



Australian Government

RIICCM210 Install trench support

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Modification History

Release	Comments
1	This unit of competency was first released in RII Resources and Infrastructure Industry Training Package Release 11.0.

Application

This unit describes the skills and knowledge required to install trench support in civil construction, including both installing and removing trench shoring.

It applies to those working in operational roles. They generally work under supervision to undertake a prescribed range of functions involving known routines and procedures and take some responsibility for the quality of work outcomes.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite unit(s)

No pre-requisite units

Competency field(s)

N/A

Unit sector(s)

Civil construction

Elements and Performance Criteria

Element	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Required knowledge, skills and application should be considered and clearly articulated.</i>
1. Plan and prepare for installing trench support	1.1 Obtain relevant excavation permit (permit) and/or Safe Work Method Statement (SWMS) or their equivalents, as per legislative and worksite requirements

	1.2 Confirm task requirements with site personnel in accordance with worksite instructions 1.3 Verify control measures are in place in accordance with those prescribed in the permit and/or SWMS (or their equivalents) 1.4 Identify and address potential risks and hazards not described in the permit and/or SWMS in accordance with work health and safety (WHS) requirements 1.5 Wear designated personal protective equipment (PPE) prescribed in site signage, permit and/or SWMS (or their equivalents) after checking its serviceability 1.6 Set up exclusion zone using signage and barriers to prevent unauthorised entry in accordance with the permit/SWMS (or their equivalents) 1.7 Confirm incident/emergency response plan is appropriate to the task and personnel involved in the task are prepared for accidents and emergencies in accordance with WHS requirements 1.8 Verify that instruments, equipment and monitoring devices are calibrated and within service date in accordance with manufacturer and worksite requirements 1.9 Establish a method of continuous positive communication with a stand-by person if a stand-by person is required by regulations/legislation or standards
2. Install trench shoring	2.1 Establish a positive communication method between mobile plant operators (if used) and ground workers before work commences in accordance with WHS requirements and worksite instructions 2.2 Confirm excavation of trenches complies with the site plan, set-out, permit and/or SWMS (or their equivalents) in accordance with WHS requirements and worksite instructions 2.3 Select ground-collapse controls based on soil/Geotech information and if required confer with a competent person in accordance with WHS requirements and worksite instructions 2.4 Set out shoring while keeping spoil outside the zone of influence in accordance with engineered design/manufacturer instructions and WHS requirements 2.5 Install shoring from the surface where practicable in accordance with engineered design, manufacturer instructions and worksite procedures 2.6 Secure shoring or trench shields in accordance with engineered design or site requirements

	2.7 Inspect and maintain the excavation and respond to changing ground conditions in accordance with WHS requirements and worksite instructions 2.8 Clean out the excavation from outside the trench where practicable, controlling water and debris to prevent collapse and falls in accordance with WHS requirements and worksite instructions 2.9 Provide safe access and egress and ensure ladders, where used, are secured in accordance with site requirements
3. Remove trench shoring	3.1 Release jacking mechanisms in accordance with manufacturer and worksite instructions 3.2 Remove ladders after confirming all workers are clear of the trench and required controls for removal are in place in accordance with WHS requirements and worksite instructions 3.3 Inspect shoring or trench shields, or arrange for inspection by a competent person, in preparation for lifting from the trench in accordance with WHS requirements and worksite instructions 3.4 Follow the required shoring or trench shield removal sequence in accordance with manufacturer instructions or worksite requirements 3.5 Maintain or repair shoring or trench shields within scope of own role prior to transport in accordance with worksite instructions 3.6 Remove supports in the reverse order of installation using a predetermined safe method in accordance with a competent person's instructions 3.7 Ensure no part of the trench is removed until the excavation is ready for final backfilling or compaction in accordance with worksite instructions
4. Conduct housekeeping activities	4.1 Remove temporary safety measures within scope of authority in accordance with WHS requirements and worksite instructions 4.2 Tidy the work area and remove, store, recycle, or dispose of waste materials in accordance with worksite instructions 4.3 Inspect the plant, tools, and equipment for damage and wear before cleaning and storing and report any faults in accordance with WHS requirements, manufacturer requirements and worksite instructions 4.4 Make the work area safe on completion of task in accordance with the requirements of the permit and SWMS/JSA (or their equivalents)

Range of conditions

N/A

Assessment Requirements for RIICCM210 Install trench support

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements and performance criteria of this unit, including evidence of the ability to:

- install trench support on at least **two** occasions, including:
 - in trenches deeper than 1.5 metres requiring the trench support to be installed, moved along or within the trench, and removed from the trench.

During the above, the candidate must:

- locate and follow relevant safety planning document (safe work method statement [SWMS] or job safety analysis [JSA]) and safe operating procedures (SOP) or safe working instructions (SWI)
- identify, report and record hazards and risks
- implement the requirements, procedures and techniques for trench support installation including:
 - selecting and using required tools and equipment
 - using shoring methods and systems
 - working in confined spaces
- work with others to install trench support that meet required outcomes, including:
 - communicating with others to receive and confirm work requirements
 - using positive communication techniques and equipment to convey information to others including signage to advise others of work activity and exclusion zones
 - complying with reporting requirements and procedures.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- legislative requirements required to install trench support
- policies, procedures and documentation required to install trench support, including those relating to:
 - hazard and risk management including mandatory safety planning documents (SWMS) or job safety analysis (JSA or JSEA) or their equivalent)
 - work health and safety (WHS)
 - working in confined spaces
 - emergency response

- site and equipment safety
- environmental protection waste management
- positive communication techniques and communication equipment
- workplace recording and reporting
- site isolation and traffic control responsibilities
- operational, maintenance and basic diagnostic procedures
- project quality requirements
- job plans and specifications
- housekeeping activities, including cleaning up work area, cleaning and maintaining condition of equipment, waste management and processing records
- principles and techniques required to install trench support, including those related to:
 - organising work activities
 - excavation of trenches, wells and pits
 - construction
 - shoring methods
 - erecting shoring, including using trench shoring mechanisms and using shoring securing mechanisms
 - requirements and procedures for selecting personal protective equipment (PPE), checking PPE serviceability, and ensuring correct fit
- types, characteristics, technical capabilities and limitations of plant and equipment required to install trench support, including:
 - shoring systems
 - levelling equipment
 - hand and power tools
 - measuring equipment
 - scaffolding
 - elevated work platforms
 - slings
 - materials safety data sheet (SDS) compliance processes
 - components of job safety analyses (JSA), job safety environmental analyses (JSEA), and safe work method statements (SWMS)
 - civil construction terminology related to installing trench support.

Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
 - personal protective equipment (PPE)
 - equipment required to install trench support
- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Assessor Requirements

In addition to the requirements in applicable vocational education and training legislation, frameworks and/or standards, assessors and industry experts must also have a minimum of two (2) years industry experience, directly relevant to the training and assessment being provided.

Mandatory Workplace Requirements

Assessment of performance evidence may be in a workplace setting or an environment that accurately represents a real workplace.

Unit Mapping Information

Previous Code and Title	Equivalence	Comments
RIICCM210E Install trench support	Equivalent	Supersedes and is equivalent.

Links

Companion volumes, including implementation guides, are found on the national training register - <https://training.gov.au/training/details/RII>.