New Zealand Certificate in

Flooring Planning & Design

Level 4

Specifications

September 2020

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BCITO buildingpeople

Foreword

Welcome to the *Specifications* that set out the technical content of the New Zealand Certificate in Flooring Planning and Design (Level 4) (with optional strands in Site Assessment and Flooring Estimation) [Ref: 4279]

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.

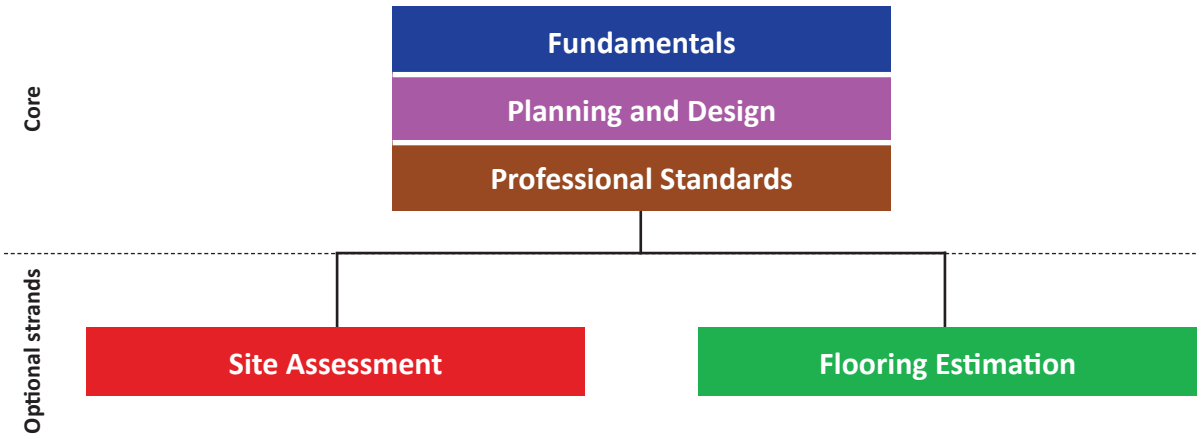
Programmes must encompass these *Specifications* and support the development of the skills, knowledge and attributes that reflect the technical competence, self-management, professionalism and leadership.

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 skill 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 Flooring Planning and Design is achieved through completing the qualification core. Candidates can further enhance their qualification through the addition of one or both of the optional strands:

- Site Assessment
- Flooring Estimation



To achieve the New Zealand Certificate in Flooring Planning and Design (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	35 credits
Skill sets:	**Covering:**	
Legislation	Relevant legislation and standards	
Flooring Calculations	Measurements, area, volume and calculations	
Flooring Installation Knowledge	Substrate requirements, different flooring and installation methods	
Working Plans	Reading, interpreting and applying working drawings	

Specification:	Planning and Design	35 credits
Skill sets:	**Covering:**	
Flooring Design	Providing flooring product and design solutions	
Planning for Flooring and Finishes	Communication and planning work with people involved in flooring installation	

Specification:	Professional Standards	15 credits
Skill sets:	**Covering:**	
Commercial competence and professional standards	Performance standard required of a trade professional	

Optional Strands

Specification:	Site Assessment	35 credits
Skill sets:	**Covering:**	
Site Assessment	Assess site and surfaces for flooring installation	

Specification:	Flooring Estimation	35 credits
Skill sets:	**Covering:**	
Flooring Estimation	Calculating costs for flooring installation jobs	

Specification: Fundamentals 35 credits

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

This specification contains the following 4 skill sets:

- Legislation
- Flooring Calculations
- Flooring Installation Knowledge
- Working Plans

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	Credits: 6
Know:	The health and safety legislative framework as it applies to flooring operations	
	The environmental legislative framework as it applies to flooring operations	
	The building legislative framework as it applies to flooring operations	
	The client protection legislative framework as it applies to flooring operations	
Do:	Apply the health and safety legislative framework in everyday contexts within flooring planning and design operations	
	Apply the environmental legislative framework in everyday contexts within flooring planning and design operations	
	Apply the legislative building framework in everyday contexts within flooring planning and design operations	
	Apply the client protection legislative framework in everyday contexts within flooring planning and design operations	
Comments:	The legislative framework refers to the hierarchy of Acts of Parliament, Regulations, Rules, Codes, Standards, approved codes of practice and best/good practice guidelines	
	Knowledge of legislative frameworks as it applies to flooring operations within commercial, residential or wholesale contexts	
	Knowledge of the health and safety legislative framework includes the safety requirements when working with hazardous materials	
	The level of legislative knowledge required is that of a flooring planner and designer rather than that of an expert with specialist knowledge	

