

Field Engineering and Technology**Review of *Infrastructure Works* unit standards**

Subfield	Domain	ID
Infrastructure Works	Bitumen Product Manufacturing	28682, 28684, 28687-28694
	Bitumen Surfacing Construction	28685, 28686, 28697-28710
	Generic Bituminous Surfacing	28678-28681, 28683, 28695, 28696

Connexis Infrastructure ITO has completed the review of the unit standards listed above.

Date new versions published**May 2020****Summary**

Connexis Infrastructure ITO consulted with Civil Contractors New Zealand (CCNZ), representatives from the Bituminous Product Manufacturing industry, and stakeholders to complete a review of the unit standards listed above.

Consultation was carried out in January 2020 and providers with consent to assess had the opportunity to give feedback via email. Due to low usage, the decision was made to expire the standards.

Main changes

- All standards were designated expiring without replacement.

These Category D unit standards will expire at the end of December 2021

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

Engineering and Technology > Infrastructure Works > Bitumen Product Manufacturing

ID	Title	Level	Credit	Review Category
28682	Describe quality control for manufacturing bituminous surfacing products	4	6	D
28684	Gather information, purchase supplies, and resolve issues relating to the production of bituminous materials	4	3	D
28687	Demonstrate knowledge of bituminous surfacing product manufacturing plants and their processes	4	6	D
28688	Demonstrate knowledge of production planning for manufacturing bituminous surfacing products	4	6	D
28689	Explain mix design fundamentals for bituminous products	4	6	D
28690	Manufacture surfacing products at a bituminous mix plant	4	22	D
28691	Demonstrate knowledge of equipment and processes for manufacturing bituminous binders	4	6	D
28692	Demonstrate knowledge of production planning for manufacturing bituminous binders	4	6	D
28693	Explain the design fundamentals of bituminous binders	4	6	D
28694	Produce binders at a bituminous binder plant	4	22	D

Engineering and Technology > Infrastructure Works > Bitumen Surfacing Construction

ID	Title	Level	Credit	Review Category
28685	Describe the purpose and function of plant and equipment used in bituminous surfacing construction	4	6	D
28686	Demonstrate knowledge of key components of quality management for a bituminous surfacing site	4	6	D
28697	Demonstrate knowledge of binder spraying fundamentals	4	6	D
28698	Operate a bitumen distributor for blending and applying bituminous binders	4	22	D
28699	Demonstrate knowledge of chipseal design fundamentals and treatment selection for chipseals	4	6	D
28700	Demonstrate knowledge of equipment and processes for constructing chipseal surfacings	4	6	D
28701	Interpret chipseal design instructions and construct chipseal surfacings	4	14	D
28702	Complete records and take samples for chipseal construction	4	6	D
28703	Demonstrate knowledge of mix design fundamentals and treatment selection for bituminous mixes	4	6	D
28704	Demonstrate knowledge of equipment and processes for laying bituminous mixes	4	6	D
28705	Interpret paving instructions and construct bituminous mix layers	4	14	D
28706	Complete records and take samples and tests for bituminous mix paving construction	4	6	D
28707	Demonstrate knowledge of mix design fundamentals and treatment selection for slurry surfacings	4	6	D
28708	Demonstrate knowledge of equipment and processes for constructing slurry surfacings	4	6	D
28709	Interpret paving instructions and construct slurry surfacings	4	14	D
28710	Complete records and take samples for slurry surfacing construction	4	6	D

Engineering and Technology > Infrastructure Works > Generic Bituminous Surfacing

ID	Title	Level	Credit	Review Category
28678	Demonstrate knowledge of environmental protection and safety for bituminous surfacing production and application	4	10	D
28679	Demonstrate knowledge of bituminous surfacings and their uses	4	6	D
28680	Demonstrate knowledge of materials used in bituminous surfacing	4	6	D
28681	Demonstrate knowledge of supply chains and plant and equipment for bituminous binder production	4	6	D
28683	Explain and carry out safety procedures and processes for storage and handling of liquid bituminous products	4	6	D
28695	Demonstrate knowledge of bitumen distributor equipment and blending, and the application of bituminous binders	4	6	D
28696	Demonstrate knowledge of planning for blending and applying bituminous binders with a bitumen distributor	4	6	D