COMPETENCY STANDARD

FOR

SCAFFOLDING

(CONSTRUCTION SECTOR)

Skills for Industry Competitiveness and Innovation Program (SICIP)
Finance Division, Ministry of Finance

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The Competency Standards for Scaffolding serves as a foundational document for creating curricula, teaching and learning materials, and assessment tools. It also facilitates training aligned with industry requirements, ensuring that individuals who meet the set standards through assessment are qualified and ready for relevant job roles.

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INTRODUCTION:

The Skills for Industry Competitiveness and Innovation Program (SICIP) has the overall objective of developing a skilled workforce adept at handling new technologies, especially for emerging industries in Bangladesh. It will expand skills training and strengthen the development of the training ecosystem to address the skills requirements of the SICIP-selected industry sectors. The program aims to (i) increase the technology-oriented skilled workforce across emerging and priority sectors, (ii) promote inclusive skilling and upskilling opportunities for women and socially disadvantaged groups, (iii) incentivize industry-university partnerships to nurture innovation capacity and improve industry competitiveness, and (iv) foster skills for climate-resilient manufacturing processes and green technologies. The program is expected to benefit about 220,000 new and existing workers over a 6-year implementation period from 2024-2029.

The SICIP Program has, therefore, taken the initiative to enhance the employability and productivity of trainees by implementing market-responsive and job-focused training programs through public and private training providers. This will require the development of competency standards for each of the occupations/trades which will provide a structured framework in the learning process to guide training providers, ensure consistent training quality, and create an alignment between the skills provided by the training institutes and the needs of the industry.

The Competency Standard also suggests integration of YouTube or similar platforms or downloaded clips into classroom practice to ensure simulated creation of the contents so that learners are exposed to visual demonstrations before classroom instruction or practical session, which aligns with modern learning preference and supports flipped classroom models.

This competency standard is therefore developed to improve skills following the job roles and skill sets of the occupation and ensure that the required skills are aligned with industry requirements.

The document details the format, sequencing, wording, and layout of the Competency Standard for an occupation which comprises Units of Competence and its corresponding Elements.

OVERVIEW:

A **Competency Standard** is a written specification of the knowledge, skills, and attitudes required for the performance of a job or occupation or trade corresponding to the standard of performance required in the workplace.
Competency standard:

- provides a consistent and reliable set of components for training, recognizing, and assessing people's skills, and may also have optional support materials.
- enables industry-recognized qualifications to be awarded through direct assessment of workplace competencies
- encourages the development and delivery of flexible training that suits individual and industry requirements
- encourages learning and assessment in a work-related environment which leads to verifiable workplace outcomes.

Competency Standard has been reviewed and updated by a working group comprised of occupation-specific experts from the industry/institution and relevant consultants of SICIP.

Competency Standards describe the skills, knowledge, and attitude needed to perform effectively in the workplace. Competency Standards acknowledge that people can achieve vocational and technical competency in many ways by emphasizing what the learner can do, not how or where they learned to do it.

With Competency Standards, assessment and training may be conducted at the workplace, at training organization, during regular work, or through work experience, work placement, work simulation or any combination of these.

A Unit of Competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of Competency are documented in a standard format that comprises:

- Reference to Industry Sector, Occupational Title and Occupational Description
- Unit code
- Unit title
- Unit descriptor
- Unit of Competency
- Elements and performance criteria
- Variables and range statement
- Evidence guides

Together all the parts of a Unit of Competency:

- Describe a work activity
- Guide the assessor in determining whether the candidate is competent.

Identification and validation of units of competency and elements for each occupation were made by experts from Construction industry in consultative workshop.

The ensuing sections of this document comprise a description of the respective occupation with all the key components of a Unit of Competence:

- An overview of all Units of Competence for the occupation and their corresponding duration required for completion of training.
- The Competency Standards that include the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide, and Assessment Evidence Guide.

Units & Elements at a Glance:

Generic Competencies (20 Hrs.)

SL	Code	Unit of competency	Elements of competency	Duration (hours)
1.	SICIP-CON-SCF-01-G	Perform computations using basic mathematical concepts	1. Identify calculation requirements in the workplace 2. Select appropriate mathematical methods/concepts for the calculation. 3. Use tool/instrument to perform calculations	10
2.	SICIP-CON-SCF-02-G	Work in a team environment	1. Identify team goals and processes 2. Communicate and cooperate with team members 3. Work as a team member 4. Solve problems as a team member	10
			Total hours	**20 Hrs.**

Sector Specific Competencies (30 hrs.)

SL	Code	Unit of Competency	Elements of Competency	Duration (hours)
1.	SICIP-CON-SCF-01-S	Read and interpret sketches and drawings	1. Interpret information and specifications 2. Read and interpret sketches and drawings.	10
2.	SICIP-CON-SCF-02-S	Use hand and power tools	1. Identify and inspect hand and power tools 2. Use hand tools properly and safely 3. Operate power tools properly and safely 4. Clean and maintain hand and power tools	10
3.	SICIP-CON-SCF-03-S	Apply green practices in construction sector	1. Interpret green concepts 2. Minimize resource use in the workplace 3. Implement waste management practices	10
			Total hours	**30 Hrs.**

Occupation Specific Competencies (310 hrs.)

