



Australian Government

MEM26017 Prepare composite or other substrate surfaces

Release: 1

MEM26017 Prepare composite or other substrate surfaces

Modification History

Release 1. Supersedes and is equivalent to MEM26017A Prepare composite or other substrate surfaces

Application

This unit of competency defines the skills and knowledge required to prepare by abrasive or chemical means, a composite surface prior to bonding/joining or coating and includes the preparation of composite surfaces and other surfaces which are used in conjunction with composites (e.g. metal surfaces).

This unit complements unit MEM26016 Select and use joining techniques.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Band: A

Unit Weight: 4

Pre-requisite Unit

MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information

Competency Field

Composites

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1 Determine job requirements	1.1 Follow standard operating procedures (SOPs)
	1.2 Comply with work health and safety (WHS) requirements at all times
	1.3 Select and use appropriate personal protective equipment (PPE) in accordance with SOPs

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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| | | 1.4 | Identify the chemistry of materials to be applied to the surface |
| | | 1.5 | Identify the surface chemistry of the substrate |
| | | 1.6 | Determine any chemical treatments needed to make the substrate compatible with the materials to be applied |
| | | 1.7 | Interpret safety data sheets (SDS) for materials that may be used |
| | | 1.8 | Identify the current and possible required physical states of the substrate |
| 2 | Select most appropriate preparation technique for job | 2.1 | Compile specification for required substrate preparation |
| | | 2.2 | Compare possible substrate preparation methods with specification |
| | | 2.3 | Select most appropriate substrate preparation |
| | | 2.4 | Conduct and evaluate tests, as appropriate |
| | | 2.5 | Review selection and substrate preparation and make any required changes to substrate preparation |
| 3 | Prepare substrate | 3.1 | Identify and control hazards |
| | | 3.2 | Prepare substrate, as required and minimise waste |
| | | 3.3 | Review result compared to requirements |
| | | 3.4 | Review substrate preparation process |
| | | 3.5 | Identify areas for improvement and take appropriate actions |
| | | 3.6 | Clean up and perform any routine maintenance required on equipment |
| | | 3.7 | Complete any required documentation/reporting according to SOPs |

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Most appropriate substrate preparation includes the following:

- compliance with product requirements
- greatest ease of preparation
- best financial return
- greatest sustainability contribution

Areas for improvement include one (1) or more of the following:

- incompatible surface applications with substrates
- non-uniform substrate preparation
- the use of hazardous materials

Sustainability includes the following:

- survival of the ecology/physical environment
- economic viability
- social sustainability

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM26017A Prepare composite or other substrate surfaces

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>