

# **CPCCWF3007A** Tile curved surfaces

Release: 1



### **CPCCWF3007A** Tile curved surfaces

### **Modification History**

Not Applicable

### **Unit Descriptor**

**Unit descriptor** This unit of competency specifies the outcomes required to

tile curved surfaces on solid and sheet substrate, using

mortar or adhesive.

It includes the preparation for and tiling of curved wall and

floor surfaces, columns, circular walls and arches.

### **Application of the Unit**

**Application of the unit** This unit of competency supports the attainment of skills

and knowledge to tile curved surfaces while working with

others as a member of a team.

# **Licensing/Regulatory Information**

Not Applicable

# **Pre-Requisites**

**Prerequisite units** 

CPCCOHS2001A Apply OHS requirements, policies and procedures in the

construction industry

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## **Employability Skills Information**

**Employability skills** This unit contains employability skills.

### **Elements and Performance Criteria Pre-Content**

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

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### **Elements and Performance Criteria**

#### **ELEMENT**

#### PERFORMANCE CRITERIA

- 1. Plan and prepare.
- 1.1. Work instructions and operational details are obtained using relevant *information*, confirmed and applied for *planning and preparation* purposes.
- 1.2. *Safety* (*OHS*) requirements are followed in accordance with safety plans and policies.
- 1.3. Signage and barricade requirements are identified and implemented.
- 1.4. *Tools and equipment* selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement.
- 1.5. Material quantity requirements are calculated in accordance with plans and specifications and *quality requirements*.
- 1.6. *Materials* appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.
- 1.7. *Environmental requirements* are identified for the project in accordance with environmental plans and regulatory obligations and applied.
- 2. Tile curved wall and floor surfaces.
- 2.1. Extent of curve is established from site inspection.
- 2.2. Levelling equipment is used for intermediate marking to level line set out around wall.
- 2.3. Location of tiles is set out to determine balanced design and identify cutting requirements.
- 2.4. *Template* is made to form an accurate curve line for tiled surface around *wall*.
- 2.5. Required method of laying *tiles* is determined by identification of location of first tile.
- 2.6. Mortar and/or adhesive is prepared where applicable to manufacturer specifications.
- 2.7. Pad tiles are *fixed* to level set out, template curve and specifications.
- 2.8. Minimum voids are maintained in mortar tile beds and tiles are fixed level, plumb (wall), flush and square.
- 2.9. Floor tiles are laid to set out grid with perimeter tiles marked and cut to fit curved wall.
- 2.10. Grout is mixed and applied to joints according to specifications, to provide flush and smooth finish.

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#### **ELEMENT**

#### PERFORMANCE CRITERIA

- 3. Tile circular columns, walls and arches.
- 2.11. Tiled surface is polished to specifications.
- 3.1. Template is set out and cut to ensure conformity to tile surface for curve.
- 3.2. Pad tiles are positioned accurately and fixed to line, to maintain uniform spacing.
- 3.3. Tiles are marked out accurately where applicable and fixed into place, to specifications.
- 3.4. Tiles are fixed on walls, plumb, maintaining levels and curvature of wall to specifications.
- 3.5. Line and curvature are maintained to specifications when fixing tiles to archways.
- 3.6. Grout is mixed and applied to joints, and tile surface is finished to specifications.
- 4. Clean up.
- 4.1. Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.
- 4.2. Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.

# Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

Required skills for this unit are:

- communication skills to:
  - follow instructions
  - read and interpret:
    - documentation from a variety of sources
    - drawings and specifications
  - recognise procedures
  - report faults
  - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand

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#### REQUIRED SKILLS AND KNOWLEDGE

- use language and concepts appropriate to cultural differences
- use and interpret non-verbal communication, such as hand signals
- written skills to record results of checks and tests and relevant work completion procedures
- evaluate own actions and make judgments about performance and necessary improvements
- identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials
- organisational skills, including the ability to plan and set out work
- respond to change and contribute to workplace responsibilities, such as current work site environmental and sustainability frameworks and management systems
- teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities
- technological skills to:
  - use a range of mobile technology, such as two-way radio and mobile phones
  - voice and hand signals to access and understand site-specific instructions.

#### Required knowledge

Required knowledge for this unit is:

- general construction terminology
- job safety analysis (JSA) and safe work method statements
- material safety data sheets (MSDS) and hazards associated with solvents, adhesives and cement or epoxy-based grouts
- materials storage and environmentally friendly waste management
- measurement and calculations
- plans, drawings and specifications
- plant, tools and equipment types, characteristics, uses and limitations
- processes for the calculation of material requirements
- quality requirements
- techniques for setting out and fixing tiles to curved surfaces
- tiling materials, including tiles, adhesives, mortar, grouting and substrates, their qualities, characteristics, preparation, techniques, applications, limitations and finishing
- workplace and equipment safety requirements.

