



# Prefabricated Structure Installer

QP Code: ISC/Q1601

Version: 1.0

NSQF Level: 4

Indian Iron & Steel Sector Skill Council || Plot no.B-7, Action Area-III, 5th Floor, Room no.509, Near Hazra Kalibari, Opposite Uni World City, New Town, Kolkata, West Bengal  
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# ISC/Q1601: Prefabricated Structure Installer

## Brief Job Description

Individual at this job is responsible for Prefabrication structure Installation reflects the role of onsite installers and/or assemblers who install prefabricated or modular building elements onsite in a team and time constrained environment.

## Personal Attributes

The person should be organized, team-oriented and can work independently for long hours. He should be result-oriented, keen observer and have an eye for detail and quality. The individual should also be able to demonstrate skills for information order, imagination, oral expression, analytical approach, deductive reasoning, and comprehension.

## Applicable National Occupational Standards (NOS)

### Compulsory NOS:

1. [ISC/N0008: Use basic health and safety practices at the workplace](#)
2. [ISC/N1601: Work effectively in prefabricated structure installation](#)
3. [ISC/N1602: Carryout Pre Assembly activities](#)
4. [ISC/N1603: Assemble and carryout Installation of prefabricated structure](#)
5. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

## Qualification Pack (QP) Parameters

<b>Sector</b>	Iron and Steel
<b>Sub-Sector</b>	Down Stream
<b>Occupation</b>	Pre-fabricated Structure
<b>Country</b>	India
<b>NSQF Level</b>	4
<b>Credits</b>	15
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2004/Nil



## Qualification Pack



<b>Minimum Educational Qualification &amp; Experience</b>	11th grade pass OR 10th grade pass plus 1-year NTC/ NAC OR 8th grade pass plus 2-year NTC plus 1 Year NAC OR 10th grade pass (with 2 years of experience in relevant field) OR Previous relevant Qualification of NSQF Level ((3.0) with minimum education as 5th Grade pass with 2 years of experience in relevant field)
<b>Minimum Level of Education for Training in School</b>	Not Applicable
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Approval Date</b>	
<b>Version</b>	1.0



## ISC/N0008: Use basic health and safety practices at the workplace

### Description

This OS unit is about following safety and adopting sustainable practices for optimising use of resources.

### Scope

The scope covers the following :

- Maintain safe and secure working environment
- Emergencies, rescue and first aid procedures
- Health and hygiene
- Housekeeping and waste management
- Material and energy conservation

### Elements and Performance Criteria

#### *Maintain safe and secure working environment*

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

- PC1.** identify hazardous activities and the possible causes of risks or accidents in the workplace
- PC2.** follow safe working practices while dealing with hazards to ensure safety of self and others
- PC3.** use appropriate protective clothing/equipment for specific tasks and work
- PC4.** follow appropriate safety practices while working in and around trenches, elevated places and confined areas
- PC5.** lift heavy objects safely using correct procedures
- PC6.** carry out routine check of the machine for identifying potential hazards
- PC7.** report any identified breaches in health, safety and security policies and procedures to the designated person

#### *Emergencies, rescue and first aid procedures*

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

- PC8.** use appropriate type of fire extinguisher
- PC9.** apply appropriate rescue techniques during fire hazard
- PC10.** provide appropriate first aid procedure to victims wherever required eg.in case of bleeding, burns, choking, electric shock etc.
- PC11.** follow emergency procedures such as raising alarm, safe evacuation etc.
- PC12.** attend safety training and fire drills to respond promptly during an emergency

#### *Health and hygiene*

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

- PC13.** follow regular cleaning and disinfection practices at work place using appropriate techniques and materials
- PC14.** follow hand hygiene practices at work place using appropriate techniques and materials
- PC15.** report regarding the contagious illness of self or people in close contact
- PC16.** avoid contact with ill people and self-isolate in a similar situation

#### *Housekeeping and waste management*

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

- PC17.** follow the fundamentals of 5S for housekeeping
- PC18.** ensure good housekeeping in order to prevent hazards and accidents
- PC19.** store the material, tools and equipment in the correct location and in good condition
- PC20.** segregate waste into different categories
- PC21.** identify recyclable, non-recyclable and hazardous waste
- PC22.** dispose non-recyclable, recyclable and reusable waste appropriately at identified location

