Modification history

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

| UNIT CODE | FWPTMM3XXX Install prefabricated timber building systems on-site |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to position and connect panelised or modular prefabricated timber building systems safely and correctly during on-site installation. The unit applies to individuals who work in the occupational area of installing prefabricated timber building structures. These include construction workers, carpenters or joiners and site supervisors. They generally work under broad or limited direction to complete routine activities related to own work and take responsibility for their work.This unit does not cover or replace trade skills required in construction operations but is to be used in conjunction with construction trade qualifications. 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 |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Apply workplace health and safety during on-site installation  | 1.1 Obtain all workplace health and safety information including safe work method statements (SWMS) and fire prevention and emergency procedures to ensure that activities are performed in compliance with workplace-specific and safe work requirements 1.2 Identify workplace and task-specific hazards nd report accidents, incidents or near misses through on-site installation in line with workplace health and safety requirements to maintain a safe workplace1.3 Identify and use required risk-control and safety measures and equipment, including, among other items, any required signs and barricades, personal protective equipment (PPE), and fall prevention and fall arrest equipment in line with workplace health and safety requirements |
| 2. Plan and prepare for installation work | 2.1 Obtain and review relevant workplace information including task instructions, drawings, design specifications, schedules and manufacturer information and seek clarification if necessary2.2 Confirm installation timeframe and sequence with relevant stakeholders or personnel to meet design specifications and on-site work schedules2.3 Review drawings and design specifications to identify type, location and quantity requirements for fixings, connections and bracing 2.4 Check building structure, slab or floor area and report non-conformance to appropriate personnel or in line with operational requirements2.5 Select tools, auxiliary materials and equipment for the installation of prefabricated timber building systems as required, and set-up equipment to meet safe work requirements 2.6 Obtain information required to ensure that the inspection, use, maintenance and storage of equipment complies with manufacturer directions2.7 Maintain appropriate ongoing communications and briefings with key stakeholders, including feedback and timeline reviews, for the duration of the installation |
| 3. Check prefabricated timber building systems logistics and storage on-site | 3.1 Ensure prefabricated timber building systems are delivered on-site in-line with the phase of the construction project and installation3.2 Ensure prefabricated timber building systems are stored as close as practically possible to the construction site when storage is required, and there is no risk of damage by weather (moisture), traffic or general construction 3.3 Check prefabricated timber building systems, connections and support points for quantity, quality, tolerance compliance and conformance and damage upon delivery and report issues to the appropriate personnel or in line with operational requirements |
| 4. Install prefabricated timber building systems | 4.1 Use tools and equipment safely and correctly in line with operational requirements and manufacturer specifications to measure, mark out, level, finish and secure prefabricated timber building systems in line with specifications 4.2 Assist crane or dogger operators to lift prefabricated timber building systems in the sequential order and apply accurate placement and connection techniques to the required tolerances and specifications4.3 Check corners and walls for being accurately levelled, plumbed and square according to specifications and operational requirements4.4 Check prefabricated timber building systems after installation and apply sealants as required to ensure compliance with fire, waterproofing and acoustic requirements and with design specifications4.5 Protect prefabricated timber building systems from damage during the installation work and other worksite activities and adverse weather conditions |
| 5. Complete installation | 5.1 Complete installation within the required timeframe and in line with on-site work schedules5.2 Maintain and store hand and power tools, equipment and machinery in line with operational requirements5.3 Keep work area and access areas free of debris and waste material in line with operational requirements5.4 Record any quality checks and changes or variations applied to a prefabricated timber system during the on-site installation work, in line with operational requirements |

| 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. |
| --- |
| Skill | Description |
| Navigate the world of work | * take responsibility for decisions made to meet design specifications and installation, storage and worksite requirements
 |
| Interact with others  | * understand what to communicate, with whom and how in routine work situations
* provide relevant information to others as required
 |
| Get the work done | * take responsibility for planning and organising own workload
* assess effectiveness in terms of how well the work was achieved and how closely the process followed the original plan and timeframes
* consider how to link with the work of others
 |

|  |
| --- |
| Unit Mapping Information |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FWPTMM3XXX Install prefabricated timber building systems on-site | Not applicable | New unit | Not applicable |

