|  |
| --- |
| 22663VIC Certificate III in Prefabrication Installation  Version 1  This course has been accredited under Part 4.4 of the *Education and Training Reform Act 2006.*  Accredited for the period: 1 July 2024 to 30 June 2029 |



© State of Victoria (Department of Jobs, Skills, Industry and Regions) 2024.

Creative Commons logo

Copyright of this material is reserved to the Crown in the right of the State of Victoria. This work is provided under a Creative Commons Attribution-No Derivatives 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria (Department of Jobs, Skills, Industry and Regions), provide a link to the licence, indicate if changes were made, and comply with all other licence terms. You must not distribute modified material. See: [Creative Commons — Attribution-NoDerivatives 4.0](https://creativecommons.org/licenses/by-nd/4.0/)

The licence does not apply to:

* any images, photographs, trademarks or branding, including the Victorian Government logo and the DJSIR logo; and
* content supplied by third parties.

Copyright queries may be directed to [copyright@education.vic.gov.au](mailto:copyright@education.vic.gov.au)

**Disclaimer**

In compiling the information contained in and accessed through this resource, the Department of Jobs, Skills, Industry and Regions (DJSIR) has used its best endeavours to ensure that the information is correct and current at the time of publication but takes no responsibility for any error, omission, or defect therein.

To the extent permitted by law, DJSIR, its employees, agents and consultants exclude all liability for any loss or damage (including indirect, special or consequential loss or damage) arising from the use of, or reliance on the information contained herein, whether caused or not by any negligent act or omission. If any law prohibits the exclusion of such liability, DJSIR limits its liability to the extent permitted by law, for the resupply of the information.

**Third party sites**

This resource may contain links to third party websites and resources. DJSIR is not responsible for the condition or content of these sites or resources as they are not under its control.

Third party material linked from this resource is subject to the copyright conditions of the third party. Users will need to consult the copyright notice of the third-party sites for conditions of usage.

**Table of contents**

[**Section A – Copyright and course classification information** 1](#_Toc104709324)

[1. Copyright owner of the course 1](#_Toc104709325)

[2. Address 1](#_Toc104709326)

[3. Type of submission 1](#_Toc104709327)

[4. Copyright acknowledgement 1](#_Toc104709328)

[5. Licensing and franchise 2](#_Toc104709329)

[6. Course accrediting body 2](#_Toc104709330)

[7. AVETMISS information 3](#_Toc104709331)

[8. Period of accreditation 3](#_Toc104709332)

[**Section B – Course information** 4](#_Toc104709333)

[1. Nomenclature 4](#_Toc104709334)

[1.1 Name of the qualification 4](#_Toc104709335)

[1.2 Nominal duration of the course 4](#_Toc104709336)

[2. Vocational or educational outcomes 4](#_Toc104709337)

[2.1 Outcome(s) of the course 4](#_Toc104709338)

[2.2 Course description 4](#_Toc104709339)

[3. Development of the course 4](#_Toc104709340)

[3.1 Industry, education, legislative, enterprise or community needs 4](#_Toc104709341)

[3.2 Review for re-accreditation 6](#_Toc104709342)

[4. Course outcomes 9](#_Toc104709343)

[4.1 Qualification level 9](#_Toc104709344)

[4.2 Foundation skills 10](#_Toc104709345)

[4.3 Recognition given to the course (if applicable) 10](#_Toc104709346)

[4.4 Licensing/regulatory requirements (if applicable) 10](#_Toc104709347)

[5. Course rules 11](#_Toc104709348)

[5.1 Course structure 11](#_Toc104709349)

[5.2 Entry requirements 13](#_Toc104709350)

[6. Assessment 13](#_Toc104709351)

[6.1 Assessment strategy 13](#_Toc104709352)

[6.2 Assessor competencies 14](#_Toc104709353)

[7. Delivery 14](#_Toc104709354)

[7.1 Delivery modes 14](#_Toc104709355)

[7.2 Resources 14](#_Toc104709356)

[8. Pathways and articulation 15](#_Toc104709357)

[9. Ongoing monitoring and evaluation 16](#_Toc104709358)

[**Section C – Units of competency** 17](#_Toc104709359)

|  |  |
| --- | --- |
| **Section A – Copyright and course classification information** | |
| Copyright owner of the course | Copyright of this material is reserved to the Crown in the right of the State of Victoria on behalf of the Department of Jobs, Skills, Industry and Regions (DJSIR) Victoria.  © State of Victoria 2024 |
| Address | **Executive Director:**  Deputy CEO Victorian Skills Authority Department of Jobs Skills, Industry and Regions (DJSIR) GPO Box 4509 Melbourne Vic 3001  **Organisational Contact:**  Manager, Training and Learning Products Unit  Engagement Branch Victorian Skills Authority Email: [course.enquiry@djsir.vic.gov.au](mailto:course.enquiry@djsir.vic.gov.au)  **Day-to-day contact:**  Curriculum Maintenance Manager (CMM), Building Industries Holmesglen Institute PO Box 42 Holmesglen VIC 3148 Telephone: (03) 9564 1987 Email: [teresa.signorello@holmesglen.edu.au](mailto:teresa.signorello@holmesglen.edu.au) |
| Type of submission | This submission is for re-accreditation of 22504VIC Certificate III in Prefabrication Installation. |
| Copyright acknowledgement | The following units of competency:   * CPCCCA2002 Use carpentry tools and equipment * CPCCOM1015 Carry out measurements and calculations * CPCCCM2007 Use explosive power tools * CPCCCM2012 Work safely at heights * CPCCCM3001 Operate elevated work platforms up to 11 metres * CPCCCM3004 Identify and apply information in construction plans, drawings and specifications * CPCCOM3006 Carry out levelling operations * CPCCSF2001 Handle steel fixing materials * CPCCSF2002 Use steel fixing tools and equipment * CPCCSH2003 Apply and install sealant and sealant devices * CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry * CPCSIL3001 Work with products and materials containing crystalline silica * CPCWHS1001 Prepare to work safely in the construction industry   are from the CPC Construction, Plumbing and Services Training Package administered by the Commonwealth of Australia.  The following units of competency:   * MSMENV272 Participate in environmentally sustainable work practices * MSMPER200 Work in accordance with an issued permit   are from the MSM Manufacturing Training Package administered by the Commonwealth of Australia.  The following units of competency:   * MSS402042 Apply 5S procedures * MSS402055 Apply quality standards   are from the MSS Sustainability Training Package administered by the Commonwealth of Australia.  The following unit of competency:   * RIIWHS202E Enter and work in confined spaces   is from the RII Resources and Infrastructure Industry Training Package administered by the Commonwealth of Australia.  Copyright of this material is reserved to the Crown in the right of the State of Victoria. © State of Victoria (Department of Education and Training) 2024.  This work is licensed under a Creative Commons Attribution-No Derivatives 4.0 International licence (see [Creative Commons](https://aus01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcreativecommons.org%2Flicenses%2Fby-nd%2F4.0%2F&data=05%7C01%7CSonia.Fabris%40education.vic.gov.au%7C20cb379bf1f04dfa124d08da44618563%7Cd96cb3371a8744cfb69b3cec334a4c1f%7C0%7C0%7C637897482884045699%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=RERq%2BHwmpPm5nwYpTsdp%2FzB6gdw0mFUXnjVyLSFBRzA%3D&reserved=0) for more information.). |
| Licensing and franchise | Copyright of this material is reserved to the Crown in the right of the State of Victoria. © State of Victoria (Department of Jobs, Skills, Industry and Regions) 2024.  This work is licensed under a Creative Commons Attribution-No Derivatives 4.0 International licence (see [Creative Commons](https://aus01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcreativecommons.org%2Flicenses%2Fby-nd%2F4.0%2F&data=05%7C01%7CSonia.Fabris%40education.vic.gov.au%7C20cb379bf1f04dfa124d08da44618563%7Cd96cb3371a8744cfb69b3cec334a4c1f%7C0%7C0%7C637897482884045699%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=RERq%2BHwmpPm5nwYpTsdp%2FzB6gdw0mFUXnjVyLSFBRzA%3D&reserved=0) for more information).  You are free to re-use the work under that licence, on the condition that you credit the State of Victoria (Department of Jobs, Skills, Industry and Regions), provide a link to the licence, indicate if changes were made, and comply with all other licence terms. You must not distribute modified material.  Request for other use should be addressed to:  Deputy CEO Victorian Skills Authority Department of Jobs, Skills, Industry and Regions (DJSIR) GPO Box 4509 Melbourne Vic 3001  Email: [course.enquiry@djsir.vic.gov.au](mailto:course.enquiry@djsir.vic.gov.au)  Copies of this publication can be downloaded free of charge from the [Victorian Government website](https://www.vic.gov.au/department-accredited-vet-courses) |
| Course accrediting body | Victorian Registration and Qualifications Authority |
| AVETMISS information | ANZSCO Code - 330000 Construction Trades Workers  ASCED Code – 4 digit - 0403 Building  **National course code**  22663VIC |
| Period of accreditation | 1 July 2024- 30 June 2029 |

