



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

Electrician

Prepared for:
 Alberta Construction Association

Job Title:	Electrician	Assessment Location:	Not applicable	Data Collection Date:	August 8, 2020
-------------------	-------------	-----------------------------	----------------	------------------------------	----------------

Completed By:	Joanna Taets Von Amerongen, BKin	Submitted on:	February 8, 2021
----------------------	----------------------------------	----------------------	------------------

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:	<p>Shift Duration: 5 days/week, 8-10 hours/day; may vary depending on volume of work</p> <p>Break Schedule: Total of 1 hour break per day / 2-15 minute breaks with 1-30 minute lunch break.</p> <p>Shift Rotation: Dependent on project schedule</p> <p>On call is required: Dependent; service electricians rotate on call duties.</p> <p>Overtime required: Yes; as required depending on volume of work</p>
-----------------------	--

Education / Experience:	<p>Education required: N/A</p> <p>Hours required for position: N/A</p> <p>Tickets that may be required (not limited to): Electrical Safety Training System, LSE, Construction Safety Training Systems (CSTS) and Basic Safety Orientation (BSO).</p>
--------------------------------	---

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

Job Overview:	As an electrician, the worker is required to complete electrical installation for renovation, and maintenance of new and existing buildings/structures. This includes but is not limited to EMT, electrical equipment, wire pulling, rough in and working at heights.		
	% of shift	Job Task	Task Description
	10%	Material/tool preparation	<ul style="list-style-type: none"> Retrieving all required materials, tools and equipment at the shop for the site and the shift onto work truck. Projects are based on site therefore loading of vehicles is not required daily.
	80%	Electrical work	<ul style="list-style-type: none"> Completing planned tasks for the shift including completing installation, maintenance and repairs as required.
	5%	Clean up and loading materials from site	<ul style="list-style-type: none"> Completing site clean up including loading all required materials, tools and equipment from site onto work truck. Workers are based onsite/project. This only applies to service electricians.

	5%	Safety preparations and corrections	<ul style="list-style-type: none"> • Appropriate paperwork to be completed onsite and safety precautions completed as necessary. • Complete site inspections, hazard identification and hazard corrections.
--	----	-------------------------------------	---

Equipment/ Tools:	All hand and power tools associated with construction including carpentry and concrete tools.
--------------------------	---

Exposures / Environment:	<ul style="list-style-type: none"> • Heat • Wind • Cold • Electricity • Vibration • Noise exposure
---------------------------------	--

Personal Protective Equipment Required:	<ul style="list-style-type: none"> • Hard hat • Steel toed boots • Gloves • Safety glasses • Safety vest or high visibility stripes • Long sleeves and pants
Personal Protective Equipment as Required:	<ul style="list-style-type: none"> • Fall arrest

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				H*		Various tools, equipment, supplies, construction materials.
Knee to Waist Level Lifting				H*		Various tools, equipment, supplies, construction materials.
Waist to Waist Level Lifting				H*		Various tools, equipment, supplies, construction materials.
Waist to Chest Level Lifting				H*		Various tools, equipment, supplies, construction materials.
Waist to Shoulder Level Lifting				H*		Various tools, equipment, supplies, construction materials.
Waist to Overhead Level Lifting				H*		Various tools, equipment, supplies, construction materials.
Front Carry				H*		Various tools, equipment, supplies, construction materials.
Right / Left-handed Carry (Dominant Hand)				H*		Various tools, equipment, supplies, construction materials.
Shoulder Carry	X					Not required.
Static Pushing/Pulling (Force)			X	X		Task dependent, can vary from day to day as applicable.
Dynamic Pushing/Pulling (Force)			X	X		Task dependent, can vary from day to day as applicable.

*Lifting up to 50 lbs. is required on a frequent basis. Lifting greater than 50 lbs. is required on an occasional basis.

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
Upper Extremity Work:						
Hand Gripping				X		Task dependent, can vary from day to day as applicable.
Pinch Gripping			X			Task dependent, can vary from day to day as applicable.
Upper Extremity Coordination				X	X	
Reaching Forward				X	X	
Overhead Shoulder Level Reaching				X	X	Task dependent, can vary from day to day.
Below Shoulder Level Reaching				X	X	Task dependent, can vary from day to day.

Throwing	X					Not applicable.
----------	---	--	--	--	--	-----------------

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
Positional Work:						
Trunk Flexion (Bending)			X	X		Task dependent, can vary from day to day.
Trunk Rotation (Twisting)				X		Task dependent, can vary from day to day.
Kneeling				X		Working on lower level tasks.
Crawling				X		Working on lower level tasks as applicable.
Crouching				X		Working on lower level tasks.
Squatting				X		Working on lower level tasks.
Neck Flexion				X		Working on lower level tasks, checking surroundings.
Neck Extension			X	X		Working on higher level tasks, checking surroundings.
Neck Rotation				X		Checking surroundings, task dependent.

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
Static Work:						
Sitting			X			In vehicle to and from site.
Static Standing				X		On site during installation, repair and maintenance.
Balancing				X		While climbing ladders, scaffolds/structures, on slippery/uneven surfaces, at heights (roofs/scaffolds), etc.

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
Ambulation:						
Walking: Level Surfaces				X		Throughout site, at shop, etc.
Walking: Uneven Surfaces				X		Throughout site, excavations, rebar, 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			On site.
Ladder				X		Working on ladders while on site to access higher levels.
Other				X		Climbing scaffolding/structures, etc.

Physical Demands Analysis
Job Title: Electrician
Date Prepared: October 11, 2020
Prepared for: Alberta Construction Association



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,

A handwritten signature in black ink, appearing to be "J. Taets", written over a horizontal line.

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:						
Vibration				X		Due to various hand and power tools.
Paperwork			X			



Validation Agreement

Job Title:	Electrician
Data Collection Date:	N/A

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 and Designation
Approved by:	Russell Meyer, Safety and Project Management Jeanette DeBruin, Director/Human Resources	Management Representative
Approved by:		Worker Representative
Approved by:		Labour Provider Representative