



Australian Government

Department of Education, Employment and Workplace Relations

LMFFL3102A Prepare, select and apply screed to concrete sub-floors

Revision Number: 1

LMFFL3102A Prepare, select and apply screed to concrete sub-floors

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the competency to prepare, select and apply cementitious products using screeding techniques to concrete sub-floors prior to the installation of flooring coverings and coatings for internal and external applications.
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Application of the Unit

Application of the unit	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 an 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

Prerequisite units	Nil	

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 for the work	<p>1.1. Applicable <i>legislative, OHS</i> and <i>organisational</i> requirements relevant to <i>sub-floor preparation</i> are verified and complied with</p> <p>1.2. <i>Instructions</i> and/or plans are read and interpreted to identify the process required to complete work tasks</p> <p>1.3. Sub-floors are inspected to ensure that they are dry, smooth, plane, sound and clean in accordance with ASNZS 2455.2 (1995) and AS 1884 (1995) and the extent of preparation is confirmed</p> <p>1.4. Trial applications of surface materials are made to determine suitability of the primer to the sub-floor, and the appropriateness of the screed compounds to <i>level requirements</i>, and compatibility to the primer</p> <p>1.5. Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition</p> <p>1.6. Material safety data sheets, or equivalent, are read and applied during the work</p> <p>1.7. Materials and equipment are prepared and positioned for use</p> <p>1.8. Surfaces are cleaned in accordance with manufacturer recommendation</p>
2. From a datum line, define the grading, ramping and set downs	<p>2.1. Establish grid and mark the floor</p> <p>2.2. Drill for and position pin height</p> <p>2.3. Clean sub-floor</p> <p>2.4. Establish existing height and the height of finished ramp to the required threshold</p> <p>2.5. Establish the width of the ramp appropriate to the height of the finished threshold and in accordance with building codes and client requirements</p> <p>2.6. Establish existing height and the height of finished floor waste to the required threshold</p> <p>2.7. Establish height of finished floor at the perimeter</p> <p>2.8. Establish height of the finished floor at the floor waste/drain</p>
3. Repair defects in sub-floor (including expansion joints)	<p>3.1. Establish extent of repairs required</p> <p>3.2. Remove unsound material and debris</p> <p>3.3. Determine type of materials to be used</p>

ELEMENT	PERFORMANCE CRITERIA
	3.4. Prime affected area 3.5. Mix and install repair compound 3.6. Inspect completed work to ensure functionality is restored and the finish is plane and smooth
4. Treatment of expansion/control joints	4.1. Establish the extent of repair 4.2. Remove unsound material and debris to ensure the mechanics of the control/expansion joint are unimpeded 4.3. Prepare joint to ensure that repair compound does not impede the function of control/expansion joint 4.4. Prime affected area 4.5. Mix and install repair compound 4.6. Inspect completed work to ensure functionality of the control/expansion joint is not impeded 4.7. Recut the expansion/control joint as required
5. Apply primers and screed compounds	5.1. Surface coating is applied with the depth and coverage in accordance with manufacturer specifications and job requirements 5.2. Levelled floor is checked and cleared for further processing
6. Complete housekeeping	6.1. Unused materials are stored or recycled as required 6.2. Tools and equipment are cleaned and stored appropriately 6.3. Work area is cleaned and rubbish disposed of appropriately 6.4. 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 concrete sub-floor preparation 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
 - installation techniques
- seek learning opportunities
- use the limited workplace technology related to the preparation of a concrete sub-floor including tools, equipment, calculators and measuring devices.

Required knowledge

- State or Territory OHS legislation, regulations, standards and codes of practice relevant to levelling sub-floors
- organisational and site standards, requirements, policies and procedures for levelling sub-floors
- environmental protection requirements
- established communication channels and protocols
- problem identification and resolution
- types of tools and equipment and procedures for their safe use, operation and

REQUIRED SKILLS AND KNOWLEDGE

maintenance

- characteristics of materials, products and defects
- set up and operation of equipment
- procedures for the recording, reporting and maintenance of workplace records and information
- appropriate mathematical procedures for estimation and measurement
- characteristics and requirements of concrete sub-floor preparation
- type, characteristics, uses and limitations of levelling compounds and primers
- workplace safety system requirements related to the application of levelling compounds and primers

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

- 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
- Complete to Australian Standards a minimum of two sub-floor preparations which are to include:
 - a patch and repair
 - a level pour
- Work effectively with others
- 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 sub-floor levelling activities
 - specifications and work instructions

Method of assessment

Assessment must satisfy the endorsed assessment guidelines of the Furnishing Industry Training Package

Assessment methods must confirm consistency and accuracy of performance (over time and in a range of

EVIDENCE GUIDE

workplace relevant contexts) together with application of underpinning knowledge

Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application

Assessment may be applied under project related conditions (real or simulated) and require evidence of process

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

Assessment may be in conjunction with assessment of other related units of competency

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.

Legislative requirements	<ul style="list-style-type: none"> • 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
OHS requirements	<ul style="list-style-type: none"> • 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 of hazardous materials and substances, manual handling including lifting and carrying
Organisational requirements	<ul style="list-style-type: none"> • 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)
Instructions	<ul style="list-style-type: none"> • Workplace procedures relating to the use and operation of tools and equipment • Workplace instructions, including job sheets, plans, drawings and designs • Workplace procedures relating to reporting

RANGE STATEMENT	
	and communication <ul style="list-style-type: none"> • Manufacturer instructions for the use of equipment and materials
Sub-floor preparation	<ul style="list-style-type: none"> • concrete sub-floor preparation may include sanding, grinding and the application of levelling compounds and primers
Level requirements	<ul style="list-style-type: none"> • may refer to plane, falls to waste, and/or ramps to thresholds

Unit Sector(s)

Unit sector	Flooring Technology
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Competency field

Competency field	Floor Preparation
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Co-requisite units

Co-requisite units		