



Australian Government

FWPCOT3267 Mechanically stress-grade engineered wood panels

Release: 1

FWPCOT3267 Mechanically stress-grade engineered wood panels

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 4.0.

Application

This unit of competency describes the skills and knowledge required to operate mechanical stress-graders or high-speed mechanical graders to test engineered wood panels for strength and durability in a manufacturing facility.

The unit applies to individuals who mechanically stress-grade engineered wood panels. Operators generally work under broad or limited direction to complete routine activities related to their own work and take responsibility for their work.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

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

Pre-requisite Unit

Nil

Unit Sector

Sawmilling and Processing
Timber Manufactured Products
Wood Panel Products

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for stress-grading	1.1 Review work order, workplace health and safety requirements, environmental protection practices and emergency procedures for

Elements	Performance Criteria
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engineered wood panels	mechanically stress-grading operation and, where required, check with appropriate personnel 1.2 Identify and report hazards and use personal protective equipment according to workplace requirements and health and safety legislative requirements to maintain safe work practices 1.3 Obtain the type and quantity of engineered wood panels for stress-grading from a storage location
2. Set up mechanical grading equipment	2.1 Use equipment according to workplace safety procedures, manufacturer instructions and environmental protection practices 2.2 Complete pre start-up checks on equipment to ensure operational effectiveness 2.3 Set up spray guns or branding rolls for use according to work order 2.4 Complete calibration process using verification panels, and set grade thresholds according to workplace procedures
3. Stress-grade engineered wood panels	3.1 Complete automatic grading process, monitor and adjust the material flow to machine 3.2 Monitor machinery to ensure consistent grade marking and panel appearance according to industry standards 3.3 Withdraw samples for independent testing and prepare according to testing procedures
4. Conduct operator maintenance	4.1 Lock out equipment according to workplace health and safety procedures 4.2 Check and clean photo-electric cells and reflectors according to environmental protection practices 4.3 Check and refill spray guns or branding rolls 4.4 Adjust and maintain mechanical stress-grade rollers, auto-feed and load pressure according to manufacturer recommendations 4.5 Keep stress-grading area clear of dust and debris according to workplace health and safety procedures 4.6 Record and report production outcomes, equipment faults and maintenance requirements to appropriate personnel

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	Identify quantities of engineered wood panels required within work orders, and count numbers of engineered wood panels to be graded
Navigate the world of work	Understand main tasks, responsibilities and boundaries of own role
Interact with others	Use modes of communication suitable for the purpose to confirm and clarify understanding
Get the work done	Recognise and respond to routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPCOT3267 Mechanically stress-grade engineered wood panels	FWPCOT3229 Mechanically stress grade panels	Updated industry terminology, workplace health and safety requirements and foundation skills; clarified intent of the unit and assessment requirements; changed unit title and code for compliance and consistency with the updates.	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPCOT3267 Mechanically stress-grade engineered wood panels

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Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that, on at least one occasion, the individual has:

- followed workplace health and safety requirements and environmental protection procedures for stress-grading engineered wood panels mechanically
- operated a mechanical stress-grading machine according to work orders and manufacturer recommendations to grade one or more of the following types of engineered wood panels:
 - laminated veneer
 - medium density fibreboard
 - chipboard
 - fibreboard
 - plywood
- completed operator maintenance on the mechanical stress-grading equipment.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- health and safety hazards or risks related to mechanical stress-grading of engineered wood panels as identified through risk assessments, manufacturer technical information, regulations and industry health and safety guides
- workplace procedures specific to mechanically stress-grading engineered wood panels:
 - health and safety, with particular emphasis on equipment lockout, use of personal protective equipment (PPE) and handling hazardous substances
 - use of mechanical grading equipment
 - communication reporting lines
 - recording and reporting production outcomes, equipment faults and maintenance requirements

- environmental protection practices for timber manufacturing facility settings:
 - reducing water and energy use
 - cleaning plant, tools and equipment
 - disposing of hazardous substances
- typical flow of material supply in and out of the grading area
- typical workflow processes and techniques used to stress-grade engineered wood panels mechanically
- range of industry standard strength grades and thresholds for engineered wood panels and applicable terminology
- markings used on engineered wood panels to identify grades
- reason for independent testing of engineered wood panels and processes for sampling and preparing engineered wood panels for testing
- purpose, features and operation of equipment used to stress-grade panels mechanically:
 - mechanical stress-graders or high-speed mechanical graders
 - spray guns
 - branding rolls
 - verification panels
- methods used to:
 - calibrate equipment to grades using verification panels
 - clean and maintain mechanical stress-grading equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - mechanical stress-graders or high-speed mechanical graders
 - spray guns
 - branding rolls
 - maintenance tools and equipment for mechanical stress-graders
 - verification panels
 - consumable dye
 - PPE suitable for stress-grading engineered wood panels mechanically
 - engineered wood panels suitable for mechanical stress-grading operations
- specifications:
 - manufacturer instructions for use and maintenance of mechanical grading equipment
 - work order with specific instructions for types and quantities of engineered wood panels to be graded

- template documents for recording production outcomes, equipment faults and maintenance requirements
- workplace procedures for mechanically stress-grading engineered wood panels, including health and safety and emergency procedures and environmental protection procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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