

COMPETENCY STANDARD

FOR

MASONRY

Level: 2

(Construction Sector)

Code: CS-CS-MAS-L2-EN-V1



National Skills Development Authority Prime Minister's Office Government of the People's Republic of Bangladesh

Copyright

National Skills Development Authority Prime Minister's Office Level: 10-11, Biniyog Bhaban, E-6 / B, Agargaon, Sher-E-Bangla Nagar Dhaka-1207, Bangladesh. Email: ec@nsda.gov.bd Website: <u>www.nsda.gov.bd</u>. National Skills Portal: http:\<u>\skillsportal.gov.bd</u>

National Skills Development Authority (NSDA) is the owner of this document. Other interested parties must obtain written permission from NSDA for reproduction of information in any manner, in whole or in part, of this Competency Standard, in English or other language.

This Competency Standard for Masonry is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order to meet the qualification of individuals who graduated through the established standard via competency-based assessment for a relevant job.

This document has been developed by NSDA in association with Construction Sector, industry representatives, academia, related specialist, trainer and related employee.

Public and private institutions may use the information contained in this standard for activities benefitting Bangladesh.

Introduction

The NSDA aims to enhance an individual's employability by certifying completeness with skills. NSDA works to expand the skilling capacity of identified public and private training providers qualitatively and quantitatively. It also aims to establish and operationalize a responsive skills ecosystem and delivery mechanism through a combination of well-defined set of mechanisms and necessary technical supports.

Key priority economic growth sectors identified by the government have been targeted by NSDA to improve current job skills along with existing workforce to ensure required skills to industry standards. Training providers are encouraged and supported to work with industry to address identified skills and knowledge to enable industry growth and increased employment through the provision of market responsive inclusive skills training program. "**Masonry**" is selected as one of the priority occupations of **Construction Sector**. This standard is developed to adopt a demand driven approach to training with effective inputs from Industry Skills Councils (ISC's), employer associations and employers.

Generally, a competency standard informs curriculum, learning materials, assessment and certification of trainees enrolled in Skills Training. Trainees who successfully pass the assessment will receive a qualification in the National Skills Qualification Framework (NSQF) under Bangladesh National Qualification Framework and will be listed on the NSDA's online portal.

This competency standard is developed to improve skills and knowledge in accordance with the job roles, duties and tasks of the occupation and ensure that the required skills and knowledge are aligned to industry requirements. A series of stakeholder consultations, workshops were held to develop this document.

The document also details the format, sequencing, wording and layout of the Competency Standard for an occupation which is comprised of 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 an occupation, trade or job corresponding to the industry standard of performance required in the workplace.

The purpose of a competency standards is to:

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

Competency standards are developed by a working group comprised of representative from NSDA, Key Institutions, ISC, and industry experts to identify the competencies required of an occupation in Informal Sector.

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

With competency standards, training and assessment may be conducted at the workplace or at training institute or any combination of these.

Competency standards consist of a number of units of competency. 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 of:

- unit title
- nominal duration
- unit code
- unit descriptor
- elements and performance criteria
- variables and range statement
- curricular content guide
- assessment evidence guide

Together, all the parts of a unit of competency:

- describe a work activity
- guide the assessor to determine whether the candidate is competent or not yet competent

The ensuing sections of this document comprise of a description of the relevant occupation, trade or job with all the key components of a unit of competency, including:

- a chart with an overview of all Units of Competency for the relevant occupation, trade or job including the Unit Codes and the Unit of Competency titles and corresponding Elements
- the Competency Standard that includes the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide and Assessment Evidence Guide.

Competency Standards for National Skill Certificate, Level-2 in Masonry in Construction Sector

Level & Job classification	Knowledge Domain	Skills Domain	Responsibility Domain
6-Mid-Level Manager/ Sub Assistant Engineer	Comprehensive actual and theoretical knowledge within a specific work or study area with an awareness of the validity and limits of that knowledge, able to analyse, compare, relate and evaluate.	Specialised and wider range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems. Communicate professional issues and solutions to the team and to external partners/users.	Work under broad guidance and self-motivation to execute strategic and operational plan/s. Lead lower-level management. Diagnose and resolve problems within and among work groups.
5-Supervisor	Broad knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to scrutinize and break information into parts by identifying motives or causes.	Broad range of cognitive and practical skills required to generate solutions to specific problems in one or more work or study areas. Communicate practice- related problems and possible solutions to external partners.	Work under guidance of management and self-direction to resolve specific issues. Lead and take responsibility for the work and actions of group/team members. Bridge between management.
4-Highly Skilled Worker	Broader knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to solve problems to new situations by comparing and applying acquired knowledge.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information. Communicate using technical terminology and IT technology with partners and users as per workplace requirements.	Work under minimal supervision in specific contexts in response to workplace requirements. Resolve technical issues in response to workplace requirements and lead/guide a team/ group.
3-Skilled Worker	Moderately broad knowledge in a specific work or study area, able to perceive ideas and abstract from drawing and design according to workplace requirements.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools. Communicate with his team and limited external partners upholding the values, nature and culture of the workplace	Work or study under supervision with considerable autonomy. Participate in teams and responsible for group coordination.
2-Semi Skilled Worker	Basic understanding of underpinning knowledge in a specific work or study area, able to interpret and apply common occupational terms and instructions.	Skills required to carry out simple tasks, communicate with his team in the workplace presenting and discussing results of his work with required clarity.	Work or study under supervision in a structured context with limited scope of manipulation

Level Descriptors of NSQF (BNQF 1-6)

1 –Basic Skilled Worker	Elementary understanding of ability to interpret the underpinning knowledge in a specific study area, able to interpret common occupational terms and instructions.	Specific Basic skills required to carry out simple tasks. Interpret occupational terms and present the results of own work within guided work environment/ under supervision.	Work under direct supervision in a structured context with limited range of responsibilities.
-------------------------------	---	---	--

List of Abbreviations

CS	Competency Standard
ISC	Industry Skills Council
NSDA	National Skills Development Authority
NSQF	National Skills Qualifications Framework
OSH	Occupational Safety and Health
PPE	Personal Protective Equipment
SCVC	Standards and Curriculum Validation Committee
STP	Skills Training Provider
SOP	Standard Operating Procedure
UoC	Unit of Competency

Approved by ----- Executive Committee (EC) Meeting of NSDA Held on -----

Copyright	iii
Introduction	iv
Overview	v
Level Descriptors of NSQF (BNQF 1-6)	vi
List of Abbreviations	vii
Course Structure	1
Units & Elements at Glance	2
Generic Units of Competencies	5
GU-02-L2-V1: Apply Occupational Safety and Health (OSH) Procedure in The	Workplace
	6
GU-12-L2-V1: Communicate in the Workplace	10
GU-08-L2-V1: Work in a Team Environment	13
Sector Specific Units of Competencies	15
SU-CS-01-L2-V1: Work in the Construction Sector	16
SU-CS-02-L2-V1: Interpret Drawings and Specifications in Construction Manua	als20
Occupation Specific Units of Competencies	
OUMAS001L2V1: Use Tools for Masonry Works	23
OU-MAS-02-L2-V1: Perform Fundamental Works of Masonry	27
OU-MAS-04-L2-V1: Construct Brick Wall and Foundation	32
OU-MAS-05-L2-V1: Perform Brick Soling	
OU-MAS-07-L2-V1: Perform Plaster Works on Masonry Surface	40
Review of Competency Standard	
Validation of Competency Standard by Standard and Curriculum Validation Cor	nmittee
(SCVC)	
Re-Review of Competency Standard	

Table of Contents

Competency Standards for National Skill Certificate, Level-02 in Masonry in Construction Sector

Course Structure

SL No	Unit code and Title UOC I Level I			Nominal (hours)
Gene	ric Units of Competenci	es	_	
1.	GU-02-L2-V1	Apply Occupational Safety and Health (OSH) Procedure in the Workplace	2	15
2.	GU-12-L2-V1	Communicate in the workplace	2	30
3.	GU-08-L2-V1	Work in a Team Environment	2	20
Sub 7	Fotal			65
Secto	r Specific Units of Com	petencies		
4.	SU-CS-01-L2-V1	Work in the Construction Sector	2	20
5.	SU-CS-02-L2-V1	Interpret Drawings and Specifications in Construction Manuals	2	20
Sub Total			40	
Occupation Specific Units of Competencies				
6.	OU-MAS-01-L2-V1	Use Tools for Masonry Works	2	20
7.	OU-MAS-02-L2-V1	Perform Fundamental Works of Masonry	2	25
8.	OU-MAS-03-L2-V1	Construct Brick Wall and foundation	2	90
9.	OU-MAS-04-L2-V1	Perform Brick Soling	2	40
10.	OU-MAS-05-L2-V1	Perform Plaster Works on Masonry Surface	2	80
Sub Total			255	
Total Duration			360	

Units & Elements at Glance

Generic Competencies

Code	Unit of competency	Elements of competency	Duration (hours)
GU002L2V1	Apply Occupational Safety and Health (OSH) Procedure in the Workplace	 Identify OSH policies and procedures Follow OSH procedure Report hazards and risks Respond to emergencies Maintain personal well-being 	15
GU012L2V1	Communicate in the workplace	 Receive verbal instructions. Interpret verbal and written information/ instruction Convey instructions using verbal and written forms of communication Complete written documentation Participate in work place meetings and discussions. 	30
GU003L2V1	Work in a team environment	 Define team role and scope. Identify individual role and responsibility. Participate in team discussions. Work as a team member. 	20
Total hours			

Sector specific competencies

Code	Unit of competency	Elements of competency	Duration (hours)
SUCS001L2V1	Work in the Construction Sector	 Describe the organizational structure within the sector. Identify processes and procedures. Identify tools, equipment and materials. Identify workplace requirements. Organize own workload. Practice OHS. 	20
SUCS002L2V1	Interpret Drawings and Specifications in Construction Manuals	 Identify information from manuals. Interpret drawings and specifications. Store manuals. 	20
		Total hours	40

Occupation specific competencies

Code	Unit of	Elements of competency	Duration
	competency		(hours)
OUMAS001L2V1	Use Tools for Masonry Works	 Identify tools and equipment Use hand tools Use power tools Perform basic preventive maintenance Maintain workplace cleanliness and store tools 	20
OUMAS002L2V1	Perform Fundamental Works of Masonry	 Prepare for works Interpret sign, symbols and specifications from drawing plan Perform basic measurement and calculations for masonry works Perform curing works Make and dismantle scaffolding Maintain workplace, tools, equipment and materials 	25