|  |  |
| --- | --- |
| **Section B – Course information** | |
| Nomenclature | **Standard 4.1 and 5.8 AQTF 2021 Standards for Accredited Courses** |
| 1.1 Name of the qualification | Certificate III in Prefabrication Installation |
| 1.2 Nominal duration of the course | 498-592 hours |
| Vocational or educational outcomes | **Standard 5.1 AQTF 2021 Standards for Accredited Courses** |
| 2.1 Outcome(s) of the course | The Certificate III in Prefabrication Installation is designed to provide participants with the skills and knowledge to install prefabricated or modular building elements on a construction site in a team and within a time constrained environment.  The course outcomes aim to allow participants to:   * work effectively and safely within the prefabrication construction industry * work effectively in teams and in collaboration with services/suppliers * develop installation fundamental skills, including carrying out measurements, setting out and interpreting plans and specifications * apply quality processes and systems thinking approaches * combine and install modular, panellised and pod components. |
| 2.2 Course description | The Certificate III in Prefabrication Installation is designed to provide participants with the skills and knowledge to install prefabricated or modular building elements on a construction site in a team and within a time constrained environment.  Graduates of the course will have the potential to fill job roles related to the on-site installation (installer) and assembly (assembler) of prefabricated building elements. |
| Development of the course | **Standards 4.1, 5.1, 5.2, 5.3 and 5.4 AQTF 2021 Standards for Accredited Courses** |
| 3.**1 Industry, education, legislative, enterprise or** **community needs** | Australia’s high economic growth is driven by its building sector. As housing affordability is a persistent issue, public awareness of climate change and other environmental issues continues to progress, and sustainable living methods are adopted, a rising trend is emerging in the development of innovative construction approaches. ‘Modular construction’ using prefabrication techniques is one such approach.  Modular construction is an off-site construction method that manufactures prefabricate elements off site (in a factory setting), transports them to site and assembles them on site.[[1]](#footnote-2) The prefabricated approach offers sustainable benefits.  The application of prefabricated/modular building extends beyond residential housing. It is being adopted in Australia for the construction of student accommodation, hotels, hospitals, aged care facilities, schools, universities as well as other contemporary applications. Advances in technology are now making design-led prefabrication possible for mass-customisation.  Several federal and state policies and directions have been initiated which recognise prefabrication as an emerging and integral part of the future building and construction space. The federal Government pledging support for the prefabrication building industry in the form of $2 million to be spent developing a collaborative lab to help manufacturers design innovative new prefabricated buildings that are more eco-friendly, affordable and can significantly reduce times for construction.[[2]](#footnote-3)  The Victorian state government committing $30 million to build 114 sustainable modular homes, to provide housing for those at risk of homelessness across Victoria[[3]](#footnote-4). Funds have been allocated and regulatory and administrative systems amended to support and encourage the use of this building process.  The CMM Building Industries initially developed the 22504VC Certificate III in Prefabrication Installation in 2019 for accreditation on behalf of the former Office of the Victorian Skills Commissioner (OVSC) to address the training need for skilled operators to service the growing market for prefabricated building installers in the absence of a training package qualification.  During the course’s initial accreditation period there was no take up of the course as the course was not made available on the Victorian Government accredited course website by the former OVSC.  Nevertheless, the Victorian Skills Authority and the Industry Advisory Group (IAG) have supported the reaccreditation of this course as there is a training need for skilled operators to service the growing market for prefabricated building installers in Australia.  The target groups for this course are new entrants to the prefabrication construction industry or those who have experience in working in allied industries e.g. on-site construction or manufacturing and wish to add to their existing skills to the prefabrication construction industry.  The redevelopment of the Certificate III in Prefabrication Installation for reaccreditation was overseen by a steering committee comprising of the following industry representatives, most of whom were involved in the course’s development for its initial accreditation.   |  |  | | --- | --- | | Damien Crough (Chair) | Prefab Aus | | Chris Ong | Sync Industries | | Chris Wood | Standstruct | | Dr Paul Kremer | Prefab Aus | | James Briggs | JMB Modular Buildings | | Matthew Dingle | Form Flow | | Terry Bagas | Fleetwood | | Tim Newman | Timber Building Systems | | In attendance: |  | | Teresa Signorello | Executive Officer, Curriculum Maintenance Manager, Building Industries |   As well as other email consultations, the consultation and validation processes included members of the steering committee who met formally on three occasions to review and confirm the required skills and knowledge profile, course structure and final accreditation submission as reflecting the current work practices for onsite installers and/or assemblers in the prefabrication construction industry.  This course:   * does not duplicate, by title or coverage, the outcomes of an endorsed training package qualification * is not a subset of a single training package qualification that could be recognised through one or more statements of attainment or a skill set * does not include units of competency additional to those in a training package qualification that could be recognised through statements of attainment in addition to the qualification * does not comprise units that duplicate units of competency of a training package qualification. |
| 3.2 Review for re-accreditation | An evaluation of the accredited course was undertaken as part of the reaccreditation process to determine the relevance and currency of its outcomes to industry since initial accreditation in January 2019. Despite the lack of uptake in recent years, industry continues to affirm the course’s need. The course structure was the focus of the review to ensure alignment of course outcomes to current and future industry needs. Significant changes to the course included the:   * revision of course rules to better reflect the vocation outcomes * updating all enterprise units to reflect the revised Standards for Accredited Courses unit template * inclusion of newly imported units of competency that reflect current safety requirements of the vocational outcomes * inclusion of current versions of endorsed units of competency where they have been updated * deletion of units considered not appropriate or aligned to the course outcome.   **Transition arrangements**  The course 22663VIC Certificate III in Prefabrication Installation supersedes and is equivalent to 22504VIC Certificate III in Prefabrication Installation.   | **22504VIC Certificate III in Prefabrication Installation** | **22663VIC Certificate III in Prefabrication Installation** | **Equivalence status and comments**  **E- equivalent**  **NE – not equivalent** | | --- | --- | --- | | CPCCCA2002B Use carpentry tools and equipment | CPCCCA2002 Use carpentry tools and equipment | E- updated | | CPCCCM1013 Plan and organise work |  | Unit removed | | CPCCOM1015 Carry out measurements and calculations | CPCCCM1015 Carry out measurements and calculations | E- updated | | CPCCCM2005B Use construction tools and equipment |  | Unit removed | | CPCCCM2007 Use explosive power tools | CPCCCM2007 Use explosive power tools | E- no change | | CPCCCM2010B Work safely at heights | CPCCCM2012 Work safely at heights | E - updated | | CPCCCM3001 Operate elevated work platforms up to 11 metres | CPCCCM3001 Operate elevated work platforms up to 11 metres | E- no change | | CPCCCM3004 Identify and apply information in construction plans, drawings and specifications | CPCCCM3004 Identify and apply information in construction plans, drawings and specifications | E- no change | | CPCCOM3006 Carry out levelling operations | CPCCM3006 Carry out levelling operations | E- updated | | CPCCSF2001A Handle steel fixing materials | CPCCSF2001 Handle steel fixing materials | E- updated | | CPCCSF2002A Use steel fixing tools and equipment | CPCCSF2002 Use steel fixing tools and equipment | E- updated | | CPCCSH2003A Apply and install sealant and sealant devices | CPCCSH2003 Apply and install sealant and sealant devices | E – updated | | CPCCWHS1001 Prepare to work safely in the construction Industry | CPCWHS1001 Prepare to work safely in the construction industry | E – updated | | CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry | CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry | no change | | CPCPDR2026A Install prefabricated inspection openings and enclosures |  | Unit removed | | MSMENV272 Participate in environmentally sustainable work practices | MSMENV272 Participate in environmentally sustainable work practices | E – no change | | MSMPER200 Work in accordance with an issued permit | MSMPER200 Work in accordance with an issued permit | no change | | MSS402042 Apply 5S procedures | MSS402040 Apply 5S procedures | E – updated | | MSS402055 Apply quality standards | MSS402051 Apply quality standards | E – updated | | PMBHAN103 Shift materials safely by hand |  | Unit removed | | VU22699 Work effectively in prefabricated construction | VU23657 Work effectively in prefabricated construction | E – updated | | VU22700 Work collaboratively with others in prefabricated construction | VU23658 Work collaboratively with others in prefabricated construction | E - updated | | VU22701 Set out and mark out components | VU23659 Set out and mark out components | E - updated | | VU22702 Assemble and install panelised components onsite | VU23661 Assemble and install panelised components onsite | E - updated | | VU22703 Combine and install modular components onsite | VU23660 Combine and install modular components onsite | E - updated | | VU22704 Install prefabricated pod components | VU23662 Install prefabricated pod components | E – updated | |  | CPCSIL3001 Work with products and materials containing crystalline silica | Unit added | |  | RIIWHS202E Enter and work in confined spaces | Unit added | |

