

Demonstrate knowledge of the composition, properties, and manufacture of laminates

Level 3

Credits 4

Purpose People credited with this unit standard are able to identify the composition and properties of laminates, and describe the manufacturing process of laminates.

Subfield Joinery

Domain Laminate Fabrication

Status Registered

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Entry information Open.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) Joinery Industry Training Organisation

Accreditation and Moderation Action Plan (AMAP) reference 0073

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

Special notes

- 1 Legislation and regulations relevant to this unit standard include but are not limited to – Health and Safety in Employment Act 1992; Health and Safety in Employment Regulations 1995.
- 2 Definitions
HGP – postforming laminate for horizontal use;
VGP – postforming laminate for vertical use;
HGS – non postforming laminate for horizontal use.

Elements and performance criteria

Element 1

Identify the composition and properties of laminates.

Performance criteria

- 1.1 The composition of laminates is identified in accordance with the types and grades of laminate being manufactured.

Range composition includes but is not limited to – decorative paper, protective paper, core paper; adhesives include but are not limited to – melamine formaldehyde resin, resorcinol and resorcinol/phenolic; grades of laminates include but are not limited to – HGP, VGP, HGS.

- 1.2 Different types and grades of laminate are identified in terms of their properties.

Range properties include but are not limited to – 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 but is not limited to – crossbreaking longitudinal and transverse, shear; grades of laminates include but are not limited to – HGP, VGP, HGS.

Element 2

Describe the manufacturing process of laminates.

Performance criteria

- 2.1 The processes for treating decorative and Kraft paper are described in accordance with manufacturer's recommendations and workplace practices.

- 2.2 The process of assembling paper core and decorative paper is described in terms of different types of paper used in the assembly process.

Range types of paper include but are not limited to – printed patterns, overlay, solid and plain colours.

- 2.3 The process of corestocking the treated Kraft paper is described in accordance with production schedules for the pressing department.

- 2.4 The bonding process is described in terms of the type of finish required.

Range type of finish includes but is not limited to – textured, solid, foil.

- 2.5 The conditions of bonding are described in terms of the type of laminate manufactured.
- Range conditions include but are not limited to – temperature, pressure per square inch time;
types of laminates include but are not limited to – HGP, VGP, HGS.
- 2.6 The pressing process is described in terms of manufacturer’s recommendations.
- 2.7 The sanding process is described in terms of manufacturer’s recommendations.
- 2.8 The reasons for any defects in the manufacturing process are identified.
- Range defects include but are not limited to – amalgamation of pattern paper to Kraft paper, resin bleed through, foreign bodies.

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the Joinery Industry Training Organisation ceo@jito.org.nz if you wish to suggest changes to the content of this unit standard.