



154 Meadowlark Health Centre
156 Street & 87 Avenue
Edmonton, Alberta T5R 5W9
Tel (780) 429-4761
Fax (780) 425-4274
Toll Free 1-800-493-5446

Physical Demands Analysis

Concrete Finisher

Prepared for:
Alberta Construction Association

Job Title:	Concrete Finisher	Assessment Location:	130 Avenue and 52 nd Street SE Calgary, AB	Data Collection Date:	July 22, 2020
-------------------	-------------------	-----------------------------	--	------------------------------	---------------

Completed By:	Joanna Taets Von Amerongen, BKin	Submitted on:	October 13, 2020
----------------------	----------------------------------	----------------------	------------------

Disclaimer:	The Physical Demands noted in this report may vary depending on company and location. Please contact the company directly to confirm this physical demands analysis is an accurate representation of the specific job title for the specific location.
--------------------	--

Work Schedule:	Shift Duration: 6 days/week, 8-14 hours/day; varies depending on volume and weather Break Schedule: Breaks are taken when trucks are not on site; flexible Shift Rotation: Not applicable On call is required: No Overtime required: Yes; amount dependent on volume and weather
-----------------------	---

Education / Experience:	Education required: Not required; Red seal opportunity with formal education Hours required for position: 1500 hours required for red seal. Tickets that may be required (not limited to): Basic Safety Orientation (BSO) and practical training provided by Standard General on site, RSTS with WHMIS 2015.
--------------------------------	---

Labour Provider:	N/A
-------------------------	-----

Job Overview:	As a Concrete Finisher, the worker is required to assist in pouring the concrete, levelling out the liquid concrete and finishing the concrete with the appropriate anti-slip grip, edging and finishing sealant.		
	% of shift	Job Task	Task Description
	1-2%	Individual Field Level Risk Assessment (IFLRA)	<ul style="list-style-type: none">Identifying hazards, exposures, plans for hazards and exposures, personal protective equipment (PPE) required.
	1-2%	Site Preparation	<ul style="list-style-type: none">Removing equipment and tools from work truck, ensuring proper site measurements are reviewed with crew and review tasks for the day.
	94-97%	Concrete Finishing	<ul style="list-style-type: none">Assisting in pouring concrete from concrete truck, levelling recently poured concrete with bow float and rake, create anti-slip grip on concrete with broom, create edges and

			corners with street cut edgers and spray finishing sealant on concrete.
	1-2%	Site Clean Up	<ul style="list-style-type: none"> Once concrete is finished, clean site by placing equipment and tools into work truck and tarp the fresh concrete (if there is precipitation in the weather forecast).

Equipment/ Tools:	<ul style="list-style-type: none"> Pump (28 lbs.) Shovel (6 lbs.; 18 lbs. with concrete) Hand Trowel Steel Trowel Bucket with Water (19 lbs.) Deep Cut Edger Rake (4 lbs.) Screet Board (16 lbs.) Push Broom (8 lbs.) Shute Extension (28 lbs.) Bow Float (8 lbs.)
------------------------------	---

Exposures / Environment:	<ul style="list-style-type: none"> Concrete fumes Vehicle exhaust Heat Wind Cold
-------------------------------------	---

Personal Protective Equipment Required:	<ul style="list-style-type: none"> Hard hat Steel toed boots Gloves Foam safety eyewear (spoggle) Safety vest or high visibility stripes Kneeling pads Long pants
Personal Protective Equipment as Required:	<ul style="list-style-type: none"> Masks worn within 6 feet due to COVID

NOC STRENGTH LEVEL KEY	
Strength Level	Definition
Limited (Lim)	Up to 5 kg (11 pounds)
Light (L)	5 kg to 10 kg (11 – 22 pounds)
Medium (M)	10 kg to 20 kg (22 – 44 pounds)
Heavy (H)	Greater than 20 kg (44 pounds plus)

****Strength Level Key based on the National Occupational Classification***

FREQUENCY KEY		
Frequency	% of Workday	Hours – Based on 8 hour Workday
Not Required (N/R)	0%	0
Rarely (R)	1 – 5%	<25 min/day
Occasionally (O)	6 – 33%	25 min to 2 hours 40 min/day
Frequently (F)	34 – 66%	2 hours 41 min to 5 hours 17 min/day
Constantly (C)	67 – 100%	5 hours 18 min to 8 hours/day

