

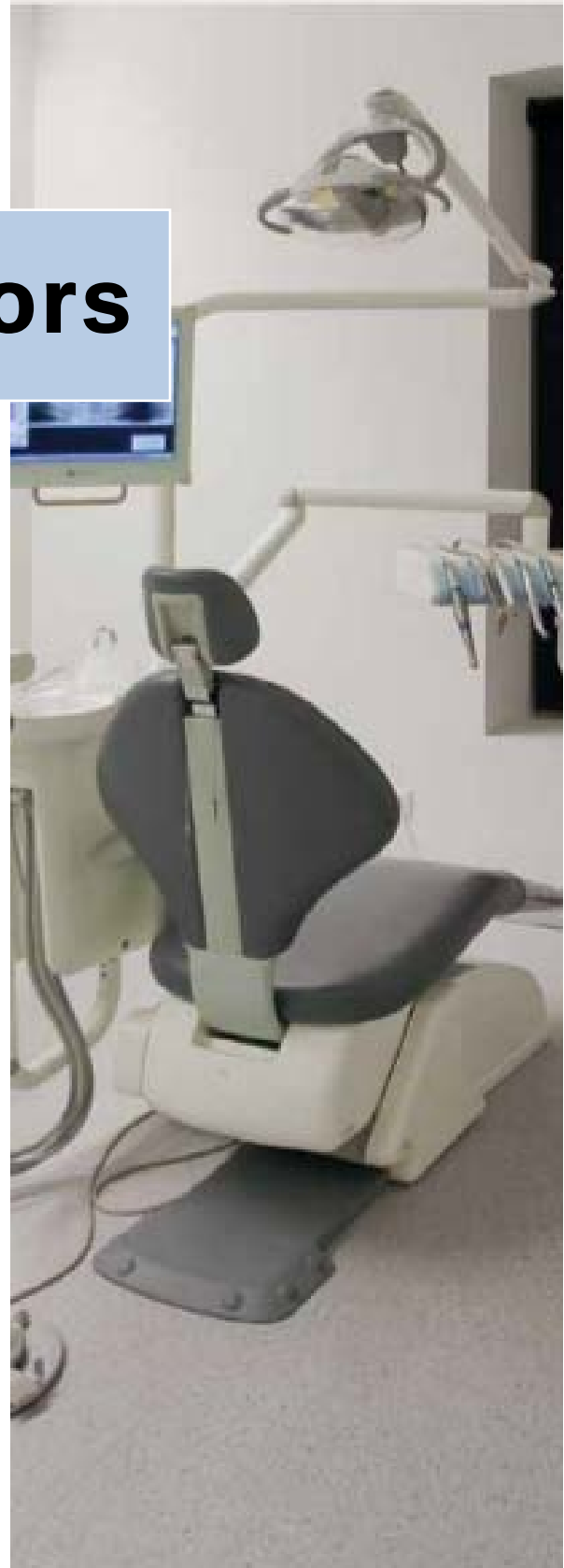
ESD floors



Supporting:

***LMFFL3308A: Install anti-static
resilient floor coverings***

***LMFFL3309A: Install conductive
resilient floor coverings***



Workbook

Name:

3rd Draft – July 2013

ESD floors

Workbook

Containing learning activities and assignments for the units of competency:

LMFFL3308A: Install anti-static resilient floor coverings

LMFFL3309A: Install conductive resilient floor coverings

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

www.flooringtech.com.au



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Introduction

ESD floors is a 'learning unit' from the Flooring Technology training resource. It supports the following competencies from the *Certificate III in Flooring Technology* (LMF31208):

- LMFFL3308A: Install anti-static resilient floor coverings
- LMFFL3309A: Install conductive resilient floor coverings

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 ESD floor coverings.

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. Flooring installers need to do lots of measure-ups and calculations, so there will be many opportunities for you to learn and practice 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 submissions are 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.

