

New Zealand Diploma in Design

Kitchen Design/ Bathroom Design

(Level 5)

Specifications

December 2018

v1.01

Foreword

Welcome to the Specifications that set out the technical content of the New Zealand Diploma in Design (Kitchen Design/Bathroom Design) (Level 5) [Ref: 3221].

These Specifications are, collectively, a prescription for achieving the requirements of the qualification. Together they describe what a person must be capable of to become a qualified residential kitchen or bathroom design 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 Diploma in Design (Kitchen Design/Bathroom Design) (Level 5) [Ref: 3221] is achieved by completing the Fundamentals Specification and at least one of the Design Development – Kitchen and Design Development – Bathroom Specifications.

To achieve the qualification a candidate must demonstrate professional competence as a residential kitchen or bathroom designer. Professional competence requires a candidate to be capable of consistently performing the requirements of each skill set, and the Specifications as a whole:

- to current regulatory, industry, best practice and commercial standards
- to the ethical and professional expectations of industry and consumers
- while working autonomously
- in dynamic and varied contexts.

The context of the qualification is kitchen or bathroom design in residential settings. Evidence for assessment must include a minimum of four kitchen or bathroom design projects for new or existing residential dwellings.

Core

Specification:	Fundamentals	(60 credits)
Skill Sets:	Covering:	
Legislation	Building, health and safety, client protection legislation	
Communication	Communication principles, interviewing clients, communicating effectively	
Measurement and Calculation	Building geometry, site measurement, design calculations	
Construction Knowledge	Building components, construction requirements and considerations, site inspection	
Contracts, Tendering, and Quoting	What to include in a contract, tendering processes for design, developing quotes	
Research and Analysis	Sourcing and recording information, analysis to develop design solutions, evaluation against design requirements	
Project Planning and Administration	Project scheduling, budgeting, time management, documentation administration, quality assurance	

Design Development

Specification:	Design development - Kitchen	(60 credits)
Skill Sets:	Covering:	
Design	Design principles and theory, space planning, kitchen design brief development, kitchen design solution development, creating working drawings	
Products and Materials	Surface materials, fixtures and fittings, hardware, appliances, cabinets and benchtops, lighting, specifying products and materials	

Specification:	Design development - Bathroom	(60 credits)
Skill Sets:	Covering:	
Design	Design principles and theory, space planning, waterproofing and drainage requirements, bathroom design brief development, bathroom design solution development, creating working drawings	
Products and Materials	Surface materials, fixtures and fittings, hardware, appliances, cabinets and benchtops, lighting, specifying products and materials	

To achieve this fundamentals specification, you must understand the underpinning principles of residential kitchen and bathroom design work and be able to apply them in practice to all areas of kitchen and bathroom design work.

This specification contains these seven skill sets:

- Legislation
- Communication
- Measurement and Calculation
- Construction Knowledge
- Contracts, Tendering and Quoting
- Research and Analysis
- Project Planning and Administration

Each 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)

Skill Set 1:	Legislation	12 credits
Know:	<p>The health and safety legislative framework as it applies to the design of kitchens or bathrooms</p> <p>The building legislative framework as it applies to the design of kitchens or bathrooms</p> <p>The client protection legislative framework as it applies to the design of kitchens or bathrooms</p>	
Do:	<p>Assess and apply the relevant legislative frameworks in the context of kitchen or bathroom design</p> <p>Implement compliance procedures in the context of kitchen or bathroom design</p>	
Comments:	<p>The legislative framework refers to the hierarchy of Acts of Parliament, Regulations, Rules, Codes, Standards, approved codes of practice and best/good practice guidelines</p> <p>The implementation of the legislative framework refers to the specifications in the design of the kitchen or bathroom, the products within it and the construction methods meeting the required compliance requirements</p> <p>The level of legislative knowledge required is that of a design practitioner rather than that of an expert with specialist legal knowledge</p>	

