



Government of the People's Republic of Bangladesh
Skills Development Project



National Competency Standards for Mason

Qualification Title: **National Skills Certificate-III in Masonry
(Construction Sector)**

Qualification Code: **CONMAS030312**



Bangladesh Technical Education Board

May 2014

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Approval Sheet

The National Competency Standards for **National Skills Certificate-III in Masonry (Construction Sector)** Qualification is a document developed by the Technical sub Committee for Mason under the Skills Development Project ADB Loan 2425 – BAN (SF).

It was approved by the Bangladesh Technical Education Board (BTEB) upon the endorsement of the Sector Working Committee at a meeting held on 10 April 2012 at the office of the Industry Skills Council.

The Standard was also approved by Standard and Curriculum Development Committee (SCDC) **on 16th April, 2014 at BTEB CBT Cell.**

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Preface

The TVET system has a large role to play in economic growth and social development as workforce provider to the labor market and as provider of skills to those who are looking for employment. In the case of Bangladesh, the TVET sector needs major reforms to ensure that issues of quality and capacity, relevance, and access are properly addressed.

The Directorate of Technical Education (DTE) with funding from the Asian Development Bank (ADB), Swiss Agency Development for Cooperation SDC and the Government of Bangladesh (GoB) is implementing a project known as Skills Development Project (SDP). The main target of the Skills Development Project (SDP) is to improve the relevance of TVET in labor market by introducing competency-based training system: a system that proceeds from the development of a qualifications framework, competency standards, curriculum, training delivery, assessment, and quality assurance mechanisms in order to develop a competitive workforce.

The development of competency standards is regarded as the heart of a competency-based training regime. Each standard defines sets of knowledge, skills and attitudes (KSAs) that a Bangladeshi trainee should be able to demonstrate at a recognized level of competence. It provides a common framework of outcomes between the labor and education sectors, as well as among workers, trainers and trainees.

In the process of development, *Industry Skills Council* (ISC) was organized to determine competencies expected of an occupation in Bangladesh. The ISC, whose membership come from “top performers” in the industry, performed occupational, competency and unit analyses based on their rich experiences in the field, existing documents, and on the advice of national and international experts. Competency standards of Sri Lanka, Philippines, Australia, Korea, Malaysia, Maldives and other countries were examined.

A series of workshops – development, review and finalization - were conducted to ensure a workable National Competency Standards for the occupation. Further, a validation instrument was developed and administered to other top industry performers to verify and confirm the draft being developed.

It is hoped that this document reflects the real needs of the industry thereby providing a concrete basis for the curriculum development and assessment. In such a way, the development of relevant and competent workforce is not farfetched.

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Acronyms

MoE	Ministry of Education
DG	Director General
DTE	Directorate of Technical Education
SDP	Skills Development Project
PD	Project Director
PIU	Project Implementation Unit
GOB	Government of Bangladesh
ADB	Asian Development Bank
SC	Swiss contact
ANTA	Australian National Training Authority
APEC	Asia Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
BMET	Bureau of Manpower Employment and Training
NTVQ	National Technical Vocational Qualification
NTVQF	National Technical Vocational Qualification Framework
BTEB	Bangladesh Technical Education Board
CBT	Competency Based Training
CS	Competency Standard
HSC (Voc)	Higher Secondary Certificate (Vocational)
KSA	Knowledge, Skills, Attitude
MoLE	Ministry of Labor and Employment
NTVQF	National Technical Vocational Qualification Framework
NTVQ	National Technical Vocational Qualification
OHS	Occupational Health and Safety
PSC	Project Steering Committee
RMG	Ready Made Garments
RPL	Recognition of Prior Learning
SSC (Voc)	Secondary School Certificate (Vocational)

STEP	Skills and Training Enhancement project (WB)
ISC	Industry Skills Council
TESDA	Technical Education and Skills Development Authority
TL	Team Leader
TSC	Technical Sub Committee
TVET	Technical and Vocational Education and Training
WB	World Bank
DACUM	Development of a Curriculum
CBLM	Competency based learning Material

Section 1: The Qualification

1. Title of Qualification: National Skills Certificate-III in Masonry (Construction Sector)	
2. Qualification code:	3. Endorsement date:
CONMAS30312	10 April 2012
4. Purpose of the qualification	<p>The NSC III in Masonry Qualification consists of a set of competencies that a person must achieve in order to work competently in the Construction Sector as a Mason.</p> <p>In particular, he/she should be able to:</p> <ol style="list-style-type: none"> 1. Install Pre-cast And fabricated components 2. Apply special cement finishes to concrete and masonry surfaces. 3. Repair defective concrete and masonry surfaces. 4. Perform waterproofing work.
5. Regulatory Arrangements	The holder of this qualification should have been assessed by a BTEB certified assessor and found to be competent in the units listed in Section 2.
6. Accreditation requirements	The qualifications shall be offered in compliance with the accreditation requirements set by BTEB.
7. Transition arrangements	In the absence of certified assessors, the BTEB shall appoint trainers who have undergone assessment trainings.
8. Contact for comments	Chairperson Bangladesh Technical Education Board (BTEB) Agargaon, Sher-E-Bangla Nagar

**Section -2: National Competency Standards
for
National Skills Certificates in Masonry**

Generic Competencies

Code	Unit of Competency	Level	No. of Hrs
GN0100112A	Communicate in the workplace	1	30
GN0100212A	Work in a team environment	1	18
GN0100312A	Practice workplace cleanliness	1	18
GN0100412A	Practice occupational health and safety (OHS) procedures.	1	30
GN0300512A	Demonstrate work values	3	18
GN0300612A	Lead small team	3	18
GN0300712A	Practice negotiation skills	3	24
Total			156 hours

Sector Specific Competencies

Code	Unit of Competency	Level	No. of Hrs
CON0100112A	Work in the Construction Sector	1	24
CON0100212A	Interpret Drawings and Specifications in Masonry Manuals	1	30
CON0100312A	Use Hand Tools and Power Tools for the Masonry	1	30
CON0200412A	Perform Measurement and Calculations in masonry	2	48
CON0200512A	Maintain tools and equipment	2	30
Total			162

