

Installing cabinets on-site

Supporting:

MSFKB3006: Install fitted cabinets and components



Work book

**KITCHEN AND CABINET
BATHROOM MAKING**

Name:

Installing cabinets on-site Workbook

Containing learning activities and assignments supporting the unit of competency:

MSFKB3006: Install fitted cabinets and components

The assignment templates are also available in an electronic 'Word' version, downloadable from the INTAR website at:

www.intar.com.au



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Parts of this resource are based on materials developed by Workspace Training for the original Kitchen and bathroom cabinetmaking Project, produced in 2011-2014 for the Workplace English Language and Literacy (WELL) Program.

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About INTAR

Industry Network Training and Assessment Resources (INTAR) is a partnership owned by Workspace Training and Vaughan Consulting Software Solutions – the development team that produced the original Flooring Technology project for the Commonwealth Government WELL Program.

INTAR was formed to enable the development work to continue, following the abolition of the WELL Program in 2014. All new materials are now paid for by subscribers and members who contribute to the INTAR funding pool. Access to the subscription site is via a password protected area.

Members of INTAR include TAFE teachers, RTO trainers, manufacturers and other suppliers of industry products and services.

In addition to learner guides, workbooks and on-line materials, INTAR also provides members with the following resources and services:

- nationally validated assessment tools for all competencies covered in the learning materials
- participation in the validation groups that meet to validate assessment tools and strategies
- forums for direct consultation with manufacturers, employers and other industry personnel
- evidence of the continuous improvement, validation and consultation processes, suitable for use in demonstrating compliance with the *Standards for RTOs 2015*.

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Introduction

Installing cabinets on-site is a 'learning unit' from the Kitchen and bathroom cabinetmaking training resource. It supports the following unit of competency from the *Certificate III in Cabinetmaking (Kitchen and bathroom)* (MSF31113):

- *MSFKB3006: Install fitted cabinets and components.*

To be assessed as competent, your assessor will use a range of methods to check your understanding of the concepts presented in the Learner guide for this unit and your practical ability to install cabinets on-site.

These may include:

- written assignments
- practical demonstrations
- on-the-job discussions about how you go about particular activities
- learning activities undertaken while you're progressing through the unit
- examples of installations you have undertaken
- log book or work diary.

Literacy, numeracy and computer skills

Literacy is the ability to read and write. To complete this qualification, you will need sufficient literacy skills to produce a range of workplace documents. You will also need the skills to be able to read and understand documents such as order forms, installation instructions, project briefs and safe operating procedures.

Numeracy is the ability to work with numbers. Cabinetmakers need to do lots of measure-ups and calculations, so there will be many opportunities for you to learn and practise your numeracy skills.

When it comes to completing the written assignments for this qualification, a certain level of literacy ability is required to read the questions and write down your answers. There will also be times when you are asked to generate documents on a computer.

Obviously, it's important that you clearly understand what the assignment is asking you to do, and that your work is a good reflection of what you really know. So if you're having trouble reading the questions, writing down your answers, or using certain computer programs, make sure you speak to your trainer before you hand the assignment in.

There are various ways your trainer can help you. For example, they may be able to ask the assignment questions verbally and help you to write down your answers. They may also be able to show you sample answers to similar questions, which will let you look at the way they're written and give you hints on how to write your own. You may also be allowed to do the assignment with the assistance of another person.

Applying for RPL

RPL stands for **Recognition of Prior Learning**. It is a form of assessment that acknowledges the skills and knowledge you have gained through:

- on-the-job experience
- formal training in other courses
- life experience, through your hobbies or other outside activities.

If you believe that you are already competent in some or all of the skills covered in this unit, ask your assessor about how to apply for RPL.

Using this workbook

All of the lessons in the Learner guide for this unit have learning activities at the end. Their purpose is to provide discussion points and questions to help reinforce your understanding of the concepts being presented.

There are also a range of assignments, which appear at the end of each section. These are designed to test your knowledge of the subject matter and ability to submit written responses in an acceptable format.

This workbook reproduces all of the learning activities and assignments in a format that lets you handwrite your answers to the questions.

Note that your trainer may ask you to produce a computer-generated document for all of the formal assignments, either printed out in hard copy or submitted electronically. To do this, go to the website version of the unit and look for the *Assignment* link in each section. This will allow you to type your answers into the 'Word' document and then either print it out or email it direct to your trainer as an attachment.

You may also be asked to share your learning activity answers electronically, especially if you are undertaking this unit by distance learning and are linked up with fellow students in other locations. This might be done through group emails or via a social networking site such as Facebook. In these cases, you should use the website resource rather than this workbook.

