



Australian Government

Department of Education, Employment and Workplace Relations

PMC552072B Produce fibrous plasterboard

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the production of fibrous plasterboard. It involves facilitating the mixing operation, ensuring plaster is of the correct consistency and formulation, maintaining a clean work environment, manually combining the fibre and plaster, cutting sheets to size and turning out sheets to facilitate final curing.
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Application of the Unit

Application of the unit	This unit of competency applies to operators who are responsible for the manufacture of fibrous plaster sheeting using a mixture of plaster material and fibre. Operators produce much of the product by hand with the full sheets cut to length after the product has set. Generally the operator would be part of a team during the process and at all times they would be liaising and cooperating with other members of the team.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	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 the production area	1.1. Ensure the production area is clean and free from debris and waste 1.2. Ensure the production area is ready to receive the plaster mixture and that all equipment is ready 1.3. Apply stripping agent to the production facility to ensure ease of removal of the product after setting of the plaster mix
2. Mix plaster	2.1. Ensure that appropriate materials are available to facilitate mixing and production of plaster mix 2.2. Check that the mixer is clean and free from debris and that there are no obstructions or contaminants present 2.3. Check that the mixing equipment is safe to use 2.4. Introduce materials to the mixer and add temper water to specification 2.5. Mix the plaster for the required time and consistency 2.6. Discharge the mixed plaster from the mixer when it reaches the desired consistency
3. Produce fibrous plasterboard	3.1. Insert the fibre into the plaster mix 3.2. Form the plasterboard to the desired size and screed off 3.3. Check the plaster sheets for entrapped air or the inclusion of unwanted materials or contamination 3.4. Ensure product is of the required uniform thickness 3.5. Allow the product to dry and prepare to strip the product
4. Strip and finish the product	4.1. Cut the finished product to the required dimensions 4.2. Strip the product and inspect for imperfections and distortion 4.3. Hang the product for final drying 4.4. Remove the product from the dryer and undertake final inspection 4.5. Stack the product according to size and prepare for storage or shipment
5. Control hazards	5.1. Identify hazards in mixing and casting areas 5.2. Assess the risks arising from those hazards 5.3. Implement measures to control those risks in line with procedures and duty of care

ELEMENT	PERFORMANCE CRITERIA
6. Respond to problems	6.1. Identify possible problems in equipment or process 6.2. Determine problems needing action 6.3. Determine possible fault causes 6.4. Rectify problem using appropriate solution within area of responsibility 6.5. Follow through items initiated until final resolution has occurred 6.6. Report problems outside area of responsibility to designated person

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 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 melting equipment
- reading and numeracy to interpret workplace documents and technical information

Required knowledge

Required knowledge includes:

- composition and nature of materials being utilised
- equipment startup and shutdown processes
- drying times and conditions
- out of specification situations
- distinguish between causes of faults such as:
 - incorrect raw materials
 - equipment maladjustment
 - contamination or poor maintenance

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

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.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

It is essential that the equipment be understood and that the importance of critical material properties, settings and readings is known.

Competence must be demonstrated in the operation of all ancillary equipment to the level required for this unit of competency.

Competence must be demonstrated in the ability to recognise and analyse potential situations requiring action and then in implementing appropriate corrective action.

Consistent performance should be demonstrated. In particular look to see that:

- work area is maintained appropriately
- plaster is mixed to required consistency
- plasterboard is formed correctly
- finished product meets required dimensions
- all OHS requirements are followed
- problems are anticipated and appropriate action is taken (i.e. problem fixed or reported).

Context of and specific resources for assessment

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.

Assessment will occur over a range of situations which will include disruptions to normal, smooth operation.

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.

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

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.

Procedures

All operations are performed in accordance with standard procedures and work instructions

Equipment

Equipment may include:

- mixers
- moulds or formers
- lifting equipment
- cutting equipment
- drying and other equipment integral to the manufacture of fibrous plasterboard

Fibre

Fibre may include:

- glass fibre or other appropriate fibre

Typical problems

Typical problems may include:

- inappropriate material specifications
- introduction of contaminants
- inclusion of air
- distortion or section thickness variations

Occupational health and safety (OHS)

The identification and control of hazards and the application of OHS are to be in accordance with current, applicable legislation and regulations, and company procedures. All work is carried out at all times in accordance with these requirements.

Unit Sector(s)

Unit sector

Operational/technical

Competency field

Competency field	
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Co-requisite units

Co-requisite units		