Occupation Specific Competencies

Code	Unit of Competency	Level	No. of Hrs.
CONMAS0100112A	Prepare Masonry Mortar	1	39
CONMAS0100212A	Perform Paving Work	1	48
CONMAS0100312A	Perform Basic masonry works	1	45
CONMAS0100412A	Perform Plaster on masonry surface	1	48
CONMAS0200512A	Lay Brick and Block For Structure	2	18
CONMAS0200612A	Perform damp proof course	2	15
CONMAS0200712A	Perform Arch work	2	48
CONMAS0200812A	Construct decorative brick work	2	30
CONMAS0200912A	Perform Concreting work	2	24
CONMAS0201012A	Perform Plaster on Concrete Surface	2	36
CONMAS0201112A	Install brick cladding	2	21
CONMAS0301212A	Install pre-cast and fabricated components	3	60
CONMAS0301312A	Apply special cement finishes to concrete and masonry surfaces	3	45
CONMAS0301412A	Repair defective concrete and masonry surfaces	3	48
CONMAS0301512A	Perform waterproofing work	3	57
Total			582 hours
Grand Total			900 hours

**Course Structure for National Skills Certificate in Mason
For Level -3**

The units of competencies this qualification are summarized as follows:

Generic Competencies

Code	Unit of Competency	Level	No. of Hrs
CON300512A	Demonstrate work values	3	18
CON300612A	Lead small team	3	18
CON300712A	Practice negotiation skills	3	24
Total			60

Occupation Specific Competencies

Code		Level	No. of Hrs
CONMAS301212A	Install Pre-cast and fabricated components	3	60
CONMAS301312A	Apply Special Cement Finishes to Concrete and Masonry Surfaces	3	45
CONMAS301412A	Repair Defective Concrete and Masonry Surfaces	3	48
CONMAS301512A	Perform waterproofing Work	3	57
Total			210
Grand Total			270 hours

Section 3: The Generic Competencies

Unit of Competency	Demonstrate work values
Unit Code	GN300612A
Unit Descriptor	This unit covers the knowledge, skill and attitude required to demonstrate work values. It includes: defining the purpose of work; applying work values and ethics; dealing with ethical problems; and maintaining integrity of conduct in the workplace.
Nominal Hours	18 hours

Elements of competency	Performance Criteria
	Bold italicized words are detailed in the Range of Variables
1. Define the purpose of work	1.1 One's unique sense of purpose for working and the why's of work are identified, reflected on and clearly defined for one's development as a person and as a member of society.. 1.2 Personal mission is in harmony with company's values.
2. Apply work values/ ethics	2.1 Work values/ethics/concepts are classified and reaffirmed in accordance with the transparent company ethical standards, policies and guidelines. 2.2 Work practices are undertaken in compliance with industry work ethical standards, organizational policy and guidelines. 2.3 Personal behavior and relationships with co-workers standards, policy and guidelines. 2.4 Company resources are used in accordance with transparent company ethical standard, policies and guidelines.
3. Deal with ethical problems	3.1 Company ethical standard, organizational policy and guidelines on the prevention and reporting of unethical conduct are accessed and applied in accordance with transparent company ethical standard, policies and guidelines. 3.2 Work incidents/situations are reported and/or resolved in accordance with company protocol/guidelines.

	3.3 Resolution and/or referral of ethical problems identified are used as learning opportunities.
4. Maintain integrity of conduct in the workplace	<p>4.1 Personal work practices and values are demonstrated consistently with acceptable ethical conduct and company's core values.</p> <p>4.2 Instructions to co-workers are provided based on ethical, lawful and reasonable directives.</p> <p>4.3 Company values/practices are shares with co-workers using appropriate behavior and language.</p>

Range of Variables

Variables	Range (Included but not limited to):
1. Work values/ethics/concepts	<p>1.1 Commitment/Dedication</p> <p>1.2 Sense of urgency</p> <p>1.3 Sense of purpose</p> <p>1.4 Love for work</p> <p>1.5 High motivation</p> <p>1.6 Orderliness</p> <p>1.7 Reliability</p> <p>1.8 Competence</p> <p>1.9 Dependability</p> <p>1.10 Goal-oriented</p> <p>1.11 Sense of responsibility</p> <p>1.12 Being knowledgeable</p> <p>1.13 Loyalty to work/company</p> <p>1.14 Sensitivity to others</p> <p>1.15 Compassion/Caring attitude</p> <p>1.16 Balancing between family and work</p> <p>1.17 Benjamin spirit/teamwork</p> <p>1.18 Sense of nationalism</p>
2. Work practices	<p>2.1 Quality of work.</p> <p>2.2 Punctuality</p> <p>2.3 Efficiency</p> <p>2.4 Effectiveness</p> <p>2.5 Productivity</p> <p>2.6 Resourcefulness</p> <p>2.7 Innovativeness/Creativity</p> <p>2.8 Cost consciousness</p>

	2.9 5S 2.10 Attention to details
3. Incidents/situations	3.1 Violent/intense dispute or argument 3.2 Gambling 3.3 Use of prohibited substances 3.4 Pilferages 3.5 Damage to person or property 3.6 Vandalism 3.7 Falsification 3.8 Bribery 3.9 Sexual Harassment 3.10 Blackmail
4. Company resources	4.1 Consumable materials 4.2 Equipment/Machineries 4.3 Human 4.4 Time 4.5 Financial resources
5. Instructions	5.1 Verbal 5.2 written