Part 1

Learning activities



Section 1: Fasteners and sealants

Fasteners for masonry

Choose a masonry anchor that you either currently use at work, or would like to know more about. If you're not very familiar with the anchor, do some research on what its particular advantages are (that is, why it is used in certain situations) and how it is fitted. If possible, see if you can use it in a couple of jobs to find out for yourself how it works. When you've finished, write down the relevant details in the boxes below.

Brand name of fastener

General class of fastener (e.g. 'expansion sleeve anchor', 'nylon anchor' etc.)

Advantages (including the applications for which it is most suitable)

Disadvantages (including situations where you would not use it)

Fasteners for stud walls

Choose a fastener for a stud wall that you either work with now or would like to know more about. When you've finished your research, write down the following details.

Brand name of fastener

General description (i.e. cavity fastener, timber fastener, steel fastener)

Advantages (including the applications for which it is most suitable)

Disadvantages (including situations where you would not use it)

Durability of fasteners

List some examples of fasteners you use at work. Beside each one state the metal (or other material) it's made from as well as its protective coating (if there is one). Try to choose fasteners that have a range of different materials and coatings.

Example	Metal (or other material)	Protective coating

Sealants and fillers

Choose one sealant brand and have a look at the information written on the side of the cartridge. Answer the following questions

1. What is the trade name of the sealant?

2. What are its features? (That is, what sorts of jobs does it do best?)

3. Does it clean up with water or a solvent?

Section 2: Installing modular units

Installing the base

The method described in the Learner guide is just one way of constructing a plinth. There are also cabinet designs that have built-in bases, which means that a separate plinth isn't needed at all.

1. What methods does your company use to carry out this part of the installation?

2. How is the levelling done?

3. What are the kickboards fixed to?

Installing floor cabinets

Name the fasteners you're likely to use when installing a set of floor cabinets in a timber framed kitchen. Include the fasteners used to fix the cabinets to each other as well as the fasteners that go down to the floor and through to the wall frame.

Types of fastener

Installing wall cabinets

List some of the problems you might be faced with if wall cabinets weren't installed level and plumb. Be as specific as you can.

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Fitting doors and drawers

What hardware items do your clients ask to be fitted to doors and drawers? Write down the names of the components and their manufacturers, and provide a brief description of what they do.

Component	Manufacturer	Description

Fitting bench tops

What types of bench tops do you (or your company) install as part of the on-site fit-outs? What other bench tops does your company offer clients that require installation from a specialist contractor?

For each bench top you list, write a brief description of its advantages and disadvantages.

Bench top type	
Advantages	
Disadvantages	

Bench top type	
Advantages	
Disadvantages	

Finishing to the wall

We've talked about using dividers to scribe the profile of a fancy cornice. But there are other tools available, such as a profile gauge, which can be used to transfer very detailed shapes across to a panel.

Have you ever seen or used a profile gauge? If not, ask your supervisor or work colleagues if they can show you one and demonstrate how it works. Trace some profiles using the profile gauge.

Section 3: Installing appliances

Ovens and stoves

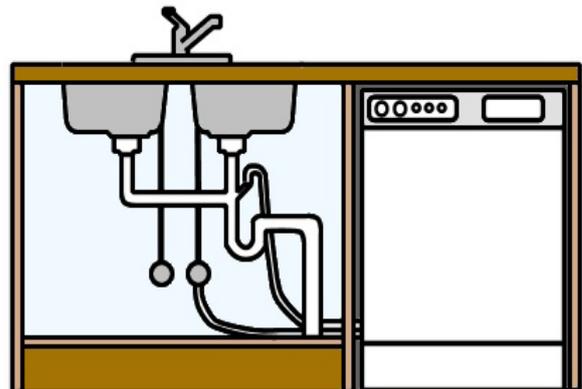
Choose three specifications from *Appendix A: Coordination of service zones in AS/NZS 4386.2*. Write down the specifications and clearances below.

1	
2	
3	

Dishwashers and sinks

Have a look at the drawing at right. You'll see that the waste pipes from the two sinks go through a **P trap** before the pipe drops down through the floor.

All waste pipes go through an S trap or P trap. 'S' and 'P' refer to the shape the pipe forms in the U-bend. The purpose of a trap is to permanently hold water.



Why do you think it would be necessary to do that? Here's a hint – all waste pipes that run into the sewerage system have an S trap or P trap.

Section 4: Final presentation

Finishing and handing over

Below is a sample checklist for a final inspection on a kitchen project. Compare your own company's list of items with the items shown on this sample checklist. Are they much the same? Is there anything missing from this sample checklist that you think should be included?

Write down your answers.

