

National Occupational Standards

Sector: Building and Construction

Occupation: Assistant Dry Rubble Wall Builder

MQF Level: 2

Units:

- ADRWB201: Health & Safety during work practices
- ADRWB202: Identification of systems, equipment, and components
- ADRWB203: Reading of drawings and calculations
- ADRWB204: Assist in building a rubble wall

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ADRWB201: Health & Safety during work practices

This unit relates to safe procedures and safe work practices to be used when assisting in building a rubble wall. The persons carrying out this work must possess the necessary knowledge and skills to ensure that their actions do not create health and safety risks to themselves and others, and to identify risks and hazards associated with the working environment, tools, equipment, materials, and substances used.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Carry out safe working practices to prevent hazards and to ensure the safety of oneself, workers, and members of the public.
2. Carry out safe working practices when using appropriate equipment and materials to prevent damages to work areas and injuries to oneself and 3rd parties.
3. Assist in the safe erection, use and dismantling of simple access platforms less than 2m high.
4. Assist in setting up safety barriers and adequate edge protection around a work environment to protect colleagues and members of the public.
5. Use protective clothing and safety equipment according to specifications issued by manufacturers and know the whereabouts of first aid equipment.
6. Assist in the use, handling, and storing of materials hazardous in a safe manner and with proper labelling.
7. Have the ability of understanding the content of risk assessment to cover the job assigned and the working area and fully understand the content of all relevant reports.
8. Assist in ensuring the site is always not accessible to unauthorized persons and according to standard procedures.

Required Knowledge

The Level 2 Assistant Dry Rubble Wall Builder must know and state:

1. The roles and responsibilities of themselves and others under the Health and Safety Act.
2. The health and safety risks associated with their role which includes tools, materials and equipment used and working practices and procedures.
3. The procedures for dealing with potential hazardous material in the place of work.
4. The health concerns associated with the workplace and safe practices when carrying out the work.
5. The potential hazards at the place of work (such as electricity, slippery and uneven surfaces, dust, handling and transporting, contaminants and irritants, fire, heights, improper use of tools and equipment).
6. The importance of being alert to the presence of hazards in the place of work.
7. The responsible persons to whom to report health and safety matters or any other occurring hazards.
8. The emergency procedures in the place of work.
9. The first aid facilities that exist within the work area.
10. The best way to make use of barricades, industrial hurdles, and warning signs to make areas clearly marked “out of bounds”.
11. The safety procedures when using scaffold platforms (less than 2 m). (Note: knowledge on how to use a scaffold safely is not limited to height. The limitation is only when erecting, dismantling, and taking responsibility of the scaffold).

12. The safety requirements and regulations regarding in assisting in erecting scaffolds not higher than 2m. (certification and weekly checks by competent persons).
13. The necessary safety precautions including the use of protective clothing and equipment for a range of applications.
14. The methods used for protecting customers' property.
15. The location and switching off existing services from the main supplies (if any).
16. Any toxic effect from materials commonly used at such construction sites.
17. The preventive and remedial actions to be taken in the case of exposure to materials hazardous to health.

Required Skills

The Level 2 Assistant Dry Rubble Wall Builder must be able to follow instructions to:

1. Identify which health and safety procedures are relevant to the working environment.
2. Seek competent person's assistance when help is needed.
3. Ensure compliance with duties and obligations as defined by the Occupational Health & Safety Act 2000 and recent amendments within their remit.
4. Follow workplace policies and supervisors' instructions for the safe use and maintenance of tools and equipment.
5. Control health and safety hazards within the job responsibility.
6. Report any hazards which may present risk. Follow correct procedures in the event of injuries to themselves or others.
7. Follow correct procedures in the event of injuries to themselves or others.
8. Take remedial action where work methods are not in line with control measures noted and identified from risk assessment.
9. Apply the necessary skills to erect, use and dismantle access equipment (at height less than 2m).
10. Read, interpret, and install warning signs and set up safety barriers and edge protection around working areas.
11. Equip oneself with the appropriate protective clothing and safety equipment for rubble wall stone laying and some other specific tasks.
12. Use, label, and store materials hazardous to health in a safe manner
13. Monitor the workplace and maintain good housekeeping whilst keeping it free from hazards.
14. Make sure that all existing services have been located and isolated prior to commencement of work where applicable.
15. Communicate information regarding unfamiliar and unpredictable situations to colleagues and supervisors.
16. Collaborate to advocate appropriate health and safety procedures.

ADRWB202: Identification of systems, equipment, and components

This unit is about identifying the different materials for specific applications based on their technical properties and identifying direct and indirect environmental impacts.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Distinguish between type of different sizes of rubble stones hearting's (mazkan), Pinning's (filsa) headstone (ktajjen).
2. Assist and distinguish where and when to insert a range of bonding-ties when applicable.
3. Assist and distinguish where and when to insert pinning as applicable.
4. Distinguish between the different sizes and shapes of rubble stones needed to properly execute job.

Required Knowledge

The Level 2 Assistant Dry Rubble Wall Builder must know and state:

1. How to help and assist in choosing a range of the size rubble stones and procedures before applying to the relevant work and their benefits.
2. How to assist in the use of Pinning's and Hearting's in the construction of the rubble wall construction.
3. How to assist when laying of headstone (ktajjen) used as a binding layer between the different rubble courses.
4. The familiarity of the methods and techniques to minimize wastage and to minimize environmental damage and risks.