Evidence Guide

1. Critical aspects of competency	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Defined one's unique sense of purpose for working</p> <p>1.2. Clarified and affirmed work values/ethics/concepts consistently in the workplace</p> <p>1.3 Demonstrated work practices satisfactorily and consistently in compliance with industry work ethical standards, organizational policy and guidelines</p> <p>1.4 Demonstrated personal behavior and relationships with co-workers and/or clients consistent with ethical standards policy and guidelines</p> <p>1.5 Used company resources in accordance with company ethical standard, policies and guidelines.</p> <p>1.6 Followed company ethical standards, organizational policy and guidelines on the prevention and reporting of unethical</p>
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	<p>conduct/behavior</p> <p>1.7 Demonstrated sufficient knowledge of the factors influencing negotiation to achieve agreed outcome</p> <p>1.8 Participated in negotiation with at least one person to achieve an agreed outcome</p>
2. Underpinning knowledge	<p>2.1 Occupational health and safety</p> <p>2.2 Work valued and ethics</p> <p>2.3 Company performance and ethical standards</p> <p>2.4 Company policies and guidelines</p> <p>2.5 Fundamental rights at work including gender sensitivity</p> <p>2.6 Work responsibilities/job functions</p> <p>2.7 Corporate social responsibilities</p> <p>2.8 Company code of conduct/values</p> <p>2.9 Balancing work and family responsibilities</p> <p>2.10 Codes of practice and guidelines for the organization</p> <p>2.11 Organization policy and procedures for negotiations</p> <p>2.12 Decision making and conflict resolution strategies procedures</p> <p>2.13 Problem solving strategies on how to deal with unexpected questions and attitudes during negotiation</p> <p>2.14 Flexibility</p> <p>2.14 Empathy</p>
3. Underpinning Skills	<p>3.1 Interpersonal skills to develop rapport with other parties</p> <p>3.2 Communication skills (verbal and listening)</p> <p>3.3 Self awareness, understanding and acceptance</p> <p>3.4 Application of good manners and right conduct</p> <p>3.5 Observation skills</p> <p>3.6 Negotiation skills</p>
4. Underpinning Attitudes	<p>4.1 Commitment to occupational health and safety</p> <p>4.2 Environmental concerns</p> <p>4.3 Eagerness to learn</p> <p>4.4 Tidiness and timeliness</p>

	<p>4.5 Respect for rights of peers and seniors in workplace</p> <p>4.6 Communication with peers and seniors in workplace</p>
5. Resource implications	<p>The following resources must be provided:</p> <p>5.1 Workplace or assessment location</p> <p>5.2 Case studies/Scenarios</p> <p>5.3 Room with facilities necessary for the negotiation process</p> <p>5.5 Human resources (negotiators)</p>
6. Methods of assessment	<p>Competency must be assessed through:</p> <p>6.1 Portfolio Assessment</p> <p>6.2 Interview</p> <p>6.3 Third Party Reports</p> <p>6.4 Observation/Demonstration and questioning</p> <p>6.5 Oral and written questioning</p>
7. Context of assessment	<p>For certification competency should be assessed in the actual workplace or in a simulated workplace individually after completion of the module.</p>
<p>Accreditation Requirements</p> <p>Training providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification.</p> <p>Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.</p>	

Unit of Competency	Lead small team
Unit Code	GN300512A
Unit Descriptor	This unit covers the knowledge, skill and attitude required to lead small team. It includes: providing team leadership; assigning responsibilities; setting performance expectations for team members; and supervising team performance.
Nominal Hours	18 hours

Elements of Competency	PERFORMANCE CRITERIA <i>Bold Italicized terms</i> are elaborated in the Range of Variables
1. Provide team leadership	1.1. Work requirements are identified and presented to team members 1.2. Reasons for instructions and requirements are communicated to team members 1.3. Team members' queries and concerns are recognized, discussed and dealt with
2. Assign responsibilities	2.1. Duties, and responsibilities are allocated having regard to the skills, knowledge and aptitude required to properly undertake the assigned task and according to company policy 2.2. Duties are allocated having regard to individual preference, domestic and personal considerations, whenever possible
3. Set performance expectations for team members	3.1. Performance expectations are established based on client needs and according to assignment requirements 3.2. Performance expectations are based on individual team members duties and area of responsibility 3.3. Performance expectations are discussed and disseminated to individual team members
4. Supervise team performance	4.1. Monitoring of performance takes place against defined performance criteria and/or assignment instructions and corrective action taken if required 4.2. Team members are provided with <i>feedback</i> ,

	<p>positive support and advice on strategies to overcome any deficiencies</p> <p>4.3. Performance issues which cannot be rectified or addressed within the team are referenced to appropriate personnel according to employer policy</p> <p>4.4. Team members are kept informed of any changes in the priority allocated to assignments or tasks which might impact on client/customer needs and satisfaction</p> <p>4.5. Team operations are monitored to ensure that employer/client needs and requirements are met</p> <p>4.6. Follow-up communication is provided on all issues affecting the team</p> <p>4.7. All relevant documentation is completed in accordance with company procedures</p>
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Range Of Variables

VARIABLE	RANGE (It includes but not limited to)
1. Work requirements	1.1. Client Profile 1.2. Assignment instructions
2. Team member's concerns	2.1. Roster/shift details
3. Monitoring of performance	3.1. Formal process 3.2. Informal process
4. Feedback	4.1. Formal process 4.2. Informal process
5. Performance issues	5.1. Work output 5.2. Work quality 5.3. Team participation 5.4. Compliance with workplace protocols 5.5. Safety 5.6. Customer service

Evidence Guide

1. Critical aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <p>1.1. Maintained or improved individuals and/or team performance given a variety of possible scenario</p> <p>1.2. Assessed and monitored team and</p>
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	<p>individual performance against set criteria</p> <p>1.3. Represented concerns of a team and individual to next level of management or appropriate specialist and to negotiate on their behalf</p> <p>1.4. Allocated duties and responsibilities, having regard to individual's knowledge, skills and aptitude and the needs of the tasks to be performed</p> <p>1.5. Set and communicated performance expectations for a range of tasks and duties within the team and provided feedback to team members</p>
2. Underpinning Knowledge	<p>2.1. Company policies and procedures</p> <p>2.2. Relevant legal requirements</p> <p>2.3. How performance expectations are set</p> <p>2.4. Methods of Monitoring Performance</p> <p>2.5. Client expectations</p> <p>2.6. Team member's duties and responsibilities</p>
3. Underpinning Skills	<p>3.1. Communication skills required for leading teams</p> <p>3.2. Informal performance counseling skills</p> <p>3.3. Team building skills</p> <p>3.4. Negotiating skills</p>
4. Underpinning Attitudes	<p>4.1 Commitment to occupational health and safety</p> <p>4.2 Environmental concerns</p> <p>4.3 Eagerness to learn</p> <p>4.4 Tidiness and timeliness</p> <p>4.5 Respect for rights of peers and seniors in workplace</p> <p>4.6 Communication with peers and seniors in workplace</p>
5. Resource Implications	<p>The following resources should be provided:</p> <p>5.1 Access to relevant workplace or appropriately simulated environment where assessment can take place</p> <p>5.2 Materials relevant to the proposed activity or task</p>
6 Method of Assessment	<p>Competency may be assessed through:</p> <p>6.1 Direct observations of work activities of the</p>

