Achievement Standard

Subject Reference	Materials and Processing Technology 1.1
Title	Develop a Materials and Processing Technology outcome in an authentic context

Level	1	**Credits**	6	**Assessment**	Internal

Subfield	Technology
Domain	Construction and Mechanical Technologies

Status	Approved	**Status date**	December 2023
Planned review date	December 2028	**Date version published**	December 2023

Purpose Statement

Students are able to develop a Materials and Processing Technology outcome in an authentic context.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Develop a Materials and Processing Technology outcome in an authentic context	• Refine a Materials and Processing Technology outcome in an authentic context	• Evaluate a Materials and Processing Technology outcome in an authentic context

Explanatory Notes

1 *Develop a Materials and Processing Technology outcome in an authentic context* involves:
- creating a fit-for-purpose outcome for a person, whānau, or community using a brief with specifications.

Refine a Materials and Processing Technology outcome in an authentic context involves:
- applying stakeholder feedback to inform the development of the outcome for a person, whānau, or community
- explaining decisions that inform the improvement of the outcome's fitness for purpose.

Evaluate a Materials and Processing Technology outcome in an authentic context involves*:*

- analysing how stakeholder feedback informed the development of the outcome for a person, whānau, or community
- evaluating the outcome against the brief with specifications for fitness for purpose in the actual or modelled intended environment.

2 A *brief* is a statement of intent that identifies the purpose, end user, and actual or modelled intended environment in the authentic context when developing an outcome, considering fitness for purpose. Students can use the brief provided by the teacher and further develop it or generate their own.

Specifications are short statements of intent that are precise and measurable. They must include the physical and functional requirements of the outcome. Specifications are evaluated and explained as either met or not met.

In Materials and Processing Technology, an outcome demonstrating *fitness for purpose* is one that addresses the requirements of a brief with specifications, and considers the end user(s) and context.

3 For the purpose of this achievement standard, *stakeholder feedback* is used to inform the development of an outcome.

Stakeholder feedback is documented verbal or written information sourced first-hand. Sources of stakeholder feedback could include the end user, or people or groups that have expertise, experience, or a combination of both in this area. More than one stakeholder must be consulted.

4 In Materials and Processing Technology, an *authentic context* refers to a real-life situation within which an outcome can be developed. The situation or use of the outcome will be familiar to students.

5 *Decisions that inform the improvement of the outcome* do not have to result in successful improvements.

6 Refer to the NCEA glossary for Māori, Pacific, and further subject-specific terms and concepts.

7 This achievement standard is derived from the Technology Learning Area at Level 6 of *The New Zealand Curriculum:* Learning Media, Ministry of Education, 2007.

Replacement Information

This achievement standard and AS92013-AS92015 replaced AS91044-AS91056.

Quality Assurance

1 Schools and institutions must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.

2 Schools and institutions with consent to assess must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233