

RIICCM209E

Carry Out Concrete Work

Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course training content (this matches the PowerPoint Presentation).
- Review questions.

What do you need to do before you use it for the first time?

1. Rebrand the document.
2. Review the document as part of your validation process.

See the 'Read Me First' document for a complete set of instructions on how to use these resources.



LEARNER GUIDE

RIICCM209E Carry Out Concrete Work

Learner Name:	
Learner ID:	
Learner Contact Number:	
Learner Email Address:	
Date Training Commenced:	

This Book Contains:

- Course Information.
- Review Questions.

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1.1 Introduction

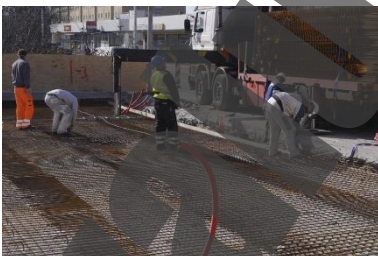
This course is based on the unit of competency **RIICCM209E Carry Out Concrete Work**.

You will learn about:

- ◆ Planning and preparing.
- ◆ Selecting materials.
- ◆ Setting out for concrete work.
- ◆ Constructing and fitting reinforcement.
- ◆ Erecting formwork.
- ◆ Carrying out concrete work.
- ◆ Stripping formwork.
- ◆ Cleaning up.



1.1.1 Concreting Tasks



Civil construction concreting tasks cover a wide range of activities. Concreting work may include:

- ◆ Site slabs.
- ◆ Footpaths.
- ◆ Repair work on kerbs and channels.
- ◆ Gully pits.
- ◆ Culvert end structures.
- ◆ Foundations.
- ◆ Drains.
- ◆ Head walls.
- ◆ Wing walls.
- ◆ Aprons.
- ◆ Plinths.
- ◆ Hardstands.

It is important that you identify the type of concreting task/s to be conducted, and the steps required to complete the work before starting any task.

1.2 Site Policies and Procedures

You must follow all safety rules and instructions when performing any work. If you are not sure about what you should do, ask your boss or supervisor. They will tell you what you need to do and how to do it in a safe way.



1.2.1 Health and Safety Rules

Every workplace has to follow laws and rules to keep everyone safe. There are 4 main types:

Rule	Explanation
Acts	Laws that protect the health, safety and welfare of people at work.
Regulations	Gives more details or information on particular parts of the Act.
Codes of Practice	Are practical instructions on how to meet the terms of the Law.
Australian Standards	Give you the minimum levels of performance or quality for a hazard, work process or product.

Some states use OHS laws, and other states use WHS laws. They both talk about the same thing, but use different words or names for people. If you have any questions about safety rules you should talk to your boss or supervisor.

1.2.2 Operations Documentation

Before starting your work you need to make sure you have access to all operations documentation for the job. This will help you to do your work in the safest way and make sure all work is compliant.



Operations documentation includes:

Site Details

The information and safety requirements of the workplace environment (where you will be working).

Hazard Details

Any hazards in the work area or related to the work. This could also include instructions on how to handle dangerous or hazardous materials.

Task Details

Instructions of what the work is or what you will be doing (this can include diagrams or plans). Also instructions on how to safely do the job.

Faulty Equipment Procedures

Isolation procedures to follow or forms to fill out.

Signage

Site signage tells you what equipment you need to have, or areas that are not safe to be in.

Emergency Procedures

Instructions on what to do in emergency situations, for example if there is a fire, accident or emergency where evacuation or first aid is needed.

Equipment and Work Instructions

Details of how to operate plant and equipment and the sequence of work to be done.

1.2.3 How to Keep Everyone Safe

WHS law says that all companies and workers need to keep themselves and other people safe while they work. This is called a duty of care.

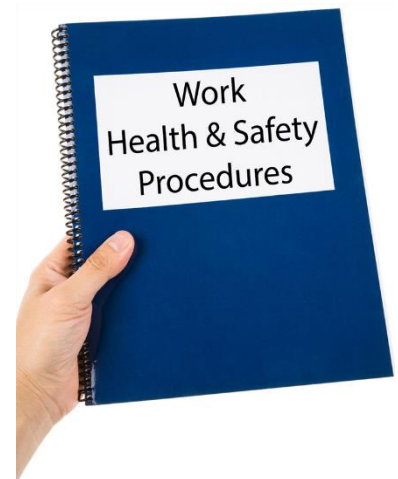
To keep yourself and other workers safe you need to:

- ◆ Follow your instructions.
- ◆ Follow all workplace rules.
- ◆ Make sure all equipment is safe to use.
- ◆ Carry out your work safely.
- ◆ Report any problems.

Your worksite will also have instructions for working safely including:

- ◆ Emergency procedures, including using fire fighting equipment, first aid and evacuation.
- ◆ Handling hazardous materials.
- ◆ Safe operating procedures.
- ◆ Personal protective clothing and equipment.
- ◆ Safe use of tools and equipment.

If you think something is dangerous tell your boss or supervisor as soon as possible.