	<p>individual member in relation to the work activities of the group</p> <p>6.2 Observation of simulation and/or role play involving the participation of individual member to the attainment of organizational goal</p> <p>6.3 Case studies and scenarios as a basis for discussion of issues and strategies in teamwork</p>
7 Context for Assessment	For certification competency should be assessed in the actual workplace or in a simulated workplace individually after completion of the module.
<p>Accreditation Requirements</p> <p>Training providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification.</p> <p>Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.</p>	

Unit of Competency	Practice negotiation skills
Unit Code	GN300712A
Unit Descriptor	This unit covers the knowledge, skill and attitude required to perform negotiation skills. It includes: planning negotiations; and participating in negotiations.
Nominal Hours	24 hours

Elements of Competency	Performance Criteria <i>Italicized terms</i> are elaborated in the Range of Variables
1. Plan negotiations	<p>1.1 Information on <i>preparing for negotiation</i> is identified and included in the plan</p> <p>1.2 Information on creating <i>non verbal environments</i> for positive negotiating is identified and included in the plan</p> <p>1.3 Information on <i>active listening</i> is identified and included in the plan</p> <p>1.4 Information on different <i>questioning techniques</i> is identified and included in the plan</p> <p>1.5 Information is checked to ensure it is correct and up-to- date</p>
2. Participate in negotiations	<p>2.1 Criteria for successful outcome are agreed upon by all parties</p> <p>2.2 Desired outcome of all parties are considered</p> <p>2.3 Appropriate language is used throughout the negotiation</p> <p>2.4 A variety of questioning techniques are used</p> <p>2.5 The issues and processes are documented and agreed upon by all parties</p> <p>2.6 Possible solutions are discussed and their viability assessed</p> <p>2.7 Areas for agreement are confirmed and recorded</p> <p>2.8 Follow-up action is agreed upon by all parties</p>

Range Of Variables

VARIABLE	RANGE
1. Preparing for negotiation	1.1 Background information on other parties to the negotiation 1.2 Good understanding of topic to be negotiated 1.3 Clear understanding of desired outcome/s 1.4 Personal attributes <ul style="list-style-type: none"> 1.4.1 self awareness 1.4.2 self esteem 1.4.3 objectivity 1.4.4 empathy 1.4.5 respect for others 1.5 Interpersonal skills <ul style="list-style-type: none"> 1.5.1 Listening/reflecting 1.5.2 Non verbal communication 1.5.3 Assertiveness 1.5.4 Behavior labeling 1.5.5 Testing understanding 1.5.6 Seeking information 1.5.7 Self-disclosure 1.6 Analytic skills <ul style="list-style-type: none"> 1.6.1 observing differences between content and process 1.6.2 identifying bargaining information 1.6.3 applying strategies to manage process 1.6.4 applying steps in negotiating process 1.6.5 strategies to manage conflict 1.6.6 steps in negotiating process 1.6.7 options within organization and externally for resolving conflict
2. Non verbal environments	2.1 Friendly reception 2.2 Warm and welcoming room 2.3 Refreshments offered 2.4 Lead in conversation before negotiation begins
3. Active listening	3.1 Attentive 3.2 Don't interrupt 3.3 Good posture 3.4 Maintain eye contact 3.5 Reflective listening

4. Questioning techniques	4.1 Direct 4.2 Indirect 4.3 Open-ended
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Evidence Guide

1. Critical aspects of Competency	Assessment requires evidence that the candidate: <ul style="list-style-type: none"> 1.1 Demonstrated sufficient knowledge of the factors influencing negotiation to achieve agreed outcome 1.2 Participated in negotiation with at least one person to achieve an agreed outcome
2. Underpinning Knowledge	<ul style="list-style-type: none"> 2.1 Codes of practice and guidelines for the organization 2.2 Organizations policy and procedures for negotiations 2.3 Decision making and conflict resolution strategies procedures 2.4 Problem solving strategies on how to deal with unexpected questions and attitudes during negotiation 2.5 Flexibility 2.6 Empathy
3. Underpinning Skills	<ul style="list-style-type: none"> 3.1 Interpersonal skills to develop rapport with other parties 3.2 Communication skills (verbal and listening) 3.3 Observation skills 3.1 Negotiation skills
4. Underpinning Attitudes	<ul style="list-style-type: none"> 4.1 Commitment to occupational health and safety 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 4.6 Communication with peers and seniors in workplace
5. Resource Implications	The following resources should be provided: <ul style="list-style-type: none"> 5.1 Room with facilities necessary for the negotiation process 5.2 Human resources (negotiators)
6. Methods of Assessment	Competency may be assessed through: <ul style="list-style-type: none"> 6.1 Observation/demonstration and questioning 6.2 Portfolio assessment 6.3 Oral and written questioning 6.4 Third party report

7. Context for Assessment	For certification competency should be assessed in the actual workplace or in a simulated workplace individually after completion of the module.
Accreditation Requirements Training providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

Section 4: The Occupation Specific Competencies

Unit of Competency	Install Pre-cast and fabricated components
Unit Code	CONMAS301212A
Unit Descriptor	<p>This unit covers the knowledge, skills and attitude required to install Pre-cast and fabricated components.</p> <p>It includes: Collecting tools, Equipment and materials; Interpreting relevant drawings, plans and sections; setting layout; preparing base bedding for laying or erecting; laying pre-cast and prefabricated items and Cleaning the work place for masonry.</p>
Nominal Hours	60 hours

Elements of Competency	Performance Criteria <i>Bold italicized</i> words are detailed in the Range of Variables
1. Collect tools, Equipment and materials	<p>1.1 PPE are collected and used.</p> <p>1.2 Bedding material, including cement, metal, sand, quarry dust, and gravel are checked.</p> <p>1.3 Precast and pre-fabricated components are checked to identify cracks, sagging, dimension and other damages for remedy.</p> <p>1.4 Tools and equipment are selected to handle pre cast and prefabricated items safely.</p> <p>1.5 Relevant standard hand signals are used in handling precast, pre fabricated items.</p>
2. Interpret relevant drawings.	<p>2.1 Sections, notations, scales and drawings are interpreted.</p> <p>2.2 Location and positions of erection and laying are determined.</p> <p>2.3 Time, material, equipment and man-hours to perform the outlined work is estimated.</p>
3. Set layout	<p>3.1 Base line and other lines are established according to the drawing.</p> <p>3.2 Profile boards and pegs are fixed according to site conditions and references points.</p> <p>3.3 Angles and corners are set out as per the drawings.</p> <p>3.4 Levels are checked to ensure maintenance of specified gradients as required.</p>