### *Material and energy conservation*

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

- PC23.** identify ways to optimize usage of material in various tasks/activities/processes
- PC24.** check for spills/leakages in various tasks/activities/processes
- PC25.** plug spills/leakages and escalate to appropriate authority if unable to rectify
- PC26.** check if the equipment/machine is functioning normally before commencing work and rectify wherever required
- PC27.** ensure electrical equipment and appliances are properly connected and turned off when not in use

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** organisation procedures for health, safety and security, individual role and responsibilities in this context
- KU2.** the organisation's emergency procedures for different emergency situations and the importance of following the same
- KU3.** evacuation procedures for workers and visitors
- KU4.** how and when to report hazards
- KU5.** potential hazards, risks and threats based on the nature of work
- KU6.** preventative and remedial actions to be taken in case of exposure to toxic material
- KU7.** various types of fire extinguisher
- KU8.** various types of safety signs and their meaning
- KU9.** appropriate first aid treatment relevant to different condition e.g. bleeding, minor burns, eye injuries etc.
- KU10.** relevant standards, procedures and policies related to 5S followed in the company
- KU11.** the various materials used and their storage norms
- KU12.** efficient utilisation of material and water
- KU13.** basics of electricity and prevalent energy efficient devices
- KU14.** common practices of conserving electricity
- KU15.** categorisation of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics
- KU16.** usage of different colors of dustbins
- KU17.** waste management techniques



## Qualification Pack



### Generic Skills (GS)

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

- GS1.** read safety instructions/guidelines
- GS2.** modify work practices to improve them
- GS3.** ask for clarifications from superior about the job requirement
- GS4.** work with supervisors/team members to carry out work related tasks
- GS5.** complete tasks efficiently and accurately within stipulated time
- GS6.** inform/report to concerned person in case of any problem
- GS7.** make timely decisions for efficient utilization of resources
- GS8.** write reports such as accident report, in at least English/regional language
- GS9.** be punctual and utilize time efficiently

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain safe and secure working environment</i>	<b>10</b>	<b>14</b>	-	<b>6</b>
<b>PC1.</b> identify hazardous activities and the possible causes of risks or accidents in the workplace	2	2	-	1
<b>PC2.</b> follow safe working practices while dealing with hazards to ensure safety of self and others	2	3	-	1
<b>PC3.</b> use appropriate protective clothing/equipment for specific tasks and work	1	2	-	1
<b>PC4.</b> follow appropriate safety practices while working in and around trenches, elevated places and confined areas	2	1	-	-
<b>PC5.</b> lift heavy objects safely using correct procedures	1	2	-	1
<b>PC6.</b> carry out routine check of the machine for identifying potential hazards	1	2	-	1
<b>PC7.</b> report any identified breaches in health, safety and security policies and procedures to the designated person	1	2	-	1
<i>Emergencies, rescue and first aid procedures</i>	<b>6</b>	<b>9</b>	-	<b>5</b>
<b>PC8.</b> use appropriate type of fire extinguisher	1	1	-	1
<b>PC9.</b> apply appropriate rescue techniques during fire hazard	1	2	-	1
<b>PC10.</b> provide appropriate first aid procedure to victims wherever required eg.in case of bleeding, burns, choking, electric shock etc.	2	2	-	1
<b>PC11.</b> follow emergency procedures such as raising alarm, safe evacuation etc.	1	2	-	1
<b>PC12.</b> attend safety training and fire drills to respond promptly during an emergency	1	2	-	1
<i>Health and hygiene</i>	<b>2</b>	<b>6</b>	-	<b>2</b>
<b>PC13.</b> follow regular cleaning and disinfection practices at work place using appropriate techniques and materials	1	2	-	1



Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC14.</b> follow hand hygiene practices at work place using appropriate techniques and materials	1	2	-	1
<b>PC15.</b> report regarding the contagious illness of self or people in close contact	-	1	-	-
<b>PC16.</b> avoid contact with ill people and self-isolate in a similar situation	-	1	-	-
<i>Housekeeping and waste management</i>	<b>7</b>	<b>12</b>	-	<b>5</b>
<b>PC17.</b> follow the fundamentals of 5S for housekeeping	2	3	-	2
<b>PC18.</b> ensure good housekeeping in order to prevent hazards and accidents	1	2	-	-
<b>PC19.</b> store the material, tools and equipment in the correct location and in good condition	1	2	-	-
<b>PC20.</b> segregate waste into different categories	1	2	-	1
<b>PC21.</b> identify recyclable, non-recyclable and hazardous waste	1	1	-	1
<b>PC22.</b> dispose non-recyclable, recyclable and reusable waste appropriately at identified location	1	2	-	1
<i>Material and energy conservation</i>	<b>5</b>	<b>9</b>	-	<b>2</b>
<b>PC23.</b> identify ways to optimize usage of material in various tasks/activities/processes	1	2	-	-
<b>PC24.</b> check for spills/leakages in various tasks/activities/processes	1	2	-	1
<b>PC25.</b> plug spills/leakages and escalate to appropriate authority if unable to rectify	1	2	-	1
<b>PC26.</b> check if the equipment/machine is functioning normally before commencing work and rectify wherever required	1	2	-	-
<b>PC27.</b> ensure electrical equipment and appliances are properly connected and turned off when not in use	1	1	-	-
<b>NOS Total</b>	<b>30</b>	<b>50</b>	-	<b>20</b>