OUMAS003L2V1	Construct Brick Wall and foundation	 Prepare for brick works Perform Damp Proof Course (DPC) Layout for brick work Perform wall and foundation Maintain workplace cleanliness and store tools 	90
OUMAS004L2V1	Perform Brick Soling	 Prepare for works Perform brick flat soling Perform zigzag bond soling Perform diagonal bond soling Perform herringbone bond soling Perform paving work Maintain workplace cleanliness and store tools 	40
OUMAS005L2V1	Perform Plaster Works on Masonry Surface	 Prepare for works Perform plaster on brick wall Perform plaster on concrete surface Make drip course Maintain workplace cleanliness and store tools 	80
		Total Hours	255

Generic Units of Competencies

Unit Code and Title	GU-02-L2-V1: Apply Occupational Safety and Health (OSH) Procedure in The Workplace		
Unit Descriptor	 This unit covers the knowledge, skills and attitudes (KSA) required to apply occupational safety and health (OSH) procedure in the workplace. It specifically includes the task of identifying OSH policies and procedures, following OSH procedure, reporting hazards and risks, responding to emergencies and maintaining personal wellbeing. 		
Nominal Hours	15 Hours		
Elements of Competency	Performance Criteria Bold & Underlined terms are elaborated in the Range of Variables		
1. Identify OSH policies and procedures	1.1. <u>OSH policies</u> and <u>safe operating procedures</u> are accessed and stated		
	 1.2. Safety signs and symbols are identified and followed 1.3. Emergency response, evacuation procedures and other contingency measures are determined according to workplace requirements 		
2. Follow OSH	2.1 Personal protective equipment (PPE) is selected and		
procedure	 collected as required 2.2 Personal protective equipment (PPE) is correctly used in accordance with organization OSH procedures and practices 2.3 A clear and tidy workplace is maintained as per workplace standard 2.4 DDE is a is taken by the protection of the procedure of the		
	2.4 PPE is maintained to keep them operational and compliant with OSH regulations		
3. Report hazards and risks	 3.1 <u>Hazards</u> and risks are identified, assessed and controlled 3.2 Incidents arising from hazards and risks are reported to designated authority 		
4. Respond to emergencies	 4.1 Alarms and warning devices are responded 4.2 Workplace <u>emergency procedures</u> are followed 4.3 <u>Contingency measures</u> during workplace accidents, fire and other emergencies are recognized and followed in accordance with organization procedures 4.4 First aid procedures are applied during emergency situations 		
5. Maintain personal well-being	5.1 OSH policies and procedures are adhered to OSH awareness programs are participated in as per workplace guidelines and procedures.		

	5.2	Corrective actions are implemented to correct unsafe
		condition in the workplace
	5.3	"Fit to work" records are updated and maintained
		according to workplace requirements
Range of Variables		
X 7 • 11	n	
Variables	Kan	ge (may include but not limited to):
1. OSH policies	1.1.	Bangladesh standards for OSH
	1.2.	Fire safety rules and regulations
	1.3.	Code of practice
	1.4.	Industry guidelines
2. Safe operating	2.1	Orientation on emergency exits, fire extinguishers, fire
procedures		escape, etc.
	2.2	Emergency procedures
	2.3	First aid procedures
	2.4	Tagging procedures
	2.5	Use of PPE
	2.6	Safety procedures for hazardous substances
3. Safety signs and	3.1	Direction signs (exit, emergency exit, etc.)
symbols	3.2	First aid signs
	3.3	Danger tags
	3.4	Hazard signs
	3.5	Safety tags
	3.6	Warning signs
4. Personal Protective	4.1	Gas Mask
Equipment (PPE)	4.2	Gloves
	4.3	Safety boots
	4.4	Face mask
	4.5	Overalls
	4.6	Goggles and safety glasses
	4.7	Sun block
	4.8	Chemical/ gas detectors
5. Hazards	5.1	Chemical hazards
	5.2	Biological hazards
	5.3	Physical hazards
	5.4	Mechanical and electrical hazard
	5.5	Mental hazard
	5.6	Ergonomic hazard
6. Emergency	6.1	Fire fighting
procedures	6.2	Earthquake
	6.3	Medical and first aid
	6.4	Evacuation

7. Contingency	7.1	Evacuation
merasures	7.2	Isolation
	7.1	Decontamination
8. "Fit to Work" records	8.1	Medical Certificate every year
	8.2	Accident reports, if any
	8.3	Eye vision certificate
Evidence Guide		
The evidence must be aut	hentic	e, valid, sufficient, reliable, consistent, recent and meet all
requirements of current ve	rsion	of the Unit of Competency
	Asse	essment required evidence that the candidate:
	1.1	stated OSH policies and safe operating procedures
	1.2	followed safety signs and symbols
1 Critical aspects of	1.3	used personal protective equipment (PPE)
competency	1.4	maintained workplace clear and tidy
competency	1.5	assessed and controlled hazards
	1.6	followed emergency procedures
	1.7	followed contingency measures
	1.8	implemented corrective actions
	2.1	Define OSH
	2.2	OSH workplace policies and procedures
	2.3	Work Safety procedures
	2.4	Emergency procedures
2. Underpinning	2.5	Hazard control procedure
knowledge	2.6	Different types of hazards
	2.7	PPE and there uses
	2.8	Personal hygiene practices
	2.9	OSH awareness
	3.1	Accessing OSH policies
	3.2	Handling of PPE
3. Underpinning skills	3.3	Handling cleaning tools and equipment
	3.4	Writing report
	3.5	Responding to emergency procedures
	4.1	Commitment to occupational health and safety
	4.2	Sincere and honest to duties
	4.3	Promptness in carrying out activities
A Doquired attitude	4.4	Environmental concerns
4. Required attitude	4.5	Eagerness to learn
	4.6	Tidiness and timeliness
	4.7	Respect of peers and seniors in workplace
	4.8	Communicate with peers and seniors in workplace
5. Resource implications	5.1	Workplace

	5.2 Equipment and outfits appropriate in applying safety			
		measures		
	5.3	Tools, equipment, materials and documentation required		
	5.4	OSH policies and procedures		
	Con	petency should be assessed by:		
6. Methods of assessment	6.1	Written test		
	6.2	Demonstration		
	6.3	Oral questioning		
	7.1	Competency assessment must be done in NSDA		
7. Context of assessment		accredited assessment centre		
	7.2	Assessment should be done by a NSDA		
		certified/nominated assessor		

Unit code and Title	GU-12-L2-V1: Communicate in the Workplace		
Nominal Hours	30 Hours		
Unit Descriptor	This unit covers the knowledge, skills and attitudes (KSAs) required to communicate in the workplace. It includes the use of verbal and written forms of communication to receive, interpret, convey, and document information/ instruction using appropriate communication		
Elements of Competency	equipment. Performance Criteria Bold & Underlined terms are elaborated in the Range of Variables Training Components		
1. Receive verbal instructions.	 Instructions are accessed and interpreted Questions are asked to clarify understanding or gain more information. Information/instruction is recorded. 		
2. Interpret verbal and written information/ instruction	 2.1 <u>Written instructions</u> are interpreted. 2.2 Work <u>signage's</u> are properly responded. 2.3 Routine written instructions are followed in sequence. 2.4 Feedback is given to workplace supervisor. 		
3. Convey instructions using verbal and written forms of communication	 3.1 Relevant <u>communication</u> methods are used to transmit instructions. 3.2 Appropriate non-verbal communication is used. 3.3 Channels of communication are identified and followed 3.4 Communication <u>tools and equipment</u> are operated and faults are identified and reported. 3.5 Information is conveyed using appropriate forms 		
4 Complete written documentation	 4.1 All required <u>documentation</u> is completed 4.2 Workplace data are recorded 4.3 Written information/instruction is passed to personnel. 		
5. Participate in work place meetings and discussions	 5.1 Meetings are attended regularly and on time. 5.2 Meeting inputs are consistent with the meeting purpose and established protocols. 5.3 Opinions are expressed without interruption. 5.4 Meeting outputs are processed and implemented. 		
Variable	Range (may include but not limited to):		
1. Written instructions	 1.1 Supervisor's/Manager's Instructions 1.2 Memoranda 1.3 Rules and Regulations 1.4 Signage 1.5 Approved Work Plan 1.6 External communications 2.1 Labor Policies and Guidelines 		
2. Workplace guidelines	2.1 Labor Foncies and Guidennes 2.2 Written Instructions		

