

The background of the page is a close-up photograph of several wooden planks. The planks are arranged in a parallel, slightly overlapping pattern, running diagonally from the top-left towards the bottom-right. Each plank is separated from the next by a thin, white, vertical line. The wood grain is clearly visible, and the colors range from light tan to dark brown. The overall effect is a rhythmic, textured pattern.

# **New Zealand Certificate in Carpentry**

# **Specifications**

April 2015

Programmes leading to the award of the NZ Certificate in Carpentry must fully recognise all aspects of these Carpentry specifications. Aspects include:

- Provision of opportunities for learners to demonstrate knowledge and skill to cover all skills sets within the specifications
- An appropriate balance of content to ensure that the scale and proportion of individual specifications and skill sets are met
- Ensuring that the level of complexity of knowledge and skill requirements are those of an industry practitioner demonstrating ability to meet NZQF Level 4 descriptors

# The Carpentry Specifications

Welcome to the draft specifications that set out the content of the proposed New Zealand Certificate in Carpentry.

The following notes may assist you in reading and interpreting the specifications, especially if you are familiar with qualifications composed of unit standards. These specifications may seem more familiar to those who remember the old Trade Certificate and Advanced Trade Certificate structures.

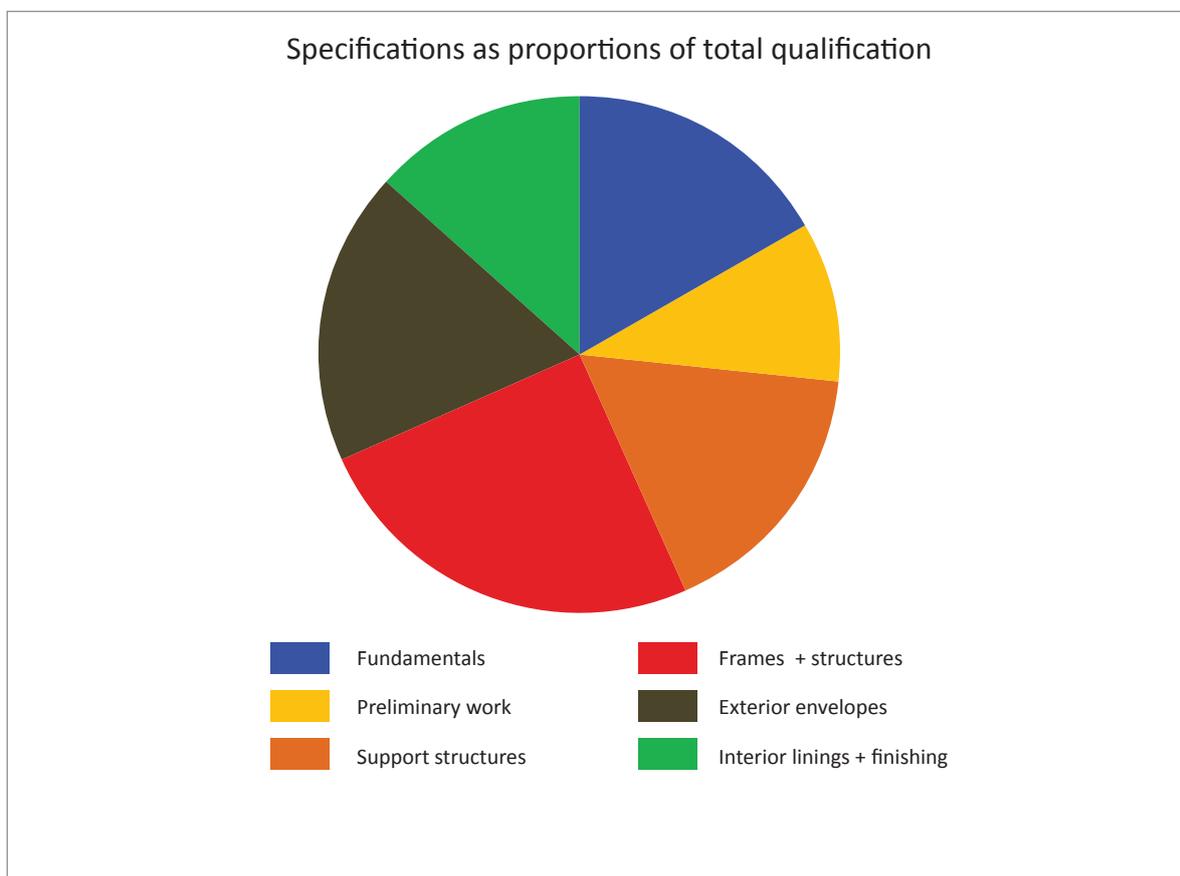
1. The specifications constitute the **prescription** for a qualification. They describe what needs to be learned.
2. Specifications are grouped by topic which is generally determined by the key processes of construction.
3. Specifications set out **capability requirements**. They represent what a person must be judged able to do.
4. The proposed Carpentry Specifications therefore contain no provision for electives or options. The well-rounded carpenter is required to be capable of all prescribed skills.
5. Specifications avoid duplication. As an example, all theory requirements related to calculations are contained in the “Building Mathematics” skill-set and not repeated in the skill-sets where they are applied in practice. Likewise “safe working practices” are mentioned only once and expected to be applied in all relevant situations.
6. Unlike unit standards, specifications are not precise descriptions of what or how to assess. That detail is contained within the programmes that BCITO and polytechnics develop in order to deliver the prescription to apprentices. Guidance documentation sits below these specifications to assist in programme development.

# Qualification: **Carpentry**

The Carpentry qualification contains six specifications including:

- **Fundamentals**
- **Preliminary work**
- **Support structures**
- **Frames and structures**
- **Exterior envelope**
- **Interior lining and finishing**

Within each specification there are a number of skill sets covering the knowledge and practical skills required to be a qualified carpenter.



**Specification: Fundamentals****Skill Sets:****Covering:**

Tools and equipment of the trade	Hand tools, power tools, and equipment (mechanical, non-mechanical, access and lifting)
Materials	Timber, steel, concrete and synthetic
Legislation	Building, health and safety, and environmental legislation
Consents and licensing	LBP scheme, resource and building consents
Building types and methods	Timber, steel, concrete, natural materials and proprietary systems
Drawings and specifications	Reading, interpreting and applying
Building science	Physics and chemistry relating to structures and materials, weathertightness and energy efficiency
Building mathematics	Measurement, area, volume, angles, percentages and calculations
Planning and communication	Communication, planning and relationships with those involved in the construction process

**Specification: Preliminary work****Skill Sets:****Covering:**

Site establishment and maintenance	Clearing and setting up the site, work programming, storing materials and equipment, maintaining the work environment and disestablishment of the site
Demolition	Preparing existing buildings for construction activities
Set-out	Taking levels, marking set-out, erecting profiles or establishing gridlines

**Specification: Support structures****Skill Sets:****Covering:**

Framed floors	Piles/poles, subfloor framing and bracing, floor framing, flooring, decks, stairs and ramps (for ground floors and suspended floors)
Concrete floors	Excavations, foundations, slabs, formwork, reinforcing and concrete (for slab on ground and suspended floors)
Retaining walls	Timber, concrete and proprietary systems

**Specification: Frames and structures****Skill Sets:****Covering:**

Walls	The construction of different types of walls. Setting out, constructing and erecting wall framing
Roofs	Setting out, constructing and erecting roof framing
Ceilings	Setting out and fixing ceiling framing and proprietary ceiling systems
Columns, posts, beams and portals	The construction and erection of columns, posts, beams and portal frames

**Specification: Exterior envelope****Skill Sets:****Covering:**

Roof claddings	Metal and proprietary systems
Joinery	Doors and windows
Wall claddings	Linear and sheet materials

**Specification: Interior lining and finishing****Skill Sets:****Covering:**

Insulation	Systems and application
Linings	Installation of wall and ceiling sheet linings
Finishing trim	Skirtings, architraves, scotia and other mouldings
Joinery	Interior doors, stairs and cabinets
Hardware	Types, properties and installation
Sound control	Systems and application

## Specification: **Fundamentals (50 credits)**

To achieve this Fundamentals Specification, you must understand the underpinning principles of the carpentry trade and be able to apply them in practice to all areas of building and construction work.

This specification contains these nine skill sets:

- Tools and equipment of the trade
- Materials
- Legislation
- Consents and licensing
- Building types and methods
- Drawings and specifications
- Building science
- Building mathematics
- Planning and communication

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: Tools and equipment of the trade

<b>Know:</b>	The use and application of different hand tools used by the carpentry trade
	The use and application of different power tools used by the carpentry trade
	The use and application of different items of access equipment used by the carpentry trade
	The use and application of different items of lifting equipment used by the carpentry trade
	The use and application of different items of other equipment used by the carpentry trade
	How to care for and maintain different tools and equipment used by the carpentry trade
<b>Do:</b>	Use a range of carpentry hand tools to measure, cut, hold and drive
	Use a range of carpentry power tools to cut, drive and join
	Use a range of carpentry mechanical equipment
	Use a range of carpentry non-mechanical equipment
	Erect, alter, inspect and dismantle non-notifiable scaffolding
	Maintain tools and equipment
	Sharpen cutting tools
<b>Comments:</b>	The skill and knowledge associated with using a particular tool or piece of equipment could be applied to another less familiar tool or piece of equipment
	Hand tools are those which are typically used by carpenters on a daily basis
	Power tools are those which are typically used by carpenters on a daily basis including electric, battery, compressed air, gas and powder-actuated tools
	Measuring tools are those that define length, distance, angles and level/plumb
	Cutting tools are those that cut to size, and shape or finish
	Holding tools are those that temporarily retain work in position prior to fixing
	Driving tools are those that rely on force to hit, drive or break
	Tools designed to join rely on the use of fixing accessories to permanently join materials
	Access equipment includes ladders, all types of scaffolding and all types of elevating work platforms (EWPs)
	Lifting equipment includes the piece of equipment and any accessories such as chains and strops
	Other equipment includes all types of motorised or manually operated equipment associated with specific carpentry operations
	Non-notifiable scaffolding is any scaffold where the height of the working platform is less than 5m
	Sharpening cutting tools is limited to chisels and plane irons
	Maintenance requirements differ depending on the tool or piece of equipment concerned

## Skill Set 2: Materials

<b>Know:</b>	The different types, sizes, finish, treatments and defects of timber used by the carpentry trade
	The methods of joining timber including joints, adhesives and connectors
	The different types, sizes, finish and treatments of steel used in the construction of buildings
	The methods of joining steel including welding and connectors
	The different types, applications and finishes of other metals used in the construction industry
	The different types, composition and applications of concrete used in the construction industry including ready mixed, precast and prestressed
	The different types and application of synthetic materials used in the construction industry
<b>Comments:</b>	Steel includes heavy (hot rolled) and light gauged formed (cold rolled) steel
	Synthetic materials include plastics, glass, fibreglass, epoxies and silicones
	The level of knowledge required for timber should reflect the fact that timber is the primary material used by carpenters. The level of knowledge required for all other materials is proportional to their use in the industry, and in specific contexts
	The level of materials knowledge required is that of an industry practitioner rather than that of an expert with specialist knowledge

## Skill Set 3: Legislation

<b>Know:</b>	The health and safety legislative framework as it applies to the construction industry
	The environmental legislative framework as it applies to the construction industry
	The building legislative framework as it applies to the construction industry
<b>Do:</b>	Practically apply the health and safety legislative framework in everyday contexts within construction operations
	Practically apply the environmental legislative framework in everyday contexts within construction operations
	Practically apply the building legislative framework in everyday contexts within construction operations
<b>Comments:</b>	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 required is that of an industry practitioner rather than that of an expert with specialist knowledge

#### **Skill Set 4: Consents and licensing**

**Know:** How the licensed building practitioner scheme operates in the New Zealand construction industry  
The requirements and responsibilities of being a licensed building practitioner  
How the consenting process operates in the New Zealand construction industry  
The requirements and responsibilities of undertaking consentable work

**Do:** Undertake building and construction work to be compliant with the applicable codes and consent processes

**Comments:** It is not a requirement to be a licensed building practitioner but it is required that work completed meets legislated requirements  
Consenting processes relate to both national and local legislation and codes

#### **Skill Set 5: Building types and methods**

**Know:** The principles, features and construction methods of light timber and steel framed buildings  
The principles, features and construction methods of heavy steel buildings  
The principles, features and construction methods of concrete buildings  
The principles, features and construction methods of buildings made from natural materials  
The principles, features and construction methods of buildings made from proprietary systems

**Comments:** Concrete buildings include post, beam and panel construction  
Natural materials include logs, hay and earth  
Proprietary systems include manufactured design solutions for specific building components that form a complete system, both prefabricated and site-assembled  
The level of knowledge required is that of an industry practitioner rather than that of a designer or specialist

#### **Skill Set 6: Drawings and specifications**

**Know:** The key components that make up a set of working drawings  
How to read and interpret a set of working drawings for a construction project  
The key components that make up a specification  
How to read and interpret a specification for a construction project

**Do:** Read, interpret and apply working drawings and specifications

**Comments:** The minimum level of complexity to which a set of working drawings and specifications needs to be understood, interpreted and applied is equivalent to that associated with the construction of a conventional, two storey dwelling

## Skill Set 7: Building science

<b>Know:</b>	How loads work on and within a structure
	How design and construction compensate for loads
	The impact of subterranean conditions on structural and construction requirements
	The principles of water penetration and methods used to manage weathertightness
	Materials physics
	Materials chemistry
	The principles of energy efficiency in buildings
	The principles of sound transmission in buildings

<b>Comments:</b>	Methods of compensating for loads include size and configuration of foundations and members, and types and configurations of fixings and bracing elements
	Subterranean conditions include sub strata and soil composition and compaction, the proximity of the water table and the potential for earthquake and geothermal activity
	Water penetration principles are capillary action, hydrostatic pressure, gravity, wind pressure and surface tension
	Methods used to manage weathertightness are deflection, drying, drainage and durability of materials
	Materials physics includes strength, deflection and expansion of materials. It also includes how materials perform under compression and tension or when subject to friction, wear or extreme temperatures
	Materials chemistry includes composition, form, treatments, malleability, flammability and volatility of materials. It also includes the compatibility of different materials due to their chemical composition; the manner in which they are used; their susceptibility to deterioration over time; their effects on building performance, the environment and people
	Energy efficiency principles include design, building placement, heat transfer, thermal mass and insulation
	The level of building science knowledge required is that of an industry practitioner rather than that of an engineer, designer or scientist

## Skill Set 8: Building mathematics

<b>Know:</b>	The different units of measurement and how they are used
	Conventions associated with the use of centres and spacings
	How to calculate area and volume
	Pythagoras' theorem and its practical application when building
	Trigonometric calculations to determine lengths and pitches
	How to use and apply percentages and ratios to building calculations
<b>Do:</b>	Undertake measurements and calculations in one, two and three dimensions
	Use the mathematical principles associated with right-angled triangles to check for square and to calculate lengths and pitches
	Calculate physical quantities of materials
<b>Comments:</b>	Units of measurement include 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
	The level of physical quantities required to be calculated is that for specific components or building tasks rather than the list of materials required to construct an entire building

## Skill Set 9: Planning and communication

<b>Know:</b>	The roles and responsibilities of the parties to a construction process
	How to plan and coordinate work to fit with the construction programme and other trades
<b>Do:</b>	Work effectively with the parties to a construction process
	Communicate effectively with own team and parties to a construction process
<b>Comments:</b>	The parties to a construction process include the main contractor, subcontractors, clients, suppliers, designers, compliance bodies and neighbours
	Working effectively involves everyday contact on site and the ability to discuss and reach conclusions about work requirements and integration of activities
	Communicating effectively involves written, oral and graphic communications

## Specification: **Preliminary Work (30 credits)**

To achieve this Preliminary Work Specification, you must understand and be able to establish and maintain construction sites, undertake preparatory demolition work and set out buildings.

This specification contains these three skill sets:

- Site establishment and maintenance
- Demolition
- Set-out

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: Site establishment and maintenance**

### **Know:**

How to identify the site, and understand and satisfy the requirements of building consent authorities and clients

The facilities required to allow work to start and progress to be made throughout the build

How to plan and programme to coordinate and manage equipment, materials, subcontractors and compliance requirements

Access and delivery requirements

Disposal of waste materials

Temporary protection requirements of materials and work already completed

How to disestablish the site ready for handover

### **Do:**

Identify the site, boundaries, position of building and any features, plants or physical attributes requiring specific consideration

Set up and/or organise the establishment of the necessary site facilities

Devise a work programme

Coordinate deliveries and maintain a workable site

Disestablish the site and make good at the end of the job

### **Comments:**

Facilities include power, water, sheds, ablution facilities, storage, fences, hoardings and any other provisions necessary

Disposal of waste materials includes the ongoing clean-up and maintenance of site waste as well as the provision of areas for plant wash-down and the correct disposal and management of hazardous materials

The level of complexity for site establishment and maintenance is equivalent to that associated with the construction of a conventional, two storey dwelling. There is no expectation or requirement for an apprentice to manage the contract for a construction project of this size

## Skill Set 2: Demolition

<b>Know:</b>	Key components and implementation of a demolition plan
	How to support existing structures and isolate services
	How to protect exposed areas from the elements
<b>Do:</b>	Plan and undertake demolition work
<b>Comments:</b>	Demolition refers to preparing existing buildings for construction activities including new work, repair, renovation or alteration. It does not require the complete demolition of buildings, though it may involve other site works

## Skill Set 3: Set-out

<b>Know:</b>	How to read and interpret surveying information provided for set-out
	How to set up, adjust and use levelling equipment used to set out buildings
	How to set out building lines, construct profiles and mark set-out points
	How to undertake an interior set-out
<b>Do:</b>	Set out buildings, construct profiles and establish set-out points
<b>Comments:</b>	Levelling equipment includes those items typically used by carpenters to facilitate the set-out. It does not include more specialist devices used mostly by professional surveyors
	The level of complexity of the set-out must meet or exceed that required to form both internal and external corners on the exterior of the building.



## Specification: **Support Structures (50 credits)**

To achieve this Support Structures Specification, you must understand the construction of framed and solid foundations (up to and including floors) and retaining walls. You must also be able to construct framed and concrete foundations and floors, and retaining walls.

This specification contains these three skill sets:

- Framed floors
- Concrete floors
- Retaining walls

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: Framed Floors

**Know:**

- The different types and properties of piles and poles and how they are installed
- How the sub-floor structure is fixed and braced
- The different types of floor framing and components
- The properties and application of the different types of flooring
- How floor framing is permanently connected to the structure
- How to frame around penetrations
- The requirements and components for constructing decks, stairs and ramps

**Do:**

- Set out, place and secure piles or poles in position
- Construct and fix sub-floor framing and bracing
- Install floor framing made from individual components and/or prefabricated components
- Form penetrations in floor framing
- Install flooring materials
- Construct timber decks, and stairs or ramps

**Comments:**

- Piles and poles support both interior floor framing and timber decks
- Floor frames can be constructed out of either timber or formed light gauge steel channel
- Floor frames can be fixed to bearers on piles or to wall frames at first or subsequent floor levels
- Flooring includes both sheet materials and lineal products
- Timber stairs are exterior stairs, not interior ones made by a joiner

## **Skill Set 2: Concrete floors**

<b>Know:</b>	The different types, materials and construction methods used to create concrete foundations and slabs
	How to construct formwork, place damp proof membrane, and cut, bend and tie reinforcing
	How to place and finish concrete
	The different types, purposes, materials and construction methods of suspended concrete floors
<b>Do:</b>	Set out, excavate, construct formwork and apply damp-proof membrane for concrete foundations and slabs
	Cut, bend and tie reinforcing
	Place and finish concrete
<b>Comments:</b>	Foundations include concrete and concrete block
	Formwork includes stud and sheathing, shutters and proprietary systems

## **Skill Set 3: Retaining walls**

<b>Know:</b>	The principles of retaining wall design
	The different types and construction methods used to create retaining walls
<b>Do:</b>	Construct retaining walls
<b>Comments:</b>	Principles include loads and dealing with water



## Specification: **Frames and Structures (75 credits)**

To achieve this Frames and Structures Specification, you must understand the construction of walls, roofs, ceilings, columns, posts, beams and portals to form the frames and structures of buildings. You must also be able to construct all framing required for walls, roofs and ceilings.

This specification contains these five skill sets:

- Walls
- Roofs
- Ceilings
- Columns, posts, beams and portals

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: Walls

### Know:

The different types of wall structures and configurations

The components that make up wall frames

How wall frames are constructed and assembled

How wall frames are stood up, plumbed, straightened and temporarily braced

How wall frames are permanently fixed together, braced and connected to floor framing or flooring and roof framing

The purpose, place, design and configuration of non load-bearing framing

The purpose and place of supplementary framing work resulting from additions and alterations

The purpose and place of supplementary framing to accept substrates/linings

How to undertake repair and maintenance framing work

The different types, purposes, materials and construction methods used to create in-situ concrete walls

How to construct formwork and prepare for the placement of concrete

How to erect and prop precast concrete walls and other prebuilt panels, and tie into the rest of the structure

### Do:

Set out and construct wall frames including openings

Stand up, plumb, straighten and temporarily brace wall frames

Permanently fix together and brace wall frames and connect them to floor framing or flooring and roof framing

### Comments:

Wall frames can be constructed out of either timber or formed light gauge steel channel

Regardless of the material used, a carpenter must be able to set out and construct wall frames from individual components, and erect and fix together prefabricated wall frames

Interior partitioning (non load-bearing constructed from timber or steel stud) does not on its own meet the requirements for this wall framing skill set

The use of prefabricated beams could be integrated into the forming of large openings

Reinforcing and concrete is covered under the concrete floors skill set in the support structure specification

Prebuilt wall panels include custom panels, structurally insulated panels (SIPs) constructed from timber or metal, and panels constructed from cross-laminated or compressed timber

## Skill Set 2: Roofs

**Know:**

- The different types of roof styles, structures and configurations
- The components that make up roof framing and trim
- How roof framing is constructed and assembled to form the framework on which substrates and/or roofing materials are laid
- How roof framing is permanently tied together, braced and connected to wall framing
- How to frame around penetrations
- How to construct roof finishing components

**Do:**

- Erect and form roof framing from prefabricated and individual components
- Permanently tie together, brace and connect roof framing to wall framing
- Fix roofing support members to roof framing
- Form penetrations in roof framing
- Construct roof finishing components

**Comments:**

- Roof framing can be constructed out of either timber or formed light gauge steel channel
- Roof framing includes prefabricated components and individual components
- The level of complexity for roof framing must meet or exceed that required to form gables, hips and valleys
- Roof finishing components include all members associated with the formation of eaves, verges, overhangs and fascias
- Roofing support members include purlins, battens and sarking or other substrates

## Skill Set 3: Ceilings

**Know:**

- The different types of ceiling framing and components
- How ceiling framing is constructed and assembled to form the framework to which linings are fixed
- How to frame around penetrations

**Do:**

- Fix ceiling framing from individual components and/or proprietary systems
- Form penetrations in ceiling framing

**Comments:**

- Ceiling framing can be constructed out of either timber or formed light gauge metal

#### **Skill Set 4: Columns, posts, beams and portals**

<b>Know:</b>	The different types, purposes, materials and construction methods used to create in-situ concrete columns and beams
	How to construct formwork and prepare for the placement of concrete
	How in-situ concrete beams are propped until they become self-supporting
	How to erect, position and support precast concrete columns and beams and tie in to the rest of the structure
	How to install timber, steel and composite posts, beams and portal frames
<b>Comments:</b>	Reinforcing and concrete is covered under the concrete floors skill set in the support structure specification

## Specification: **Exterior Envelope (55 credits)**

To achieve this Exterior Envelope Specification, you must understand the types, properties and installation of roof claddings, joinery, and wall claddings. You must also be able to install roof claddings, joinery, and wall claddings.

This specification contains these three skill sets:

- Roof claddings
- Joinery
- Wall claddings

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: Roof claddings**

**Know:** The different types and properties of roof claddings installed by subcontractors  
Framing and underlay requirements for roof claddings installed by subcontractors  
The different types and properties of longrun roofing installed by carpenters  
Framing, underlay and fixing requirements for longrun roofing  
How to install and flash longrun roofing  
How to install and flash skylights  
How to install spouting  
How to integrate a new roof cladding with an existing one

**Do:** Install roofing underlay  
Cut, fix and flash longrun roofing

**Comments:** Types of roof claddings installed by subcontractors include concrete, clay and metal tiles; sheet, liquid and torch-on membranes; timber, slate and asphalt shingles  
Longrun roofing includes metal and translucent roofing materials  
The level of complexity for roof claddings must meet or exceed that required to form gables, hips and valleys

**Skill Set 2: Joinery**

**Know:** The different types and properties of joinery  
The components and terminology of joinery  
How to prepare cavities for the installation of joinery  
How to install joinery and integrate with the cladding

**Do:** Prepare cavities for the installation of joinery  
Install joinery  
Complete flashings, seals and trim around joinery

**Skill Set 3: Wall claddings**

<b>Know:</b>	The different types and properties of sheet claddings
	The different types and properties of lineal board claddings
	The requirements and installation of underlay and cavity systems
	How to fix sheet claddings
	How to fix lineal board claddings
	How to deal with claddings at internal and external corners
	How to deal with claddings around windows, doors and other penetrations
	How to deal with joins in cladding materials
How to integrate different cladding materials	
<b>Do:</b>	Install underlay and cavity system
	Install sheet cladding
	Install lineal board cladding
	Install flashings and trim for claddings
<b>Comments:</b>	Installing claddings includes dealing with internal and external corners, junctions, joins and penetrations



## Specification: **Interior Lining and Finishing** (40 credits)

To achieve this Interior Lining and Finishing Specification, you must understand the types, properties and installation of insulation, linings, finishing trim, joinery, hardware and sound control systems. You must also be able to install insulation, linings, finishing trim, joinery, hardware and sound control systems.

This specification contains these six skill sets:

- Insulation
- Linings
- Finishing trim
- Joinery
- Hardware
- Sound control

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: Insulation

**Know:** The different types, properties and performance of thermal insulation  
How to install different types of thermal insulation

**Do:** Install thermal insulation

### Skill Set 2: Linings

**Know:** The different types and properties of sheet linings  
Framing requirements for linings  
How to install different types of linings

**Do:** Install wall linings  
Install ceiling linings

**Comments:** Linings include wall and ceiling sheet linings  
Sheet linings include those requiring additional work by finishing trades once fixed and pre-finished sheet linings  
Framing includes timber, formed light gauge metal, and proprietary systems

### Skill Set 3: Finishing trim

**Know:** The different types and properties of finishing trim  
How to install different types of finishing trim

**Do:** Install finishing trim

**Comments:** Finishing trim includes skirtings, architraves, scotia, and other mouldings  
Finishing trim may complete perimeters, openings, cabinetry and stairs  
Installing finishing trim includes dealing with internal and external corners, non 90° angles, junctions, joins and stops

### Skill Set 4: Joinery

**Know:** The different types and properties of interior doors  
The different types and components of interior stairs  
How to prepare for and install interior joinery

**Do:** Install interior joinery

**Comments:** Interior joinery includes doors, stairs and cabinets  
Preparation for the installation of interior joinery includes any framing requirements necessary

**Skill Set 5: Hardware**

**Know:** The different types, properties and uses of hardware  
How to install hardware

**Do:** Install hardware

**Skill Set 6: Sound control**

**Know:** The different types, properties and components of sound control systems  
Sound control ratings and how they are achieved and measured  
How to install sound control systems

**Do:** Install sound control systems

**Comments:** Sound control is achieved through the installation of a combination of products to meet the specifications of a system

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