Required Skills

The Level 2 Assistant Dry Rubble Wall Builder must be able to follow instructions to:

1. Assist and clear a level pad and make it at least 1m bigger than the size on all sides so that builders can have room to man oeuvre about the site.
2. Assist in selecting quantity and size of rubble stones needed
3. Dig the length of the wall and provide a stable foundation
4. Assist in setting up a batter and a string line the length of the wall,
5. Assist the builder of the rubble wall by providing stones for each course, by helping the builder slant the course at least 1cm (1 centimeter), fill between the stones with hearting, pinning- stone, so water can pass through. Assist the builder so that in existing structures, level the walls, and build on slops, build corners, assess types of damages and repair.
6. Assist the builder so that in existing structures, level the walls, and build on slops, build corners, assess types of damages and repair.
7. Assist in the building of a retaining rubble walls.
8. Assist in clearing up and tidy the work area at the end of the working day.

ADRWB203: Reading of drawings and calculations

This unit is about understanding and applying dimensions from drawings and calculating quantities in the preparation, costing, and estimation.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Assist in reading of drawings and basic calculations
2. Assist, understand and interpret any rubble wall building drawings, methods to calculate quantities of stones, and methods to transform setting out measurements from drawings to site setting out.
3. Assist in reading and interpret plans to establish important building levels.
4. Assist in calculating the quantities of stones required to meet work schedules.
5. Assist in setting out the posts, and any openings indicated in drawings.
6. Assist and be able to tackle all the various foundations found.
7. Understand the building regulations.
8. Be aware of the various types and shapes of wall openings.

Required Knowledge

The Level 2 Assistant Dry Rubble Wall Builder must know and state:

1. How to assist in setting up of overall linear dimensions from drawings.
2. How to assist in the calculations including those involving quantities and costs of materials.
3. How to identify the tools and equipment to be used to set out alignment.
4. How to assist in the correct procedure for setting out work systems. Assist in scaling working drawings from plans.
5. How to assist in scaling working drawings from plans.

Required Skills

The Level 2 Assistant Dry Rubble Wall Builder must be able to follow instructions to:

1. Assist in reading drawing details to setting out of work where necessary.
2. Assist in checking the wooden batter for accuracy.
3. Assist and read in quality specifications on actual work.
4. Assist in calculating quantity of rubble stones and other materials required for a job.
5. Assist in measuring and comprehend calculations using metric units.
6. Read and show awareness of annotated building drawings.
7. Assist in keeping record of any variations and deviation from plans.
8. Assist in the setting out of batter frames specifically designed for building of walls on inclined planes.

ADRWB204: Assist in building a rubble wall

This unit is about the understanding of assisting during the process of building a rubble wall.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Assist in the selection and sizes of stones.
2. State the tools, accessories and equipment used for construction of a rubble wall.
3. Clear a level pad for the rubble wall and make it at least 1m bigger than the size of the wall on each side so that the builder has room to man oeuvre about the site.
4. Assist in setting up batter boards. These allow persons to run string lines for the outside and inside of the foundation trench. Always use a line level to level these strings.
5. Assist in the laying of the first course by laying large base stones along the outer edge of the trench.
6. Assist in keeping records of the quantity of materials used for the project.
7. Assist in making sure that your foundation is straight by using appropriate calculations.
8. Assist in choosing the stones so that the “face” is showing on the outside of the foundation wall.
9. Assist in Inserting “pinning’s (filsa) in between large stones.
10. Assist in the laying of the interior layer of stones.
11. Assist in providing bond stones to penetrate through the whole width of the wall.

Required Knowledge

The Level 2 Assistant Dry Rubble Wall Builder must know and state:

1. How to discern the relevant building regulations
2. Various components of building and construction of a rubble wall.
3. The safety measures in the building industry.
4. The different types of foundations.
5. How to prevent hazards and to ensure the safety of workers and members of the public before commencement and throughout the works.
6. How to discern that certain jobs need different protective clothing and safety equipment to accomplish the tasks.
7. The knowledge of methods to performing safe lifting and handling of heavy stones.
8. The knowledge of methods for the safe erecting, the use and dismantling of any simple scaffold platforms that are less than 2m high.
9. The knowledge of safety procedures during demolishing works.

Required Skills

The Level 2 Assistant Dry Rubble Wall Builder must be able to follow instructions to:

1. Make the necessary basic calculations for quantities of materials needed before working a project.
2. Assist in planning a rubble wall from a given document.
3. Assist in choosing the right materials for the work being done. Grading of stone: size, hue, length and weight, face-stones, hearting and pinning rubble.
4. Assist in opening out the space and direction of the wall.
5. Dig and prepare the orientation of the foundation of the rubble wall.
6. Identify which safety equipment and tools will be required.
7. Assist in opening the orientation dimensions as required.

8. Dig the length of the wall to provide a stable foundation.
9. Assist in using batter frame and a string line the length of the wall.
10. Assist the rubble wall builder in executing the work.
11. Carry out safe working practices using appropriate equipment and materials to prevent damages to work areas.
12. Carry out safety procedures with works on heights.