MEM08012 Prepare surfaces by abrasive blasting (basic)
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Modification History
Release 1. Supersedes and is equivalent to MEM08012B Prepare surfaces by abrasive blasting (basic)

Application
This unit of competency defines the skills and knowledge required to follow pre-determined procedures to perform, at a basic level of skill, surface preparation/cleaning on both ferrous and non-ferrous masonry and cementitious materials/components.

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

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

Where the selection and use of tools is required unit MEM18001 Use hand tools and unit MEM18002 Use power tools/hand held operations, should also be selected as appropriate.

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

Band: A
Unit Weight: 4

Pre-requisite Unit
MEM08016 Control blast coating by-products, materials and emissions
MEM11011 Undertake manual handling
MEM13003 Work safely with industrial chemicals and materials
MEM13015 Work safely and effectively in manufacturing and engineering
MEM16006 Organise and communicate information

Competency Field
Surface finishing
Elements and Performance Criteria

<table>
<thead>
<tr>
<th>Elements</th>
<th>Performance criteria</th>
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<tbody>
<tr>
<td>Elements describe the essential outcomes.</td>
<td>Performance criteria describe the performance needed to demonstrate achievement of the element.</td>
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<tr>
<td>1 Determine job requirements</td>
<td>1.1 Follow standard operating procedures (SOPs)</td>
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<td>1.2 Comply with work health and safety (WHS) requirements at all times</td>
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<td>1.3 Use appropriate personal protective equipment (PPE) in accordance with SOPs</td>
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<td>1.4 Identify job requirements from specifications, job sheets or work instructions</td>
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<td>2 Prepare to undertake work</td>
<td>2.1 Identify equipment to be used as per job requirements</td>
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<td>2.2 Obtain blasting media which meets job requirements</td>
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<td>2.3 Prepare worksite for surface cleaning activities</td>
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<tr>
<td>3 Set up equipment</td>
<td>3.1 Assemble, set up and correctly and safely prepare appropriate equipment and any required consumables in accordance with manufacturers’ specifications and workplace procedures</td>
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<td>3.2 Obtain specified rust inhibitor, including the specified amount, to reduce the rate of corrosion when using wet abrasive blast methods, as required</td>
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<td>3.3 Carry out pre-operational checks on equipment, and rectify faults or report for further action</td>
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<td>4 Prepare surfaces using abrasive blasting</td>
<td>4.1 Operate blasting equipment in accordance with procedures</td>
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<td>4.2 Undertake emergency shutdown procedures, as required</td>
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<td></td>
<td>4.3 Undertake work procedures to appropriate environmental requirements</td>
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<td>4.4 Carry out abrasive media disposal in accordance with environmental regulations and procedures</td>
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</table>
Elements describe the essential outcomes. Performance criteria describe the performance needed to demonstrate achievement of the element.

4.5 Disassemble, clean and inspect blasting equipment in accordance with manufacturers’ specifications

4.6 Record equipment faults and report in accordance with SOPs

5 **Inspect prepared surface**

5.1 Assess surface preparation for cleanliness and conformance with specifications

5.2 Rectify faults or defects where required and record inspection results and report in accordance with 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, accessibility of the item, and local industry and regional contexts) are included.

**Blasting process includes one (1) or more of the following:**

- water
- air steam
- grits
- blasting mediums

**Blasting media includes one (1) or more of the following:**

- abrasives
- shot
- glass beads
- sand
- steel shot
- garnet
- other mediums accepted by industry and all regulatory bodies
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, accessibility of the item, and local industry and regional contexts) are included.

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

- electric and diesel compressors
- blast pots
- blast rooms
- centrifugal blast machines
- water pressure washers to 35,000 kPa
- air hoses and nozzles
- specified hand and power tools

**Unit Mapping Information**

Release 1. Supersedes and is equivalent to MEM08012B Prepare surfaces by abrasive blasting (basic)

**Links**

Companion Volume implementation guides are found in VETNet - [https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49e10bb2](https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49e10bb2)