2.4 Organizational Manuals 2.5 Quality Assurance Handbook 3. Signage 3.1 On-site direction signs 3.2 Common site warnings 3.3 Location signs 3.4 Traffic signs 4.1 Verbal instructions 4.2 Written instructions 4.3 Online communication 5.1 Telephone 5.2 Kobile Phone 5.3 Fax machines 5.4 Two-way radio 5.5 Computers 5.6 Forms 5.7 Memo 5.8 Two-way radio 5.5 Conjuters 5.6 Forms 6.1 Memorandum 6.2 Requisitioning Form 6.3 Personnel Form 6.4 Safety Report Form 7.1 Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2 Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3 7.3 Monitoring and Evaluation Report 7.4 Minutes of Meetings		2.3 Operations Manual		
2.5 Quality Assurance Handbook3. Signage3.1 On-site direction signs 3.2 Common site warnings 3.3 Location signs 3.4 Traffic signs4. Communication4.1 Verbal instructions 4.2 Written instructions 4.3 Online communication5. Tools and machinery5.1. Telephone 5.2. Mobile Phone 5.3. Fax machines 5.4. Two-way radio 5.5. Computers 5.6. Forms 5.7. Memo 5.8. Two-way radio6. Forms6.1. Memorandum 6.2. Requisitioning Form 6.3. Personnel Form 6.4. Safety Report Form7. Documentation7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence GuideFidence GuideThe evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of CompetencyAssessment required evidence that the candidate:		2.4 Organizational Manuals		
3. Signage 3.1 On-site direction signs 3. Signage 3.2 Common site warnings 3. Location signs 3.3 Location signs 3.4 Traffic signs 4.1 Verbal instructions 4. Communication 4.2 Written instructions 4.2 Written instructions 4.3 Online communication 5. Tools and machinery 5.1. Telephone 5. Tools and machinery 5.4. Two-way radio 6. Forms 5.7. Memo 5.8. Two-way radio 6.1. Memorandum 6.2. Requisitioning Form 6.3 Personnel Form 6.3. Personnel Form 6.4. Safety Report Form 7. Documentation 7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of Meetings 7.4. Minutes of Meetings Evidence Guide The evidence must be auth=ttic, valid, sufficient, reliable, consistent and recent and meet the requirements of the cur		2.5 Quality Assurance Handbook		
3. Signage3.2 Common site warnings 3.3 Location signs 3.4 Traffic signs4. Communication4.1 Verbal instructions 4.2 Written instructions 		3.1 On-site direction signs		
3. Signage 3.3 Location signs 3.4 Traffic signs 4. Communication 4.1 Verbal instructions 4.2 Written instructions 4.3 Online communication 5. Tools and machinery 5.1 Telephone 5.2 Mobile Phone 5.3 Fax machines 5.4 Two-way radio 5.5 Computers 5.6 Forms 5.7. Memo 5.8 Two-way radio 6.1 Memorandum 6.2. Requisitioning Form 6.3. Personnel Form 6.4. Safety Report Form 7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of Meetings Evidence Guide The evidence must be auti-tric, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency<		3.2 Common site warnings		
3.4 Traffic signs4. Communication4.1 Verbal instructions 4.2 Written instructions 4.3 Online communication5. Communication5.1. Telephone 5.2. Mobile Phone 5.3. Fax machines 5.4. Two-way radio 5.5. Computers 5.6. Forms 5.7. Memo 5.8. Two-way radio6. Forms6.1. Memorandum 6.2. Requisitioning Form 6.3. Personnel Form 6.4. Safety Report Form7. Documentation7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence GuideTwo-way sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of CompetencyAssessment required evidence that the candidate:	3. Signage	3.3 Location signs		
4. Communication 4.1 Verbal instructions 4. Communication 4.2 Written instructions 4.3 Online communication 4.3 Online communication 5. Tools and machinery 5.1. Telephone 5. Tools and machinery 5.2. Mobile Phone 5. Tools and machinery 5.4. Two-way radio 6. Forms 5.7. Memo 6. Forms 6.1. Memorandum 6. Forms 6.2. Requisitioning Form 6.3. Personnel Form 6.4. Safety Report Form 7. Documentation 7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of Meetings Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency Assessment required evidence that the candidate:		3.4 Traffic signs		
4. Communication4.2 Written instructions 4.3 Online communication5. Complete5.1. Telephone 5.2. Mobile Phone 5.3. Fax machines 5.4. Two-way radio 5.5. Computers 5.6. Forms 5.7. Memo 5.8. Two-way radio6. Forms6.1. Memorandum 6.2. Requisitioning Form 6.3. Personnel Form 6.4. Safety Report Form 6.4. Safety Report Form7. Documentation7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence Guide The evidence must be aut+tic, valid, sufficient, reliable, consistent and recent and meet the requirements of the cu+t version of the Unit of CompetencyAssessment required evidence that the candidate:		4.1 Verbal instructions		
4.3 Online communication5.1 Telephone5.2. Mobile Phone5.3. Fax machines5.4. Two-way radio5.5. Computers5.6. Forms5.7. Memo5.7. Memo5.8. Two-way radio6. Forms6.1. Memorandum6.2. Requisitioning Form6.3. Personnel Form6.3. Personnel Form6.4. Safety Report Form7. Documentation7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual)7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule)7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence GuideThe evidence must be aut+tic, valid, sufficient, reliable, consistent and recent and meet the requirements of the cu-ture version of the Unit of CompetencyAssessment required evidence that the candidate:	4. Communication	4.2 Written instructions		
5. Tools and machinery 5.1. Telephone 5. Tools and machinery 5.2. Mobile Phone 5.3. Fax machines 5.3. Fax machines 5.4. Two-way radio 5.5. Computers 5.6. Forms 5.7. Memo 5.8. Two-way radio 6.1. Memorandum 6. Forms 6.1. Memorandum 6. Forms 6.1. Memorandum 6. Forms 6.1. Memorandum 6. Forms 7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly 7. Documentation 7.3. Monitoring and Evaluation Report 7.4. Minutes of Meetings 7.4. Minutes of Meetings Evidence Guide The evidence must be auth=rtic, valid, sufficient, reliable, consistent and recent and meet the requirements of the curret version of the Unit of Competency Assessment required evidence that the candidate:		4.3 Online communication		
5. Tools and machinery5.2. Mobile Phone5.3. Fax machines5.4. Two-way radio5.4. Two-way radio5.5. Computers5.6. Forms5.7. Memo5.8. Two-way radio6.1. Memorandum6.2. Requisitioning Form6.3. Personnel Form6.4. Safety Report Form7. Documentation7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual)7.2. Plans (Strategic Plan, Operational Plan, Monthly7.3. Monitoring and Evaluation Report7.4. Minutes of MeetingsEvidence GuideThe evidence must be aut+-tric, valid, sufficient, reliable, consistent and recent and meet the requirements of the curtriver version of the Unit of CompetencyAssessment required evidence that the candidate:		5.1. Telephone		
5. Tools and machinery5.3. Fax machines 5.4. Two-way radio 5.5. Computers 5.6. Forms 5.6. Forms 5.7. Memo 5.8. Two-way radio6. Forms6.1. Memorandum 6.2. Requisitioning Form 6.3. Personnel Form 6.4. Safety Report Form6.4. Safety Report Form 6.4. Safety Report Form7. Documentation7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence Guide The evidence must be aut+-tic, valid, sufficient, reliable, consistent and recent and meet the requirements of the curver version of the Unit of CompetencyAssessment required evidence that the candidate:		5.2. Mobile Phone		
5. Tools and machinery5.4. Two-way radio 5.5. Computers 5.6. Forms 5.6. Forms 5.7. Memo 5.8. Two-way radio6. Forms6.1. Memorandum 6.2. Requisitioning Form 6.3. Personnel Form 6.4. Safety Report Form7. Documentation7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule)7. Documentation7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence Guide The evidence must be aut+tic, valid, sufficient, reliable, consistent and recent and meet the requirements of the cut-tic version of the Unit of CompetencyAssessment required evidence that the candidate:		5.3. Fax machines		
5. Tools and machinery 5.5. Computers 5.6. Forms 5.6. Forms 5.7. Memo 5.8. Two-way radio 6. Forms 6.1. Memorandum 6. Forms 6.2. Requisitioning Form 6. Forms 6.3. Personnel Form 6.4. Safety Report Form 6.4. Safety Report Form 7. Documentation 7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of Meetings Evidence Guide The evidence must be authtic, valid, sufficient, reliable, consistent and recent and meet the requirements of the curret version of the Unit of Competency Assessment required evidence that the candidate:		5.4. Two-way radio		
5.6. Forms5.7. Memo5.8. Two-way radio6.1. Memorandum6.2. Requisitioning Form6.3. Personnel Form6.4. Safety Report Form6.4. Safety Report Form7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual)7.2. Plans (Strategic Plan, Operational Plan, Monthly7.3. Monitoring and Evaluation Report7.4. Minutes of MeetingsEvidence GuideThe evidence must be aut+-tic, valid, sufficient, reliable, consistent and recent and meetthe requirements of the current version of the Unit of CompetencyAssessment required evidence that the candidate:	5. Tools and machinery	5.5. Computers		
5.7. Memo5.8. Two-way radio6. Forms6.1. Memorandum6.2. Requisitioning Form6.3. Personnel Form6.4. Safety Report Form6.4. Safety Report Form7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual)7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule)7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence GuideThe evidence must be auther, valid, sufficient, reliable, consistent and recent and meet the requirements of the currer version of the Unit of CompetencyAssessment required evidence that the candidate:		5.6. Forms		
5.8. Two-way radio6.1. Memorandum6.2. Requisitioning Form6.3. Personnel Form6.4. Safety Report Form7. Documentation7. Documentation7. Nore GuideFvidence GuideThe evidence must be aut+ic, valid, sufficient, reliable, consistent and recent and meet the requirements of the curry version of the Unit of CompetencyAssessment required evidence that the candidate:		5.7. Memo		
6. Forms6.1. Memorandum 6.2. Requisitioning Form 6.3. Personnel Form 6.4. Safety Report Form7. Documentation7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of CompetencyAssessment required evidence that the candidate:		5.8. Two-way radio		
6. Forms6.2. Requisitioning Form 6.3. Personnel Form 6.4. Safety Report Form7. Documentation7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual) 7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence Guide The evidence must be aut+-tic, valid, sufficient, reliable, consistent and recent and meet the requirements of the curver version of the Unit of CompetencyAssessment required evidence that the candidate:		6.1. Memorandum		
6. Forms6.3. Personnel Form6.4. Safety Report Form6.4. Safety Report Form7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual)7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule)7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence GuideThe evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of CompetencyAssessment required evidence that the candidate:	C. Earnes	6.2. Requisitioning Form		
6.4. Safety Report Form7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual)7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule)7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence GuideThe evidence must be auth-rtic, valid, sufficient, reliable, consistent and recent and meet the requirements of the curret version of the Unit of CompetencyAssessment required evidence that the candidate:	6. Forms	6.3. Personnel Form		
7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual)7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule)7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence GuideThe evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of CompetencyAssessment required evidence that the candidate:		6.4. Safety Report Form		
7. Documentation7.2. Plans (Strategic Plan, Operational Plan, Monthly Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of MeetingsEvidence GuideThe evidence must be authertic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of CompetencyAssessment required evidence that the candidate:		7.1. Reports (Monthly, Quarterly, Half-Yearly, Annual)		
7. Documentation Schedule) 7.3. Monitoring and Evaluation Report 7.4. Minutes of Meetings Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency Assessment required evidence that the candidate:		7.2. Plans (Strategic Plan, Operational Plan, Monthly		
7.3. Monitoring and Evaluation Report 7.4. Minutes of Meetings Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency Assessment required evidence that the candidate:	7. Documentation	Schedule)		
7.4. Minutes of Meetings Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency Assessment required evidence that the candidate:		7.3. Monitoring and Evaluation Report		
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency Assessment required evidence that the candidate:		7.4. Minutes of Meetings		
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency Assessment required evidence that the candidate:	Evidence Guide			
the requirements of the current version of the Unit of Competency Assessment required evidence that the candidate:	The evidence must be authority	entic, valid, sufficient, reliable, consistent and recent and meet		
Assessment required evidence that the candidate:	the requirements of the curr	rent version of the Unit of Competency		
		Assessment required evidence that the candidate:		
1.1 demonstrated knowledge of workplace procedures in		1.1 demonstrated knowledge of workplace procedures in		
1. Critical Aspects of receiving, interpreting and conveying verbal & written	1. Critical Aspects of	receiving, interpreting and conveying verbal & written		
Competency communication.	Competency	communication.		
1.2 satisfied the requirements mentioned in the Performance		1.2 satisfied the requirements mentioned in the Performance		
2.1 Workplace Communication Policies Standards and		2.1 Workplace Communication Policies Standards and		
2.1 Workplace Communication Foncies, Standards and Procedures		Procedures		
2 Underninning 2.2 Verbal and Non-verbal communication	2 Underninning	2.2 Verbal and Non-verbal communication		
Knowledge 2.3 Modes of Communication	Z. Underprinning Knowledge	2.3 Modes of Communication		
2.4 Communication Equipment: Types Uses and Faults	INIO WICUZC	2.4 Communication Equipment: Types Uses and Faults		
2.5 Channels of Communication		2.5 Channels of Communication		