## Qualification Pack



### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ISC/N0008
<b>NOS Name</b>	Use basic health and safety practices at the workplace
<b>Sector</b>	Iron and Steel
<b>Sub-Sector</b>	Steel, Sponge Iron, Ferro Alloys, Re-Rollers, Refractory
<b>Occupation</b>	Mechanical Maintenance, Raw Material Handling , Product Quality Control, Refractory Maintenance, Furnace Operation, Fitter, Cold Rolling Mill Operations, Electrical Maintenance, Mechanical Maintenance
<b>NSQF Level</b>	3
<b>Credits</b>	TBD
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	31/03/2025
<b>NSQF Clearance Date</b>	31/03/2022



# ISC/N1601: Work effectively in prefabricated structure installation

## Description

This NOS describes the performance outcomes, skills and knowledge required to work within the prefabricated structure sector. It includes the ability to develop and apply knowledge on prefabricated construction technologies and principles, work within workplace and industry standards and legislative requirements and continuously apply check measures to ensure quality standards are met.

## Scope

The scope covers the following :

- Apply prefabricated system technologies and principles with supervisor or superior
- Work within industry and workplace requirements
- Apply quality and systems thinking approaches to onsite installation

## Elements and Performance Criteria

### *Apply prefabricated system technologies and principles with supervisor or superior*

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

- PC1.** Source information on new and emerging prefabricated system technologies
- PC2.** Identify the impacts of prefabricated construction on efficiency, precision, productivity, and affordability
- PC3.** Examine environmental benefits of prefabricated construction in reducing waste and energy
- PC4.** Examine the relationship between offsite and onsite construction approaches
- PC5.** Apply knowledge of prefabricated system technologies and principles to own work processes

### *Work within industry and workplace requirements*

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

- PC6.** Identify responsibilities and duties of construction roles in prefabricated construction according to industry codes and practices
- PC7.** Identify and apply relevant industry standards and codes for prefabrication system installation
- PC8.** Work within scope of role and recognise when prefabrication system requires for workers or relevant specialists

### *Apply quality and systems thinking approaches to onsite installation*

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

- PC9.** Continuously check received information, components, materials and services against specifications and standards for conformance
- PC10.** Continuously check work, including tolerances, work processes, sequencing and timing against specifications and standards relevant to the installation being undertaken
- PC11.** Investigate causes of any identified faults and deviations from specifications and standards and take corrective action according to workplace procedures

## Knowledge and Understanding (KU)



## Qualification Pack



The individual on the job needs to know and understand:

- KU1.** Organisation procedures for health, safety and security, individual role and responsibilities in this context
- KU2.** principles and purposes of prefabrication construction
- KU3.** profile of prefabrication industry India
- KU4.** manufacturing environment and process for prefabricated components
- KU5.** workplace policies and procedures relating to work practices
- KU6.** sources of information on employment rights and responsibilities including employment related laws
- KU7.** covering rights and responsibilities of employees and employers
- KU8.** impact of how received information, components and materials or services relate to installation operations and how they contribute to the final quality of the prefabricated structure
- KU9.** relevant quality standards, policy and procedures
- KU10.** relevant measurement techniques and quality checking and reporting procedures.

