## Field Planning and Construction

#### Review of Concrete and Construction Trades unit standards

Subfield	Domain	ID
Concrete	Concrete Construction	26376, 26823-26832
	Concrete Technology	18342-18344, 18347, 18349-18351
	Precast Concrete	26526-26528
Construction Trades	Concrete Construction	12035, 12037, 12038, 12040

The Waihanga Ara Rau has completed the review of the unit standards listed above.

Date new versions published

January 2022

Planned review date

December 2026

# **Summary**

Alongside a review of Concrete qualifications, unit standards related to concrete construction, concrete sawing and drilling, precast concrete and prestressing concrete elements were reviewed.

The review resulted in the expiry of 24 unit standards that are no longer in use or are no longer fit for purpose. 22 new unit standards were developed in consultation with stakeholders representing commercial construction, contract sawing and drilling, precast concrete manufacturing. These new unit standards reflect the current requirements of the workforce within these sectors and meet the graduate outcomes of the qualifications. Waihanga Ara Rau as the only organisation holding consent to assess for the reviewed unit standards was consulted through this review.

#### Main changes

- 10 (subfield *Concrete*) *Concrete Construction* unit standards were designated expiring because they are no longer required by industry.
- 17 Concrete Construction unit standards were developed to meet industry requirements.
- Seven Concrete Technology unit standards were designated expiring because they are no longer required by industry.
- Three *Precast Concrete* unit standards were designated expiring as they are no longer required by industry.
- Five Precast Concrete unit standards were developed to meet industry requirements.
- Four (subfield *Construction Trades*) *Concrete Construction* unit standards were designated expiring as they are no longer required by industry.

### Category D unit standards will expire at the end of December 2023

## Detailed list of unit standards - classification, title, level, and credits

All changes are in **bold**.

Ke	y to review category
Α	Dates changed, but no other changes are made - the new version of the standard carries the
	same ID and a new version number
В	Changes made, but the overall outcome remains the same - the new version of the standard
	carries the same ID and a new version number
С	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Planning and Construction > Concrete > Concrete Construction

ID	Title	Level	Credit	Review Category
26376	Describe the delivery coordination and erection of precast concrete units	3	6	D
26823	Perform deep floor sawing of concrete on site	4	10	D
26824	Demonstrate knowledge of concrete core drilling, and concrete core drilling equipment	3	3	D
26825	Demonstrate knowledge of concrete sawing, and concrete sawing equipment	3	3	D
26826	Perform core drilling of concrete on site	3	6	D
26827	Perform floor sawing of concrete on site	3	8	D
26829	Perform large core, and deep, drilling of concrete on site	4	12	D
26830	Demonstrate knowledge of concrete slurry control, and control concrete slurry	3	2	D
26831	Perform track-mounted wall sawing of concrete on site	3	12	D
26832	Perform wire sawing of concrete on site	3	12	D
32580	Operate and maintain tools, plant and equipment used in concrete operations	4	8	New
32581	Apply legislative frameworks to concrete operations	4	8	New
32582	Apply plans, working drawings, and specifications to concrete operations	4	8	New
32585	Plan and coordinate a daily programme of work for concrete construction operations	4	6	New
32587	Establish and maintain a concrete construction site	4	10	New
32588	Set-out for in-ground and above-ground concrete construction	4	10	New
32589	Prepare a base for the construction of in-situ concrete structures	4	8	New
32590	Construct formwork, falsework and propping systems for concrete structures	4	15	New
32591	Receive and store reinforcing steel and carry out reinforcing for concrete structures in-situ	4	15	New
32593	Plan and carry out placing and finishing concrete for flatwork and in-situ structures	4	12	New
32594	Position and secure premanufactured elements into a concrete construction	4	10	New
32595	Post-tension concrete in-situ	4	10	New
32596	Maintain professional standards when working as a concrete operations trade professional	4	10	New
32597	Demonstrate knowledge of the impacts of hardened concrete on concrete sawing and drilling	4	4	New
32598	Maintain tools and equipment used in concrete sawing and drilling operations	4	8	New
32599	Plan and carry out sawing operations on concrete structures	4	6	New
32600	Plan and carry out drilling operations on concrete structures	4	6	New

Planning and Construction > Concrete > Concrete Technology

ID	Title	Level	Credit	Review Category
18342	Demonstrate knowledge of concrete production	4	10	D
18343	Demonstrate knowledge of joint types and positions for concrete construction	4	4	D
18344	Describe and design formwork for concrete construction	4	12	D
18347	Demonstrate knowledge of materials and construction for concrete roads and floors	4	10	D
18349	Demonstrate knowledge of site layout and organisation for concrete construction	4	10	D
18350	Demonstrate knowledge of control procedures for concrete production	5	8	D
18351	Demonstrate knowledge of concrete reinforcement	4	6	D

Planning and Construction > Concrete > Precast Concrete

ID	Title	Level	Credit	Review Category
26526	Manufacture prestressed concrete beams and columns	3	25	D
26527	Manufacture prestressed concrete flooring units	3	25	D
26528	Manufacture prestressed concrete panels	3	25	D
32584	Plan and lead a work programme, and quality assure manufacturing for precast concrete	4	10	New
32601	Maintain equipment and machinery used in concrete prestressing operations	4	7	New
32602	Demonstrate knowledge of materials and components used in concrete prestressing operations	4	7	New
32603	Plan and carry out concrete prestressing operations	4	10	New
32604	Demonstrate knowledge of mould design, materials and construction methodology for precast concrete manufacture	4	10	New

Planning and Construction > Construction Trades > Concrete Construction

ID	Title	Level	Credit	Review Category
12035	Carry out specialist structural repairs to concrete	3	18	D
12037	Post-tension concrete	3	20	D
12038	Carry out cement based grouting	2	10	D
12040	Distribute concrete by conveyor	2	3	D