Sample inspection checklist

Item	Checked	Comments / Fixes
Doors plumb and all gaps even		
Drawers close smoothly and all gaps even		
Buffer pads installed to doors and drawers		
Handles fitted		
Adjustable shelves fitted		
Panels scribed and gaps filled		
Screws capped in all carcasses		
Cut outs for services neat and in position		
Kickboards fitted and exposed ends edged		
Cutlery tray provide		
Accessories fitted and running correctly		
Capping mould fitted		
Bench tops secured and cut outs sealed		
Sink secured and sealed		
Doors, drawer fronts, end panels cleaned		
Interiors cleaned		
All rubbish removed		

Part 2

Assignments



Assignment 1

Name		Date	
------	--	------	--

Question 1

Choose two types of fasteners used for fixing cabinets or components to masonry. Provide the following details for each one.

- Trade name or brand name
- Class of fastener (generic description)
- Main uses (what you use it for in your own installations)
- Finish (e.g. zinc plated, hot dipped gal, stainless steel etc.)
- Tools required (for drilling the pilot hole, inserting the fastener and securing it)
- Safety considerations (specific safety issues and PPE e.g. dust mask)
- Cautions (typical things that might go wrong and how you guard against it).

Example 1

Type of fastener	
Trade name	
Class of fastener	
Main uses	
Finish	
Tools required	
Safety considerations	
Cautions	

Example 2

Type of fastener	
Trade name	
Class of fastener	
Main uses	
Finish	
Tools required	
Safety considerations	
Cautions	

Question 2

Choose two types of fasteners used for fixing materials to stud walls (either into studs or cavities). Provide the following details for each one.

- Name of fastener (including brand name if applicable)
- Main uses (what you use it for in your own installations)
- Tools required (for inserting and securing it)
- Cautions (typical things that might go wrong and how you guard against it).

Example 1

Type of fastener	
Main uses	

Tools required	
Cautions	

Example 2

Type of fastener	
Main uses	
Tools required	
Cautions	

Question 3

Choose two types of caulking compounds, preferably for two different purposes (e.g. one may be a gap filler and the other may be a sealant). Provide the following details for each one.

- Brand name of product
- Generic description (purpose and main chemical ingredients)
- Main uses (what you use it for in your own installations)
- Equipment required (for application)
- Clean-up agent (water or solvent)
- Safety considerations (specific safety issues and PPE e.g. gloves)
- Cautions (typical things that might go wrong and how you guard against it).

Example 1

Brand name	
Generic description	

Main uses	
Equipment required	
Clean-up agent	
Safety considerations	
Cautions	

Example 2

Brand name	
Generic description	
Main uses	
Equipment required	
Clean-up agent	
Safety considerations	
Cautions	

Assignment 2

Name		Date	
------	--	------	--

Question 1

Describe two methods for putting a level base underneath a floor cabinet.

Method 1

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Method 2

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Question 2

Let's say you need to install two floor cabinets in a kitchen. The cabinets will sit side by side on a single plinth with a kickboard across the front. All boards are 16 mm melamine particleboard. The floor is bare concrete. The stud walls are constructed from radiata pine with plasterboard linings.

List each of the different types of fasteners you would take on-site with you to carry out this installation. For each fastener, state where you will use it.

Note that you do not have to include fasteners for the bench top or any other components.

Fastener	Where you would use it

Question 3

Why do cabinets need to be installed perfectly level and plumb, regardless of the state of the floor and walls? Name four problems you might have to deal with if the carcasses were not level and plumb. Note that the problems may relate to other components or moving parts – they don't have to be limited to the carcasses themselves.

Problem 1

Problem 2

Problem 3

Problem 4

Assignment 3

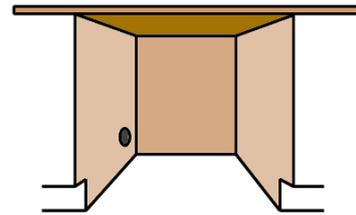
Name		Date	
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Question 1

You have been asked to build in a space for a dishwasher between the sink cabinet and the cutlery drawers. The dishwasher dimensions are:

Width: 590 mm

Height: 850 mm (minimum height, with adjustable legs screwed in)



- (a) You decide to allow a clearance of 5 mm on each side of the dishwasher.

What will the total width of the opening be for the dishwasher?

- (b) The floor is currently bare concrete, but the client has told you that it will be tiled later with tiles that are 12 mm thick. They will cover the entire kitchen floor area, including the space provided for the dishwasher. You will need to allow 12 mm for the tiles plus 3 mm for the glue thickness.

