



Australian Government

FWPWPP3213 Heat treat material

Release: 1

FWPWPP3213 Heat treat material

Modification History

Release	Comment
1	Replaces equivalent unit FPIWPP3213B Heat treat material, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format.

Application

This unit of competency describes the outcomes required to heat treat material in standard or controlled humidity ovens to achieve the desired moisture content and curing.

The unit applies to production operators and technicians who heat treat materials in a forest and wood products factory setting and includes operator maintenance.

No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Wood Panel Products

Elements and Performance Criteria

<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i>
1. Prepare for heat treating	1.1 Review work order and where required check with appropriate personnel. 1.2 Identify and obtain type and quantity of material for heat treatment. 1.3 Select appropriate personal protective equipment and check for operational effectiveness. 1.4 Plan heat treating process cycles in line with work order.
2. Dry material	2.1 Use equipment in line with organisational safety procedures,

	manufacturer's instructions and environmental protection practices. 2.2 Complete pre start-up equipment checks to ensure operational effectiveness and set heating temperature and humidity for optimal product recovery. 2.3 Adjust oven settings to suit process cycles and material condition, and monitor continually. 2.4 Follow emergency shutdown procedures in response to oven alarm. 2.5 Prepare racks containing materials of consistent processing condition and allowable range of thickness and load into oven, maximising space. 2.6 Assess material visually and measure moisture levels to ensure specified outcome. 2.7 Tag or mark processed racks and take samples of material for testing. 2.8 Record and report heat treating process to appropriate personnel.
3. Redistribute material	3.1 Regrade material in line with industry standards. 3.2 Direct material to storage or processing operations in line with organisational procedures. 3.3 Reject and dispose of defective material in line with environmental protection practices. 3.4 Clean work area in line with organisational safety procedures.
4. Complete operator maintenance	4.1 Follow organisational safety procedures to lock out equipment. 4.2 Check heat treating mechanisms for effective condition. 4.3 Adjust and maintain temperature and humidity settings, water drainage, atomising sprays and fans in line with manufacturer's recommendations. 4.4 Keep oven clear of dust and debris in line with organisational safety procedures. 4.5 Record and report equipment faults and maintenance requirements to appropriate personnel.

Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

Numeracy skills to:	• identify quantities of required material within work orders and count amounts • read basic oven temperature settings; set and adjust levels according to heat treatment requirements • estimate amounts of materials that can be loaded to maximise space • complete routine measurements of material moisture levels.
Oral communication skills to:	• ask questions and actively listen to clarify contents of work orders.
Reading skills to:	• interpret: • workplace health and safety and other organisational procedures • work orders • manufacturers' instructions and maintenance recommendations.
Writing skills to:	• complete accurate basic records for production outcomes, equipment faults and maintenance requirements.
Planning and organising skills to:	• efficiently and logically sequence the stages of heat treatment processes using work order to guide activities.
Problem-solving skills to:	• identify and dispose of defective materials • identify situations requiring emergency shutdown and respond immediately • recognise faulty equipment and resolve by reporting or rectifying.
Technology skills to:	• select and use appropriate personal protective equipment for oven operation and maintenance tasks • efficiently and safely operate heat treatment ovens.

Range of Conditions

Not Applicable

Unit Mapping Information

FPIWPP3213B Heat treat material

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPWPP3213 Heat treat material

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1	Replaces equivalent unit FPIWPP3213B Heat treat material, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards. Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including Required Skills and Knowledge, Evidence Guide and Range Statement.

Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. If a specific volume or frequency is not stated below, then evidence must be provided that the following requirements have been performed on at least one occasion:

- operate an oven to heat treat materials in line with individual work orders prescribing different quantities for each job. Materials for treatment include:
 - logs
 - raw boards
 - laminated panels
 - coves
 - board
 - medium density fibreboard
 - plywood
- for each of the above jobs, direct materials to appropriate storage location or to downstream processing
- after each of the above jobs, complete operator maintenance on the oven used.

Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- environmental protection practices for operating and maintaining heat treatment ovens:
 - reducing water and energy use
 - cleaning plant, tools and equipment
 - disposing of, recycling and reusing defective materials

- purpose of heat treating materials
- characteristics of materials, effects of the heat treatment process and appropriate range of temperatures and humidity levels:
 - logs
 - raw boards
 - laminated panels
 - coves
 - board
 - medium density fibreboard
 - plywood
- methods used to visually assess condition of materials and measure moisture content after the treatment process
- typical work flow processes and heat treatment techniques
- typical flow of material supply in and out of the heat treatment area
- purpose, features and operation of equipment used for heat treating materials:
 - standard or controlled humidity type ovens including:
 - temperature and humidity settings
 - water drainage
 - atomising sprays
 - fans
- racks
- different types of lifting equipment which including:
 - fork lifts
 - slings
 - trolley jacks
 - gantry cranes
 - loaders
- moisture probes
- methods used to maintain heat treatment ovens
- organisational procedures specific to heat treating materials:
 - workplace health and safety with particular emphasis on equipment lock out and use of personal protective equipment
 - communication reporting lines
 - recording and reporting process outcomes, equipment faults and maintenance requirements.
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Assessment Conditions

Links

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