|  |  |
| --- | --- |
| Course outcomes | Standards 5.5, 5.6 and 5.7 AQTF 2021 Standards for Accredited Courses |
| 4.1 Qualification level | The course outcomes of the Certificate III in Prefabrication Installation is consistent with the Australian Qualifications Framework specifications for Certificate III.  Graduates of the Certificate III in Prefabrication Installation will have factual, technical, procedural and theoretical knowledge related to working in the prefabrication construction industry.  They will have:   * cognitive, technical and communication skills to interpret and act on available information. For example, in interpreting construction plans, drawings and specifications. * cognitive and communication skills to apply and communicate known solutions to a variety of predictable problems and to deal with unforeseen contingencies using known solutions. For example, in working with the construction team to schedule installation tasks and taking corrective action for unexpected situations * technical and communication skills to provide technical information to a variety of specialist and non-specialist audiences. For example, in briefing and coordinating service providers and suppliers participating in the installation of individual responsibilities.   Graduates of the Certificate III will demonstrate the application of knowledge and skills:   * with discretion and judgement in the selection of equipment, services or contingency measures. For example, in setting out and marking out components and taking corrective measures against irregularities in levels, dimensions and tolerances. * to adapt and transfer skills and knowledge within known routines, methods, procedures and time constraints. For example, applying and adapting setting out and quality check processes to a range of prefabricated construction components (panelised, modular and pod) * in contexts that include taking responsibility for own outputs in work and learning including participation in teams and taking limited responsibility for the output of others within established parameters. For example, continuously applying quality checks against installation stages and planning order of sequences with other construction team.   The volume of learning for this qualification is typically 1 to 2 years and incorporates a range of learning activities such as:   * structured activities to develop the technical skills and the theoretical knowledge that underpins performance. Structured activities may include reading text material, completing projects and assignments. * unstructured activities to reinforce and practice skills. Unstructured activities may include research, discussion with trainers and peers and investigating pathway options to independently develop and implement a learning plan appropriate to the achievement of desired learning goals. |
| 4.2 Foundation skills | Foundation skills applicable to the outcomes of this course are identified in the performance criteria or within the Foundation Skills section of the units of competency where not explicit in the performance criteria. |
| 4.3 Recognition given to the course (if applicable) | Not applicable. |
| 4.4 **Licensing/regulatory requirements (if applicable)** | There are no licensing or regulatory requirements for these courses, however completion of the general construction induction training program is required by anyone carrying out construction work on a construction site. Achievement of the unit CPCWHS1001 Prepare to work safely in the construction industry or its successor, meets this requirement.  For information visit WorkSafe website:  <https://www.worksafe.vic.gov.au/construction-induction-training-white-card> |

|  |  |
| --- | --- |
| Course rules | Standards 5.8 and 5.9 AQTF 2021 Standards for Accredited Courses |
| 5.1 Course structure | To be awarded the 22663VIC Certificate III in Prefabrication Installation, learners must successfully complete a total of 18 units comprising:   * 16 core units * 2 elective units selected from the elective units listed below. One unit may be selected from a relevant training package or accredited course. The unit chosen must support the job role, maintain the overall integrity of the AQF level of this course and should not duplicate the outcomes of the core units.   A Statement of Attainment will be issued for each unit of competency completed if the full course is not completed. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit of competency code** | **Unit of competency title** | **Field of Education code (six-digit)** | **Pre-requisite** | **Nominal hours** |
| **Core units** | | | |  |
| CPCCCA2002 | Use carpentry tools and equipment | 040311 | CPCCWHS2001 | 96 |
| CPCCOM1015 | Carry out measurements and calculations | 010101 |  | 20 |
| CPCCCM2012 | Work safely at heights | 061301 |  | 8 |
| CPCCCM3001 | Operate elevated work platforms up to 11 metres | 030717 |  | 32 |
| CPCCCM3004 | Identify and apply information in construction plans, drawings and specifications | 040301 |  | 30 |
| CPCCOM3006 | Carry out levelling operations | 040301 |  | 24 |
| CPCCSH2003 | Apply and install sealant and sealant devices | 040311 | CPCCWHS2001 | 16 |
| CPCCWHS2001 | Apply WHS requirements, policies and procedures in the construction industry | 061301 |  | 20 |
| CPCSIL3001 | Work with products and materials containing crystalline silica | 061301 | CPCCWHS2001 | 25 |
| CPCWHS1001 | Prepare to work safely in the construction industry | 061301 |  | 6 |
| RIIWHS202E | Enter and work in confined spaces | 061301 |  | 30 |
| VU23657 | Work effectively in prefabricated construction | 040399 |  | 20 |
| VU23658 | Work collaboratively with others in prefabricated construction | 040399 |  | 15 |
| VU23659 | Set out and mark out components | 040399 |  | 20 |
| VU23660 | Combine and install modular components onsite | 040399 |  | 50 |
| VU23661 | Assemble and install panelised components onsite | 040399 |  | 50 |
| **Core units nominal hours** | | | | **462** |
| **Elective units** | | | |  |
| CPCCCM2007 | Use explosive power tools | 030717 | CPCCWHS2001 | 16 |
| CPCCSF2001 | Handle steel fixing materials | 040399 | CPCCWHS2001 | 24 |
| CPCCSF2002 | Use steel fixing tools and equipment | 030717 | CPCCWHS2001 | 80 |
| MSMENV272 | Participate in environmentally sustainable work practices | 059999 |  | 30 |
| MSMPER200 | Work in accordance with an issued permit | 120505 |  | 20 |
| MSS402042 | Apply 5S procedures | 120505 |  | 40 |
| MSS402055 | Apply quality standards | 080317 |  | 30 |
| VU23662 | Install prefabricated pod components | 040399 |  | 50 |
| **Elective units nominal hours** | | | | **36- 130** |
| **Total nominal hours** | | | | **498-592** |

|  |  |  |
| --- | --- | --- |
|  | | **Standard 5.11 AQTF 2021 Standards for Accredited Courses** |
| 5.2 Entry requirements | There are no essential entry requirements for the Certificate III in Prefabrication Installation.  Entrants are best equipped to successfully undertake the course if they have the learning, literacy, numeracy and oral communication skills equivalent to Level 2 of Australian Core Skills Framework (ACSF). ACSF detail may be accessed from [here](https://www.dewr.gov.au/skills-information-training-providers/australian-core-skills-framework/download-acsf).  Learners with language, literacy and numeracy skills at lower levels than those suggested will require additional support to successfully undertake the course. | |

|  |  |
| --- | --- |
| Assessment | **Standard 5.12 and 5.14 AQTF 2021 Standards for Accredited Courses** |
| 6.1 Assessment strategy | All assessment, including Recognition of Prior Learning (RPL), must be compliant with the requirements of:   * Standard 1 of the AQTF: Essential Conditions and Standards for Initial/Continuing Registration and Guidelines 4.1 and 4.2 of the VRQA Guidelines for VET Providers,   or   * the Standards for Registered Training Organisations 2015 (SRTOs),   or   * the relevant standards and Guidelines for RTOs at the time of assessment.   These standards ensure that the assessment strategies meet requirements of the courses and therefore ensure that all assessments are valid, reliable and flexible and fair.  Assessment strategies should be designed to:   * cover the range of skills and knowledge required to demonstrate achievement of competence in prefabricated construction context * be appropriate to the knowledge, skills, methods of delivery and needs and characteristics of learners while meeting the demands of industry * recognise prior learning * be equitable to all groups of learners.   The following assessment methods are appropriate for units of competency in this course:   * oral and/or written questioning of required knowledge * inspection of final process outcomes * observation of demonstrated skills over time and in a range of situations * observation of, or evidence of, interactions with team members, contractors and authorities * portfolio of evidence such as documentation of completed work projects.   Assessment strategies for the imported units from training packages should be consistent with the Assessment Requirements for the relevant training packages. |
| 6.2 Assessor competencies | Assessment must be undertaken by a person or persons in accordance with:   * Standard 1.4 of the AQTF: Essential Conditions and Standards for Initial/Continuing Registration and Guidelines 3 of the VRQA Guidelines for VET Providers,   or   * the Standards for Registered Training Organisations 2015 (SRTOs),   or   * the relevant standards and Guidelines for RTOs at the time of assessment.   Units of competency imported from training packages must reflect the requirements for assessors specified in that training package. |