3. Underpinning Skills	3.1 Receiving verbal instructions.		
	3.2 Interpreting verbal and written information/ instruction		
	3.3 Conveying instructions using verbal and written forms		
	of communication		
	3.4 Completing written documentation		
	3.5 Participating in workplace meetings and discussions		
	4.1 Commitment to occupational health and safety		
	4.2 Environmental concerns		
1 Undominning Attitudo	4.3 Eagerness to learn		
4. Underpinning Autude	4.4 Tidiness and timeliness		
	4.5 Respect for rights of peers and seniors in workplace		
	4.6 Communication with peers and seniors in workplace		
	The following resources must be provided:		
	5.1 Pens		
5 December Inglingting	5.2 Telephone		
5. Resource Implications	5.3 Computer		
	5.4 Writing materials		
	5.5 Online communication		
	Competency should be assessed by:		
(Mathada af	6.1 Demonstration		
6. Methods of Assessment	6.2 Oral questioning		
	6.3 Written test		
	6.4 Portfolio		
	7.1 Competency assessment must be done in NSDA accredited		
7. Context of	assessment centre		
Assessment	7.2 Assessment should be done by a NSDA		
	certified/nominated assessor		

Unit Code and Title	GU-08-L2-V1: Work in a Team Environment		
Unit Descripton	This unit covers the knowledge, skills and attitudes (KSAs) required in work in a team environment.		
Unit Descriptor	It includes defining team role and scope, identifying individual role and responsibility, participating in team discussions and work as a team member		
Nominal Hours	20 Hours		
	Performance Criteria		
Elements of Competency	Bold & Underlined terms are elaborated in the Range of Variables		
	1.1. Role and objectives of the team are defined.		
1. Define team role and	1.2. Team structure, responsibilities and reporting relations		
scope	are identified from team discussions and other external		
2. Identify individual role	2.1 Individual roles and responsibilities of team members		
and responsibility	are identified.		
	2.2 Reporting relationships among team members are defined and clarified.		
	2.3 Reporting relationships external to the team are defined and clarified.		
3. Participate in team	3.1 Ideas related to team plans are contributed.		
discussions	3.2 Recommendations for improving team work are put forward.		
4. Work as a team	4.1. Effective forms of communication are used to interact		
member	with team members.		
	4.2. Communication channels are followed.		
Danga of Variables	4.5. OHS practices are followed.		
Kange of variables			
Variables	Range (may include but not limited to):		
1. Sources of information	1.1 Standard Operating Procedures		
	1.2 Job Description		
	1.3 Operations Manual		
2 Team Members	1.4 Organizational Structure		
	2.1 Coach/mentor 2.2 Supervisor/Manager		
	2.2 Supervisor/manager 2.3 Peers/Colleagues		
	2.4 Employee representative		
3. Workplace context	3.1 National Laws and Statutes		
r ····	3.2 Standard Operating Procedures		
	3.3 Workplace Rules and Regulations		
Evidence Guide			
The evidence must be authe	ntic valid sufficient reliable consistent recent and meet all		

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency

	Assessment required evidence that the candidate:		
1. Critical aspects of competency	1.1	demonstrated knowledge in working in a team	
		environment.	
	1.2	satisfied the requirements mentioned in the	
	1.3	performance Criteria and Range of Variables	
	2.1	Team Structure, Role and Responsibility	
	2.2	Individual Members' Roles and Responsibilities	
	2.3	Communication Flow and Reporting Structures	
2. Underpinning	2.4	Team Planning	
knowledge	2.5	Interpersonal Communication Skills	
	2.6	Team Meeting Procedures	
	2.7	OHS Practices	
	3.1	Identifying the role and responsibility of the team	
	3.2	Identifying roles and responsibilities of individual	
3. Underpinning skills		members	
	3.3	Participating in team discussions	
	3.4	Working as a team member	
	4.1	Commitment to occupational health and safety	
	4.2	Environmental concerns	
4 Underninning Attitudes	4.3	Eagerness to learn	
4. Underplinning Attitudes	4.4	Tidiness and timeliness	
	4.5	Respect for rights of peers and seniors in workplace	
	4.6	Communication with peers and seniors in Workplace	
	5.1	Pens	
	5.2	Telephone	
5. Resource implications	5.3	Computer	
	5.4	Writing materials	
	5.5	Online communication	
	Comp	etency should be assessed by:	
6. Methods of assessment	6.1.	Demonstration	
	6.2.	Oral questioning	
	6.3.	Written test	
	6.4.	Portfolio	
	7.1	Competency assessment must be done in NSDA	
7 Context of accomment		accredited assessment centre	
7. Context of assessment	7.2	Assessment should be done by a NSDA	
		certified/nominated assessor	

Sector Specific Units of Competencies

Unit Code and Title	SU-CS-01-L2-V1: Work in the Construction Sector		
Nominal Hours	20 Hours		
Unit Descriptor	This unit covers the skills, knowledge and attitude in work in the construction sector. It includes describing the organizational structure within the construction sector, identifying processes and procedures, identifying tools, equipment and materials, identifying workplace practices, and organize own workload, and practice OHS.		
Floments of	Perf	ormance Criteria	
Competency	Bold Varia	and Underlined terms are elaborated in the Range of ables.	
	1.1	Scope, nature and major fields of the construction sector	
		are determined	
	1.2	The profile of the construction sector in relation to	
1. Describe the		Bangladesh employment conditions is determined	
organizational	1.3	Trends and technologies relevant to the sector are	
structure within the		explained.	
sector	1.4	Relevant policies and guidelines are identified and	
		interpreted.	
	1.5	<u>Instructions</u> as to procedures in achieving quality are	
		obtained, understood and clarified.	
2. Identify processes and	2.1	Construction processes are identified and described.	
procedures	2.2	Work activities are identified.	
r	2.3	Adjustments are interpreted.	
	3.1	Appropriate manuals are accessed to ensure up-to-date	
3. Identify tools,		specifications of tools, materials and equipment.	
equipment and	3.2	Construction tools, materials and equipment are	
materials	2.2	Identified.	
	3.5	Substitutes are identified in case of non-availability.	
 Identify workplace requirements 	4.1	Roles and responsibilities of all personnel are described	
	4.2	Workplace's practices are identified	
	4.4	Problem-solving strategies are used to address	
		bottlenecks, inconsistencies and other concerns.	
	5.1	Own work activities are planned and progress of work is	
5. Organize own workload		communicated to relevant staff.	
	5.2	Work activities are completed.	
	5.3	Difficulties and bottlenecks are identified, and solutions are put forwarded.	
	5.4	Own work is monitored against workplace standards and	
		areas for improvement identified and acted upon.	
6. Practice OHS	6.1.	Relevant OHS practices are identified.	

	6.2. Relevant OHS practices are interpreted and implemented.	
Range of Variables		
Variables	Range (may include but not limited to):	
1. Major Fields	 1.1 Construction Site Support (Dogging, Rigging, etc.) 1.2 Carpentry and Form Works 1.3 Masonry, Brick/Block Laying and Concreting 1.4 Surface Finishing, Tiling and Painting 1.5 Roofing 1.6 Plumbing 1.7 Residential Electrical Wiring and Cabling 	
2. Employment conditions	 2.1 Code of Practice 2.2 Salary/Wage System 2.3 Labor Practices 2.4 Anti-Discrimination Policy 2.5 Gender Issues 2.6 Collective Bargaining and Other Practices 2.7 Awards 2.8 Procedures for Handling Disputes 2.9 Innovations in the Sector 	
3. Instructions	 3.1 Specifications and requirements 3.2 Standard operating procedures 3.3 Manuals of Instruction 3.4 Operations Manual 3.5 Environmental Guidelines 3.6 Gender and Develop Guidelines 	
4. Manuals	 4.1 Manual of Instructions 4.2 Manual of Specifications 4.3 Repair Manual 4.4 Quality Manual 4.5 Maintenance Procedure and Troubleshooting 	
5. Workplace requirements	 5.1 Goals and objectives 5.2 Strategic and Operational Plans 5.3 Systems and Processes 5.4 Monitoring and Evaluation 5.5 Reports and Documentation 	
6. Tools, equipment and materials	Refers to all tools, equipment and materials appropriate for any of the construction fields	
7. Problem-solving strategies	 7.1 Asking questions 7.2 Feedback and Feed forward system 7.3 Reference to Standard Operating Procedures 7.4 Accessing Information 	

	7.5	Reviews
	7.6	Brainstorming
8. OHS	8.1	Reporting hazards, risks and emergencies
	8.2	Arrangement of workplaces
	8.3	Standard Operating Procedure
	8.4	Workplace environment and safety
	8.5	Safe storage of tools and equipment
	8.6	Use of PPE

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

 Critical aspects of competency 	Asse	ssment required evidence that the candidate:
	1.1	demonstrated knowledge in working in the
		Construction sector
	1.2	satisfying all the requirements mentioned in the
		Performance Criteria and Range of Variables
	2.1	Scope and Major Divisions of the Construction Sector
	2.2	Relevant Policies and Guidelines in the Construction
		Sector
	2.3	Manuals used in the Construction Sector
2. Underpinning	2.4	Relevant Terminologies and Acronyms
knowledge	2.5	Types and Uses of Construction Tools and Materials.
	2.6	Workplace Practices
	2.7	Occupational Health and Safety Practices
	2.8	Recording and Reporting practices
	3.1	Describing the organization structure
	3.2	Identifying construction processes and procedures
3 Underninning skills	3.3	Identifying tools, equipment and materials
5. Onderprinning skins	3.4	Identifying workplace practices
	3.5	Organizing own workload
	3.6	Practicing OHS
	4.1	Commitment to occupational health and safety
4. Underpinning attitudes	4.2	Environmental concerns
	4.3	Eagerness to learn
	4.4	Tidiness and timeliness
	4.5	Respect for rights of peers and seniors in workplace
	5.1	Pens
5. Resource implications	5.2	Telephone
	5.3	Computer
	5.4	Writing materials

