



Rigger - Precast Erection

QP Code: CON/Q0703

Version: 2.0

NSQF Level: 4

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CON/Q0703: Rigger - Precast Erection

Brief Job Description

This person is responsible for providing support in heavy lifting, unloading, and aligning RCC precast units and components by means of cranes or other heavy lifting equipment's and applying specified grouting and caulking agents to the precast joints by suitable methods at construction sites.

Personal Attributes

The individual is expected to be physically fit and able to work across various location and height withstanding construction environment while working. The person should be able to implement and maintain safety practices as applicable to the nature of work. The job holder should preferably be free from vertigo problem, cardiovascular diseases as the nature of work involves handling heavy loads and working at height.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [CON/N0709: Provide support in heavy lifting of precast units](#)
2. [CON/N0710: Unload, position and align RCC precast components](#)
3. [CON/N0711: Apply grout and caulking agents in RCC Precast components](#)
4. [CON/N8001: Work effectively in a team to deliver desired results at the workplace](#)
5. [CON/N8002: Plan and organize work to meet expected outcomes](#)
6. [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	Rigging
Country	India
NSQF Level	4



Qualification Pack



Credits	NA
Aligned to NCO/ISCO/ISIC Code	NCO-2004/7215.10
Minimum Educational Qualification & Experience	5th Class with 2-3 Years of experience as a certified Khalasi (Assistant Rigger) 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	5th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	04/03/2020
Next Review Date	24/07/2023
Deactivation Date	31/08/2023
NSQC Approval Date	22/08/2019
Version	2.0
Reference code on NQR	2019/CON/CSDCI/03296
NQR Version	1.0



CON/N0709: Provide support in heavy lifting of precast units

Description

This unit describes the skills and knowledge required to provide support in heavy lifting of precast units

Scope

The scope covers the following :

- Shift precast units as per instruction
- Carry out preparatory work prior to lifting precast units
- Provide support in heavy lifting work

Elements and Performance Criteria

Shift precast units as per instruction

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

- PC1.** select and use appropriate rigging gears required for heavy material shifting for precast units at construction site
- PC2.** anchor precast units and hook up with the prescribed lifting equipment by using slings, shackle, rope or lifting hooks and secure properly against slipping or deflection
- PC3.** tie down the precast units to the transporting vehicle using chains, binders, belts etc. to stabilize the load and prevent damage during transportation
- PC4.** remove all bracing, packing and protective edges from the units, as required and prepare the precast unit for unloading by equipment
- PC5.** carry out visual checks to the precast units for chipped edges, cracks, blemishes, stains and edge condition caused during shifting and report to senior accordingly
- PC6.** unload precast units safely under supervision at the specified location

Carry out preparatory work prior to lifting precast units

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

- PC7.** carry out visual checking for availability of lifting gears, tools and tackles prior to start lifting works
- PC8.** inspect lifting tools and tackles for their safe using conditions
- PC9.** check that the lifting equipment and precast components are placed well away from any overhead power lines or service lines
- PC10.** check precast components for good condition of embedded parts like bolts, clearance of holes provided for post tensioning sleeves in the RCC member and report immediately if any discrepancy found
- PC11.** carry out visual checking to the work location for barricading, presence of signage and availability of required PPEs
- PC12.** erect work safety measures in accordance with plan and instruction
- PC13.** work with respective equipment operator in order to grade and prepare the base of lifting equipment and units to be lifted
- PC14.** provide adequate level, compactness and well drainage to the prepared base



Qualification Pack



Provide support in heavy lifting work

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

- PC15.** attach slings, lifting belts to the right location of the load to be lifted as per instruction
- PC16.** attach shackle, hooks to the load as per requirement
- PC17.** check tightness and locking of shackle, hooks to ensure safety
- PC18.** attach tag line to the load at required locations
- PC19.** control position of suspended loads using tag line according to the signals or instructions

