

NATIONAL OCCUPATIONAL STANDARDS FOR CONSTRUCTION/ BUILDING TRADES IN NIGERIA

MASONRY WORKS

VOLUME 1



COUNCIL OF REGISTERED BUILDERS OF NIGERIA

CORBON

Established in 1989

COUNCIL OF REGISTERED BUILDERS OF NIGERIA
(ESTABLISHED BY Builders Registration Act CAPB13 LFN 2004)



NATIONAL BOARD FOR
TECHNICAL EDUCATION

PREFACE

The Construction industry occupies a very critical position in the Nigerian economic landscape. It is a major contributor to the nation's GDP and one of the biggest employer of labour particularly in the artisanal level. However, there is the prevalence of skills gap in the sector which has impacted on the quality of our buildings. The need to improve the quality of works produced by Nigerian artisans and craftsmen is the primary reason for the development of the National Occupational Standards (NOS) for Building Trades in Nigeria.

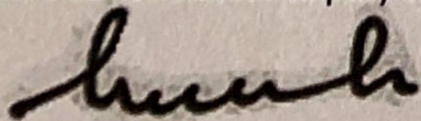
This NOS is a product of relentless efforts that started in 2014 when CORBON was assigned the role of a Sector Skills Council (SSC) under the National Vocational Qualification Framework (NVQF) programme being spearheaded by the National Board for Technical Education. Its primary objective is the promotion of skills development in the Building/Construction Sector. The Council has since then continued to deliver on its mandates by working and collaborating with NBTE and other stakeholders in ensuring;

- " The Training of Assessors under the NVQF programme
- " Organising the conduct of training of master trainers
- " Development of Sector skills plan and maintaining skills inventory
- " Development of competency standards and Qualifications
- " Development of NOS for the appropriate skills, amongst others.

This maiden edition covers Seven (7) different trades in the industry, namely; Masonry, Carpentry, Electrical Installation, Painting and Decoration, Welding and Fabrication, Tiling, and Plumbing. This document will serve as a uniform standard training tool for up-skilling our Artisans and Craftsmen under the NVQF programme, as they are critical and indispensable in Building Production delivery. Moreover, these set of quality personnel are very scarce in the Nigerian market today.

It is my pleasure to state that we appreciate the effort and substantial contributions of all individuals and stakeholders who have made valuable contributions in the development of this NOS.

I am happy with the current efforts made so far because it is a measure of our readiness and preparedness to grapple with the task ahead of us to reposition the building / construction sector to play the key role in industrialising Nigeria.



Mr. Babatunde Raji Fashola, SAN
Minister for Power, Works and Housing
Federal Republic of Nigeria

FOREWORD

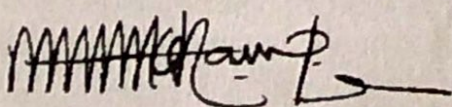
It is evident that young people out of employment, under employed, having left education too early or completed with inadequate skills, are everywhere in Nigeria. These are at high risk of economic marginalization and social exclusion. Upgrading their skills is essential in helping them to enter, or return to the labour market or become entrepreneurs. So the challenge is hugely depended on how Nigeria can transform this youthful population into highly skilled and competent citizens. A major part of the responsibility for preparing such a workforce rests on our Nation's education and training systems. It is for this reason that National Board for Technical Education (NBTE) has been spearheading skills development programmes in Nigeria through the National Vocational Qualifications Framework (NVQF) in line with the practice adopted by many countries.

NVQF is a system for the development, classification and recognition of skills, knowledge and competencies acquired by individuals, irrespective of where and how the training or skill was acquired. The system gives a clear statement of what the learner must know or be able to do whether the learning took place in a classroom, on-the-job, or less formally. The framework is the instrument through which National Vocational Qualifications (NVQs) are delivered. The NVQs are based on National Occupational Standards (NOS) dictated by industry bodies or employers. At the moment in Nigeria, different industries, organisations and companies have their standards which do not attract national certification and recognition. However, with the coming of CORBON as the sector skills council for the building industry, it has harmonised and standardised learning outcomes and competencies to be attained irrespective of how and where the learning took place. The outcome is what we have in this document as the classified NOS.

