



New Zealand Certificate in  
**Flooring Installation**

Level 4



# Specifications

September 2020



v1.1

**BCITO**  
building people



# Foreword

Welcome to the *specifications* that set out the technical content of the New Zealand Certificate in Flooring Installation with strands in Conventional Carpet, Bonded Carpet, Commercial Resilient and Residential Resilient Flooring (Level 4) [Ref: 4296].

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 Installation with strands in Conventional Carpet, Bonded Carpet, Commercial Resilient and Residential Resilient Flooring (Level 4) is achieved through completing the qualification core and at least one other strand. Candidates can further enhance their qualification through the addition of any combination of the remaining strands.

To achieve the New Zealand Certificate in Flooring Installation with strands in Conventional Carpet, Bonded Carpet, Commercial Resilient and Residential Resilient Flooring (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	25 credits
<b>Skill sets:</b>		<b>Covering:</b>
Legislation		Relevant legislation and standards as it applies to carpet and resilient flooring installation
Tools, Plant and Equipment		Tools plant and equipment used in the carpet and resilient flooring installation industry
Planning and Communication		Planning and communication in the flooring industry
Measurement and Calculations		Measurement and calculations as they apply to carpet and resilient flooring installation industry
Drawings, Specifications and Job Documentation		Drawings specifications and job documentation relevant to carpet and resilient flooring installation

Specification:	Professional Standards	15 credits
<b>Skill Set:</b>		<b>Covering:</b>
Commercial Competence and Professional Standards		Performance standard required of a trade professional

## Strands

Specification:	Conventional Carpet	65 credits
<b>Skill Set:</b>		<b>Covering:</b>
Carpet Products		Products relating to the installation of carpet types including carpet flaws
Substrate Preparation for Carpet Installation		Prepare and assess carpet substrates and remediate as required
Conventional Carpet Installation		Installation of conventional carpet to substrates

Specification:	Bonded Carpet	60 credits
<b>Skill Set:</b>		<b>Covering:</b>
Carpet Products		Products relating to the installation of carpet types including carpet flaws
Substrate Preparation for Carpet Installation		Prepare and assess carpet substrates and remediate as required
Bonded Carpet Installation		Installation of bonded carpet to substrates

<b>Specification: Commercial Resilient</b>		<b>75 credits</b>
<b>Skill Set:</b>	<b>Covering:</b>	
Resilient Products	Products relating to the installation of resilient flooring types including flaws	
Substrate Preparation for Resilient Flooring Installation	Prepare and assess resilient flooring substrate and remediate as required	
Commercial Resilient Installation	Installation of commercial resilient flooring to substrates	

<b>Specification: Residential Resilient</b>		<b>75 credits</b>
<b>Skill Set:</b>	<b>Covering:</b>	
Resilient Products	Products relating to the installation of resilient flooring types including flaws	
Substrate Preparation for Resilient Flooring Installation	Prepare and assess resilient flooring substrate and remediate as required	
Residential Resilient Installation	Installation of residential resilient flooring to substrates	

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

This specification contains the following 5 skill sets:

- Legislation
- Tools, Plant and Equipment
- Planning and Communication
- Measurement and Calculations
- Drawings, Specifications and Job Documentation

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
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Skill Set 1:	Legislation	5 credits
<b>Know:</b>	The health and safety legislative framework as it applies to either carpet and/or resilient flooring operations	
	The environmental legislative framework as it applies to either carpet and/or resilient flooring operations	
	The building legislative framework as it applies to either carpet and/or resilient flooring operations	
	The client protection legislative framework as it applies to either carpet and/or resilient flooring operations	
<b>Do:</b>	Apply the health and safety legislative framework in everyday contexts within either carpet and/or resilient flooring operations	
	Apply the environmental legislative framework in everyday contexts within either carpet and/or resilient flooring operations	
	Apply the legislative building framework in everyday contexts within either carpet and/or resilient flooring operations	
	Apply the client protection legislative framework in everyday contexts within either carpet and/or resilient flooring operations	
<b>Comments:</b>	The legislative framework refers to the hierarchy of Acts of Parliament, Regulations, Rules, Codes, Standards, approved codes of practice best/good practice guidelines	
	Knowledge of the health and safety legislative framework includes safety requirements when working with hazardous materials	
	The level of legislative knowledge required is that of a flooring tradesperson rather than that of an expert with specialist knowledge	