Code	Unit of Competency	Elements of Competency	Duration (hours)
SICIP-CON-SCF-01-O	Plan and Design Scaffolding	1. Carry out planning for scaffolding 2. Prepare layout 3. Design scaffolding	40
SICIP-CON-SCF-02-O	Practice Occupational Health and Safety Procedures	1. Identify workplace safety procedures 2. Understand workplace emergency procedures 3. Practice safety in erection and dismantling works	30
SICIP-CON-SCF-03-O	Perform Erection of Scaffolding	1. Interpret site rules and regulations in erecting scaffolding 2. Collect scaffold components, tools and equipment 3. Prepare ground work area 4. Install scaffolding	160
SICIP-CON-SCF-04-O	Carry Out Dismantling of Scaffolding	1. Understand safe dismantling 2. Collect tools and equipment for dismantling 3. Perform dismantling 4. Clean and store the scaffolding components	80
		Total Hours	**310 Hrs.**

COMPETENCY STANDARD: SCAFFOLDING

Generic Competencies

Unit of Competency: **PERFORM COMPUTATIONS USING BASIC MATHEMATICAL CONCEPTS**	**Nominal Duration:** 10 hrs.	**Unit Code:** SICIP-CON-SCF-01-G
Unit Descriptor: This unit covers the skills, knowledge and attitudes required to perform computations using basic mathematical concepts. It specifically includes the tasks of identifying calculation requirements in the workplace, selecting appropriate mathematical method/concept for the calculation and using tool/instrument to perform calculations.		

Elements and Performance Criteria:
(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	**Performance Criteria**
1. Identify calculation requirements in the workplace	1.1 Job requirements are identified. 1.2 **Measurements** are selected in accordance with job requirement. 1.3 Calculation requirements are identified from **workplace information.**
2. Select appropriate mathematical methods for the calculation.	2.1 Mathematical methods are identified 2.2 **Appropriate method** is selected to carry out the calcul ation requirements 2.3 Tolerance and clearance limits are identified and adjusted according to the job requirements
3. Use tool/instrument to perform calculations	3.1 Work instructions are confirmed and applied to the job in hand 3.2 Materials to be measured are identified as per job specification 3.3 Appropriate **tool/ instrument** is selected based on materials to be measured

Range of variables:

Variables	**Range** (may include but not limited to)
1. Measurements	1.1 Length 1.2 Width 1.3 Weight 1.4 Tolerances
2. Workplace information	2.1 Job Order 2.2 Design 2.3 Working drawing 2.4 Verbal instructions 2.5 Written Instruction

3. Appropriate method	3.1 Addition 3.2 Subtraction 3.3 Division 3.4 Multiplication 3.5 Conversion 3.6 Percentage and ratio calculation
4. Tool/instrument	4.1 Calculator 4.2 Scale 4.3 Measuring tape 4.4 Marker

Curricular Content Guide

1. Underpinning knowledge	1.1 Numerical concept 1.2 Basic mathematical methods such as addition, subtraction 1.3 multiplication and division and percentage. 1.4 Mathematical language, symbols and terminology. 1.5 Measuring units
2. Underpinning skill	2.1 Selecting measurements 2.2 Selecting appropriate methods 2.3 Using tool/instrument 2.4 Adding numbers 2.5 Subtracting numbers 2.6 Multiplying numbers. 2.7 Dividing numbers.
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety 3.2 Promptness in carrying out activities 3.3 Sincere and honest to duties 3.4 Environmental concerns 3.5 Eagerness to learn 3.6 Tidiness and timeliness 3.7 Respect for rights of peers and seniors in the workplace 3.8 Communication with peers, subordinates and seniors in the workplace
4 Resource implications	The following resources must be provided: 4.1 Work place Procedure 4.2 Materials relevant to the proposed activity 4.3 All tools, equipment, material and documentation required. 4.4 Relevant specifications or work instructions

Assessment Evidence Guide

1. Critical aspects of competency	1.1 Assessment required evidence that the candidate: 1.2 Identified calculation requirements from workplace information

	1.3 Selected appropriate method to carry out the calculation Requirements 1.4 Completed calculations using appropriate tools/instruments
2. Methods of assessment	Competency should be assessed by: 2.1 Written test 2.2 Practical Demonstration 2.3 Oral Questioning 2.4 Portfolio (Optional)
3. Context of assessment	3.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training. 3.2 Assessment should be done by a nationally certified assessor or occupation-specific industry expert.

Unit of Competency: **WORK IN A TEAM ENVIRONMENT**	**Nominal Duration:** 10 hrs.	**Unit Code:** SICIP-CON-SCF-02-G
Unit Descriptor: This unit covers the skills, knowledge and attitudes required to work in a team environment. It specifically includes the tasks of identifying team goals and processes, communicating and cooperating with team members, working as a team member and solving problems as a team member.		

Elements and Performance Criteria:

(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
1. Identify team goals and processes	1.1 Team goals and collaborative decision-making processes are identified. 1.2 Roles and responsibilities of team members are identified. 1.3 Relationships within team and with other workers are identified.
2. Communicate and cooperate with team members	1.4 Effective interpersonal skills are used to interact with team members and to contribute to activities and objectives. 1.5 Formal and informal **forms of communication** are used effectively to support team achievement. 1.6 Diversity in character is respected and valued in team functioning. 1.7 Views and opinions of other team members are understood and valued. 1.8 Workplace terminology is used correctly to assist communication.
3. Work as a team member	1.9 Duties, responsibilities, authorities, objectives and task requirements are identified and clarified with team. 1.10 Tasks are performed in accordance with organizational and team requirements, specifications and workplace procedures. 1.11 Team member's support with other members are made to ensure team achieves goals, awareness and requirements. 1.12 Agreed reporting lines are followed using standard operating procedure.
4. Solve problems as a team member	4.1 Current and potential problems faced by team are identified. 4.2 A solution to the problem is identified. 4.3 Problems are solved effectively and the outcome of the implemented solution is evaluated.