	5.5	Online communication	
	Competency should be assessed by:		
6. Methods of assessment	6.1	Demonstration	
	6.2	Oral questioning	
	6.3	Written test	
	6.4	Portfolio	
7. Context of assessment	7.1	Competency assessment must be done in NSDA	
		accredited assessment centre	
	7.2	Assessment should be done by a NSDA	
		certified/nominated assessor	

	SU-CS-02-L2-V1: Interpret Drawings and Specifications in		
Unit Code and Title	Construction Manuals		
Nominal Hours	20 Hours		
Unit Descriptor	This unit covers the knowledge, skill and attitude required in interpreting drawings and specifications in construction manuals.		
	It includes identifying information, drawings and specifications, interpreting drawings and specifications, and applying occupational health and safety procedures.		
Elements of	Performance Criteria		
Competency	Bold and Underlined terms are elaborated in the Range of Variables		
1. Identify information from manuals	 1.1 Appropriate manuals are identified and accessed. 1.2 Version and date of the manual are checked to ensure up-to-date specifications of tools, equipment, materials and procedures. 		
	2.1 Relevant <u>drawings</u> and <u>specifications</u> are correctly		
2. Identify drawings and	identified.		
specifications	2.2 <u>Terms and abbreviations</u> are identified.		
	2.3 Signs and symbols are identified		
3 Interpret drawings and	3.1 Drawings and specifications are interpreted.		
specifications	3.2 Schedules, dimensions and specifications contained in the		
	drawings are interpreted.		
	4.1. Documents are collected and packed.		
4. Store manuals	4.2. Documents are stored to prevent damage, and ready		
	access and updating of information when required.		
Range of Variables			
Variables	Range (may include but not limited to):		
	1.1 Manufacturer's Specification Manual		
	1.2 Repair Manual		
1 Documents	1.3 Maintenance Procedure Manual		
	1.4 Periodic Maintenance Manual		
	1.5 Quality Manual		
	1.6 Manual of Instruction		
2 Drawings	2.1 Technical Drawings		
2. Diamingo	2.2 Sketch		
3. Specifications	3.1 Product specifications		
	3.2 Performance specifications		
	3.3 Method specifications		
4. Instructions	4.1 Orders		
	4.2 Special Orders		

5. Terms and abbreviations	Refer	rs to all terms and abbreviations associated with the
6. Signs and symbols	Inclu	de all signs and symbols associated with the construction
Evidence Guide	secto	
The evidence must be auth	entic y	valid, sufficient, reliable, consistent and recent and meet
the requirements of the cur	rent ve	rsion of the Unit of Competency.
	1	
	Asses	ssment required evidence that the candidate:
1. Critical aspects of	1.1	interpret drawings and specifications in construction
competency		documents
1 5	1.2	satisfying the requirements mentioned in the
		Performance Criteria and Range of Variables
	2.1	Types of Construction Manuals
	2.2	Identification of Signs and Symbols
2. Underpinning	2.3	Identification of Units of Measurement
knowledge	2.4	Identification of Units of Conversion
	2.5	Drawings and Specifications
	2.6	Terms and Abbreviations Used
	3.1	Identifying appropriate manuals
3. Underpinning skills	3.2	Identifying drawings and specifications
	3.3	Interpreting drawings and specifications
	3.4	Storing manuals
	4.1	Commitment to occupational health and safety
4 Underninging attitudes	4.2	Environmental concerns
4. Underpinning attitudes	4.5	Eagerness to learn Tidinass and timelinass
	4.4	Pagnact for rights of pages and soniors in workplace
	4.5	Respect for rights of peers and seniors in workprace
	5.1	r clis Talanhona
5. Resource implications	5.2	Computer
	5.5	Writing materials
	Com	betency should be assessed by:
	61	Workplace observation
(Mathada of account out	6.1	Demonstration
6.Methods of assessment	6.3	Oral questioning
	6.4	Written test
	6.5	Portfolio
	7.1	Competency assessment must be done in NSDA
7 Contort f		accredited assessment centre
7. Context of assessment	7.2	Assessment should be done by a NSDA
		certified/nominated assessor

Occupation Specific Units of Competencies

Unit Code and Title	OUMAS001L2V1: Use Tools for Masonry Works
Nominal Hours	20 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to use tools for Masonry works. It includes identifying tools, using hand tools and power tools, performing basic preventive maintenance and maintaining workplace cleanliness and storing tools.
	Performance Criteria
Elements of Competency	Bold and Underlined terms are elaborated in the Range of Variables.
	1.1. Personal Protective Equipment (PPE) is used
1 Identify tools and	1.2. <u>Hand tools</u> , their functions are identified and selected
1. Identify tools and	1.3. <u>Power tools</u> and <u>equipment</u> , their functions are
equipment	identified and selected
	1.4. <u>Applications</u> of tools are defined
	2.1 Hand tools are prepared for works according to
	workplace procedures
	2.2 Proper hand-eye coordination is applied when using
2. Use hand tools	hand tools
	2.3 Safety requirements are complied with before, during
	and after use
	2.4 Unsafe or faulty tools are identified and marked for
	repair according to workplace procedures
	3.1 <u>Power sources</u> are recognized
	5.2 Power tools are prepared according to workprace
3 Use power tools	3.3 Route for power supply established in accordance with
	work safety requirements
	3.4 Power tools are used as per job requirement following
	Standard Operating Procedure (SOP)
	4.1. Tools are inspected and reported to supervisor as per
	work place procedure
4. Perform basic	4.2. Tools and equipment are cleaned according to
preventive	workplace instructions
maintenance.	4.3. Appropriate <u>lubricants</u> are identified
	4.4. Tools and equipment are lubricated as per
	manufacturer's instruction
5. Maintain workplace	5.1 Workplace is cleaned as per standard procedure
cleanliness and store tools	5.2 Hazardous materials are identified, separated and disposed as per workplace procedure

	5.3 Waste materials are disposed as per workplace procedure
	5.4 Inventory of tools are conducted, and recorded as per stock register by using forms
	5.5 Tools are cleaned and stored safely in appropriate location
Range of Variables	·
Variables	Range (may include but not limited to):
	1.1. Dust mask
	1.2. Safety glasses/Goggles
	1.3. Gloves
1. Personal Protective	1.4. Safety shoes/boots
Equipment	1.5. Aprons
	1.6. Face masks
	1.7. Overalls
	1.8. Helmet
	2.1 Measuring tape
	2.2 Tri square
	2.3 Brick hammer
	2.4 Chipping hammer
	2.5 Ball peen hammer
	2.6 Claw hammer
	2.7 Measuring mug
	2.8 Measuring bucket
	2.9 Shovel
	2.10 Trowel
	2.11 Spade
	2.12 Plumb bob
2. Hand Tools	2.13 Water level pipe
	2.14 Spirit level
	2.15 Pan
	2.16 Wooden/aluminum gauge
	2.17 Sieve
	2.18 Wood planner
	2.19 Steel planner
	2.20 Hand saw
	2.21 Chisel
	2.22 Wooden saw
	2.23 Curing pipe
	2.24 Cue box (Phera)
3 Dower tools	3.1 Power drill machine
5. Power tools	3.2 Angle grinder

	3.3	Pneumatic drill machine
4. Equipment	4.1	Mixture machine with accessories
	4.2	Vibrator machine
	5.1	Adjusting
	5.2	Aligning
	5.3	Assembling
	5.4	Boring
	5.5	Clamping
	5.6	Cleaning
	5.7	Cutting
5. Applications	5.8	Dismantling
	5.9	Finishing
	5.10	Hand sharpening
	5.11	Lubricating
	5.12	Scraping
	5.13	Simple Tool Repairs
	5.14	Threading
	5.15	Tightening
	6.1	Electric
6. Power sources	6.2	Pneumatic
	6.3	Hydraulic
7 Lubricanto	7.1	Grease
7. Lubricants	7.2	Lubricating oil

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

	Asses	ssment required evidence that the candidate:
	1.1	followed OSH as per job requirement
1. Critical aspects of	1.2	identified appropriate tools
competency	1.3	used hand tools with appropriate method
	1.4	used power tools with appropriate SOP
	1.5	performed preventive maintenance
	2.1	Define tools
	2.2	Classify tools
2. Underpinning knowledge	2.3	Define equipment
	2.4	Procedure of the use of hand tools and power tools
	2.5	Application of hand tools and power tools
	2.6	Basic preventive maintenance of tools
3. Underpinning skills	3.1	Identifying appropriate tools
	3.2	Handling tools and equipment with appropriate
		method
	3.3	Identifying power sources

	3.4	Using power tools with appropriate SOP
	3.5	Identifying preventive maintenance
	4.1	Commitment to occupational health and safety
	4.2	Environmental concerns
4. Underpinning attitudes	4.3	Eagerness to learn
	4.4	Tidiness and timeliness
	4.5	Respect for rights of peers and seniors in workplace
	The fo	ollowing resources must be provided
5 Decourse implications	5.1	Workplace (actual or simulated)
5. Resource implications	5.2	Tools appropriate to the masonry process
	5.3	Manual, Codes, Standards and reference materials
	Comp	etency should be assessed by:
	6.1	Demonstration
6.Methods of assessment	6.2	Oral questioning
	6.3	Written test
	6.4	Portfolio
7 Contact of accomment	7.1	Competency assessment must be done in NSDA
		accredited assessment centre
7. Context of assessment	7.2	Assessment should be done by a NSDA
		certified/nominated assessor

