

Adhesive fixed carpet

**Supporting:**

***MSFFL3006 -   
Install adhesive   
fixed carpet   
floor coverings***



**To be used in conjunction with the Learner Guide for this unit**

Name: Date of issue:

**INTAR Flooring Technology Project 2018**

**Student Workbook**

Adhesive fixed carpet

Student Workbook



This Workbook accompanies the Learner guide for ‘Adhesive fixed carpet’. It has been developed by Industry Network Training and Assessment Resources (INTAR) for the National Flooring Trainers Network (NFTN) with funding provided by the Carpet Institute of Australia Limited (CIAL).

Its purpose is to help apprentice floor layers, sales staff and other workers to acquire the background knowledge needed to satisfy the theoretical components of the competency: *MSFFL3006 Install adhesive fixed carpet floor coverings*.

It is not designed to replace the practical training necessary to develop the hands-on skills required.

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In all cases, users should consult the original source documents before relying on any information presented in the resource.

These source documents include manufacturers’ installation guides, Australian Standards, codes of practice and other materials produced by specialist industry bodies and government agencies.

### About the Flooring Technology project

The Flooring Technology project is an ongoing resource development venture coordinated by INTAR to assist apprentice flooring installers undertaking the *Certificate III in Flooring Technology.*

For more information about INTAR, and to see the full range of Flooring Technology units available under this project, go to the following website and follow the links:

[www.intar.com.au](http://www.intar.com.au)

For more information on the background of the Flooring Technology project, and the funding bodies, organisations and individuals that have been involved in its development work over the years, go to the following website and follow the links:

[www.workspacetraining.com.au](http://www.workspacetraining.com.au)

**Name:**

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# Introduction

*Adhesive fixed carpet* is a ‘learning unit’ from the Flooring Technology training resource. It supports the following competency from the *Certificate III in Flooring Technology* (MSF30813):

* *MSFFL3006: Install adhesive fixed carpet floor coverings.*

### Using this workbook

All of the lessons in the Learner guide for this unit have learning activities at the end. Their purpose is to test your knowledge of the subject matter and reinforce your understanding of the concepts being presented.

This workbook reproduces all of the learning activities in a format that lets you handwrite your answers to the questions. Your assessor will use this workbook as one of the evidence requirements for demonstrating competence in the unit.

### How you will be assessed

To be assessed as competent in this unit, your assessor will use a range of methods to evaluate your practical skills and understanding of the concepts relating to the installation of dual bond and direct stick carpet.

In addition to this workbook, your assessor will also use one or more of the following assessment methods to collect evidence of your competence:

* practical demonstrations of direct stick and dual bond carpet installations
* on-the-job discussions about how you go about particular activities
* log book or work diary
* reports from your workplace supervisor.

See the next chapter – ‘Assessment evidence checklists’ – for a summary of the skills and knowledge you will need to demonstrate in your various assessment activities.

### Literacy, numeracy and computer skills

Literacy is the ability to read and write. To complete this qualification, you will need sufficient literacy skills to fill in a range of workplace documents and complete the learning activities. 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. Flooring installers 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 learning activities for this qualification, a certain level of literacy ability is required to read the questions and write down your answers. There may be times when you are asked to generate documents on a computer.

If you have any trouble reading the questions, writing down your answers, or using certain computer programs, make sure you speak to your trainer before you hand the workbook or assignment in.

There are various ways your trainer can help you. For example, they may be able to ask the 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.

# Assessment evidence checklists

The checklists below set out the sorts of things your trainer will be looking for when you undertake the practical demonstrations and knowledge tests for this unit.

They are divided into ‘Performance evidence’ and ‘Knowledge evidence’ checklists. Performance evidence refers to tasks or activities you will need to perform through practical demonstrations. Knowledge evidence refers to items of information you will need to show an understanding of through the completion of written tests, workbook learning exercises and verbal discussions.

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 events are 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.