Range of variables:

Variables	**Range** (may include but not limited to)
1. Forms of communication	1.1 Agenda 1.2 Simple reports such as progress and incident reports 1.3 Job sheets 1.4 Operational manuals 1.5 Brochures and promotional material 1.6 Visual and graphic materials 1.7 Standards 1.8 OSH information 1.9 Signs

Curricular Content Guide

1. Underpinning Knowledge	1.1 Team goals and collaborative decision-making processes 1.2 Roles and responsibilities of team members 1.3 Relationships within team and with other workers 1.4 Effective interpersonal skills to interact with team members 1.5 Effective formal and informal forms of communication 1.6 Value of diversity in team functioning. 1.7 Correct use of workplace terminology 1.8 Team's duties, responsibilities, authorities, objectives and task requirements 1.9 Support mechanism to other members of team to ensure achievements of goals. 1.10 Methods of identifying current and potential problems faced by a team 1.11 Effective problem-solving methods and evaluation of outcomes
2. Underpinning Skills	2.1 Identifying team goals and collaborative decision-making processes 2.2 Identifying roles and responsibilities of team members 2.3 Identifying relationships within team and with other workers 2.4 Using effective interpersonal skills to interact with team members and to contribute to activities and objectives 2.5 Using formal and informal forms of communication 2.6 Understanding and valuing views and opinions of other team members 2.7 Performing tasks in accordance with organizational and team requirements, specifications and workplace procedures. 2.8 Supporting other members of the team to ensure team achieves goals, awareness and requirements. 2.9 Identifying current and potential problems faced by the team 2.10 Identifying solutions to the problem 2.11 Solving problems effectively and evaluating the outcome

	of the implemented solution
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety 3.2 Promptness in carrying out activities 3.3 Sincere and honest to duties 3.4 Environmental concerns 3.5 Eagerness to learn 3.6 Tidiness and timeliness 3.7 Respect for rights of peers and seniors in the workplace 3.8 Communication with peers, subordinates and seniors in the workplace
4. Resource implications	The following resources must be provided: 4.1 Workplace (simulated or actual) 4.2 Manuals/Guidelines 4.3 Pens 4.4 Papers 4.5 Work books

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 identified team goals and work processes 1.2 communicated and cooperated with team members. 1.3 worked as a team member 1.4 solved problems as a team member
2. Methods of assessment	Competency should be assessed by: 2.1 Written test 2.2 Practical Demonstration 2.3 Oral Questioning 2.4 Portfolio (Optional)
3. Context of assessment	3.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training. 3.2 Assessment should be done by a nationally certified assessor or occupation-specific industry expert.

The Sector Specific Competencies

Unit of Competency: **READ AND INTERPRET SKETCHES AND DRAWINGS**	**Nominal Duration:** 10 hrs.	**Unit Code:** SICIP-CON-SCF-01-S
Unit Descriptor: This unit covers the skills, knowledge and attitudes required to read and interpret sketches and drawings. It specifically includes the task of interpreting information and specifications, reading and interpreting sketches and drawings.		

Elements and Performance Criteria:

(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	**Performance Criteria**
1. Interpret information and specifications	1.1 Required **manuals** for work activity are identified and collected. 1.2 Information and **specifications** in the manuals is interpreted and applied.
2. Interpret sketches and drawings	2.1. Relevant **sketches and drawings** are identified for job requirement. 2.2. Key **terms and abbreviations** are identified and interpreted. 2.3. **Signs and symbols** are identified and interpreted. Schedules, dimensions, sketches, drawings and specifications are correctly read and interpreted.

Range of Variables

Variable	**Range** (May include but not limited to):
1. Manuals	1.1. Buyers' specification 1.2. Compliance 1.3. Maintenance procedure 1.4. Periodic maintenance 1.5. Quality assurance 1.6. Standard operating procedure (SOP)
2. Specifications	2.1 Product 2.2 Performance 2.3 Method
3. Sketches and drawings	3.1 Technical 3.2 Measurement 3.3 Design
4. Terms and abbreviations	4.1 Refers to all terms and abbreviations associated with the Construction Sector.

5. Signs and symbols	5.1 Include all signs and symbols associated with the Construction Sector.

Curricular Content Guide

1. Underpinning Knowledge	1.1 Types of construction manuals. 1.2 Relevant signs and symbols. 1.3 Identification of units of measurement 1.4 Units of conversion 1.5 Sketches, drawings and specifications 1.6 Terms and abbreviations.
2. Underpinning Skills	2.1 Identifying appropriate manuals. 2.2 Reading and identifying information from manual 2.3 Reading and interpreting sketches and drawings 2.4 Identifying drawings and specifications. 2.5 Interpreting drawings and specifications. 2.6 Storing manuals.
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety 3.2 Promptness in carrying out activities 3.3 Sincere and honest to duties 3.4 Environmental concerns 3.5 Eagerness to learn 3.6 Tidiness and timeliness 3.7 Respect for rights of peers and seniors in workplace 3.8 Communication with peers, sub-ordinates and seniors in workplace
4. Resource Implications	The following resources must be provided: 4.1 Workplace (actual or simulated) 4.2 Tools, equipment and facilities appropriate to processes or activity 4.3 Sketches and drawings relevant to the proposed activity 4.4 Computer/laptop 4.5 Software 4.6 Manual 4.7 Notebook

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 identified and accessed appropriate manuals 1.2 identified information and specifications 1.3 read and interpreted sketches and drawings 1.4 identified terms and abbreviations
2. Methods of Assessment	Competency should be assessed by: 2.1 Written test

	2.2 Practical Demonstration 2.3 Oral Questioning 2.4 Portfolio (Optional)
3. Context of Assessment	3.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training. 3.2 Assessment should be done by a nationally certified assessor or occupation-specific industry expert.

Unit of Competency: **USE HAND AND POWER TOOLS**	**Nominal Duration:** 10 hrs.	**Unit Code:** SICIP-CON-SCF-02-S
Unit Descriptor: This unit covers the skills, knowledge and attitudes required to use hand and power tools. It specifically includes the task of identifying and inspecting hand and power tools, using hand tools properly and safely, operating power tools properly and safely and cleaning and maintaining hand and power tools.		