**Skill Set 2: Tools, Plant and Equipment** **6 credits**

<b>Know:</b>	<p>The use and application of different hand tools used by either the carpet and/or resilient flooring installation trade</p> <hr/> <p>The use and application of different power tools used by either the carpet and/or resilient flooring trade</p> <hr/> <p>The use and application of different plant and equipment used by either the carpet and/or resilient flooring trade</p> <hr/> <p>The use and application of different accessories and consumables used by either the carpet and/or resilient flooring trade</p>
<b>Do:</b>	<p>Use a range of hand tools used by either the carpet and/or resilient flooring trade</p> <hr/> <p>Use a range of power tools used by either the carpet and/or resilient flooring trade</p> <hr/> <p>Use a range of plant and equipment used by either the carpet and/or resilient flooring trade</p> <hr/> <p>Use a range of accessories and consumables used by either the carpet and/or resilient flooring trade</p> <hr/> <p>Maintain tools, plant and equipment used by either the carpet and/or resilient flooring trade</p>
<b>Comments:</b>	<p>The different types of tools and equipment vary depending on either the carpet and/or resilient flooring trade</p> <hr/> <p>Flooring trades include either carpet installers and/or resilient flooring installers</p> <hr/> <p>The skill and knowledge associated with using a particular tool or piece of plant or equipment could be applied to another less familiar tool or piece of equipment</p> <hr/> <p>Hand tools are those which are typically used by either the carpet and/or resilient flooring trade on an everyday basis</p> <hr/> <p>Power tools are those which are typically used by either the carpet and/or resilient flooring trade on a regular basis</p> <hr/> <p>Plant and equipment is that which is typically used in either the carpet and/or resilient flooring trade on a regular basis</p> <hr/> <p>Consumables are things associated with a tool or piece of equipment that are consumed or degraded through use</p>

Skill Set 3:	Planning and Communication	4 credits
<b>Know:</b>	The roles and responsibilities of the parties to either carpet and/or resilient flooring operations	
	How to plan and coordinate work to fit with a programme and other parties	
<b>Do:</b>	Establish work activities, priorities and deadlines	
	Plan and coordinate either carpet and/or resilient flooring operations	
	Work effectively with the parties in either carpet and/or resilient flooring operations	
	Communicate effectively with own team and parties for either carpet and/or resilient flooring operations	
<b>Comments:</b>	Parties to either carpet and/or resilient flooring operations include other team members, the client, main contractor, subcontractors, manufacturers, suppliers, designers, and compliance bodies	
	Working effectively involves everyday contact on site and the ability to discuss and reach conclusions about work requirements and the integration of activities	
	Communicating effectively involves written, oral, and electronic formats	

Skill Set 4:	Measurement and Calculations	5 credits
<b>Know:</b>	The different units of measurement and how they are used	
	The formulas for, and how to calculate area, and quantities	
	How to use and apply percentages and ratios to calculations	
	How to calculate labour, material, overheads and other costs	
<b>Do:</b>	Undertake measurements and calculations in one, two and three dimensions	
	Calculate material quantities and make the appropriate allowances	
	Calculate labour, materials and overheads and other costs to price jobs	
<b>Comments:</b>	Units of measurement include length, area, volume, time and distance	
	Units of measurement for flooring products are often in lineal metres	
	Overheads are the direct costs associated with a specific job that are not materials or labour	
	The level of pricing knowledge required is that of an employee rather than that of a business owner	

