



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **PMC552070B Operate forming equipment**

**Revision Number: 1**

## PMC552070B Operate forming equipment

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the operation of forming equipment in the production of plasterboard, cornice and fibre cement sheet manufacture. It involves operating and monitoring forming equipment, making adjustments in accordance with work instructions, undertaking routine quality checks and undertaking minor maintenance on equipment.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency applies to operators who are responsible for operating forming equipment within the manufactured mineral products industry.</p> <p>This competency is typically performed by operators working either independently or as part of a work team. At all times they would be liaising with other members of the team.</p>
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## 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. Prepare forming equipment for production	1.1. Set up line in accordance with work instructions 1.2. Determine product formation requirements from the production program 1.3. Conduct equipment pre-startup procedure and visual checks according to enterprise procedure check list 1.4. Ensure required change parts are in place 1.5. Set up and configure equipment startup functions to comply with standard operating procedures 1.6. Ensure equipment is safe to use
2. Operate forming equipment	2.1. Start up equipment in accordance with work instructions 2.2. Operate equipment to produce product of required shape, dimensions and consistency 2.3. Monitor equipment conditions and adjust to ensure correct product quality 2.4. Monitor and adjust material properties as required 2.5. Record production data as required
3. Rectify routine problems	3.1. Identify the range of faults that can occur during the operation 3.2. Determine and rectify fault causes by established enterprise procedures/work instructions 3.3. Identify and rectify equipment failure causes in accordance with established enterprise procedures 3.4. Identify non-routine problems and report to designated person
4. Shut down equipment	4.1. Ensure line is clear of all product and left in a safe manner for startup 4.2. Determine and rectify fault causes in accordance with procedures/work instructions 4.3. Clean work area 4.4. Complete appropriate records and logs 4.5. Shut down equipment in an emergency situation
5. Prepare equipment for cleaning and maintenance	5.1. Isolate equipment in accordance with work instructions 5.2. Remove any remaining product or materials safely 5.3. Ensure the area is clear and safe for cleaning or maintenance

ELEMENT	PERFORMANCE CRITERIA
6. Control hazards	6.1. Identify hazards from the job to be done 6.2. Identify other hazards in the work area 6.3. Assess the risks arising from those hazards 6.4. Implement measures to control those risks in line with procedures

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

Required skills include:

- recognising process conditions which will lead to out of specification production and taking appropriate action
- implementing the enterprise's standard procedures and work instructions and relevant regulatory requirements within appropriate time constraints and in a manner relevant to the operation of the equipment
- reading and numeracy to interpret workplace documents and technical information

#### Required knowledge

Required knowledge includes:

- composition and nature of products being manufactured
- startup and shutdown processes
- construction and limitations of the equipment
- identification of required adjustments to keep process within specifications
- identification of out of specification situations
- distinguish between causes of faults such as:
  - raw material
  - equipment adjustment setup
  - maintenance issues

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>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.</p>	
<p><b>Overview of assessment</b></p>	<p>The unit will be assessed in as holistic a manner as is practical and may be integrated with the assessment of other relevant units of competency.</p>
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>It is essential that the forming equipment be understood and that the importance of critical material properties, settings and readings is known. Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate corrective action.</p> <p>Consistent performance should be demonstrated. In particular look to see that:</p> <ul style="list-style-type: none"> <li>• process and equipment are operated in accordance with work instructions and process parameters</li> <li>• quality is monitored to minimise wastage</li> <li>• startup and shutdown occur first time</li> <li>• signals and alarms are responded to immediately</li> <li>• process measurements and tests are continually made, observed and interpreted</li> <li>• all OHS requirements are followed.</li> </ul> <p>Competence must be demonstrated in the operation of all ancillary equipment to the level required for this unit of competency.</p>
<p><b>Context of and specific resources for assessment</b></p>	<p>Assessment will require access to an operating plant over an extended period of time, or a suitable method of gathering evidence of operating ability over a range of situations.</p> <p>Assessment will occur over a range of situations which will include disruptions to normal, smooth operation.</p> <p>Simulation or case studies/scenarios may be required to allow for timely assessment of parts of this unit of competency. Simulation should be based on the actual plant and will include 'walk-throughs' of the relevant competency components. A bank of scenarios/case studies/what ifs and questions will be required to probe the reasoning behind observable actions.</p>

<b>EVIDENCE GUIDE</b>	
<b>Method of assessment</b>	<p>Individual enterprises may choose to add prerequisites and co-requisites relevant to their processes.</p> <p>In all plants it may be appropriate to assess this unit concurrently with relevant teamwork and communication units.</p>
<b>Guidance information for assessment</b>	<p>Assessment processes and techniques must be culturally appropriate and appropriate to the language and literacy capacity of the candidate and the work being performed.</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>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.</p>	
<b>Procedures</b>	All operations are performed in accordance with standard procedures and work instructions
<b>Operations</b>	<p>This unit of competency includes the operation of items of equipment where the operator is expected to demonstrate an understanding of the process and the equipment operation. The processes covered by this unit include:</p> <ul style="list-style-type: none"> <li>• fibre cement board</li> <li>• plaster board</li> <li>• machine cornices</li> </ul>
<b>Tools and equipment</b>	<p>Tools and equipment may include:</p> <ul style="list-style-type: none"> <li>• curing ovens</li> <li>• transfer machines</li> <li>• scoring</li> <li>• plasterboard liner unwinders/burners</li> <li>• setting belts</li> <li>• forming plates/dams</li> <li>• mixers</li> <li>• pizza cutters/blades</li> <li>• hand tools</li> <li>• safety clothing and equipment</li> </ul>
<b>Occupational health and safety (OHS)</b>	All operations are subject to stringent OHS requirements and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and OHS requirements, the OHS requirements take precedence

## Unit Sector(s)



<b>Unit sector</b>	Operational/technical
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		