Elements and Performance Criteria:

(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
1. Identify and inspect hand and power tools	1.1. Appropriate hand and power tools are identified. 1.2. Application of hand and power tools is recognized. 1.3. Usability of hand and power tools is checked and verified.
2. Use hand tools properly and safely	2.1. Appropriate **hand tools** are selected. 2.2. Safety precautions are ensured before using hand tools. 2.3. Unsafe or faulty hand tools are identified and marked for repair. 2.4. **Measuring tools** are checked and calibrated before use. 2.5. Hand tools are used properly and safely to perform work activity.
3. Operate power tools properly and safely	3.1. Appropriate **power tools** are selected. 3.2. Power supply outlet and electrical cord are inspected and confirmed safe for use in accordance with established workplace safety requirements. 3.3. Safety precautions are ensured before using power tools in accordance with manufacturer's operating specification. 3.4. Proper sequence of operation is applied for using power tools. 3.5. Unsafe or faulty power tools are identified and marked for repair. 3.6. Power tools are operated properly and safely to perform work activity.
4. Clean and maintain hand and power tools	4.1. Dust and foreign particles are removed from hand and power tools in accordance to workplace standards. 4.2. Condition of hand and power tools is checked after use and reported. 4.3. Appropriate lubricant is applied after use and prior to storage. 4.4. Measuring tools are checked and calibrated after use.

	4.5. Defective hand and power tools are inspected and repaired or replaced. 4.6. Hand and power tools are stored and secured in accordance with workplace requirements.

Range of Variables

Variable	**Range** (May include but not limited to):
1. Hand tools	1.1. Hammer 1.2. Ball pin hammer 1.3. Wrenches and spanners 1.4. Adjustable wrench 1.5. Pliers 1.6. Scriber 1.7. Hacksaw 1.8. Socket spanners 1.9. Claw Hammer 1.10. Drill 1.11. Angle grinder 1.12. Pulleys 1.13. Scaffold keys 1.14. Clamps 1.15. Jacks 1.16. Screw driver set 1.17. Hand saw 1.18. Mallet 1.19. Plumb bob 1.20. Rachets spanner
2. Power tools	2.1. Drills 2.2. Rivet gun 2.3. Grinders 2.4. Saws 2.5. Glue guns 2.6. Nail gun machine 2.7. Electric planer
3. Measuring tools	3.1. Measuring tape 3.2. Hose level 3.3. Water level 3.4. Magnetic spirit level 3.5. Laser level 3.6. Slide Calipers 3.7. Set square 3.8. Steel rule 3.9. Protractor 3.10. Tri-square 3.11. Measuring steel tape 3.12. Sliding T-Bevel square 3.13. Feeler gauges

	3.14. Thermometers

Curricular Content Guide

1. Underpinning Knowledge	1.1 Types, functions and use of hand and power tools 1.2 Procedures for safely using hand and power tools 1.3 Methods of cleaning and storing hand and power tools 1.4 Process of apply appropriate lubricant on hand and power tools 1.5 Storing procedure of hand, power and measuring tools
2. Underpinning Skills	2.1 Identifying hand, power and measuring tools 2.2 Following safety precautions when using hand, power and measuring tools 2.3 Using hand and measuring tools correctly and safely 2.4 Operating power tools correctly and safely 2.5 Cleaning and maintaining hand and power tools after use 2.6 Applying appropriate lubricant on hand and power tools after use and prior to storing 2.7 Storing technic of hand and power tools.
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety 3.2 Promptness in carrying out activities 3.3 Sincere and honest to duties 3.4 Environmental concerns 3.5 Eagerness to learn 3.6 Tidiness and timeliness 3.7 Respect for rights of peers and seniors in the workplace 3.8 Communication with peers, subordinates and seniors in the workplace
4. Resource Implications	The following resources must be provided: 4.1 Workplace (actual or simulated) 4.2 Tools, equipment and facilities appropriate to processes or activity 4.3 Materials relevant to the proposed activity 4.4 Personal protective equipment (PPE)

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Identified and selected appropriate hand and power tools for work to be performed 1.2 Identified and used measuring and testing tools appropriate to work activity

	1.3 Followed safety precautions when using hand and power tools 1.4 Operated power tools safely and pursuant to manufacturer's operating specification 1.5 cleaned and lubricants tools and equipment 1.6 Inspected and corrected or replaced defective instruments, equipment and accessories 1.7 Performed cleaning and maintenance of hand and power tools after use and prior to storing
2. Methods of Assessment	Competency should be assessed by: 2.1 Written test 2.2 Practical Demonstration 2.3 Oral Questioning 2.4 Portfolio (Optional)
3. Context of Assessment	3.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training. 3.2 Assessment should be done by a nationally certified assessor or occupation-specific industry expert.

Unit of Competency: **APPLY GREEN PRACTICES IN CONSTRUCTION SECTOR**	**Nominal Duration:** 10 hrs.	**Unit Code:** SICIP-CON-SCF-03-S
Unit Descriptor: This unit covers the skills, knowledge and attitudes required for apply green practices in construction sector. It specifically includes the tasks of interpreting green concepts, minimizing resources in the workplace and implementing waste management practices.		

Elements and Performance Criteria:

(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
1. Interpret green concepts	1.1 **Green concepts in the construction sector** are understood. 1.2 **Sustainable building materials** are recognized. 1.3 Energy-efficient designs are interpreted. 1.4 **Water conservation practices** are understood. 1.5 Construction waste management is recognized. 1.6 **Building codes and regulations** are interpreted. 1.7 **Green building certifications** are understood.
2. Minimize resources use in the workplace	2.1 Resource consumption in the construction sector is regularly monitored. 2.2 **Energy-efficient equipment and technologies** are utilized. 2.3 Material selection is optimized. 2.4 Water usage is managed by using water-saving systems. 2.5 Optimized building designs are implemented. 2.6 Sustainable practices are followed.
3. Implement waste management practices	3.1 **Types of waste** generated in the construction sector. 3.2 Waste segregation is implemented on-site. 3.3 Recycling programs are recognized. 3.4 On-site storage and disposal methods are described. 3.5 Construction processes are followed ensuring waste management practices.