|  |  |
| --- | --- |
| Delivery | **Standards 5.12, 5.13 and 5.14 AQTF 2021 Standards for Accredited Courses** |
| 7.1 Delivery modes | The Certificate III in Prefabrication Installation may be offered on a full or part-time basis.  The course aims to develop practical competencies within an industry setting. Practical demonstrations and opportunity for application are considered to provide the most suitable strategy to reflect the objectives of the course. Delivery options, including grouping of learners and learning activities, should recognise the varying learning needs, educational backgrounds, preferred learning styles and constraints of the individual learner and the specific requirements of each unit. The units may be delivered singularly, or they may be integrated holistically with a number of units.  As the role involves practical skill development, the practical skill component of the course must be delivered in a workplace, or simulated workplace that accurately reflects workplace conditions. Practical exercises may take the form of realistic, holistic projects to provide the learner with a ‘real work’ experience.  The knowledge components of the course may be delivered using face-to-face, online or blended modes.  Delivery of units of competency imported from training packages should be contextualised to the prefabricated construction environment, whilst ensuring that the delivery guidelines are adhered to. |
| 7.2 Resources | Resources that are essential for the delivery of the Certificate III in Prefabrication Installation include:   * classroom/workshop with learning resources that includes information sources relating to working in the prefabrication construction industry * a safe prefabrication construction site or simulated environment reflective of the workplace that includes: * industry prefabricated components, materials, tools and equipment, including personal protective and safety equipment * job requirements, including relevant plans and specifications * relevant workplace policies and procedures which cover design specifications, industry standards, building codes and regulations   Mandated assessment resources apply to the units. Refer to the Assessment Conditions of the individual units.  **Trainer competence**  Training must be undertaken by a person or persons in accordance with:   * Standard 1.4 of the AQTF: Essential Conditions and Standards for Initial/Continuing Registration and Guideline 3 of the VRQA Guidelines for VET Providers,   or   * the Standards for Registered Training Organisations 2015 (SRTOs),   or   * the relevant standards and Guidelines for RTOs at the time of assessment.   The units of competency imported from training packages must reflect the requirements for resources/trainers specified in that training package. |

|  |  |
| --- | --- |
| Pathways and articulation | **Standard 5.10 AQTF 2021 Standards for Accredited Courses** |
|  | The Certificate III in Prefabrication Installation comprises of units of competency from the following training packages:   * CPC Construction, Plumbing and Services * MSM Manufacturing * MSS Sustainability * RII Resources and Infrastructure   Completion of those units provide credit transfers into any qualifications or accredited courses containing those units.  There are no formal articulation arrangements in place at the time of accreditation. |

|  |  |
| --- | --- |
| Ongoing monitoring and evaluation | **Standard 5.15 AQTF 2021 Standards for Accredited Courses** |
|  | The CMM for Building Industries is responsible for the ongoing monitoring and evaluation of the Certificate III in Prefabrication Installation.  Formal course evaluations will be undertaken halfway through the accreditation period and will be based on student and teacher evaluation surveys and industry stakeholder surveys/consultations.  The Victorian Registration and Qualifications Authority (VRQA) will be notified of any changes to the course. |

|  |
| --- |
| **Section C – Units of competency** |
| Following is the list of units of competency imported from training packages, which can be downloaded from the National Register ([here](https://training.gov.au/)):   * CPCCCA2002 Use carpentry tools and equipment * CPCCOM1015 Carry out measurements and calculations * CPCCCM2007 Use explosive power tools * CPCCCM2012 Work safely at heights * CPCCCM3001 Operate elevated work platforms up to 11 metres * CPCCCM3004 Identify and apply information in construction plans, drawings and specifications * CPCCOM3006 Carry out levelling operations * CPCCSF2001 Handle steel fixing materials * CPCCSF2002 Use steel fixing tools and equipment * CPCCSH2003 Apply and install sealant and sealant devices * CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry * CPCSIL3001 Work with products and materials containing crystalline silica * CPCWHS1001 Prepare to work safely in the construction industry * MSMENV272 Participate in environmentally sustainable work practices * MSMPER200 Work in accordance with an issued permit * MSS402042 Apply 5S procedures * MSS402055 Apply quality standards * RIIWHS202E Enter and work in confined spaces.   Following is the list of units of competency developed for the course, which comply with the [AQTF 2021 Standards for Accredited Courses - Unit of Competency Template](https://www.vrqa.vic.gov.au/Documents/VETAQTF2021standardsAccredCrses.docx) and is detailed in this section of the course document:   * VU23657 Work effectively in prefabricated construction * VU23658 Work collaboratively with others in prefabricated construction * VU23659 Set out and mark out components * VU23660 Combine and install modular components onsite * VU23661 Assemble and install panelised components onsite * VU23662 Install prefabricated pod components. |

|  |  |
| --- | --- |
| **Unit code** | **VU23657** |
| **Unit title** | **Work effectively in prefabricated construction** |
| **Application** | This unit describes the performance outcomes, skills and knowledge required to work within the prefabricated construction sector of the construction industry.  It includes the ability to identify and work within workplace and industry principles, standards and legislative requirements and continuously apply check measures to ensure quality standards are met.  This unit applies to individuals who work in prefabricated construction and apply knowledge of prefabrication technologies and principles, industry standards, codes of practice, legislative and safe work practices to their own work processes. They apply quality and systems thinking approaches to ensure that construction work meet specifications and is compliant with building standards  No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication. |
| **Pre-requisite Unit(s)** | N/A |
| **Competency Field** | N/A |
| **Unit Sector** | N/A |

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** | | **Performance Criteria** | |
| Elements describe the essential outcomes of a unit of competency. | | Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements. | |
| 1 | Work within industry and workplace requirements and prefabricated construction principles | 1.1 | Identify responsibilities and duties of own role and other construction roles in Australia’s prefabrication construction industry according to state or territory employment legislative and workplace requirements |
|  |  | 1.2 | Identify and apply relevant industry standards and codes for prefabrication construction |
|  |  | 1.3 | Identify and apply safe work methods practices according to state or territory work health and safety regulatory requirements |
|  |  | 1.4 | Identify and apply environmental sustainability principles and practices according to state or territory environmental regulatory requirements |
|  |  | 1.5 | Identify and apply prefabricated construction technologies and principles to own work processes according to workplace requirements |
|  |  | 1.6 | Work within scope of role and recognise when construction work requires licenced tradespersons or relevant specialists |
| 2 | Apply quality and systems thinking approaches to onsite installation | 2.1 | Check received information, components, materials and services against specifications and standards for conformance |
|  |  | 2.2 | Identify, isolate, record and report faulty information, prefabricated components, materials or services to the supervisor |
|  |  | 2.3 | Check work for tolerances, work processes, sequencing and timing against specifications and standards relevant to the installation being undertaken |
|  |  | 2.4 | Investigate causes of any identified faults and deviations from specifications and standards and take corrective action according to workplace procedures |

|  |
| --- |
| **Range of Conditions** |
| N/A |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Foundation Skills** | | | | |
| Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance but not explicit in the performance criteria. | | | | |
| **Skill** | | **Description** | | |
| Reading skills to: | | * Interpret information from information sources, workplace policies and procedures, specifications and industry codes and standards | | |
| Writing skills to: | | * record information on prefabricated construction and report on quality faults using clear language and terminology | | |
| Oral communication skills to: | | * report identified issues and deviations from specifications and standards using clear language and terminology | | |
| Numeracy skills to: | | * make and use calculations and measurements to respond to identified issues and deviations from specifications and standards | | |
| Learning skills to: | | * maintain knowledge on prefabrication construction, industry standards and codes of practice within own area of responsibility | | |
| Digital literacy skills to: | | * use information technology to source and source information on prefabrication construction * use communications technologies to communicate and report during work processes. | | |
|  | | | | |
| **Unit Mapping Information** |  | | | |
| Code and Title  Current Version | | Code and Title  Previous Version | Comments |
| VU23657 Work effectively in prefabricated construction | | VU22699 Work effectively in prefabricated construction | Equivalent |
|  | | | |