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### **Evidence Guide**

#### **EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.

Critical aspects for assessment and evidence required to demonstrate competency in this unit A person who demonstrates competency in this unit must be able to provide evidence of the ability to:

- locate, interpret and apply relevant information, standards and specifications
- comply with site safety plan and OHS legislation, regulations and codes of practice applicable to workplace operations
- comply with organisational policies and procedures including quality requirements
- safely and effectively operate and use tools, plant and equipment
- communicate and work effectively and safely with others
- as a minimum, tile a circular concrete column of a minimum of 360mm diameter and 1m high abutting a concrete flat wall, continuing the tiling to the floor (to 150mm radius) from the column; and tile a standard door archway in a fibre cement sheet wall, including vertical returns and soffit; ensuring:
  - correct identification of requirement and completion of the tiling
  - correct selection and use of appropriate processes, tools and equipment
  - completing all work to specification
  - compliance with regulations, standards and organisational quality procedures and processes.

#### **Context of and specific**

This competency is to be assessed using standard and authorised work practices, safety requirements

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#### **EVIDENCE GUIDE**

#### resources for assessment

and environmental constraints.

Assessment of essential underpinning knowledge will usually be conducted in an off-site context.

Assessment is to comply with relevant regulatory or Australian standards' requirements.

Resource implications for assessment include:

- workplace location or simulated workplace
- materials relevant to tiling curved surfaces
- hand and power tools, plant and equipment appropriate to tiling curved surfaces
- realistic activities covering the mandatory task requirements
- specifications and work instructions.

Assessment of this unit of competency may be in conjunction with assessment of other units commonly performed at the same time in normal job roles.

Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.

#### Method of assessment

#### Assessment methods must:

- satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Training Package
- include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- reinforce the integration of employability skills with workplace tasks and job roles
- confirm that competency is verified and able to be transferred to other circumstances and environments.

Validity and sufficiency of evidence requires that:

 competency will need to be demonstrated over a period of time reflecting the scope of the role

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#### **EVIDENCE GUIDE**

- and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence.

Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

### **Range Statement**

#### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

#### Information includes:

- diagrams or sketches
- instructions issued by authorised organisational or external personnel
- manufacturer specifications and instructions, where specified
- MSDS

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#### RANGE STATEMENT

- memos
- regulatory and legislative requirements pertaining to tiling curved surfaces
- relevant Australian standards
- safe work procedures relating to tiling curved surfaces
- signage
- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.
- assessment of conditions and hazards
- determination of work requirements and safety plans and policies
- equipment defect identification
- work site inspection.
- emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation
- hazard control
- hazardous materials and substances
- · organisational first aid
- PPE prescribed under legislation, regulations and workplace policies and practices
- safe operating procedures, including the conduct of operational risk assessment and treatments associated with:
  - concealed services (water, power and gas)
  - lighting
  - traffic control
  - restricted access barriers
  - trip hazards
  - work site visitors and the public
  - working at heights
  - working in confined spaces
  - working in proximity to others
- use of firefighting equipment
- use of tools and equipment
- workplace environmental requirements and safety.
- include:

**Planning and preparation** include:

Safety (OHS) is to be in accordance with state and territory legislation and regulations and project safety plan and may include:

Tools and equipment:

#### RANGE STATEMENT

- brooms
- brushes
- buckets
- caulking guns
- cement sheet cutters
- hammers
- hose and water sprays
- ladders
- levelling equipment
- lump hammers
- measuring tapes and rules
- mortar boards
- nippers
- pointed grouters
- power drills
- power leads
- rags
- rubber mallets
- sanding blocks
- saws
- scrapers
- shovels
- spacers and wedges
- spatulas
- sponges
- squares
- squeegees
- straight edges
- stringlines
- templates
- tile cutters and scribes
- trowels
- wet and dry diamond saws
- wheelbarrows
- wire brushes
- wooden floats
- may include:
  - concrete mixers

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#### RANGE STATEMENT

- masonry drill bits
- power grinders
- · power sanders.

*Quality requirements* include relevant regulations, including:

- Australian standards
- internal company quality policy and standards
- manufacturer specifications
- workplace operations and procedures.

*Materials* include:

- adhesives
- caulking compound
- cement mortar (with and without additives)
- grout
- tiles.

**Environmental requirements** include:

- · clean-up management
- dust and noise
- vibration
- waste management.

**Templates** are made from:

- hardboard
- plywood
- sheet metal.

**Wall** surfaces include:

- approved waterproof surfaces
- blockwork
- brickwork
- concrete
- fibre cement sheet
- rendered surfaces
- timber.

Types of *tiles* include:

- ceramic
- glass
- granite
- marble
- porcelain
- stone
- terracotta.

Tiles are *fixed* using:

- adhesives
- cement mortar
- cement mortar with adhesive additive.

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# **Unit Sector(s)**

**Unit sector** Construction

# **Co-requisite units**

**Co-requisite units** Nil

### **Functional area**

**Functional** area

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