### Generic Skills (GS)

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

- GS1.** read safety instructions/guidelines/procedures
- GS2.** listen effectively and orally communicate information
- GS3.** ask for clarification and advice from the concerned person
- GS4.** maintain positive and effective relationships with colleagues and customers
- GS5.** evaluate the possible solution(s) to the problem
- GS6.** deliver consistent and reliable service to customers
- GS7.** complete written work with attention to detail
- GS8.** check that the work meets customer requirements

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Apply prefabricated system technologies and principles with supervisor or superior</i>	<b>4</b>	<b>12</b>	-	<b>4</b>
<b>PC1.</b> Source information on new and emerging prefabricated system technologies	1	2	-	1
<b>PC2.</b> Identify the impacts of prefabricated construction on efficiency, precision, productivity, and affordability	1	2	-	1
<b>PC3.</b> Examine environmental benefits of prefabricated construction in reducing waste and energy	1	2	-	1
<b>PC4.</b> Examine the relationship between offsite and onsite construction approaches	1	3	-	-
<b>PC5.</b> Apply knowledge of prefabricated system technologies and principles to own work processes	-	3	-	1
<i>Work within industry and workplace requirements</i>	<b>3</b>	<b>6</b>	-	<b>3</b>
<b>PC6.</b> Identify responsibilities and duties of construction roles in prefabricated construction according to industry codes and practices	1	2	-	1
<b>PC7.</b> Identify and apply relevant industry standards and codes for prefabrication system installation	1	2	-	1
<b>PC8.</b> Work within scope of role and recognise when prefabrication system requires for workers or relevant specialists	1	2	-	1
<i>Apply quality and systems thinking approaches to onsite installation</i>	<b>3</b>	<b>12</b>	-	<b>3</b>
<b>PC9.</b> Continuously check received information, components, materials and services against specifications and standards for conformance	1	4	-	1
<b>PC10.</b> Continuously check work, including tolerances, work processes, sequencing and timing against specifications and standards relevant to the installation being undertaken	1	4	-	1



## Qualification Pack



Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> Investigate causes of any identified faults and deviations from specifications and standards and take corrective action according to workplace procedures	1	4	-	1
<b>NOS Total</b>	<b>10</b>	<b>30</b>	<b>-</b>	<b>10</b>



## Qualification Pack



### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ISC/N1601
<b>NOS Name</b>	Work effectively in prefabricated structure installation
<b>Sector</b>	Iron and Steel
<b>Sub-Sector</b>	Down Stream
<b>Occupation</b>	Pre-fabricated Structure
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	1.0
<b>Next Review Date</b>	NA



### ISC/N1602: Carryout Pre Assembly activities

#### Description

This NOS unit describes the performance outcomes, skills and knowledge required to set out and mark out prefabricated components onsite. It requires the ability to plan and organise work, receive and check prefabricated components, indicate site boundaries and reference and offset lines and mark out prefabricated components. It includes continuously checking calculations against specifications and quality standards.

#### Scope

The scope covers the following :

- Plan and prepare for set out
- Check prefabricated components onsite
- Set out installation and layout components

#### Elements and Performance Criteria

##### *Plan and prepare for set out*

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

- PC1.** Obtain and confirm job requirements and specifications for the set out with relevant personnel
- PC2.** Inspect worksite to determine extent of work preparation, conditions and hazards
- PC3.** Confirm health and safety requirements and risk control measures according to workplace and health and safety requirements
- PC4.** Schedule and sequence set out tasks in consultation with supervisor, team members, service providers and suppliers as required to ensure set out is completed to installation plan
- PC5.** Select tools and equipment, including personal protective equipment according to job requirements, check for serviceability and place ready for use

##### *Check prefabricated components onsite*

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

- PC6.** Confirm scheduled delivery of prefabricated components according to construction plan schedule and take corrective action according to workplace procedures if delivery is delayed
- PC7.** Check storage for prefabricated components on the site are adequate, away from obstruction, sheltered from weather and placed in sequence for efficient transfer
- PC8.** Check delivered components and materials against specifications and take correction action according to workplace procedures if delivery is incomplete or damaged

##### *Set out installation and layout components*

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

- PC9.** Identify and indicate site boundaries according to specifications
- PC10.** Set reference line and offset line to determine the position of the components to be installed
- PC11.** Perform calculations to check accuracy of the offset lines against specifications instructions
- PC12.** Mark out prefabricated components to comply with specified measurements.
- PC13.** Mark out prefabricated components to comply with specified measurements.





