

Stone Sculptor

A competent Stone Sculptor should be able to demonstrate the following skills and competences:

General Competences and Skills

- 1. Teamwork The ability to work within a multi-disciplinary team.
- 2. Health & Safety The ability to work on site in a safe and responsible manner.
- 3. Communication The ability to communicate effectively both verbally and in writing.
- 4. Organisational Knowledge Understand workplace organisational structures and professional obligations.

Specialist Competencies and Skills

- 1. Understanding of intellectual property law.
- 2. Understanding of the importance of basic documentation.
- 3. Understanding and knowledge of basic techniques in stone carving.
- 4. Familiarization with risk assessments and knowledge of how to minimize them.
- 5. Familiarization with the Maltese strata and their different function in the construction industry.
- 6. Understanding of how each stone will chip differently according to its internal structure and the angle of the chisel.
- 7. Familiarization with local / foreign sculptors.
- 8. Awareness of the different tools which help to simplify the creation of a work of art, like the pointing machine, much more recently the help of machinery like laser scanning and CNC machines.
- 9. Familiarization with the franka differences when cut from different places and the stone impurities that can be found.
- 10. Understanding of the artist's (sculptor) rights and awareness of the circumstances when a work of art can be reproduced and when not.

The candidate applying to be trade tested for the Certificate of Competence should be in possession of the majority of the following knowledge:

Competencies & Skills:

- 1. Be familiar with and identify the properties of local and foreign stone materials.
- 2. Be able to pick up the appropriate tools for the material worked on.
- 3. Be competent in at least one of the following skills: human anatomy sculpting / abstract sculpting / reproduction sculpting.
- 4. Be able to distinguish between tools used for wood carving, stone carving (franka), and marble / coralline sculpture and determine what kind of edge is required.
- 5. Be familiar with the difference between three dimensional sculpture, two dimensional sculpture (alto-relief) and bas-relief.
- 6. Be able to reproduce colours on stone.
- 7. Be able to pick up the appropriate tools for the material worked on.
- 8. Be able to distinguish when it is permitted to be creative and when one needs to stick with what already exists.
- 9. Be able to simplify, do a reproduction or an enlargement of a design.
- 10. Be skilled in clay modelling, and identify when best to use this technique.
- 11. Be able to distinguish between the five orders of architecture.
- 12. Be able to distinguish the various architectural styles.
- 13. Be able to do a mold casting, and to illustrate various techniques used and materials.

Use of Power Tools

Angle grinder

Angle grinder with regulation for sanding and polishing

Air compressor

Chisels for air compressor gun

Diamond cutting tools

Stone's vulnerabilities:

Splitting

Chipping

Sanding

Polishing

Documentation

Interpreting drawings.

Site Management

Carrying out instructions received.

Knowledge and application of health and safety measures in the workshop and on site.

Wearing compulsory clothing for the sculpting workshop that includes: apron / lab coat, safe footwear, safety specs / goggles and tied up hair.

Using non-compulsory equipment for the sculpting workshop that includes: ear defenders when using power tools such as angle grinder, dust mask in case of dust allergies and working gloves.

Selecting and wearing protective clothing for use in connection with hazardous chemicals.

Knowing of emergency procedures.

Applying good housekeeping practices at all times.

Use of Measurement Tools

Carrying out calculation of Perimeter Carrying out calculation of Area Carrying out calculation of Volume

Stereotomy (including producing templates):

Drawing of flat arch
Drawing of segmental arch
Drawing of semicircular arch
Drawing of pointed arch
Drawing of three-centered arch (given height)
Enlarging a preliminary design to a given scale.

ASSESSMENT CRITERIA

Stone Sculptor

The following is a detailed description of the assessment criteria to be adopted by the Trade Testing Board to reach a final decision on the award of a Certificate of Competence.

The trade test is to be made up of the following components:

- 1. The Written
- 2. The Practical
- 3. The Interview
- 4. Portfolio

The Board has agreed on the sequence of the test and the markings allocated to each specific component as indicated below:

Component	Mark	Pass Mark
Written	100	50%
Practical	100	50%
Interview	100	50%
Portfolio	100	50%

The Written Component

The Board has agreed that candidates will sit for the written test of 2 hours duration.

The candidate must be able to demonstrate the following:

- 1. An understanding of the different building types and their chronology.
- 2. Identifying the different building materials used and the type of construction adopted.
- 3. Demonstrate the knowledge of basic techniques in stone carving.
- 4. An ability to understand the importance of documentation.
- 5. Recognising the right materials of a particular work of art.
- 6. Identifying material deterioration and understanding its causes.
- 7. Reading a plan or a drawing.
- 8. Assessing risks at the workplace and how to minimize them.

The Interview Component

All candidates will be called for an interview in order for the Board to assess the proficiency of the candidate in this field.

A portfolio of evidence of works carried out by the candidate needs to be presented during the interview.

The interview questions will cover the following topics:

- 1. Different building types and their chronological order.
- 2. Buildings and monuments, their artistic and historic value and also the materials used.
- 3. Basic causes of deterioration of such buildings and monuments.
- 4. Explain and elaborate the ideas and creativity.
- 5. The application of specialized assessments or techniques when necessary.
- 6. Basic knowledge of the orders and styles.
- 7. Interpretation of drawings.
- 8. Proposing remedial action in a competent manner.
- 9. Risk assessment on work sites

The Practical Component

Candidate will have three sessions of 6 hours each, during which one is expected to:

Produce a design enlargement of an original design provided.

Sculpture the design on a stone. Exercise dimension will be given to the candidate by the examiner.