

Title	Demonstrate knowledge of snow, snowgrooming, and snowgroomers and their maintenance		
Level	4	Credits	12

Purpose	People credited with this unit standard are able to demonstrate knowledge of: a snowgroomer and its maintenance; and weather, terrain and nature of the snowpack in relation to grooming practices at a snowsport area.
----------------	---

Classification	Snowsport > Snowsport Area Operations
-----------------------	---------------------------------------

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 All learning and assessment against this unit standard must be carried out in accordance with the following:
 - relevant legislation including the Health and Safety at Work Act 2015, Accident Compensation Act 2001 and subsequent amendments and associated regulations;
 - alpine industry codes and good practice guidelines including *Snow Safety Code* and *Outdoor Safety Code*; (available at <http://www.mountainsafety.org.nz>);
 - organisational policies, procedures and requirements including Emergency Action Plans (EAPs), Standard Operating Procedures (SOPs), and the use of personal protective equipment.
- 2 Definitions

Artificial features are features at a snowsport area that are man-made.

Organisational policies and procedures are instructions to staff that may be documented and available for reference at each alpine resort in the form of an operations manual and/or policy and procedures manual.
- 3 Employment as a snowgroomer may require the graduate to hold a Class 2 Driver Licence with a T endorsement when driving a snowgroomer on a snowsport area.
- 4 Industry guidelines for recording snow and weather information are contained in the *New Zealand Guidelines and Recording Standards for Weather, Snowpack and Avalanche Observations*, (Wellington: New Zealand Mountain Safety Council, 2017).

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of a snowgroomer and its maintenance.

Performance criteria

- 1.1 Explain the components of a snowgroomer and their functions in relation to snowgrooming, using technical terms.
- 1.2 Complete pre-operation routine maintenance checks in accordance with manufacturer's recommendations.
- 1.3 Identify machine lubrication points and meet lubrication and fluid requirements in accordance with manufacturer's recommendations.
- 1.4 Complete pre-check and maintenance logs.
- 1.5 Demonstrate start-up and shut-down procedures in line with manufacturer's operating instructions.
- 1.6 Describe actions of snow grooming personnel in the event of mechanical problems during operation of the snowgroomer.

Outcome 2

Demonstrate knowledge of weather, terrain and nature of the snowpack in relation to grooming practices at a snowsport area.

Performance criteria

- 2.1 Describe main natural terrain and artificial features of the snowsport area, including identification of snowgroomer access routes to each feature.
- 2.2 Observe and interpret local weather information to contribute to planning for snowgrooming.
- 2.3 Describe operating parameters of a snowgroomer in relation to terrain and to comply with snowsport area policy.
- 2.4 Describe advantages and limitations of the performance of a snowgroomer for a range of snow and weather conditions.
- 2.5 Explain snowpack metamorphism and snow mechanics, with reference to the effects of temperature, pressure, environmental conditions, and grooming practices on the snowpack over time.

Planned review date	31 December 2025
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	20 April 2017	31 December 2022
Review	2	25 March 2021	N/A

Consent and Moderation Requirements (CMR) reference

0099

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

Comments on this unit standard

Please contact Skills Active Aotearoa info@skillsactive.or.nz if you wish to suggest changes to the content of this unit standard.