



PLUMBER – MQF/EQF LEVEL 3 INFORMATION HANDBOOK

ON

**The process of validation of informal and non-
formal learning for Plumber**

The Assessment Board:

The Assessment Board is appointed by the Minister responsible for Jobsplus by means of Article 26 of the Employment and Training Services Act 2018 to ascertain proficiency or competency in a particular occupation.

This handbook describes the competences that candidates need to possess before sitting for the Plumber validation process. Successful candidates acquire an *Award as Plumber* pegged at Level 3 of the Malta Qualifications Framework and also the European Qualifications Framework and which is endorsed by the National Commission for Further and Higher Education (NCFHE).

Eligibility:

Candidates who are interested in acquiring the *Award as Plumber* can apply for their knowledge, skills and competences to be assessed, recognised and validated if they possess the necessary competences and skills as defined in this handbook.

The prospective candidate must have **3 years experience** in the respective field. This is in line with the L.N. 295 of 2012 which regulates the Validation of Informal and Non-formal Learning process. Prior to the assessment candidates need to present an official Employment History to confirm the years of experience to the Assessment Board. Candidates applying for the Skill Card through the Building Industry Consultative Council (BICC) are exempt from submitting the Employment History.

The Assessment Board is free to contact the Institution and/or referee at will in order to confirm experiences and training claimed by the candidate.

Initial Assessment Plan:

The Assessment Board will conduct an induction session for candidates interested in acquiring the *Award in Plumber*, and review the portfolio and the experience presented to plan the appropriate assessments according to the individual's experience and needs. During the induction session, the candidate is also instructed on how to collect evidence used as a proof of their practical experience.

Evidence sources may include:

- Work Activity
- Witness Testimony
- Health & Safety Documents/ Reports/ Procedures
- Photographic Evidence / Risk Assessments / Instructions
- Work-based confirmation of evidence not observed by assessor.

Assessment Criteria:

The Assessment Criteria for the validation process are based on the National Occupational Standards. Following is an abstract of the list of competences that the candidate must possess prior to applying for the validation process. For further information you can download the National Occupational Standards from the following link:

<https://ncfhe.gov.mt/en/services/Documents/VINFL/NOS%20-%20Building%20and%20Construction/Plumbers%20MQF%203.pdf>

BUP 301: Apply Occupational Health and Safety and Working Practices

1. Use protective clothing and safety equipment to accomplish tasks.
2. Use, handle and store materials hazardous to health in a safe manner.
3. Complete a risk assessment and prepare a report for the work to be carried out.
4. Carry out safe working practices to prevent and identify hazards and to ensure his safety, workers and members of the public.
5. Carry out safe working practices using appropriate equipment and materials to prevent damages to work areas.
6. Carry out the safe erection, use and dismantling of simple scaffold platforms less than 2m high.
7. Set up safety barriers around a work environment hazard to protect workers and members of the public.
8. Locate and manually operate the isolating valve to disconnect domestic water services from the main water supply.

BUP 302: Identify Systems, Equipment and Components

1. Identify and select copper pipe and fittings from given specifications and based on their technical properties for specific jobs.
2. Identify and select steel pipe and fittings from given specifications and based on their technical properties for specific jobs.
3. Identify and select plastic pipe and fittings from given specifications and based on their technical properties for specific jobs.
4. Identify and select iron pipe fittings from given specifications and based on their technical properties for specific jobs.
5. Identify and select stainless steel fittings from given specifications and based on their technical properties for specific jobs.
6. Identify the different types of solder and flux based on their technical properties used for specific jobs.

7. Identify the jointing compounds and tapes based on their technical properties used for specific jobs.
8. Identify valves based on their technical properties used for specific jobs.
9. Identify and select sanitary accessories and fittings from given specifications and based on their technical properties for specific jobs.
10. Identify water storage tanks from given specifications and based on their technical properties for a specific job.
11. Identify and select various fixings from given specifications and based on their technical properties for a specific job.
12. Identify and select sands and aggregates from given specifications and based on their technical properties for a specific job.
13. Identify and select insulating and protective material from given specifications to be used for specific jobs.
14. Identify and select rainwater guttering materials and downpipes from given specifications to be used for specific jobs.
15. Write a report on the availability, suitability of plumbing material and labour for a specific job.
16. Write a report on the environmental impacts of water supply and sewage disposal.