****Frequency Key based on WCB Alberta Recommendations***

Job Demand	Frequency / NOC Strength Level					Details/ Measurements
	N/R	R	O	F	C	
Material Handling:						
Floor to Waist Level Lifting			Up to 28 lbs.			Moving various equipment including edgers, rakes, brooms, buckets, bow floats, screet boards from work truck to site and vice versa.
Knee to Waist Level Lifting	X					Not required
Waist to Waist Level Lifting	X					Not required
Waist to Chest Level Lifting	X					Not required
Waist to Shoulder Level Lifting	X					Not required
Waist to Overhead Level Lifting	X					Not required
Front Carry	X					Not required
Right / Left-handed Carry (Dominant Hand)			Up to 28 lbs.			Carrying various equipment including edgers, rakes, brooms, buckets, bow floats, screet boards from work truck to site and vice versa (dependent on workers preferred method of carrying).
Shoulder Carry			Up to 28 lbs.			Carrying various equipment including edgers, rakes, brooms, buckets, bow floats, screet boards from work truck to site and vice versa (dependent on workers preferred method of carrying).
Static Pushing/Pulling (Force)	X					Not required

Dynamic Pushing/Pulling (Force)				Up to Heavy NOC Level	Light NOC Level	Heavy NOC Level: Pushing/pulling Screenshot Board with fresh concrete, pushing/pulling Bow Float with fresh concrete. Light NOC Level: Pushing/pulling rakes, edgers, brooms shovels, trowels, shute extension, etc.
--	--	--	--	-----------------------	-----------------	---

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
Upper Extremity Work:						
Hand Gripping					X	Using screed board, bow float, rakes, edgers, brooms, shovels, trowels, moving shute extension, etc. to pour, level and detail concrete, site preparation and site clean up.
Pinch Gripping		X				Using pump and nozzle attached to apply sealant to fresh concrete.
Upper Extremity Coordination					X	Using screed board, bow float, rakes, edgers, brooms, shovels, trowels, moving shute extension, etc. to pour, level and detail concrete, site preparation and site clean up.
Reaching Forward				X		Using screed board, bow float, rakes, edgers, brooms, shovels, trowels, moving shute extension, etc. to pour, level and detail concrete, site preparation and site clean up.
Overhead Shoulder Level Reaching			X			Pushing/pulling bow float to level concrete.
Below Shoulder Level Reaching				X		Using screed board, bow float, rakes, edgers, brooms, shovels, trowels, moving shute extension, etc. to pour, level and detail concrete, site preparation and site clean up.
Throwing	X					Not required

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
Positional Work:						
Trunk Flexion (Bending)				X		Using hand/steel trowel, various edgers, screed board, bow float, checking level of concrete, applying sealant and tarp to concrete.
Trunk Rotation (Twisting)			X			Edging and troweling fresh concrete.
Kneeling			X			Edging fresh concrete.
Crawling	X					Not required
Crouching			X			Edging and troweling fresh concrete.
Squatting	X					Not required

Neck Flexion				X		Checking surroundings and nearby traffic for hazards, while using hand/steel trowel, various edgers, screed board, bow float, removing concrete from chute extension, applying sealant, site preparation and site clean up.
Neck Extension			X			Removing concrete from chute extension.
Neck Rotation				X		Checking surroundings and nearby traffic for hazards, while using hand/steel trowel, various edgers, screed board, bow float, removing concrete from chute extension, applying sealant, communicating with coworkers site preparation and site clean up.

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
Static Work:						
Sitting		X				During breaks
Static Standing			X			IFLRA, site preparation, communicating with coworkers, waiting for concrete truck.
Balancing				X		On site including gravel, curbs, grass, etc.

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
Ambulation:						
Walking: Level Surfaces			X			Surrounding sidewalk and asphalt (road).
Walking: Uneven Surfaces				X		On site including gravel, curbs, grass, etc.
Walking: Slopes		X				Dependent on site.
Jumping	X					Not required
Running	X					Not required

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
Climbing:						
Stairs	X					Not required
Ladder	X					Not required
Other			X			Over curbs, onto work truck

PHOTOS OF TASKS AND WORK ENVIRONMENT

Figure 1: Concrete Finishers using hand trowel and bow float.



Figure 2: Creating edges using deep cut edger.



Figure 3: Concrete Finisher completing over shoulder reaching while using bow float.



Figure 4: Concrete Finishers crouching and kneeling while using hand trowels.



If you have any questions, and/or would like to discuss this assessment and report further, I can be reached at (780) 429-4761.

Sincerely,

Physical Demands Analysis
Job Title: Concrete Finisher
Date Prepared: August 18, 2020
Prepared for: Alberta Construction Association



Joanna Taets Von Amerongen, BKin
Kinesiologist

SITE SPECIFIC JOB DEMAND ADDITIONS:

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
Site Specific Job Demand:						
Writing		X				Filling out IFLRA.

Validation Agreement

Job Title:	Concrete Finisher
Data Collection Date:	July 22, 2020

We the undersigned have reviewed the Physical Demands Analysis for this position and agree that the physical demands documented in this report are representative of the true demands of the tasks associated with the job title as assessed on the date listed above.

Completed by:	Joanna Taets Von Amerongen, BKin	Lifemark Clinician Name
Approved by:	Matt Cooper, Paul Parsons	Management Representative
Approved by:		Worker Representative
Approved by:		Labour Provider Representative