completion of work	2	5	-	-
Organize desired resources prior to commencement of work	21	48	-	-
<b>PC5.</b> list and arrange required resources prior to commencement of work	3	7	-	-
<b>PC6.</b> select and employ correct tools, tackles and equipment for completion of desired work	3	7	-	-
<b>PC7.</b> complete the work with allocated resources	3	7	-	-
PC8. engage allocated manpower in an appropriate manner	3	6	-	-
<b>PC9.</b> use resources in an optimum manner to avoid any unnecessary wastage	3	6	-	-
<b>PC10.</b> employ tools, tackles and equipment with care to avoid damage to the same	2	5	-	-
PC11. organize work output, materials used, tools and tackles deployed	2	5	-	-
<b>PC12.</b> processes adopted to be in line with the specified standards and instructions	2	5	-	-
NOS Total	30	70	-	-





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

NOS Code	CON/N8002
NOS Name	Plan and organize work to meet expected outcomes
Sector	Construction
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	23/03/2015
Next Review Date	31/03/2022
NSQC Clearance Date	19/05/2015

# Table of Skill Development Council

#### **Oualification 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.** 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:

- PC6. 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)
- **PC7.** handle all required tools, tackles, materials & equipment safely
- **PC8.** follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines
- **PC9.** install and apply properly all safety equipment as instructed
- **PC10.** follow safety protocol and practices as laid down by site EHS department

#### Implement good housekeeping practices

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

- **PC11.** collect and deposit construction waste into identified containers before disposal, separate containers that may be needed for disposal of toxic or hazardous wastes
- **PC12.** apply ergonomic principles wherever required

#### **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.** appropriate personal protective equipment to used based on various
- **KU6.** importance of handling tools, equipment and materials as per applicable
- **KU7.** health and environments effect of construction materials as per
- **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 any other flammable wastes
- KU10. how to use hazardous material, in a safe and appropriate manner as per
- KU11. safety relevant to tools, tackles, & requirement as per applicability
- **KU12.** 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
- **GS13.** respond to emergency





### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Follow safety norms as defined by organization	11	27	-	-
<b>PC1.</b> identify and report any hazards, risks or breaches in site safety to the appropriate authority	2	5	-	-
<b>PC2.</b> follow emergency and evacuation procedures in case of accidents, fires, natural calamities	2	5	-	-
<b>PC3.</b> follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable	3	7	-	-
<b>PC4.</b> participate in safety awareness programs like Tool Box Talks, safety demonstrations, mock drills, conducted at site	2	5	-	-
<b>PC5.</b> identify near miss , unsafe condition and unsafe act	2	5	-	-
Adopt healthy & safe work practices	15	33	-	-
PC6. 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)	3	7	-	-
<b>PC7.</b> handle all required tools, tackles , materials & equipment safely	2	5	-	-
PC8. follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines	2	5	-	-
<b>PC9.</b> install and apply properly all safety equipment as instructed	4	8	-	-
<b>PC10.</b> follow safety protocol and practices as laid down by site EHS department	4	8	-	-
Implement good housekeeping practices	4	10	-	-





Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> collect and deposit construction waste into identified containers before disposal, separate containers that may be needed for disposal of toxic or hazardous wastes	2	5	-	-
<b>PC12.</b> apply ergonomic principles wherever required	2	5	-	-
NOS Total	30	70	-	-





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

NOS Code	CON/N9001
NOS Name	Work according to personal health, safety and environment protocol at construction site
Sector	Construction
Sub-Sector	Generic
Occupation	Generic
NSQF Level	3
Credits	TBD
Version	1.2
Last Reviewed Date	23/05/2015
Next Review Date	31/03/2022
NSQC Clearance Date	21/07/2016

# 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) (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 theory part will be based on knowledge bank of questions created by the SSC.
- 3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
- 4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
- 5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
- 6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

#### Minimum Aggregate Passing % at QP Level: 70





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

# **Assessment Weightage**

### Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N0351.Erect and dismantle common customized system scaffolds	20	80	-	-	100	30
CON/N0352.Erect and dismantle staircase tower and mobile tower scaffold	20	80	-	-	100	30
CON/N8001.Work effectively in a team to deliver desired results at the workplace	30	70	-	-	100	10
CON/N8002.Plan and organize work to meet expected outcomes	30	70	-	-	100	15
CON/N9001.Work according to personal health, safety and environment protocol at construction site	30	70	-	-	100	15
Total	130	370	-	-	500	100





# **Acronyms**

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





# Glossary

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





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