



Participant Handbook

Sector
Construction

Sub-Sector
**Real Estate and Infrastructure
Construction**

Occupation
Masonry

Reference ID: **CON/Q0103, Version 1.0**
NSQF Level 4



Mason General

Acknowledgements

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About this book

Construction industry is the second largest employer in India. As one of the leading avenues for employment in the country, the role played by this industry in the economic development of India is pivotal. However despite its vast potential, the construction Industry faces a key challenge of shortage of skilled manpower due to expansion of the sector and increase in the quality requirements from the end users.

There is a vast difference between the required skill and available skills of workers in the industry today. To reduce the skill gap appropriate skilling of workforce needs to be carried out. This will not only empower the worker but also benefit the construction industry in terms of quality and productivity.

This Participant book is developed to impart training for the skill and knowledge required to work as a Mason General in construction industry. It is designed based on Mason General Qualification Pack under the National skill qualification framework which was developed from the inputs received from different organisations operating in the sector. It comprises of the following NOS/ topics.

- Construct masonry structures using brick / block
- Execute plaster on internal & external Masonry
- Carry out waterproofing work for structures using cementitious materials
- Build structures using random rubble masonry
- Carry out IPS / Tremix flooring
- Work effectively in a team to deliver desired results at the workplace
- Plan and organize work to meet expected outcomes
- Work according to personal health, safety and environment protocol at construction site

This book is designed considering the educational background of the construction workers. Therefore, special efforts have been made to explain the concept required for the job mostly through photos and illustrations. Efforts have been made to ensure that the worker is able to grab theoretical details from the chapters through illustration.

Symbol Used



Key Learning
Outcomes



Steps



Exercise



Tips



Notes



Objectives

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UNIT 1.2: Mason General Job Role and Responsibility

Unit Objectives

At the end of this unit, you will be able to:

1. List the roles and responsibilities of Mason General

1.2.1 Mason General - Role and Responsibility

Mason General is responsible for performing routine masonry works. At a construction site, the mason general is commonly referred to as *mistry*.

As a part of his job role he has to perform masonry work such as:

- Construct masonry structures using brick and block
- Execute plastering for internal and external masonry and RCC structure
- Carry out cementitious water proofing work
- Build structures using random rubble masonry
- Carry out IPS/Tremix Flooring
- Support the team to complete assigned tasks
- Plan and organise tasks allotted
- Follow health and safety guidelines

He is expected to perform the following responsibilities while performing the task at the work place:

- Select and use various tools and equipment in Masonry Works
- Check material for brick/block work, plastering, stone masonry, IPS/Tremix flooring, water proofing work
- Lay brick/block for construction of walls, columns and footings
- Check the line, level and alignment while constructing masonry structures
- Carry out pointing in brick masonry structures
- Carry out curing work for masonry structures
- Construct specialised masonry work for arches, stair case, manholes and walkways
- Repair and Restore brick /block masonry
- Follow safety, housekeeping and waste disposal practices at the workplace
- Communicate effectively with subordinates and superiors
- Plan and organise activities to achieve the desired outcome
- Manage resources for productivity and efficiency.



Fig. 1.2.1. Laying of bricks



Fig. 1.2.2. Plastering



Fig. 1.2.3. Construct random rubble masonry



Fig. 1.2.4. Construct arches



Fig. 1.2.5. Lay paver blocks



Fig. 1.2.6. Check alignment



Fig. 1.2.7. Attend toolbox talk



Fig. 1.2.8. Housekeeping

Exercise

1. State whether the following statements are true or false.

- It is not required to stack materials properly. _____
- Only technical skills are required to be a Mason General. _____

2. Fill in the blanks.

- At the construction site, the Mason general is commonly referred to as _____.
- Some of the responsibilities of Mason General are _____, _____ and _____.

3. Mason general should

- Construct masonry structure using brick/block
- Execute plastering on masonry and RCC structures
- Carry out waterproofing works for structures
- All of the above

UNIT 1.3: Mason General Training Program

Unit Objectives

At the end of this unit, you will be able to:

1. State the purpose of training
2. Explain the benefits of training
3. Describe about qualification pack and national occupation standards

1.3.1 Purpose of Training Program

This training program is developed to impart specific skills to individuals who wish to perform as a Mason General. The training program is based upon National occupation standards for masonry works.



Fig. 1.3.1. Classroom training



Fig. 1.3.2. Practical training

The National occupation standards have been described in the following subsection of this chapter

The training program will enable an individual to:

- Construct masonry structure using Brick/block
- Perform specialised masonry work such as arches, staircases, manholes and walkways
- Repair and restore brick/block masonry
- Execute plaster on internal & external surfaces of masonry & RCC structure
- Carry out brush bond waterproofing and brick coba course for water proofing
- Build structures using random rubble masonry
- Construct IPS/Tremix flooring works
- Organise working procedure within a team at site
- Prioritise activities and organise resources to meet desired outcome
- Work according to personal health, safety and environment protocol at construction site

1.3.2 Benefits of Training Program

- After successful completion of training program, trainee will undergo an assessment which will have theory and a practical test.
- On successfully passing the assessment, a certificate will be awarded by the Construction Skill Development Council (CSDC).
- This will help you in getting an employment as a Mason General in construction companies or to independently.

- This certificate will help you to get job and earn better wages than an untrained person.