Skill Set 2:	Flooring Calculations	Credits: 4
Know:	The different units of measurement and how they are used	
	How to use equipment to complete measurements	
	How to calculate area	
	How to calculate quantities	
	How to use and apply percentages and ratios to calculations	
	How to calculate labour, material and associated costs	
Comments:	Units of measurement include length, area, volume, time and distance	
	Equipment used for measuring may be either manual or electronic	
	Calculating quantities includes additional allowances for different product types	
	Associated costs are costs related to a specific job that are not materials or labour and may include freight, travel or disposal of materials	
	The level of pricing knowledge required is that of flooring planner and designer rather than that of a business owner	

Skill Set 3:	Flooring Installation Knowledge	Credits: 20
Know:	Properties, functions, benefits and limitations of different flooring types Care and maintenance requirements of different flooring types	
	Properties, functions, benefits and limitations of accessories used in flooring operations	
	The safe storage and handling of floor coverings and accessories used in flooring operations	
	Properties, functions and limitations of substrate preparation systems used prior to flooring installation	
	How to interpret product data sheets	
	The principles and effects of water penetration on flooring systems, installation methods and substrates	
	Methods for moisture and pH testing, and how to interpret readings	
	Installation methods for different flooring types	
	The use and application of tools, equipment and consumables used for flooring installation	
Comments:	Types of flooring may include carpet, resilient, timber cork and finish coatings	
	Finish coatings are applied onsite as the finished flooring surface	
	Types of accessories include fixings, fasteners and adhesives	
	Methods of moisture and pH testing are those approved and recognised in the New Zealand flooring industry	
	Consumables are items associated with a tool or piece of equipment that are consumed or degraded through use	
	The level of installation knowledge required is that of a flooring planner and designer rather than an installer	

Skill Set 4:	Working Plans	Credits: 5
Know:	The key components that make up a set of working plans and their functions for flooring planning and design operations	
	How to read and interpret working plans for flooring planning and design operations	
	How working plans are created for flooring operations	
Do:	Interpret working plans for flooring planning and design	
Comments:	Working plans can either be in hard copy or electronic form	
	Interpreting working plans includes understanding drawing types, scales, legends, symbols, dimensions, codes and abbreviations. It also includes questioning details where information is unclear or conflicts with best practice.	
	The minimum level to which working plans needs to be understood and interpreted is to allow flooring planning and design operations to be undertaken as documented	

Specification:	Planning and Design	35 credits

To achieve this planning and design specification, you must understand the underpinning principles, and be able to apply them in practice to all areas of flooring planning and design.

This specification contains the following 2 skill sets:

- Flooring design
- Planning for Flooring and Finishes

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:	Flooring Design	Credits: 20
Know:	How to find current information about flooring products and design trends	
	Principles of colour and design	
	How to make comparisons between different flooring and design solutions	
	The factors that influence the selection and installation of floor coverings	
Do:	Provide advice to clients on flooring products and design trends	
	Provide advice on the ongoing care and maintenance of flooring, and how common issues are rectified	
	Evaluate information and prepare flooring product and design solutions for clients	
Comments:	Flooring design trends includes regional styles, themes, integration with associated décor, and functionality of flooring	
	Factors that influence the selection and installation of floor coverings include aesthetics, durability of product, purpose of the space, environmental conditions flooring will be exposed to, construction techniques, product supply, regulatory requirements and project budget	
	Providing advice includes guidance on the possible outcomes associated with product selection, installation processes and the overall design	
	Common issues may include product failure, inappropriate product installation, and incorrect maintenance	
	Advice may be given verbally, written or in electronic form	

Skill Set 2:	Planning for Flooring and Finishes	Credits: 15
Know:	How to consult with clients for flooring projects	
	Construction site activities as they relate to the installation of flooring	
	How to plan and coordinate work to fit with a programme of work	
	The purpose and process of job documentation as it applies to flooring operations	
	The different pricing and payment systems	
	The process to follow when presented with customer complaints	
Do:	Consult with clients to establish requirements	
	Order flooring materials for planned flooring projects	
	Plan for the safe handling and storage of equipment or products	
	Administer the process of job documentation between parties to flooring operations	
	Communicate required surface finish of substrate to relevant parties prior to flooring installation	
	Communicate job information with own team and other parties to problem solve and progress flooring project	
	Address flooring installation complaints	
Comments:	Clients' requirements include scope of work, timeframes and budgets, materials, fixtures and accessories	
	Work level required is that of a flooring planner and designer rather than a business owner or project manager. It includes consideration for required delivery time and site access	
	Communicating effectively involves written, oral, and electronic formats	
	Problem-solving relates to changes and challenges to work programmes, the environment in which flooring operations take place, and the use, application or installation of specified materials	
	Customer complaints may come from end user, retailer, wholesaler, contractor, or architect. Addressing complaints may include managing the complaint as per company processes.	

Specification:	Professional Standards	15 credits

This specification reflects the performance standard required of a commercially competent flooring planner and designer. It contains the following skill set:

- Commercial competence and professional standards

Candidates must be capable of demonstrating the knowledge and skills included in this skill set to be awarded the New Zealand Certificate in Floor Planning and Design (Level 4) [Ref: 4297].

