



New Zealand Certificate in
Kitchens
Level 4



Specifications

September 2020

Foreword

Welcome to the *specifications* that set out the technical content of the New Zealand Certificate in Kitchens with strands in Manufacture and Installation (Level 4).

These *Specifications* are, collectively, a prescription for achieving the requirements of the qualification. Together they describe what a person must know and be capable of to become a qualified trade professional.

They are intended to support tertiary education organisations to develop programmes that detail how learning and assessment will occur.

Programmes must encompass these *Specifications* and support the development of the skills, knowledge and attributes that reflect the technical competence, self-management, professionalism and leadership.

Assessment related to these specifications

The individual skill sets included in these *Specifications* are designed to be read, interpreted and assessed together. This means that information contained in one skill set that is relevant to any other skill sets is stated only once, in the most appropriate place. However, the expectation is that assessment will look for links across skills sets. This avoids duplicating information and allows the candidate to be assessed holistically. Where the skills and knowledge included in one skill set are essential to achieving other skill sets, the candidate must be capable of applying them to the level, scope and complexity required.

The New Zealand Certificate in Kitchens with strands in Manufacture and Installation (Level 4) is achieved through completing the qualification core and specialising in at least one of the strands. Candidates can further enhance their qualification through the addition of any combination of the remaining strands.

To achieve the New Zealand Certificate in Kitchens with strands in Manufacture and Installation (Level 4) a candidate must be capable of maintaining the professional standards of the trade and consistently performing the requirements of each skill set, and the specifications as a whole, to a commercially competent standard. Professional standards are reflected in:

- employment agreements, codes of conduct and standard operating procedures
- training and education agreements
- standards of ethics and professionalism produced by industry membership organisations
- best practice and technical guidance produced by suppliers, regulators, education and industry organisations

Commercial competence requires a candidate to be capable of consistently demonstrating the technical skills and knowledge of the trade:

- to current regulatory, industry and commercial standards
- within a commercially viable timeframe

Core Compulsory

Specification:	Fundamentals	50 credits
Skill sets:		
Legislation		
Health, safety and wellbeing		
Planning and communication		
Work documentation		
Mathematics		
Tools and equipment		
Materials and products		
Kitchen design principles		

Specification:	Professional Standards	15 credits
Skill Set:		
Commercial competence and professional standards		

Strands

Specification:	Kitchen manufacture	55 credits
Skill Sets:		
Machinery		
Manufacture		

Specification:	Kitchen installation	20 credits
Skill Set:		
Installation		

Specification: Fundamentals

To achieve this fundamentals specification, an apprentice must understand the principles, and be able to apply them to all areas of kitchen manufacture and installation.

This specification contains the following **8** skill sets:

- Legislation
- Health, safety and wellbeing
- Planning and communication
- Work documentation
- Mathematics
- Tools and equipment
- Materials and products
- Kitchen design principles

Each skill set comprises:

- **Know** – the theory that underpins the practical skills
 - **Do** – the practical skills an apprentice needs to have
 - **Comments** – explanatory notes to clarify specific aspects of knowledge and skill
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Skill Set 1: Legislation (7 credits)

- Know:**
- The health and safety legislative framework as it applies to kitchen manufacture and installation
 - The building legislative framework as it applies to kitchen manufacture and installation
 - The environmental legislative framework as it applies to kitchen manufacture and installation

- Do:**
- Practically apply the health and safety legislative framework to everyday contexts in kitchen manufacture and installation
 - Practically apply the building legislative framework to everyday contexts in kitchen manufacture and installation
 - Practically apply the environmental legislative framework to everyday contexts in kitchen manufacture and installation

- Comment:**
- The legislative framework refers to the hierarchy of Acts of Parliament, Regulations, Rules, Codes, Standards, approved codes of practice and best/good practice guidelines
 - The level of legislative knowledge is that of an industry practitioner rather than that of an expert with specialist knowledge
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Skill Set 2: Health, Safety and Wellbeing (4 credits)

- Know:**
- Potential hazards in the workshop
 - The personal protective equipment to be used in different situations
 - The site safety requirements and emergency procedures for the workshop
 - Techniques for lifting and carrying heavy items

- Do:**
- Report and/or remedy potential hazards
 - Wear personal protective equipment where and when required
 - Follow site safety requirements and emergency procedures
 - Use safe techniques for lifting and carrying heavy items

