UNIT CODE	CPCCBL3013
UNIT TITLE	Construct masonry structural systems
APPLICATION	This unit specifies the skills and knowledge required to construct masonry load bearing walls and engaged piers. This unit applies to bricklayers and blocklayers who work on new and 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 *CPCCWHS1001 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.
PREREQUISITE UNIT	CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry
ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	Performance criteria describe what needs to be done to demonstrate achievement of the element.
1. Prepare for work.	1.1 Select, fit correctly and use personal protective equipment (PPE) appropriate for job. 1.2 Read, identify and apply masonry structural systems requirements from current plans, specifications, standards and codes. 1.3 Follow requirements in workplace safety and environmental documentation and workplace procedures. 1.4 Use measurements and apply formulas to calculate material quantities. 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. 1.8 Check conformity of materials against the specifications and place materials in preparation for the work.
2. Set out load bearing walls.	2.1 Set out and mark masonry wall and engaged piers. 2.2 Set out blockwork bond and gauge and the location of horizontal reinforcing and articulated joints.
3. Construct load bearing walls with engaged piers.	3.1 Mix mortar to meet job requirements. 3.2 Lay blocks to set out height between control joints, maintaining bond and centring starter bars. 3.3 Install horizontal reinforcing to specified bed joints. 3.4 Lay attached piers with reinforcing to set out height. 3.5 Install and secure roof tie down, bracing and vertical support. 3.6 Clean and prepare blockwork for formwork and core filling.
4. Clean and finish mortar joints.	4.1 Rake or rule joints to specified profile and depth. 4.2 Brush down face of blockwork prior to drying to remove unwanted mortar.
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: • technology skills to: o use digital tools and devices to source job information and communicate effectively with others.	
UNIT MAPPING INFORMATION	Supersedes and is equivalent to CPCCBL3013A Construct masonry structural systems
LINKS	Companion volumes to this training package are available at the

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

TITLE	Assessment requirements for CPCCBL3013 Construct masonry structural systems

PERFORMANCE EVIDENCE

To demonstrate competency in this unit, a candidate must meet the performance criteria of this unit by constructing a 2.1 m long x 2.0 m high load bearing block wall with one 390 mm x 390 mm engaged pier.

In doing this, the candidate must:

- install wall tie down and lateral reinforcing support system
- install a door jamb and bond beam lintel
- secure tie down for roof structures
- clean core in preparation for core filling
- comply with current masonry structural systems standards and codes.

KNOWLEDGE EVIDENCE

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

- characteristics, application and limitation of approved materials for structural wall construction:
    - mortar ingredients and consistency
    - steel reinforcing and steel ties
- processes and techniques for structural wall construction:
    - methods of engaging piers
    - fixing of horizontal and vertical reinforcing
    - installing roof tie down systems
- construction terminology relating to structural wall construction
- brick and block expansion and growth, control and articulation joints
- functional and operational features of plant, equipment, hand and power tools
- workplace safety:
    - job safety and environmental analysis (JSEA)
    - working at heights
    - exposure to silica
    - exposure to loud noise
- fire control and separation requirements
- key requirements of the National Construction Code (NCC) relevant to masonry structural systems
- features of working drawings and specification
- environmental requirements for workplace processes and waste disposal.

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	Companion volumes to this training package are available at the VETNet website: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad