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 | FWPTMM3XXX Apply critical workplace processes in the off-site manufacture of timber building systems |
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| Application | This unit of competency describes the skills and knowledge required to conduct production tasks on an assembly line for panelised or modular prefabricated timber building systems safely and efficiently. Critical workplace processes covered in this unit include workplace health and safety, storage and handling of building materials for major timber building subassemblies, quality check at the workstations before and after assembly work and control of waste material for disposal. The unit applies to individuals who work as operators in a prefabricated timber building systems manufacturing plant. These include wood machinists, carpenters or joiners, supervisors and other trade and multi-skilled operators. 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 occupational licensing, legislative or certification requirements apply to this unit at the time of publication.  |
| Prerequisite Unit | Nil  |
| Unit Sector | Timber Manufactured 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. Apply workplace health and safety during assembly operation | 1.1 Obtain and review workplace health and safety requirements and emergency procedures for assembly operation and where required check with appropriate personnel1.2 Use personal protective equipment (PPE) and identify and report hazards, accidents, incidents and/or near misses throughout assembly operation in line with workplace requirements and health and safety legislation to maintain safe work practices |
| 2. Store and handle building materials for major subassemblies  | 2.1 Use the storage system provided for tools, equipment and building materials to enhance safety, material protection, accessibility, storage efficiency, visibility and replenishment of commonly used resources2.2 Ensure that large subassemblies and materials are stagged in line with workplace procedures for ease of access, optimal use of floor space and production efficiency |
| 3. Check quality of building materials before assembly work begins | 3.1 Obtain and review task-specific information including design and production documents to ensure that product quality and production schedules and targets are met and materials used are conforming building products3.2 Receive building materials, elements, components, fixings and sub-assemblies from previous work at the point of storage, check quantity, relevant product certification and quality, including that product is fit-for-purpose, and assemble as required to meet design specifications, standards, codes, certification and production schedule3.3 Ensure partition walls, floor elements and other regulated components are tested and certified for thermal, acoustic and fire properties according to the design, local codes and standards 3.4 Report any incorrect information, unsuitable and non-conforming building materials or resources and incoming defects to appropriate personnel for repairing the defect, resolving its root cause and preventing recurrence 3.5 Check sub-assemblies and record incoming variations from design specifications, work processes or equipment and address or report to the appropriate personnel following workplace procedures by ensuring that the work can be completed at the required quantity, quality and timeframe |
| 4. Check quality of completed subassembly  | 4.1 Complete the assembly work to design specifications with respect to strength, thickness, tolerances, continuity/discontinuity of materials, systems and services and choice of materials and properties4.2 Identify any safety risks associated with manual handling of completed subassembly or prefabricated timber building system and correct them before release to next workstation or delivery for on-site installation 4.3 Document and report time, product variations and work processes to identify non-value added activities, delays and inefficiencies and initiate process improvement |
| 5. Prepare waste materials for disposal  | 5.1 Sort and store waste materials from assembly work for being collected, reused or disposed in line with workplace procedures  |

| Foundation SkillsThis 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 | * read a range of workplace documentation including workplace health and safety plans, materials certification, design and production documents
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| Numeracy | * calculate quantity, length, volume, area and waste associated with assembly of prefabricated timber building systems
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| Navigate the world of work | * take responsibility for decisions made to meet specifications and workplace requirements
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| Interact with others  | * understand what to communicate, with whom and how in routine work situations
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| Get the work done | * take responsibility for planning and organising own workload
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| Unit Mapping Information |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FWPTMM3XXX Apply critical workplace processes in the off-site manufacture of timber building systems | Not applicable | New unit | Not applicable |

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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 FWPTMM3XXX Apply critical workplace processes in the off-site manufacture of timber building systems |
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| Performance Evidence |
| An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that, on at least three occasions, the individual has completed the following activities for one or more panelised or modular prefabricated timber building system types including:* cross laminated timber floor and wall systems
* post and beam systems (Glulam, laminated veneer lumber)
* panelised floor cassette systems
* panelised wall systems (including cladding, insulation, windows or doors)
* panelised and pre-finished wall system (inclining above, electrical, plumbing, mechanical or lining)
* pre-finished and fully finished timber-based modules
* implemented workplace health and safety procedures and practices at the assembly workstation
* demonstrated safe and efficient work practice for storing and handling building materials and sub-assemblies in line with workplace procedures
* reviewed design and production documents and understood assembly work requirements regarding quality, quantity and production schedules and targets
* checked the quality of building materials and sub-assemblies from previous work against design specifications and certification requirements before commencing the assembly work
* checked completed subassembly or prefabricated timber building system against specifications and safe manual handing before being released to the next workstation or delivered for on-site installation
* documented and reported time and product variations, defects and work processes efficiently and in line with workplace procedures
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| 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:* task-specific information and requirements contained in drawings, design specifications, production schedules, work method statements, risk assessments and manufacturer information
* health and safety hazards or risks related to the assembly activity and as identified through risk assessments, manufacturer technical information, regulations and industry health and safety guides including:
* lifting and handling of large building materials and sub-assemblies including the use of tools and handling equipment
* methods of work
* product storage
* workplace health and safety procedures and practices related to the assembly activities including:
* emergency response procedure and responsibilities when involved with fires, spillages and injuries relating to occupational activities
* accident reporting procedures and responsibilities
* safe use of personal protective equipment (PPE)
* efficient storage of building materials and replenishment systems in off-site manufacture of prefabricated timber building systems
* methods for efficient handling and stagging of large timber building subassemblies and materials at workstations along assembly lines
* types, quantity, quality, sizes, fit-for-purpose and sustainability of building materials, services components including hydraulics, electrical or heating, ventilation and air conditioning (HVAC), wood structural components and fixings associated with a range of prefabricated timber building systems and their final application
* jurisdictional standards, codes and certifications for building materials, services, components and fixings in the location where prefabricated timber building systems are installed
* regulated components, including partition walls and floor elements, and valid documentation for attesting compliance with thermal, acoustic and fire requirements
* acceptable tolerances and continuity or discontinuity requirements for materials, insulation systems and services related to a range of prefabricated timber building systems; the importance for on-site installation and in-service life cycle
* workstations or operations associated with a particular production line for prefabricated timber building systems; order of sequence or flow of sub-assembled products and information between process activities
* bottleneck operations and root causes for delays or inefficiencies including product design variations and rework due to damage, material unavailability, poor quality, incorrect stagging in the subassembly area, design questions or errors
* methods for and importance of reporting incorrect information, unsuitable building material resources, incoming defects and design variations
* elements associated with manual handling hazards and risks of completed timber building systems including:
* cut metal edges
* exposed screw tips and nails
* abrasion of insulation materials resting on metal edges
* pinch points in connections
* surfaces which can retain rainwater
* methods for sorting and storing waste materials
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| Assessment Conditions |
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| Assessment of skills must take place under the following conditions: * physical conditions:
* skills must be demonstrated in a workstation on an assembly line for prefabricated timber building systems or an environment that accurately represents workplace conditions
* resources, equipment and materials:
* specialised tools and material handling equipment for operational activity
* building materials and subassemblies related to different prefabricated timber building systems
* personal protective equipment used in off-site manufacture of prefabricated timber building systems
* specifications:
* access to drawings, design documentation, production schedules and targets, method statements, risk assessments, workplace health and safety procedures, manufacturer information, certification for regulated building material and building regulations
* access to emergency procedures
* access to template for documenting and reporting issues regarding product quality and time and process variations
* relationships:
* production personnel with whom the individual can interact
* timeframes:
* according to time specified in production schedule

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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