**PC14.** Check dimensions for accuracy and compliance with plans and specifications.

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** profile of prefabrication industry India
- KU2.** product portfolio of organization principles of set out in relation to prefabrication system installation
- KU3.** workplace health and safety requirements and risk measures relevant to prefabricated panelized construction, including working safely at heights and emergency procedures
- KU4.** off-site logistics and traffic management for deliveries onsite
- KU5.** basic design, offsite manufacturing process and materials used in manufactured panelized components, including damage and weather effects associated with materials
- KU6.** types of network protocols, topology and its significance
- KU7.** design of industrial network between devices based on protocols, topology and device parameters
- KU8.** signaling parameters required to do cable installation between devices
- KU9.** allocation of device parameters like station ID, baud rate etc. to the devices connected to the network
- KU10.** device manufacturer software for network parameter settings and device communication

### Generic Skills (GS)

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

- GS1.** communicate effectively at the workplace
- GS2.** attentively listen and comprehend the information given by the process managers
- GS3.** write observations and any work-related information in English/regional language
- GS4.** recognise a workplace problem and take suitable action
- GS5.** analyse and apply the information gathered from observation, experience, reasoning or communication to act efficiently
- GS6.** complete the assigned tasks in a timely and efficient manner
- GS7.** coordinate with shop floor workers and team for installing the new systems efficiently

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan and prepare for set out</i>	<b>12</b>	<b>18</b>	-	<b>5</b>
<b>PC1.</b> Obtain and confirm job requirements and specifications for the set out with relevant personnel	2	3	-	1
<b>PC2.</b> Inspect worksite to determine extent of work preparation, conditions and hazards	2	3	-	1
<b>PC3.</b> Confirm health and safety requirements and risk control measures according to workplace and health and safety requirements	2	3	-	1
<b>PC4.</b> Schedule and sequence set out tasks in consultation with supervisor, team members, service providers and suppliers as required to ensure set out is completed to installation plan	3	4	-	1
<b>PC5.</b> Select tools and equipment, including personal protective equipment according to job requirements, check for serviceability and place ready for use	3	5	-	1
<i>Check prefabricated components onsite</i>	<b>6</b>	<b>11</b>	-	<b>3</b>
<b>PC6.</b> Confirm scheduled delivery of prefabricated components according to construction plan schedule and take corrective action according to workplace procedures if delivery is delayed	2	3	-	1
<b>PC7.</b> Check storage for prefabricated components on the site are adequate, away from obstruction, sheltered from weather and placed in sequence for efficient transfer	2	4	-	1
<b>PC8.</b> Check delivered components and materials against specifications and take correction action according to workplace procedures if delivery is incomplete or damaged	2	4	-	1
<i>Set out installation and layout components</i>	<b>12</b>	<b>24</b>	-	<b>9</b>
<b>PC9.</b> Identify and indicate site boundaries according to specifications	2	4	-	1



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> Set reference line and offset line to determine the position of the components to be installed	2	4	-	1
<b>PC11.</b> Perform calculations to check accuracy of the offset lines against specifications instructions	2	4	-	1
<b>PC12.</b> Mark out prefabricated components to comply with specified measurements.	2	4	-	2
<b>PC13.</b> Mark out prefabricated components to comply with specified measurements.	2	4	-	2
<b>PC14.</b> Check dimensions for accuracy and compliance with plans and specifications.	2	4	-	2
<b>NOS Total</b>	<b>30</b>	<b>53</b>	<b>-</b>	<b>17</b>



## Qualification Pack



### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ISC/N1602
<b>NOS Name</b>	Carryout Pre Assembly activities
<b>Sector</b>	Iron and Steel
<b>Sub-Sector</b>	Down Stream
<b>Occupation</b>	Pre-fabricated Structure
<b>NSQF Level</b>	4
<b>Credits</b>	3
<b>Version</b>	1.0
<b>Next Review Date</b>	NA



## ISC/N1603: Assemble and carryout Installation of prefabricated structure

### Description

This NOS unit describes the performance outcomes, skills and knowledge required to assemble and install prefabricated components onsite. It requires the ability to plan and organise work, receive and check prefabricated components and measure and position components before assembling and fixing them into place. It includes continuously checking work against specifications and quality standards and responding to challenges and anomalies.