Range of Variables

Variable	Range May include but not limited to:
1. Green concepts in the construction sector	1.1 Sustainable Building Materials 1.2 Energy-Efficient Design 1.3 Water Conservation Measures 1.4 Waste Management and Recycling 1.5 Site Environmental Protection

	1.6	Renewable Energy Integration
2. Sustainable building materials	2.1	Recycled and Reclaimed Materials
	2.2	Renewable Natural Materials
	2.3	Low-Emission and Non-Toxic Materials
	2.4	High-Performance Insulation Materials
	2.5	Durable and Long-Lasting Materials
	2.6	Innovative Eco-Friendly Materials
3. Water conservation practices	3.1	Rainwater Harvesting Systems
	3.2	Greywater Recycling
	3.3	Low-Flow Fixtures and Fittings
	3.4	Efficient Site Water Management
	3.5	Landscaping with Drought-Resistant Plants
	3.6	Water Leak Detection and Repair Systems
	3.7	Use of Water-Efficient Appliances and Equipment
4. Building codes and regulations	4.1	Bangladesh National Building Code (BNBC)
	4.2	Environmental Conservation Rules (1997)
	4.3	Water Supply and Sewerage Authority (WASA) Regulations
	4.4	Fire Service and Civil Defense Regulations
	4.5	Bangladesh Labour Act (2006) and Construction Safety
	4.6	Local Government (City Corporation and Municipal) Building Bye-laws
	4.7	Energy Efficiency and Green Building Guidelines
5. Green building certifications	5.1	LEED (Leadership in Energy and Environmental Design)
	5.2	BREEAM (Building Research Establishment Environmental Assessment Method)
	5.3	WELL Building Standard
	5.4	EDGE (Excellence in Design for Greater Efficiencies)
	5.5	Green Globe Certification
	5.6	Green Rating for Integrated Habitat Assessment (GRIHA)
6. Energy-efficient equipment and technologies	6.1	High-Efficiency HVAC Systems
	6.2	LED and Smart Lighting Systems
	6.3	Energy-Efficient Construction Machinery
	6.4	Building Automation and Control Systems (BACS)
	6.5	Solar-Powered Equipment and Technologies
	6.6	Insulation and Building Envelope Technologies
7. Types of waste	7.1	Concrete and Masonry Waste
	7.2	Wood Waste
	7.3	Metal Waste
	7.4	Plastic and Packaging Waste
	7.5	Hazardous Waste
	7.6	Soil and Excavation Waste
	7.7	Glass and Ceramics Waste

Curricular Content Guide

1. Underpinning Knowledge	1.1 Fundamental principles of green construction. 1.2 Benefits, environmental footprint, and lifecycle considerations 1.3 Overview of sustainable building materials 1.4 Relevant building codes and environmental regulations 1.5 Common types of construction waste 1.6 Waste segregation principles and methods 1.7 Green building certifications 1.8 Principles of integrated design and project management 1.9 Sustainable construction techniques
2. Underpinning Skills	2.1 Identifying and selecting sustainable building materials 2.2 Interpreting and applying energy-efficient design principle 2.3 Establishing and managing on-site waste storage systems 2.4 Segregating construction waste on-site into recyclable, reusable, and hazardous categories 2.5 Coordinating with recycling facilities and waste disposal contractors 2.6 Following building codes, environmental regulations, and green certification 2.7 Documenting waste generation and disposal activities
3 Underpinning Attitudes	3.1 Commitment to occupational health and safety 3.2 Promptness in carrying out activities 3.3 Sincere and honest to duties 3.4 Environmental concerns 3.5 Eagerness to learn 3.6 Tidiness and timeliness 3.7 Respect for rights of peers and seniors in the workplace 3.8 Communication with peers, subordinates and seniors in the workplace
4 Resource Implications	4.1 Workplace (simulated or actual) 4.2 Projector 4.3 Stationery 4.4 Learning manual

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 interpreted green concepts 1.2 minimizing resources use in the workplace 1.3 implementing waste management practices

2. Methods of Assessment	Competency should be assessed by: 2.1 Written test 2.2 Practical Demonstration 2.3 Oral Questioning 2.4 Portfolio (Optional)
3. Context of Assessment	3.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training. 3.2 Assessment should be done by a nationally certified assessor or occupation-specific industry expert.

The Occupation Specific Competencies

Unit of Competency: **PLAN AND DESIGN SCAFFOLDING**	**Nominal Duration:** 40 Hrs.	**Unit Code:** SICIP-CON-SCF-01-O
Unit Descriptor: This unit covers the skills, knowledge and attitudes required to plan and design scaffolding. It specifically includes the tasks of carrying out planning for scaffolding, preparing layout and designing scaffolding.		

Elements and Performance Criteria:
(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	**Performance Criteria**
1. Carry out planning for scaffolding	1.1 Importance of scaffolding is interpreted. 1.2 **Types of scaffoldings** are identified. 1.3 Selection of scaffolding is made based on the planning. 1.4 Scaffolding plan is carried out.
2. Prepare layout	2.1 Plan is prepared based on the **working structure**. 2.2 Measurement of the working area is carried out. 2.3 Layout with detailed specifications is prepared.
3. Design scaffolding	3.1 **Factors influencing in design** of scaffolding are identified. 3.2 Job nature with height and duration of scaffolding is identified. 3.3 Selection of appropriate materials is considered. 3.4 Engineering inputs are collected. 3.5 Load calculation is made based on the **environmental, live and dead loads**.

