



Australian Government

CPCCB3010 Construct masonry arches

Release: 4

CPCCB3010 Construct masonry arches

Modification History

- Release 4 Updated reference to general construction induction training program.
- Release 3 This version first released with CPC Construction, Plumbing and Services Training Package Release 6.3.
Changes to Performance Evidence.
- Release 2 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.1.
Performance Evidence formatted for clarity.
- Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.
Supersedes and is equivalent to CPCCB3010A Construct masonry arches.
Updated to meet the Standards for Training Packages 2012.

Application

This unit specifies the skills and knowledge required to construct various types of masonry arches within walls and above columns or attached piers.

This unit applies to bricklayers and blocklayers who construct masonry arches in new or existing structures. 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 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

CPCWHS2001 Apply WHS requirements, policies and procedures in the construction industry

Unit Sector

Bricklaying and Blocklaying

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 work. | 1.1 Select, fit correctly and use personal protective equipment (PPE) appropriate for job. |
| | 1.2 Read, interpret and apply masonry arch construction requirements from current plans, specifications and codes. |
| | 1.3 Follow requirements in workplace safety and environmental documentation and workplace procedures. |
| | 1.4 Calculate material quantities required for the task. |
| | 1.5 Determine job priorities and sequence job tasks in consultation with others on site. |
| | 1.6 Identify potential hazards and determine and implement control measures. |
| | 1.7 Select and check condition of plant, equipment and tools and report damage or faults to relevant person. |
| | 1.8 Check conformity of materials against the specifications and place materials in preparation for the work. |
| 2 Construct wall to springing line of arch. | 2.1 Set out location of first course and determine span of arch. |
| | 2.2 Lay abutting walls maintaining plumb, gauge and level up to springing line to comply with Australian standards tolerances. |
| 3 Set up arch template. | 3.1 Set out arch centre and curve and where appropriate produce a full-size drawing of arch. |
| | 3.2 Transfer shape to template materials and cut to shape. |
| | 3.3 Locate arch template to height of springing line and crown. |
| | 3.4 Adjust toms and wedges or adjustable metal props to ensure arch centre and springing line is level. |

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| 4 | Cut and lay voussoirs. | 4.1 | Use full size drawing to determine voussoir shape and size. |
| | | 4.2 | Mark, cut and test voussoirs for parallel joints. |
| | | 4.3 | Lay voussoirs around arch centre. |
| | | 4.4 | Cut and lay spandrels maintaining even collar joints. |
| 5 | Clean up. | 5.1 | Clear the work area, and dispose of, reuse or recycle materials following workplace and environmental requirements. |
| | | 5.2 | Clean tools and equipment, check for serviceability and report damage or faults. |
| | | 5.3 | Store and secure tools and equipment following workplace procedures. |

Foundation Skills

Candidates require:

- numeracy skills to:
 - use measurements and formulas to calculate material quantities
 - apply geometry to arch set out
- technology skills to:
 - use digital tools and devices to source job information and communicate effectively with others.

Unit Mapping Information

Supersedes and is equivalent to CPCCB3010A Construct masonry arches

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>