|  |  |
| --- | --- |
| **Assessment Requirements Template** | |
| **Title** | **Assessment Requirements for VU23657 Work effectively in prefabricated construction** |
| **Performance Evidence** | There must be evidence the learner has completed the tasks outlined in the elements and performance criteria of this unit and has worked effectively within the scope of their role during the completion of a prefabricated construction project.  In completing the above, there must also be critical evidence that the learner has:   * applied relevant industry standards and codes of practice * used safe work and sustainable environmental practices * applied prefabricated construction technologies and principles of prefabricated construction to work processes * continuously applied quality check measures against specifications and standards, and taken corrective action to resolve issues and faults as required within scope of work. |
| **Knowledge Evidence** | The learner must be able to apply essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the work role. This includes knowledge of:   * profile of Australia’s prefabrication industry, * principles and impacts of prefabricated construction on efficiency, precision, productivity and affordability * environmental benefits of prefabricated construction in reducing waste and energy usage * purposes and types of prefabrication construction, including panelised, volumetric modular and pods * relationship between offsite and onsite construction approaches * workplace policies and procedures relating to work practices * relevant state or territory legislation relating to employment rights * sources of information on employment rights and responsibilities including employment related laws covering rights and responsibilities of employees and employers * relevant Australian Standards and building codes in relation to prefabricated construction * state or territory regulatory workplace safety requirements * state or territory environmental sustainability regulatory requirements * how received information, components and materials or services relate to construction operations and how they contribute to the final quality of the construction * relevant quality standards, policy and procedures * relevant measurement techniques and quality checking and reporting procedures. |
| **Assessment Conditions** | Assessment of this unit must be demonstrated in a prefabricated construction site or simulated environment reflective of the workplace that complies with standard and authorised work practices, safety requirements and environmental constraints.  Assessment must ensure access to:   * sources of information on prefabrication construction industry and employment related laws * job requirements, including relevant plans and specifications * relevant workplace policies and procedures which cover design specifications, industry standards, building codes and regulations and safety requirements.   **Assessor requirements**  No specialist vocational competency requirements for assessors apply to this unit. |

|  |  |
| --- | --- |
| **Unit code** | **VU23658** |
| **Unit title** | **Work collaboratively with others in prefabricated construction** |
| **Application** | This unit describes the performance outcomes, skills and knowledge required to work effectively in teams and in collaboration with service providers and suppliers during prefabrication construction projects.  It requires the ability to develop and maintain working relationships with the construction team, service providers and suppliers, identify, sequence and assist team members with work responsibilities, confirm arrangements with service providers and suppliers and deal with communications issues and unexpected situations within scope of work.  This unit applies to individuals who work in prefabricated construction as on-site assemblers. In this role, they work in team and time constrained environments which requires effective communication and negotiation skills to ensure construction is completed according to legislative, quality, installation sequencing and completion requirements.  No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication. |
| **Pre-requisite Unit(s)** | N/A |
| **Competency Field** | N/A |
| **Unit Sector** | N/A |

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** | | **Performance Criteria** | |
| Elements describe the essential outcomes of a unit of competency. | | Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements. | |
| 1 | Develop and maintain effective working relationships | 1.1 | Seek input of team members and relevant persons into planning own operational tasks against job requirements and specifications |
|  |  | 1.2 | Communicate with others in a courteous and sensitive manner |
|  |  | 1.3 | Recognise and discuss issues which may lead to, or involve conflict, and refer to supervisor as required |
| 2 | Work with construction team members | 2.1 | Identify individual responsibilities within the team according to job requirements and specifications and within scope of work responsibilities |
|  |  | 2.2 | Prioritise and sequence own work with others to achieve the most efficient and effective outcome against designated timeframes and quality standards |
|  |  | 2.3 | Communicate relevant information to team members in a clear and timely manner |
|  |  | 2.4 | Assist team members and seek assistance to ensure efficient and safe completion of work tasks |
| 3 | Collaborate with relevant authorities, service providers and suppliers | 3.1 | Confirm construction arrangements with relevant authorities, service providers and suppliers to satisfy construction schedule and installation requirements |
|  |  | 3.2 | Brief and coordinate service providers and suppliers participating in the installation of individual responsibilities according to construction schedule and installation requirements |
|  |  | 3.3 | Make decisions for dealing with unexpected situations with appropriate persons according to job requirements and specifications |
|  |  | 3.4 | Resolve issues with authorised persons, service providers and suppliers within scope of work, and refer to supervisor as required |
|  |  | 3.5 | Maintain ongoing communication and reporting to relevant personnel during the installation project. |

|  |
| --- |
| **Range of Conditions** |
| N/A |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Foundation Skills** | | | | |
| Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance but not explicit in the performance criteria. | | | | |
| **Skill** | | **Description** | | |
| Reading skills to: | | * interpret workplace documentation | | |
| Writing skills to: | | * complete workplace documentation using clear language and terminology | | |
| Oral communication skills to: | | * use questioning to identify individual and team responsibilities and construction arrangements, and using negotiation skills to resolve issues and solutions to arising challenges | | |
| Digital literacy skills to: | | * use communication technologies to communicate with relevant personnel | | |
|  | | | | |
| **Unit Mapping Information** |  | | | |
| Code and Title  Current Version | | Code and Title  Previous Version | Comments |
| VU23658 Work collaboratively with others in prefabricated construction | | VU22700 Work collaboratively with others in prefabricated construction | Equivalent |
|  | | | |

|  |  |
| --- | --- |
| **Assessment Requirements Template** | |
| **Title** | **Assessment Requirements for VU23658 Work collaboratively with others in prefabricated construction** |
| **Performance Evidence** | There must be evidence the learner has completed the tasks outlined in the elements and performance criteria of this unit and has worked collaboratively with team members, suppliers and service providers during the completion of a prefabrication installation project.  In completing the above, there must also be critical evidence that the learner has:   * identified, prioritised and sequenced work with construction team * communicated and confirmed information and construction arrangements in a clear and courteous manner according to construction schedule and installation requirements * assisted or sought assistance from team members in completing work tasks * applied the appropriate corrective action in dealing with communication issues and unexpected situations. |
| **Knowledge Evidence** | The learner must be able to apply essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the work role. This includes knowledge of:   * group processes and team behaviour: * role and function of workplace teams * team dynamics * causes of stress or conflict in teams * strategies for managing or reducing conflict * principles of commonwealth, state or territory anti-discrimination legislation and regulations * construction arrangements requiring communication and reporting * construction installation sequencing, and implications for not planning and monitoring * processes used for assisting relevant authorities, service providers and suppliers, including traffic control and crane operators * role, responsibilities and communication requirements for authorities, service providers and suppliers relevant to prefabrication construction. |
| **Assessment Conditions** | Assessment of this unit must be demonstrated in a prefabricated construction site or simulated environment reflective of the workplace that complies with standard and authorised work practices, safety requirements and environmental constraints.  Assessment must ensure access to:   * job requirements, including relevant plans and specifications * relevant workplace policies and procedures which cover design specifications, industry standards, building codes and regulations and safety requirements * other people with whom the individual can interact.   **Assessor requirements**  No specialist vocational competency requirements for assessors apply to this unit. |

|  |  |
| --- | --- |
| **Unit code** | **VU23659** |
| **Unit title** | **Set out and mark out components** |
| **Application** | This unit describes the performance outcomes, skills and knowledge required to set out and mark out prefabricated components onsite.  It requires the ability to plan and organise work, receive and check prefabricated components, indicate site boundaries and reference and offset lines and mark out prefabricated components. It includes continuously checking calculations against specifications and quality standards  This unit applies to onsite assemblers and installers who set out and mark out components prior to installation. They work in a team and time constrained environment and within the scope of their work with other construction tradespersons.  No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication. |
| **Pre-requisite Unit(s)** | N/A |
| **Competency Field** | N/A |
| **Unit Sector** | N/A |

