

National Occupational Standards

Sector: Building and Construction

Occupation: Assistant Formwork and Falsework Erector

MQF Level: 2

Units:

- FFE201: Apply Occupational Health and Safety during Work Practices
- FFE202: Identify systems, equipment and components
- FFE203: Setting Out Formwork and Falsework Erecting and Dismantling

FFE201: Apply Occupational Health and Safety during Work Practices

This unit is about being able to use safe procedures and safe work practices. 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, identify risks and hazards associated within the working environment, tools and equipment and 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. Carry out the safe erection, use and dismantling of system access platforms less than 2m high.
4. Set up safety barriers around a work environment hazard 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. Use, handle and store materials hazardous to health in a safe manner.
7. Conform with the official risk assessment covering the job assigned and the working area.
8. Locate and switch-off temporary or fixed electrical switch gear, systems isolating valves as instructed in the health and safety procedures.

Required Knowledge

The Level 2 Assistant Formwork and Falsework Erector 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 potential hazardous material commonly found at the workplace.
4. The procedures for dealing with potential hazardous material in the place of work.
5. The health concerns associated with the workplace and safe practices when carrying out work.
6. The hazards and potential hazards at the place of work (such as electricity, slippery and uneven surfaces, dust and fumes, handling and transporting, contaminants and irritants, fire, heights, improper use of tools and equipment.)
7. The importance of being alert to the presence of hazards in the place of work.
8. The responsible persons to whom to report health and safety matters or any other occurring hazards.
9. The emergency procedures in the place of work.
10. The first aid facilities that exist within the work area.
11. The best way to make use of barricades, industrial hurdles and warning signs to make areas clearly marked out of bounds.
12. The safety procedures when using scaffold platforms (not erecting and dismantling platforms).
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. When it is required to isolate domestic water services from the main water supply.

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16. Any toxic effect from materials commonly used at construction sites.
17. The preventative and remedial actions to be taken in the case of exposure to materials hazardous to health.

Required Skills

The Level 2 Assistant Formwork and Falsework Erector should be able to:

1. Identify which health and safety procedures are relevant to the work environment.
2. Seek supervisor assistance when help is needed.
3. Ensure compliance with duties and obligations as defined by the Occupational Health and Safety Act 2000 and recent amendments.
4. Follow workplace policies and employers' 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 to relevant persons.
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. Adhere to work production and installation processes as agreed with the employer.
10. Apply the necessary skills to erect, use and dismantle access equipment less than 2m in height and use appropriately all access equipment provided.
11. Read, interpret and install warning signs and assist in setting up safety barriers, around working areas.
12. Wear the appropriate protective clothing and safety equipment for erecting and dismantling formwork and falsework.
13. Use and store materials hazardous to health in a safe manner.
14. Observe the assigned work area and maintain good housekeeping whilst keeping it free from hazards.
15. Report unfamiliar and unpredictable situations to colleagues and supervisors.
16. Practice the appropriate health and safety procedures.

FFE202: Identify systems, equipment and components

This unit is about identifying the different materials for specific applications based on their technical properties and to identify direct and indirect impacts on the environment and surrounding areas.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Distinguish between the various types of 'system formwork' and 'pipe and clamp systems' used as falsework.
2. Assist in keeping records of the quantity of materials used in day to day work.
3. Follow instructions given by supervisors to work according to the project environment management plan.

Required Knowledge

The Level 2 Assistant Formwork and Falsework Erector must know and state:

1. What defines an operation or a workstation at the place of work.
2. The difference between various types of 'system formwork' and 'pipe and clamp systems' used as falsework.
3. The preserving techniques of any type of formwork and fittings.
4. The cutting blades/ tools to trim any type of formwork.
5. Who to inform of the quantity of materials used in day to day work.

Required Skills

The Level 2 Assistant Formwork and Falsework Erector should be able to:

1. Distinguish between different systems formwork and pipe and clamp systems from simplified employer instructions.
2. Assist in keeping records of the quantity of materials used in the day-to-day work.
3. Apply stipulated instructions as per site's regulations, the environment management plan and recycling procedures during the maintenance of any type of formwork.
4. Follow material cleaning and storage procedures as per the environment management plan.

FFE203: Setting out formwork and falsework erecting and dismantling

This unit is about using components and elements to set out, erect and dismantle formwork and falsework.

Performance Criteria

The candidate must have the necessary knowledge and skills to:

1. Identify and familiarise oneself with the various elements and components to be used.
2. Assist in the setting out of main key set out locations, datum, height levels and alignment tolerances.
3. Assist in the preparation of work area and materials for the assembly of formwork and the erection of falsework.
4. Operate and maintain hand and power tools and equipment.
5. Assemble formwork shutters as instructed.
6. Assist in the erection of falsework (formwork support system).
7. Assist in the inspections of self and others' work, to ensure that all supports and bracings are according to design specifications as instructed.
8. Assist to plumb and check simple dimensions as instructed.
9. Assemble and plumb to alignment boxing formwork.
10. Install cast-openings and insert fittings according to instructions given.
11. Organise and check scaffolding and possible hand railing requirements as instructed.
12. Assist in the monitoring of supporting erected structures during concrete pouring for deflections and movements.
13. Clean work area and dispose of or recycle / re-use materials as instructed.
14. Clean, check, maintain and store plant tools and equipment.

Required Knowledge

The Level 2 Assistant Formwork and Falsework Erector must know and state:

1. Identify the components and/or elements needed for the job.
2. Understand rigidity and stability structure requirements.
3. The routine maintenance requirements for all the tools and equipment.
4. The application of various methods of calculating weights of falsework modules and formwork panels and modules.
5. Regular and common terms used in the construction industry.
6. Who to inform of depleting stock levels of the various formwork panels and fittings.
7. The importance of using power tools and equipment available as instructed.
8. The importance of using the appropriate tools eg: plumb to check simple dimensions, and to align boxing framework as per instructions.
9. The proper procedure of cleaning the work area and disposing of, recycling or reusing materials as instructed.

Required Skills

The Level 2 Assistant Formwork and Falsework Erector should be able to:

1. Use the necessary components and/or elements needed for the job as instructed.
2. Read and interpret simplified drawings and schedules to assist in the setting out of formwork and falsework.

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3. Assist in the setting out of grids and pitch circle diameters.
4. Communicate and collaborate with team members.
5. Carry out required upkeep to hand and power tools and equipment.
6. Assist to assemble and/or fabricate on site shutter as necessary.
7. Inform supervisors of depleting stock levels of the various panels and fittings.
8. Communicate the necessary information about quantity of materials used in day-to-day work by project defined zones.
9. Use lifting gear to handle formwork and falsework panels and modules in a safe manner.
10. Contribute ideas to improve productivity.