### Scope

The scope covers the following :

- Plan and prepare for installation
- Check prefabricated components onsite
- Measure and position prefabricated components
- Assemble and install components

### Elements and Performance Criteria

#### *Plan and prepare for Installation*

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

- PC1.** Obtain and confirm job requirements and specifications for the set out with relevant personnel
- PC2.** Obtain and confirm job requirements and specifications for assembling and installing prefabricated structure components from the installation plan
- PC3.** Inspect worksite, identify hazards and conditions to determine the extent of work preparation required
- PC4.** Confirm health and safety requirements and risk control measures according to health and safety legislative requirements
- PC5.** Schedule and sequence tasks in consultation with supervisor, team members, service providers and suppliers as required to ensure work is completed to construction plan
- PC6.** Select tools and equipment, including personal protective equipment according to job requirements, check for serviceability, calibrate or report faults and place ready for use

#### *Check prefabricated components onsite*

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

- PC7.** Confirm delivery of panelised components according to construction plan schedule and take correction action according to workplace procedures if delivery is delayed.
- PC8.** Check storage requirements for panelised components on the construction site are adequate, away from obstruction, sheltered from weather and placed in sequence for efficient transfer
- PC9.** Check delivered panelised components and materials against specifications and take correction action according to workplace procedures if delivery is incomplete or damaged

#### *Measure and position prefabricated components*

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

- PC10.** Measure, check levels and connecting points of supplied prefabricated components against specified measurements and accepted tolerances
- PC11.** Rectify or report irregularities in levels, dimensions and tolerances according to workplace procedures
- PC12.** support to lift prefabricated components in sequential order and position with use of propping on levelling walls and floors according to job requirements

### *Assemble and install components*

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

- PC13.** Assemble components as required and place into position to commence installation
- PC14.** Check measurements and tolerances of completed assembly against specifications and report or rectify anomalies as required
- PC15.** Install fixings or braces to connect to wall, floor and other components as required
- PC16.** Install assembly to level, plumb off and pack to position as required
- PC17.** Fix assembly and apply fire rated sealants as required, to all connecting points according to relevant codes and design specifications
- PC18.** Check completed installation against job specifications and schedule and report quality checks and any variances to supervisor

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** profile of prefabrication industry India
- KU2.** offsite and onsite construction approaches for prefabricated components systems
- KU3.** workplace and legislative health and safety requirements and risk measures relevant to prefabricated components construction, including working safely at heights and emergency procedures
- KU4.** off-site logistics and traffic management for deliveries onsite
- KU5.** importance of onsite prefabricated components construction assembly and installation sequence, and implications for not planning and monitoring
- KU6.** basic design, offsite manufacturing process and materials used in manufactured prefabricated components, including damage and weather effects associated with materials
- KU7.** tools, equipment and materials used in assembling and installing prefabricated components, including maintenance and safe operating procedures
- KU8.** range of lifting and propping equipment used for different prefabricated components
- KU9.** types and purposes of fixings, braces and sealants
- KU10.** building codes and inspection checks relevant to prefabricated components
- KU11.** content, terms and symbols used in drawings and specifications relevant to prefabricated components
- KU12.** quality assurance procedures relevant to installing prefabricated components onsite, including measure accuracy against tolerance acceptance, order of sequences, risk and time management
- KU13.** acceptable tolerances for different materials, component structures and fixings
- KU14.** processes and equipment used for levelling



- KU15.** environmentally sustainable practices relevant to prefabricated components construction, including safe disposal and recycling of waste.

### Generic Skills (GS)

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

- GS1.** communicate effectively at the workplace
- GS2.** reading skills to interpret a range of essential workplace documentation, including drawings and specifications relating to the assembly and installation of panelised components
- GS3.** writing skills to complete workplace documentation, including equipment fault and variance reports
- GS4.** oral communication skills to use questioning to identify and confirm job requirements, interact with team members and other personnel and negotiate solutions to arising challenges
- GS5.** numeracy skills to apply measurements and calculations to identify anomalies in straightness or dimensions of installation positions or of delivered components
- GS6.** problems solving skills to respond to challenges, including challenging timeframes, delivery delays or anomalies in installation position
- GS7.** teamwork skills to complete assembly and installation to quality standards and timeframes and contribute to safe and efficient installation
- GS8.** planning and organising skills to identify and prepare components, tools and equipment and plan and complete tasks in appropriate sequence
- GS9.** self-management skills to manage own workspace, speed, timing, and productivity and maintain ongoing compliance with regulatory and quality requirements
- GS10.** technology skills to use check, maintain and operate tools and equipment according to manufacturer instructions