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** | | **Performance Criteria** | |
| Elements describe the essential outcomes of a unit of competency. | | Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements. | |
| 1 | Plan and prepare for set out | 1.1 | Obtain and confirm job requirements and specifications for the set out with relevant personnel |
|  |  | 1.2 | Inspect worksite to determine extent of work preparation, conditions and hazards |
|  |  | 1.3 | Confirm health and safety requirements and risk control measures according to work health and safety legislative requirements |
|  |  | 1.4 | Schedule and sequence set out tasks in consultation with supervisor, team members, service providers and suppliers, to ensure set out is completed to construction plan |
|  |  | 1.5 | Select personal protective equipment and tools and equipment according to job requirements, check for serviceability and place ready for use |
| 2 | Check prefabricated components onsite | 2.1 | Confirm scheduled delivery of prefabricated components according to construction plan schedule and take corrective action according to workplace procedures if delivery is delayed. |
|  |  | 2.2 | Check storage for prefabricated components on the site is adequate, away from obstruction, sheltered from weather and placed in sequence for efficient transfer |
|  |  | 2.3 | Check delivered components and materials against specifications and take corrective action according to workplace procedures if delivery is incomplete or damaged |
| 3 | Set out installation | 3.1 | Identify and indicate site boundaries according to specifications |
|  |  | 3.2 | Set reference line and offset line to determine the position of the components to be installed |
|  |  | 3.3 | Perform calculations to check accuracy of the offset lines against specifications |
| 4 | Lay out components | 4.1 | Mark out prefabricated components to comply with specified measurements. |
|  |  | 4.2 | Check dimensions for accuracy and compliance with plans and specifications. |
| 5 | Clean up worksite | 5.1 | Clear worksite, recycle or store unused material and dispose safely of waste according to workplace and environmental procedures |
|  |  | 5.2 | Clean, maintain and store tools and equipment according to workplace procedures |

|  |
| --- |
| **Range of Conditions** |
| N/A |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Foundation Skills** | | | | |
| Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance but not explicit in the performance criteria. | | | | |
| **Skill** | | **Description** | | |
| Reading skills to: | | * interpret workplace documentation, plans, drawings and specifications relating to setting out and marking out components | | |
| Writing skills to: | | * complete workplace documentation using clear language and terminology | | |
| Oral communication skills to: | | * use questioning to identify and confirm job requirements, interact with team members and other personnel and negotiate solutions to arising challenges | | |
| Numeracy skills to: | | * apply measurements and calculations in setting out and marking out components | | |
| Digital literacy skills to: | | * use digital setting out technology * use communication technologies | | |
|  | | | | |
| **Unit Mapping Information** |  | | | |
| Code and Title  Current Version | | Code and Title  Previous Version | Comments |
| VU23659 Set out and mark out components | | VU22701 Set out and mark out components | Equivalent |
|  | | | |

|  |  |
| --- | --- |
| **Assessment Requirements Template** | |
| **Title** | **Assessment Requirements for VU23659 Set out and mark out components** |
| **Performance Evidence** | There must be evidence the learner has completed the tasks outlined in the elements and performance criteria of this unit and has set out and marked out prefabricated components for a small building of at least 50 square metres and which includes at least one internal and one external corner.  In completing the above, there must also be critical evidence that the learner has:   * complied with relevant safety regulations, building codes, codes of practice and job requirements * checked logistics and storage of prefabricated components * communicated and worked effectively with others, in checking, scheduling, and sequencing set out tasks to meet quality standards and timelines * applied the appropriate corrective action in dealing with unexpected situations * cleaned up and stored tools, equipment and materials after set out. |
| **Knowledge Evidence** | The learner must be able to apply essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the work role. This includes knowledge of:   * principles of set out in relation to prefabrication construction * workplace and legislative health and safety requirements and risk measures relevant to prefabricated panelised construction, including working safely at heights and emergency procedures * off-site logistics and traffic management for deliveries onsite * importance of task sequencing, and implications for not planning and monitoring * basic design, offsite manufacturing process and materials used in manufactured panelised components, including damage and weather effects associated with materials * tools, equipment and materials used for set out, including maintenance and safe operating procedures * building codes and inspection checks relevant to prefabricated construction * content, terms and symbols used in drawings and specifications relevant to panelised construction * quality assurance procedures relevant to set out, including measure accuracy against tolerance acceptance, order of sequences, risk and time management * acceptable tolerances for different materials, component structures and fixings * processes and equipment used for levelling * principles of Lean 5S methodology in relation to set out * environmentally sustainable practices relevant to set out, including safe disposal and recycling of waste. |
| **Assessment Conditions** | Assessment of this unit must be demonstrated in a prefabricated construction site or simulated environment reflective of the workplace that complies with standard and authorised work practices, safety requirements and environmental constraints.  Assessment must ensure access to:   * industry prefabricated components, materials, tools and equipment, including personal protective and safety equipment * job requirements, including relevant plans and specifications * relevant workplace policies and procedures which cover design specifications, industry standards, building codes and regulations and safety requirements.   **Assessor requirements**  No specialist vocational competency requirements for assessors apply to this unit. |

|  |  |
| --- | --- |
| **Unit code** | **VU23660** |
| **Unit title** | **Combine and install modular components onsite** |
| **Application** | This unit describes the performance outcomes, skills and knowledge required to combine and install modular components onsite.  It requires the ability to plan and organise work, receive and check prefabricated components, measure and position components before assembling and fixing them into place. It includes continuously checking work against work specifications and quality standards and responding to arising challenges and anomalies.  This unit applies to onsite assemblers and installers who combine and install modular or Prefabricated Prefinished Volumetric Construction (PPVC) components that are pre-fitted with electrics, plumbing, heating, doors, windows and internal finishes onsite in a team and time constrained environment. They work within the scope of their role with other construction tradespersons.  No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication. |
| **Pre-requisite Unit(s)** | N/A |
| **Competency Field** | N/A |
| **Unit Sector** | N/A |

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** | | **Performance Criteria** | |
| Elements describe the essential outcomes of a unit of competency. | | Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements. | |
| 1 | Plan and prepare for installation | 1.1 | Obtain and confirm job requirements and specifications for combining and installing modular components from the construction plan with relevant personnel |
|  |  | 1.2 | Inspect worksite, identify hazards and conditions to determine the extent of work preparation required |
|  |  | 1.3 | Confirm health and safety requirements and risk control measures according to work health and safety legislative requirements |
|  |  | 1.4 | Schedule and sequence tasks in consultation with supervisor, team members, service providers and suppliers to ensure work is completed to construction plan |
|  |  | 1.5 | Select personal protective equipment and tools and equipment according to job requirements, check for serviceability and place ready for use |
| 2 | Check and prepare modular components onsite | 2.1 | Confirm delivery of modular components according to construction plan schedule and take corrective action according to workplace procedures if delivery is delayed. |
|  |  | 2.2 | Check storage requirements for modular components on the construction site are adequate, away from obstruction, sheltered from weather and placed in sequence for efficient transfer |
|  |  | 2.3 | Check delivered modular components and materials against specifications and take corrective action according to workplace procedures if delivery is incomplete or damaged |
| 3 | Combine and install components | 3.1 | Assist to lift modular components in sequential order and position with use of propping on levelling walls and floors according to job requirements and specified measurements |
|  |  | 3.2 | Combine components and place into position to commence installation |
|  |  | 3.3 | Check measurements and tolerances of combined components against specifications and report or rectify anomalies as required |
|  |  | 3.4 | Install fixings or braces to connect to wall, floor and other components |
|  |  | 3.5 | Install combined components to level, plumb off and pack to position |
|  |  | 3.6 | Fix and apply fire rated sealants as required, to all connecting points according to relevant building codes and design specifications |
|  |  | 3.7 | Check completed installation against job specifications and schedule and report quality checks and any variances to supervisor |
| 4 | Clean up worksite | 4.1 | Clear worksite, recycle or store unused material and dispose safely of waste according to workplace and environmental procedures |
|  |  | 4.2 | Clean, maintain and store tools and equipment according to workplace procedures |

|  |
| --- |
| **Range of Conditions** |
| N/A |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Foundation Skills** | | | | |
| Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance but not explicit in the performance criteria. | | | | |
| **Skill** | | **Description** | | |
| Reading skills to: | | * interpret workplace documentation, plans, drawings and specifications relating to the combination and installation of modular components | | |
| Writing skills to: | | * complete workplace documentation using clear language and terminology | | |
| Oral communication skills to: | | * use questioning to identify and confirm job requirements, interact with team members and other personnel and negotiate solutions to arising challenges | | |
| Numeracy skills to: | | * apply measurements and calculations to identify anomalies in straightness or dimensions of installation positions or of delivered components | | |
| Digital literacy skills to: | | * use digital construction technology * use communication technologies | | |
|  | | | | |
| **Unit Mapping Information** |  | | | |
| Code and Title  Current Version | | Code and Title  Previous Version | Comments |
| VU23660 Combine and install modular components onsite | | VU22703 Combine and install modular components onsite | Equivalent |
|  | | | |

