

FIELD PLANNING AND CONSTRUCTION**Review of *Carpentry Theory* unit standards and Revision of *Carpentry* unit standard 13036**

Subfield	Domain	Id
Construction Trades	Carpentry	13036
	Carpentry Theory	12997-13015, 13017-13035, 20887-20888, 21211

The Building and Construction Industry Training Organisation has completed the review of the *Carpentry Theory* unit standards listed above and the revision of unit standard 13036.

Date new versions published **January 2008**

Planned review date **December 2012**

Summary of review and consultation process

These unit standards were reviewed as part of the scheduled review process for unit standards in the Carpentry and Carpentry Theory domains, and the National Certificate in Carpentry (Level 4) [Ref: 0016] qualification. Feedback was sought from industry representative groups in a series of forums, comprised of industry focus groups, BCITO internal working parties, and the Carpentry National Advisory Group.

The forums identified a need for the unit standards and qualification to become more relevant to carpenters working in the commercial sector, as many carpenters now did commercial as well as residential work. Changes were required to terminology and legislation to bring the unit standards into line with current industry practice, and in some cases rewording of elements and performance criteria to improve clarity for assessment purposes.

The feedback was collated and drafts of the new unit standards were sent out to these groups for further discussion and endorsement. Final signoff on changes was made by the Carpentry National Advisory Group in June 2007.

Main changes resulting from the review

- Titles of unit standards 13006, 13008-13009, 13015, 13017, 13019-13020, 13023, 13028-13029, 13031-13032, and 21211 were changed to reflect skills covered.
- Unit standards 13001, 13003, 13007, 13011, 13014, 13018, 13021-13022, 13025, 13027, and 13030 were replaced by new unit standards 24378-24381, 24384-24386, 24388-24389, 24391-24392 respectively, as their outcomes had changed substantially.
- Unit standards 13012 and 20887, and 13013 and 20888 were replaced by unit standards 24382 and 24383 respectively.
- Unit standards 20887 and 20888 were replaced by unit standards 24382 and 24383 respectively, which now covered these skills more comprehensively.
- Three new unit standards, 24362, 24363 and 24364, were developed.
- Unit standards 12997 and 13036 were reclassified to the *Core Construction* domain to reflect the generic nature of these skills.

- Elements and performance criteria were changed to meet the roles reflected in the titles, to improve assessability, and for consistency of style across the domain.

Unit standards categorised as category C expire at the end of December 2011.

Impact on existing provider accreditations

Current Accreditation for			Accreditation extended to		
Nature of accreditation	Classification or Id	Level	Nature of accreditation	Id	Level
Domain	Carpentry	4+	Standard	13036	4
Domain	Carpentry Theory	3+	Standard	12997	3
Standard	13001	3	Standard	24378	3
Standard	13003	4	Standard	24379	4
Standard	13007	3	Standard	24380	3
Standard	13011	3	Standard	24381	3
Standard	13012	4	Standard	24382	4
Standard	20887	4			
Standard	13013	4	Standard	24383	4
Standard	20888	4			
Standard	13014	4	Standard	24384	4
Standard	13018	3	Standard	24385	3
Standard	13021	4	Standard	24386	4
Standard	13022	4	Standard	24388	4
Standard	13025	4	Standard	24389	4
Standard	13027	3	Standard	24391	3
Standard	13030	4	Standard	24392	4

Impact on existing qualifications

Qualifications that contain the reviewed standards or classifications are tabled below.

Affected	The qualification lists a reviewed classification (domain or subfield) in an elective set The qualification lists a standard that has changes to level or credits The qualification lists a C or D category standard
Not materially affected	The qualification lists a standard that has a new title The qualification lists a standard that has a new classification

In the following tables qualifications that contain unit standards and classifications in both categories are identified in the *Affected* table, with the items that generated the *Affected* status in **bold**.

The following Building and Construction Industry Training Organisation qualifications are affected by the outcome of this review and will be revised or reviewed in 2008.