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan and prepare for Installation</i>	<b>10</b>	<b>14</b>	-	<b>6</b>
<b>PC1.</b> Obtain and confirm job requirements and specifications for the set out with relevant personnel	2	2	-	1
<b>PC2.</b> Obtain and confirm job requirements and specifications for assembling and installing prefabricated structure components from the installation plan	1	1	-	1
<b>PC3.</b> Inspect worksite, identify hazards and conditions to determine the extent of work preparation required	2	2	-	1
<b>PC4.</b> Confirm health and safety requirements and risk control measures according to health and safety legislative requirements	1	3	-	1
<b>PC5.</b> Schedule and sequence tasks in consultation with supervisor, team members, service providers and suppliers as required to ensure work is completed to construction plan	2	3	-	1
<b>PC6.</b> Select tools and equipment, including personal protective equipment according to job requirements, check for serviceability, calibrate or report faults and place ready for use	2	3	-	1
<i>Check prefabricated components onsite</i>	<b>3</b>	<b>6</b>	-	<b>3</b>
<b>PC7.</b> Confirm delivery of panelised components according to construction plan schedule and take correction action according to workplace procedures if delivery is delayed.	1	2	-	1
<b>PC8.</b> Check storage requirements for panelised components on the construction site are adequate, away from obstruction, sheltered from weather and placed in sequence for efficient transfer	1	2	-	1
<b>PC9.</b> Check delivered panelised components and materials against specifications and take correction action according to workplace procedures if delivery is incomplete or damaged	1	2	-	1
<i>Measure and position prefabricated components</i>	<b>5</b>	<b>6</b>	-	<b>3</b>



Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> Measure, check levels and connecting points of supplied prefabricated components against specified measurements and accepted tolerances	2	2	-	1
<b>PC11.</b> Rectify or report irregularities in levels, dimensions and tolerances according to workplace procedures	2	2	-	1
<b>PC12.</b> support to lift prefabricated components in sequential order and position with use of propping on levelling walls and floors according to job requirements	1	2	-	1
<i>Assemble and install components</i>	<b>12</b>	<b>26</b>	-	<b>6</b>
<b>PC13.</b> Assemble components as required and place into position to commence installation	2	5	-	1
<b>PC14.</b> Check measurements and tolerances of completed assembly against specifications and report or rectify anomalies as required	2	4	-	1
<b>PC15.</b> Install fixings or braces to connect to wall, floor and other components as required	2	5	-	1
<b>PC16.</b> Install assembly to level, plumb off and pack to position as required	2	4	-	1
<b>PC17.</b> Fix assembly and apply fire rated sealants as required, to all connecting points according to relevant codes and design specifications	2	4	-	1
<b>PC18.</b> Check completed installation against job specifications and schedule and report quality checks and any variances to supervisor	2	4	-	1
<b>NOS Total</b>	<b>30</b>	<b>52</b>	-	<b>18</b>



## Qualification Pack



### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ISC/N1603
<b>NOS Name</b>	Assemble and carryout Installation of prefabricated structure
<b>Sector</b>	Iron and Steel
<b>Sub-Sector</b>	Down Stream
<b>Occupation</b>	Pre-fabricated Structure
<b>NSQF Level</b>	4
<b>Credits</b>	7
<b>Version</b>	1.0
<b>Next Review Date</b>	NA



### DGT/VSQ/N0102: Employability Skills (60 Hours)

#### Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

#### Scope

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

#### Elements and Performance Criteria

##### *Introduction to Employability Skills*

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

- PC1.** identify employability skills required for jobs in various industries
- PC2.** identify and explore learning and employability portals

##### *Constitutional values - Citizenship*

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

- PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC4.** follow environmentally sustainable practices

##### *Becoming a Professional in the 21st Century*

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

- PC5.** recognize the significance of 21st Century Skills for employment
- PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

##### *Basic English Skills*

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



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- PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC9.** write short messages, notes, letters, e-mails etc. in English

### *Career Development & Goal Setting*

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

- PC10.** understand the difference between job and career
- PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

### *Communication Skills*

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

- PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13.** work collaboratively with others in a team

### *Diversity & Inclusion*

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

- PC14.** communicate and behave appropriately with all genders and PwD
- PC15.** escalate any issues related to sexual harassment at workplace according to POSH Act

### *Financial and Legal Literacy*

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

- PC16.** select financial institutions, products and services as per requirement
- PC17.** carry out offline and online financial transactions, safely and securely
- PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation

### *Essential Digital Skills*

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

- PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21.** use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22.** use basic features of word processor, spreadsheets, and presentations

### *Entrepreneurship*

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

- PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

### *Customer Service*

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

- PC26.** identify different types of customers
- PC27.** identify and respond to customer requests and needs in a professional manner.
- PC28.** follow appropriate hygiene and grooming standards