4. Prepare base bedding for laying or erecting	<p>4.1 Type of base and bedding are selected as per the drawing or instruction.</p> <p>4.2 Mortar is prepared.</p> <p>4.3 Base is prepared by placing concrete or any other material to given thickness.</p>
5. Lay/erect pre cast/prefabricated items	<p>5.1 Precast and prefabricated items are selected according to the sequence of erecting and laying.</p> <p>5.2 Temporary working platforms are made to ensure safety.</p> <p>5.3 Items are placed and aligned at specified positions and levels.</p> <p>5.4 Arrangements are made to keep items stable until the erection joint get hardened</p> <p>5.5 Gaps, pits and joints of pre-cast and prefabricated units are sealed with concrete or with any other materials as specified.</p> <p>5.6 Pre cast and prefabricated units are secured with bolts and nuts.</p> <p>5.7 Necessary action taken to protect the work from bad weather conditions.</p>
6. Clean the work place	<p>6.1 Tools and equipment are cleaned and stored</p> <p>6.2 Work place is cleaned</p> <p>6.3 Waste materials are disposed in proper place.</p>

Range of Variables

Variables	Range (Include but not limited to):
1. PPE	<p>1.1 Helmets</p> <p>1.2 Goggles</p> <p>1.3 Gloves</p> <p>1.4 Safety shoes</p> <p>1.5 Aprons</p>
2. Materials	<p>2.1 Cement</p> <p>2.2 Water</p> <p>2.3 Sand</p> <p>2.4 Metal</p> <p>2.5 Paper pin</p> <p>2.6 Concrete repairing chemicals</p> <p>2.7 Nylon string</p>

	<p>2.8 Wire nails</p> <p>2.9 Accelerators</p>
3. Tools & Equipments	<p>3.1 Measuring tape</p> <p>3.2 Try square</p> <p>3.3 Water tube</p> <p>3.4 Spirit level</p> <p>3.5 Masonry trowel</p> <p>3.6 Lifting devices</p> <p>3.7 Mobile cranes</p> <p>3.8 Wedges</p> <p>3.9 Handsaw</p> <p>3.10 Pocket tape</p> <p>3.11 Claw hammer</p> <p>3.12 Centre punch</p> <p>3.13 Plumb bob</p> <p>3.14 Wooden pages</p> <p>3.15 Shovel</p> <p>3.16 Spanners</p> <p>3.17 Precast & prefabricated components</p>
4. Drawings	<p>4.1 Architectural drawings.</p> <p>4.2 Electrical drawings.</p> <p>4.3 Masonry drawings.</p>
5. Levels	<p>5.1 Angular level</p> <p>5.2 Horizontal level</p> <p>5.3 Vertical level</p>

Evidence Guide

1. Critical Aspects of Competency	<p>Assessment required evidence that the candidate:</p> <p>1.1 Interpreted drawings.</p> <p>1.2 Established base lines and other lines</p> <p>1.3 Set angles and corners</p> <p>1.4 Checked cracks, sagging, dimensions and connecting nut-bolt</p> <p>1.5 Aligned positions and levels</p> <p>1.6 Sealed gap, pits and joints</p>
2. Underpinning knowledge	<p>2.1 Drawings are interpretation</p> <p>2.2 Location and position determination</p> <p>2.3 Lines laying</p> <p>2.4 Profile board and pegs fixing</p>

	<p>2.5 Angle and corner setting</p> <p>2.6 Mortar preparation</p> <p>2.7 Lines and level aligning</p> <p>2.8 Gap, pits, and joint sealing</p>
3. Underpinning Skills	<p>3.1 Collecting tools and materials</p> <p>3.2 Laying lines</p> <p>3.3 Fixing profile board and pegs</p> <p>3.4 Setting angle</p> <p>3.5 Preparing mortar</p> <p>3.6 Aligning lines and level</p> <p>3.7 Checking and removing faults</p> <p>3.8 Sealing gap, pits and joints</p>
4. Underpinning Attitude	<p>4.1 Commitment to occupational health and safety</p> <p>4.2 Environmental concerns</p> <p>4.3 Eagerness to learn</p> <p>4.4 Tidiness and timeliness</p> <p>4.5 Respect for rights of peers and seniors in workplace</p>
5. Resource Implication	<p>The following resources must be provided:</p> <p>5.1 Appropriate workplace</p> <p>5.2 Relevant materials and equipment</p> <p>5.3 Relevant specifications or works instructions.</p>
6. Methods of Assessment	<p>Competency should be assessed through :</p> <p>6.1 Direct Observation in work place</p> <p>6.2 Feedback from supervisor and peers.</p> <p>6.3 Oral test.</p>
7. Context of Assessment	<p>For certification competency should be assessed in the actual workplace or in a simulated workplace individually after completion of the module.</p>
<p>Accreditation Requirements</p> <p>Training providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification.</p> <p>Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.</p>	

Unit Competency	Apply special cement finishes to concrete and masonry surfaces
Unit Code	CONMAS301312A
Unit Descriptor	<p>This unit covers the knowledge, skills and attitude required to apply special cement finishes to concrete and masonry surfaces.</p> <p>It includes Collecting tools, equipment and materials; Prepare concrete and masonry surfaces; Applying special cement finishes to concrete and masonry surfaces; Checking completed special cement finishes and Cleaning the work place for Masonry.</p>
Nominal Hours	45 hours

Elements Of Competency	Performance Criteria
	Bold italicized words are detailed in the Range of Variables
1. Collect tools, equipment and materials.	<p>1.1 Drawings are interpreted.</p> <p>1.2 Materials, tools and equipment are selected & collected.</p> <p>1.3 Grout is proportioned and prepared.</p> <p>1.4 Materials are properly staged at designated workplace and free from any foreign particles.</p>
2. Prepare concrete and masonry surfaces	<p>2.1 PPE are selected and used.</p> <p>2.2 Surface area is identified for special cement finishes to concrete and masonry surfaces.</p> <p>2.3 Preparation of concrete and masonry surfaces are performed.</p>
3. Apply special cement finishes to concrete and masonry surfaces	<p>3.1 Cement grout is spread over the surface before applying special cement/mortar finishes.</p> <p>3.2 Special cement mortar finishes are applied.</p> <p>3.3 Special cement surface finishes are applied within the required period.</p>
4. Check completed special cement finishes.	<p>4.1 Final checks are made to ensure that work conforms to instructions.</p> <p>4.2 Tools, equipment and any surplus resources and materials are checked.</p>
5. Clean the work place.	<p>5.1 Tools and equipment are cleaned</p> <p>5.2 Work place is cleaned</p>