1.2.4 Worksite Communications

Carrying out concrete work is a team effort, from the planners through to the inspectors who check the final product.



It is important to communicate with other workers when you are planning for and carrying out the work to make sure everyone knows:

- ◆ The work being completed.
- ◆ How, when and where you will be operating.
- ◆ What they need to do.

All workers on site must understand their own role and the roles of others before starting work. It helps to make sure work is done safely and efficiently.

Workers you may need to communicate with on site include:

- ◆ Supervisors and management.
- ◆ Plant and vehicle operators.
- ◆ Traffic controllers or other workers on the site.
- ◆ Team leaders.
- ◆ Site safety personnel.
- ◆ Processing plant operators.
- ◆ Maintenance workers.
- ◆ Crane and float operators.
- ◆ Contractors.
- ◆ Inspectors, both internal and external, including WHS, environmental and quality assurance officers.
- ◆ Site visitors.



You need to make sure you understand all communication requirements before starting your work. This can be done by confirming which communications equipment you will need to use, filling out documents and deciding on any special hand or whistle signals that will be used with other personnel.



Some communication methods may involve:

- ◆ Site meetings.
- ◆ Toolbox meetings.
- ◆ Team briefings.
- ◆ Notice boards.
- ◆ Policies, procedures and manuals.
- ◆ Work Method Statements (WMS).
- ◆ Communications equipment, including:
 - ◆ Two-way radio.
 - ◆ Mobile phones.
 - ◆ Computers.
 - ◆ Landline phones.
 - ◆ Whistles, horns or bells.
 - ◆ Hand signals.
 - ◆ Flag signalling.
 - ◆ Verbal instructions.

If you are at all unsure about any aspects of communication on your worksite, re-read your work instructions or plans and speak with your supervisor.

Review Questions

1.	What information can you find in Australian Standards?	<input type="checkbox"/>

2.	List three (3) things that may be included in 'operations documentation':	<input type="checkbox"/>
1.		
2.		
3.		

3.

List three (3) types of personnel you may need to communicate with on site.



1.

2.

3.

1.3 Work Instructions

You need to be clear about what work you will be doing. Make sure you have everything about the job written down before you start. This includes what you will be doing, how you will be doing it and what equipment you will be using.



1.3.1 Job Details

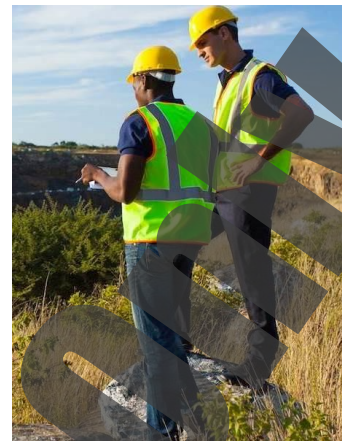
Make sure you have all of the details about where you will be working. For example:



- ◆ **The Site** – Is there clear access for all equipment? What are the ground conditions like?
- ◆ **The Weather** – Is there wind, rain or other bad weather? Is it too dark?
- ◆ **Facilities and Services** – Are there power lines or underground services to think about?
- ◆ **Traffic** – Are there people, vehicles or other equipment in the area that you need to think about? Do you need to get them moved out of the area? Do you need to set up barriers or signs?
- ◆ **Hazards** – Are there dangerous materials to work around or think about? Will you be working close to underground services or other people?

You also need to make sure you have all of the details about the kind of work you will be doing:

- ◆ **The Task** – What area is being concreted? How much concrete will be needed? Does it need any special equipment?
- ◆ **Plant and Equipment** – What type of plant and equipment will be used? How much room does it need?
- ◆ **Communications** – How are you going to communicate with other workers?
- ◆ **Procedures and Rules** – Do you need any special permits or licences? Are there site rules that affect the way you will do the work?



1.3.2 Reading and Checking Your Work Instructions



All work needs to follow worksite, environment and company safety procedures.

Procedures help to make sure that all work is done in a safe way, without damaging equipment or putting people in unsafe situations. They also help to make sure that work is done in the correct order and doesn't interrupt or get in the way of other work that is happening on the site.

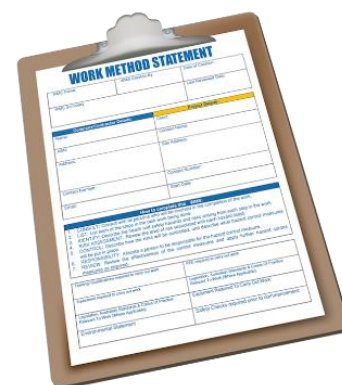
Your work instructions will tell you the safest way to do the job, and the equipment that you will need to use. It is a good idea to check your work instructions with your boss or supervisor to make sure you know exactly what you need to do.

If you don't know where to get your instructions or you can't understand them, you can ask your boss or supervisor. They will tell you where to find your work instructions and explain what they mean.