Skill Set 2:	Communication	12 credits
Know:	<p>The communication requirements needed for all parties to achieve the relevant kitchen and bathroom design and construction outcomes</p>	
Do:	<p>Interview clients to establish the requirements for kitchen or bathroom designs</p> <p>Communicate effectively with the parties to the kitchen or bathroom design and construction process</p>	
Comments:	<p>Design requirements include scope of works, budget, timeframes, materials, fixtures, fittings and accessories</p> <p>Parties to the design and construction process include the client, main contractor, subcontractors, suppliers, other designers and compliance bodies</p> <p>Communication includes sales communication, marketing communication and negotiation</p> <p>Communicating effectively involves written, oral and graphic communications, and includes the ability to discuss and reach conclusions about requirements and solutions</p>	

Skill Set 3:	Measurement and Calculation	4 credits
Know:	Different units of measurement and how they are used	
	How to calculate area and volume	
	Pythagoras' theorem and its application to design	
	How to use and apply percentages and ratios to design calculations	
Do:	Take and record kitchen or bathroom design project site measurements	
	Perform calculations for kitchen or bathroom design development	
Comments:	Units of measurement include those used for length, weight, volume, time and temperature	
	Calculations for 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	

Skill Set 4:	Construction Knowledge	8 credits
Know:	The components of buildings' service and support systems and their impact on kitchen or bathroom design	
	Construction requirements and their impact on kitchen or bathroom design	
	Renovation considerations and their impact on kitchen or bathroom design	
Do:	Perform site inspection for kitchen or bathroom design projects	
Comments:	Components of buildings' service and support systems include electrical systems, plumbing systems, heating and/or extraction systems and insulation	
	Construction requirements include framing, floors, windows, doors, building interior, linings and finishings	
	Renovation considerations include adding or removing walls, doors, and/or windows, shifting plumbing or electrical systems and making structural changes	
	The level of construction knowledge required is that of a design practitioner rather than that of an engineer or builder	

Skill Set 5:	Contracts, Tendering, and Quoting	6 credits
Know:	<p>The legal status of a contract and the legal responsibilities of the parties to a contract</p> <hr/> <p>What to include in a contract for a kitchen or bathroom design</p> <hr/> <p>What to include in a contract for purchase of a kitchen or bathroom</p> <hr/> <p>Tendering processes as they apply to kitchen or bathroom design</p> <hr/> <p>The difference between estimating and quoting</p> <hr/> <p>The quoting process as it applies to kitchen or bathroom design</p>	
Do:	<p>Develop quotes from a scope of works</p> <hr/> <p>Negotiate, develop and manage contracts for kitchen or bathroom design projects</p>	
Comments:	<p>Considerations associated with contractual relationships may include hidden commissions, protection of deposits and preferred creditors</p> <hr/> <p>Managing contracts may include negotiating and overseeing contracts including; work schedules , deadlines, pricing, communication, disputes, payments, variations and any other relevant conditions both parties agree to</p>	

Skill Set 6:	Research and Analysis	12 credits
Know:	<p>How to source, record and organise information relevant to the kitchen or bathroom design process</p> <hr/> <p>How to analyse information for evaluation against specified requirements</p>	
Do:	<p>Conduct research to inform development of kitchen or bathroom designs</p> <hr/> <p>Analyse information and make decisions to develop design solutions for kitchens or bathrooms</p> <hr/> <p>Evaluate potential design solutions against the requirements of the design brief parameters and identify areas for development</p>	
Comments:	<p>The design brief refers to the design parameters agreed between the kitchen or bathroom designer and the client and provides solutions to meet the functional and aesthetic requirements of the project</p>	

Skill Set 7:	Project Planning and Administration	6 credits
Know:	The planning, budgeting, time and scope management and documentation requirements for kitchen or bathroom design projects	
Do:	<p>Develop project schedules for kitchen or bathroom design projects</p> <p>Budget for kitchen or bathroom design projects</p> <p>Design time and scope management plans for kitchen or bathroom design projects</p> <p>Administer kitchen or bathroom design documentation</p>	
Comments:	Planning includes processes for monitoring effectiveness and implementing changes where required. Examples could include regular contractor reports being reviewed by the project team, scheduled meetings with project members and completion of a final project review and feedback session	

Specification:

Design Development - Kitchen

(60 credits)

To achieve this specification you must understand how to conceptualise, develop, and present designs and product specifications for residential kitchens.