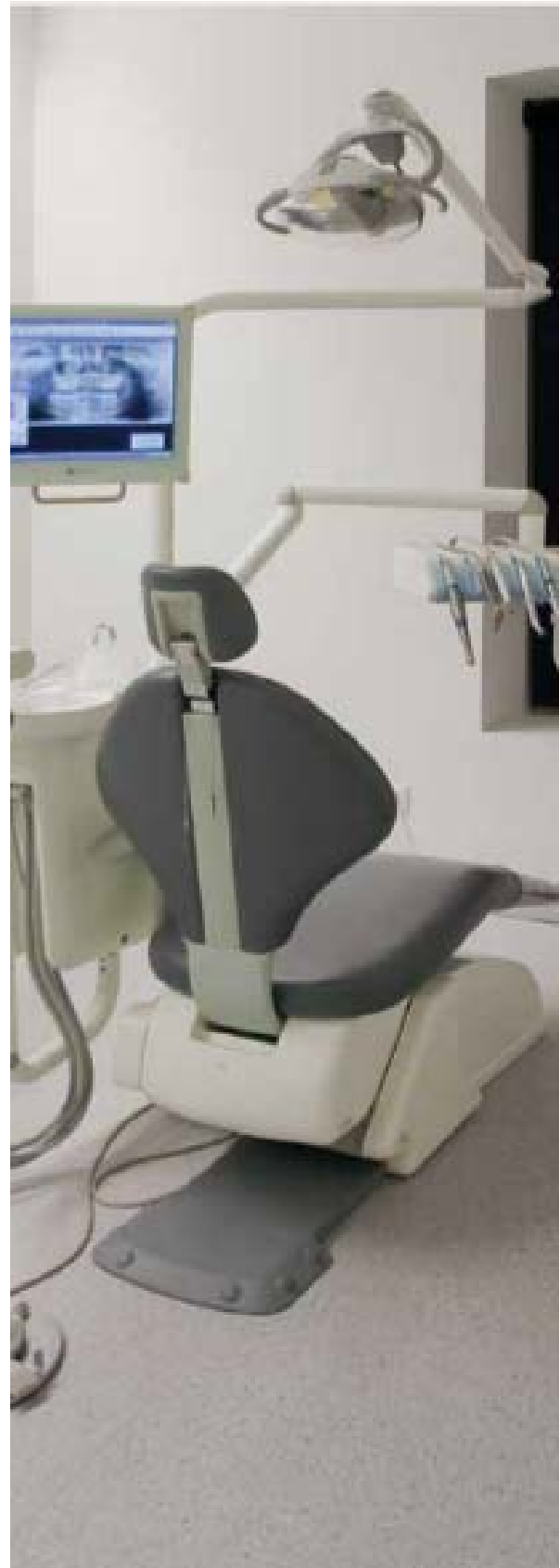
This workbook reproduces all of the learning activities and assignments in a format that lets you handwrite your answers to the questions.

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



Static electricity in floors

Go to the web link below and select the first video – called: ‘What is Electrostatic Discharge (ESD)?’. Watch the clip and then answer the questions.

<http://www.staticworx.com/articles/videos.php>

1. How many volts of electricity are needed for a person to feel a static discharge?

2. How many volts are needed for static-sensitive electronic devices to be affected by static discharges?

Anti-static flooring

Go to the web link below and select the video called: ‘Testing your ESD floor’. Watch the clip and then answer the questions.

<http://www.staticworx.com/articles/videos.php>.

1. Why can't you use a multimeter with standard probes to test the surface resistance of a floor?

2. What type of probes should you use, and how are they different from standard probes?

Conductive flooring

Go to the web link below and watch the Forbo video clip. Then answer the questions.

