Modification history

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

| UNIT CODE | FWPCOT3XXX Mechanically stress grade engineered wood panels |
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| 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 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. |
| Prerequisite Unit | Nil |
| Unit Sector | Sawmilling and Processing  Timber Manufactured Products  Wood Panel Products |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare for stress-grading engineered wood panels | 1.1 Review work order, workplace health and safety requirements, environmental protection practices and emergency procedures for mechanically stress grading operation and where required check with appropriate personnel  1.2 Identify and report hazards and use personal protective equipment (PPE) in line with workplace requirements and health and safety legislative requirements to maintain safe work practices  1.3 Obtain type and quantity of engineered wood panels for stress grading from storage location |
| 2. Set up mechanical grading equipment | 2.1 Use equipment in line with 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 in line with work order  2.4 Complete calibration process using verification panels and set grade thresholds in line with workplace procedures |
| 3. Stress grade engineered wood panels | 3.1 Complete automatic grading process, monitor and adjust material flow to machine  3.2 Monitor machinery to ensure consistent grade marking and panel appearance in line with industry standards  3.3 Withdraw samples for independent testing and prepare according to testing procedures |
| 4. Conduct operator maintenance | 4.1 Lock out equipment in line with workplace health and safety procedures  4.2 Check and clean photo-electric cells and reflectors in line with 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 in line with manufacturer recommendations  4.5 Keep stress-grading area clear of dust and debris in line with 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. | |
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| Skill | Description |
| Numeracy | * identify quantities of engineered wood panels required within work orders and count numbers of 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 to purpose to confirm and clarify understanding |
| Get the work done | * recognise and respond to routine problems |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FWPCOTXXX 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 |

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

| TITLE | Assessment requirements for FWPCOT3XXX Mechanically stress grade engineered wood panels |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements, performance criteria and foundation skills of this unit. There must be evidence that, on at least one occasion, the individual has:   * operated a mechanical stress grading machine in line with work orders to grade 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 |
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| 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 lock out, use of personal protective equipment 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 work flow processes and techniques used to mechanically stress grade engineered wood panels * 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 panels for testing * purpose, features and operation of equipment used to mechanically stress grade panels: * 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 |
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| 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 * personal protective equipment suitable for mechanically stress grading engineered wood panels * a diverse range of commercial engineered wood panels including laminated veneer, medium density fibreboard, chipboard, fibreboard, plywood * 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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