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard procedure for construction rigging works
- KU2.** safety rules and regulation for handling and storing relevant rigging tools, equipment and materials
- KU3.** personal protection including the use of relevant safety gears & equipments
- KU4.** service request procedures for tools, materials and equipments
- KU5.** basic principles of measurement, geometry and arithmetic calculation
- KU6.** conversion of units of linear measurements
- KU7.** units of measurements
- KU8.** hand tools required to carry out material lifting activity and their use
- KU9.** rigging tools required to lift structural steel sections or assemblies and their use
- KU10.** required nature of base level and compaction required for equipment during lifting
- KU11.** technique of guiding suspended object through tag lines to location of erection
- KU12.** working mechanism of load lifting equipments like cranes winches, etc.
- KU13.** specification of lifting tools and tackles as per load lifting requirement
- KU14.** interpretation of gestures/ signals by signaller during load lifting work

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 in the local language of the site
- GS3.** read various, sign boards, safety rules and safety tags, instructions related to exit routes during emergency at the workplace
- GS4.** speak in one or more language, preferably one of the local language at site
- GS5.** listen and follow instructions given by the superior
- GS6.** orally communicate with co-workers regarding support required to complete the respective work
- GS7.** decide whether his workplace is safe for working and also his work is not creating hazardous conditions for other
- GS8.** decide whether the base of staging is levelled and compacted adequately



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- GS9.** plan work and organize required resource in coordination with team members and superiors
- GS10.** complete work as per agreed time and quality
- GS11.** tie down the precast units to the transporting vehicle and stabilize the load and prevent damage during transportation
- GS12.** resolve any conflict within the team
- GS13.** calculate the appropriate quantity of required materials as per applicability
- GS14.** optimize resources
- GS15.** minimize wastages
- GS16.** revert to superior for selection/sorting of materials
- GS17.** evaluate the complexity of the tasks to and seek assistance and support wherever required from the superior
- GS18.** identify and assess how violation of any safety norms may lead to accidents



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Shift precast units as per instruction</i>	10	25	-	-
PC1. select and use appropriate rigging gears required for heavy material shifting for precast units at construction site	-	-	-	-
PC2. anchor precast units and hook up with the prescribed lifting equipment by using slings, shackle, rope or lifting hooks and secure properly against slipping or deflection	-	-	-	-
PC3. tie down the precast units to the transporting vehicle using chains, binders, belts etc. to stabilize the load and prevent damage during transportation	-	-	-	-
PC4. remove all bracing, packing and protective edges from the units, as required and prepare the precast unit for unloading by equipment	-	-	-	-
PC5. carry out visual checks to the precast units for chipped edges, cracks, blemishes, stains and edge condition caused during shifting and report to senior accordingly	-	-	-	-
PC6. unload precast units safely under supervision at the specified location	-	-	-	-
<i>Carry out preparatory work prior to lifting precast units</i>	12	28	-	-
PC7. carry out visual checking for availability of lifting gears, tools and tackles prior to start lifting works	-	-	-	-
PC8. inspect lifting tools and tackles for their safe using conditions	-	-	-	-
PC9. check that the lifting equipment and precast components are placed well away from any overhead power lines or service lines	-	-	-	-



Qualification Pack



Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. check precast components for good condition of embedded parts like bolts, clearance of holes provided for post tensioning sleeves in the RCC member and report immediately if any discrepancy found	-	-	-	-
PC11. carry out visual checking to the work location for barricading, presence of signage and availability of required PPEs	-	-	-	-
PC12. erect work safety measures in accordance with plan and instruction	-	-	-	-
PC13. work with respective equipment operator in order to grade and prepare the base of lifting equipment and units to be lifted	-	-	-	-
PC14. provide adequate level, compactness and well drainage to the prepared base	-	-	-	-
<i>Provide support in heavy lifting work</i>	7	18	-	-
PC15. attach slings, lifting belts to the right location of the load to be lifted as per instruction	-	-	-	-
PC16. attach shackle, hooks to the load as per requirement	-	-	-	-
PC17. check tightness and locking of shackle, hooks to ensure safety	-	-	-	-
PC18. attach tag line to the load at required locations	-	-	-	-
PC19. control position of suspended loads using tag line according to the signals or instructions	-	-	-	-
NOS Total	29	71	-	-



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N0709
NOS Name	Provide support in heavy lifting of precast units
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Rigging
NSQF Level	3
Credits	TBD
Version	2.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	22/08/2019



