

<b>Title</b>	<b>Describe and determine permeability and flame retardancy of fabrics used in industrial textile fabrication</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	People credited with this unit standard are able to: describe and determine whether permeability of a selected fabric is suitable for product requirement; and describe and determine whether flame retardancy of selected fabric is suitable for product requirement.
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<b>Classification</b>	Industrial Textile Fabrication > Industrial Textile Fabrication Core Skills
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable manufacturer's information, company requirements, industry guidelines and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the Health and Safety at Work Act 2015; and any subsequent amendments and replacements.
- 3 Definitions  
*Company requirements* refers to instructions to staff on policy and procedures that are available in the workplace. These requirements may include – company policies and procedures, work instructions, product quality specifications and legislative requirements.  
*Industry guidelines* refers to those practices and procedures commonly used as standard procedures to produce items of acceptable merchantable quality in the industrial textile fabrication industry such as related textbook descriptors.  
*Manufacturer's information* refers to technical information for a machine or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.  
*Suitable tools and equipment* refer to industry approved tools and equipment that are recognised within the industry as being the most suited to complete the task in a professional and competent manner with due regard to safe working practices.

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## Outcomes and performance criteria

### Outcome 1

Describe permeability of a selected fabric's suitability for product requirement.

#### Performance criteria

- 1.1 Permeability of fabric is described.  
Range air, water, vapour.
- 1.2 Tests for fabric permeability are described.  
Range waterhead, rate of air flow.

### Outcome 2

Determine whether permeability of a selected fabric is suitable for product requirement.

#### Performance criteria

- 2.1 Permeability test is observed on selected fabric and result recorded and interpreted.
- 2.2 Permeability of selected fabric is checked against minimum company requirements for the product.

### Outcome 3

Describe flame retardancy of selected fabric's suitability for product requirement.

#### Performance criteria

- 3.1 Reasons for flame retardancy treatment of fabric are described.  
Range safety, environment, legislative requirement.
- 3.2 Method of treating fabric to increase flame retardancy is described.  
Range post-production treatment.
- 3.3 Testing for flame retardancy rating of fabric is described.  
Range ignition speed, heat evolved, char length.

### Outcome 4

Determine whether flame retardancy of selected fabric is suitable for product requirement.

## Performance criteria

- 4.1 Testing for flame retardancy is observed on selected fabric, and the results are recorded and interpreted.
- 4.2 Flame retardancy of selected fabric is checked against minimum company requirements for the product.

<b>Planned review date</b>	31 December 2026
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## Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	3 August 1995	31 December 2023
Revision	2	16 September 1997	31 December 2023
Revision	3	4 November 1997	31 December 2023
Revision	4	28 May 1998	31 December 2023
Review	5	17 August 1999	31 December 2023
Review	6	26 March 2007	31 December 2023
Rollover	7	27 January 2015	31 December 2023
Review	8	25 November 2021	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0014
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

## Comments on this unit standard

Please contact Hanga-Aro-Rau – Manufacturing, Engineering, and Logistics Workforce Development Council [qualifications@hangaarorau.nz](mailto:qualifications@hangaarorau.nz) if you wish to suggest changes to the content of this unit standard.