



Australian Government

Department of Education, Employment and Workplace Relations

FPITMM3207A Set up timber floor trusses

Release: 1

FPITMM3207A Set up timber floor trusses

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to plan and set up the assembly of timber floor trusses using a purpose built jig or computer-operated truss table, and oversee the operation of the truss press

General workplace legislative and regulatory requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication

Application of the Unit

Application of the unit

The unit involves setting up and producing floor trusses in a timber and wood products production environment

It may be applied at either a truss/frame fabrication facility or timber merchants facility

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability skills This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for assembly	1.1. Applicable Occupational Health and Safety (OHS), environmental, legislative and organisational requirements relevant to assembling timber floor trusses are identified and followed 1.2. Work order and construction plans are reviewed and clarified with appropriate personnel 1.3. Type and quantity of material to be assembled and assembly hardware is collected 1.4. Tools and equipment are selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations 1.5. Set-up table or jigs required for construction are identified and prepared 1.6. Communication with others is established and maintained in line with OHS and organisational requirements
2. Set up floor truss	2.1. Product size and number of joints are assessed with table or jig area, and sections and layout are planned 2.2. Timber components are selected from pre-cut material in line with the cutting list and are checked for fit 2.3. Steel web components are selected in line with the construction plans and standards 2.4. Jig components are positioned to accurately locate and support the assembly components and jig or table is adjusted to suit 2.5. Components are positioned and clamped in jigs ready for joining with allowable faults, joins and grain in line with construction standards and grading rules 2.6. Components are set to include overhang and other design requirements, including camber if specified 2.7. Webs are set up to nominated pattern configuration 2.8. Defective components are identified and disposed of or recycled in line with site procedures 2.9. Components are clamped and/or nailed to maintain temporary alignment during assembly

ELEMENT	PERFORMANCE CRITERIA
3. Control pressing operations	3.1. Hardware is positioned on joints and installed in line with design specifications 3.2. Truss-pressing operations are coordinated to ensure finished product complies with customer orders 3.3. Assembly faults are corrected in line with site procedures
4. Prepare products for despatch and report	4.1. Finished product is assessed for quality against construction standards and labelled in line with the work order 4.2. Components are removed from table or jigs and safely stacked in a designated location in line with work order requirements 4.3. Finished products are strapped, packed and labelled ready for transportation 4.4. Equipment faults are recognised and reported in line with site procedures 4.5. Records and reports are accurately completed, processed and maintained in line with site procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Required skills

- Technical skills sufficient to set up and fix timber floor truss components, pack, stack and strap components for despatch
- Communication skills sufficient to read and interpret plans and drawings, complete and process production records and label products for despatch
- Literacy skills sufficient to read and interpret plans and process production records
- Numeracy skills sufficient to estimate timeframes for job completion and number and types of components needed to produce floor trusses
- Problem solving skills sufficient to identify and rectify non-compliant product
- Planning and organisational skills sufficient to plan assembly sequences and jig operation

Required knowledge

- Applicable Commonwealth, State or Territory legislation, regulations, standards,

REQUIRED SKILLS AND KNOWLEDGE

codes of practice and established safe practices relevant to the full range of processes for setting up timber floor trusses

- Environmental protection requirements, including the safe disposal of waste material
- Organisational and site standards, requirements, policies and procedures for setting up floor trusses
- Characteristics of timber and timber defects
- Assembly sequences and jig operation
- Assembly, componentry and construction standards
- Quality requirements of national building codes and standards
- Industry standard cross-sections and lengths
- Established communication channels and protocols
- Problem identification and resolution strategies and common fault finding techniques
- Types of tools and equipment for setting up timber floor trusses and procedures for their safe use, operation and maintenance
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can plan and set up the assembly of timber floor trusses using a purpose built jig or computer-operated truss table, and oversee the operation of the truss press

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements of this unit and include demonstration of:

- following applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice relevant to setting up timber floor trusses
- following organisational policies and procedures relevant to setting up timber floor trusses
- safely setting up a timber floor truss jig
- safely conducting pressing operations as per work orders

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to undertaking work applicable to this unit
 - specifications and work instructions

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of

EVIDENCE GUIDE

workplace relevant contexts) together with application of required knowledge

- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

OHS requirements:

are to be in line with applicable Commonwealth, State or Territory legislation and regulations, and organisational safety policies and procedures, and

RANGE STATEMENT

may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- fatigue management
- hazard identification and risk control
- elimination of hazardous materials and substances
- manual handling including shifting, lifting and carrying

Legislative requirements:

are to be in line with applicable Commonwealth, State or Territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

Organisational requirements may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals
- quality and continuous improvement processes and standards
- OHS, emergency and evacuation procedures
- ethical standards
- recording and reporting requirements
- equipment use and maintenance and storage requirements
- environmental management requirements (waste disposal, recycling and re-use guidelines)

RANGE STATEMENT

Timber floor trusses

- are jointed structures designed to act as a beam of long span, while each member is usually subjected to gravity, dead and live loads

and may include:

- joists
- purlins
- chords
- beams

Work order is to include:

- instructions for the assembly and despatch of timber and timber products from the work site and

and may include:

- construction plans or drawings
- type of product
- size
- quantity
- grade

Appropriate personnel may include:

- supervisors
- suppliers
- clients
- colleagues
- managers

Material may include:

- native timber species
- imported timber species
- dressed timber
- in-the-rough timber
- stress and non-stress graded timber
- preservative treated timber
- laminated veneer
- coated and/or treated timber products
- beams or laminated beams

Assembly hardware may include:

- nailing plates
- floor truss spacers and bracing
- nail gun nails and staples

Tools and equipment may include:

- measuring equipment
- electric circular saws
- docking saws
- drills

RANGE STATEMENT

- assembly jigs
 - assembly table
 - nail plate presses
 - staple guns
 - nail guns
 - compressor or compressed air supply
 - marking equipment
 - strapping equipment
- Set-up table/ jigs:**
- are enterprise manufactured templates and structures which assist in the positioning of components during the assembly process
- Communication** may include:
- verbal and non-verbal language
 - constructive feedback
 - active listening
 - questioning to clarify and confirm understanding
 - use of positive, confident and cooperative language
 - use of language and concepts appropriate to individual social and cultural differences
 - control of tone of voice and body language
- Timber components**
- are the sections of timber or timber product which have been pre-cut in readiness for assembly and have been cut to comply with the construction plans and cutting list
- Steel web components**
- are V shaped steel tension web members
- Webs**
- are truss internal supports - arranged symmetrically
- Defective components** may include
- components with an unacceptable level of:
- warp
 - wane/want
 - cupping
 - shakes
 - spring
 - bow
 - splits
 - insect defects
 - knots
 - resin pockets

RANGE STATEMENT

Assembly faults may include:

- incorrectly positioned joints
- timber splits from nailing
- incorrectly positioned hardware

Stacking may include:

- preparation for transport
- categorising in common size and shape
- marking lots in line with work order and site procedures and located so as not to block access or passage

Strapping

- is securing bundles with metal or plastic strap and tightening and tensioning using hand held equipment to prevent slippage without risk of strap breakage or damage to products

Unit Sector(s)

Not Applicable

Competency field

Competency field

Timber Manufactured Products