	OU-N	AAS-02-L2-V1: Perform Fundamental Works of
Unit Code and Title	Maso	onry
Nominal Hours	25 He	burs
Unit Descriptor	This uperform	unit covers the knowledge, skills and attitudes required to rm fundamental works of Masonry.
	It includes preparing for works, interpreting sign, symbols and specifications from drawing plan, performing basic measurement and calculations for Masonry works and curing works, making and dismantle scaffolding and maintaining workplace, tools, equipment and materials.	
	Perfo	ormance Criteria
Elements of Competency	<u>Bold</u>	and Underlined terms are elaborated in the Range of
Competency	Varia	bles.
	1.1.	Personal Protective Equipment (PPE) is collected and worn as per job requirement
1 Proporo for works	1.2.	<u>Tools</u> and <u>materials</u> are selected and collected as per job requirement
1. Frepare for works	1.3.	Use of materials are described
	1.4.	Workplace is prepared as per job requirement
	1.5.	Basic parts of building are identified
	1.6.	Function of main building parts are interpreted
	2.1	Relevant drawings are correctly identified as per
 Interpret sign, symbols and specifications from drawing plan 	2.2	requirement All <u>specifications</u> are interpreted from the relevant drawing
	2.3	All terms and abbreviations are interpreted from the relevant drawing
	2.4	Sign and symbols are identified as per drawing
3. Perform basic measurement and calculations for Masonry works	3.1	<u>Measuring units</u> to be used are determined as per workplace requirement
	3.2	Appropriate measuring instruments are selected as per requirement
	3.3	<u>Measurement</u> of <u>shapes</u> are taken using appropriate measuring instrument
	3.4	Basic <u>calculations</u> are carried out following appropriate methods
4. Perform curing works	4.1	Curing of bricks is performed at least 24 hours before works as per Bangladesh National Building code (BNBC)
	4.2	Soaking is done for at least 1 hours or become up to Saturated Surface Dry (SSD) condition for Brick works

	4.3	Curing of brick chips /stone chips is performed as per requirements	
	4.4	Curing is performed at least 07 days after completion of brick/block wall as per standard	
	4.5	Curing is performed at least 14 days after completion of plaster surface as per standard	
	4.6	Curing is performed at least 28 days after completion of concrete surface as per standard	
	4.7	Vertical surface is covered with wet gunny or coarse cloths and spray water periodically	
	5.1	Location of scaffolding to be made is identified as per job requirement	
	5.2	Size of the scaffolding is measured as per requirement	
5. Make and dismantle	5.3	Scaffolding materials are cut as required size and shape	
scaffolding	5.4	Cut materials are assembled to make scaffolding as per job requirement	
	5.5	Rigidity of scaffolding is checked and confirmed as required	
	5.6	Scaffolding is dismantled as per standard procedure	
	6.1.	Work area is cleaned in accordance with workplace procedures	
	6.2.	Unused materials are stored for re-use or disposed following workplace procedures	
 Maintain workplace, tools, equipment and 	6.3.	Waste and scrap materials are disposed with following workplace procedures	
materials	6.4.	Inventory of tools equipment are conducted and recorded as per checklist	
	6.5.	Tools and equipment are cleaned and stored as per manufacturer's recommendation in appropriate location	
Range of Variables			
Variables	VariablesRange (may include but not limited to):		
1. PPE	1.1.	Dust mask.	
	1.2.	Goggles.	
	1.3.	Safety shoes.	
	1.4.	Apron.	
	1.5.	Hand Gloves.	
	1.6.	Safety helmet	
	1.7.	Safety belt	

2. Tools	2.1	Measuring tape
	2.2	Tri square
	2.3	Brick hammer
	2.4	Chipping hammer
	2.5	Ball peen hammer
	2.6	Claw hammer
	2.7	Shovel
	2.8	Trowel
	2.9	Spade
	2.10	Plumb bob
	2.11	Water level pipe
	2.12	Spirit level
	2.13	Pan
	2.14	Wooden/aluminum gauge
	2.15	Sieve
	2.16	Wood planner
	2.17	Steel planner
	2.18	Hand saw
	2.19	Chisel
	2.20	Wooden saw
	2.21	Curing pipe
	2.22	Cue box
	2.23	Measuring mug
	2.24	Measuring bucket
3. Materials	3.1	Bamboo
	3.2	Water
	3.3	Waste cotton
	3.4	Hessian cloth
	3.5	Rope
	3.6	Wooden plank
	3.1 3.8	Piops Nails
	3.9	Paper
	3.10	Marker pen
	3.11	Wooden bars
	3.12	Brick
	3.13	Cement
	3.14	Filling sand
	3.15	Plaster sand
	5.10 3.17	Sallu Brick chins
	3.17	Stone chips
	3.19	Reinforcement
	3.20	Tiles
	3.21	Hose pipe
	3.22	Brush

	3.23	MS pipe
	3.24	Joint coupler
	3.25	Base plate
	3.26	Shovel clamp
	3.27	U Head
	3.28	Broom
4. Basic parts of	4.1	Slab
building	4.2	Beam
	4.3	Column
	4.4	Lintel
	4.5	Window
	4.6	Door
	4.7	Sunshade
	4.8	Wall
	4.9	Floor
	4.10	Foundation
5. Drawings	1.1	Technical drawings
	1.2	Sketch
6. Specifications	6.1	Product specifications
	6.2	Material types
	6.3	Standards of work
	6.4	Tolerances
	6.5	Treatments and finishes
7. Measuring units	7.3	FPS (foot, pound, second)
	7.4	MKS (meter, kilogram, second)
8. Measuring	8.1	Rulers
Instruments	8.2	Measurement tapes
	8.3	Try square
	8.4	Calculators
9. Measurements	9.1	Length
	9.2	Width
	9.3	Height
	9.4	Depth
	9.5	Quantities of materials
10. Shapes	10.1	Triangular
	10.2	Square
	10.3	Rectangular
	10.4	Circular
	10.5	Angular
11. Calculations	11.1	Area
	11.2	Volume
	11.3	Addition
	11.4	Subtraction
	11.5	Multiplication

	11.6	Division
Evidence Guide		
The evidence must be authority	entic, v	valid, sufficient, reliable, consistent and recent and meet
the requirements of the current version of the Unit of Competency.		
	Asse	ssment required evidences that the candidate:
	1.1	followed safety rules of building construction works
	1.2	identified basic parts of building
	1.3	identified types of Masonry materials
1. Critical aspects of	1.4	interpreted drawings and specifications for Masonry
competency		works
	1.5	interpreted sign and symbols from drawing
	1.6	took measurement of shapes with measuring instrument
	1.7	carried out calculations following appropriate methods
	1.8	checked tightness and rigidity of scaffolding manually
	2.1	Materials collection procedure
	2.2	Sign and symbols
	2.3	Measuring units
2. Underpinning	2.4	Measuring instruments
knowledge	2.5	Curing process and duration
	2.0	Types of scaffolding
	2.7	Dispose of waste material and cleanliness
	2.0	Safety rules of building construction works
3. Underpinning Skills	3.1	Handling tools and equipment
······································	3.2	Handling materials
	3.3	Applying mathematical methods
	3.4	Interpreting drawings and specifications
	3.5	Taking measurement of shapes
	4.1	Commitment to occupational health and safety
	4.2	Environmental concerns
4. Underpinning attitudes	4.3	Eagerness to learn
	4.4	Tidiness and timeliness
	4.5	Respect for rights of peers and seniors in workplace
	The f	following resources must be provided:
5 December 11 - 4	5.1	Adequate Workplace
5. Resource implications	5.2	Tools and equipment are available
	5.3	Materials relevant to proposed activity
	5.4	Drawing and specifications relevant to the task
	Com	petency should be assessed by:
	6.1	Demonstration
o. Methous of assessment	6.2	Oral questioning
	6.3	Written test
	6.4	PortIolio
	/.1	Competency assessment must be done in NSDA
7. Context of assessment	7 2	Assessment should be done by a NSDA
	1.2	certified/nominated assessor
	1	control/nonimation assessor

Unit Code and Title	OU-MAS-04-L2-V1: Construct Brick Wall and Foundation		
Nominal Hours	90 Hours		
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to construct brick wall and foundation.It includes preparing for brick works, laying out for brick work, performing wall and foundation, damp proof course (DPC) and maintaining workplace, tools, equipment and materials.		
	Performance Criteria		
Elements of Competency	<u>Bold and Underlined</u> terms are elaborated in the Range of Variables.		
 Prepare for brick works 	 1.1. <u>PPE</u> is selected & used 1.2. Scaffolding is set for Masonry works 1.3. <u>Tools, Equipment</u> and <u>Materials</u> are kept for easy working 1.4. Quality of bricks are checked as per instruction 1.5. Bricks are cleaned & soaked as per workplace procedure 1.6. Quality of cement, sand and water are determined as per instruction 1.7. Cement, Sand and water are mixed as per specified ratio 		
2. Perform Damp Proof Course (DPC)	 2.1 Working area is selected, marked & measured as per requirement 2.2 Concrete mix/patten stone is prepared according to standard ratio 2.3 <u>Water proofing compounds</u> are mixed with concrete mix as per standard procedure 2.4 DPC materials are applied over plinth level as required thickness 2.5 Dampproof course is cured as per standard procedure 		
3. Layout for brick work	 3.1 Specifications are interpreted as per instructions 3.2 Centre lines of the brick work of Construction is measured and marked as per drawing 3.3 Levels marks are obtained to set out complicated levels from given reference 3.4 Different levels of building structure are obtained by transferring levels from one point to the other using spirit level or dumpy level 		

	25	T ¹ 1 1 1 1
	3.5	Linear and angular measurements are marked as
	3.6	Offset measurements are taken and checked according
		to drawing or instructions given
	3.7	String lines are established using threads to facilitate
		trenching without disturbing the set-out marking
4. Perform wall and	4.1	Working area is selected as per requirement
foundation	4.2	Chipping, cleaning and cement grouting are performed
		at concrete surface as per requirements
	4.3	Mortar is distributed along the marking line
	4.4	Bricks are distributed for 1 st layer according to required
		length, <u>Drick Bond</u> and maintaining level and gaps as per
	15	Mortar is distributed on top of 1 st layer and spread it
	4.5	uniformly maintaining standard thickness
	46	Bricks for 2 nd and consecutive layer is laid following
		drawing as per standard procedure
	4.7	Wall is aligned vertically and as per drawing
	4.8	Gaps are filled by mortar and racked-out the joint
	5.1	Work area is cleaned in accordance with workplace
		procedures
	5.2	Unused materials are stored for re-use or disposed
5. Maintain workplace.		following workplace procedures
tools, equipment and	5.3	Waste and scrap materials are disposed with following
materials	5 1	workplace procedures
	5.4	as per checklist
	55	Tools and equipment are cleaned and stored as per
	0.0	workplace standard
Range of Variables		•
Variable	Rang	ge (may include but not limited to):
1. Personal protective	1.1	Safety shoes
equipment (PPE)	1.2.	Safety gloves
	1.3.	Safety helmet
	1.4.	Safety belt
	1.5.	Apron
	1.6.	Mask
	1.7.	Safety goggles
2. Tools, equipment	2.1	Measuring tape
	2.2	Trowel
	2.3	Try square
	2.4	Plum bob
	2.6	Water leveling nine
	2.7	Brick cutting hammer
	2.8	Center pegs
	2.9	Spade
	2.10	Shovel
	2 11	Buckets