**Skill Set 5: Drawings, Specifications and Job Documentation** **5 credits**

<b>Know:</b>	<p>The different types of drawings, specifications and job documentation used for either carpet and/or resilient flooring operations</p> <hr/> <p>The function and use of drawings, specifications and job documentation used for either carpet and/or resilient flooring operations</p> <hr/> <p>The key components that make up a set of drawings, specifications and job documentation for either carpet and/or resilient flooring operations</p> <hr/> <p>How to read and interpret drawings, specifications and job documentation for either carpet and/or resilient flooring operations</p>
<b>Do:</b>	<p>Read and interpret specifications and job documentation and apply drawings to complete flooring jobs</p> <hr/> <p>Produce sketch and scale drawings for flooring operations</p> <hr/> <p>Complete job documentation</p>
<b>Comments:</b>	<p>Drawings, specifications and job documentation can either be in hard copy or electronic form</p> <hr/> <p>Interpreting drawings and specifications includes understanding conventions including terminology, drawing types, scales, symbols, dimensions and abbreviations.</p> <hr/> <p>The minimum level to which drawings, specifications and job documentation need to be understood and interpreted is to allow carpet and resilient flooring operations to be undertaken as documented</p> <hr/> <p>A scope of work is a type of specification</p> <hr/> <p>Job documentation includes checklists, records and schedules produced to quantify and qualify flooring operations</p> <hr/> <p>The level of knowledge required for drawings and specifications needs to be at the level of a flooring tradesperson rather than that of a draughtsperson or designer.</p>

This specification reflects the performance standard required of a commercially competent timber and composite flooring installer. It This specification reflects the performance standard required of a commercially competent resilient and carpet flooring installer. 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 Flooring Installation (Level 4) [Ref: 4296].

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
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<b>Skill set 1:</b>	<b>Professional Standards</b>	<b>15 credits</b>
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<b>Know:</b>	The knowledge and practical skills involved in being a carpet and resilient flooring installer
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How to use effective communication methods in the workplace

The ways in which professional standards contribute to the sustainability of the carpet and resilient flooring installation trade

How to locate and interpret industry professional standards

<b>Do:</b>	Perform all aspects of the relevant strand(s) in the carpet and resilient flooring installation trade to a commercially competent standard
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Demonstrate professional behaviour on a day-to-day basis

Fulfil responsibilities in the workplace to meet commercial contracts, employment and education agreements

Self-manage ongoing learning and development

Keep up to date with the industry's professional standards

Support the learning and development of others in training

Lead and coordinate the everyday on-site operations in the relevant strand(s) in carpet and resilient flooring installation projects

<b>Comments:</b>	A commercially competent standard means completing work to a commercial standard in a commercial environment without direct supervision
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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

Behaving professionally includes presenting a positive company image, positive body language and personal presentation to clients and colleagues

To achieve this conventional carpet installation specification, you must understand and use different carpet products, prepare surfaces and undertake all aspects of conventional carpet installation work.

This specification contains the following 3 skill sets:

- Carpet Products
- Substrate Preparation for Carpet Installation
- Conventional Carpet Installation

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
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Skill Set 1:	Carpet Products	10 credits
<b>Know:</b>	<p>The types, functions and properties of tufted, woven, non-woven carpets and carpet tiles</p> <p>The types, functions and properties of natural and synthetic fibre carpets</p> <p>The types, functions and properties of carpet underlays</p> <p>The use and function of carpet consumables utilised in an installation</p> <p>The types, functions and properties of adhesives</p> <p>How to recognise manufacturing flaws and transportation damage to carpet and flooring products prior to installation</p> <p>How to repair damaged carpet</p>	
<b>Do:</b>	<p>Recognise when carpet product is flawed or damaged and take appropriate action prior to installation</p>	
<b>Comment:</b>	<p>Carpet installation consumables include those items necessary to secure and finish edges, junctions, joins, changes in planes and height variations</p> <p>The types, functions and properties of adhesives includes cleaners and associated chemicals</p> <p>Conventional installation system is also known as the carpet gripper system</p> <p>Bonded carpet installation system is also known as direct-stick system and double-bond system</p>	

**Skill Set 2:****Substrate Preparation for Carpet Installation****10 credits****Know**

The properties of substrates onto which carpet is installed

Physical and technical requirements for substrates onto which carpet is installed

