



**Australian Government**

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

# **LMFFL3401A Mix and apply epoxy and seamless floor coverings**

**Revision Number: 1**

## LMFFL3401A Mix and apply epoxy and seamless floor coverings

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers the preparation, application and finishing of epoxy and seamless floor coverings.
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### Application of the Unit

<b>Application of the unit</b>	This unit supports the attainment of skills and knowledge required for competent workplace performance in the wide variety of flooring technology operations. The competency applies to a work room and on site environment and involves application of skills and knowledge at a trade worker level. These skills and knowledge are to be used within the scope of the individual's job and authority.
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	Nil	

## 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 for the work	<p>1.1. Applicable <b>OHS, legislative, organisational</b> and <b>information</b> requirements relevant to the application of <b>epoxy and seamless floor coverings</b> are verified and complied with</p> <p>1.2. Work orders and/or plans are read and interpreted</p> <p>1.3. The condition of the <b>sub-floor</b> is inspected and confirmed as suitable for use</p> <p>1.4. <b>Tools, equipment</b> and <b>materials</b> are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition</p> <p>1.5. Floor preparation, including conventional and decorative formwork is established, levelled and secured</p>
2. Apply epoxy materials floor covering	<p>2.1. Surfaces are checked for contamination, moisture content and suitable preparation</p> <p>2.2. <b>Materials</b> and equipment are prepared and positioned for use</p> <p>2.3. Material safety data sheets, or equivalent, are read and applied during the work</p> <p>2.4. Trial applications of surface materials are made to check equipment operation, materials consistency and specified surface finish</p> <p>2.5. Surface coatings are applied with the depth and coverage in accordance with manufacturer specifications and job requirements</p> <p>2.6. Decorative additives are applied in accordance with job requirements</p> <p>2.7. Floor is checked and cleared for further processing</p>
3. Finish the flooring	<p>3.1. <b>Sanding/grinding equipment</b> is set up in accordance with manufacturer instructions and operating procedures</p> <p>3.2. Emergency stops, gauges, guards and controls are identified and checked</p> <p>3.3. Equipment settings and adjustments are made and checked</p> <p>3.4. Trial runs are conducted to check machine operations and quality of finished work</p> <p>3.5. Sanding/grinding is completed to industry and manufacturer standards.</p>

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
4. Complete housekeeping	4.1. Unused materials are stored or recycled as required 4.2. Tools and equipment are cleaned and stored appropriately 4.3. Work area is cleaned and rubbish disposed of appropriately 4.4. Workplace documentation and/or reporting is completed

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow and productivity
- use pre-checking and inspection techniques to anticipate epoxy and seamless application problems to avoid re-work and wastage
- recognise and respond to circumstances outside instructions or personal competence
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, work flow interruptions or wastage
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate other material requirements
- clarify and confirm work instructions
- plan work within given task parameters
- accept responsibility for given tasks
- set, monitor and satisfy personal work goals
- satisfy the competency requirements for the job
- maintain current knowledge of:
  - tools and materials
  - epoxy and seamless application techniques
- seek learning opportunities
- use the limited workplace technology related to the epoxy and seamless application including tools, equipment, calculators and measuring devices.

#### Required knowledge

- State or Territory OHS legislation, regulations, standards and codes of practice relevant to the application of epoxy and seamless floor coverings
- organisational and site standards, requirements, policies and procedures for moisture suppressant and barrier systems
- environmental protection requirements
- type, characteristics, uses and limitations of:
  - epoxy and seamless floor coverings
  - sanders/grinders

**REQUIRED SKILLS AND KNOWLEDGE**

- techniques for preparing epoxy and seamless materials, including decorative additives
- workplace safety system requirements related to sanding and grinding
- types and uses of relevant tools and equipment
- procedures for the recording, reporting and maintenance of workplace records and information
- appropriate mathematical procedures for estimation and measurement
- characteristics and requirements of monolithic sub-floor preparation
- established communication channels and protocols
- problem identification and resolution