- Comment:**
- Requirements for health, safety and wellbeing include legislative and workplace requirements
 - Hazards are those that may cause physical harm or injury such as poor visibility, electricity, poor ventilation, wet surfaces, noise, heat, handling procedures, excessive dust.
 - Hazards may also include those that cause harm to mental wellbeing.
 - Personal protective equipment is that which is appropriate to the equipment, task and workshop
 - Site safety requirements and emergency procedures include location and use of first-aid equipment, site accident procedures, site emergency evacuations procedures in case of fire, earthquake or natural disasters, traffic, electrical isolation, gas leak, chemicals
 - Techniques for safe lifting include both manual, mechanical or a mix of both
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Skill Set 3: Planning and Communication (4 credits)

- Know:**
- The roles and responsibilities of the parties involved with a kitchen project
 - How to plan and communicate work to fit with the production schedule, work programme and work of others
 - Methods of communication for interacting with customers throughout a kitchen project

- Do:**
- Work effectively with the parties involved in a kitchen project
 - Communicate effectively with own team and other parties involved in a kitchen project

- Comment:**
- The parties involved in a kitchen project may include a main contractor, painters, electricians, plumbers, other sub-contractors, suppliers, clients, designers, CAD programmers and compliance bodies
 - Working effectively involves everyday contact and the ability to discuss and reach conclusions about work requirements and the integration of activities
 - Communicating effectively involves written, oral and graphic communications
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Skill Set 4: Work Documentation (6 credits)

- Know:**
- How to read and interpret a set of working drawings to determine the materials required for manufacturing and/or installing kitchens
 - How to read and interpret a design brief
 - The requirements for creating a cutting list
 - How to read and interpret a specification to determine the manufacture and installation requirements for a kitchen

- Do:**
- Read, interpret and apply working drawings, design briefs and specifications
 - Create a cutting list
 - Use plans to determine materials required for the manufacture and installation of kitchens
 - Use working drawings to determine the manufacture and installation requirements for kitchens
 - Produce a sketch and cutting list

- Comment:**
- Interpreting a set of working drawings includes understanding drawing conventions such as drawing types, scales, symbols, dimensions, abbreviations
 - The minimum level to which a set of working drawings and specifications needs to be understood and interpreted is to allow the joiner to complete required work
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Skill Set 5: Mathematics (5 credits)

- Know:**
- The different units of measurement and how they apply to the manufacture and/or installation of kitchens
 - Calculations for determining perimeter, length, area and volume
 - Mathematical principles associated with right-angled triangles
 - How to use and apply percentages, fractions and ratios to calculations
 - Conventions associated with the use of centres and spacing

- Do:**
- Undertake measurements and calculations in one, two and three dimensions
 - Use the mathematical principles associated with right-angled triangles
 - Calculate physical quantities of materials

- Comment:**
- Units of measurement include those used for linear, area, volume, weight
 - Calculations for perimeter length, area and volume include a variety of different shapes including rectangular, triangular and circular
 - Measurements and calculations include using accepted conventions and making applicable allowances
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Skill Set 6: Tools and Equipment (6 credits)

- Know:**
- How to use hand tools to manufacture and/or install kitchens
 - How to use power tools used to manufacture and install kitchens
 - How to use different items of equipment used to manufacture and install kitchens
 - How to care for, maintain and store different tools and equipment used to manufacture and install kitchens

- Do:**
- Use a range of hand tools
 - Use a range of power tools
 - Use a range of equipment
 - Tidy up and store tools and equipment
 - Maintain tools and equipment
 - Check tools and equipment are safe and tagged

- Comment:**
- Hand tools are those which are typically used on a daily basis
 - Power tools are those which are typically used on a daily basis
 - Different items of equipment include all types of motorised or manually operated equipment associated with the manufacture and installation of kitchens
 - Maintenance requirements differ according to the tool or piece of equipment concerned
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Skill Set 7: Materials and Products (8 credits)

- Know:**
- Types, properties and uses of timber and composite materials used in the manufacture and installation of kitchens
 - Types, properties and uses of laminates, veneers and acrylics used in the manufacture and installation of kitchens
 - Types and uses of hardware used in the manufacture and installation of kitchens
 - Types and uses of mechanical fixings used in the manufacture and installation of kitchens
 - Types and uses of inserts used in the manufacture and installation of kitchens
 - Types, properties and uses of adhesives and sealants used in the manufacture and installation of kitchens
 - Installation requirements for kitchen appliances, lighting and other electrical and plumbing items associated with kitchens