Qualification title	Standard in the qualification
National Certificate in Carpentry (Level 4) [Ref: 0016]	12997, 13001 , 13003 , 13006, 13007 , 13008-13009, 13011-13014 , 13015, 13017, 13018 , 13019, 13020, 13021 , 13022 , 13023, 13024, 13025 , 13026, 13027 , 13028, 13029, 13030 , 13031, 13032, 13035, 13036, 21211
National Certificate in Elementary Construction Skills with strands in Entry Level, Advanced Level, and Basic Residential Property Maintenance [Ref: 0751]	13001
National Certificate in Frame and Truss Manufacturing (Level 3) with strands in Frame Manufacture, and Truss Manufacture [Ref: 1124]	12997, 13001 , 13013 , 13035

The following Building and Construction Industry Training Organisation qualifications are not materially affected by the changes. They will be updated when they are next reviewed.

Qualification title	Standard in the qualification
National Certificate in Fibre Cement Linings with strands in Fixing and Finishing [Ref: 0272]	12997, 13036
National Certificate in Fibrous Plaster (Installation) with an optional Specialist strand [Ref: 0273]	12997, 13036
National Certificate in Fibrous Plaster (Manufacture) with optional strands in Casting Models, Casting Sheets, and Specialist Panels [Ref: 0274]	12997, 13036
National Certificate in Plaster Board with strands in Fixing and Finishing and an optional Specialist strand [Ref: 0275]	12997, 13036
National Certificate in Specialist Interiors (Proprietary Partitions Installation) with an optional strand in Access Floors Installation [Ref: 0276]	12997, 13036
National Certificate in Specialist Interiors (Suspended Ceilings Installation) with an optional strand in Access Floors Installation [Ref: 0277]	12997, 13036
National Certificate in Solid Plastering (Level 4) with an optional strand in Specialist Mouldings and Decorative Work [Ref: 0725]	12997, 13036, 21211
National Certificate in Floor and Wall Tiling [Ref: 0726]	12997, 13036
National Certificate in Concrete Production (Ready-Mixed Concrete) [Ref: 0731]	12997, 13036
National Certificate in Concrete Construction with strands in Sitework, Pre-cast Concrete, and Placing and Finishing [Ref: 0732]	12997, 13008, 13032, 13036
National Certificate in Concrete Construction (Specialist) with strands in Sitework, and Pre-cast Concrete [Ref: 0744]	13029
National Certificate in Proprietary Plaster Cladding Systems with strands in Fibre Cement, and External Insulation Finishing Systems (EIFS) [Ref: 0786]	12997, 13036
National Certificate in Concrete Technology (Level 4) [Ref: 0884]	12997
National Certificate in Construction (Leading Hand) (Level 4) [Ref: 1130]	13035
National Certificate in Construction (Supervisor) (Level 5) [Ref: 1131]	13035

The following qualifications are not materially affected by the changes. The standard setting bodies (SSBs) were advised. They will be updated when they are next reviewed.

Qualification title	Standard in the qualification	SSB Name
National Certificate in Boatbuilding, (Level 4) with strands in Marine Cabinetmaking, Composite Sparmaking, Alloy Boatbuilding, Marine Rigging, Marine Painting, Composite Boatbuilding, Steel Boatbuilding, Wooden Boatbuilding, Marine Systems Engineering, Metal Sparmaking, Composite Production Trailer Boats, and Alloy Production Trailer Boats [Ref: 0877]	13023	Boating Industry Training Organisation
National Certificate in Civil Construction Works with strands in Concrete Kerb and Channel; Concrete Work; Culverts and Drainage Systems; Interlocking Paving; Retaining Structures; Road Construction; Road Maintenance; Road Safety Barrier; Roadside Amenities; and Traffic Signage [Ref: 1326]	13026	InfraTrain New Zealand
National Certificate in Glazing (Level 4) [Ref: 1104]	13036	Joinery Industry Training Organisation
National Certificate in Painting with optional strands in Wall Coverings, Spray Techniques, Specialised Coatings, and Industrial Coatings [Ref: 1071]	13028	New Zealand Painting Contractors Association of Employers Industry Training Organisation
National Certificate in Roofing (Installer) with strands in Concrete Roof Tiling; Metal Roofing and Cladding; Metal Roof Tiling; Membrane Roofing; Liquid Membrane Roofing; Torch on Membrane Roofing; and Shingle Roofing; and with optional strands in Translucent Roofing; and Foreperson [Ref: 0375]	12997	Plumbing, Gasfitting and Drainlaying Industry Training Organisation
National Certificate in Parks and Recreation (Level 3) with strands in Local Authority Park Ranger, and Parks Contractor [Ref: 1268]	13036	Sport, Fitness and Recreation Industry Training Organisation

It is not intended that anyone be disadvantaged by this review. BCITO will continue to recognise replaced unit standards from the *Carpentry Theory* domain, and there is no need for existing holders to 'upgrade'. However, if holders of the replaced standards (identified below) choose to complete a qualification listing the replacement standard, additional assessment will be required. The additional knowledge and skills contained within the replacement unit standard is such that a straightforward exemption would be inappropriate.

