

**40134****Apply piping, elastic, and stabilising tape or reinforcement using industrial sewing machines**

<b>Kaupae   Level</b>	3
<b>Whiwhinga   Credit</b>	4
<b>Whāinga   Purpose</b>	<p>This skill standard is intended for people who want to learn to apply piping, elastic, and stabilising tape or reinforcement using industrial sewing machines. These machines are used in a variety of sectors and the context will be provided through different learning experiences and assessment tasks.</p> <p>This skill standard can be used in qualifications or other credentials that incorporate industrial sewing skills.</p>

**Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria**

<b>Hua o te ako   Learning outcomes</b>	<b>Paearu aromatawai   Assessment criteria</b>
1. Apply piping to a product.	a. Prepare piping and fabric.
	b. Attach piping to material using the correct machine foot.
	c. Join fabric pieces using the correct machine foot.
	d. Finish the seam using stitching or pressing.
2. Apply elastic to a product.	a. Prepare, measure and cut elastic to desired length.
	b. Mark placement of elastic and secure it.
	c. Sew the elastic into place ensuring finished measurement is correct.
3. Insert elastic into a product.	a. Prepare, measure and cut elastic to desired length.
	b. Construct casing for elastic.
	c. Insert and secure elastic ensuring finished measurement is correct.

Hua o te ako   Learning outcomes	Paearu aromatawai   Assessment criteria
4. Apply stabilising tape or reinforcement to a product.	a. Prepare fabric and stabilising tape or reinforcement.
	b. Position the stabilising tape or reinforcement.
	c. Secure by stitching stabilising tape or reinforcement.
	d. Inspect and finish the stabilising tape or reinforcement ensuring finished measurement is correct.

### Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

#### Assessment specifications:

Complete all tasks using industrial sewing machines.

Finish all tasks cleanly, removing loose threads using snips or scissors as required.

All tasks should be in accordance with product, style or garment specifications, workplace performance criteria and workplace procedures.

Assessment evidence can be from a work-based or classroom environment.

Evidence of at least two different examples of:

- piping
- application of elastic
- insertion of elastic
- application of stabilising tape or reinforcement.

#### Definitions

*Industrial sewing machine* refers to lockstitch, overlockers and any other commercial or industrial machine used for stitching.

*Lockstitch* is sometimes known as a plain sewer or single needle and refers to the traditional or standard type of stitch produced by industrial and domestic sewing machines.

*Overlocker* is sometimes known as overedge and can also include safety stitch and mock safety stitch machines. These machines have knives fitted and can cut fabric to neaten the fabric edges as these are being sewn.

*Piping* refers to a technique in sewing where a narrow strip of fabric, often folded over a cord or filler material, is sewn into a seam or along the edges of a garment or item.

*Product, style or garment specifications* refer to the documentation that accompanies each manufacturing order. This documentation sets out the fabric to be used for the product, the size range of the order, the garment assembly sequence, garment finishing procedures, and the garment component specifications.

*Reinforcement* refers to adding an extra thickness or layer of fabric to strengthen an area.

*Stabilising tape* is also known as seam tape or hem tape. It is a narrow strip of fabric or adhesive material used in sewing to provide support, structure, or reinforcement to seams, hems, or edges of fabric.

*Workplace performance criteria* refer to the expected standard and speed of performance as set by the quality control management in the candidate's workplace. These criteria are determined by the construction of the garment, the fabric being used and the quality standards that apply in the candidate's workplace. These expectations must be explained and made available to the learner prior to assessment.

*Workplace procedures* refer to the verbal or documented procedures for performing work activities and include health and safety, operational, environmental, and quality management requirements. They may refer to manuals, manufacturer's specifications, codes of practice, or policy statements.

### **Ngā momo whiwhinga | Grades available**

Achieved

### **Ihirangi waitohu | Indicative content**

#### **Piping**

- Uses of piping in a variety of projects and selection of appropriate materials.
- Different types of piping material including fabric strips, cords, and pre-made piping.
- Industrial sewing machines and specialised attachments for piping such as piping feet and cording feet.
- Other equipment and tools needed for piping such as scissors and measuring tools.
- Techniques for making piping including cutting bias fabric strips and wrapping them around cords.
- Finishing processes such as trimming, pressing, and topstitching.
- Quality control such as inspecting seams.

#### **Elastic**

- Types of elastic such as woven, knit, braided, fold-over.
- Elastic widths, stretch capacities, and suitability for specific applications.
- Different applications of elastic such as sewn into a seam to create a gather, decorative trims, support and shaping, button loops and loop fasteners.
- Techniques for preparing elastic such as steaming.
- Specialised machine attachments and accessories for sewing elastic such as elastic feet and differential feed mechanisms.
- Calculating elastic length based on garment measurements and desired stretch.
- Ensuring consistent distribution of elastic along fabric edges.
- Inspecting elastic application to ensure proper placement, tension, and stitching quality.
- Techniques for fixing errors and adjusting elastic placement or tension as needed.

#### **Stabilising tape**

- Fusible and non-fusible stabilising tape, including woven, non-woven, and fusible interfacing.
- The benefits of using stabilising tape such as reinforcing seams, edges and hems, and preventing stretching or distortion of fabric.
- Stabilising tape properties including weight, thickness, adhesive properties, and suitability for different fabrics and garment types.
- Techniques for positioning stabilising tape accurately along seams, edges, and hems to provide reinforcement and support.
- Techniques for applying fusible stabilising tape using industrial steam irons and pressing equipment.
- Techniques for fixing errors and adjusting stabilising tape placement or tension as needed during industrial sewing operations.

## Reinforcement

- Techniques to reinforce edges for the application of attachments.
- Applying webbing to reinforce areas of fabric.

## Rauemi | Resources

Legislation, regulations and/or industry standards relevant to this skill standard include but are not limited to:

Health and Safety at Work Act 2015.

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

Legislation can be accessed at: <https://www.legislation.govt.nz>.

## Pārongo Whakaū Kouna | Quality assurance information

<b>Ngā rōpū whakatau-paerewa  </b> Standard Setting Body	Hanga-Aro-Rau Engineering, Manufacturing and Logistics Workforce Development Council
<b>Whakaritenga Rārangi Paetae Aromatawai  </b> DASS classification	Manufacturing > Clothing Manufacture > Apparel Cutting and Sewing
<b>Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga  </b> CMR	0030

<b>Hātepe  </b> Process	<b>Putanga  </b> Version	<b>Rā whakaputa  </b> Review Date	<b>Rā whakamutunga mō te aromatawai  </b> Last date for assessment
<b>Rēhitatanga  </b> Registration	1	29 August 2024	N/A
<b>Kōrero whakakapinga  </b> Replacement information	N/A		
<b>Rā arotake  </b> Planned review date	31 December 2029		

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