

<b>Title</b>	<b>Manufacture high pressure laminate benchtops</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>35</b>

<b>Purpose</b>	People credited with this unit standard are able to: <ul style="list-style-type: none"> <li>– demonstrate knowledge of the laminates used in manufacturing high pressure laminate benchtops; and</li> <li>– manufacture high pressure laminate benchtops.</li> </ul>
----------------	--

<b>Classification</b>	Joinery > Joinery Operational Skills
-----------------------	--------------------------------------

<b>Available grade</b>	Achieved
------------------------	----------

### Guidance Information

- 1 Legislation and guidelines relevant to this unit standard include:
  - Health and Safety at Work Act 2015; available from [www.legislation.govt.nz](http://www.legislation.govt.nz);
  - *Safe Use of Machinery: Best Practice Guidelines*; available from [www.worksafe.govt.nz](http://www.worksafe.govt.nz), and any subsequent amendments and replacements.

- 2 Assessment  
Evidence for this unit standard must reflect commercial competence; the ability to demonstrate knowledge and skills in the context of the currently accepted requirements of a business operating in a commercial environment.

Evidence must also reflect commercial standards; the verbal and written information covering company policy, standard operating procedures and processes and job-specific instructions.

This unit standard must be assessed under the supervision of a commercially competent practitioner in workplace conditions that reflect:

- commercial standards, current health, safety, industry, and workplace requirements; and
- industry requirements for commercially acceptable timeframes.

- 3 Definitions  
*HGP* refers to horizontal general-purpose postforming laminate. HGP is commonly used in manufacturing benchtops.  
*HGS* refers to the horizontal general-purpose standard laminate. HGS is commonly used in manufacturing interior horizontal surfaces where postforming is not required.  
*Joinery work* refers to the work, job, or project relevant to joinery, cabinetry, timber doors and windows, stairs, bench tops, shop fitting, and specialty surfaces.  
*Postforming* refers to re-shape a laminate. Postforming laminate can be heated to soften the resins and bent to a desired shape. It is thinner and more flexible than standard laminate.

VGP refers to vertical general-purpose postforming laminate. VGP is commonly used for interior vertical surfaces.

*Workplace requirements* refer to the documented procedures specific to a workplace which set out the standard and the required practices of that workplace. This may include job specifications, procedures, practices, manufacturer recommendations, technical data sheets and material safety data sheets.

---

## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of the laminates used in manufacturing high pressure laminate benchtops.

#### Performance criteria

- 1.1 The importance of manufacturer wear standards and specifications for laminates are explained.
- 1.2 The composition of laminates is described in accordance with the types and grades of laminate being manufactured.

Range	composition includes – decorative paper, protective paper, core paper; adhesives include – melamine formaldehyde resin, resorcinol and resorcinol/phenolic; grades of laminates include – HGP, VGP, HGS.
-------	--
- 1.3 Laminates are described in terms of their properties.

Range	properties include – colour fastness; clarity; durability; flexibility; dimensional stability; cleanability; surface finish; hardness; reaction to fire; heat distortion; resistance to stains, heat, cold, impact, abrasion, insulation, moisture, boiling water, light, chemicals, cracking, steam, fire; strength includes – crossbreaking, longitudinal, and transverse shear; grades of laminates – HGP, VGP, HGS.
-------	---
- 1.4 Manual handling techniques and storage methods are explained in terms of workplace requirements.

### Outcome 2

Manufacture high pressure laminate benchtops.

#### Performance criteria

- 2.1 Materials for the job are confirmed and selected and any templates are converted into the workplan for the joinery work.

- 2.2 Manual handling procedures are followed in accordance with workplace requirements.
- 2.3 Workplan is broken down for substrate, adhesives, and laminate components to meet the requirements of the workplan.
- 2.4 Manufacturing process is confirmed and carried out in accordance with the workplan.
- 2.5 Pressing laminates are applied and pressed onto the board.
- 2.6 Thickness requirements are applied in accordance with the job specifications.
- 2.7 Any required bending or rolled edges are confirmed and the heating and bending process is applied.
- 2.8 Components are incorporated into the CNC machine and any cut outs completed and panels machined to accurate sizes.
- 2.9 Finishing, edging, and joining are applied in accordance with the job specifications.
- 2.10 Attachments are fitted to the pressing to meet the job specifications.
- 2.11 Final quality checks are completed prior to dispatch.

<b>Replacement information</b>	This unit standard replaced unit standard 2538 and unit standard 14481.
--------------------------------	---

<b>Planned review date</b>	31 December 2027
----------------------------	------------------

#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 October 2014	31 December 2025
Review	2	30 March 2023	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0073
--	------

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

#### Comments on this unit standard

Please contact Waihangara Ara Rau Construction and Infrastructure Workforce Development Council at [qualifications@WaihangaraAraRau.nz](mailto:qualifications@WaihangaraAraRau.nz) if you wish to suggest changes to the content of this unit standard.