National Occupational Standards (NOS) specify the standard of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Essentially NOS are benchmarks of good practice. Each NOS defines one key function in a job role and describes functions, standards of performance and knowledge/understanding.

The preparation and maintenance of the NOS are tasks which cannot be completed once and for all in our expanding economy, changes in techniques and scientific developments are continually introducing new job opportunities requiring new occupational skills in the new industrial processes the preparation and the maintenance work will, therefore, be a continuous process. I therefore appeal to all stakeholders to partner and support CORBON achieve this laudable objectives. It is an essential requirement for the production of competent, flexible and competitive workforce in Nigeria.

I call on other regulatory agencies and the organised Private Sector to partner with NBTE, as they actually have the leading role, and stand to derive the greatest benefit from a successful NVQF in Nigeria.



Dr. M.A. Kazaure, mni
Executive Secretary, NBTE



MASONRY WORKS

Level 1

The level 1 Qualifications and Credit Framework (QCF Level 1) for masonry works is considered as the Masonry Entry Level. The qualification is aimed at equipping the Assistant Mason with the right knowledge and skill to work with the Mason and Senior Mason. The Assistant Mason must be proficient in interpreting sketches and blueprints, working out material quantities, and ensuring the accuracy of vertical, horizontal and bearings of building elements like walls.

Assistant Mason trainees are expected to undertake five mandatory and two optional courses, totalling 120 credit hours. This is made up of seven (7) units, with a credit value of Twelve (12).

Evidence requirements for this level are: Question and Answers (QA), Direct Observation (DO), Witness Statement (WS), Personal Statement / Reflective Journal (PS/RJ) and Work Product (WP). A summary of the Level 3 Qualifications and Credits Framework (QCF) details are presented in the table below.

LEVEL 1: MASONRY WORKS					
UNIT	Credit Value	UNIT REFERENCE	GLH	UNIT TITLE	REMARK
1	2	CONMS001L1	20	Health, Safety and Environment	Mandatory
2	1	CONMS002L1	10	Communication system in a work environment	Mandatory
3	1	CONMS003L1	10	Team Work in Construction Environment	Mandatory
4	2	CONMS004L1	20	Identification of equipment, material handling and storage	Mandatory
5	2	CONMS005L1	20	Site preparation and Excavation	Optional
6	3	CONMS006L1	30	Mix/Surface preparation and Bonding	Mandatory
7	1	CONMS007L1	10	Erection of temporary scaffolding	Optional



There are five compulsory units (Units 1,2,3,4 and 6) and the other two optional units, to enable the Learner to qualify for QCF Level 1 as Assistant mason. There will be no simulation exercise; all pieces of evidence are to be obtained directly on site.

At the end of the units, the Learner should:

1. Know the basic health and safety requirement in the workplace environment
2. Understand the importance of communication and teamwork in the workplace environment.
3. Identify and use the right materials, tools and equipment for the work.
4. Assist in the process of mix/surface preparation and Bonding
5. Assist in the process of scaffold erection and dismantling



MASONRY WORKS

Level 2

Hitherto, masonry skills can be acquired informally by apprenticeship under an experienced tradesman. However, in contemporary times, formal training, tests, hands-on practices and/or apprenticeship are required for certification/qualification as a Mason in Nigeria.

The Qualifications and Credit Framework (QCF) Level 2 for masonry works is made up of seven (7) units, with a credit value of Thirty (30) and Guided Learning Hours (GLH) of Three hundred (300). Level 2 certification requires a minimum of 40 credits is required.