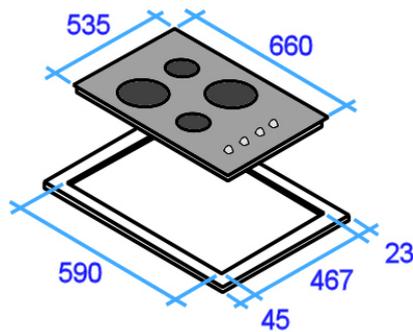
Your bench top height is 920 mm above the concrete floor and its thickness is 35 mm.

How much clearance will there be between the top of the dishwasher and the underside of the bench top after the tiles are laid?

Question 2

You are about to install a cooktop. The splashback behind the cooktop is glass and the vertical panel to the right is particleboard with a timber veneer.

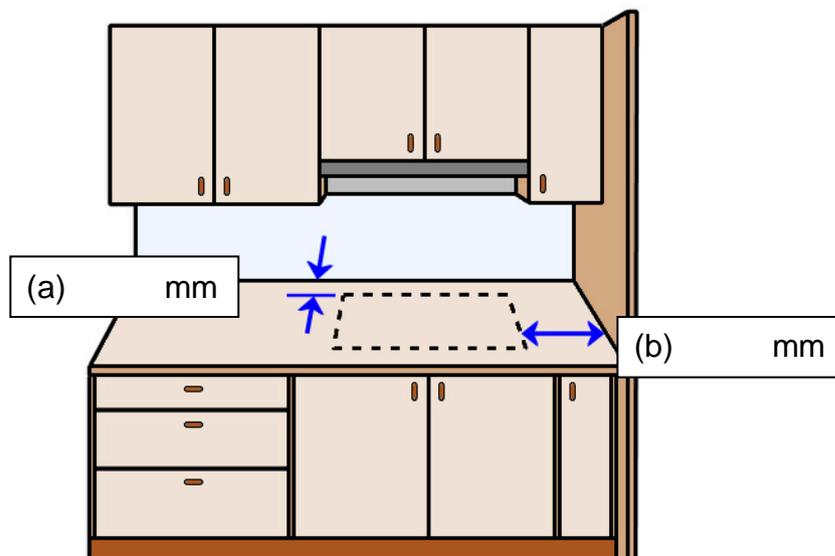
Once it's installed, the clearances to the back and right hand side of the cooktop will be the minimum allowed under AS 4386. The space between the underside of the rangehood and the top of the cook



The diagram at left shows the cooktop dimensions and cut-out dimensions.

The white border around the cut-out represents the cooktop overlap where it sits on the bench top.

- How far in from the splashback will you draw your rear cut-out line? Mark the measurement on the 3D drawing.
- How far in from the right hand panel will you draw the right hand cut-out line? Mark the measurement on the 3D drawing.



Practical demonstration

The checklist below sets out the sorts of things your trainer will be looking for when you undertake the practical demonstrations for this unit. Make sure you talk to your trainer or supervisor about any of the details that you don't understand, or aren't ready to demonstrate, before the assessment event is organised. This will give you time to get the hang of the tasks you will need to perform, so that you'll feel more confident when the time comes to be assessed.

When you are able to tick all of the YES boxes below you will be ready to carry out the practical demonstration component of this unit.

Specific performance evidence	YES
1. Install cabinets and conduct post-installation inspection in at least: <ul style="list-style-type: none"> • One kitchen (Installation 1) • One bathroom and laundry (Installation 2) 	<input type="checkbox"/> <input type="checkbox"/>
2. Above installations must include at least: <ul style="list-style-type: none"> • One commercial installation • One residential installation 	<input type="checkbox"/> <input type="checkbox"/>

General performance evidence	YES
1. Follow all relevant WHS laws and regulations, and company policies and procedures	<input type="checkbox"/>
2. Wear appropriate PPE for the task being undertaken	<input type="checkbox"/>
3. Access the information needed to identify the correct cabinets and components and carry out the installation	<input type="checkbox"/>
4. Check that all cabinets and components are suitable for the installation	<input type="checkbox"/>
5. Select the correct tools and equipment for the job, carry out all necessary pre-start checks	<input type="checkbox"/>
6. Use hand and power tools safely and efficiently	<input type="checkbox"/>
7. Interpret plans, confirm markings and check measurements	<input type="checkbox"/>

8. Install cabinets and fix components according to plans and specifications	<input type="checkbox"/>
9. Make provision for appliances and service features	<input type="checkbox"/>
10. Wear appropriate PPE for the job being undertaken	<input type="checkbox"/>
11. Operate tools safely and efficiently, and keep them secure when not in use	<input type="checkbox"/>
12. Clean up work area and dispose of rubbish properly	<input type="checkbox"/>
13. Inspect job to ensure that measurements, levels, squareness and tolerances are within specifications and that components are correctly aligned	<input type="checkbox"/>
14. Accurately complete all required documentation	<input type="checkbox"/>