

<b>Title</b>	<b>Demonstrate knowledge of, calculate requirements for, and handle and store substrates used for reel-fed printing</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	People credited with this unit standard are able to: demonstrate knowledge of substrates used for reel-fed printing in the workplace and calculate substrate requirements; and handle and store substrates used for reel-fed printing.
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<b>Classification</b>	Printing > Printing - Reel-Fed
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:

- Hazardous Substances and New Organisms Act 1996;
- Health and Safety at Work Act 2015;
- Resource Management Act 1991.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

- 2 Definitions

*Substrate* refers to paper, plastic film, foils, metallised film or other material that is printed onto.

*Workplace procedures* refer to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace. 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, manufacturer's requirements, 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 print sector.

- 3 Assessment information

Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, workplace procedures and legislative requirements.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of substrates used for reel-fed printing in the workplace and calculate substrate requirements.

Range may include – paper, plastic film, foils, metallised film.

### Performance criteria

1.1 Identify substrates used for reel-fed printing and describe the characteristics of substrates used in the workplace.

Range characteristics may include but are not limited to – grammage, calliper, bulk value, smoothness, opacity, coatings, grain direction, absorbency, pH, strength, colour.

1.2 Identify substrate characteristics which are likely to cause printing problems and list the problems.

1.3 List major raw materials used in the manufacture of substrates used for reel-fed printing.

1.4 Describe processes used to manufacture substrates used for reel-fed printing.

1.5 Calculate the substrate requirements for printing.

### Outcome 2

Handle and store substrates used for reel-fed printing.

### Performance criteria

2.1 Describe the effects of workplace conditions on substrates.

Range humidity, static, airflow, temperature.

2.2 Handle and store substrates.

Range handling – clean working environment, clean hands, carrying methods, stacking, working side, avoidance of physical damage, static electricity, clinging edges, uneven stock, uneven spray powder coating, spray powder;  
storage – light, temperature, air-flow control, relative humidity, age (stock rotation), ease of access.

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<b>Planned review date</b>	31 December 2027
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	25 May 1999	31 December 2025
Review	2	22 March 2004	31 December 2025
Rollover	3	12 December 2008	31 December 2025
Review	4	18 June 2010	31 December 2025
Review	5	30 March 2023	N/A

**Consent and Moderation Requirements (CMR) reference**

0013

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.