Evidence requirements for this level are: Questions and Answers, Direct Observation of Learner's performance, Recognition of Prior Learning, Witness testimony and Personal statement / Reflective account. The qualification summary for QCF Level 2 in Masonry works is presented in the table below.

LEVEL 2: MASONRY WORKS				
UNIT	Credit Value	UNIT REFERENCE	UNIT TITLE	REMARK
1	4	CONMS001L2	Health, Safety and Environment	Mandatory
2	4	CONMS002L2	Communication system in a work environment	Mandatory
3	3	CONMS003L2	Team Work in Construction Environment	Optional
4	5	CONMS004L2	Set out masonry Structures	Mandatory
5	6	CONMS005L2	Erection of masonry works: using appropriate tools and equipment	Mandatory
6	6	CONMS006L2	Rendering and Finishes according to specification	Optional
7	4	CONMS007L2	Repair and Rectify Masonry structures	Optional

There are four (4) compulsory units (Units 1, 2, 4 and 5) and any other two units out of the other three (3) units, to enable the Learner to qualify for QCF Level II in Assistant mason. There will be no simulation exercise; all pieces of evidence are to be obtained directly on site.



At the end of the units, the Learner should be able to:

1. Know the basic health and safety requirement in the workplace environment
2. Understand the importance of communication and teamwork in the workplace environment.
3. Work in a team to achieve work, aim and objectives.
4. Identify appropriate tools and equipment for various masonry activities in the building construction work.
5. Carry out construction activities correctly.

This qualification is for a Mason who needs to support the Senior Mason in carrying out masonry work.



MASONRY WORKS

Level 3

Masonry works comprise of block, brick and stone works. Training in these areas requires in-depth knowledge of both basic and core competencies in masonry. The training enables clear-cut understanding of variations in block laying approaches by the craftsman. Same applies to bricklaying and stonework.

The Qualifications and Credit Framework (QCF) Level 3 for masonry works is made up of Nine (9) units, with a credit value of Forty (40) and Guided Learning Hours (GLH) of Four hundred (400). To obtain this certificate, a minimum of 40 credits is required.

Evidence requirements for this level are: Question and Answers, Direct Observation of Learner's performance, Recognition of Prior Learning, Witness testimony and Personal statement / Reflective account. The qualification summary for QCF Level 3 in Masonry works is presented in the table below.

LEVEL 3: MASONRY WORKS				
UNIT	Credit Value	UNIT REFERENCE	UNIT TITLE	REMARK
1	4	CONMS001L3	Health, Safety and Environment	Mandatory
2	3	CONMS002L3	Communication system in a work environment	Mandatory
3	1	CONMS003L3	Team Work in Construction Environment	Mandatory
4	4	CONMS004L3	Special structures	Mandatory
5	9	CONMS005L3	Masonry Work in high-rise complex structures elements and techniques in construction	Mandatory
6	9	CONMS006L3	Plastering on Internal/External surfaces of masonry structures and POP works	Mandatory
7	4	CONMS007L3	Plan, organise and estimate works to meet the required standard	Mandatory
8	3	CONMS008L3	General knowledge of activities in building construction works	Mandatory
9	3	CONMS009L3	Waterproofing work on masonry structures	Mandatory



There are six (6) compulsory units (Units 1, 3, 4, 5, 6 and 7) and any other two units out of the other three (3) units, to enable the Learner to qualify for QCF Level III in

Masonry works. There will be no simulation exercise; all pieces of evidence are to be obtained directly on site.

At the end of the unit, the Learner should be able to:

1. Know the basic health and safety requirement in the workplace environment
2. Understand the importance of communication and teamwork in the workplace environment.
3. Working in complex building structures and application of waterproofing materials.
4. Carryout rendering/POP finishes
5. Plan, organise, coordinate and estimate building works

This qualification is for the Senior Mason. He needs to be familiar with assistant mason and masons job descriptions as well as coordination and also to carry out advanced masonry works.

