Modification history

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| Release | Comments |
| Release 2 | This version released with FWP Forest and Wood Products Training Package Version 5.0. |
| Release 1 | This version released with FWP Forest and Wood Products Training Package Version 2.0. |

| FWPCOTXXXX | Visually stress grade hardwood |
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| Application | This unit of competency describes the skills and knowledge required to visually stress grade hardwood structural products for strength against set classifications detailed in Australian Standard AS2082 as a minimum standard.  The unit applies to those who visually stress grade hardwood in a timber processing or manufacturing facility.  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 | 1.1 Review work order to determine job requirements and where required seek clarification from appropriate personnel  1.2 Identify and apply workplace health and safety requirements, including use of personal protective equipment and safe manual handling techniques  1.3 Identify, assess and take actions to mitigate risks and hazards associated with visual stress grading of timber  1.4 Identify and implement workplace procedures for minimising waste material and maximising energy efficiency  1.5 Identify grading requirements according to workplace procedures, standards and specifications  1.6 Select materials, hardware items, tools and equipment appropriate to work order and check for operational effectiveness  1.7 Position hardwood to be graded to provide appropriate access and facilitate efficient workflow  1.8 Establish and maintain communication with others at workplace to ensure safety  1.9 Identify routine processing problems and resolve or report to appropriate personnel |
| 2. Evaluate hardwood | 2.1 Identify species and defects and check status of seasoning  2.2 Accurately record size and tolerance measurements according to workplace requirements  2.3 Establish characteristics and evaluate according to standards and product specifications  2.4 Measure moisture content and evaluate against standards and seasoning requirements |
| 3. Grade hardwood | 3.1 Visually stress grade hardwood based on standards for the required structural grade  3.2 Diagnose and check characteristics with the greatest limiting effect on the grade  3.3 Assess the appearance, mark and segregate substandard material for disposal, reuse or recycling according to workplace procedures and environmental requirements  3.4 Despatch graded material to appropriate storage location  3.5 Record and report results of grading according to workplace procedures |

| 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 | * Estimate sizes of hardwood * Measure sizes of hardwood |
| Navigate the world of work | * Identify 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 |
| FWPCOT2215 Visually stress-grade hardwood  Release 2 | FWPCOT2215 Visually stress grade hardwood  Release 1 | Reworded knowledge evidence. | Equivalent |

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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 FWPCOT2215 Visually stress-grade hardwood |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all the elements and performance criteria in this unit. There must be evidence that, on at least on one occasion, the individual has visually stress grade hardwood and has:   * prepare for visual stress grading of hardwood * evaluated and visually stress graded hardwood in readiness for processing or storage * followed work order for visually stress grading hardwood * accurately identified characteristics and defects in hardwood * accurately interpreted grading standards and specifications * worked safely and communicated effectively with others at workplace * followed workplace procedures and standards for visually stress grading hardwood * recorded and reported grading activity. | |

| 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:   * national standards for visual stress grading of hardwood structural products * types of timber products that are visually stress graded: * native and imported structural hardwoods * seasoned and unseasoned structural hardwoods * native and imported structural softwoods * ticker seasoned and unseasoned structural softwoods * importance of stress grading timber products * visual grading rules for strength as outlined in national standards for hardwoods * sorting method used to stress grade timber products including the relationship between sorting categories: * strength group (inherent strength of timber species, seasoned and unseasoned) * structural grades (quality of timber / visual grade) * strength or stress grade * visual stress-grade classification (F and A stress grade systems) as outlined in national standard for hardwoods * grade descriptions (limits on the size and position of physical characteristics) as outlined in national standard for hardwoods * physical characteristics of hardwood timber that need to be checked for visual stress grading: * strength limiting characteristics * utility limiting characteristics * grading markings and standards * storage systems and labelling procedures * criteria for recycling and re-using sub-standard hardwood structural products * disposal methods for timber with defects or contamination, including recycling, reusing and redirecting * types of risks and hazards and control measures associated with visual stress grading of timber * workplace procedures for visual stress grading of timber: * health and safety with particular emphasis the use of personal protective equipment (PPE) and safe manual handling techniques * workplace communication channels and protocols * recording and reporting grading outcomes * strategies for identifying and resolving problems. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a timber processing or manufacturing facility or an environment that accurately represents workplace conditions * resources, equipment and materials: * hardwood for visual stress grading * vernier callipers * moisture meters (resistance and/or capacitance) * tapes * marking implements * PPE required for visual stress grading of timber * specifications: * work order with specific instructions for visually stress grading hardwood * workplace procedures for visually stress grading hardwood * regulations, standards, codes of practice and established safe practices including Australian Standard AS2882.   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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