



**Australian Government**

# **FWPTMM3208 Apply critical workplace processes in the manufacture of prefabricated timber building systems**

**Release: 1**

# FWPTMM3208 Apply critical workplace processes in the manufacture of prefabricated timber building systems

## 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 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 sub-assemblies, 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 their own work, and take responsibility for their work.

In order to undertake this unit, individuals must have a relevant qualification or equivalent.

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.

## Pre-requisite Unit

Nil

## Unit Sector

Timber Manufactured 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. Apply workplace health and safety during the assembly operation     | <p>1.1 Obtain and review workplace health and safety requirements and emergency procedures for assembly operation and, where required, check with appropriate personnel</p> <p>1.2 Use personal protective equipment and identify and report hazards, accidents, incidents or near misses throughout assembly operation according to workplace requirements and health and safety legislation to maintain safe work practices</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 2. Store and handle building materials for major sub-assemblies        | <p>2.1 Use the storage system provided for tools, equipment and building materials to enhance accessibility, protect material, and replenishment of commonly used resources</p> <p>2.2 Ensure that large sub-assemblies and materials are positioned according to workplace procedures for ease of access and safety, enabling optimal use of floor space and production efficiency</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 3. Check the quality of building materials before assembly work begins | <p>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 that materials used conform to building products</p> <p>3.2 Access building materials from storage, check the suitability for the task, quantity, relevant product certification and quality and assemble as required to meet design specifications, standards, codes, certification and production schedule</p> <p>3.3 Ensure partition walls, floor elements and other regulated components are certified for thermal, acoustic and fire properties according to the design, local codes and standards</p> <p>3.4 Report any incorrect information and unsuitable and non-conforming building materials to appropriate personnel for repairing the defect, resolving its cause and preventing recurrence</p> <p>3.5 Access sub-assemblies from storage and check incoming variations in work processes or in design and equipment specifications</p> <p>3.6 Address or report incoming variations to the appropriate personnel</p> <p>3.7 Follow workplace procedures to ensure that the work is of the required standard and completed on time</p> |
| 4. Check the quality of completed sub-assembly product and process     | <p>4.1 Complete and check the quality of the assembly work to ensure it meets design specifications</p> <p>4.2 Identify and rectify safety risks associated with manual handling of completed sub-assembly or prefabricated timber building system before its release to the next workstation or its delivery for on-site installation</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| Elements                                         | Performance Criteria                                                                                                                                                                   |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                 |
|                                                  | 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. Assess waste materials for reuse or disposal  | 5.1 Sort and store waste materials from assembly work according to health and safety procedures<br>5.2 Prepare waste materials for reuse or disposal 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.*

| Skill                      | Description                                                                                                                                                                                    |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading                    | <ul style="list-style-type: none"><li>Read a range of workplace documentation, including workplace health and safety plans, materials certification, design and production documents</li></ul> |
| Numeracy                   | <ul style="list-style-type: none"><li>Calculate quantity, length, volume, area and waste associated with the assembly of prefabricated timber building systems</li></ul>                       |
| Navigate the world of work | <ul style="list-style-type: none"><li>Take responsibility for decisions made to meet specifications and workplace requirements</li></ul>                                                       |
| Interact with others       | <ul style="list-style-type: none"><li>Understand what to communicate, with whom and how in routine work situations</li></ul>                                                                   |
| Get the work done          | <ul style="list-style-type: none"><li>Take responsibility for planning and organising own workload</li></ul>                                                                                   |

## Unit Mapping Information

| Code and title current version         | Code and title previous version | Comments | Equivalence status |
|----------------------------------------|---------------------------------|----------|--------------------|
| FWPTMM3208<br>Apply critical workplace | Not applicable                  | New unit | No equivalent unit |

|                                                                       |  |  |  |
|-----------------------------------------------------------------------|--|--|--|
| processes in the manufacture of prefabricated timber building systems |  |  |  |
|-----------------------------------------------------------------------|--|--|--|

## 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 FWPTMM3208 Apply critical workplace processes in the manufacture of prefabricated timber building systems

### Modification History

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

### 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 three occasions, the individual applied critical workplace processes in the manufacture of prefabricated timber building systems 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 systems (inclining above, electrical, plumbing, mechanical or lining)
- pre-finished and fully finished timber-based modules.

In doing the above, the individual has:

- 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 according to 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 sub-assembly or prefabricated timber building system against specifications and safe manual handling 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 according to workplace procedures.

## 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:

- 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 the off-site manufacture of prefabricated timber building systems
- methods for efficient handling and positioning of large timber building sub-assemblies and materials at workstations along assembly lines
- aspects of design specifications for a range of prefabricated timber building systems and their final application:
  - types, quantity, quality, sizes, suitability and sustainability of building materials including wood structural components and fixings; choice of materials and properties
  - services components including hydraulics, electrical or heating, ventilation and air conditioning
  - 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 causes for delays or inefficiencies, including product design variations and rework due to damage, material unavailability, poor quality, incorrect positioning in the sub-assembly 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 that can retain rainwater
- methods for sorting and storing waste materials.

## Assessment Conditions

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 the operational activity
  - building materials and sub-assemblies related to different prefabricated timber building systems
  - PPE used in the 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 templates for documenting and reporting issues regarding product quality and time and process variations
- timeframes:
  - according to the time specified in the production schedule.

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

## Links

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