### *Getting ready for apprenticeship & Jobs*

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

- PC29.** create a professional Curriculum vitae (Résumé)
- PC30.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- PC31.** apply to identified job openings using offline /online methods as per requirement
- PC32.** answer questions politely, with clarity and confidence, during recruitment and selection
- PC33.** identify apprenticeship opportunities and register for it as per guidelines and requirements

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

The individual on the job needs to know and understand:

- KU1.** need for employability skills and different learning and employability related portals
- KU2.** various constitutional and personal values
- KU3.** different environmentally sustainable practices and their importance
- KU4.** Twenty first (21st) century skills and their importance
- KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
- KU6.** importance of career development and setting long- and short-term goals
- KU7.** about effective communication
- KU8.** POSH Act
- KU9.** Gender sensitivity and inclusivity
- KU10.** different types of financial institutes, products, and services
- KU11.** how to compute income and expenditure
- KU12.** importance of maintaining safety and security in offline and online financial transactions
- KU13.** different legal rights and laws
- KU14.** different types of digital devices and the procedure to operate them safely and securely
- KU15.** how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.
- KU16.** how to identify business opportunities
- KU17.** types and needs of customers
- KU18.** how to apply for a job and prepare for an interview
- KU19.** apprenticeship scheme and the process of registering on apprenticeship portal

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

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

- GS1.** read and write different types of documents/instructions/correspondence
- GS2.** communicate effectively using appropriate language in formal and informal settings
- GS3.** behave politely and appropriately with all
- GS4.** how to work in a virtual mode



## Qualification Pack



- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> identify employability skills required for jobs in various industries	-	-	-	-
<b>PC2.</b> identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values – Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC3.</b> recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
<b>PC4.</b> follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>2</b>	<b>4</b>	-	-
<b>PC5.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC6.</b> practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<i>Basic English Skills</i>	<b>2</b>	<b>3</b>	-	-
<b>PC7.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
<b>PC8.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC9.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development &amp; Goal Setting</i>	<b>1</b>	<b>2</b>	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> understand the difference between job and career	-	-	-	-
<b>PC11.</b> prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	<b>2</b>	<b>2</b>	-	-
<b>PC12.</b> follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
<b>PC13.</b> work collaboratively with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>2</b>	-	-
<b>PC14.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC15.</b> escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>2</b>	<b>3</b>	-	-
<b>PC16.</b> select financial institutions, products and services as per requirement	-	-	-	-
<b>PC17.</b> carry out offline and online financial transactions, safely and securely	-	-	-	-
<b>PC18.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
<b>PC19.</b> identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	<b>3</b>	<b>4</b>	-	-
<b>PC20.</b> operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
<b>PC21.</b> use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
<b>PC22.</b> use basic features of word processor, spreadsheets, and presentations	-	-	-	-
<i>Entrepreneurship</i>	<b>2</b>	<b>3</b>	-	-



Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC23.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC24.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC25.</b> identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	<b>1</b>	<b>2</b>	-	-
<b>PC26.</b> identify different types of customers	-	-	-	-
<b>PC27.</b> identify and respond to customer requests and needs in a professional manner.	-	-	-	-
<b>PC28.</b> follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship &amp; Jobs</i>	<b>2</b>	<b>3</b>	-	-
<b>PC29.</b> create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC30.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC31.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC32.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC33.</b> identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>30</b>	-	-



## Qualification Pack



### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0102
<b>NOS Name</b>	Employability Skills (60 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	25/08/2025
<b>NSQC Clearance Date</b>	25/08/2022

### Assessment Guidelines and Assessment Weightage

#### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (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 Centre (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training Centre 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



## Qualification Pack



successfully clear the Qualification Pack assessment.)

### Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ISC/N0008.Use basic health and safety practices at the workplace	30	50	-	20	100	10
ISC/N1601.Work effectively in prefabricated structure installation	10	30	-	10	50	20
ISC/N1602.Carryout Pre Assembly activities	30	53	-	17	100	30
ISC/N1603.Assemble and carryout Installation of prefabricated structure	30	52	-	18	100	30
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	10
<b>Total</b>	<b>120</b>	<b>215</b>	<b>-</b>	<b>65</b>	<b>400</b>	<b>100</b>



## Qualification Pack



### Acronyms

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



## Glossary

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



## Qualification Pack



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