Common issues associated with substrates and substrate surfaces and how to remedy them for carpet installation

Preparation requirements and methods associated with different substrate surface types

The types, functions and properties of moisture treatment systems used in conjunction with carpet flooring products

How to recognise potentially contaminated, unsuitable or hazardous substrates and substrate surfaces

**Do:**

Assess new and existing surfaces before carpet installation

Remove existing floor coverings, coatings and contaminants from substrate surfaces

Prepare and remediate existing substrates and substrate surfaces before carpet flooring operations or organise for a specialist to carry-out repairs

Reassess surfaces after any repairs have been carried-out

**Comments:**

Substrate is the base material of the floor and includes timber strip, processed timber sheets, composite sheets, concrete and metal

The substrate surface is the face of the substrate

Physical and technical requirements include levels, falls, thickness, structural support, moisture content, fixings, surface integrity, stability and cleanliness

Assessment of substrate surfaces includes evaluating integrity, moisture content and recognition of potentially contaminated, unsuitable or hazardous surfaces and taking appropriate action

Moisture treatment systems refers to products and materials used to control the transfer of moisture from the substrate to the floor covering

Repairing existing substrates and substrate surfaces includes minor maintenance and fixes ready for carpet flooring installation or organising for major repairs by a specialist

Preparing substrate surfaces ensures the physical and technical requirements are met



**Skill Set 3:****Conventional Carpet Installation****45 credits****Know:**

How to fit edging trims and use other recommended products and consumables both prior and during conventional carpet installation

How to install carpet underlay on different surfaces prior to conventional carpet installation

How to cut, prepare and seam carpets for conventional carpet installation

How to use recommended adhesives as part of a conventional installation

How to carry out conventional installation of carpet on different surfaces

How to pattern-match

How to install carpet on stairs using the conventional system

**Do:**

Use recommended consumables to fit conventional carpet

Install carpet underlay on different surfaces ready for a conventional carpet installation

Install loop, cut and patterned carpet

Set out, cut, prepare and seam carpets for a conventional carpet installation

Power stretch, trim and tuck carpet using the conventional method

Install carpet on stairs using the conventional method

Repair any damaged carpet

**Comments:**

Conventional installation also known as the carpet gripper system includes cutting, fitting, forming, power stretching, joining and fixing carpet

Power stretching refers to using a power stretcher with the aid of a knee kicker as the assist tool

The conventional carpet installation method uses carpet gripper

Carpet gripper is also known as smooth edge or tackle strip

Recommended consumables includes items necessary to secure and finish edges, carpet adhesives, junctions, joins, changes in planes and height variations

Recommended adhesives includes cleaners and any associated chemicals that may be used when fitting carpet gripper, edging trims, stair nosings seam sealing carpet joins and carpet edges

Installation fitting techniques must follow manufacturer's specifications

To achieve this bonded carpet installation specification, you must understand and use different carpet products, prepare surfaces and undertake all aspects of bonded carpet installation work.

This specification contains the following 3 skill sets:

- Carpet Products
- Substrate Preparation for Carpet Installation
- Bonded Carpet Installation

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
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Skill Set 1:	Carpet Products	10 credits
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<b>Know:</b>	The types, functions and properties of tufted, woven, non-woven carpets and carpet tiles
	The types, functions and properties of natural and synthetic fibre carpets
	The types, functions and properties of carpet underlays
	The use and function of carpet consumables utilised in an installation
	The types, functions and properties of adhesives
	How to recognise manufacturing flaws and transportation damage to carpet and flooring prior to installation
	How to repair damaged carpet
<b>Do:</b>	Recognise when carpet product is flawed or damaged and take appropriate action prior to installation
<b>Comments:</b>	Carpet installation consumables include those items necessary to secure and finish edges, junctions, joins, changes in planes and height variations
	The types, functions and properties of adhesives includes cleaners and any associated chemicals
	Conventional installation system is also known as the carpet gripper system
	Bonded carpet installation system is also known as direct-stick system and double-bond system

