



Australian Government

Department of Education, Employment and Workplace Relations

LMFFF3003B Apply plural component coatings

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the competency to apply plural component polyurethane, polyester coatings and acid catalysed coatings.
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Application of the Unit

Application of the unit	
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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

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>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.</p>
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for work	<p>1.1. Workplace information, including materials application and safety information, material safety data sheets, is used to inform work practices</p> <p>1.2. Characteristics of the surface and the required surface treatment are identified from work orders or instructions</p> <p>1.3. Processing and application techniques, time and safety requirements are identified and used for work planning</p> <p>1.4. OHS requirements, including ventilation requirements and personal protection needs, are observed throughout the work</p> <p>1.5. Tools, equipment and accessories are identified and checked for safe and effective application of polyurethane, polyester and acid catalysed coatings</p>
2. Prepare for application of materials	<p>2.1. Surfaces are checked for contamination and correct preparation according to workplace procedures and standards</p> <p>2.2. Products with surface or other faults are identified and faults repaired as appropriate</p> <p>2.3. Materials required are identified and prepared for the task</p> <p>2.4. Spray booths and work documentation are inspected to ensure nitro-cellulose lacquer has not been sprayed in the same booth as that used for the application of two/three part polyurethane/polyester coatings</p> <p>2.5. Nitro-cellulose overspray is cleaned off booth surfaces if necessary before application of two/three-part polyurethane/polyester</p> <p>2.6. Trial applications of two-part polyurethane/polyester and acid catalysed coatings are made to check equipment operation, materials consistency and viscosity</p> <p>2.7. Faults and/or inconsistencies in applied coating are identified and workplace procedures for rectification and adjustment are followed</p>
3. Apply finishing materials	<p>3.1. Techniques for application of plural component coatings are identified and selected</p> <p>3.2. Materials are applied according to job instructions, material manufacturer specifications and workplace procedures</p>

ELEMENT	PERFORMANCE CRITERIA
	3.3.Finished products are inspected and approved for suitability for further processing 3.4.Products which do not meet quality specifications are rectified or tagged for further investigation
4. Clean work area and maintain equipment	4.1.Equipment used is cleaned and inspected for serviceable condition and stored appropriately 4.2.Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed 4.3.Work area is cleaned and returned to approved condition 4.4.Workplace records are 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 coating materials, cleaning materials, work orders 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
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of coating equipment and materials to avoid any backtracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate paint requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid re-working and wastage
- use the limited workplace technology related to coating, including tools, equipment and measuring devices

Required knowledge

- identification of application techniques
- characteristics of acid catalysed, polyurethane and polyester coatings
- the methods to prevent contamination of surfaces during and after coating
- workflow in relation to the application of polyurethane and polyester

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 of Evidence

- Interpret work order and locate and apply 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:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- Apply plural component coatings on at least three occasions, including:
 - one acid catalysed
 - one two-pot polyurethane
 - applications, including flat, vertical and internal surfaces
- Maintain application equipment
- Work effectively with others
- Modify activities to cater for variations in workplace contexts and environment

Resource Implications

Spray application equipment, acid catalysed, polyurethane and polyester coatings.

Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

Range Statement

RANGE STATEMENT	
<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>	
Unit context	<ul style="list-style-type: none"> OHS requirements may include legislation, building codes, material safety management systems, hazardous substance and dangerous goods codes and local safe operating procedures Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements Work requires individuals to demonstrate discretion, judgement and problem solving skills in the installation of surface coatings
Plural component coatings are to include:	<ul style="list-style-type: none"> acid catalysed and two-pot polyurethane and may include: polyester and metallic finishes
Application techniques and processes are to include:	<ul style="list-style-type: none"> brushing and spraying
Surfaces may include but are not limited to:	<ul style="list-style-type: none"> solid timber manufactured board metal
Tools and equipment may include, but are not limited to:	<ul style="list-style-type: none"> liquid containers rubber gloves positive pressure air wash face masks positive pressure water wash spray booths protective clothing spray guns compressor air lines brushes sanding block orbital sanders
Materials to be applied may	<ul style="list-style-type: none"> two-part polyurethane

RANGE STATEMENT	
include but are not limited to:	<ul style="list-style-type: none"> • two/three part polyester • acid catalysed lacquer • solvents
Personal protective equipment	Personal protective equipment is to include that prescribed under legislation, regulations and enterprise policies and practices
Information and procedures	<p>Workplace procedures relating to the use and operation of tools and equipment</p> <p>Work instructions, including job sheets, plans, drawings and designs</p> <p>Workplace procedures relating to reporting and communication</p> <p>Manufacturer specifications and operational procedures</p>

Unit Sector(s)

Unit sector	Furniture Finishing
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Competency field

Competency field	
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Co-requisite units

Co-requisite units	