



Australian Government

MSFSS2003 Undertake surface preparation

Release: 1

MSFSS2003 Undertake surface preparation

Modification History

Release 1 - New unit of competency

Application

This unit of competency covers preparing surfaces, by hand or machine, for protective coatings, under-coatings and finishes using solvents.

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

Pre-requisite Unit

Competency Field

Unit Sector

Security Screens and Grilles

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1	Establish work requirements	1.1	Applicable work health and safety (WHS), legislative and organisational requirements relevant to surface preparation are verified and complied with
		1.2	Instructions, plans and/or work instructions are read and interpreted to identify processes and materials to complete work tasks
		1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition
		1.4	Where required, appropriate solvent and application method is selected to meet job specification
2	Prepare worksite and set up equipment	2.1	Worksite is prepared in accordance with surface cleaning activity

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| | | 2.2 | Appropriate equipment and any required consumables are assembled, set up and prepared in accordance with manufacturer specifications and organisational procedures |
| | | 2.3 | Hazards are recognised and steps adopted to ensure safety |
| 3 | Prepare surfaces using solvents as required | 3.1 | Surfaces are prepared for procedures |
| | | 3.2 | Safe working environment for solvent use is established according to regulatory requirements and organisational procedures |
| | | 3.3 | Solvents are applied |
| | | 3.4 | Treated surface is neutralised and made safe to handle |
| | | 3.5 | The area is made safe in accordance with organisational procedures |
| 4 | Prepare surfaces using mechanical means | 4.1 | Safe working environment for mechanical surface preparation is established according to regulatory requirements and organisational procedures |
| | | 4.2 | Surfaces are prepared to specifications using mechanical means |
| | | 4.3 | Adjustments are made, as required, to meet specifications |
| | | 4.4 | Surface preparation faults are rectified as necessary |
| | | 4.5 | Equipment used is cleaned and checked for damage and operational faults in accordance with organisational procedures |
| 5 | Ensure surfaces are adequately prepared and clean up | 5.1 | Surface preparation is assessed for cleanliness and conformance with specification |
| | | 5.2 | Any faults in the surface preparation are identified and action taken to remedy them in accordance with procedures |
| | | 5.3 | Problems are reported to a designated person |
| | | 5.4 | Records and documentation are completed in accordance with organisational procedures |
| | | 5.5 | Work area is restored and waste disposed of in accordance |

with organisational procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency. Detail on appropriate performance levels for each furnishing unit of competency in reading, writing, oral communication and numeracy utilising the Australian Core Skills Framework (ACSF) are provided in the Furnishing Training Package Implementation Guide.

Range of Conditions

Specifies 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. Range is restricted to essential operating conditions and any other variables essential to the work environment.

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| Unit context includes: | <ul style="list-style-type: none">• WHS requirements, including legislation, building codes, material safety management systems, hazardous and dangerous goods codes, and local safe operating procedures or equivalent• 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 some discretion, judgement and problem solving |
| Surface preparation includes: | <ul style="list-style-type: none">• the preparation of product material for finish coating, either powder coating or other paint type surface, through solvent or mechanical means• mechanical means include steel brush, file, and so on |
| Tools and equipment include: | <ul style="list-style-type: none">• files• hand rasps• hand finishing tools• power tools• jigs• power sanders |
| Materials include: | <ul style="list-style-type: none">• metal• aluminium• composite materials |
| Hazards include: | <ul style="list-style-type: none">• acids• hydrocarbons and other solvents as both liquid or vapour |

- moving equipment and machinery
- manual handling hazards
- Solvents include:**
 - acids
 - hydrocarbons
- Application of solvents includes:**
 - brush
 - spraying
 - wiping
 - dipping in a solvent bath
- Personal protective equipment includes:**
 - that prescribed under legislation, regulation and enterprise policies and practices
- Information and procedures include:**
 - workplace procedures relating to the use of tools and equipment and personal protective equipment
 - work instructions, including job sheets, cutting lists, plans, drawings and designs
 - workplace procedures relating to reporting and communication
 - manufacturer specifications and operational procedures

Unit Mapping Information

Supersedes and is equivalent to LMFSS2004A Undertake surface preparation.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>

Assessment Requirements for MSFSS2003 Undertake surface preparation

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Performance 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
- Identify materials used in the work process
- Follow work instructions, operating procedures and inspection processes to:
 - minimise the risk of injury to self or others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- Prepare a minimum of two (2) surfaces for powder coating or other finish without the need for further preparation
- Complete work area housekeeping activities, including clean up, effectively and in accordance with organisational procedures
- Use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- Communicate ideas and information to enable confirmation of work requirements and specifications and the reporting of work outcomes and problems, interpret basic plans and follow safety procedures
- Avoid backtracking, work flow interruptions or wastage
- Work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow and productivity

Knowledge Evidence

- Organisational and site standards, requirements, policies and procedures for the preparation of surfaces for coating
- Environmental protection requirements relating to the disposal of waste material
- Established communication channels and protocols
- Relevant problem identification and resolution
- Common surface contaminants
- Treatment for different substrates
- Types of tools and equipment and procedures for their safe use, operation and maintenance
- Safe handling of hazardous materials
- Storage systems and labelling

- Procedures for the recording, reporting and maintenance of workplace records and information

Assessment Conditions

- Assessors must:
 - hold training and assessment competencies as determined by the National Skills Standards Council (NSSC) or its successors
 - have vocational competency in the furnishing industry at least to the level being assessed with broad industry knowledge and experience, usually combined with a relevant industry qualification
 - be familiar with the current skills and knowledge used and have relevant, current experience in the furnishing industry.
- Assessment methods must confirm consistency of performance over time rather than a single assessment event and in a range of workplace relevant contexts.
- Assessment must be by observation of relevant tasks with questioning on underpinning knowledge and, where applicable, multimedia evidence, supervisor's reports, projects and work samples.
- Assessment is to be conducted on single units of competency or in conjunction with other related units of competency. Foundation skills are integral to competent performance in the unit and should not be assessed separately.
- Assessment must occur on the job or in a workplace simulated facility with relevant process, equipment, materials, work instructions and deadlines.
- Access is required to materials, equipment and specifications for surface preparation.

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