



Australian Government

CPC CST3023 Apply drawing principles to stonemasonry

Release: 2

CPCST3023 Apply drawing principles to stonemasonry

Modification History

- Release 2 Updated reference to general construction induction training program.
- Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.
- New unit.

Application

This unit specifies the skills and knowledge required to use manual drafting techniques to produce stonemasonry sketches and drawings from standards, specifications and project briefs. It includes freehand sketching to depict and communicate ideas and information using technical drawing techniques.

This unit applies to stonemasonry workers who use drawings to transfer information to assist in off-site production, onsite set out, cutting and shaping and installation of elaborate masonry elements.

It is suitable for people operating with some autonomy. A person working at this level would be expected to take responsibility for organising and completing stonemasonry drawing tasks assigned to them without needing close supervision.

Completion of the general construction induction training program specified by the model Code of Practice for Construction Work is required for any person who is to carry out construction work. Achievement of *CPCWHS1001 Prepare to work safely in the construction industry* meets this requirement.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Stonemasonry

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

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| 1 Prepare for drawing. | 1.1 | Identify project objectives and design from plans, specifications, standards and codes. |
| | 1.2 | Establish stonemasonry component shape, dimensions and key features. |
| | 1.3 | Determine appropriate drawing medium to suit job requirements. |
| | 1.4 | Select drawing equipment, instruments and materials to produce appropriate drawing. |
| 2 Draft initial drawing. | 2.1 | Hand sketch an isometric prototype to assist with designing the drawing. |
| | 2.2 | Apply notations to sketch. |
| | 2.3 | Check sketch against project objectives and specifications. |
| | 2.4 | Identify, rectify and clarify any non-conformities with appropriate person. |
| 3 Create a technical drawing using hand drawing techniques. | 3.1 | Select paper size according to project objectives. |
| | 3.2 | Set out the title block and location of plan, section, elevation and detail views. |
| | 3.3 | Produce a scaled orthographic drawing including measurements, symbols and abbreviations. |
| | 3.4 | Develop basic specifications from compiled information and drawings. |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

No equivalent unit

Links

Companion volumes to this training package are available at the VETNet website -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>

Assessment Requirements for CPCST3023 Apply drawing principles to stonemasonry

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Performance Evidence

To demonstrate competency in this unit, a candidate must meet the performance criteria of this unit by creating a freehand sketch of a standard heritage boss stone and producing a technical drawing for a 6.0 m long x 1.5 m high stone wall construction.

In doing this, the candidate must:

- apply primary and secondary lines and shade and light in creating the freehand sketch
- apply standard drawing conventions to the technical drawing and include the following:
 - scale, title block
 - plan, section and elevation views
 - dimensions lines to indicate footing size and position of wall on footing, height and length of wall and stone and joint sizes
 - ground line

Knowledge Evidence

To be competent in this unit, a person must demonstrate knowledge of:

- principles and application of geometry
- drawing methods:
 - hand sketching
 - using drawing instruments
 - computer aided
- types of technical drawings:
 - orthographic
 - isometric
 - pictorial
- drafting and drawing protocols/conventions:
 - elevations or projections

- sections
- details
- abbreviations
- commonly used symbols
- legends / keys
- lettering standards
- scale
- paper size
- International System of Units (SI)
- stonemasonry and heritage terminology:
 - pediments, volutes, entablatures
 - crockets, finals, boss stones
 - return corners
 - ornamental stone components
- characteristics, applications and limitations of stonemasonry materials
- workplace processes and procedures
- workplace safety
- heritage principles relating to the Burra Charter
- digital technology to operate devices and applications to source information and communicate with others.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations.

This unit must be assessed in the workplace or a close simulation reflecting workplace conditions and standards, materials, equipment, activities, responsibilities, procedures, safety requirements and environmental considerations.

Links

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