



Australian Government

Assessment Requirements for FWPCOT4209 Design timber structures

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 6.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has designed floor trusses, wall framing and roof trusses for at least one structure with a minimum of 100 square metres.

In performing this design work, there must be evidence that the individual has:

- met the design requirements of the construction plan, building codes and standards
- prepared and documented designs for timber structures in line with an individual design and set of drawing views and notes
- interpreted and calculated loading conditions from construction plans and specifications
- interpreted and applied technical information and conveyed information in written, sketch and oral form.

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:

- workplace policies and procedures for designing and preparing drawings and documenting and communicating information relating to timber floor and wall frames and roof trusses.
- applicable building regulations, codes and standards relating to the design of timber structures:
 - AS1684 and supplementary tables
 - CSIRO supplementary tables
 - National Construction Code (NCC)
- dimensions defining geometry and loading of individual structural members
- industry standard layouts, spacing and sizing dimensions of individual members for timber floor, wall frames and roof trusses
- loads imposed on timber structures:
 - live and dead loads

- mass loads and externally applied loads (wind, surrounding structures, common/special building usage)
- construction industry terminology for all components of timber wall frames, roof and floor trusses
- characteristics, properties and limitations of timber products and components:
 - nail/connector plates
 - timber species and types
- processes and methods of:
 - producing structural layout drawings and assembly drawings
 - producing designs for timber floor, wall and roof structures
 - applying mass, wind, live and dead loads to a structure
 - determining impact of surrounding buildings
- key features of constructions plans.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a timber fabrication facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - AS1684 and supplementary tables
 - CSIRO supplementary tables
 - National Construction Code (NCC)
- specifications:
 - access to construction plans and specifications to design timber structures
 - access to industry and workplace policies and procedures for designing timber structures
- relationships:
 - • person to discuss design questions with.

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>