CON/N0710: Unload, position and align RCC precast components

Description

This unit describes the skills and knowledge required to unload, position and align RCC precast components

Scope

The scope covers the following :

- Unload, position and align precast units

Elements and Performance Criteria

Unload, position and align precast units

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

- PC1.** check for completion of preparatory works prior to unloading precast units to the erection location and report if any inadequacy observed to superior or concerned authority
- PC2.** signal equipment operator to lift and locate precast units into final position and to bring the unit to the proper elevation and position
- PC3.** guide units into positions using guy lines and hook as per instruction
- PC4.** unload steel units at specified location under close supervision of senior personnel
- PC5.** install temporary bracing supports and connections such as pony clamps, tilt up jacks, turn buckles, guy lines to stabilize the unit in its position
- PC6.** check vertical and horizontal alignment of precast units and make suitable adjustments using appropriate measuring tools
- PC7.** place shims, bearing pads at appropriate locations as per instruction
- PC8.** clean bolts, inserts so that they are free of dust, debris or damaged threads and report if discrepancy observed to senior authority
- PC9.** use PPEs and relevant safety measures as per standard practice of working at height

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard procedure for construction rigging works
- KU2.** safety rules and regulation for handling and storing relevant rigging tools, equipment and materials
- KU3.** personal protection including the use of relevant safety gears & equipments
- KU4.** service request procedures for tools, materials and equipments
- KU5.** basic principles of measurement, geometry and arithmetic calculation
- KU6.** conversion of units of linear measurements
- KU7.** units of measurements
- KU8.** hand tools required to carry out material lifting activity and their use



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- KU9.** required nature of base/ platform level and readiness required prior to erection
- KU10.** technique of guiding suspended object through tag lines to location of erection
- KU11.** working mechanism of load lifting equipments like cranes winches, etc.
- KU12.** specification of lifting tools and tackles as per load lifting requirement
- KU13.** request procedure for material, tools and equipments
- KU14.** interpretation of gestures/ signals by signaller during load lifting work
- KU15.** how to check alignment of the erected structures

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 in the local language of the site
- GS3.** read various, sign boards, safety rules and safety tags, instructions related to exit routes during emergency at the workplace
- GS4.** speak in one or more language, preferably one of the local language at site
- GS5.** listen and follow instructions given by the superior
- GS6.** orally communicate with co-workers regarding support required to complete the respective work
- GS7.** decide whether his workplace is safe for working and also his work is not creating hazardous conditions for other
- GS8.** decide whether the rigging gears are safe to be used for erection activities
- GS9.** plan work and organize required resource in coordination with team members and superiors
- GS10.** complete work as per agreed time and quality
- GS11.** make suitable adjustments for vertical and horizontal alignment of precast units
- GS12.** resolve any conflict within the team
- GS13.** calculate the appropriate quantity of required materials as per applicability
- GS14.** optimize resources
- GS15.** minimize wastages
- GS16.** revert to superior for selection/sorting of materials
- GS17.** evaluate the complexity of the tasks to and seek assistance and support wherever required from the superior
- GS18.** identify and assess how violation of any safety norms may lead to accidents



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Unload, position and align precast units</i>	30	70	-	-
PC1. check for completion of preparatory works prior to unloading precast units to the erection location and report if any inadequacy observed to superior or concerned authority	-	-	-	-
PC2. signal equipment operator to lift and locate precast units into final position and to bring the unit to the proper elevation and position	-	-	-	-
PC3. guide units into positions using guy lines and hook as per instruction	-	-	-	-
PC4. unload steel units at specified location under close supervision of senior personnel	-	-	-	-
PC5. install temporary bracing supports and connections such as pony clamps, tilt up jacks, turn buckles, guy lines to stabilize the unit in its position	-	-	-	-
PC6. check vertical and horizontal alignment of precast units and make suitable adjustments using appropriate measuring tools	-	-	-	-
PC7. place shims, bearing pads at appropriate locations as per instruction	-	-	-	-
PC8. clean bolts, inserts so that they are free of dust, debris or damaged threads and report if discrepancy observed to senior authority	-	-	-	-
PC9. use PPEs and relevant safety measures as per standard practice of working at height	-	-	-	-
NOS Total	30	70	-	-



