



Australian Government

Department of Education, Employment and Workplace Relations

LMFGG2010C Fabricate and install insect and security screens

Release: 1

LMFGG2010C Fabricate and install insect and security screens

Modification History

Updated format, revised Evidence Guide. Outcome equivalent.

Unit Descriptor

This unit of competency covers the skills and knowledge required to measure, fabricate and install insect screens, security doors and window grills.

Application of the Unit

This unit covers aluminium fabrication and installation activities generally performed individually or in a team environment, with general supervision or may be part of a production process. It involves discretion, judgement and problem solving in the fabrication and installation process.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

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|---|---|---|
| 1 | Plan for work | 1.1 Work requirements in the form of type of <i>insect or security screen</i> to be fabricated and installed are determined from work instructions including the identification of its pattern or plan |
| | | 1.2 Occupational health and safety (OHS) requirements for fabrication and installation of insect or security screens, including <i>personal protective equipment</i> , are observed throughout the work |
| | | 1.3 The suitable process for fabricating and installing insect or security screens is identified |
| | | 1.4 Quantities of <i>materials</i> required are calculated from plans and/or work instructions and/or by measuring the screen opening in accordance with Australian Standards and industry practice |
| | | 1.5 Cutting lists are prepared from plans, work instructions or measurements of opening to suit the type of screen to be installed |
| | | 1.6 <i>Fittings</i> , fixings and joining devices or materials are selected in accordance with specifications or type of materials to be joined or fixed |
| | | 1.7 <i>Tools and equipment</i> appropriate to the work method are identified and assembled for use |
| 2 | Prepare for work | 2.1 Work sequence is determined in a logical order to suit the job and <i>workplace procedures</i> |
| | | 2.2 Tools, equipment and materials are selected and checked prior to use to ensure they are appropriate for the work, serviceable and in a safe condition |
| | | 2.3 Components of the insect or security screen are checked against specifications or job order for size, quantity, finish and profile |
| 3 | Fabricate and install insect or security screen | 3.1 Materials are measured and marked to cutting list requirements and most economical use of materials |
| | | 3.2 Materials are cut and stamped to cutting list requirements in accordance with workplace procedures |

- or industry practice
- 3.3 Components of insect or security screen are assembled in accordance with recognised industry standards
 - 3.4 Fittings are installed to screen in accordance with workplace procedures or industry practice
 - 3.5 Insect or security screen is installed in opening in accordance with recognised industry standards
- 4 Complete work
- 4.1 Installed insect or security screen is inspected for quality of work and repaired, re-fabricated or reinstalled, as required in accordance with workplace procedures
 - 4.2 Material which can be reused is collected and stored
 - 4.3 Waste and scrap materials are removed for disposal or recycling, as required
 - 4.4 Work area is cleaned and rubbish disposed of, as appropriate
 - 4.5 Tools, equipment and unused materials are cleaned and removed and stored appropriately
 - 4.6 Workplace documentation is completed in accordance with workplace requirements

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

- collecting, organising and understanding information related to work orders, basic plans and safety procedures
- using communication skills to the level required to confirm work requirements and specifications; communicate effectively regarding work requirements with supervisors, other workers and customers; report work outcomes and problems; and relate to people from a range of social, cultural and ethnic backgrounds, and of varying physical and mental abilities
- using literacy skills to the level required to understand information related to work orders, including common industry terminology, plans and safety procedures; prepare reports; and interpret technical information and specifications
- planning and organising activities, including the preparation and layout of the work area, and the obtaining of equipment and materials to avoid any backtracking, workflow interruptions or wastage
- working with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- using mathematical ideas and techniques to correctly complete measurements, calculate work requirements, and optimise material sizes for economical cutting and assembling of required materials
- using pre-checking and inspection techniques to plan work, and avoid re-working and wastage
- using workplace technology related to the fabrication and installation of insect and security screens
- applying fixing techniques and procedures relating to the correct installation security screens, doors and window grills
- applying current Australian Standards and type testing procedures
- modifying activities to cater for variations in workplace contexts and environment