**Skill Set 2:****Substrate Preparation for Carpet Installation****10 credits****Know**

The properties of substrates onto which carpet is installed

Physical and technical requirements for substrates onto which carpet is installed

Common issues associated with substrates and substrate surfaces and how to remedy them for carpet installation

Preparation requirements and methods associated with different substrate surface types

The types, functions and properties of moisture treatment systems used in conjunction with carpet flooring products

How to recognise potentially contaminated, unsuitable or hazardous substrates and substrate surfaces

**Do:**

Assess new and existing surfaces before carpet installation

Remove existing floor coverings, coatings and contaminants from substrate surfaces

Prepare and remediate existing substrates and substrate surfaces before carpet flooring operations or organise for a specialist to carry-out repairs

Reassess surfaces after any repairs have been carried-out

**Comments:**

Substrate is the base material of the floor and includes timber strip, processed timber sheets, composite sheets, concrete and metal

The substrate surface is the face of the substrate

Physical and technical requirements include levels, falls, thickness, structural support, moisture content, fixings, surface integrity, stability and cleanliness

Assessment of substrate surfaces includes evaluating integrity, moisture content and recognition of potentially contaminated, unsuitable or hazardous surfaces and taking appropriate action

Moisture treatment systems refers to products and materials used to control the transfer of moisture from the substrate to the floor covering

Repairing existing substrates and substrate surfaces includes minor maintenance and fixes ready for carpet flooring installation or organising for major repairs by a specialist

Preparing substrate surfaces ensures that physical and technical requirements are met

**Skill Set 3:****Bonded Carpet Installation****40 credits****Know:**

How to install carpet on different floor surfaces by bonded method

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How to install bonded carpet underlay on different surfaces prior to bonded installation

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How to cut, prepare and seam carpets for the bonded installation method

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How to use recommended adhesives for a bonded installation

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How to use recommended consumables in bonded installation

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How to pattern-match ready for bonded installation

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How to set out and install carpet tiles

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How to install carpet on vertical surfaces by bonded method

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How to install carpet on stairs by bonded method

**Do:**

Install carpet underlay on different surfaces ready for bonded installation

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Cut, prepare and seam carpets for the bonded method

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Install plain and patterned carpet on different surfaces by bonded method

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Set out and install carpet tiles

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Use recommended consumables including adhesives to fit carpet by bonded method

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Install carpet on stairs by bonded method

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Repair damaged carpet

**Comments:**

Carpet installation includes cutting, fitting, forming, joining and fixing

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Bonded carpet installation is also known as a direct-stick system and double-bond system

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Recommended adhesives includes cleaners and any associated chemicals

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Recommended consumables includes those items necessary to secure and finish edges, junctions, joins, changes in planes and height variations

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Installation fitting techniques must follow manufacturer's specifications

To achieve this commercial resilient flooring installation specification, you must understand and use different resilient products, prepare surfaces and undertake all aspects of commercial resilient flooring installation work.

This specification contains the following 3 skill sets:

- Resilient Products
- Substrate Preparation for Resilient Installation
- Commercial Resilient Installation

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
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Skill Set 1:	Resilient Products	10 credits
<b>Know:</b>	<p>The types, functions and properties of resilient sheet and resilient tile flooring products</p> <p>The use and function of resilient consumables utilised in an installation</p> <p>The types, functions and properties of adhesives</p> <p>The functions of coving and how to create this for resilient installations</p> <p>How to recognise manufacturing flaws and transportation damage to resilient flooring prior to installation</p>	
<b>Do:</b>	<p>Recognise when resilient flooring product is flawed or damaged and take appropriate action prior to installation</p>	
<b>Comments:</b>	<p>Resilient flooring products include sheet, plank, “safety” and tile products made from vinyl, linoleum, cork and rubber</p> <p>Commercial resilient refers to both heterogeneous and homogeneous resilient floor coverings suitable for business, hospitality, institution, health care type area and includes installation of wet areas</p> <p>Residential resilient refers to light to medium heterogeneous floor coverings suitable for residential dwellings</p> <p>Resilient tiles include VCT (Vinyl Composite Tiles) and LVT (Luxury Vinyl Tile)</p> <p>Resilient tiles also includes planks</p> <p>Resilient consumables includes those items necessary to form coving, finish edges, junctions, welding, changes in planes and height variations</p> <p>The types, functions and properties of adhesives includes cleaners and any associated chemicals</p> <p>Wet areas include level access and assisted showers</p>	