- Do:**
- Receive, handle and store materials

- Comment:**
- Properties to be known are those which require environmental consideration as well as compatibility with other materials and products
 - Types of hardware include: handles, hinges, slides, plinth legs, catches, roller doors, rails, cutlery inserts, adjustable legs, bins
 - Types of inserts include bowls, sinks, drainers
 - Installation requirements include clearances, access, protective measures

Skill Set 8: Kitchen Design Concepts (10 credits)

- Know:**
- Basic kitchen design concepts associated with kitchen manufacture and installation
 - How design briefs relate to the manufacture and installation of kitchens
 - Different kitchen layouts

- Do:**
- Develop basic design briefs
 - Follow design briefs when manufacturing and/or installing kitchens

- Comment:**
- Kitchen design principles include space planning and ergonomic requirements such as food flow sequence, work triangle, appliance layout and clearances, storage systems and requirements
 - Kitchen layout knowledge should be in reference to advantages and disadvantages of different layouts
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Specification: Kitchen manufacture

To achieve this kitchen manufacture specification, an apprentice must understand the principles, and be able to apply them to all areas of kitchen manufacture.

This specification contains the following **2** skill sets:

- Machinery
- Manufacture

Each skill set comprises:

- **Know** – the theory that underpins the practical skills
 - **Do** – the practical skills an apprentice needs to have
 - **Comments** – explanatory notes to clarify specific aspects of knowledge and skill
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Skill Set 1: Machinery (15 credits)

- Know:**
- Software used for programming Computer Numerical Controlled (CNC) machinery for producing kitchen cabinetry
 - The procedures for setting up machinery used for manufacturing kitchens
 - The procedures for operating machinery used for manufacturing kitchens
 - The maintenance requirements of machinery used for manufacturing kitchens

- Do:**
- Set-up machinery
 - Operate machinery
 - Maintain machinery

- Comment:**
- Machinery may be computer numerically controlled or manually controlled
 - CNC machinery refers to any computer numerically controlled machinery used in a workshop for the production of kitchens and may differ from one workshop to another, these may include flatbed, pod and rail, cubed
 - The type of software used may vary from one workshop to another however an understanding of how it works in relation to production is what needs to be assessed
 - Types of machinery may include edge banders, hinging machines, presses, formers, edge trimmers
 - The maintenance requirements to be undertaken by an apprentice are basic maintenance such as lubrication, cleaning and knife/tool changes rather than that which would be completed by an engineer
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Skill Set 2: Kitchen Manufacture (40 credits)

- Know:**
- The processes and methods used for manufacturing kitchen cabinetry
 - Options and methods used for assembling kitchen cabinetry
 - Types, uses and properties of fixings and fittings used with kitchen cabinetry
 - Workplace requirements for stock control

- Do:**
- Manufacture cupboard carcasses
 - Manufacture doors and drawers
 - Manufacture and fix flat pressings
 - Attach hardware and attachments
 - Assemble cabinetry components

- Comment:**
- Processes and methods may vary from one workshop to another
 - Options for assembling kitchen cabinetry include taking place in the workshop or on site as well as selecting whether to use of screws, staples, adhesives or joint types such as mortise and tenon, dowel or cam and dowel
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Specification: Kitchen installation

To achieve this kitchen installation specification, an apprentice must understand the principles, and be able to apply them to all areas of kitchen installation.

This specification contains the following **1** skill set:

- Installation

Each skill set comprises:

- **Know** – the theory that underpins the practical skills
 - **Do** – the practical skills an apprentice needs to have
 - **Comments** – explanatory notes to clarify specific aspects of knowledge and skill
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Skill Set 1:**Installation****(20 credits)****Know:**

- The site requirements for installing kitchen cabinetry
- The processes and procedures for installing kitchen cabinetry
- The procedures for trimming and finishing kitchen cabinetry
- The processes for attaching and finishing fittings and fixtures
- Protective measures applied to kitchen cabinetry components
- Basic plumbing and electrical work
- Methods for assembling components on site

Do:

- Set out kitchen cabinetry fittings and fixtures
- Assemble components
- Install kitchen cabinetry components
- Install fittings and fixtures
- Trim, finish and apply protection to kitchen cabinetry
- Complete any specialist work as required

Comment:

- Installation requirements includes those relating to walls, ceilings and floors
 - Basic plumbing and electrical work is that which is required onsite as part of the installation process and not to the level of a qualified plumber or electrician.
 - Specialist includes any work done on top of the general cabinetry installation that is specific to the job
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Specification: Professional standards

This skill set below reflects the performance standard required of a trade professional. Candidates must be capable of demonstrating the skills and knowledge included in this skill set to awarded the New Zealand Certificate in Kitchen Manufacture and Installation.

The professional standards skill set comprises:

- **Know** – the theory that underpins the practical skills
 - **Do** – the practical skills you need to have
 - **Comments** – explanatory notes to clarify specific aspects of knowledge and skill
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Skill set 1: Commercial competence and professional standards (15 credits)

- Know:**
- The practical and conceptual interrelationships between the standards required to achieve the New Zealand Certificate in Kitchen Manufacture and Installation
 - How to locate and interpret kitchen manufacture and installation sector professional standards
 - The connection between professional standards and the sustainability of the kitchen manufacture and installation trade

- Do:**
- Perform all aspects of the kitchen manufacture and installation trade specialty to a commercially competent standard
 - Complete kitchen manufacture and installation work to the productivity standards expected of a trade professional
 - Demonstrate professional behaviour on a day-to-day basis
 - Fulfil responsibilities in the workplace under commercial contracts, employment and education agreements
 - Self-manage on-going learning and development to maintain currency with kitchen manufacture and installation industry professional standards
 - Support the learning and development of others attaining the trade
 - Lead and coordinate the everyday onsite operations of kitchen manufacturing and installation projects

- Comment:**
- A commercially competent standard means completing work to a commercial standard in a commercial environment without supervision
 - Expected productivity standards will reflect the complexity and scale of the work to be undertaken
 - Demonstrating professional behaviour on a day-to-day basis is likely to include working constructively with clients, suppliers and people involved in the candidate's learning programme, being consistently reliable, responsible and accountable, acting with integrity, making and keeping commitments, and showing respect and consideration for people, property and the environment
 - Leading and coordinating the everyday onsite operations of commercial kitchen manufacturing and installation projects includes coordinating the work of other trades, workflow management and completing work within the scope provided without requiring guidance and/or scrutiny
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References

The following is a list of nationally applicable legislation, standards and best practice guidance information relevant to the learning and assessment included in this *Specification* at the time of this publication.

This is not intended to be an exhaustive list. Programme developers are expected and encouraged to develop programmes that also reflect the requirements of their region, learners and industry stakeholders.

It is the responsibility of TEOs offering programmes leading to the qualification to ensure learning and assessment reflect current local and national legislative, regulatory and industry standards.

Acts of Parliament available from www.legislation.govt.nz

Building Act 2004

Construction Contracts Act 2002

Health and Safety at Work Act 2015

Fair Trading Act 1986

Fire and Emergency New Zealand Act 2017

Hazardous Substances and New Organisms Act 1996

Heritage New Zealand Pouhere Taonga Act 2014

Resource Management Act 1991

Regulations available from www.legislation.govt.nz

Health and Safety at Work (Asbestos) Regulations 2016

Health and Safety at Work (General Risk and Workplace Management) Regulations 2016

Health and Safety at Work (Worker Engagement, Participation and Representation) Regulations 2016

Health and Safety at Work (Hazardous Substances) Regulations 2017

Codes available from www.building.govt.nz

The New Zealand Building Code

Standards available from www.standards.co.nz

AS/NZS 4386 Domestic Kitchen Assemblies

Guidelines and Approved Codes of Practice available from www.worksafe.govt.nz for the following topics:

[Code of practice for manual handling](#)

[Powder-actuated hand-held fastening tools – Approved Code of Practice](#)

[General risk and workplace management – Interpretive guidelines](#)

[The absolutely essential health and safety toolkit for small construction sites](#)

Best practice and good practice guidelines

Various BRANZ publications available at www.branz.co.nz

The Absolutely Essential Health and Safety Toolkit for Small Construction Sites and other Worksafe NZ publications available from www.worksafe.govt.nz

