

National Occupational Standards

Sector: Building and Construction

Occupation: Demolition Operative (with no licence to operate small mobile plants)

MQF Level: 3



National Occupational Standards do not replace any licenses or permissions required to operate certain machinery or to work in certain positions.

Units:

- DEM31- Contribute to health and safety requirements in the workplace
- DEM32- Remove and separate materials (demolition – clearing buildings and structures) in the workplace
- DEM33- Operate portable powered plant and equipment in the workplace
- DEM34- Demolish and dismantle existing structures (by hand) in the workplace

DEM31- Contribute to health and safety requirements in the workplace

This unit lists the knowledge and skills required by a person holding this position to contribute to carrying out safe work activities in compliance with health and safety activities.

Upon completion of this unit the persons carrying out this work will possess the necessary knowledge and skills to follow health and safety procedures which ensure that their actions do not create health and safety risks to others.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Follow safe working practices in accordance with the workplace health and safety regulations
2. Identify potential hazards associated with own work practices and the workplace, and report them in accordance with organisational procedures
3. Follow correct procedures in the event of hazards or injury or ill health
4. Carry out work practices to comply with supplied information to contribute to a healthy, safe and secure working environment

Required Knowledge

The Level 3 Demolition Operative must know and explain:

1. Their roles and responsibilities under the Health and Safety Act as amended by Act XXXII of 2007 or any subsequent current legislation
2. Their health concerns associated with the workplace and safe practices when carrying out work activities
3. The importance of co-operating with their employer on matters related to health and safety to safeguard their own wellbeing and of those others affected by their work activities
4. The organisational policies regarding legislation and guidance which need to be complied with
5. The potential hazards in the workplace such as; electricity and other utility services, contaminants, hazardous and non-hazardous substances, waste materials, working at height, work equipment, access equipment, obstructions, fire risks, manual handling, proximity, third party hazards, changing weather conditions
6. The importance of being aware and alert to the presence of hazards on site and other work areas
7. The effect of any toxic or hazardous substances detected on site and the precautions that need to be taken while using them

8. The risks to health within a construction environment- substances hazardous to health, drugs and alcohol
9. The importance of correct storage of combustibles and chemicals on site
10. The importance of working around mobile plant and equipment on site- keeping safe distances away from working machinery
11. The security arrangements and procedures that should be observed and followed when working on site
12. The procedures for dealing with accidents and emergencies associated with the workplace and environment
13. The importance of reporting accidents and near misses to superiors
14. Personal responsibility for behaviour of health safety and welfare on site and the consideration of others
15. The arrangements for maintaining security on site and in the workplace e.g. storage of materials, components, tools, plant and equipment

Required Skills

The Level 3 Demolition Operative must be able to:

1. Comply with their individual duties and legal obligations under the Health and Safety Act XXXV11 of 2007 or any subsequent current legislation
2. Work according to health and safety regulations and other relevant regulations that apply to the work requirements
3. Comply with safe working practices in accordance with organisational procedures
4. Recognise any hazards and hazardous materials associated with workplace activities and how changing circumstances could increase those hazards
5. Report any hazards and risks and changing circumstances to superiors in accordance with organisational procedures
6. Report near misses and accidents to superiors
7. Recognise emergency situations and report them in accordance with organisational requirements.
8. Select and use Personal Protective Equipment (PPE) and Respiratory Equipment (RPE) to carry out work duties
9. Comply with organisational procedures for safely working around mobile plant and equipment
10. Carry out work activities to protect work areas from damage
11. Demonstrate good personal behaviour for workplace health safety and welfare

DEM32 - Remove and separate materials (demolition – clearing buildings and structures) in the workplace

This unit lists the knowledge and skills needed by a person holding this position to carry out activities in dismantling, clearing, removing and separating components from buildings and structures in the workplace.