	2.12	Brush
	2.13	Sieve
	2.14	Water mug
	2.15	Ballpein hammer
	2.16	Hack saw
	2.17	Claw hammer
	2.18	Trolley
	2.19	Van / Rickshaw van
3. Materials	3.1	Brick
	3.2	Cement
	3.3	Chips (Brick, Stone)
	3.4	Sand
	3.5	Water
	3.6	Nails
	3.7	Nylon thread
4. Working area	4.1	Straight wall
	4.2	Curve wall
	4.3	Junction wall
	4.4	Brick foundation
	4.5	Brick pillar
5. Brick bond	5.1	Stretcher bond
	5.2	Header bond
	5.3	English bond
	5.4	Flemish bond
6. Water proofing	6.1.	Pudlo
compound	6.2.	Foam-lub
	6.3.	Sem-seal
	6.4.	Bitumen
	6.5.	Asphalt

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

	Asse	ssment required evidence that the candidate:
	1.1.	specifications are interpreted as per instructions
	1.2.	maintained water-cement ratio, bond and brick joint as
		per instruction
1. Critical aspects of	1.3.	marked center line and levels
competency	1.4.	performed leveling
competency	1.5.	checked thickness of brick courses
	1.6.	checked horizontal, vertical alignment and angular
		measurement.
	1.7.	cleaned work area in accordance workplace standard
	1.8.	cleaned and stored tools and equipment
2. Underpinning Knowledge	2.1.	Brick soaking.
	2.2.	Mortar
	2.3.	Grouts
	2.4.	Chipping
	2.5.	Standard thickness of mortar for brick work

		2.6.	Sand cement & water ratio
		2.7.	3-4-5 triangular method.
		2.8.	Quality of cement, sand, water and bricks.
		2.9.	Types of bonds.
		2.10.	Mortar preparation.
		2.11.	Brick work setting.
		2.12.	DPC ratio
		3.1.	Interpreting of drawings and instructions
		3.2.	Laying of bricks uniformly.
		3.3.	Fixing of levels.
3. 1	Underpinning Skills	3.4.	Performing mortar laying.
	1 0	3.5.	Establishing lines for laying of bricks.
		3.6.	Aligning of bricks.
		3.7.	Mixing of cement, sand and water ratio (1:4,1:5,1:6)
		4.1.	Commitment to occupational health and safety
		4.2.	Environmental concerns
4. 1	Underpinning	4.3.	Eagerness to learn
	attitudes	4.4.	Tidiness and timeliness
		4.5.	Respect for rights of peers and seniors in workplace
			Respect for rights of peers and seniors in workplace.
		The f	following resources must be provided:
		5.1.	Adequate workplace.
5	Descurse implications	5.2.	Tools and equipment appropriate to masonry work
5. 1	Resource implications		processes.
		5.3.	Materials relevant to the work activities.
		5.4.	Drawings and specifications relevant to the task.
		Com	petency should be assessed by:
	Mathada af	6.1	Demonstration
0. 1	6. Methods of	6.2	Oral questioning
assessment	6.3	Written test	
	6.4.	Portfolio	
		7.1.	Competency assessment must be done in NSDA
7. Context of assessment	~		accredited assessment centre
	7.2	Assessment should be done by a NSDA	
		certified/nominated assessor	
		I	

Unit Code and Title	OU-MAS-05-L2-V1: Perform Brick Soling
Nominal Hours	40 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to perform brick soling. It includes preparing for works, performing brick flat soling, zigzag bond soling, diagonal bond soling, herringbone bond soling, performing paving work and maintaining workplace, tools, equipment and materials.
	Performance Criteria
Competency	<u>Bold and Underlined</u> terms are elaborated in the Range of Variables.
1. Prepare for works	 1.1 <u>Personal Protective Equipment (PPE)</u> is collected and worn as per job requirement 1.2 <u>Tools, equipment</u> and <u>materials</u> are selected and collected as per job requirement 1.3 Drawings and specification are interpreted
2. Perform brick flat soling	 2.1 Working area is selected and prepared as required 2.2 Quality of materials are checked of as per specification 2.3 Bricks are laid (1st line) using stretcher bond from one end of the marked area (maintain 12.5mm gap between two bricks) 2.4 Bricks are laid for 2nd line along with the 1st line using bat in the beginning and ending of the 2nd line 2.5 Brick joint is filled by sand as required 2.6 Soling is checked and defects are rectified as per standard procedure 2.7 Spray water on soling surface is performed as per requirement
 3. Perform zigzag bond soling 4. Perform diagonal 	 3.1. Working area is selected and prepared 3.2. One brick is laid diagonally on edge' position at the marked middle point & maintain 12.5 mm gap between two bricks 3.3. 2nd one is laid making 90° at the top of 1st brick 3.4. Brick joint is filled by sand 3.5. Soling is checked and defects are rectified as per standard procedure 3.6. Spray water on soling surface is performed as per requirement 4.1 Working area is selected and prepared
bond soling	 4.2 One brick is placed diagonally and lay it 'on edge' position at the marked middle point 4.3 2nd one is placed making 90° at the top of 1st brick 4.4 Brick joint is filled by sand

	4.5	Soiling is checked and defects are rectified as per standard
		procedure
	4.6	Spray water on soling surface is performed as per requirement
5. Perform herringbone	5.1	Working area is selected and prepared
bond soling	5.2	One brick is placed diagonally and lay it 'on edge'
00110 00111g	0.1	position at the marked middle point
	5.3	2^{nd} one is placed making 90° at the top of 1^{st} brick
	5.4	Brick joints are filled by sand
	5.5	Soiling is checked and defects are rectified as per standard
		procedure
	5.6	Spray water on soling surface is performed using water
		pipe
6. Perform paving work	6.1	Working area is selected and prepared
	6.2	Pavers quality is checked as per workplace standard
	6.3	Paving is performed in selected area as per standard
	6.4	Pave joint is filled by mortar
	6.5	Paving work is checked and defects are rectified as per
		standard procedure
	6.6	Curing is performed as per requirement
	7.3	Work area is cleaned in accordance with workplace
		procedures
	7.4	Unused materials are stored for re-use or disposed
7. Maintain workplace.		following workplace procedures
tools, equipment and	7.5	Waste and scrap materials are disposed with
materials		following workplace procedures
	7.6	Inventory of tools equipment are conducted and
	77	Tools and equipment are cleaned and stored as per
	1.1	Workplace standard
Range of Variables	L	
Variable	Rano	e (may include but not limited to):
	Ittalie	e (may menade out not minica to).
1. Personal protective	1.1.	Safety shoes
equipment (PPE)	1.2.	Safety gloves
	1.3.	Safety helmet
	1.4.	Mask
2 Table agringent	1.5.	Apron Measuring tong
2. Tools, equipment	2.1	Measuring tape
	2.2	Tru aquere
	2.5 2.4	Spirit loval
	2.4	Water level
	2.5	Plumb bob
	2.0 27	Cross pean hammer
	$\frac{2.7}{2.8}$	Center negs
	2.0	Spade
	2.9 2 10	Shovel
	2.11	Bucket

	2.12 Wire Brush
	2.13 Trolley
	2.14 Van
3. Materials	3.1. Brick
	3.2. Sand
	3.3 Water
	3.4. Nails
	3.5. Thread
	3.6. Lime
	3.7. Chalk
Evidence Guide	
The evidence must be auth the requirements of the cur	entic, valid, sufficient, reliable, consistent and recent and meet rent version of the Unit of Competency.
	Assessment required evidence that the candidate:
	1.1 interpreted and identified drawings and specifications
	1.2. Checked flat brick soling and rectified defects
	1.3. Checked herringbone soling and rectified defects
1. Critical aspects of	1.4. Checked zigzag soling and rectified defects
competency	1.5. Checked diagonal bond soling and rectified defects
	1.6. Checked paying soling and rectified defects
	1.7. Checked flat brick soling and rectified defects
	1.8. Cleaned workplace, tools and equipment
	1.9. Stored tools and equipment
	2.1. Characteristics of good quality bricks
	2.2. Characteristics of good quality pave
2. Underpinning	2.3. Characteristics of good quality sand
Knowledge	2.4. Levelling and dressing
	2.5. Types of soling
	2.6. Level checking procedure
	3.1. Interpreting of drawings and specification
	3.2. Checking quality of materials
	3.3. Handling of tools and equipment
3 Underninning Skills	3.4. Laying of bricks uniformly
5. Chiefphinning Skins	3.5. Fixing of levels
	3.6. Establishing lines for laying of bricks
	3.7. Aligning bricks
	3.8. Filling up joints
	4.1. Commitment to occupational health and safety
	4.2. Environmental concerns
4. Underpinning	4.3. Eagerness to learn
attitudes	4.4. Tidiness and timeliness
	4.5. Respect for rights of peers and seniors in workplace
	The following response reset has a line in workplace
	I ne following resources must be provided:
5. Resource implications	5.1. Adequate workplace.
	5.2. Tools and equipment appropriate to masonry processes.
	5.3. Materials relevant to the proposed activity.