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:	Professional standards	Credits: 15
Know:	The practical and conceptual interrelationships between the standards required to achieve the New Zealand certificate in Flooring Planning and Design (Level 4) [Ref:xxxx]	
	How to locate and interpret flooring industry professional standards	
	The quality assurance systems relevant to flooring planning and design processes	
	The connection between professional standards and the sustainability of the flooring trade	
Do:	Perform all aspects of flooring planning and design to a commercially competent standard	
	Demonstrate professional behaviour on a day-to-day basis	
	Fulfil responsibilities in the workplace to meet commercial contracts, employment and education agreements	
	Maintain quality assurance practices through all areas of flooring planning and design work	
	Self-manage on-going learning and development to maintain currency with the flooring industry professional standards	
Comments:	A commercially competent standard means completing work to a commercial standard in a commercial environment without direct supervision	
	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	
	Industry sustainability refers to the economic, environmental and social practices that contribute to the sustainability and improvement of the building and construction industry	

Optional strands

Specification:	Site Assessment	35 credits

To achieve this site assessment specification, you must understand and undertake all aspects of flooring site assessment work.

This specification contains the following skill set:

- Site Assessment

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:	Site Assessment	Credits: 35
Know:	The processes to follow if contaminated, unsuitable or hazardous surfaces are identified	
	The information to obtain during a site assessment and how it is gathered	
	How product size, seams and direction of material affects flooring design	
	The roles and responsibilities of site hierarchy	
	The impact that variations to work programmes have on job completion	
Do:	Prepare for and complete site assessment	
	Communicate the results of site assessments to relevant parties prior to flooring installation	
	Complete measurements for estimation	
	Provide workable solutions to site issues	
	Produce a quantifiable plan for flooring installation	
	Assess new and existing surfaces for suitability prior flooring installation	
	Complete moisture testing requirements and provide moisture treatment recommendations	
	Comply with site specific safety requirements	
Comments:	Completing site assessment includes measurements of flooring surfaces, identifying falls, ramps and transitions required in flooring installation, job readiness, identification of contaminated, unsuitable or hazardous surfaces, the work environment, site hierarchy, site access, location of services and travel times to site	
	Communication of site assessment outcomes includes completing documentation as per company processes	
	Variations are additions, deductions or alterations to the agreed scope of work that may result as the project progresses	
	A quantifiable plan provides relevant information for an estimator to quantify materials. It may indicate preferred product size, direction and placement of seams.	
	Completing moisture testing may include carrying-out the moisture testing or making arrangements for the testing to occur	
	Product specifications are considered when assessing surfaces prior to flooring installation. This may include pH testing.	

Specification:	Flooring Estimation	35 credits

To achieve this flooring estimation specification, you must understand and undertake all aspects of flooring estimation work.

This specification contains the following skill set:

- Flooring Estimation

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:	Flooring Estimation	Credits: 35
Know:	How product specifications influences material quantification	
	How site information influences job estimates	
	How variations are included in job estimates	
	How to create a floor layout plan	
	How to include profit margins or mark ups in flooring estimates	
	The difference between an estimate and a quote	
Do:	Evaluate product specifications and site information to identify scope of work	
	Undertake measurements and calculations in one, two and three dimensions	
	Prepare floor layout plan	
	Calculate material quantities and make the appropriate allowances	
	Calculate labour requirements	
	Allow for variations in client estimates	
	Prepare costings for the agreed scope of work including all relevant elements	
	Provide estimates for flooring installation	
Comments:	Variations are additions, deductions or alterations to the agreed scope of work that may result as the project progresses	
	Site information may include location of services, access to site, the work environment, other trades and job readiness	
	A floor layout plan indicates the direction and floor seams for clients. A plan provided by an architect or builder may be used to apply the flooring layout to.	
	Quantifying materials for flooring installation takes into consideration the installation processes of products including joins, corners, ramps, transitions and falls	
	Elements in job costings may include materials, labour hours, freight, accessories, disposal, mark ups or profit margins	

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

Building (Definition of Restricted Building Work) Order 2011

Building (Residential Consumer Rights and Remedies) Regulations 2014

Building (Specified Systems, Change the Use, and Earthquake-prone Buildings) Regulations 2005

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 2455.1:1:2007 Textile floor coverings – Installation practice - General

AS/NZS 2455.1:1:2007 Textile floor coverings – Installation practice – Carpet tiles

NZS AS 1884:2013 Floor coverings – Resilient sheet and tiles – Installation practices

AS/NZS 1385:2007 Textile floor coverings – Metric units and commercial tolerances for measurement

AS/NZS 2111.0:1996 Textile floor coverings – Tests and measurements – Introduction and list of methods

ISO 6347:2017 Textile floor coverings – Consumer information

ISO 10874:2009 Resilient, textile and laminate floor coverings - Classification

AS/NZS 2914:2007 Textile floor coverings – Informative labelling

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

Management and removal of asbestos – 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

Various *Floor NZ* publications available from https://floornz.org.nz