

RED SEAL TRADE PROFILE CONCRETE FINISHER



STRUCTURE OF THE TRADE PROFILE

This profile has two sections that provide a snapshot of the trade's description, and all trade activities as they are organized in the Red Seal Occupational Standard:

Description of the Concrete Finisher trade: an overview of the trade's duties, work environment, job requirements, similar occupations and career progression

Task Matrix: a chart which outlines graphically the major work activities, tasks and sub-tasks of this trade

Major Work Activity (MWA): the largest division within the standard that is comprised of a distinct set of trade activities

Task: distinct actions that describe the activities within a major work activity

Sub-task: distinct actions that describe the activities within a task

A complete version of the occupational standard, which provides additional detail for the trade activities, skills and knowledge can be found at www.red-seal.ca

DESCRIPTION OF THE

CONCRETE FINISHER TRADE

"Concrete Finisher" is this trade's official Red Seal occupational title approved by the CCDA. This standard covers tasks performed by concrete finishers whose occupational title has been identified by some provinces and territories of Canada under the following names:

	NL	NS	PE	NB	QC	ON	MB	SK	AB	вс	NT	YT	NU
Concrete Finisher	✓	✓	✓	✓			✓		✓	✓			
Cement Finisher					✓								
Cement (Concrete) Finisher						✓							

Concrete finishers place, finish, protect and repair concrete surfaces. They work on a variety of vertical and horizontal surfaces such as concrete floors, walls, sidewalks, stairs, driveways, curbs and gutters, and overlays. They work on many types of structures such as buildings, dams, bridges and tunnels. They also texture, chip, grind and cure finished concrete work and repair and restore damaged concrete. They apply architectural finishes to concrete surfaces such as exposed aggregate, acid-stained, patterned-stamped, broomed, smooth finishes and etched concrete surfaces. They install expansion and contraction joints and install fixtures such as anchor bolts, steel plates and other embedments. They also apply membranes and other waterproofing products to concrete. Concrete finishers must possess a sound knowledge of the properties of various types of concrete mixes and how proportions, additives and curing affect concrete strength and durability. Materials that concrete finishers work with include concrete, grouts, chemical-curing compounds, exotics, epoxies, polyurethanes and acrylics. Concrete finishers should have a basic knowledge of constructing formwork, preparing subgrades and installing reinforcement.

Much of concrete placing and finishing has become mechanized with power screeds, power trowels, mechanical vibrators and pumps. Hand trowelling is still required for small jobs and to finish hard-to-reach spots in corners, edges, stairs and around obstacles such as pipes.

Concrete finishers work in the construction sector in both indoor and outdoor conditions. Outdoor work is weather-dependant and there may be less work available in the winter. Conversely, overtime is often required when the weather demands it.

Specialization in this trade is common. Concrete finishers specialize in working with specific materials such as coloured concrete, exposed aggregates and various epoxies, or specific techniques such as diamond-polishing concrete, power trowelling, and finishing curbs and gutters.

Key attributes for people entering this trade are stamina, spatial perception and hand-eye coordination. Creative and artistic skills are also helpful in this trade. Some physical activities of this trade are heavy lifting, climbing, balancing, bending, kneeling, crouching, crawling and reaching.

Concrete finishers work with a variety of other tradespeople. Heavy equipment operators may prepare the sub-base for concrete, ironworkers may prepare and place the reinforcing material and carpenters may place the formwork. Concrete finishers inspect this work and ensure that it is suitable for receiving the concrete. They also interact with plumbers and electricians when pipes and conduits are embedded in the concrete.

With experience, concrete finishers may move into supervisory, management or instructing roles.

CONCRETE FINISHER

TASK MATRIX

A - PERFORMS COMMON OCCUPATIONAL SKILLS

Task A-1 Performs safety-related functions	A-1.01 Uses personal protective equipment (PPE) and safety equipment	A-1.02 Maintains safe work environment	
Task A-2 Uses tools and equipment	A-2.01 Uses hand tools	A-2.02 Uses power tools	A-2.03 Uses measuring equipment
Task A-3 Organizes work	A-3.01 Uses documentation	A-3.02 Determines material requirements and quantities	A-3.03 Sequences work procedures
Task A-4 Uses communication and mentoring techniques	A-4.01 Uses communication techniques	A-4.02 Uses mentoring techniques	

B-PERFORMS SITE PREPARATION

Task B-5 Prepares site	B-5.01 Inspects site	B-5.02 Prepares sub-grade and elevations	
Task B-6 Uses formwork	B-6.01 Constructs concrete formwork	B-6.02 Installs reinforcements	B-6.03 Inspects formwork and reinforcement
	B-6.04 Installs construction, isolation and expansion joints	B-6.05 Removes forms	<u> </u>

C - PLACES AND LEVELS CONCRETE

Task C-7 Places concrete	C-7.01 Transports concrete on site	C-7.02 Spreads concrete	C-7.03 Consolidates concrete
Task C-8 Levels concrete	C-8.01 Establishes elevation	C-8.02 Screeds concrete	C-8.03 Bull floats concrete

D-FINISHES PLASTIC CONCRETE

Task D-9 Floats concrete	D-9.01 Floats concrete by hand	D-9.02 Floats concrete by machine	
Task D-10 Hand-tools concrete	D-10.01 Edges perimeter of slab	D-10.02 Finishes extruded concrete surfaces	D-10.03 Tools contraction joints
Task D-11 Trowels concrete	D-11.01 Trowels concrete by hand	D-11.02 Trowels concrete by machine	<u> </u>
Task D-12 Applies surface treatments to concrete	D-12.01 Applies dry-shake aggregate surface hardeners	D-12.02 Applies exposed aggregate finish	D-12.03 Textures concrete surface
	D-12.04 Applies stamped concrete surface finish	D-12.05 Applies evaporation reducers	

E - CURES AND PROTECTS CONCRETE

Task E-13 Cures concrete	E-13.01 Wet-cures concrete	E-13.02 Chemical cures concrete
Task E-14 Creates contraction joints	E-14.01 Saw cuts contraction joints	E-14.02 Fills joints
Task E-15 Protects concrete	E-15.01 Protects plastic concrete	E-15.02 Protects hardened concrete

F - MODIFIES AND REPAIRS CONCRETE AND PERFORMS GROUTING

Task F-16 Repairs and restores concrete	F-16.01 Inspects concrete	F-16.02 Removes materials	F-16.03 Prepares surface for repair or restoration
	F-16.04 Installs repair materials		
Task F-17 Applies surface treatments to hardened concrete	F-17.01 Prepares surface for surface treatments	F-17.02 Abrades surface to achieve architectural finish	F-17.03 Applies seamless systems
	F-17.04 Applies bonded and non-bonded toppings to concrete	F-17.05 Parges vertical surfaces	F-17.06 Applies chemical surface treatment

Task F-18 Grouts	F-18.01 Prepares surface for grouting	F-18.02 Mixes grout	F-18.03 Installs grout
	F-18.04 Finishes exposed grout surfaces		
Task F -19 Performs cutting and coring	F-19.01 Performs cutting	F-19.02 Performs coring	