Qualification Pack



National Occupational Standards (NOS) Parameters

NOS Code	CON/N0710
NOS Name	Unload, position and align RCC precast components
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Rigging
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	22/08/2019



CON/N0711: Apply grout and caulking agents in RCC Precast components

Description

This unit describes the skills and knowledge required to apply grout and caulking agents in RCC Precast components

Scope

The scope covers the following :

- Carry out grouting as per instruction
- Apply caulking agents as per instruction

Elements and Performance Criteria

Carry out grouting as per instruction

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

- PC1.** clean all surfaces to be grouted of dust, dirt and other foreign matter using water, brushes, scrapers and other prescribed tools and materials
- PC2.** prepare concrete surfaces by applying purging, priming and bonding agents as per instruction and work safety norms
- PC3.** install required shutters, sealant materials around joints while using flowable grout to avoid leakage and to resist grouting pressure as per instruction
- PC4.** apply grout in appropriate locations using required tools as per instruction
- PC5.** clean and store tools at specified locations

Apply caulking agents as per instruction

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

- PC6.** clean all joints to be caulked of dirt and other foreign matter using appropriate hand tools
- PC7.** apply primer, if required and take necessary precautions to prevent staining at the exposed face of the precast unit
- PC8.** fill precast joints using appropriate filler materials as per instruction under close supervision
- PC9.** mix caulking and colouring using appropriate hand/ power tools as per instruction to achieve approved sample
- PC10.** apply caulking agents to the joints using caulking gun
- PC11.** apply the caulking to a slightly concave shape to eliminate air pockets or voids using appropriate tools such as merging trowels, putty knives or wooden sticks
- PC12.** avoid direct contact with the skin and take special precaution when different surfaces to be caulked
- PC13.** clean tools using appropriate cleaning agents such as soap and water for latex based caulking and spirit solvent for oil-based caulking

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:



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- KU1.** standard procedure for construction rigging works
- KU2.** safety rules and regulation for handling and storing relevant rigging tools, equipment and materials
- KU3.** personal protection including the use of relevant safety gears & equipments
- KU4.** service request procedures for tools, materials and equipments
- KU5.** ideal surface condition of the structure to be achieved in order to carry out
- KU6.** tools and tackles used for cleaning and carry out grouting work and their respective use
- KU7.** how to prevent flowable grouting agents from leakage
- KU8.** how to place temporary shutters surrounding to the area to be grouted
- KU9.** how to apply primer at RCC surface to be caulked using proper hand tools
- KU10.** safety precautions to be taken while carrying out caulking activity
- KU11.** mix proportion of the caulking agents in order to prepare approved mix
- KU12.** how to fill joints of precast units efficiently
- KU13.** standard practices relevant to application of grouting agents
- KU14.** how to use caulking gun while applying caulking agents
- KU15.** how to select cleaning agents for material and tools used in grouting and caulking operations and their use

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 in the local language of the site
- GS3.** read various, sign boards, safety rules and safety tags , instructions related to exit routes during emergency at the workplace
- GS4.** speak in one or more language, preferably one of the local language at site
- GS5.** listen and follow instructions given by the superior
- GS6.** orally communicate with co-workers regarding support required to complete the respective work
- GS7.** decide whether his workplace is safe for working and also his work is not creating hazardous conditions for other
- GS8.** decide whether the tools and instruments for grouting and caulking works are safe to be used for load lifting activities
- GS9.** plan work and organize required resource in coordination with team members and superiors
- GS10.** complete work as per agreed time and quality
- GS11.** apply caulking to eliminate air pockets or voids using appropriate tools
- GS12.** prevent staining at the exposed face of the precast unit by applying primer
- GS13.** resolve any conflict within the team
- GS14.** determine quantity of material required for rigging works
- GS15.** optimize resources
- GS16.** minimize wastages



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- GS17.** revert to superior for selection/sorting of materials
- GS18.** evaluate the complexity of the tasks to and seek assistance and support wherever required from the superior
- GS19.** identify and assess how violation of any safety norms may lead to accidents