**Skill Set 2:****Substrate Preparation for Resilient Flooring****15 credits****Know:**

The properties of substrate onto which resilient flooring products are installed  
Physical and technical requirements and methods of the surface will be determined by the substrate onto which resilient flooring products are installed

The types, functions and properties of moisture treatment systems used in conjunction with resilient flooring products

Common issues associated with surfaces and how to remedy them for resilient flooring product installation

The types, functions and properties of compounds, board and cementitious underlayments

How to recognise potentially contaminated or hazardous surfaces

**Do:**

Assess new and existing surfaces

Remove existing floor coverings, coatings and contaminants from surfaces

Repair and remediate surfaces before resilient flooring product installation or organise for specialists to carry-out repairs or removal

Reassess surfaces after any repairs have been carried-out

**Comments:**

Substrate is the base material of the floor and includes timber strip, processed timber sheets, composite sheets, concrete and metal

The substrate surface is the face of the substrate

Physical and technical requirements include levels, falls, thickness, structural support, moisture content, fixings, surface integrity, stability, and cleanliness

Assessment of substrate surfaces takes into account physical and technical requirements and the recognition of potentially contaminated, unsuitable or hazardous surfaces and taking appropriate action

Moisture treatment systems refers to products and materials used to control the transfer of moisture from the substrate to the floor covering

Repairing existing substrates and substrate surfaces includes minor maintenance and fixes ready for resilient flooring installation or organising for major repairs by a specialist

Preparing substrate surfaces to specification ensures the physical and technical requirements are met for the application of underlayments and resilient floor coverings



**Skill Set 3:****Commercial Resilient Installation****50 credits****Know:**

How to install resilient flooring on commercial floor surfaces

The functions of coving and how to create these in a commercial environment

How to fit and use recommended products and consumables both prior and during commercial resilient installations

How to use recommended adhesives for commercial resilient installations

How to set out and install commercial resilient flooring tiles

How to install commercial resilient sheet on vertical surfaces

How to install commercial resilient flooring in wet shower areas

How to install commercial resilient flooring on stairs

**Do:**

Install underlayment systems as required

Site set out and install commercial resilient tiles

Install plain and patterned commercial resilient sheet flooring on different surfaces

Use recommended adhesives for commercial resilient installations

Install commercial resilient flooring in wet shower areas

Fit and use recommended consumables and products both prior and during commercial resilient installation

Form coving as part of commercial resilient installation

Install commercial resilient flooring products to stairs

Repair damage to resilient flooring

**Comments:**

Resilient flooring installation includes cutting, placing, seam preparation, adhering, laying and welding

Resilient consumables include cove fillet, skirting, edging trims, capping strips, welding materials, and stair nosings

Recommended adhesives includes cleaners and any associated chemicals

Installation includes attention to levels and falls to meet job specifications, the formation of coving, internal and external corners, junctions and joins with other materials or surfaces

Resilient tiles include VCT (Vinyl Composite Tiles) and LVT (Luxury Vinyl Tile)

Resilient tiles also include planks

Wet areas include level access and assisted showers

Installation fitting techniques must meet manufacturer's specifications

To achieve this residential resilient flooring installation specification, you must understand and use different materials, prepare surfaces and undertake all aspects of residential resilient flooring installation work.

