



# **CONCRETER – MQF/EQF LEVEL 4**

## **INFORMATION HANDBOOK**

ON

The process of validation of informal and nonformal learning for Concreters

#### 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 Concreter validation process. Successful candidates acquire an *Award as Concreter* pegged at Level 4 of the Malta Qualifications Framework and also the European Qualifications Framework and which is endorsed by the Malta Further and Higher Education Authority (MFHEA).

#### Eligibility:

Candidates who are interested in acquiring the *Award as Concreter* 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 S.L. 607.02 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 as Concreter* 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://qualifications.mfhea.gov.mt/#/more-database/a31c6a68-25f2-42b0-a375c7686456a343

### CL401 - Occupational Health and Safety in the Workplace

- 1. Instruct and direct to ensure that safe working practices are carried out to prevent hazards and to ensure the safety of oneself, workers and members of the public.
- 2. Ensure that safe working practices are carried out when using appropriate equipment and materials to prevent damages to work areas and injuries to oneself and 3rd parties.
- 3. Ensure that erection, use and dismantling of simple access platforms less than 2m high are carried out safely.
- 4. Instruct, direct and set up safety barriers around a work environment hazard to protect colleagues and members of the public.
- 5. Ensure that subordinates and teammates use protective clothing and safety equipment according to specifications issued by manufacturers and know the whereabouts of first aid equipment.
- 6. Supervise the use, handling and storage of materials hazardous to health are carried out in a safe manner.
- 7. Carry out a risk assessment to cover the job assigned and the working area.
- 8. Ensure that temporary or fixed electrical switch gear, systems isolating valves are located and switched off as instructed in the health and safety procedures.
- 9. Supervise and advise on health and safety precautions being applied on day-to-day bases.

## CL402 - Systems, Equipment and Components

- 1. Distinguish between the types and grades of cements available on the market.
- 2. Keep records of the quantity of materials used in day-to-day work.
- 3. Organise stores and production facilities.
- 4. Organise plant, tools and equipment including routine maintenance and accuracy and functioning checks.
- 5. Break down a job into different phases and estimate the duration and production hours required.

- 6. Coordinate with others to ensure project plans include site, roads, neighbours and neighbourhoods concerns and environmental legislation.
- 7. Ensure the requirements regarding contraction, isolation and construction joints are according to drawings.
- 8. Distinguish between a range of admixtures and calculate quantities required for concrete batches.

#### CL403 - Reading of drawings and calculations

- 1. Select, check for accuracy and use levelling tools and equipment.
- 2. Read and interpret construction and civil engineering projects site and building drawing.
- 3. Read and interpret sections and views as used in construction and building engineering drawings.
- 4. Read and interpret scales, levels, misalignment reports and other measurements to make calculations including heights, areas, volumes and grades.
- 5. Understand the relationship between force, pressure, area and hydraulic pressure.
- 6. Read and interpret materials specifications.
- 7. Read and interpret assembly drawings of shutters and form work.
- 8. Calculate concrete weight using factors, area and volumes.
- 9. Interpret concrete mix ratios by weight and by volume.
- 10. Ensure that all form work is properly supported at its base taking into account ground conditions or supporting surface conditions.

#### **CL404 - Concrete Ordering and Casting**

- 1. Clean, check, maintain and store plant, tools and equipment according to manufacturer recommendations and workplace practices.
- 2. Organise and lead teams to dispose unwanted materials according to project environmental policy and keep areas cleared from unwanted materials.
- 3. Mark levels and prepare to pour concrete in horizontal layers.
- 4. Take necessary measures to keep the vertical drop of concrete within recommended practices and to transport concrete by chute/ wheelbarrow appropriately.
- 5. Check that bar chairs and spacers are positioned.
- 6. Use the recommended compaction or vibration equipment as stipulated in the procedures.
- 7. Keep measurements to adjust orders as concrete is being poured.
- 8. Drain and de-water construction site.
- 9. Use levelling devices to confirm level of poured concrete.
- 10. Screed concrete according to drawings and specifications.
- 11. Take samples of delivered concrete to check against contract specifications and associated testing standards.
- 12. Carry out on site concrete curing procedures including protection from damage and pollution.
- 13. Keep records to document the curing process.
- 14. Remove screeding lines and surface inaccuracies with the use of bull floats.
- 15. Monitor the concrete surface during curing for bleed water to apply manual and mechanical trowelling.
- 16. Consult civil engineers to ensure correct interpretation of concrete specifications.

- 17. Estimate the time required, time interval between delivered concrete and the job-hours (manhours) requirements.
- 18. Assemble and service moulds and demould products of precast concrete.
- 19. Programme and maintain progress of material and labour.
- 20. Carry out remedial work on concrete.
- 21. Read and interpret concrete industry drawings and specifications.
- 22. Prepare joints, finish edges and trowel concrete.
- 23. Plan, organise and review processes and safety requirements.

#### 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 on Jobsplus premises 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 in writing through a theory 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 will need to present a portfolio which should contain their CV, the Reference Letter/s and any 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 MFHEA. 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.