	5.3 Waste materials are disposed in proper place.
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Range of Variables

Variables	Range (Include but not limited to):
1. PPE	1.1 Safety Gloves 1.2 Dust Mask 1.3 Safety belt/body harness 1.4 Safety shoes 1.5 Safety Helmet
2. Tools and equipment	2.1 Pointed trowel 2.2 Steel float 2.3 Wooden float 2.4 Finishing trowel 2.5 Leveling tools (level hose, spirit level) 2.6 Nylon string 2.7 Mason's brush 2.8 Aluminum straight edge 2.9 Scaffoldings 2.10 Measuring tools 2.11 Texturing tools 2.12 Mixing board 2.13 Sponge/Foam 2.14 Grinder 2.15 Mason's hammer 2.16 Measuring box/Fera
3. Materials	3.1 Concrete nails 3.2 Specified mortar 3.3 Cement 3.4 Water 3.5 Sand (screened) 3.6 Grout
4. Surfaces	4.1 Concrete floor 4.2 Masonry wall 4.3 Concrete wall 4.4 Column 4.5 Beam

5. Special cement / mortar finishes	5.1 Colored cement finish 5.2 Wash out finish 5.3 Granolithic terrazzo finish 5.4 Cement finish 5.5 Stucco cement finish 5.6 Synthetic adobe finish 5.7 Refractory materials
6. Final checks	6.1 Plumbness 6.2 Levelness 6.3 Squareness 6.4 Concrete quality

Evidence Guide

1. Critical Aspects of Competency	Assessment requires evidence that the candidate: 1.1 Interpreted and identified drawings. 1.2 Proportioned mixed grout 1.3 Applied special cement surface finishes
2. Underpinning knowledge	2.1 Drawings interpretation 2.2 Tools, equipment and materials preparing 2.3 Grout preparation and mixing 2.4 Material staging 2.5 Surface identification 2.6 Concrete and masonry surface preparation 2.7 Grout spreading 2.8 Special cement mortar finishes applying
3. Underpinning Skills	3.1 Interpreting Drawing. 3.2 Collecting tools, equipment and materials 3.3 Preparing and mixing Grout 3.4 Staging Material 3.5 Identifying surface 3.6 Preparing concrete and masonry surface 3.7 Spreading grout 3.8 Applying special cement mortar finishes
4. Underpinning Attitude.	4.1 Commitment to occupational health and safety 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.Resource Implications	<p>Things necessary in order to conduct method of assessment:</p> <p>5.1 Workplace setting</p> <p>5.2 Tools and equipment appropriate to construction processes</p> <p>5.3 Scaffolding platforms required for activity</p> <p>4.4 Special cement finishes and materials relevant to the proposed activity</p> <p>5.5 Drawings, plans and specifications relevant to the task</p>
6. Methods of Assessment	<p>Competency should be assessed through:</p> <p>6.1 Direct observation</p> <p>6.2 Demonstration</p> <p>6.3 Oral interview</p> <p>6.4 Written test</p> <p>6.5 Portfolio</p>
7. Context of Assessment	<p>For certification competency should be assessed in the actual workplace or in a simulated workplace individually after completion of the module.</p>
<p>Accreditation Requirements</p> <p>Training providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification.</p> <p>Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.</p>	

Unit Competency	Repair defective concrete and masonry surfaces
Unit Code	CONMAS301412A
Unit Descriptor	This unit covers the knowledge, skills and attitude required to repair defective concrete and masonry surfaces. It includes: Identifying concrete and masonry surfaces; repairing concrete and masonry surfaces; checking repaired concrete and Cleaning the work place for masonry surfaces.
Nominal Hours	48 hours

Elements Of Competency	Performance Criteria <i>Bold italicized</i> words are detailed in the Range of Variables
1. Identify defective concrete and masonry surface	1.1 PPE are collected and used. 1.2 Materials, tools and equipment are prepared and selected. 1.3 Defective concrete and masonry surface is identified.
2. Repair defective concrete and masonry surfaces	2.1 Defective concrete and masonry surfaces are chipped-off and cleaned. 2.2 Concrete Level and masonry surfaces are repaired and finished. 2.3 Concrete and masonry materials are prepared and mixed. 2.4 All defective concrete and masonry surfaces are grouted before repairing. 2.5 Defective concrete and masonry corners surfaces are filleted. 2.6 Curing is done on repaired area.
3. Check repaired concrete and masonry surfaces	3.1 Final checks are made to ensure that work conforms as instructions.
4. Clean the work place.	4.1 Tools and equipment are cleaned and stored. 4.2 Work place is cleaned. 4.3 Waste materials are disposed in proper place.

Range of Variables

Variables	Range (Included but not limited to):
1. PPE	1.1 Safety Gloves 1.2 Dust Mask 1.3 Safety belt / body harness 1.4 Safety shoes 1.5 Safety Helmet
2. Tools and equipment	2.1 Mixing board 2.2 Pointed trowel 2.3 Foam / Sponge 2.4 Edger / Grinder 2.5 Scaffolding / ladder 2.6 Hammer 2.7 Wooden float 2.8 Shovel 2.9 Steel float 2.10 Nail 2.11 Cold chisel 2.12 Brush 2.13 Sand blasting equipment 2.14 Axe 2.15 Nylon string 2.16 Leveling hose / spirit level 2.17 Plumb bob
3. Materials	3.1 Special cement finishes 3.2 Colored cement 3.3 Shell 3.4 Pebbles 3.5 Granolithic terrazzo 3.6 Adobe stone 3.7 Refractory materials 3.8 Portland cement 3.9 Water 3.10 Sand (Screened) 3.11 Adhesive
4. Final check	4.1 Plumbness 4.2 Levelness 4.3 Squareness