### Performance evidence

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

| **Specific demonstration criteria** – relating to adhesive-fixed carpet | **YES** |
| --- | --- |
| Complete at least one of each of the following three installations:   * **Installation 1: direct stick carpet** – using a suitable direct stick carpet in connecting rooms, including at least one cross join and one seam join * **Installation 2: dual bond carpet** – using a woven carpet in connecting rooms, including at least one cross join and one seam join * **Installation 3: dual bond carpet** – using tufted carpet and pre-applied adhesive underlay in connecting rooms, including at least one cross join and one seam join using gripper strips and heat bond tape | ❑  ❑  ❑ |

| **General performance evidence** – relating to working on-site | **YES** |
| --- | --- |
| Comply with all relevant WHS policies and procedures | ❑ |
| Correctly understand instructions and work orders, and seek out all relevant information | ❑ |
| Select suitable trims, mouldings, cover strips and other materials for  the job | ❑ |
| Select and prepare suitable primers and adhesives | ❑ |
| Acclimatise the carpet according to manufacturer’s recommendations | ❑ |
| Carry out work in accordance with Australian Standards, manufacturer’s recommendations, company procedures and client specifications | ❑ |
| Handle tools, materials and products safely, and wear all required PPE | ❑ |
| Use safe work practices to minimise the risks of injury to self and others | ❑ |
| Follow procedures to prevent damage to materials or equipment and minimise wastage | ❑ |
| Plan activities to avoid any backtracking, interruptions or wastage | ❑ |
| Work efficiently to optimise work flow and maintain production output and product quality | ❑ |
| Carry out pre-checks and inspections to anticipate problems and take corrective action | ❑ |
| Modify activities to cater for variations in workplace conditions | ❑ |
| Interpret basic plans and take accurate measurements | ❑ |
| Calculate area and estimate material requirements | ❑ |
| Communicate effectively, work cooperatively with others and ask for help when needed | ❑ |
| Clean up work area, and store or recycle unused items | ❑ |
| Dispose of rubbish appropriately, and follow environmental care procedures | ❑ |
| Report work outcomes and problems, and complete documentation accurately | ❑ |

### Knowledge evidence

Many of the knowledge evidence requirements will be assessed progressively as you work through the unit. However, you may also be asked to complete a written test as a final assessment of your knowledge and understanding of the concepts.

When you are able to tick all of the YES boxes below you will be ready to undertake the final written test for this unit.

|  |  |
| --- | --- |
| **Specific knowledge evidence** – relating to adhesive-fixed carpet | **YES** |
| Adhesive fixed carpets – including types, characteristics, uses and limitations | ❑ |
| Tools and equipment, including procedures for their safe use, operation and maintenance | ❑ |
| Cutting, laying, fixing, joining and finishing adhesive fixed carpet | ❑ |
| Characteristics and requirements of sub-floor preparation | ❑ |

|  |  |
| --- | --- |
| **General knowledge** – relating to working as a flooring installer | **YES** |
| WHS legislation, regulations, standards and codes of practice relevant to the task | ❑ |
| Company and worksite policies and procedures relevant to the task | ❑ |
| Types of tools and equipment, and procedures for their safe use and maintenance | ❑ |
| Control measures and safety equipment used to manage risk | ❑ |
| Procedures for recording workplace information and reporting problems | ❑ |
| Methods for estimating and calculating quantities and measurements | ❑ |
| Strategies for working with others in a team | ❑ |
| Environmental protection requirements | ❑ |
| Lines of communication and procedures for resolving problems | ❑ |

# Section 1: Preparing for installation

### 1. Tools and equipment

1. Are there any tools mentioned in this lesson that you don’t use in your own on-site installations? Which ones are they?

|  |
| --- |
|  |

1. Are there any additional tools that you do use, that aren’t listed? What are they, and what do you use them for?

|  |
| --- |
|  |

### 2. Health and safety

For each hazard below, state what ‘risks’ they might pose to people’s health and safety, and what ‘control measures’ you would put in place to minimise the risks.

|  |  |  |
| --- | --- | --- |
| **Hazard** | **Risk** | **Control measure** |
| Other people on-site who might walk through the installation area |  |  |
| Heavy carpet rolls that need to be moved from the truck to the work area |  |  |
| Working in a room with poor ventilation |  |  |
| Working on your knees on a hard floor surface |  |  |
| Tools, offcuts and other building items scattered around the floor |  |  |

### 3. Documentation

Let’s say you are meeting with the client to discuss their dual bond broadloom carpet installation on a concrete subfloor, and they say: ‘The carpet must be installed in accordance with the Australian Standards.’