	5.4. Drawings and specifications relevant to the task.
6. Methods of assessment	Competency should be assessed by:
	6.1. Demonstration
	6.2. Oral questioning
	6.3. Written test
	6.4. Portfolio
7. Context of assessment	7.1. Competency assessment must be done in NSDA
	accredited assessment centre
	7.2. Assessment should be done by a NSDA
	certified/nominated assessor

	OU-MAS-07-L2-V1: Perform Plaster Works on Masonry		
Unit Code and Title	Surface		
Nominal Hours	80 Hours		
	This unit covers the knowledge, skills and attitudes required to perform plaster works on Masonry surface.		
Unit Descriptor	It includes preparing for works, performing plaster on brick wall, plaster on concrete surface, making drip course and maintaining workplace, tools, equipment and materials.		
	Performance Criteria		
Elements of	Bold and Underlined terms are elaborated in the Range of		
Competency	Variables.		
	1.1 Personal Protective Equipment (PPE) is collected and		
	worn as per job requirement		
1. Prepare for works	1.2 Workplace is prepared as per job requirement		
	1.3 <u>Tools</u> , <u>equipment</u> and <u>materials</u> are selected and collected as per job requirement		
0 Deufermennelenten en	2.1. Dride well werfage is along d and any and a series		
2. Perform plaster on	2.1 Brick wall surface is cleaned and prepared as per		
Drick wall	2.2 Saturated Surface Dry (SSD) condition of wall is checked		
	2.3 Grouting on plaster surface is performed as per		
	requirements		
	2.4 Mortar is prepared for plaster as per standard procedure		
	2.5 Mortar is applied on the surface as per standard procedure		
	2.6 Finishing touch is performed as per workplace procedure		
	2.7 Plaster surface is checked as per workplace standard and		
	rectified as required		
3. Perform plaster on	3.1 <u>Concrete surface</u> is chipped as per job requirement		
concrete surface	3.2 Concrete surface is cleaned and prepared as per		
	requirement		
	3.3 Saturated Surface Dry (SSD) condition of wall is checked		
	s.4 Grouting on plaster surface is performed as per		
	3.5 Mortar is prepared for plaster as per standard procedure		
	3.6 Mortar is applied on the surface as per standard procedure		
	3.7 Finishing touch is performed as per workplace procedure		
	3.8 Plaster surface is checked procedure and rectified as per		
	standard		
	4.1 Surface area is marked with chalk or lime along which		
	drip mould is to be prepared		
	4.2 Measurement of drip mould is taken		
4. Make drip course	4.3 Surface area is made slightly rough along which the drip		
	mould is to be made		
	4.4 Mortar is prepared on the surface according to		
	measurement		

	4.5 Mortar is applied on the surface according to measurement
	4.6 Cornish and sunshade of the drip mould is leveled as
	required
	4.7 Drip mould area is cleaned using flower broom as required
	5.1 Work area is cleaned in accordance with workplace
	procedures
	5.2 Unused materials are stored for re-use or disposed
	following workplace procedures
5. Maintain workplace,	5.3 Waste and scrap materials are disposed with following
tools, equipment and	workplace procedures
materials	5.4 Inventory of tools equipment are conducted and recorded
	as per checklist
	5.5 Tools and equipment are cleaned and stored as per
	Workplace procedure
Range of Variables	
Variable	Range (may include but not limited to):
1. Personal protective	1.1. Safety gloves
equipment (PPE)	1.2. Safety shoes
	1.3. Safety helmet
	1.4. Safety belt
	1.5. Apron
	1.6. Gumboot
	1.7. Safety googles
	1.8. Dust musk
2. Tools, equipment	2.1 Measuring tape
	2.2 Trowel
	2.3 Try square
	2.4 Spirit level
	2.5 Plum bob
	2.6 Water leveling pipe
	2.7 Center pegs
	2.8 Spade
	2.9 Shovel
	2.10 Pans
	2.11 Buckets
	2.12 Brush
	2.13 Sieve
	2.14 Water mug
	2.15 Wooden float
	2.16 Floating rule/Gauge
	2.17 Foam/Coconut broom/flower broom

	2.18	Trolley
	2.19	Van
	2.20	Flower broom
3. Materials	3.1	Cement
	3.2	Sand (Sylhet and Local)
	3.3	Water
	3.4	Desalt
	3.5	Nails
	3.6	Thread
	3.7	Polythene
	3.8	Pudlo / Foam lub
4. Concrete surface	4.1	Beam
	4.2	Column
	4.3	Ceiling

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

	Assessment required evidence that the candidate:		
	1.1.	chipped and cleaned surface	
	1.2.	used grouting on plaster surface	
1. Critical aspects of	1.3.	prepared mortar as per requirements	
competency	1.4.	performed finishing touch	
	1.5.	checked and rectified defects of plaster	
	1.6.	takes measurement of drip mould	
	1.7.	leveled drip mould	
	2.1.	Quality of cement, sand	
	2.2.	Plaster	
	2.3.	Grouting	
2 Underninning	2.4.	Chipping	
Z. Underprinning Knowledge	2.5.	Mortar mixing ratio	
Knowledge	2.6.	Grouting mixing procedure	
	2.7.	Plastering thickness of surface	
	2.8.	Drip course	
	2.9.	Finishing touching procedure	
	3.1.	Handling of tools and equipment	
3. Underpinning Skills	3.2.	Leveling of plaster surface	
	3.3.	Taking measurement	
	3.4.	Maintaining ratio of sand cement and water	
	3.5.	Mixing of cement, sand and water	
	3.6.	Maintaining plaster thickness	

	11	Commitment to occupational health and safety	
4. Underpinning attitudes	4.1.		
	4.2.	Environmental concerns	
	4.3.	Eagerness to learn	
	4.4.	Tidiness and timeliness	
	4.5.	Respect for rights of peers and seniors in workplace	
		Respect for rights of peers and seniors in workplace.	
5. Resource implications	The following resources must be provided:		
	5.1.	Adequate workplace.	
	5.2.	Tools and equipment appropriate to construction	
		processes.	
	5.3.	Materials relevant to the proposed activity.	
	5.4.	Drawings and specifications relevant to the task.	
	Competency should be assessed by:		
	6.1.	Demonstration	
6. Methods of assessment	6.2.	Oral questioning	
	6.3.	Written test	
	6.4.	Portfolio	
7. Context of assessment	7.1.	Competency assessment must be done in NSDA	
		accredited assessment centre	
	7.2.	Assessment should be done by a NSDA	
		certified/nominated assessor	

Review of Competency Standard

The Competency Standards for National Skills Certificate in **Masonry L-2** is Reviewed by NSDA on 12 January, 2021.

Respectable members:

1.	Dulal Krishna Saha, Executive Chairman (Secretary), National Skills Development Authority (NSDA)	Chairperson
2.	Aloke kumar saha, Senior Instructor, CIVIL, BGTTC, Mirpur, Dhaka- 1216, Cell: 01716607775, Email: <u>alokekumarsaha15@gmail.com</u>	Member
3.	Engr. Md. Abdul Mannan, Ex-vice Principal, Bangladesh Korea, TTC, Dhaka, Cell: 01711847455, Email: <u>engr.a.mannan@gmail.com</u>	Member
4.	B.M Mofizur Rahman, Curriculum Development & Training Executive, CISC, Cell: 01717518730 Email: mofizur.cisc@gmail.com	Member
5.	Md. Farid Hossain, Project Engineer, BTI, Cell: 01817636816, Email: <u>farid2015bti@gmail.com</u>	Member
6.	Md. Moniruzzaman, Project Engineer, ARM Real State and Construction, Cell: 01774279272, Email: <u>moniruzzaman604130@gmail.com</u>	Member
7.	Md. Imam Hossain, Senior Instructor, UCEP, Jatrabari Technical School, Cell: 01920218567, Email: <u>imam.hossain1@ucepbd.org</u>	Member
8.	Md. Atiqur Rahman Sajib, Sub Assistant Engr, Bright Engineering & Construction, Cell: 01779878361, Email: <u>atikur61@gmail.com</u>	Member
9.	Md. Mijanur Rahman, Manager, Construction, H.I Technology Construction Ltd, Cell: 01712184303, Email: <u>engrmijanrahman@gmail.com</u>	Member
10.	Shakhy Baroi, Assistant In-Charge Mirpur, TVET Center, Muslim Aid, UK-Bangladesh, Cell: 01902876247, Email: <u>shakhybr@gmail.com</u>	Member
11.	Md. Shahadat Hossain, Specialist-2, SEIP Project, Dhaka. Cell: 01715360652, Email: <u>hossainsm61@gmail.com</u>	Member
12.	Md. Abdur Razzaque, Specialist, NSDA, Cell: 01742734313, Email:	Member
13.	Md. Amir Hossain, Process Expert (CS and Curriculum), NSDA. Cell: 01631670445, Email: <u>razib.consultant@yahoo.com</u>	Member
14.	Md. Quamruzzaman, Director (Skills Standard), NSDA, Cell: 01819189320	Member
15.	Engr. B.M. Shariful Islam, Deputy Director (Skills Standard), Cell: +880 01715010321, Email: <u>sharif9375@gmail.com</u>	Member

Validation of Competency Standard by Standard and Curriculum Validation Committee (SCVC)

The Competency Standards for National Skills Certificate in **Masonry L-2** is validated by SCVC on 13 January, 2021.

Respectable members of the SCVC:

1.	Engr. Anisuzzaman Bhuiyan Rana, Chairperson, Curriculum Development & Training Support Standing Committee, Dhaka. Cell: 01711522658.	Chairperson
2.	Aloke kumar saha, Senior Instructor, CIVIL, BGTTC, Mirpur, Dhaka- 1216, Cell: 01716607775, Email: <u>alokekumarsaha15@gmail.com</u>	Member
3.	Engr. Md. Abdul Mannan, Ex-vice Principal, Bangladesh Korea, TTC, Dhaka, Cell: 01711847455, Email: <u>engr.a.mannan@gmail.com</u>	Member
4.	B.M Mofizur Rahman, Curriculum Development & Training Executive, CISC, Cell: 01717518730 Email: mofizur.cisc@gmail.com	Member
5.	Md. Farid Hossain, Project Engineer, BTI, Cell: 01817636816, Email: <u>farid2015bti@gmail.com</u>	Member
6.	Md. Moniruzzaman, Project Engineer, ARM Real State and Construction, Cell: 01774279272, Email: moniruzzaman604130@gmail.com	Member
7.	Md. Imam Hossain, Senior Instructor, UCEP, Jatrabari Technical School, Cell: 01920218567, Email: imam.hossain1@ucepbd.org	Member
8.	Md. Atiqur Rahman Sajib, Sub Assistant Engr, Bright Engineering & Construction, Cell: 01779878361, Email: <u>atikur61@gmail.com</u>	Member
9.	Md. Mijanur Rahman, Manager, Construction, H.I Technology Construction Ltd, Cell: 01712184303, Email: <u>engrmijanrahman@gmail.com</u>	Member
10.	Muhammad Masudur Rahman, Instructor, Gazipur Technical School & College, Gazipur, Cell: 01716797027, Email: <u>gtscmasud@gmail.com</u>	Member
11.	Md. Shahadat Hossain, Specialist-2, SEIP Project, Dhaka. Cell: 01715360652, Email: <u>hossainsm61@gmail.com</u>	Member
12.	Md. Abdur Razzaque, Specialist, NSDA, Cell: 01742734313, Email:	Member
13.	Md. Amir Hossain, Process Expert (CS and Curriculum), NSDA. Cell: 01631670445, Email: <u>razib.consultant@yahoo.com</u>	Member
14.	Md. Quamruzzaman, Director (Skills Standard), NSDA, Cell: 01819189320	Member
15.	Engr. B.M. Shariful Islam, Deputy Director (Skills Standard), Cell: +880 01715010321, Email: sharif9375@gmail.com	Member

Re-Review of Competency Standard

The Competency Standards for National Skills Certificate in **Masonry, Level-2** is Re-Reviewed by NSDA on November, 2023.