Upon completion of this unit, the persons carrying out this work will possess the necessary knowledge and skills to remove, sort, salvage and separate materials and components for disposal or recycling in accordance with demolition work requirements and procedures.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Interpret given information relating to the requirements for dismantling, removing and separating materials and components
2. Carry out safe working practices
3. Select materials, and use appropriate tools and equipment to carry out the clearing of buildings and structures
4. Identify components to be salvaged
5. Remove, separate, sort, prepare and store components
6. Conform to organisational instructions and procedures to carry out the work efficiently and to specification

Required Knowledge

The Level 3 Demolition Operative must know and explain:

1. The different types of organisational information: method statements, risk assessments instructions, procedures, specifications
2. The organisational information extracted from method statements, risk assessments, procedures
3. The organisational procedures for rectifying and reporting any inaccuracies with given information
4. Their own responsibilities under current legislation and organisational requirements whilst working on site
5. Methods for dismantling, separating and storing of materials and equipment by manual and mechanical handling methods
6. The purpose of health and safety equipment and the reasons for why and when it needs to be used, for collective protection measures, Personal Protective Equipment (PPE), Respiratory Protective Equipment (RPE)

7. The potential hazards and risks associated with dismantling, removing and separating existing components by hand -, hazardous and non- hazardous waste, materials
8. How to respond to emergencies in accordance with organisational procedures,
9. The different types of tools and equipment required to carry out the pre-demolition work requirements, hand tools, portable power tools, waste disposal/ re- cycling containers
10. Preparation required to storage area(s) ready to receive materials and components (trucks, racks, bins, compounds skips, containers)
11. How to check, maintain, and use tools and equipment to carry out pre-demolition activities
12. The reasons for and how to protect the work area from damage, workplace activities, safety of other occupations, proximity and third party hazards and varying weather conditions
13. The reasons for the separation of materials and components, and disposing of waste safely in accordance with organisational procedures and environmental considerations
14. How to identify and separate components and materials that can be salvaged and re-used
15. The defects in components which are caused naturally by manufacture/workmanship and the environment
16. Safe methods of removing existing materials and components
17. The importance of communicating with colleagues and other occupations during clearing and removal activities in buildings and structures
18. How the methods of work are applied to enable the work to be carried out safely and to specification
19. The procedures for dealing with problems which could affect the work programme

Required Skills

The Level 3 Demolition Operative must be able to:

1. Interpret and obtain appropriate information from method statements, risk assessments, drawings, procedures and specifications
2. Conform with information acquired from method statements, risk assessments, procedures and specifications
3. Report any inaccuracies with given information to the appropriate person(s)
4. Use health and safety control equipment, tools and equipment and access equipment in accordance with organisational procedures to carry out pre-demolition activities
5. Use of Personal Protective Equipment (PPE), Respiratory Equipment (RPE), and Local Exhaust Ventilation (LEV) equipment for pre-demolition activities
6. Use waste and recycling containers to dispose of and recycle waste

7. Work above and below ground level and work at height with materials, substances, tools and equipment
8. Disconnect, dismantle, remove, store and separate materials and components by manual handling and using tools and equipment:
 - Timber and timber -based products
 - Bricks and blocks
 - Concrete
 - Glass and glass components
 - Fixtures and fittings
 - Sanitary ware and fittings
 - Metals
 - Steel re-bar
 - Mechanical and electrical equipment
9. Check use and maintain demolition tools and equipment such as; hand tools, portable power tools and ancillary equipment
10. Follow organisational procedures in case of fire, accidents, spillages and equipment failure
11. Carry out hazard identification and take appropriate action within the limits of their own authority
12. Safely store tools and equipment for separating materials and components for pre-demolition activities
13. Protect workplace and adjacent areas in accordance with organisational safe working practices and procedures
14. Plan and follow the sequence of work using suitable resources to ensure work is carried out to specification in a safe and productive manner
15. Communicate with colleagues and line management to carry out safe and productive working practices

DEM33 - Operate portable powered plant and equipment in the workplace

This unit lists the knowledge and skills required by a person holding this position to carry out activities in operating powered plant and equipment in the workplace.