Which Australian Standards would they be referring to?

|  |
| --- |
|  |

### 4. Assessing the subfloor

1. Why is subfloor moisture content an important consideration when you’re laying dual bond carpet?

|  |
| --- |
|  |

1. What are the main problems that might occur in an installation if the moisture content in the substrate was too high?

|  |
| --- |
|  |

1. Let’s say you have been asked to install dual bond carpet over a new concrete slab. What steps should you take to minimise the problem of rising moisture in the slab before you start the installation?

|  |
| --- |
|  |

1. Who takes final responsibility for deciding whether a subfloor is in a suitable condition for a floor covering installation?

|  |
| --- |
|  |

# Section 2: Carpets, underlays and adhesives

### 1. Carpet

Choose one carpet product you’re familiar with that is suitable for dual bond or direct stick installation. Complete the table below for that product.

|  |  |
| --- | --- |
| Brand name of carpet |  |
| Manufacturer |  |
| Type (e.g. tufted, fusion bonded, woven, etc) |  |
| Pile texture |  |
| Materials used in fibres |  |
| Backing materials |  |

### 2. Cushion underlay

Choose one underlay product you’re familiar with that is suitable for use in a dual bond installation. Complete the table below for that product.

|  |  |
| --- | --- |
| Brand name |  |
| Manufacturer |  |
| Type of underlay |  |
| Materials used |  |
| AS classification |  |
| ‘R’ value |  |

### 3. Adhesive

Select one adhesive product you’re familiar with that is suitable for use in a dual bond or direct stick installation. Complete the table below for that product.

|  |  |
| --- | --- |
| Brand name |  |
| Manufacturer |  |
| Type (chemical comp.) |  |
| Tack-up time |  |
| Working time |  |

# Section 3: Basic carpet installation principles

### 1. Installing carpet grippers

Do a measure up of the room you’re in (or a nearby room) and estimate the quantity of gripper strip needed for the installation.

Use both techniques described in the Learner guide – measuring the perimeter of the area and using the rule of thumb formula for commercial installations. Show your workings below and compare the two results.

|  |  |
| --- | --- |
| Perimeter  of area |  |
| Rule of thumb formula |  |

### 2. Preparing the cushion underlay

Do the following calculations to find out how much underlay you will need to cover the room you measured up in the above learning exercise:

* Square metreage of underlay required
* Lineal metreage of underlay required, based on the width of the roll you have chosen to use.

Show your calculations below.

|  |  |
| --- | --- |
| Square metreage (m2) of underlay |  |
| Lineal metreage (l/m) of underlay |  |

### 3. Preparing the carpet

Select a specific carpet product and get a copy of the manufacturer’s installation guidelines. Answer the following questions, using the manufacturer’s guide as your reference source:

1. What is the minimum acclimatisation period in the room?

|  |
| --- |
|  |

1. What is the specified ambient temperature range and relative humidity in the room?

|  |
| --- |
|  |

1. What is the specified temperature range and maximum relative humidity in the floor at installation time?

|  |
| --- |
|  |

1. What other recommendations does the manufacturer provide in relation to the site conditions or preparation of the carpet?

|  |
| --- |
|  |

### 4. Seaming the carpet

Select a seaming iron and answer the following questions in relation to its use. In preference, you should choose the seaming iron you plan to use for your practical demonstration in this unit.