## 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.

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

- Comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for preparing and presenting design information
- Interpret work order and locate relevant information
- Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- Follow work instructions, operating procedures and inspection practices to:
  - prevent damage to goods, equipment and products
  - maintain required production output and product quality
  - minimise the risk of injury to self and others
- Work effectively with others
- Complete a minimum of three of the following:
  - a trowelled epoxy floor
  - a self levelling epoxy floor
  - a flake floor
  - a seamless floor
- Modify activities to cater for variations in workplace context and environment

#### Context of, and specific resources for assessment

- The application of competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements
- The following resources should be made available:
  - workplace location or simulated workplace
  - materials and equipment relevant to the preparation for and application of epoxy and



<b>EVIDENCE GUIDE</b>	
	seamless flooring <ul style="list-style-type: none"> <li>• specifications and work instructions</li> </ul>
<b>Method of assessment</b>	<p>Assessment must satisfy the endorsed assessment guidelines of the Furnishing Industry Training Package</p> <p>Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge</p> <p>Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application</p> <p>Assessment may be applied under project related conditions (real or simulated) and require evidence of process</p> <p>Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances</p> <p>Assessment may be in conjunction with assessment of other units of competency</p>

## 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.

<b>Legislative requirements</b>	<ul style="list-style-type: none"> <li>• are to be in accordance with applicable legislation from all levels of government that affect organisational operation. Requirements may include but not be limited to award and enterprise agreements, industrial relations, Australian Standards, confidentiality and privacy, OHS, the environment, equal opportunity, anti-discrimination, relevant industry codes of practice, duty of care and heritage</li> </ul>
<b>OHS requirements</b>	<ul style="list-style-type: none"> <li>• are to be in accordance with Commonwealth, State or Territory legislation and regulations, organisational safety policies and procedures. Requirements may include but not be limited to the use of personal protective equipment and clothing, fire fighting equipment, First Aid equipment, hazard and risk control and elimination, control of hazardous materials and substances, manual handling including lifting and carrying</li> </ul>
<b>Organisational requirements</b>	<ul style="list-style-type: none"> <li>• may include but not be limited to legal, organisational and site guidelines, policies and procedures relating to own role and responsibility, quality assurance, procedural manuals, quality and continuous improvement processes and standards, OHS, emergency and evacuation, ethical standards, recording and reporting, access and equity principles and practices, equipment use, maintenance and storage, environmental management (waste disposal, recycling and re-use guidelines)</li> </ul>
<b>Information and procedures</b>	<ul style="list-style-type: none"> <li>• Workplace procedures relating to use and operation of tools and equipment</li> <li>• Work instructions, including job sheets, plans, drawings and designs</li> <li>• Workplace procedures relating to reporting</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>and communications</p> <ul style="list-style-type: none"> <li>• Manufacturer instructions for the use of equipment and materials</li> </ul>
<b>Epoxy and seamless flooring</b>	<ul style="list-style-type: none"> <li>• includes trowelled epoxy, self levelling epoxy, flake floors, granule floors, epoxy coatings (seamless), spray on roller coatings and waterproofing, and joint sealing</li> </ul>
<b>Sub-floor preparation</b>	<ul style="list-style-type: none"> <li>• is to include sanding, grinding and the application of levelling compounds and primers</li> </ul>
<b>General tools and equipment</b>	<ul style="list-style-type: none"> <li>• are to include utility knife, straight edge, square, tape measure, trowels, rollers, brushes, buckets and trolley</li> </ul>
<b>Sanding equipment</b>	<ul style="list-style-type: none"> <li>• is to include sander, edger, belt-sander, sander belts and paper</li> </ul>
<b>Materials</b>	<ul style="list-style-type: none"> <li>• are to include but are not limited to: acrylics, epoxy, polyurethane, separating strips, flushing strips, joining strips, expansion jointing, additives (flakes and granules), oil and lubricants for equipment</li> </ul>
<b>Grinding equipment</b>	<ul style="list-style-type: none"> <li>• is to include grinder, grinding stones and materials</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Flooring Technology
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## Competency field

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

Co-requisite units		