This specification contains two skill sets:

- Design
- Products and Materials

The 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)

Skill Set 1:	Design	40 credits
Know:	<p>Design principles and elements, their purpose, use and application to kitchen design</p> <hr/> <p>Types of drawings and their functions</p> <hr/> <p>The terminology and abbreviations, and the drawing conventions used in kitchen design sketches and drawings</p> <hr/> <p>Colour principles</p> <hr/> <p>How the materials used in different regional styles and themes influence kitchen design</p> <hr/> <p>The impact of space planning and ergonomics on kitchen design</p> <hr/> <p>The advantages and disadvantages of different types of kitchen layouts and their impact on design</p> <hr/> <p>The types of mechanical systems used in kitchens, their functions and efficiency and their impact on design</p> <hr/> <p>The purpose and key components of a design brief</p>	
Do:	<p>Practically apply design knowledge to meet the relevant design brief parameters in everyday kitchen design contexts</p> <hr/> <p>Develop design briefs and concepts for kitchen design projects</p> <hr/> <p>Develop, prepare and present design solutions to meet the design brief for kitchen design projects</p> <hr/> <p>Create working drawings for kitchen design projects</p>	
Comments:	<p>Space planning and ergonomic requirements include food flow sequence, work triangle, main appliances, fixtures and fittings, landing spaces and storage requirements, storage systems, vertical heights for major kitchen components and access</p> <hr/> <p>Mechanical systems include venting, heating, extraction, electrical and plumbing services, integrated systems, sound systems and smart appliances</p> <hr/> <p>Design solutions include supporting documentation, sketches, recommendations, design statement, and amendments to the plan</p> <hr/> <p>Drawings include fully dimensioned floor plans and elevations, concept electrical and lighting plans and mechanical plans</p> <hr/> <p>Drawings must contain all the information required to construct the design</p>	

Skill Set 2:	Products and Materials	20 credits
Know:	<p>Types, properties, advantages and disadvantages, and impact on design of flooring and surface materials used in kitchens</p> <hr/> <p>Types, properties, advantages and disadvantages, and impact on design of plumbing fixtures and fittings used in kitchens</p> <hr/> <p>Types, properties, advantages and disadvantages, and impact on design of kitchen hardware used in kitchens</p> <hr/> <p>Types, properties, and impact on design of appliances used in kitchens</p> <hr/> <p>Types, properties, construction, and impact on design of cabinets and benchtops used in kitchens</p> <hr/> <p>Types, properties, and impact on design of lighting used in kitchens</p>	
Do:	<p>Advise clients on product and material options to assist with development of design solutions</p> <hr/> <p>Specify and source products and materials for kitchen design projects</p> <hr/> <p>Create a set of specifications for kitchen design</p>	
Comments:	<p>Surface materials include materials for surfaces of benches, doors and drawers, and walls and ceilings</p> <hr/> <p>Properties are context and material dependent and may include durability, material lifespan, water resistance or proofing, ease of cleaning, impact resistance, sound transfer, porosity, and stain resistance</p>	

To achieve this specification you must understand how to conceptualise, develop, and present designs and product specifications for residential bathrooms.