1.3.3 Work Method Statements

Many worksites require a work method statement before any work can start. A work method statement is a list of steps that outlines how a job will be done. It also includes any hazards that occur at each step, and what you need to do about them.

These statements can also be known as Safe Work Method Statement (SWMS), Job Safety Analysis (JSA) or Safe Operating Procedure (SOP).



1.3.4 Safety Data Sheets

A Safety Data Sheet (SDS) is a detailed document outlining the risks and hazards associated with handling chemicals and other materials.

The SDS will contain details that can help you to identify:

Basic Details of the Chemical or Material	Name, type and identification number.
Hazards Associated with the Material	Whether it is flammable or corrosive.
Safe Handling and Storage Procedures	PPE to use, sealed containers or storage temperatures.
Emergency Procedures	What to do if the chemical or material gets out of hand.
Disposal Procedures	Suggestions for removing the chemical or material from the site.

It will be issued by the manufacturer and may or may not include material handling methods.

Talk to your WHS representative or supervisor if you have any questions about legislative requirements relating to your work.

1.3.5 Organise Your Work Activities

Once you have confirmed all requirements for completing the concrete work and received your work instructions, it is essential that you organise your work activities.

Organising your work activities involves scheduling your daily and weekly tasks to complete all assigned tasks in the most efficient manner that still meets the requirements of the worksite.

Concrete work must be completed in the correct sequence. For this reason, it is important that your work activities are organised and scheduled.



You may need to sequence activities, book machinery hire, source operators, check availability of equipment, and step out how the work must be done.

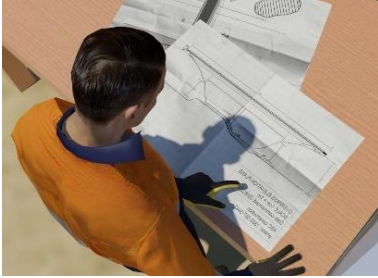
Every activity that you schedule or organise must be recorded and kept following workplace procedures.

Flexibility is important when organising your work priorities to allow you to reorganise if a higher priority task needs to be completed.

1.3.6 Project Quality Requirements

Every civil construction project will have quality requirements. These outline when tasks need to be completed and the required standard of the work.

Your work instructions and plans or drawings will guide you, and help you to make sure you are achieving the quality standard for the project.



They can include:

- ◆ Project dimensions.
- ◆ Project tolerances.
- ◆ Standards of work.
- ◆ Material standards.

1.3.6.1 Plans, Drawings and Sketches

Some of your work instructions might be given to you in drawings and sketches. You will need to get the information out of these and use it to do your job.

Project plans and drawings give you an overview of the site, for example:

- ◆ Location of the site and earthworks in relation to the surrounding area.
- ◆ The position of structures, roads, access areas.
- ◆ Layout of drainage lines.
- ◆ Foundation details and landscaping features.



Depending on the project, drawings may be very detailed or they could be simple sketches.

You should learn about the conventions and symbols used in the plans and drawings so you can understand what the information means.

Review Questions

4.

What details about the work area can you get from your work instructions?



5.

What is a Work Method Statement?

6.

What is a Safety Data Sheet?

7.

What does organising your work activities involve?

8.

What details are outlined in project quality requirements?

1.4 Emergency Procedures

It is important that you know what to do in the event of an emergency. Your worksite will have standard actions that should be taken during an emergency.

Obtaining and interpreting emergency procedures before starting the job will help you to identify the steps required to respond to emergencies.



1.4.1 Emergency Response

Emergency procedures will vary depending upon the worksite. These procedures could include:



- ◆ Emergency shutdown.
- ◆ Evacuation.
- ◆ First aid.
- ◆ Fire fighting.

1.4.2 Emergency Shutdown of Equipment

If there is a fire, emergency or accident you might need to use the emergency stop on the equipment you are using. This will turn the equipment off immediately.

You can also use the emergency stop if the equipment stops working properly or you lose control of the equipment.



1.4.3 Evacuation

Things to remember are:

1. Keep calm.
2. Move away from the danger to a designated evacuation point, sometimes called an emergency assembly area.
3. Do not let other people into the area.
4. Call emergency services in accordance with workplace procedures and policies.



1.4.4 First Aid

First Aid is the quick care given to an injured or ill person.

Every site will have a First Aid Officer. If somebody needs first aid you must tell your supervisor or First Aid Officer. Do not try to give first aid if you have not been trained.



1.4.5 Fire Fighting Equipment

Fire fighting equipment on site could be anything from small fire extinguishers through to large water cannons. Different fire fighting equipment should be used for different types of fire. Always check the equipment for information on what type of fire it can be used on.



Steps for using a fire extinguisher:

1. Evacuate the area.
2. Isolate the area.
3. Call emergency services or other designated on site procedure.
4. If it is safe to do so use an extinguisher to attempt to control the fire using the PASS system.

The PASS system:

P	Pull the pin.
A	Aim at the base of the fire.
S	Squeeze the trigger.
S	Sweep the base of the fire.

Contact your site emergency management team as soon as possible and call the fire brigade on 000.