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Types of scaffoldings	1.1 Based on materials 1.1.1 Tube and clamp scaffolding 1.1.2 Frame scaffolding 1.1.3 System scaffolding (cup-lock, ring lock, pin lock) 1.1.4 Mechanical scaffolding 1.2 Based on structure 1.2.1 Single layer 1.2.2 Double layer 1.2.3 Tower scaffolding 1.2.4 Independent scaffolding 1.2.5 Suspended (Hanging) scaffolding

	1.2.6 Mobile scaffolding
2. Working structure	2.1 Multi storied building 2.2 Tower 2.3 Indoor structure 2.4 Industry building 2.5 Warehouse 2.6 Bridge and flyover
3. Factors influencing in design	3.1 Nature of the job 3.2 Height and duration 3.3 Materials selection 3.4 Design and engineering inputs 3.5 Weather 3.6 Load
4. Environmental, live and dead loads	4.1 Environmental loads 4.1.1 Wind 4.1.2 Rain 4.1.3 Earthquake 4.1.4 Storm 4.1.5 Flood 4.2 Dead load 4.2.1 Construction materials 4.2.2 Scaffolding load 4.3 Live load 4.3.1 Worker load 4.3.2 Machine load

Curricular Content Guide

1. Underpinning Knowledge	1.1. Importance of scaffolding and their types. 1.2. Materials used in scaffolding design 1.3. Understand construction site for scaffolding, including factors influencing the ground and other structural work 1.4. Understand scaffolding design 1.5. Load calculation based on environment live and dead loads. 1.6. Understand the factors that affect the load capacity
2. Underpinning Skills	2.1. Assessing the site to determine the best layout for scaffolding 2.2. Measuring and marking out the scaffolding layout 2.3. Selecting tools, equipment and material. 2.4. Creating detailed scaffolding plans and drawings, 2.5. Reading and interpreting construction drawings and adapt scaffolding designs accordingly.
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety 3.2 Promptness in carrying out activities 3.3 Sincere and honest to duties 3.4 Environmental concerns 3.5 Eagerness to learn

	3.6 Tidiness and timeliness 3.7 Respect for rights of peers and seniors in the workplace 3.8 Communication with peers, subordinates and seniors in the workplace
4 Resource Implications	The following resources must be provided: 4.1 Workplace (actual or simulated) 4.2 Tools, equipment and facilities appropriate to processes or activity 4.3 Materials relevant to the proposed activity

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 identified types of scaffolding 1.2 carried out planning for scaffolding 1.3 prepared layout 1.4 understood design of scaffolding 1.5 identified factors influencing in design of scaffolding 1.6 carried out load calculation based on environmental, live and dead loads.
2. Methods of Assessment	Competency should be assessed by: 2.1 Written test 2.2 Practical Demonstration 2.3 Oral Questioning 2.4 Portfolio (Optional)
3. Context of Assessment	3.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training. 3.2 Assessment should be done by a nationally certified assessor or occupation-specific industry expert.

Unit of Competency: **PRACTICE OCCUPATIONAL HEALTH AND SAFETY PROCEDURES**	**Nominal Duration:** 30 Hrs.	**Unit Code:** SICIP-CON-SCF-02-O
Unit Descriptor: This unit covers the skills, knowledge and attitudes required to practice occupational health and safety procedures. It specifically includes the tasks of identifying workplace safety procedures, understanding workplace emergency procedures and practicing safety in erection and dismantling works.		

Elements and Performance Criteria:
(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
1. Identify workplace safety procedures	1.1 **Safety signals and symbols** are identified. 1.2 Health and safety instructions/points at the tool box are understood. 1.3 **Inflammable liquids** and **hazardous substances** are identified and interpreted. 1.4 Manual handling procedures and ergonomic parameters are collected.
2. Understand workplace emergency procedures	2.1 **Fire protection equipment** & material and methods of use are identified. 2.2 Emergency fire escape procedures are interpreted when necessary 2.3 Safety warning alarms and workshop evacuation procedures are explained.
3. Practice safety in erection and dismantling works	3.1 **Personal protective equipment** is worn according to workplace requirements. 3.2 Safety in erection process is practiced. 3.3 Safety in dismantling work is practiced.

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Safety signals and symbols	1.1 Safety tag 1.1.1 Green 1.1.2 Yellow 1.1.3 Red 1.2 Safety sign 1.2.1 Under construction 1.2.2 Over height 1.2.3 Danger 1.2.4 High voltage 1.2.5 Drive slow
2. Inflammable liquids	2.1 Fuels

	2.2 Solvents 2.3 Adhesives and Sealants 2.4 Oils and Lubricants 2.5 Bitumen
3. Hazardous substances	3.3 Solvents and Paints 3.4 Cement Dust 3.5 Chemical Additives in Concrete 3.6 Formaldehyde
4. Fire protection equipment	4.1 Fire Extinguishers 4.2 Fire Hose Reels 4.3 Sprinkler Systems 4.4 Fire Alarm Systems 4.5 Fire pump
5. Personal protective equipment	5.1 Safety helmet 5.2 Safety glasses 5.3 Dust masks 5.4 Safety apron 5.5 Ear plugs 5.6 Gloves 5.7 Safety belt 5.8 Safety harnesses 5.9 Safety shoes

Curricular Content Guide

1. Underpinning Knowledge	1.1 Specific safety standards and requirements for scaffolding installation, use, and dismantling 1.2 Common workplace hazards in scaffolding activities 1.3 Understand safety equipment used during emergency and the time of fire protection 1.4 Understand workplace evacuation procedures 1.5 Safety requirements and safe work practices for scaffolding erection and dismantling 1.6 Procedures for safely working with tools and equipment used in scaffolding erection and dismantling.
2. Underpinning Skills	2.1 Using appropriate PPE 2.2 Identifying potential hazards in the scaffolding setup 2.3 Using fire protection equipment 2.4 Identifying evacuation routes 2.5 Reacting quickly and effectively in the event of an emergency 2.6 Following safety procedures of erecting and dismantling scaffolding
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety 3.2 Promptness in carrying out activities 3.3 Sincere and honest to duties 3.4 Environmental concerns 3.5 Eagerness to learn

	3.6 Tidiness and timeliness 3.7 Respect for rights of peers and seniors in the workplace 3.8 Communication with peers, subordinates and seniors in the workplace
4 Resource Implications	The following resources must be provided: 4.1 Workplace (actual or simulated) 4.2 Tools, equipment and facilities appropriate to processes or activity 4.3 Materials relevant to the proposed activity 4.4 Relevant manuals (OHS) 4.5 Safety guideline

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 identified safety signals and symbols 1.2 identified Inflammable liquids and hazardous substances 1.3 used fire protection equipment & materials 1.4 understood workplace evacuation procedures 1.5 practiced safety in erection and dismantling works
2. Methods of Assessment	Competency should be assessed by: 2.1 Written test 2.2 Practical Demonstration 2.3 Oral Questioning 2.4 Portfolio (Optional)
3. Context of Assessment	3.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training. 3.2 Assessment should be done by a nationally certified assessor or occupation-specific industry expert.

