Title	Prepare for installation of refractories		
Level	4	Credits	25

Purpose	This unit standard is intended for people working in the refractory installation industry.
	People credited with this unit standard are able prepare for installation of refractories to the level required of a commercially competent refectory installer.

Classification	Masonry > Refractory Installation
----------------	-----------------------------------

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

### **Guidance Information**

#### 1 Assessment

This unit standard is one of a family of standards intended to align with the New Zealand Certificate in Trowel Trades – *Specifications*, and the New Zealand Certificate in Trowel Trades (Level 4) with strands in Brick and Block Laying, Floor and Wall Tiling, Proprietary Plaster Cladding Systems, Ferro-cement Tank Manufacture, Refractory Installation, and Solid Plastering (with optional strands in Fixing Cavities and Substrates, and Decorative Mouldings) [Ref: 3137].

Evidence for this unit standard must reflect commercial competence.

Commercial competence requires a candidate to be capable of consistently performing the requirements of the unit specification:

- to current regulatory, industry and commercial standards
- within a commercially viable timeframe
- in commercial environments
- without supervision
- in different and unfamiliar contexts.

Commercial competence must be confirmed by a person who has current expertise in the refractory installation trade.

### 2 Definitions

Job description pack refers to all required documentation for a provided to a supervisor for a specific job. A supervisor uses the information in the job description pack to provide guidance to the refractory installers.

*Manufacturer's specifications* refer to the documented technical data for materials provided by the manufacturer, including the specific composition of ingredients, properties, use, and safe handling procedures for the material.

Workplace procedures refer to the documented procedures specific to a workplace which sets out the standard and the required practices of that workplace.

3 Legislation, and guidance information relevant to this standard includes the following, and any subsequent amendments and replacements:

New Zealand Certificate in Trowel Trades – Specifications, BCITO, August 2021, available from <a href="https://www.WaihangaAraRau.nz">www.WaihangaAraRau.nz</a>.

Legislation accessed at www.legislation.govt.nz

- Health and Safety at Work Act 2015,
- Resource Management Act 1991.

# Skill specification and performance level guidance

# **Skill specification**

Prepare for installation of refractories.

## Knowledge

The workplace procedures to order materials and co-ordinate deliveries.

The workplace procedures and requirements to check the quality, quantity, consistency and finish of delivered materials.

The preparation requirements of materials ready for laying and installing refractories.

Range stacking, re-positioning, covering, protecting.

How to set up the site ready for installing refractories.

The characteristics of foundations constructed as the base for relaying refractories.

Range insulation level, depth of brick, acceptable tolerances; type, quality, finish, suitability to accept refractory installation.

How to prepare foundations for installing refractories.

Range remedial work, priming.

How to install insulating materials.

Range insulating materials include – ceramic modules, ceramic blanket, insulating bricks, castables.

### **Skills**

Set up the site ready for installing refractories.

Confirm suitability of foundations ready for installing refractories.

Range insulation level, depth of brick, acceptable tolerances;

type, quality, finish, suitability to accept refractory installation.

Prepare foundations to allow for installing refractories.

Order materials and co-ordinate deliveries.

Check quality, quantity, consistency and finish of delivered materials.

Prepare materials ready for laying and installing refractories.

Range stacking, re-positioning, covering, protecting.

Install insulating materials.

Range insulating materials may include – ceramic modules, ceramic blanket, insulating

bricks, castables.

## Performance level guidance

Performance must reflect manufacturer's specifications, workplace procedures, and job description pack relevant to refractory installation.

Substrates are the pre-made concrete or steel shell of the structure including the floor.

Planned review date	31 December 2027

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 September 2018	31 December 2025
Review	2	25 August 2022	N/A

Consent and Moderation Requirements (CMR) reference	0048	
---	------	--

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

### Comments on this unit standard

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council <a href="mailto:qualifications@WaihangaAraRau.nz">qualifications@WaihangaAraRau.nz</a> if you wish to suggest changes to the content of this unit standard.