

<b>Title</b>	<b>Measure moisture content of wood products</b>		
<b>Level</b>	<b>2</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	People credited with this unit standard are able to: demonstrate knowledge of moisture content (MC) in wood products; measure MC using a handheld electrical moisture meter; and record results and process non-conforming product.
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<b>Classification</b>	Wood Manufacturing - Generic Skills > Wood Manufacturing Foundation Skills
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation  
Health and Safety at Work Act 2015.  
Hazardous Substances and New Organisms Act 1996.  
Resource Management Act 1991.
- 2 Definitions  
*Accepted industry practice* refers to approved codes of practice and standardised procedures accepted by the wider wood manufacturing industry as examples of best practice.  
*Corrective actions* refer to actions such as communication to management, communication to on-site technical support person, communication to off-site technical support person, cleaning, communication with maintenance staff, recalibration, or changes made to the operating system in accordance with worksite documentation.  
*Oven drying* refers to use of a forced draught oven at 105 degrees C, or microwave oven of 600W.  
*Workplace procedures* refer to documented policies and procedures set by the organisation carrying out the work, and to documented or other directions provided to staff, and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor’s instructions, and procedures to comply with legislative and local body requirements relevant to the wood manufacturing sector.
- 3 Assessment Information  
All activities and evidence must meet workplace procedures and accepted industry practice.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of moisture content (MC) in wood products.

#### Performance criteria

1.1 Methods used to determine MC are explained.

Range methods may include but are not limited to – electrical resistance, capacitance meters, oven drying; evidence of two methods is required.

1.2 The limitations of electrical moisture meters are stated.

Range capacitance, resistance, in-line.

1.3 Sampling standards for MC determination are described.

1.4 Hazards associated with MC testing are identified and the role of protective equipment and safety features used to manage these are explained.

Range hazards may include but are not limited to – moving equipment, forklifts; evidence of two is required; safety features may include but are not limited to – personal protective equipment, safety isolation procedures, lockouts, emergency stops, guards; evidence of two is required.

1.5 The consequences of non-conformance with workplace quality and safety standards are described.

### Outcome 2

Measure MC using a handheld electrical moisture meter.

Range evidence of measurements on three samples is required.

#### Performance criteria

2.1 Handheld electrical moisture meter is applied to material to measure moisture.

Range material includes one of – wood panel, solid wood.

2.2 Recommended MC and temperature ranges are identified and adhered to in accordance with manufacturer's instructions.

- 2.3 Allowance is made for factors affecting the reading.
- Range factors may include but are not limited to – wood temperature, preservatives, species, resins; evidence of at least one is required.
- 2.4 Levels of accuracy of reading are identified.
- 2.5 Correction tables, specific to the wood species, are selected and applied.
- 2.6 Handheld electrical moisture meter is stored, calibrated, and tested.

### Outcome 3

Record results and process non-conforming product.

#### Performance criteria

- 3.1 All results are recorded, and non-conforming product is reported to operational staff.
- 3.2 Corrective actions are taken to minimise the impact of the non-conforming MC product on customer orders.
- 3.3 Non-conforming product is processed.

<b>Planned review date</b>	31 December 2024
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 January 1995	31 December 2012
Review	2	24 November 1995	31 December 2012
Revision	3	12 February 1998	31 December 2012
Review	4	25 March 1999	31 December 2012
Review	5	29 March 2005	31 December 2012
Rollover and Revision	6	23 February 2007	31 December 2012
Review	7	15 April 2011	N/A
Review	8	28 May 2020	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0013
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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**Comments on this unit standard**

Please contact Competenz [qualifications@competenz.org.nz](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.