|  |  |
| --- | --- |
| 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 Install prefabricated timber building systems on-site |
| --- | --- |
| 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 two 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, mechanical, plumbing or lining)
* pre-finished and fully finished timber-based modules
* complied with health and safety requirements and regulations applicable to workplace operations
* identified design requirements and installation sequence of prefabricated timber building systems
* identified and selected correct fittings, connections, tie-downs and braces for the installation of prefabricated timber building systems
* checked suitability of building structure, slab or flor area for the installation of prefabricated timber building systems
* applied workplace quality procedures and processes in the context of installing prefabricated timber building systems
* selected and used processes, tools and equipment for measuring, marking out, levelling and securing prefabricated timber building systems into place
* placed prefabricated timber building system safely, efficiently and to required tolerances and installed connectors to required specifications
* checked that walls and corners are accurately levelled, plumbed, square and structurally and fire safety
* identified typical faults and problems and rectified faults
* communicated efficiently with others, exchanging feedback and timeline reviews.
 |

| 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:* relevant, current health and safety legislative obligations and workplace procedures as outlined in industry health and safety guides and site workplace health and safety plans
* hazards associated with the construction work and as identified through SWMS, risk assessments, manufacturer technical information, regulations and industry health and safety guides, including but not limited to:
* building systems and components
* methods of work
* waste material
* risk of fire
* power lines
* cabling and plumbing
* drains covered correctly
* access and egress
* fire prevention, emergency procedures, evacuation, use of PPE, signs and barricades, personal protective equipment (PPE), fall prevention and fall arrest equipment and other mitigation methods for reducing the risk from fire and other hazards on a construction site as defined in the National Construction Code (NCC) and site safety plan
* type of task-specific documents, their source, information included and how they are read and interpreted with reference to:
* drawings
* design specifications
* on-site workflow, schedules and targets
* method statements
* risk assessments
* progress charts and timetables
* manufacturer information
* product certifications
* building regulations
* basic design and offsite manufacture processes for prefabricated timber building systems for recognising problems that arise from missing information, damaged or faulty prefabricated timber building systems and understanding methods to resolve them
* installation design specifications for different prefabricated timber building systems with reference to:
* installation sequence
* lifting equipment, support connections and techniques
* bracing techniques
* technical properties and specific requirements of materials, elements, components, insulations, connections
* mechanical fixings, tie-downs and braces, connection strengths and installation tolerances
* building checks before prefabricated timber building system installation and the importance of checking
* testing and checking of prefabricated timber building systems for quality assurance:
* required tests for different prefabricated timber building system and methods to undertake them
* test sampling and frequency of testing within a managed process
* specialised tools and equipment for installation and fixing of different prefabricated timber building systems and methods of operation
* methods for measuring and calculating the quantity, length, area, centre of gravity and mass of different prefabricated timber building systems for the purpose of lifting and installation operations
* techniques for accurate placement of prefabricated timber building systems before the full installation
* problems or faults related to prefabricated timber systems including materials, components, connections or insulations that arise from on-site installation and impact on structural, fire and acoustic performance of the system
* critical performance metrics used in the on-site installation operations of prefabricated timber building systems regarding quality, cycle time, productivity and inventory
* methods for reporting:
* circumstances that affect the work cycle time
* quality checks
* product changes or variations during installation
* maintenance and servicing requirements for tools and equipment as outlined in workplace procedures or manufacturer manual
* waste management procedures regarding safe disposal and recycling.
 |

| Assessment Conditions |
| --- |
| Assessment of skills must take place under the following conditions: * physical conditions:
* skills must be demonstrated in a construction site or environment that accurately represents workplace conditions
* resources, equipment and materials:
* specialised tools and equipment for installation and fixing of prefabricated timber building systems
* prefabricated timber building systems, components, sections and fittings
* personal protective equipment, signs and barricades, fall prevention and fall arrest equipment used in building construction operations
* specifications:
* access to workplace health and safety policies, SWMS, emergency procedures,, fire safety plans, drawings, design specifications, on-site workflow, schedules and targets, work method statements, risk assessments, manufacturer information and operating instructions for specialised tools and equipment, product certifications, building regulations
* relationships:
* team member(s) including licenced crane operator and licenced dogger to lift prefabricated timber building systems
* timeframes:
* according to time specified in job sheet.

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.education.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47> |