Upon completion of this unit the persons carrying out this work will possess the necessary knowledge and skills to prepare, position and set up the portable powered plant, tools and equipment for work, carry out pre and post use functional checks and operate, use and control the tools and equipment in accordance with work requirements and organisational procedures.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Interpret given information relating to the requirements for setting up and using powered plant and equipment and portable power tools
2. Carry out safe working practices
3. Select portable powered plant and equipment, power source, fuels lubricants and consumables
4. Set up and operate portable powered plant, tools and equipment to carry out various work activities

Required Knowledge

The Level 3 Demolition Operative must know and explain:

1. The types of information applicable to the operation and use of powered plant and equipment, portable power tools, operating instruction manuals, safety literature, risk assessments and organisational instructions
2. The health and safety requirements associated with using powered plant and equipment and portable power tools - e.g. different power sources and attachments
3. The protective clothing and equipment to be worn (PPE and RPE) when using powered plant and portable power tools
4. The safety checks that need to be carried out on portable power tools prior to connecting to supply source
5. The actions to be taken if powered plant equipment and power tools are found to be faulty or defective
6. The different types of powered plant, portable plant and attachments and how they are prepared and set up for use
7. The requirements for supply lines, routing, position, lengths of cables, hoses
8. Methods and requirements for fitting drill bits, tooling, and attachments

9. Methods and safety requirements for the fitting of abrasive wheels
10. Operating procedures for starting and stopping different power sources - engines; pneumatic, hydraulic, electrical and cordless powered tools and equipment
11. The necessary precautions to be taken to prevent injury when using hand held portable power tools
12. Basic maintenance requirements to items of powered plant and equipment
13. Different types of fuels, lubricants and coolants used on powered plant and equipment
14. The purpose and reason for identifying, selecting and using the correct item of powered plant and equipment/portable power tool to carry out the work requirements

Required Skills

The Level 3 Demolition Operative must be able to:

1. Interpret and obtain information for the safe use and operation of powered plant and equipment
2. Conform with information acquired from manufacturers' machine operator manuals, risk assessments, organisational instructions and procedures and risk assessments related to the work being undertaken
3. Use the correct PPE and RPE when operating plant, equipment and portable power tools
4. Carry out functional and safety checks of plant equipment and portable power tools and equipment prior to use
5. Report faults and defects with plant and equipment in accordance with organisational procedures
6. Select, prepare and set up powered plant and equipment and their associated cables, hoses, tooling for work activities cables/hoses, tooling for operation;
7. Select, prepare and set up portable power tools and their associated tooling and attachments in accordance with manufacturer's instructions and recommendations to carry out work activities
8. Remove and fit abrasive wheels and discs, securing accessories and tool attachments
9. Carry out pre and post start checks on powered plant equipment and portable power tools
10. Operate powered plant and equipment and portable power tools safely to carry out work activities
11. Replenish fuels, lubricants and fluids in accordance with operating and maintenance requirements
12. Carry out basic maintenance to plant equipment, portable power tools and attachments

13. Comply with manufacturers' and organisational instructions and procedures for maintaining portable, powered plant, tools and equipment

DEM34- Demolish and dismantle existing structures (by hand) in the workplace

This unit lists the knowledge and skills required by a person holding this position to carry out activities in demolishing/dismantling existing structures in the workplace.

Upon completion of this unit the persons carrying out this work will possess the necessary knowledge and skills to demolish and/or dismantle brick, masonry, concrete and steel structures safely for disposal and/or recycling in accordance with work requirements and organisational procedures.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Interpret given information relating to the requirements for demolishing and dismantling existing structures
2. Adopt safe working practices in accordance with organisational requirements
3. Select materials, tools and equipment to carry out demolition and dismantling work activities
4. Carry out demolishing/dismantling tasks to existing structures
5. Conform to organisational instructions and procedures to reduce the risk of damage in the workplace and surrounding areas
6. Conform to organisational instructions to carry out the work efficiently, productively and to specification

Required Knowledge

The Level 3 Demolition Operative must know and explain:

1. The different types of organisational information, method statements, risk assessments, oral and written instructions, procedures and specifications
2. The organisation's rectifying and reporting procedures for inaccurate information
3. The organisational information extracted from method statements, risk assessments, instructions and procedures
4. Their own responsibilities under current legislation and organisational requirements whilst carrying out manual demolition activities
5. The purpose of health and safety equipment and the reasons for why and when it needs to be used for collective and personal protective measures,
6. The different types of Personal Protective equipment (PPE), respiratory protective equipment (RPE)
7. The potential hazards and risks associated with demolition and dismantling of structures: working at height, dust, manual handling

8. The organisational procedures to follow and who to report to on the discovery of hazardous materials, such as an asbestos containing material
9. How emergencies should be responded to in accordance with organisational procedures, fire, spillages, injuries and other work- related hazards
10. The different types of tools and equipment required to carry out the demolition and dismantling work manually, such as: portable powered equipment, power tools, hand tools, ancillary equipment
11. How to check and maintain tools and equipment to carry out demolition and dismantling activities
12. The reasons for protecting the work area from damage, erecting barriers, sheeting, exclusion zones
13. The reasons for the salvaging and separation of different materials and components
14. The procedures for disposing of waste safely in accordance with organisational procedures and environmental considerations
15. The importance of visually inspecting structures prior to work commencing and during the demolition process
16. The methods used for manually demolishing and dismantling, buildings. structures and associated materials
17. Procedures for suppressing and controlling dust on site and surrounding area(s)
18. Procedures to determine the correct stripping sequence
19. The importance of communicating with colleagues and other occupations when carrying out manual demolition activities in buildings and structures
20. How the methods of work are applied to enable the work to be carried out safely and to specification
21. Procedures for dealing with problems which could affect the work programme

Required Skills

The Level 3 Demolition Operative must be able to:

1. Interpret and obtain appropriate information from method statements, risk assessments, drawings, organisational procedures and specification
2. Conform with information from method statements, risk assessments, organisational procedures and specifications
3. Report any inaccuracies with information to the appropriate person/s
4. Follow organisational requirements for current legislation and official guidance

5. Use health and safety control equipment, tools, equipment and access equipment in accordance with organisational procedures for demolishing/dismantling existing structures
6. Identify, select and use PPE, RPE and LEV equipment to carry out demolition/dismantling activities
7. Identify hazards, protect surroundings and install/erect physical barriers to assist in the demolition/dismantling activities
8. Follow procedures for establishing the type of structure/materials to be demolished and selecting appropriate hand tools, power tools and mechanical equipment
9. Carry out visual inspections of structures throughout demolition and dismantling activities
10. Demolish/dismantle existing structures by hand using tools and equipment such as; hand, portable power tools and ancillary equipment for bricks, blocks, masonry concrete, timber/timber based products, fixtures and fittings, clay products
11. Check, use and maintain demolition tools, hand tools, portable power tools, mechanical and ancillary equipment
12. Remove assorted materials discarded by occupiers of buildings
13. Remove salvageable components safely, move, handle and store them in accordance with organisational procedures
14. Handle and remove components and dispose of them for waste and/or re-cycling
15. Follow the correct method of work and determine the stripping sequence for the demolition/dismantling of the existing structure
16. Report any problems or hazards associated with the demolition/dismantling tasks that may affect the work programme in accordance with organisational instructions and procedures
17. Communicate with colleagues/supervisor, line manager to carry out efficient and productive working practices

DEM35 - Operate mobile plant equipment to remove and separate demolished materials in the workplace

This unit lists the knowledge and skills needed by a person holding this position to carry out activities in using and/or supervising the use of heavy plant equipment (360 degree tracked excavator above and below 10 tonnes) to remove and segregate materials for disposal or recycling in the workplace.