Required knowledge includes:

- workflow requirements in relation to the fabrication and installation of insect and security screens
- characteristics of materials used and uses of products produced
- workplace safety system requirements related to fabricating and installing insect and security screens
- correct identification of equipment, processes and procedures
- relevant Australian Standards

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the language, literacy and numeracy capacity of the candidate and the work being performed.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Assessors must be satisfied that the candidate can competently and consistently:</p> <ul style="list-style-type: none"> • plan the fabrication and installation of insect and security screens • interpret work order/job instruction and locate and apply relevant information to fabricate and install insect and security screens • apply safe handling requirements for equipment, products and materials, including use of personal protective equipment • follow work instructions, operating procedures and inspection practices to: <ul style="list-style-type: none"> • minimise the risk of injury to self and others • prevent damage to goods, equipment and products • maintain required product quality • as a minimum: <ul style="list-style-type: none"> • measure for security windows and doors • identify and select product materials used within the industry/workplace • fabricate frame and components, including optimisation of materials, cutting, tooling, drilling and/or crimping to ensure compliance to Australian Standards • identify, select and install component hardware, including wheels, hinges, guides and locks • assemble frames and/or grills to comply with Australian Standard requirements • calculate the cost of security screens and doors • work effectively with others.
Context of and specific resources for assessment	<p>The application of competency is to be assessed in the workplace or realistically simulated workplace.</p> <p>Assessment is to occur under standard and authorised work practices, safety requirements and environmental</p>

	<p>constraints.</p> <p>Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context.</p> <p>Assessment is to comply with relevant regulatory or Australian Standards requirements.</p> <p>The following resources should be made available:</p> <ul style="list-style-type: none"> • aluminium or other framing material • aluminium or other sheeting • fittings, fixing and fasteners • workplace operating procedures • personal protective equipment • an appropriate work area.
Method of assessment	<p>Assessment must satisfy the endorsed Assessment Guidelines of the LMF02 Furnishing Industry Training Package.</p> <p>Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge.</p> <p>Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure correct interpretation and application.</p> <p>Assessment may be applied under project-related conditions (real or simulated) and require evidence of process.</p> <p>Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.</p> <p>Assessment may be in conjunction with assessment of other units of competency.</p>
Guidance information for assessment	

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<i>Insect and security screens may include:</i>	<ul style="list-style-type: none"> • fixed • sliding and emergency exit grills to suit various commercial and domestic window types • sliding and hinged door applications
<i>Personal protective equipment includes:</i>	<ul style="list-style-type: none"> • that prescribed under legislation, regulation and Australian Standard policies and practices, and may include: <ul style="list-style-type: none"> • gauntlets • gloves • safety glasses • safety footwear • hard hats • aprons and overalls
<i>Materials are to include, but are not limited to:</i>	<ul style="list-style-type: none"> • extruded door framing • corner stakes • interlocks • fly mesh • security mesh • fittings and fixing/fasteners and anti-jemmy protection hardware
<i>Fittings include:</i>	<ul style="list-style-type: none"> • hinges • wheels • lock mechanisms that comply with Australian Standards • door closures and lock guards
<i>Tools and equipment may include:</i>	<ul style="list-style-type: none"> • assembly benches • drop and up-cut saws • pneumatic and manual presses • stamping and notching tools • copy routers • end millers • crimpers • electric and pneumatic powered drills and screwdrivers • pop rivet guns

	<ul style="list-style-type: none">• fly screen spline rollers• soft rubber mallets• knives• bolt cutters or mechanical shears
Workplace procedures include:	<ul style="list-style-type: none">• workplace procedures relating to the fabrication and installation of insect screens and security doors and windows• equipment or tool manufacturer specifications and operational procedures• work instructions, including job sheets, plans, drawings and designs• safety standards, including personal protective equipment, OHS regulations and enterprise requirements• Australian Standards

Unit Sector(s)

Glass and glazing

Custom Content Section

Not applicable.