Assessment information

For BCITO qualifications, the following transitions will apply for assessment purposes only:

- People who hold credit for standard 13012 can use this as evidence of assessment for timber framing against standard 24382; but must be assessed for steel framing.
- People who hold credit for standard 20887 can use this as evidence of assessment for steel framing against standard 24382; but must be assessed for timber framing.
- People who hold credit for standard 13013 can use this as evidence of assessment for timber roof construction against standard 24383; but must be assessed for steel roof construction.

- People who hold credit for standard 20887 can use this as evidence of assessment for steel roof construction against standard 24383; but must be assessed for timber roof construction.
- People who hold credit for standard 13018 can use this as evidence of assessment for interior and exterior joinery against standard 24385; but must be assessed for showers and baths (performance criterion 2.2).
- People who hold credit for standard 13022 can use this as evidence for elements 1 and 3 of standard 24388; but must be assessed against element 2.
- People who hold credit for standard 13025 can use this as evidence for elements 1 and 3 of standard 24389; but must be assessed against element 2.
- People who hold credit for standard 13027 can use this as evidence for element 1 of standard 24391; but must be assessed against element 2.
- People who hold credit for standard 13007 can use this as evidence for element 1 of standard 24380; but must be assessed against element 2.

BCITO qualifications will be revised or reviewed to include the following transition arrangements. People who have gained credit for the expiring standards will be exempt from the requirement to gain credit for the replacement standards.

Credit for	Exempt from
13003	24379
13007 and 13011	24380 and 24381
13011	24381
13012 and 20887	24382
13013 and 20888	24383
13014	24384
13021	24386
13030	24392

Review Categories and changes to classification, title, level, and credits

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same Id and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same Id and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new Id
D	Standard will expire and not be replaced
R	Standard has been revised not reviewed

Planning and Construction > Construction Trades > Carpentry

Planning and Construction > Construction Trades > Core Construction

Id	Title	Level	Credit	Review Category
13036	Carry out safe working practices on construction sites	4	4	R

Planning and Construction > Construction Trades > Carpentry Theory

Planning and Construction > Construction Trades > Core Construction

Id	Title	Level	Credit	Review Category
12997	Demonstrate knowledge of safe working practices on construction sites	3	3	B

Planning and Construction > Construction Trades > Carpentry Theory

Id	Title	Level	Credit	Review Category
12998	Demonstrate knowledge of carpentry hand tools	3	4	B
12999	Demonstrate knowledge of timber machining equipment used on construction sites	3	3	B
13000	Demonstrate knowledge of portable power tools used on construction sites	3	4	B
13001 24378	Demonstrate knowledge of building calculations Perform building calculations	3 3	4 4	C
13002	Demonstrate knowledge of timber used in construction	3	2	B
13003 24379	Demonstrate knowledge of preliminary work needed for construction Demonstrate knowledge of preliminary work needed for construction	4 4	2 2	C
13004	Demonstrate knowledge of setting out a building	4	3	B
13005	Demonstrate knowledge of spot levels and contour plans	4	3	B
13006	Demonstrate knowledge of residential and/or light commercial slab on ground construction Demonstrate knowledge of preparation for footings and slab on ground construction	4	2	B
13007 24380	Demonstrate knowledge of residential and/or light commercial foundation construction Demonstrate knowledge of construction of pile foundations	3 3	4 4	C
13008	Demonstrate knowledge of formwork for walls up to 1.2 metres Demonstrate knowledge of formwork for footings, foundations-, beams and walls up to 1.2 metres	3	4	B
13009	Demonstrate knowledge of fabrication of, and placing reinforcing steel and steel mesh Demonstrate knowledge of fabrication and placing of reinforcing steel and steel mesh	3	1	B
13010	Demonstrate knowledge of making and placing concrete	3	3	B
13011 24381	Demonstrate knowledge of sub-floor framing and flooring construction Demonstrate knowledge of floor framing and flooring construction	3 3	4 3	C