This specification contains the following 3 skill sets:

- Resilient Products
- Substrate Preparation for Resilient Flooring
- Residential Resilient Installation

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
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**Skill Set 1:****Resilient Products****10 credits****Know:**

The types, functions and properties of resilient sheet and resilient tile flooring products

The use and function of resilient consumables utilised in an installation

The types, functions and properties of adhesives

The functions of coving and how to create this for resilient installations

How to recognise manufacturing flaws and transportation damage to resilient flooring prior to installation

**Do**

Recognise when resilient flooring product is flawed or damaged and take appropriate action prior to installation

**Comments:**

Resilient flooring products include sheet, plank, "safety" and tile products made from vinyl, linoleum, cork and rubber

Commercial resilient refers to both heterogeneous and homogeneous resilient floor coverings suitable for business, hospitality, institution, health care type areas and includes installation of wet areas

Residential resilient refers to heterogeneous vinyl floor coverings suitable for residential dwellings

Resilient tiles include VCT (Vinyl Composite Tiles) and LVT (Luxury Vinyl Tile)

Resilient tiles also includes planks

Resilient consumables includes those items necessary to form coving, finish edges, junctions, welding, changes in planes and height variations

The types, functions and properties of adhesives includes cleaners and any associated chemicals

Wet areas include level access and assisted showers

**Skill Set 2:****Substrate Preparation for Resilient Flooring****15 credits****Know:**

The properties of surfaces onto which resilient flooring products are installed

Physical and technical requirements and methods of the surface will be determined by the substrate onto which resilient flooring products are installed

The types, functions and properties of moisture treatment systems used in conjunction with resilient flooring products

Common issues associated with surfaces and how to remedy them for resilient flooring product installation

The types, functions and properties of compounds, board and cementitious underlayments

How to recognise potentially contaminated or hazardous surfaces

**Do:**

Assess new and existing surfaces

Remove existing floor coverings, coatings and contaminants from surfaces

Repair and remediate surfaces before resilient flooring product installation or organise for a specialist to carry-out repairs or removal

Reassess surfaces after any repairs have been carried-out

**Comments:**

Substrate is the base material of the floor and includes timber strip, processed timber sheets, composite sheets, concrete and metal

The substrate surface is the face of the substrate

Physical and technical requirements include levels, falls, thickness, structural support, moisture content, fixings, surface integrity, stability, and cleanliness

Assessment of substrate surfaces takes into account physical and technical requirements and the recognition of potentially contaminated, unsuitable or hazardous surfaces and taking appropriate action

Moisture treatment systems refers to products and materials used to control the transfer of moisture from the substrate to the floor covering

Repairing existing substrates and substrate surfaces includes minor maintenance and fixes ready for resilient flooring installation or organising for major repairs by a specialist

Preparing substrate surfaces to specification ensures the physical and technical requirements are met for the application of underlayments and resilient floor coverings

**Skill Set 3:****Residential Resilient Installation****50 credits****Know:**

How to install residential resilient flooring on different floor surfaces

The functions of coving and how to create these for residential installation

How to fit and use recommended products and consumables both prior and during residential installation

How to use recommended adhesives for a residential environment

How to set out for residential resilient sheet and flooring tiles

How to pattern-match residential resilient products

How to install residential resilient flooring on stairs

**Do**

Install underlayment systems as required

Install plain and patterned residential resilient sheet flooring on different surfaces and areas

Site set out and install residential tiles

Use recommended adhesives for domestic resilient installations

Fit and use recommended consumables and products both prior and during residential installation

Form coving as part of residential resilient installation

Repair any damage to resilient flooring

**Comments:**

Resilient flooring installation includes cutting, placing, seam preparation, adhering, laying and welding

Resilient accessories also known as consumables include cove fillet, skirting, edging trims, capping strips, weld, and stair nosings

Installation includes levels to meet job specifications and may include the formation of coving, internal and external corners, junctions and joins with other materials or surfaces

Residential resilient flooring can also be referred to as cushion backed vinyl

Installation fitting techniques must meet manufacturer's specifications

# 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](http://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](http://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](http://www.building.govt.nz)

The New Zealand Building Code

## **Standards** available from [www.standards.co.nz](http://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](http://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](http://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](http://www.worksafe.govt.nz)

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