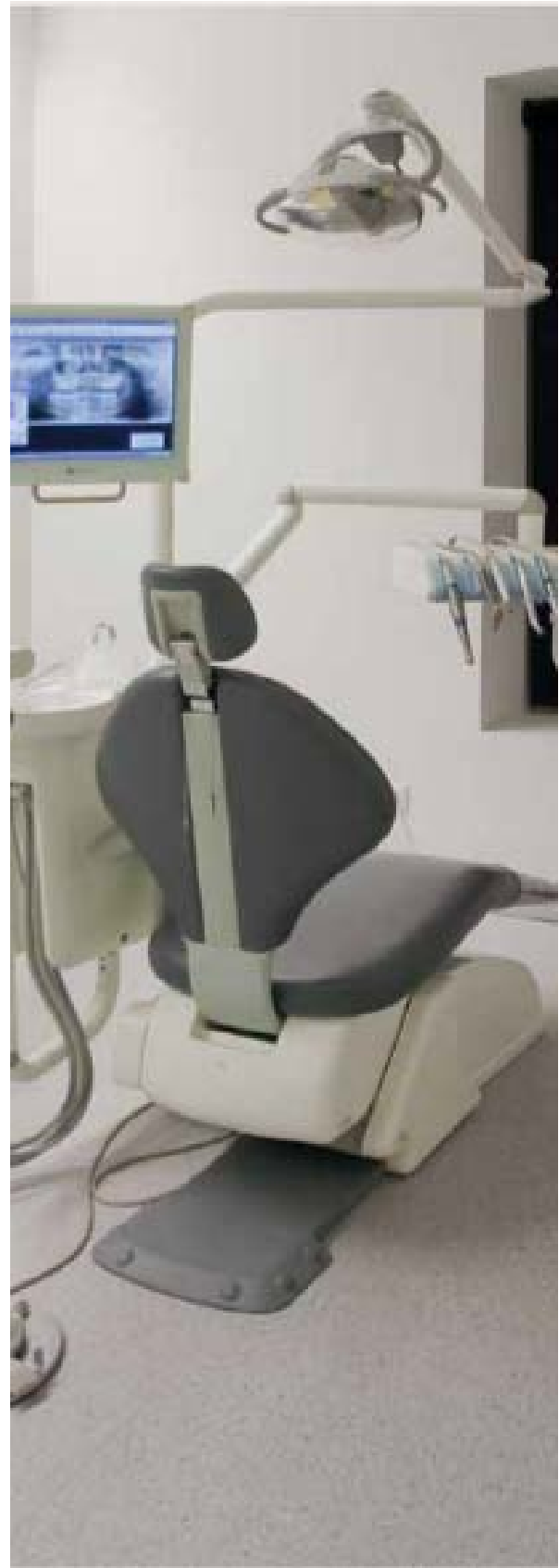
<http://www.youtube.com/watch?feature=endscreen&NR=1&v=FPNLNcE8wbc>

1. How does the installer mark out the floor to make sure the copper strip will be laid in a straight line and in the right position?

2. How does he draw a guide line on the wall to ensure that the line is an even distance from the floor?

Part 2

Assignment



Assignment

Name		Date	
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1. Anti-static floors

(a) What are the properties of an anti-static floor?

--

(b) Where are they typically used?

--

(c) Why aren't anti-static floors described in terms of their surface resistance?

--

(d) Name a product that satisfies the requirements for an anti-static floor.

--

2. Static dissipative floors

(a) What are the properties of a static dissipative floor?

--

(b) Where are they typically used?

(c) What are the surface resistance specifications?

(d) Name a static dissipative floor covering (product name and manufacturer)

(e) What adhesive is recommended for this product?

(f) What extra features do you need to build into the installation of this flooring, beyond the normal installation requirements?

3. Static conductive floors

(a) What are the properties of a static conductive floor?

(b) Where are they typically used?

(c) What are the surface resistance specifications?

(d) Name a static conductive floor covering (product name and manufacturer)

(e) What adhesive is recommended for this product?

(f) What extra features do you need to build into the installation of this flooring, beyond the normal installation requirements?

Practical demonstrations

Your trainer may ask you to keep a log book or diary of the work you do on-the-job that relates to the practical components of this unit. This will help them to determine when you will have had sufficient hands-on practice in these tasks to undertake the assessment events.

When you're ready to be assessed, your assessor will watch you carrying out a range of practical demonstrations. The checklists below set out the sorts of things the assessor will be looking for when you undertake these practical tasks.

Make sure you talk to your trainer or supervisor about any of the details 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'll need to perform, so that you'll feel more confident when the time comes to be assessed.

General criteria

You will need to:

- follow all work, health and safety requirements and environmental care procedures
- correctly interpret company documents and work instructions
- communicate and work effectively with other workers in the area
- prevent damage to goods, equipment and products
- work productively and produce a high quality job
- modify activities and techniques used to suit different sites and working conditions.

Depending on the type of flooring being laid and the nature of the job, you'll use of some or all of the following tools:

- spatula knife, utility knife with hook, straight and concave blades
- straight edge, square, chalk, chalk line, tape measure
- notched trowel, serrated trowel
- hammer, rubber mallet, hacksaw
- seam and edge trimmer, wall trimmer
- dividers, recess scribe, preformed linoleum recess scribe, scribing bar
- welding gun and accessories
- gas bottle and gun, hot air gun

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- grooving tool, cove gauging tool
 - pencil cove roller, hand roller, floor roller
 - paint brush, bucket
 - linoleum trolley.

LMFFL3308A Install anti-static resilient floor coverings

You will be asked to install:

- at least one anti-static resilient floor using a conductive acrylic adhesive system.

LMFFL3309A Install conductive resilient floor coverings

You will be asked to install:

- at least one static conductive resilient floor with an isolating layer using conductive adhesive and an earthing strip.