Unit of Competency: **PERFORM ERECTION OF SCAFFOLDING**	**Nominal Duration:** 160 Hrs.	**Unit Code:** SICIP-CON-SCF-03-O
Unit Descriptor: This unit covers the skills, knowledge and attitudes required to perform erection of scaffolding. It specifically includes the tasks of interpreting site rules and regulations in erecting scaffolding, collecting scaffold components, tools and equipment, preparing ground work area and installing scaffolding.		

Elements and Performance Criteria:
(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
1. Interpret site rules and regulations in erecting scaffolding	1.1 **Rules and regulations** in erecting scaffolding are identified. 1.2 Rules and regulations are interpreted.
2. Collect scaffold components, tools and equipment	2.1 **Scaffold components** are identified and selected based on the design. 2.2 **Fittings and accessories** are identified and collected. 2.3 **Tools and equipment** are identified and collected. 2.4 Tools and equipment are checked for usability.
3. Prepare ground work area	3.1 Ground conditions are observed to ensure stability and suitability for scaffold installation. 3.2 Obstructions and debris are cleared from the area to provide a safe, level foundation for scaffold setup. 3.3 Protective barriers or signage are installed to secure the work area and prevent unauthorized access. 3.4 Surface leveling is completed to ensure that scaffold is securely positioned and stable.
4. Install scaffolding	4.1 Necessary equipment and materials are collected to the site for efficient scaffold erection. 4.2 Team is formed to carry out different tasks relating to erection of scaffolding. 4.3 Scaffolding components are collected as per the specifications and materials required. 4.4 Scaffolding components are assembled, leveled and installed as per design. 4.5 Working platform is placed as per requirements. 4.6 Safety nets are fixed around working area as per requirements. 4.7 Scaffolding position is checked as per the design for efficient use.

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Rules and regulations	1.1 Safety compliance 1.2 Structure integrity 1.3 Height and weight limit 1.4 Stable and leveled base surface 1.5 Guardrails and toe board 1.6 Safety access 1.7 Ladder positioning 1.8 Fall protection 1.9 Penalty for non-compliance
2. Scaffold components	2.1. Standards 2.2. Ledgers 2.3. Transoms 2.4. Braces 2.5. Base plates 2.6. Kicker lift 2.7. Adjustable base jacks 2.8. Working platforms 2.9. Guardrails 2.10. Toe boards 2.11. Ladders 2.12. Cross bracing 2.13. Putlog
3. Fittings and accessories	3.1 Couplers 3.1.1 Single coupler 3.1.2 Double coupler 3.1.3 Swivel coupler 3.1.4 Sleeve coupler 3.1.5 Roofing coupler 3.2 Expandable join pin 3.3 Clumps 3.3.1 Fixed clump 3.3.2 Moving clump 3.3.3 Ladder clump 3.3.4 Box clump 3.3.5 Beam clump 3.3.6 Plunk clump 3.4 Putlog head accessories 3.5 Key pin 3.6 Ring lock 3.7 Cup lock
4. Tools and equipment	4.1 Wrenches and spanners 4.2 Ball pin hammer 4.3 Magnetic spirit level 4.4 Laser level

	4.5 Plumb bob 4.6 Scaffold key 4.7 Pulleys 4.8 Angle grinder 4.9 Scaffold measuring tape 4.10 Rachets

Curricular Content Guide

1. Underpinning Knowledge	1.1 Understand safety compliance and structure integrity 1.2 Scaffolding components required for scaffolding 1.3 Use of tools and equipment required for scaffolding work 1.4 Use of fittings and accessories required for scaffolding work 1.5 Understand ground conditions and soil types for proper scaffolding setup 1.6 Understand assemble procedure of different types of scaffolding 1.7 Sequence of scaffolding components setup
2. Underpinning Skills	2.1 Applying construction site-specific safety standard and regulations related to scaffolding and ensuring compliance during erection of scaffolding. 2.2 Implementing the requirements of site rules and regulations in practical scaffolding tasks. 2.3 Identifying different scaffold components based on the scaffolding design. 2.4 Collecting and organizing scaffold components that supports smooth workflow during the erection of scaffolding. 2.5 Inspecting the ground conditions, soil type and hazards related to scaffolding. 2.6 Assembling and installing scaffolding components 2.7 Checking lifting and positioning of scaffold components
3. Underpinning Attitudes	3.1. Commitment to occupational health and safety 3.2. Promptness in carrying out activities 3.3. Sincere and honest to duties 3.4. Environmental concerns 3.5. Eagerness to learn 3.6. Tidiness and timeliness 3.7. Respect for rights of peers and seniors in the workplace 3.8. Communication with peers, subordinates and seniors in the workplace
4. Resource Implications	The following resources must be provided: 3.1 Workplace (actual or simulated) 3.2 Tools, equipment and facilities appropriate to processes or activity

	3.3 Materials relevant to the proposed activity 3.4 Relevant manuals

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 interpreted construction site rules and regulations in erecting scaffolding. 1.2 collected scaffold components, tools and equipment 1.3 identified fittings and accessories 1.4 observed ground conditions to ensure stability and suitability for scaffold installation. 1.5 assembled, leveled and installed scaffolding components
2. Methods of Assessment	Competency should be assessed by: 2.1 Written test 2.2 Practical Demonstration 2.3 Oral Questioning 2.4 Portfolio (Optional)
3. Context of Assessment	3.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training. 3.2 Assessment should be done by a nationally certified assessor or occupation-specific industry expert.

