Modification history

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| Release | Comments |
| Release 2 | This version released with FWP Forest and Wood Products Training Package Version 4.0.  Version created to update industry terminology, workplace health and safety requirements and foundation skills and to clarify intent of unit and assessment requirements. |
| Release 1 | This version replaces equivalent unit FPIWPP3219B Blend and test binding mixes, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2.  This is the first release of this unit in the new standards format. |

| UNIT CODE | FWPWPP3219 Blend and test binding mixes |
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| Application | This unit of competency describes the skills and knowledge required to blend and test binding mixes used in the production of engineered wood panels.  The unit applies to individuals who work as production operators and technicians in an engineered wood panel facility. 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 | 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 blending binding mix | 1.1 Review work order, workplace health and safety requirements, environmental protection practices and emergency procedures for blending binding mix 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 legislation to maintain safe work practices  1.3 Obtain type and quantity of binding mix for blending from storage  1.4 Select and plan blending process in line with work order |
| 2. Set up equipment and blend binding mix | 2.1 Use equipment in line with workplace health and safety procedures, manufacturer instructions and environmental protection practices  2.2 Set blend cycles in line with work order  2.3 Measure ingredients and additives and blend to ensure minimum wastage  2.4 Transfer blend to appropriate storage location or production equipment through transfer lines without contamination  2.5 Monitor rate of including additives and where required adjust pumps |
| 3. Test binding mix results | 3.1 Test blend samples regularly, checking tack and adhesion properties  3.2 Interpret test results and where required adjust blend to achieve desired properties  3.3 Reject and dispose of incorrect blend in line with environmental protection practices |
| 4. Maintain and clean equipment | 4.1 Clean blending, storage and transfer equipment in line with workplace health and safety procedures  4.2 Turn off pumps and flush equipment in line manufacturer instructions  4.3 Dispose of excess blended material and additives in line with environmental protection practices  4.4 Store equipment and ingredients in line with workplace health and safety procedures  4.5 Record and report production outcomes and equipment faults 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 |
| Reading | * interpret safety data sheets |
| Numeracy | * identify quantity of ingredients to meet work order production requirements and count amounts * calculate routine mixing ratios for blends * interpret numerical data from binding mix test samples |
| 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 |
| FWPWPP3219 Blend and test binding mixes | FWPWPP3219 Blend and test binding mixes | 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 FWPWPP3219 Blend and test binding mixes |
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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:   * followed workplace health and safety requirements and environmental protection procedures for blending binding mix used in the production of engineered wood products * prepared binding mixes in line with individual work orders that prescribe varying quantities for each job; binding mixes are to be prepared from different types of materials which includes: * chips * flakes * fibre * across the above jobs, demonstrated use of water and resin based glues * for each of the above jobs, taken samples and test mix for types of properties which includes: * mix quantities * viscosity * colour * spread * tack * cured bond strength * setting speed * how weather conditions may be affecting the process. | |

| 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 blending binding mix for the production of engineered wood products as identified through risk assessments, manufacturer technical information, regulations and industry health and safety guides * workplace procedures specific to blending and testing mixes: * health and safety with particular emphasis on equipment lock out, emergency procedures, use of personal protective equipment and handling hazardous substances * use of equipment for blend binding mix * communication reporting lines * recording and reporting production outcomes and equipment faults * environmental protection practices for blending and testing binding mixes: * reducing water and energy use * cleaning plant, tools and equipment * disposing of hazardous substances * storage layout and categories for: * raw materials * finished mixes * typical flow of material supply in and out of the mixing area * typical work flow processes for blending and testing binding mixes * properties, at a basic level of understanding, of ingredients and their uses: * rubber based adhesives * poly vinyl acetate * epoxy resins and formaldehydes * chips * flakes or fibre * hardeners * softeners * accelerants * decelerators * dyes * effects of weather conditions on blending processes * methods used to: * blend binding mix * test samples of mix * safely store glue and additives * purpose, features, operation and basic non-specialist maintenance of mixing systems used to blend binding mix: * mixers with manually controlled feed * mixers with pre-programmed mix quantities. |

| 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: * blending system with transfer pumps * personal protective equipment suitable for blending and testing mixes * ingredients for binding mix including chips, flakes or fibre * specifications: * recipes for mixing ingredients * manufacturer safety data sheets, instructions for equipment use, recommendations for maintaining equipment * work order with specific instructions for blending binding mixes * template documents for recording production outcomes and equipment faults * workplace procedures for blending and testing mixes including health and safety and emergency procedures and environmental protection procedures * relationships: * relevant personnel for the purposes of communicating information.   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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