|  |  |
| --- | --- |
| **Assessment Requirements Template** | |
| **Title** | **Assessment Requirements for VU23660 Combine and install modular components onsite** |
| **Performance Evidence** | There must be evidence the learner has completed the tasks outlined in the elements and performance criteria of this unit and has combined and installed prefabricated modular components for a small building of at least 50 square metres and which includes at least one internal and one external corner.  In completing the above, there must also be critical evidence that the learner has:   * complied with relevant safety regulations, building codes, codes of practice and job requirements * checked logistics and storage of prefabricated modular components * communicated and worked effectively with others, in checking, scheduling, lifting and sequencing prefabricated modular components and tasks to meet quality standards and timelines * applied the appropriate corrective action in dealing with unexpected situations * completed preparatory work for proper fit * cleaned up and stored tools, equipment and materials after installation. |
| **Knowledge Evidence** | The learner must be able to apply essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the work role. This includes knowledge of:   * offsite and onsite construction approaches for prefabricated modular systems, including DfMA (Design for Manufacture and Assembly), Prefabricated Prefinished Volumetric Construction (PPVC), sectional and volumetric * workplace and legislative health and safety requirements and risk measures relevant to prefabricated modular construction, including working safely at heights and emergency procedures * off-site logistics and traffic management for deliveries onsite * importance of onsite modular construction assembly and installation sequence, and implications for not planning and monitoring * basic design, offsite manufacturing process and materials used in manufactured modular components, including damage and weather effects associated with materials * tools, equipment and materials used in assembling and installing modular components, including maintenance and safe operating procedures * range of lifting and propping equipment used for different prefabricated modular systems * types and purposes of fixings, braces and sealants * fire resistance rating * building codes and inspection checks relevant to prefabricated modular construction * content, terms and symbols used in drawings and specifications relevant to panelised construction * quality assurance procedures relevant to installing panelised components onsite, including measure accuracy against tolerance acceptance, order of sequences, risk and time management * acceptable tolerances for different materials, component structures and fixings * processes and equipment used for levelling * principles of Lean 5S methodology in relation to modular construction * environmentally sustainable practices relevant to modular construction, including safe disposal and recycling of waste. |
| **Assessment Conditions** | Assessment of this unit must be demonstrated in a prefabricated construction site or simulated environment reflective of the workplace that complies with standard and authorised work practices, safety requirements and environmental constraints.  Assessment must ensure access to:   * industry prefabricated modular components, materials, tools and equipment, including personal protective and safety equipment * job requirements, including relevant plans and specifications * relevant workplace policies and procedures which cover design specifications, industry standards, building codes and regulations and safety requirements.   **Assessor requirements**  No specialist vocational competency requirements for assessors apply to this unit. |

|  |  |
| --- | --- |
| **Unit code** | **VU23661** |
| **Unit title** | **Assemble and install panelised components onsite** |
| **Application** | This unit describes the performance outcomes, skills and knowledge required to assemble and install prefabricated panelised components onsite.  It requires the ability to plan and organise work, receive and check prefabricated components and measure and position components before assembling and fixing them into place. It includes continuously checking work against specifications and quality standards and responding to challenges and anomalies.  This unit applies to onsite assemblers and installers who assemble and install prefabricated panelised components that are pre-cut, pre-sized, pre-moulded or pre-shaped in a factory environment onsite in a team and time constrained environment. They work within the scope of their work with other construction tradespersons.  No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication. |
| **Pre-requisite Unit(s)** | N/A |
| **Competency Field** | N/A |
| **Unit Sector** | N/A |

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** | | **Performance Criteria** | |
| Elements describe the essential outcomes of a unit of competency. | | Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements. | |
| 1 | Plan and prepare for installation | 1.1 | Obtain and confirm job requirements and specifications for assembling and installing prefabricated panelised components from the construction plan with relevant personnel |
|  |  | 1.2 | Inspect worksite, identify hazards and conditions to determine the extent of work preparation required |
|  |  | 1.3 | Confirm health and safety requirements and risk control measures according to work health and safety legislative requirements |
|  |  | 1.4 | Schedule and sequence tasks in consultation with supervisor, team members, service providers and suppliers as required to ensure work is completed to construction plan |
|  |  | 1.5 | Select personal protective equipment and tools and equipment according to job requirements, check for serviceability, calibrate or report faults and place ready for use |
| 2 | Check panelised components onsite | 2.1 | Confirm delivery of panelised components according to construction plan schedule and take corrective action according to workplace procedures if delivery is delayed. |
|  |  | 2.2 | Check storage requirements for panelised components on the construction site are adequate, away from obstruction, sheltered from weather and placed in sequence for efficient transfer |
|  |  | 2.3 | Check delivered panelised components and materials against specifications and take corrective action according to workplace procedures if delivery is incomplete or damaged |
| 3 | Measure and position panelised components | 3.1 | Measure, check levels and connecting points of supplied components against specified measurements and accepted tolerances |
|  |  | 3.2 | Rectify or report irregularities in levels, dimensions and tolerances according to workplace procedures |
|  |  | 3.3 | Assist to lift panelised components in sequential order and position with use of propping on levelling walls and floors according to job requirements and specified measurements |
| 4 | Assemble and install components | 4.1 | Assemble components as required and place into position to commence installation |
|  |  | 4.2 | Check measurements and tolerances of completed assembly against specifications and report or rectify anomalies |
|  |  | 4.3 | Install fixings or braces to connect to wall, floor and other components |
|  |  | 4.4 | Install assembly to level, plumb off and pack to position |
|  |  | 4.5 | Fix assembly and apply fire rated sealants as required, to all connecting points according to relevant building codes and design specifications |
|  |  | 4.6 | Check completed installation against job specifications and schedule and report quality checks and any variances to supervisor |
| 5 | Clean up worksite | 5.1 | Clear worksite, recycle or store unused material and dispose safely of waste according to workplace and environmental procedures |
|  |  | 5.2 | Clean, maintain and store tools and equipment according to workplace procedures |

|  |
| --- |
| **Range of Conditions** |
| N/A |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Foundation Skills** | | | | |
| Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance but not explicit in the performance criteria. | | | | |
| **Skill** | | **Description** | | |
| Reading skills to: | | * interpret workplace documentation, plans, drawings and specifications relating to the assembly and installation of panelised components | | |
| Writing skills to: | | * complete workplace documentation using clear language and terminology | | |
| Oral communication skills to: | | * use questioning to identify and confirm job requirements, interact with team members and other personnel and negotiate solutions to arising challenges | | |
| Numeracy skills to: | | * apply measurements and calculations to identify anomalies in straightness or dimensions of installation positions or of delivered components | | |
| Digital literacy skills to: | | * use digital construction technology * use communication technologies | | |
|  | | | | |
| **Unit Mapping Information** |  | | | |
| Code and Title  Current Version | | Code and Title  Previous Version | Comments |
| VU23661 Assemble and install panelised components onsite | | VU22702 Assemble and install panelised components onsite | Equivalent |
|  | | | |

|  |  |
| --- | --- |
| **Assessment Requirements Template** | |
| **Title** | **Assessment Requirements for VU23661 Assemble and install panelised components onsite** |
| **Performance Evidence** | There must be evidence the learner has completed the tasks outlined in the elements and performance criteria of this unit and has assembled and installed prefabricated panelised components for a small building of at least 50 square metres and which includes at least one internal and one external corner.  In completing the above, there must also be critical evidence that the learner has:   * complied with relevant safety regulations, building codes, codes of practice and job requirements * checked logistics and storage of prefabricated panelised components * communicated and worked effectively with others, in checking, scheduling, lifting and sequencing prefabricated panels and tasks to meet quality standards and timelines * applied the appropriate corrective action in dealing with unexpected situations * completed preparatory work for proper fit * cleaned up and stored tools, equipment and materials after installation. |
| **Knowledge Evidence** | The learner must be able to apply essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the work role. This includes knowledge of:   * offsite and onsite construction approaches for prefabricated panelised systems, including timber building systems, timber framing, cladding systems, herbal walls and cassettes * workplace and legislative health and safety requirements and risk measures relevant to prefabricated panelised construction, including safe manual lifting, working safely at heights and emergency procedures * off-site logistics and traffic management for deliveries onsite * importance of onsite panelised construction assembly and installation sequence, and implications for not planning and monitoring * basic design, offsite manufacturing process and materials used in manufactured panelised components, including damage and weather effects associated with materials * tools, equipment and materials used in assembling and installing panelised components, including maintenance and safe operating procedures * lifting and propping equipment used for different prefabricated panelised systems * processes and hand signals used for assisting crane operators * types and purposes of fixings, braces and sealants * fire resistance rating * building codes and inspection checks relevant to prefabricated panelised construction * content, terms and symbols used in drawings and specifications relevant to panelised construction * quality assurance procedures relevant to installing panelised components onsite, including measure accuracy against tolerance acceptance, order of sequences, risk and time management * acceptable tolerances for different materials, component structures and fixings * processes and equipment used for levelling * principles of Lean 5S methodology in relation to panelised construction * environmentally sustainable practices relevant to panelised construction, including safe disposal and recycling of waste. |
| **Assessment Conditions** | Assessment of this unit must be demonstrated in a prefabricated construction site or simulated environment reflective of the workplace that complies with standard and authorised work practices, safety requirements and environmental constraints.  Assessment must ensure access to:   * industry prefabricated panelised components, materials, tools and equipment, including personal protective and safety equipment * job requirements, including relevant plans and specifications * relevant workplace policies and procedures which cover design specifications, industry standards, building codes and regulations and safety requirements   **Assessor requirements**  No specialist vocational competency requirements for assessors apply to this unit. |