Unit of Competency: **CARRY OUT DISMANTLING OF SCAFFOLDING**	**Nominal Duration:** 80 Hrs.	**Unit Code:** SICIP-CON-SCF-04-O
Unit Descriptor: This unit covers the skills, knowledge and attitudes required to carry out dismantling of scaffolding. It specifically includes the tasks of understanding safe dismantling, collecting tools and equipment for dismantling, performing dismantling and cleaning and storing the scaffolding components.		

Elements and Performance Criteria:
(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
1. Understand safe dismantling	1.1 **Personal protective equipment (PPE)** is used. 1.2 Safety compliances are understood. 1.3 Proper fall protection is ensured.
2. Collect tools and equipment for dismantling	2.1 Tools and equipment are identified. 2.2 Tools and equipment are collected. 2.3 Tools and equipment are checked for usability.
3. Perform dismantling	3.1 The area is cleared of obstructions. 3.2 Safety and caution signs are placed. 3.3 Team is formed to carry out different tasks relating to dismantling of scaffolding. 3.4 **Sequence of dismantling procedures** is maintained. 3.5 Tools and equipment are used according to safety standards. 3.6 Scaffold components are removed sequentially to maintain stability of the components.
4. Clean and store the scaffolding components	4.1 Dismantled items are stored safely for reuse in designated places. 4.2 Scaffolding components are cleaned and stored. 4.3 Tools and equipment are cleaned and stored as per manufacturer's instructions. 4.4 Safety and caution sign is removed. 4.5 Work area is cleaned.

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Personal protective equipment (PPE)	1.1 Safety helmet 1.2 Safety glasses 1.3 Dust masks 1.4 Safety apron 1.5 Ear plugs 1.6 Gloves 1.7 Safety belt

	1.8 Safety harnesses 1.9 Safety shoes
2. Sequence of dismantling procedures	2.1 Inspect scaffold stability 2.2 Dismantling top sections 2.3 Removing scaffold components 2.4 Dismantling lower components

Curricular Content Guide

1. Underpinning Knowledge	1.1 Understand the importance of handling equipment and hazardous materials 1.2 Comprehending procedures of safely removing hazardous materials 1.3 Lifting and handling techniques for scaffold components 1.4 Use of tools and equipment for each stage of the scaffolding dismantling process. 1.5 Correct sequence for dismantling and removing scaffold components 1.6 Cleaning techniques based on the material of the scaffold components 1.7 Cleaning methods of tools and equipment for dismantling of scaffolding 1.8 Process of storing tools, equipment and scaffolding components.
2. Underpinning Skills	2.1 Following safety procedure/protocols for dismantling 2.2 Identifying appropriate tools and equipment required for scaffolding dismantling. 2.3 Checking usability of tools and equipment 2.4 Removing scaffolding components maintaining sequence and ensuring that the structure remains stable 2.5 Following the dismantling sequence to ensure that components are removed in a safe and controlled manner. 2.6 Applying cleaning materials or treatments to scaffolding components. 2.7 Cleaning tools, equipment and scaffolding components 2.8 Storing tools, equipment and scaffolding components for reuse. 2.9 Cleaning the work area.
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety 3.2 Promptness in carrying out activities 3.3 Sincere and honest to duties 3.4 Environmental concerns

	3.5 Eagerness to learn 3.6 Tidiness and timeliness 3.7 Respect for rights of peers and seniors in the workplace 3.8 Communication with peers, subordinates and seniors in the workplace
4 Resource Implications	The following resources must be provided: 4.1 Workplace (actual or simulated) 4.2 Tools, equipment and facilities appropriate to processes or activity 4.3 Materials relevant to the proposed activity 4.4 Relevant manuals

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 understood safety compliance for dismantling 1.2 collected tools and equipment for dismantling 1.3 checked usability of tools and equipment 1.4 maintained sequence of dismantling procedures 1.5 removed scaffold components sequentially to maintain stability of the components. 1.6 cleaned tools, equipment and scaffolding components 1.7 stored tools, equipment and scaffolding components.
2. Methods of Assessment	Competency should be assessed by: 2.1 Written test 2.2 Practical Demonstration 2.3 Oral Questioning 2.4 Portfolio (Optional)
3. Context of Assessment	3.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training. 3.2 Assessment should be done by a nationally certified assessor or occupation-specific industry expert.

End of the Competency Standard

Workshop/Lab Facility Standard

Course Name:	Scaffolding
Number of Trainees:	25

Course-wise Training Space (Theoretical Classroom, Workshop/ Lab/ Classroom cum Workshop):

- Classroom – 350 sft (33 sqm)
- Workshop/ lab – 800 sft (75 sqm)

  OR
- Classroom cum workshop – 1000 sft (93 sqm)

Major Training Equipment and Training Facilities:

S. N.	Major Equipment and Training facilities	Required facilities
1.	Computer/laptop	01
2.	Multimedia projector	01
3.	Internet connectivity	01
4.	MS pipe (pipe range 1.5” to 2.5” dia), 10’ each	112
5.	Working platform (aluminum/toe board), range of length 5’, width 2’	8
6.	Sole board (300 mm x 300 mm) thickness – 38 mm	16
7.	Base plate	16
8.	Grinding machine	02
9.	Rachet spanner	25
10.	Ball pin hammer	25
11.	Magnetic spirit level	25
12.	Measuring tape (steel)	25
13.	Adjustable wrench	04

The following conditions must be fulfilled –

- The institute shall not use the same facilities for any other projects/organizations offering a similar course.
- The institute must provide sufficient evidence to prove ownership of the proposed training equipment.

The list denotes the minimum training equipment and facility required to effectively conduct training for a specific course. Additionally, the institute must ensure that all other necessary training tools, equipment, and furniture are available to meet the requirement of competency standards (CS) provided by SICIP.

For the operation of training course on **scaffolding,** the institute must ensure the availability of at least 80% of the major training equipment and training facilities (according to the CS) to be eligible for SICIP training delivery. If the score is below 80%, the remaining equipment and facilities need to be installed before the commencement of the training.

The institute will also provide all other hand tools and power tools as per CS for 25 trainees. Also, they will arrange adequate seating arrangement and classroom setup for the 25 trainees.