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out grouting as per instruction</i>	12	28	-	-
PC1. clean all surfaces to be grouted of dust, dirt and other foreign matter using water, brushes, scrappers and other prescribed tools and materials	-	-	-	-
PC2. prepare concrete surfaces by applying purging, priming and bonding agents as per instruction and work safety norms	-	-	-	-
PC3. install required shutters, sealant materials around joints while using flowable grout to avoid leakage and to resist grouting pressure as per instruction	-	-	-	-
PC4. apply grout in appropriate locations using required tools as per instruction	-	-	-	-
PC5. clean and store tools at specified locations	-	-	-	-
<i>Apply caulking agents as per instruction</i>	18	42	-	-
PC6. clean all joints to be caulked of dirt and other foreign matter using appropriate hand tools	-	-	-	-
PC7. apply primer, if required and take necessary precautions to prevent staining at the exposed face of the precast unit	-	-	-	-
PC8. fill precast joints using appropriate filler materials as per instruction under close supervision	-	-	-	-
PC9. mix caulking and colouring using appropriate hand/ power tools as per instruction to achieve approved sample	-	-	-	-
PC10. apply caulking agents to the joints using caulking gun	-	-	-	-
PC11. apply the caulking to a slightly concave shape to eliminate air pockets or voids using appropriate tools such as merging trowels, putty knives or wooden sticks	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. avoid direct contact with the skin and take special precaution when different surfaces to be caulked	-	-	-	-
PC13. clean tools using appropriate cleaning agents such as soap and water for latex based caulking and spirit solvent for oil-based caulking	-	-	-	-
NOS Total	30	70	-	-



Qualification Pack



National Occupational Standards (NOS) Parameters

NOS Code	CON/N0711
NOS Name	Apply grout and caulking agents in RCC Precast components
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Rigging
NSQF Level	4
Credits	TBD
Version	2.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	22/08/2019



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



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- 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
<i>Interact and communicate in effective and conclusive manner</i>	18	42	-	-
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	-	-	-	-
<i>Support co-workers to execute project requirements</i>	12	28	-	-
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	-	-	-	-
NOS Total	30	70	-	-



Qualification Pack



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	4
Credits	TBD
Version	4.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	22/08/2019



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

Scope

The scope covers the following :

- Prioritize work activities to achieve desired results
- Organize desired resources prior to commencement of work

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
<i>Prioritize work activities to achieve desired results</i>	12	28	-	-
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	-	-	-	-
<i>Organize desired resources prior to commencement of work</i>	18	42	-	-
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	-	-	-	-
NOS Total	30	70	-	-



Qualification Pack



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	4
Credits	TBD
Version	3.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	22/08/2019



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



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



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GS13. respond to emergency



Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Follow safety norms as defined by organization</i>	9	21	-	-
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	-	-	-	-
<i>Adopt healthy & safe work practices</i>	15	35	-	-
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	-	-	-	-



Qualification Pack



Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. undertake and pass height pass test as per EHS guideline	-	-	-	-
<i>Implement good housekeeping practices</i>	6	14	-	-
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	-	-	-	-
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	4
Credits	TBD
Version	4.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	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 70%. To pass the Qualification Pack, every trainee should score a minimum of 70% individually in each NOS.
6. The Assessor shall check the final outcome of the practices while evaluating the steps performed to achieve the final outcome.



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

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/N0709.Provide support in heavy lifting of precast units	29	71	-	-	100	20
CON/N0710.Unload, position and align RCC precast components	30	70	-	-	100	30
CON/N0711.Apply grout and caulking agents in RCC Precast components	30	70	-	-	100	20
CON/N8001.Work effectively in a team to deliver desired results at the workplace	30	70	-	-	100	5
CON/N8002.Plan and organize work to meet expected outcomes	30	70	-	-	100	10
CON/N9001.Work according to personal health, safety and environment protocol at construction site	30	70	-	-	100	15



Qualification Pack



National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
Total	179	421	-	-	600	100



Qualification Pack



Acronyms

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



Qualification Pack



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.



Qualification Pack



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.