



Australian Government

Assessment Requirements for MSMPMC330 Produce architectural precast concrete

Release: 1

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Modification History

Release 1. New unit. Supersedes and is equivalent to PMC553050 Produce architectural precast concrete

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- produced at least 1 architectural precast concrete product, including:
 - monitoring the following key variables to ensure product integrity and conformance to specification:
 - mould condition
 - amount and consistency of concrete mix
 - placement of reinforcement and fittings
 - concrete cover
 - compaction and vibration
 - curing conditions
 - curing time and rate
 - stripping strength
 - recognising possible causes of the following routine problems:
 - raw material and mix variations
 - mould anomalies
 - casting and operating conditions
 - process errors.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- principles of casting process
- significance to architectural concrete products of key factors, including:
 - veneer adhesion
 - concrete cover
 - role of reinforcement
 - placement of reinforcement and fittings
 - curing
 - compaction and vibration

- mould design
- mould condition and wear
- water-cement ratio
- concrete finishing
- methods of curing
- compaction methods
- fabrication methodologies
- concrete sampling and testing procedures
- the potential effects of variations in raw materials and equipment operation, processes in relation to quality of product
- quality requirements at each stage of production
- common adjustments in variables and their impact on product quality and production output
- routine problems, their probable causes and relevant corrective actions
- architectural precast concrete production hazards and:
 - their possible causes
 - potential consequences
 - risk control procedures.
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Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - architectural precast concrete production equipment and ancillary equipment
 - materials to be processed
 - specifications, procedures and job sheets
- modelling of industry operating conditions, including:
 - routine and non-routine problems.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume Implementation Guides are available at VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>