BUP 303: Calculating, Positioning and Drawing

1. Obtain accurate dimensions from drawings of below ground drainage pipe work.
2. Measure and position domestic pipe work systems from drawings.
3. Calculate volumes from dimensions obtained from drawings of excavations.
4. Calculate costs of materials obtained from drawings.
5. Calculate pipe sizes from drawings.
6. Calculate the expansion and contraction of pipe work.
7. Produce working drawings from plans and details of drainage systems.
8. Produce drawings from plans and details of domestic services.

BUP 304: Identifying and Applying Systems, Equipment and Components

1. Position, assemble and install domestic mains cold water pipe work on two levels.
2. Lay out and set up drain pipe bedding.
3. Check domestic sanitation and drainage pipe work systems.
4. Install a bathroom suite and connect to water and sanitary service pipe work.
5. Install a kitchen sink and connect to water and sanitary service pipe work.
6. Set up connections for a domestic appliance.
7. Position, assemble and install a domestic rainwater system.
8. Test a domestic rainwater system.
9. Position, assemble and install domestic tank fed cold water pipe work on two levels.
10. Position, assemble and install domestic mains hot water pipe work on two levels.
11. Examine and authorise domestic pipe work systems.
12. Test and authorise a domestic gas pipe work system.

13. Position, assemble and install a domestic sanitation pipe work system.
14. Position, assemble and install a domestic drainage pipe work system.

BUP 305: Maintain Effective Relationships

1. Communicate effectively in both written and oral forms.
2. Interpret, apply and draw diagrams.
3. Apply national standards.
4. Gather technical information to be used at the place of work.
5. Use information technology systems to communicate with customers and fellow workers.
6. Establish and maintain productive working relationships with the relevant people as to deal with disagreements in a positive way.
7. Identify and confirm the needs of colleagues and customers.
8. Keep others informed about work plans and activities.

BUP 306: Identify, Rectify and Plan Maintenance

1. Inspect, identify faults and repair domestic water pipe work.
2. Inspect, identify faults and repair domestic drainage pipe work.
3. Inspect, identify faults and repair domestic gas pipe work.
4. Dismantle, service, reassemble and test domestic valves.
5. Dismantle, service, reset, reassemble and test a domestic tap.
6. Dismantle, service, reassemble and test a water closet (WC).
7. Inspect water storage tanks.
8. Adjust existing pipe work to add a new sanitary fitting.
9. Complete a maintenance report for domestic services.

Mode of Assessment:

A candidate will be assessed on all the above listed competences. Assessment will be made up from different components, namely:

A. Practical Work

Practical work could be assessed by a task created to simulate the work environment. During the practical test a candidate will be asked to perform a number of tasks in line with the assessment criteria. Assessment can either be held in a simulated workshop or on site. Information on the assessment venue will be provided by Jobsplus prior to the assessment. Multiple sessions might need to be scheduled.

B. Knowledge and Understanding

Candidates will be assessed on knowledge and understanding orally during an interview and/ or in writing through a written test paper.

C. Interview to verify product evidence and supplementary evidence

During the interview the Board will continue assessing candidates in relation to their knowledge, skills and competences in the respective occupation. Candidates are encouraged to present photographic evidence, workbooks or logbooks to illustrate their work.

To successfully pass from the assessment, candidates need to proof their competences in all enlisted criteria as defined in the National Occupational Standards. Following assessment candidates will receive a formal result slip issued by Jobsplus in collaboration with NCFHE. The result slip will indicate whether the candidate has obtained a Pass or a Fail in all criteria. Nonetheless persons who fail any of these criteria will have the possibility to sit for a re-sit.

Resits:

Candidates who do not pass from any of the enlisted criteria will be guided for further development in the failed criterion/criteria.

The areas of further development may include:

- Health & Safety Course (Safety Card)
- MCAST / Jobsplus Training Programmes
- On-Site Training
- Evidence of Training

The failed criterion/criteria will be communicated in the result slip issued by Jobsplus. Date, time and venue of re-sit would be communicated to the candidate by Jobsplus. The candidate will be guided by the Assessment Board with respect to the areas for improvement prior to the re-sit.

Appeals:

Candidates who fail the assessment and wish to contest the decision taken by the Assessment Board can submit a formal request for further feedback to Jobsplus. An appeal can be lodged within 10 working days from the result slip issued by Jobsplus. In the eventuality that the candidate's final result is changed following the appeal, a new result will supersede the previous one.