This specification contains two skill sets:

- Design
- Products and Materials

The 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)

Skill Set 1: Design 40 credits

Know: Design principles and elements, their purpose, use, and application to bathroom design

Types of drawings and their functions

The terminology and abbreviations, and drawing conventions used in bathroom design sketches and drawings

Colour principles

How the materials used in different regional styles and themes influence bathroom design

The impact of waterproofing and drainage requirements on bathroom design

The impact of space planning and ergonomics on bathroom design

The advantages and disadvantages of different types of bathroom layouts and their impact on design

The types of mechanical systems used in bathrooms, their functions and efficiency, and their impact on design

The purpose and key components of a design brief

Do: Practically apply design knowledge to meet the relevant design brief parameters in everyday bathroom design

Develop design briefs and concepts for bathroom design projects

Develop, prepare and present design solutions in accordance with a design brief for bathroom design projects

Create working drawings for bathroom design projects

Comments: Space planning and ergonomics requirements include flow sequence, fixtures and fittings, landing spaces and storage requirements, storage systems, vertical heights for major bathroom components and access

Mechanical systems include venting, heating, extraction, electrical and plumbing services, integrated systems, sound systems and smart appliances

Design solutions include supporting documentation, sketches, recommendations, design statements and amendments to the plan

Drawings include fully dimensioned floor plans and elevations, concept electrical and lighting plans and mechanical plans

Skill Set2:	Products and Materials	20 credits
Know:	<p>Types, properties, advantages and disadvantages, and impact on design of flooring and surface materials used in bathrooms</p> <hr/> <p>Types, properties, and impact on design of fixtures, fittings, and accessories used in bathrooms</p> <hr/> <p>Types, properties, construction, and impact on design of cabinets used in bathrooms</p> <hr/> <p>Types, properties, and impact on design of lighting used in bathrooms</p> <hr/> <p>Types, functions, and properties of technology options used in bathrooms</p>	
Do:	<p>Advise clients on product and material options to assist with development of design briefs</p> <hr/> <p>Specify and source products and materials for bathroom design projects</p> <hr/> <p>Create a set of specifications for bathroom design</p>	
Comments:	<p>Surface materials include materials for the surfaces of benches, doors and drawers, and walls and ceilings</p> <hr/> <p>Properties are context and material dependent and may include durability, material lifespan, water resistance or proofing, ease of cleaning, impact resistance, sound transfer, porosity and stain resistance</p> <hr/> <p>Fixtures are items that hold water, fittings are items that water passes through, accessories are items that make a bathroom functional</p> <hr/> <p>Technology options include sound systems and integrated systems and technologies</p>	

References

The following is a list of nationally applicable legislation, standards and best/good practice guidance information relevant to the learning and assessment included in this Specification at the time of 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 that 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
Consumer Guarantees Act 1993
Health and Safety at Work Act 2015
Fair Trading Act 1986
Privacy Act 1993

Regulations available from www.legislation.govt.nz

Building (Residential Consumer Rights and Remedies) Regulations 2014
Health and Safety at Work (General Risk and Workplace Management) Regulations 2016

Codes available from www.building.govt.nz

The New Zealand Building Code

Standards available from www.standards.co.nz

AS/NZS 1680.1 Interior lighting – General principles and recommendations
AS/NZS 4386.1 Domestic kitchen assemblies – Kitchen units
AS/NZS 4386.2 Domestic kitchen assemblies – Installation
AS/NZS 3500.2 Plumbing and drainage – Sanitary plumbing and drainage
NZS 3602 Timber and wood-based products for use in building
NZS 3604 Timber-framed buildings
NZS 4303:1990 Ventilation for acceptable indoor air quality
NZS 5261 Gas Installation
NZS 5807 Code of practice for industrial identification by colour, wording or other coding

Best practice and good practice guidelines

Various BRANZ publications available at www.branz.co.nz including:
Homes without barriers: A guide to accessible houses (Wellington: BRANZ, 2001)
Plumbing and Drainage Guide (Wellington: BRANZ, 2004)
Selecting Timber (Wellington: BRANZ, 2004)

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