	<p>4.4 Concrete quality</p> <p>4.5 Smoothness</p> <p>4.6 Color consistency / uniformity</p>
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Evidence Guide

1. Critical Aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Identified defective concrete and masonry surfaces</p> <p>1.2 Chipped off defective concrete</p> <p>1.3 Maintained ratio and time setting</p> <p>1.4 Mixed concrete and masonry materials</p> <p>1.5 Retouched defective concrete and masonry surface.</p>
2. Underpinning knowledge	<p>2.1 Defective concrete and masonry surface identification</p> <p>2.2 Tools, equipment and materials preparation</p> <p>2.3 Defective concrete and masonry surface chipping</p> <p>2.4 Time setting and curing</p> <p>2.5 Concrete level and masonry surface repairing</p> <p>2.6 Concrete and masonry materials mixing</p> <p>2.7 Defective concrete and masonry surface grouting</p> <p>2.8 Defective concrete and masonry surface retouching</p>
3. Underpinning Skills	<p>3.1 Identifying defective concrete and masonry surface</p> <p>3.2 Preparing tools, equipment and materials</p> <p>3.3 Chipping defective concrete and masonry surface</p> <p>3.4 Setting Time and curing</p> <p>3.5 Repairing concrete level and masonry surface</p> <p>3.6 Mixing concrete and masonry materials</p> <p>3.7 Grouting defective concrete and masonry surface</p> <p>3.8 Retouching defective concrete and masonry surface</p>
4. Underpinning Attitude	<p>4.1 Commitment to occupational health and safety</p> <p>4.2 Environmental concerns</p>

	<p>4.3 Eagerness to learn</p> <p>4.4 Tidiness and timeliness</p> <p>4.5 Respect for rights of peers and seniors in workplace</p>
5.Resource Implications	<p>Things necessary in order to conduct method of assessment:</p> <p>5.1 Workplace location setting</p> <p>5.2 Tools and equipment appropriate to construction processes</p> <p>5.3 Scaffolding platforms and ladder required for activity</p> <p>5.4 Special cement finishes and materials relevant to the proposed activity</p>
6. Methods of Assessment	<p>Competency in this unit should be assessed through:</p> <p>5.1 Direct observation</p> <p>5.2 Demonstration</p> <p>5.3 Oral Interview</p> <p>5.4 Written test</p> <p>5.5 Portfolio</p>
7. Context of Assessment	<p>For certification competency should be assessed in the actual workplace or in a simulated workplace individually after completion of the module.</p>
<p>Accreditation Requirements</p> <p>Training providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification.</p> <p>Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.</p>	

Unit Competency	Perform waterproofing Work
Unit Code	CONMAS301512A
Unit Descriptor	This unit covers the knowledge, skills and attitude required to Perform Waterproofing work. It includes: planning and preparing; identifying design concepts and processes; preparing and applying materials and cleaning the workplace
Nominal Hours	57 hours

Elements Of Competency	Performance Criteria <i>Bold italicized</i> words are detailed in the Range of Variables
1. Plan and prepare for water proofing.	1.1. <i>PPE</i> is selected and used. 1.2 Work instructions and operational details are obtained for relevant <i>information, planning and preparation.</i> 1.3. Signage and barricade requirements are identified and removed. 1.4. <i>Tools and equipment</i> are selected. 1.5. <i>Materials</i> appropriate to the work application are identified, obtained & prepared. 1.6. Environmental requirements are identified.
2. Identify design concepts and processes	2.1. Drawings are examined for performance requirements and design requirements. 2.2. Work site is visited and work requirements are confirmed. 2.3. Waterproof process is referenced and identified. 2.4. Practices and principles of waterproof design for wet areas are identified. 2.5. Waterproofing work is determined in relation to structural elements. 2.6. Waterproofing materials are identified. 2.7. Application of bond-breaker and waterproofing installation is identified. 2.8. Potential faults, contingencies and

	techniques are identified.
3. Prepare and apply materials	<p>3.1. Waterproofing material is checked for conformity and compatibility with substrate material.</p> <p>3.2. Substrates to be waterproofed are prepared.</p> <p>3.3. Substrates are prime coated with waterproofing material.</p> <p>3.4. Flashings are prepared and ready for placement and fixing.</p> <p>3.5. Reinforcing material is set out and cut for waterproofing junctions and surface requirements.</p> <p>3.6. Waterproofing membrane is prepared for installation.</p> <p>3.7. Waterproofing material is mixed or prepared.</p> <p>3.8. Waterproofing materials are applied.</p> <p>3.9. Quality of works is checked and defects are rectified.</p>
4. Clean the workplace	<p>4.1. Tools and equipment are cleaned and stored.</p> <p>4.2. Work place is cleaned.</p> <p>4.3. Waste materials are disposed in proper place.</p>

Range of Variables

Variables	Range (Include but are not limited to):
1. PPE	<p>1.1 Organizational first aid</p> <p>1.2 Safe operating procedures</p> <p>1.2.1 Earth package boxes</p> <p>1.2.2 Lighting</p> <p>1.2.3 Trip hazards</p> <p>1.2.4 Working at height</p> <p>1.2.5 Working in combined spaces</p>
2. Information	<p>2.1 Diagrams or sketcher</p> <p>2.2 Memos</p> <p>2.3 Verbal, written and graphical instructions</p> <p>2.4 Work bulletins</p> <p>2.5 Work schedules plans and specifications.</p>

3.Planning and Preparation	3.1 Assessment of conditions and hazards. 3.2 Worksite inspection. 3.3 Use tools and equipment. 3.4 Use firefighting equipment. 3.5 Hazard control.
4. Tools and equipment	4.1 Mixing board 4.2 Pointed trowel 4.3 Foam / Sponge 4.4 Edger / Grinder 4.5 Scaffolding / ladder 4.6 Hammer 4.7 Wooden float 4.8 Shovel 4.9 Steel float 4.10 Nail 4.11 Cold chisel 4.12 Brush 4.13 Sand blasting equipment 4.14 Nylon string 4.15 Leveling hose / spirit level 4.16 Plumb bob
5. Materials	5.1 Portland Cement 5.2 Water 5.3 Sand (Screened) 5.4 Adhesive 5.5 Padlo 5.6 Stone/ Brick chips 5.7 Waterproofing reagent

