

Title	Apply coating systems by spraying method to aircraft, aircraft components or aeronautical equipment		
Level	4	Credits	35

Purpose	People credited with this unit standard are able to: prepare to apply the coating system to aircraft, aircraft components, or aeronautical equipment; apply coating system by spraying method to aircraft, aircraft components, or aeronautical equipment; and complete finishing activities.
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Classification	Aeronautical Engineering > Aircraft Painting
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Available grade	Achieved
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Guidance Information

- 1 All tasks must be carried out in accordance with enterprise procedures.
- 2 Definition
Enterprise procedures – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.
- 3 Any of the following coating systems and drying or curing methods may be used: solvent evaporation, oxidation, polymerisation.
- 4 Spray equipment may include airless, air-assisted airless, pneumatic, electrostatic, high-volume low pressure (HVLP), pressure feed, syphon feed, gravity feed.

Outcomes and performance criteria

Outcome 1

Prepare to apply the coating system to aircraft, aircraft components, or aeronautical equipment.

Performance criteria

- 1.1 Task is determined by reviewing maintenance documentation and enterprise procedures.

- 1.2 Resources are obtained and checked for serviceability or status.
- Range may include but are not limited to – publications, tools, materials, equipment, safety equipment, clothing.
- 1.3 Aircraft, aircraft components or aeronautical equipment identification is matched with documentation.
- 1.4 Environment is established.
- Range temperature, lighting, ventilation, hazard warning signs.
- 1.5 Ground equipment is positioned.
- 1.6 Aircraft, aircraft components or aeronautical equipment is prepared.
- Range degreased, chemically treated, masked, stencils fabricated and applied.
- 1.7 Coating system materials are prepared.
- Range viscosity, cleanliness, ingredients mixed, colour checked.

Outcome 2

Apply coating system by spraying method to aircraft, aircraft components, or aeronautical equipment.

Performance criteria

- 2.1 Coating system is applied.
- Range primer, topcoats;
coating system may include but is not limited to – abrasion resistant coating (ARC), erosion resistant coating (ERC), infra-red reflective (IRR), low infrared reflective (LIR), solar heat reflective (SHR), polyurethane, epoxy, low VOC, zero VOC.
- 2.2 Colour scheme is matched to specifications.
- 2.3 Masking is removed from aircraft, aircraft components, or aeronautical equipment.
- 2.4 Any defects are rectified.
- 2.5 Inspections are obtained.
- Range independent, duplicate, progressive; wet film thickness, dry film thickness, gloss level readings.

Outcome 3

Complete finishing activities.

Performance criteria

3.1 Resources are checked for serviceability.

3.2 Waste and surplus materials are disposed of or recycled.

Range may include but is not limited to – serviceable, unserviceable, surplus, waste, scrap, hazardous.

3.3 Documentation is completed.

3.4 Completion activities specific to the task and work area are carried out.

Range may include but are not limited to – tool control, cleanliness, tidiness, return of publications, preparation for next activity, return of aircraft and systems to normal.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 June 1995	31 December 2016
Revision	2	7 August 1997	31 December 2016
Revision	3	8 May 2001	31 December 2016
Review	4	19 May 2006	31 December 2016
Review	5	18 June 2014	31 December 2021
Review	6	26 March 2020	N/A

Consent and Moderation Requirements (CMR) reference	0028
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact ServicelQ qualifications@serviceiq.org.nz if you wish to suggest changes to the content of this unit standard.