Fig. 1.3.3. Skill cards



Fig. 1.3.4. Certificate

1.3.3 Introduction to QP and NOS

This training program is intended for imparting basic skill and knowledge relevant to masonry occupation required to perform at a construction site. This program is based on qualification pack called Mason General. The Qualification Pack Code for Mason General is CON/Q0103. This is also called a QP. A QP consists of a set of National Occupational Standards (NOS). NOS specifies the standards level of competency a worker should possess in order to perform the enlisted function at the workplace. Under Mason General QP, there are eight number of NOSs which detail the functions to be performed at work site by Mason General.

NOS Code	Major Function/Task
CON/N0110:	Construct masonry structures using brick / block
CON/N0111:	Execute plaster on internal & external surfaces of masonry & RCC structure
CON/N0112:	Carry out waterproofing works for structures using cementitious materials
CON/N0113:	Build structures using random rubble masonry
CON/ N0114:	Carry out IPS / Tremix flooring
CON/N8001:	Work effectively in a team to deliver desired results at the workplace
CON/N8002:	Plan and organize work to meet expected outcomes
CON/N9001:	Work according to personal health, safety and environment protocol at construction site

1.3.4 Introduction to Core NOS

NOS cover the scope specifying the variance of the tasks that a workman has to perform while carrying out the function having critical impact on the quality of outcome.

1. CON/N011: Construct masonry structures using brick / block

This unit covers the skills and knowledge required by a workman for constructing various masonry structures using brick / block.

The scope covers the following:

- Carry out preparatory work before starting masonry work
- Check material used for brickwork / block work
- Lay brick / block for construction of load bearing / non-load bearing wall, columns and footings
- Check the line, level and alignment
- Carry out pointing in brick masonry
- Perform specialized masonry works such as arches, staircase, manholes and walkways
- Repair and restore brick / block masonry

2. CON/N0111: Execute plaster on internal & external surfaces of masonry & RCC structure

This unit covers the skills and knowledge required by workman for plastering on internal & external surfaces of masonry and RCC structures.

The scope covers the following:

- Carry out preparatory work before starting the plastering work
- Check material used for plastering
- Plaster internal & external masonry & RCC structures
- Check for line, level & alignment

3. CON/N0112: Carry out waterproofing work for structures using cementitious materials

This NOS covers the core skills and technical knowledge required by a workman to be proficient in carrying out waterproofing work for structures using cementitious materials at the construction site.

The scope covers the following:

- Carry out preparatory work prior to waterproofing
- Check the materials used for waterproofing
- Lay out waterproofing course
- Carry out brick bat coba waterproofing
- Check for line, level & alignment

4. CON/N0113: Build structures using random rubble masonry

This unit covers the skills and knowledge required for an individual to be proficient in executing work on random rubble masonry

The scope covers the following:

- Carry out preparatory work for rubble masonry
- Check the material used for random rubble masonry
- Lay out coursed and un-coursed Random Rubble Masonry with undressed or hammer dressed stones
- Carry out pointing in stone masonry
- Lay out course of Dry Rubble Masonry
- Check for line, level and alignment

1.3.5 Personal Attributes of Mason General

A Mason General in addition to his technical skills should also possess certain soft skills and personal qualities. He should be able to:

- be well-organised and plan assigned task
- be physically fit to work across locations having extreme weather conditions
- have leadership qualities with ability to perform efficiently within a team
- be honest, reliable and responsible
- be hard working individual
- solve problem with analytical mind set
- be communicative with co-workers to manage daily task
- be a good listener
- maintain personal hygiene
- create and maintain a cooperative work environment at the workplace

1.3.6 Growth Chart

Growth chart signifies the professional growth of a workman who begins his career as a Helper Mason. He further progresses towards the job role of an Assistant Mason with some training and experience. He later specialises either as a Mason General or Mason Concrete by obtaining skills and knowledge required for the job role. The growth chart advances and denotes the progression in the career path of a Mason General and Mason Concrete in achieving his goal to become a Foreman Wet Finishing and Flooring and Foreman Concrete respectively.

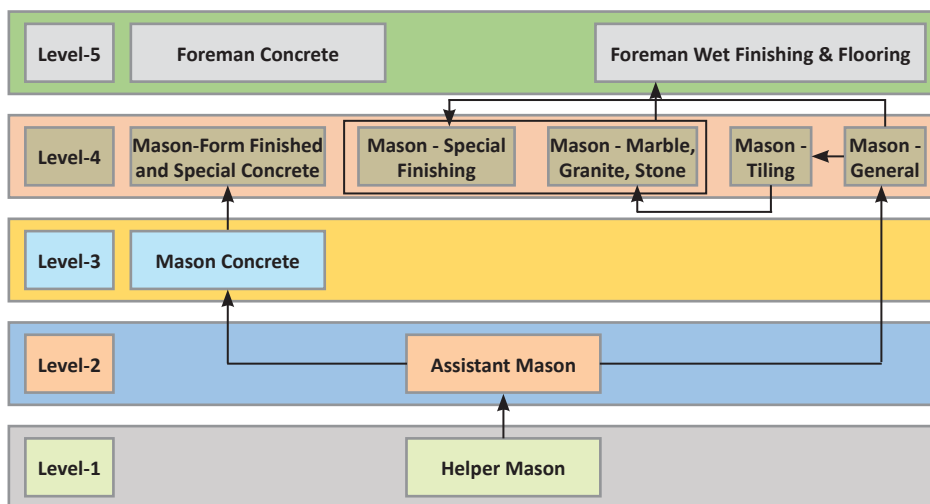


Fig. 1.3.5. Growth chart



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