UNIT CODE	CPCCBL3011
UNIT TITLE	Construct curved walls
APPLICATION	This unit specifies the skills and knowledge required to construct masonry curved walls. It includes using geometry to calculate and set out curves. This unit applies to bricklayers and blocklayers working 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, interpret and apply curved wall construction requirements from current plans, specifications, standards 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. 1.8 Check conformity of materials against the specifications and place materials in preparation for the work.
2. Set out and lay curved wall.	2.1 Identify wall shape from job drawings and calculate curve using geometry. 2.2 Locate and set out curved wall using a trammel. 2.3 Set out wall length and height maintaining brickwork gauge and bond. 2.4 Mix mortar quality and consistency to job specifications. 2.5 Lay first course level and in line with curve set out. 2.6 Lay wall maintaining gauge, bond and alignment with vertical face maintaining a constant 'V' shape perpend joint. 2.7 Remove excess mortar and rake or rule joints to specified profile and depth. 2.8 Brush down face brickwork prior to mortar drying.
3. Set out and lay serpentine wall.	3.1 Identify wall shape from job drawings and calculate curves using geometry. 3.2 Locate and set out serpentine wall curves using trammel heads and trammel arm. 3.3 Set out length and height of wall maintaining brickwork gauge and bond. 3.4 Mark and cut required bricks to maintain equal perpend joints. 3.5 Lay bricks to curve set out maintaining bond, gauge and alignment with vertical face. 3.6 Remove excess mortar and rake or rule joints to specified profile and depth.
4. Clean up.	4.1 Clear the work area, and dispose of, reuse or recycle materials following workplace and environmental requirements. 4.2 Clean tools and equipment, check for serviceability and report damage or faults. 4.3 Store and secure tools and equipment following workplace procedures.
FOUNDATION SKILLS	

Candidates require:
• numeracy skills to:
  o calculate various curves using geometry
• 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 CPCCBL3011A Construct curved walls
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 CPCCBL3011 Construct curved walls

PERFORMANCE EVIDENCE

To demonstrate competency in this unit, a candidate must meet the performance criteria of this unit by setting out and laying two curved masonry walls to height of 600 mm using stretcher bond.

In doing this, the candidate must:

- construct one serpentine masonry wall to a minimum length of 4.0 m using the plotted points or template method and finished with a soldier course capping
- construct one curved masonry wall with a minimum rise of 290 mm and radius of 2.4 m using the trammel technique
- comply with brickwork tolerances stated in the current Australian Standards.

KNOWLEDGE EVIDENCE

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

- characteristics, applications and limitations of materials used for curved wall construction
- processes and techniques for:
    - calculating and setting out various size curves
    - curved wall construction
    - using measurements and formulas to calculate quantities
- facets generated by curved walls
- aspects and factors relating to curved walls
- construction terminology relating to curved wall construction
- wall types, movement of joints and bonding patterns
- functional and operational features of plant, equipment, hand and power tools
- workplace safety:
    - job safety and environmental analysis (JSEA)
    - hazardous manual handling
    - exposure to silica
    - exposure to loud noise
- current and relevant Australian Standards relating to constructing curved walls
- key requirements of the National Construction Code (NCC) for constructing curved walls
- features of working drawings and specifications
- environmental and waste management requirements.

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