Id	Title	Level	Credit	Review Category
13012	Demonstrate knowledge of setting out and erecting wall frames	4	5	C
20887	Demonstrate knowledge of setting out and erecting steel wall frames	4	4	C
24382	Demonstrate knowledge of setting out, assembling and erecting timber and steel wall frames	4	5	
13013	Demonstrate knowledge of equal pitch gable, and hip roof construction	4	5	C
20888	Demonstrate knowledge of steel frame roof construction	4	6	C
24383	Demonstrate knowledge of equal pitch gable, and hip, timber and steel roof construction	4	5	
13014	Demonstrate knowledge of construction of alternative roof structures	4	3	C
24384	Demonstrate knowledge of construction of alternative roof structures	4	4	
13015	Demonstrate knowledge relating to the work of construction subcontractors Demonstrate knowledge of construction subcontractors' work and main contractor's responsibilities	3	1	B
13017	Demonstrate knowledge of fixing exterior claddings and timber weatherboards Demonstrate knowledge of fixing exterior claddings	4	3	B
13018	Demonstrate knowledge of construction and installation of exterior and interior joinery Demonstrate knowledge of construction principles and installation of exterior and interior joinery, showers and baths	3	2	C
24385	Demonstrate knowledge of construction principles and installation of exterior and interior joinery, showers and baths	3	2	
13019	Demonstrate knowledge of the installation of metal and translucent roof coverings and roof lights Demonstrate knowledge of the installation of metal and translucent roof claddings and roof lights	3	2	B
13020	Demonstrate knowledge of alternative roof cladding materials Demonstrate knowledge of alternative roof cladding materials and their installation requirements	3	1	B
13021	Demonstrate knowledge of thermal insulation and sound control Demonstrate knowledge of thermal insulation and sound control for buildings	4	3	C
24386	Demonstrate knowledge of thermal insulation and sound control for buildings	4	3	
13022	Demonstrate knowledge of fixing interior linings and trim	4	4	C
24388	Demonstrate knowledge of cutting, fitting and fixing interior linings and trim	4	5	

Id	Title	Level	Credit	Review Category
13023	Demonstrate knowledge of building hardware Demonstrate knowledge of selection and installation of mechanical fixings and building hardware	3	2	B
13024	Demonstrate knowledge of pole frame and pole platform construction	4	1	B
13025	Demonstrate knowledge of timber stair and ramp construction	4	3	C
24389	Demonstrate knowledge of stair and ramp construction	4	4	
13026	Demonstrate knowledge of retaining wall construction to 1.5 metres high	3	2	B
13027	Demonstrate knowledge of the construction of concrete masonry structures and paving	3	1	C
24391	Demonstrate knowledge of the construction of concrete masonry structures and paving	3	2	
13028	Demonstrate knowledge of adhesives and sealants in construction work Demonstrate knowledge of adhesives and sealants used in construction work	3	2	B
13029	Demonstrate knowledge of erecting high wall, column, suspended beam, slab, and stair falsework and formwork Demonstrate knowledge of erecting in situ high wall, column, beam, and slab falsework and formwork	4	3	B
13030	Demonstrate knowledge of residential alterations and additions	4	3	C
24392	Demonstrate knowledge of alterations and additions for construction	4	3	
13031	Demonstrate knowledge of demolition of a single storey building Demonstrate knowledge of regulations and precautions for demolition work	3	1	B

Planning and Construction > Construction Trades > Carpentry Theory
Planning and Construction > Construction Trades > Carpentry

Id	Title	Level	Credit	Review Category
13032	Demonstrate knowledge of construction equipment used on site Demonstrate knowledge of non-mechanical and mechanical construction equipment	3	1	B

Planning and Construction > Construction Trades > Carpentry Theory

Id	Title	Level	Credit	Review Category
13033	Demonstrate knowledge of alternative building construction methods	4	1	B
13034	Demonstrate knowledge of prefabricated beams used in construction	4	1	B
13035	Demonstrate knowledge of working drawings, specifications and quantity lists Demonstrate knowledge of working drawings, specifications and quantity lists for a building of two storeys	4	4	B
21211	Demonstrate knowledge of weatherproofing methods used in buildings Demonstrate knowledge of the principles of, and methods used in weatherproofing buildings	3	4	B
24362	Demonstrate knowledge of working drawings and specifications for building work	3	3	New
24363	Demonstrate knowledge of proprietary suspended concrete floor systems	4	2	New
24364	Demonstrate knowledge of compliance with building legislation	3	3	New