1. Who is the manufacturer, and what is the model name?

|  |
| --- |
|  |

1. What temperature settings does the iron have?

|  |
| --- |
|  |

1. Which temperature setting will you use for the hot melt tape you’ll be installing for your practical demonstration?

|  |
| --- |
|  |

1. What is the recommended operating speed of the iron at the temperature setting you will be using?

|  |
| --- |
|  |

### 5. Trimming and finishing

What should you do with the following types of waste products that are left over on-site? Fill in your answers below.

|  |  |
| --- | --- |
| **Item** | **Method of disposal** |
| **Liquids** – such as leftover primers |  |
| **Solids** – such as leftover patching and levelling compounds |  |
| **Small carpet offcuts** |  |
| **Large carpet offcuts** |  |

# Section 4: Installing direct-stick carpet

### 1. Pros and cons of direct stick carpet

Give two examples of buildings or facilities where direct stick carpet might be specified. For each one, state why direct stick carpet is a suitable choice for that application, and why the client is likely to choose it in preference to a dual bond installation.

|  |  |
| --- | --- |
| Example 1 | |
| Building / facility |  |
| Why the product is suitable |  |
| Why the client might prefer this method |  |

|  |  |
| --- | --- |
| Example 2 | |
| Building / facility |  |
| Why the product is suitable |  |
| Why the client might prefer this method |  |

### 2. Direct stick installation techniques

Complete this learning activity in reference to the direct stick practical demonstration you will carry out for this unit – where you will install a suitable direct stick carpet in connecting rooms. Your assessor will help you with the details.

Provide the following information in relation to the installation:

* Carpet – including product name, manufacturer and colour
* Adhesive – including product name, manufacturer and type of adhesive
* Subfloor description – including structure, materials used and surface condition
* Subfloor preparation required – including brand names of any products used (such as levelling compounds, primers, etc.)
* Floor covering plan – showing adjoining rooms, all relevant dimensions and features, position of seams and joins, and direction of the carpet pile.

|  |  |
| --- | --- |
| Carpet details |  |
| Adhesive details |  |
| Sub-floor description |  |
| Sub-floor preparation |  |

|  |
| --- |
| Floor covering plan |
|  |

# Section 5: Installing dual bond carpet

### 1. Pros and cons of dual bond carpet

Give two examples of buildings or facilities where dual bond carpet might be specified. For each one, give some reasons why a dual bond installation is the most suitable choice for that application.

|  |  |
| --- | --- |
| Example 1: | |
| Building / facility |  |
| Why product is suitable |  |

|  |  |
| --- | --- |
| Example 2: | |
| Building / facility |  |
| Why product is suitable |  |

### 2. Dual bond installation techniques

Complete this learning activity in reference to the dual bond practical demonstration you will carry out for this unit – where you will install a woven carpet in connecting rooms. Your assessor will help you with the details.

Provide the following information in relation to the installation:

* Carpet – including product name, manufacturer and colour
* Underlay – including product name and manufacture
* Adhesive – including product name and manufacturer
* Subfloor description – including structure, materials used and condition of the surface
* Subfloor preparation required – including brand names of any products used (such as levelling compounds, primers, etc.)
* Floor covering plan – showing adjoining rooms, all relevant dimensions and features, position of seams and joins, and direction of the carpet pile.

|  |  |
| --- | --- |
| Carpet details |  |
| Underlay details |  |
| Adhesive details |  |
| Sub-floor description |  |
| Sub-floor preparation |  |

|  |
| --- |
| Floor covering plan |
|  |

### 3. Pre-adhered cushion underlay systems

Complete this learning activity in reference to the pre-applied adhesive practical demonstration you will carry out for this unit – where you will install a tufted carpet over pre-applied adhesive underlay, and incorporate the use of gripper strips and heat bond tape.

Your assessor will help you with the details of this activity

Provide the following information in relation to the installation.

* Carpet – including product name, manufacturer and colour
* Underlay – including product name and manufacturer
* Spreadable adhesive – including product name and manufacturer
* Subfloor description – including structure, materials used and condition of the surface
* Subfloor preparation required – including brand names of any products used (such as levelling compounds, primers, etc.)
* Floor covering plan – showing adjoining rooms, all relevant dimensions and features, position of seams and joins, and direction of the carpet pile.

|  |  |
| --- | --- |
| Carpet details |  |
| Underlay details |  |
| Adhesive details |  |
| Sub-floor description |  |
| Sub-floor preparation |  |

|  |
| --- |
| Floor covering plan |
|  |