Upon completion of this unit, the persons carrying out this work will possess the necessary knowledge and skills to prepare, operate and/or supervise the use of mobile plant to remove, separate, stockpile and load materials for disposal, processing and/or recycling components for disposal in accordance with demolition work requirements and procedures.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Interpret and/or instruct given information relating to the requirements for using mobile plant to remove and segregate materials
2. Carry out safe working practices
3. Select materials, tools and equipment to carry out the separation of materials
4. Prepare, set up and operate and/or supervise the use mobile plant equipment to remove and segregate materials
5. Ensure all mobile plant equipment on site is shut down properly
6. Conform to organisational instructions and procedures to reduce the risk of damage in the workplace and surrounding areas
7. Conform to organisational instructions and procedures to carry out the work efficiently and to specification

Required Knowledge

The Level 4 Demolition Plant Supervisor must know and explain:

1. The different types of organisational information such as: method statements, risk assessments, instructions, procedures, specifications, manufacturers information, operator handbooks
2. The organisational information extracted from method statements, risk assessments, procedures
3. The organisational procedures for rectifying and reporting any inaccuracies with given information
4. One's own responsibilities under current legislation and organisational requirements

whilst working on site

5. The importance of understanding site clearance methods and procedures prior to commencement of any excavation work, such as: soil removal, and any permit requirements for the removal of trees
6. Dismantling, separating, storing of materials and equipment by host machine and the use of attachments
7. The use of lifting and handling equipment and access equipment
8. The purpose of health and safety equipment and the reasons for why and when it needs to be used, for collective and individual measures
9. The different types of Personal Protective Equipment (PPE) and, Respiratory Equipment (RPE)
10. The potential risk and hazards associated with operating mobile plant for separating demolished material - such as, proximity hazards, obstructions, pedestrians
11. The checks that need to be carried out prior to and during operating the machine, pre-start checks, functional checks
12. The types of demolished materials that are to be removed and separated for disposal and recycling
13. The reasons why disposal of waste should be carried out safely in accordance with environmental, organisational, and statutory requirements
14. The different types of attachments for removing and separating demolished materials, such as. buckets (standard and non-standard) breakers, and shears
15. The capabilities and limitations of different attachments
16. The reasons for preparing, setting up and positioning the machine for demolition activities
17. The procedures for extracting, separating and removing materials
18. The reasons for protecting the workplace and surrounding areas when removing, separating and loading loose demolition materials
19. The reasons for carrying out basic operator maintenance and adjustments on the relevant machine
20. The replenishment and application procedures for fuels, coolants and lubricants
21. The reasons for shutting down, securing and isolating the relevant machine on completion of work
22. The organisational requirements for reporting problems with the machine and work methods

23. The importance of communicating and liaising with colleagues and other occupations when carrying out demolition work activities

24. Reasons for ensuring work is carried out to meet the specification

Required Skills

The Level 4 Demolition Plant Supervisor must be able to:

1. Interpret and obtain appropriate information from method statements, risk assessments, drawings, procedures, specifications, manufacturers information and operator handbooks
2. Comply with organisational procedures for rectifying and reporting inaccuracies with supplied information
3. Comply with information and procedures taken from risk assessments, method statements, current legislation and organisational procedures
4. Select and use Personal Protective Equipment (PPE), Respiratory Equipment (RPE) for machine operating and site activities
5. Ensure that subordinates use health and safety equipment correctly and safely
6. Carry out pre-start and functional checks on the machine
7. Carry out pre-operational checks for ground conditions, stability, proximity hazards, obstructions, traffic routes, pedestrians, other activities and surrounding work area
8. Protect areas to avoid damage from work activities
9. Communicate with other work colleagues, line management, subordinates, and other occupations throughout the removal and separation of demolished materials
10. Ensure that the plant machine is prepared and set up for demolition work activities
11. Operate the machine laden and unladen to travel, position and manoeuvre over various types of ground
12. Operate the machine to remove, separate, load and unload materials,
13. Form stockpiles of segregated waste and re-usable material
14. Use attachments to remove, separate, load and cut loose demolition materials for disposal, recycling and processing
15. Replenish fuels and lubricants and maintain the plant machine in accordance with organisational procedures
16. Carry out basic operator maintenance and adjustments on the machine in accordance with organisational procedures
17. Ensure that work is completed productively and safely to the specification and within

allocated timescale

18. Report any problems that may affect the work programme in accordance with organisational procedures
19. Shut down and isolate the machine and carry out post start checks on completion of work activities