Evidence Guide

1. Critical Aspects of Competency	1.1 Identified and implemented signage and barricade 1.2 Examined drawings 1.3 Determined appropriate method of water proofing and water exclusion. 1.4 Set and mixed water proofing materials and membrane.
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2. Underpinning knowledge	<ul style="list-style-type: none"> 2.1 Work instruction and operational detail 2.2 Signage and barricade identification 2.3 Drawings interpretation 2.4 Bond breaker application 2.5 Water proofing 2.6 Potential faults identification techniques 2.7 Water proofing materials checking 2.8 Water proofing membrane preparation 2.9 Water proofing materials mixing
3. Underpinning Skills	<ul style="list-style-type: none"> 3.1 Identifying signage and barricade 3.2 Collecting material 3.3 Interpreting drawings 3.4 Applying bond breaker 3.5 Identifying potential faults, contingencies and techniques 3.6 Checking water proofing materials 3.7 Preparing flash 3.8 Preparing water proofing membrane 3.9 Mixing water proofing materials
4. Underpinning Attitude	<ul style="list-style-type: none"> 4.1 Commitment to occupational health and safety 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. Resource Implications	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> 5.1 Adequate workplace. 5.2 Specifications and work instructions. 5.3 Hand and power tools, plant and equipment preparing for waterproofing construction process. 5.4 Materials relevant to preparing for water proofing construction process.
6. Methods of Assessment	<p>Competency should be assessed through:</p> <ul style="list-style-type: none"> 6.1 Direct observation 6.2 Demonstration 6.3 Interview 6.4 Portfolio 6.5 Third Party Report
7. Context of Assessment	For certification competency should be assessed

	in the actual workplace or in a simulated workplace individually after completion of the module.
Accreditation Requirements	
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Annexes

Annex 1: Competency Map for Mason in Construction Sector

OCCUPATION SPECIFIC COMPETENCIES	Prepare Masonry Mortar	Perform Paving Work	Perform Basic masonry works	Perform Plaster masonry surface	Lay Brick and Block For Structure	Perform damp proof course
	1	1	1	1	2	2
	Perform Arch work	Construct decorative brick work	Perform Concreting work	Plaster Concrete/ Masonry Surface	Install brick cladding	Install Pre-cast And fabricated components
	2	2	2	3	3	3
	Apply Special Cement Finishes To Concrete And Masonry Surfaces	Repair Defective Concrete And Masonry Surfaces	Perform Waterproofing Work			
	3	3	3			
CSECTOR SPECIFIC COMPETENCIES	Work in the construction sector	Interpret drawings and specifications in masonry	Perform measurement and calculation in masonry	Use hand tools and power tools for masonry	Maintain tools and equipment	
	1	1	1	1	2	
GENERIC COMPETENCIES	Communicate in the workplace	Work in a team environment	Practice workplace cleanliness	Practice occupational health and safety	Demonstrate work values	Lead small team
	1	1	1	1	3	3
	Develop and practice negotiation skills					
	3					

Annex 2. Bangladesh National Qualifications Framework

Annex 2: Bangladesh National Qualifications Framework

TVQF Level	Education Type			Current Qualification Structure	Job Classification
	Pre-Voc	VE	TE		
TVQF 6			Diploma	4-year Diploma	Supervisor/Middle Manager/Sub-Assistant Engineer
TVQF 5		**NSC-V		NSS Master	Highly-Skilled Worker/Supervisor
TVQF 4		**NSC-IV		NSS 1/HSC (Voc) Year 11/12	Skilled Worker
TVQF 3		**NSC-III		NSS 2/SSC (Voc) Year 10	Semi-Skilled Worker
TVQF 2		**NSC-II		NSS 3/SSC (Voc) Year 9	Basic Skilled Worker
TVQF 1		**NSC-I		NSS Basic/Basic Trade Course	Basic Worker
Pre-Voc 2	*NPVC-II			None	Pre-Vocational Trainee
Pre-Voc 1	*NPVC-I			None	Pre-Vocational Trainee

*NPVC – National Pre-Vocational Certificate

**NSC – National Skill Certificate

Annex 3: Qualification Level Descriptors

BTVQF Level	Knowledge	Skill	Responsibility	Job Class
6	Comprehensive actual and theoretical knowledge within a specific study area with an awareness of the limits of that knowledge.	Specialised and restricted range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems	Manage a team or teams in workplace activities where there is unpredictable change Identify and design learning programs to develop performance of team members	Supervisor/Middle-Level Manager/Sub Assistant Engineer
5	Very broad knowledge of the underlying, concepts, principles, and processes in a specific study area	Very broad range of cognitive and practical skills required to generate solutions to specific problems in one or more study areas.	Take overall responsibility for completion of tasks in work or study Apply past experiences in solving similar problems	Highly Skilled Worker/ Supervisor (NSC 4)
4	Broad knowledge of the underlying, concepts, principles, and processes in a specific study area	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	Take responsibility, within reason, for completion of tasks in work or study Apply past experiences in solving similar problems	Skilled Worker
3	Moderately broad knowledge in a specific study area.	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	Work or study under supervision with some autonomy	Semi Skilled worker
2	Basic underpinning knowledge in a specific study area.	Basic skills required to carry out simple tasks	Work or study under indirect supervision in a structured context	Medium Skilled Worker
1	Elementary understanding of the underpinning knowledge in a specific study area.	Limited range of skills required to carry out simple tasks	Work or study under direct supervision in a structured context	Basic Skilled Worker

BTVQF Level	Knowledge	Skill	Responsibility	Job Class
Pre-Voc 2	Limited general knowledge	Very limited range of skills and use of tools required to carry out simple tasks	Work or study under direct supervision in a well-defined, structured context.	Pre-Vocation Trainee (NPVC 2)
Pre-Voc 1	Extremely limited general knowledge	Minimal range of skills required to carry out simple tasks	Simple work or study exercises, under direct supervision in a clear, well defined structured context	Pre-Vocation Trainee (NPVC 1)

Annex 4: Key for Coding

Code	Description
Occupational Sector	
RMG	Ready-Made Garments
LEG	Light Engineering
CON	Construction
INF	Informal Sector
Occupation	
MAS	Mason
PLM	Plumbing
PNT	Painter
SFF	Scaffold and Form Fitter
TMS	Tiles and Mosaic Setter
ECN	Electrician
Competencies	
GN	Generic Competencies
CC	Common Competency
CC	Core competency

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