



Australian Government

Assessment Requirements for MEM09225

Detail standardised structural connections

Release: 1

Assessment Requirements for MEM09225 Detail standardised structural connections

Modification History

Release 1. Supersedes and is equivalent to MSATCS501A Detail standardised structural connections.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- complying with requirements prescribed by legislation, awards, agreements and conditions of employment
- assessing design information for adequacy of information needed for structural steel detailing
- detailing standardised structural connections in structural steelwork detailed drawings on at least two occasions
- liaising with architects and engineers
- assessing scope of structural steel detailing tasks and priorities
- interpreting design drawings, sketches and schedules to determine dimensions, layouts, types and grades of materials
- interpreting manufacturer catalogues and product information
- using basic trigonometry to determine dimensions not given in design information
- communicating at all levels about technical issues related to patterns and specifications.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures
- architectural and engineering design drawings including standard symbols, terms, abbreviations and sketches
- legislative and regulatory requirements
- design information
- haunch specifications including:
 - roof slope
 - details of haunch location and size sufficient to ensure design requirements
 - end plate specification

- bolting information
- location and sizes of welds
- fly bracing requirements
- connections, components and fixings used in structural steel construction
- Australian Steel Institute's publication 'Standardised Structural Connections'
- difference between design and detail drawing processes
- standard structural connection detailing parameters
- drawing office procedures
- fabrication processes and procedures
- Australian steel structures limit state design code's (AS 4100, Steel structures) requirements in so far as they impact on steel detailing
- standard welding symbols as described in AS 1101.3 Graphical symbols for general engineering - Welding and non-destructive testing examination
- characteristics of portal frame construction, especially the behaviour of the frame under load and points of high stress.

Assessment Conditions

- Assessors must:
 - have vocational competency in detailing standardised structural connections at least to the level being assessed with relevant industry knowledge and experience
 - satisfy the assessor requirements in the Standards for Registered Training Organisations 2015 or its replacement and comply with the National Vocational Education and Training Regulator Act 2011, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Where possible, assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including relevant workplace procedures, product and manufacturing specifications.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>