|  |  |
| --- | --- |
| **Unit code** | **VU23662** |
| **Unit title** | **Install prefabricated pod components** |
| **Application** | This unit describes the performance outcomes, skills and knowledge required to install prefabricated pod components onsite.  It requires the ability to plan and organise work, receive and check pod components, measure and position pod into place. It includes continuously checking work against work specifications and quality standards and responding to arising challenges and anomalies.  This unit applies to onsite installers who install fully functional pod components, such as bathroom pods onsite prior to connection to mechanical, plumbing and electrical systems. Onsite installers perform installation tasks in a team and time constrained environment and within the scope of their role with other construction tradespersons.  No occupational licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication. |
| **Pre-requisite Unit(s)** | N/A |
| **Competency Field** | N/A |
| **Unit Sector** | N/A |

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** | | **Performance Criteria** | |
| Elements describe the essential outcomes of a unit of competency. | | Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the assessment requirements. | |
| 1 | Plan and prepare for pod installation | 1.1 | Obtain and confirm job requirements and specifications for pod installation with relevant personnel |
|  |  | 1.2 | Inspect worksite, identify hazards and conditions to determine the extent of work preparation required |
|  |  | 1.3 | Confirm health and safety requirements and risk control measures according to work health and safety legislative requirements |
|  |  | 1.4 | Schedule and sequence installation tasks in consultation with supervisor, team members, service providers and suppliers as required to ensure work is completed to construction plan |
|  |  | 1.5 | Select tools and equipment, including personal protective equipment according to job requirements, check for serviceability, calibrate or report faults and place ready for use |
| 2 | Check and prepare pod onsite | 2.1 | Confirm delivery of pod according to construction plan schedule and take corrective action according to workplace procedures if delivery is delayed. |
|  |  | 2.2 | Check storage requirements for pod on construction site are adequate, away from obstruction, sheltered from weather and placed in sequence for efficient transfer |
|  |  | 2.3 | Check delivered pod components and materials against specifications and take corrective action according to workplace procedures if delivery is incomplete or damaged |
| 3 | Measure and position pod | 3.1 | Measure, check levels and connecting points of supplied pod components against specified measurements and accepted tolerances |
|  |  | 3.2 | Rectify or report irregularities in levels, dimensions and tolerances according to workplace procedures |
|  |  | 3.3 | Assist crane operators to guide pod components onto landing platform to be placed onto its final position |
|  |  | 3.4 | Release landing platform once in position avoiding distortion and damage to base |
|  |  | 3.5 | Check that the surface under the pod is level to avoid any distortion |
|  |  | 3.6 | Verify set out location is according to set out datum |
| 4 | Install pod | 4.1 | Slide pod into place against surrounding partition walls according to job requirements and manufacturer specifications |
|  |  | 4.2 | Fix pod and apply fire rated sealants as required, to all connecting points according to relevant building codes and design specifications |
|  |  | 4.3 | Confirm location of services connection with service trades according to scope of work |
|  |  | 4.4 | Check completed installation job specifications and schedule and report quality checks and any variances to supervisor |
| 5 | Clean up worksite | 5.1 | Clear worksite, recycle or store unused material and dispose safely of waste according to workplace and environmental procedures |
|  |  | 5.2 | Clean, maintain and store tools and equipment according to workplace procedures |

|  |
| --- |
| **Range of Conditions** |
| N/A |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Foundation Skills** | | | | |
| Foundation Skills describe the language, literacy, numeracy and employability skills that are essential to performance but not explicit in the performance criteria. | | | | |
| **Skill** | | **Description** | | |
| Reading skills to: | | * interpret workplace documentation, plans, drawings and specifications relating to the assembly and installation of pod components | | |
| Writing skills to: | | * complete workplace documentation using clear language and terminology | | |
| Oral communication skills to: | | * use questioning to identify and confirm job requirements, interact with team members and other personnel and negotiate solutions to arising challenges | | |
| Numeracy skills to: | | * apply measurements and calculations to identify anomalies in straightness or dimensions of installation positions or of delivered components | | |
| Digital literacy skills to: | | * use digital construction technology * use communication technologies | | |
|  | | | | |
| **Unit Mapping Information** |  | | | |
| Code and Title  Current Version | | Code and Title  Previous Version | Comments |
| VU23662 Install prefabricated pod components | | VU22706 Install prefabricated pod components | Equivalent |
|  | | | |

|  |  |
| --- | --- |
| **Assessment Requirements Template** | |
| **Title** | **Assessment Requirements for VU23662 Install prefabricated pod components** |
| **Performance Evidence** | There must be evidence the learner has completed the tasks outlined in the elements and performance criteria of this unit and has installed at least one pod system for a prefabrication construction project.  In completing the above, there must also be critical evidence that the learner has:   * complied with relevant safety regulations, building codes, codes of practice and job requirements * checked logistics and storage of prefabricated pod components * communicated and worked effectively with others, in checking, scheduling, lifting and sequencing prefabricated pod components and tasks to meet quality standards and timelines * applied the appropriate corrective action in dealing with unexpected situations * completed preparatory work for proper fit * ensured connection to mechanical, electrical and plumbing systems * cleaned up and stored tools, equipment and materials after installation. |
| **Knowledge Evidence** | The learner must be able to apply essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the work role. This includes knowledge of:   * offsite and onsite construction approaches for prefabricated pod systems, including bathroom, combi, kitchen and laundry pods * workplace and legislative health and safety requirements and risk measures relevant to prefabricated pod construction, including working safely at heights and emergency procedures * off-site logistics and traffic management for deliveries onsite * importance of onsite installation sequencing, and implications for not planning and monitoring * basic design, offsite manufacturing process and materials used in manufactured pod components, including damage and weather effects associated with materials * tools, equipment and materials used in installing pod components, including maintenance and safe operating procedures * range of lifting and landing platforms used for different prefabricated pod installations * processes and hand signals used for assisting crane operators * types and purposes of fixings and sealants * fire resistance rating * mechanical, electrical and plumbing systems used for pod installation * building codes and inspection checks relevant to prefabricated pod construction * content, terms and symbols used in drawings and specifications relevant to pod installation * quality assurance procedures relevant to installing pods onsite, including measure accuracy against tolerance acceptance, order of sequences, risk and time management * acceptable tolerances for different materials, component structures and fixings * processes and equipment used for levelling * principles of Lean 5S methodology in relation to pod installation * environmentally sustainable practices relevant to pod installation, including safe disposal and recycling of waste. |
| **Assessment Conditions** | Assessment of this unit must be demonstrated in a prefabricated construction site or simulated environment reflective of the workplace that complies with standard and authorised work practices, safety requirements and environmental constraints.  Assessment must ensure access to:   * industry prefabricated pod components, materials, tools and equipment, including personal protective and safety equipment * job requirements, including relevant plans and specifications * relevant workplace policies and procedures which cover design specifications, industry standards, building codes and regulations and safety requirements.   **Assessor requirements**  No specialist vocational competency requirements for assessors apply to this unit. |

1. PREFAB AND THE AUSTRALIAN BUILDING SECTOR - https://builtoffsite.com.au/emag/issue-01/prefab-australian-building-sector/ [↑](#footnote-ref-2)
2. https://builtoffsite.com.au/emag/issue-16/government-backing-australia-prefab/ [↑](#footnote-ref-3)
3. https://builtoffsite.com.au/news/melbourne-modular-builder/ [↑](#footnote-ref-4)