



Australian Government

MEM03003 Perform sheet and plate assembly

Release: 1

MEM03003 Perform sheet and plate assembly

Modification History

Release 1. Supersedes and is equivalent to MEM03003B Perform sheet and plate assembly

Application

This unit of competency defines the skills and knowledge required to assemble prefabricated/formed components using a range of joining techniques in a production assembly environment.

Where soft soldering is required unit MEM05003 Perform soft soldering should also be selected.

Where brazing and/or silver soldering is required unit MEM05006 Perform brazing and/or silver soldering should also be selected.

Where production welding skills are required unit MEM05013 Perform manual production welding should also be selected.

Where the interpretation of technical drawings is required unit MEM09002 Interpret technical drawing should also be selected.

Where the selection and use of engineering measuring equipment is required unit MEM12023 Perform engineering measurements should also be selected.

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

Band: A

Unit Weight: 4

Pre-requisite Unit

MEM11011	Undertake manual handling
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools
MEM18002	Use power tools/hand held operations

Competency Field

Assembly

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 | Use appropriate personal protective equipment (PPE) in accordance with SOPs |
| | | 1.4 | Identify job requirements |
| | | | |
| 2 | Select and use sheet and plate assembly equipment | 2.1 | Select assembly equipment to suit application in accordance with job requirements |
| | | 2.2 | Use equipment in a safe manner according to SOPs |
| | | | |
| 3 | Assemble fabrications | 3.1 | Assemble products and verify against job requirements |
| | | 3.2 | Produce assembly following correct sequence of operations |
| | | 3.3 | Join assemblies/fabrications to job requirements using specified joining techniques |
| | | 3.4 | Test/check assembly for compliance with job requirements using SOPs |
| | | | |
| 4 | Protect assembly from damage | 4.1 | Handle and store assemblies/fabrications according to SOPs and in a manner least likely to cause damage |

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.

Job requirements can be identified from one (1) or more of the following:

- specifications
- sketches
- job sheets
- work instructions
- verbal instructions

Assembly equipment includes one (1) or more of the following:

- jigs
- fixtures
- other appropriate tools

Application includes one (1) or more of the following:

- manufacture of white goods
- appliances
- electrical cabinets
- metal furniture
- cladding and shelving
- box trailer bodies
- ductwork
- other sheet and plate assemblies

Joining techniques include one (1) or more of the following:

- seaming
- bonding
- riveting

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM03003B Perform sheet and plate assembly

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEM03003 Perform sheet and plate assembly

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting job requirements from verbal or written job instructions for sheet and plate assembly
- selecting appropriate tools, components and equipment for required assembly tasks
- using appropriate handling procedures to minimise damage to components and/or assemblies
- using equipment safely to assemble and join products to job requirements using specified assembly and joining techniques
- checking assembly to ensure compliance
- handling and storing components, fabrications and assemblies.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- purpose of a sequence of operations
- application and function of assembly equipment, including jigs, fixtures and other appropriate tools
- safety precautions and operating characteristics of assembly equipment and tools
- application and limitations of different joining techniques
- surface preparation and joining techniques
- assembly tests/checks
- safe handling and storage procedures applicable to components, fabrications and/or assemblies
- potential damage that can occur to components, fabrications and assemblies through the use of inappropriate handling and/or unsafe storage procedures.

Assessment Conditions

- Assessors must:

- have vocational competency in perform sheet and plate assembly at least to the level being assessed with relevant industry knowledge and experience
- satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires
- Where possible assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

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