



Australian Government

Assessment Requirements for CPCCST4007 Construct a fire brick wall and arch using refractory materials

Release: 2

Assessment Requirements for CPCCST4007 Construct a fire brick wall and arch using refractory materials

Modification History

Release 2 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.1.

Elements and Performance Criteria 1.1 rewritten for clarity.

Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.

Supersedes and equivalent to CPCCBC4042A Construct a fire brick wall and arch using refractory materials. Updated to meet the Standards for Training Packages 2012.

Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by constructing a fire brick wall and arch. This work may include a 230mm fire brick wall to incorporate an opening (600mm x 600mm) with a segmental arch above, a minimum of 1.5m long and 1.2m high to the top of the arch.

In doing this, the candidate must:

- demonstrate understanding of the purpose and application of refractory bricklaying
- comply with Work Health and Safety (WHS) regulations applicable to workplace operations
- use safe and effective procedures to handle hazardous materials
- read and interpret two-dimensional refractory plans and specifications
- select and use processes, tools and equipment appropriate to the job requirements
- prepare materials and samples in accordance with job requirements
- identify typical faults and problems with materials and equipment that occur and take necessary action to rectify
- communicate effectively with others to ensure safe work site operations.

Knowledge Evidence

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

- Building Code of Australia (BCA) and other Australian standards relevant to the nature of work and materials being used
- characteristics and applications of different materials used in refractory brick work:
 - required bond:

- header bond
- stretch bond
- adjustable props:
 - metal props
 - packers
 - timber toms
 - timber wedges
- wedge shape bricks include the following common sizes:
 - 51mm
 - 63mm
 - 69mm
- methods and processes relating to the use of refractory bricks and insulation materials for the construction of fire resistant structures:
 - measurements and placements:
 - accurate positioning and maintenance of the centreline of the key brick is through the vertical centre line of the arch ensuring:
 - all bricks are cut and laid to maintain even joints
 - even joint thickness around the extrados
- organisational procedures for the acquisition and storage of materials
- workplace and equipment safety requirements, including relevant statutory regulations, codes and standards.

Assessment Conditions

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

Assessment of performance must be undertaken in the workplace or in a simulated workplace environment. Tasks are to be performed to the level of proficiency and within the time limits expected in a workplace.

Assessors are responsible for ensuring that the person demonstrating competency has access to:

- materials appropriate to refractory brickwork
- plant, tools and equipment relevant to refractory brickwork.

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>