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## Physical Demands Analysis

Hoist Operator

Prepared for:  
 Alberta Construction Association

<b>Job Title:</b>	Hoist Operator	<b>Assessment Location:</b>	Edmonton, AB	<b>Data Collection Date:</b>	June 17, 2021
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<b>Completed By:</b>	Joanna Ellingson, BKin	<b>Submitted on:</b>	July 29, 2021
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<b>Disclaimer:</b>	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.
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<b>Work Schedule:</b>	<p><b>Shift Duration:</b> 4 days/week, 9.5 hours/day; 1 day/week, 8.25 hours/day</p> <p><b>Break Schedule:</b> Total of 1 hour break per day / 2-15 minute coffee breaks, 1-30 minute lunch break</p> <p><b>Shift Rotation:</b> Not applicable</p> <p><b>On call is required:</b> No</p> <p><b>Overtime required:</b> No; but may be available upon Foreman discretion</p>
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<b>Education / Experience:</b>	<p><b>Education required:</b> Not applicable</p> <p><b>Hours required for position:</b> Not applicable</p> <p><b>Tickets that may be required (not limited to):</b> Fall protection, First Aid, WHMIS, Construction Safety Training Systems (CSTS) and Basic Safety Orientation (BSO).</p>
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<b>Labour Provider:</b>	N/A
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<b>Job Overview:</b>	As a hoist operator, the worker is required to operate the hoist on site by transporting heavy materials throughout the site.		
	% of shift	Job Task	Task Description
	1-2%	Equipment and Safety Check	<ul style="list-style-type: none"> <li>Checking hoist to ensure fluids are adequate, controls are working, no mechanical failures or changes in hoist from last shift.</li> </ul>
	2%	Tailgate talk	<ul style="list-style-type: none"> <li>The worker's plan for the day including progress on site thus far and from previous day, plan for remaining projects required and updates on any changes required for remaining projects.</li> <li>Discuss any safety concerns/hazards and updates related to the day's work.</li> <li>Hazard assessment discussion and where hoist operators will be working for the day.</li> </ul>

	1-2%	Site Preparation	<ul style="list-style-type: none"> <li>Using the hoist, reviewing plans with the crews for the day. Communicate with rigger and spotter as to best route to transport materials. Prepare site for day's work including taping off any area where the hoist will work and other crews have access below.</li> </ul>
	93-96%	Operating Hoist	<ul style="list-style-type: none"> <li>Operating hoist using various controls to move materials and excess garbage.</li> <li>This will include frequent communication with the rigger and spotter.</li> </ul>
	1-2%	Site Clean up	<ul style="list-style-type: none"> <li>Once shift is complete, use the hoist to assist with cleaning site as necessary.</li> <li>Remove tape from areas on site where hoist was operating.</li> </ul>

<b>Equipment/ Tools:</b>	<ul style="list-style-type: none"> <li>Hoist</li> </ul>
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<b>Exposures / Environment:</b>	<ul style="list-style-type: none"> <li>Noise exposure</li> <li>Vibration exposure</li> <li>Dust</li> <li>Heat</li> <li>Wind</li> <li>Cold</li> <li>Air Conditioning</li> </ul>
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<b>Personal Protective Equipment Required:</b>	<ul style="list-style-type: none"> <li>Hard hat</li> <li>Steel toed boots</li> <li>Gloves</li> <li>CSA safety glasses</li> <li>Safety vest or high visibility stripes</li> <li>Long pants</li> </ul>
<b>Personal Protective Equipment as Required:</b>	<ul style="list-style-type: none"> <li>Masks worn within 6 feet due to COVID</li> <li>Fall arrest equipment (as required)</li> </ul>

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	
<b>Material Handling:</b>						
Floor to Waist Level Lifting		H				Adjusting materials, excess garbage being transported by hoist (as needed).
Knee to Waist Level Lifting		H				Adjusting materials, excess garbage being transported by hoist (as needed).
Waist to Waist Level Lifting		H				Adjusting materials, excess garbage being transported by hoist (as needed).
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)	X					Not required.
Shoulder Carry	X					Not required.
Static Pushing/Pulling (Force)	X					Not required.
Dynamic Pushing/Pulling (Force)		Heavy NOC Level			Light NOC Level	Pushing/pulling controls in the hoist, tightening straps around load.

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
<b>Upper Extremity Work:</b>						
Hand Gripping					X	Gripping the hand controls in the hoist, refilling fluids, mechanical checks, adjusting materials or tightening straps for loads.
Pinch Gripping		X				Gain access to enter the hoist.

<b>Upper Extremity Coordination</b>					X	Operating the hand controls in hoist, refilling fluids, mechanical checks, adjusting materials or tightening straps for loads.
<b>Reaching Forward</b>					X	Reaching the hand controls in hoist, refilling fluids, adjusting materials or tightening straps for loads.
<b>Overhead Shoulder Level Reaching</b>	X					Not required.
<b>Below Shoulder Level Reaching</b>					X	Reaching the hand controls in The hoist, refilling fluids, adjusting materials or tightening straps for loads.
<b>Throwing</b>	X					Not required.

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
<b>Positional Work:</b>						
<b>Trunk Flexion (Bending)</b>			X			Completing equipment and safety inspection, adjusting materials or tightening straps for loads.
<b>Trunk Rotation (Twisting)</b>				X		Checking surroundings on site, communicating with crew.
<b>Kneeling</b>	X					Not required.
<b>Crawling</b>	X					Not required.
<b>Crouching</b>		X				Completing equipment and safety inspection.
<b>Squatting</b>		X				Completing equipment and safety inspection, checking blind spots of the hoist.
<b>Neck Flexion</b>				X		Completing equipment and safety inspection, checking surroundings on site and blind spots of the hoist, communicating with crew.
<b>Neck Extension</b>				X		Completing equipment and safety inspection, checking surroundings on site and blind spots of the hoist.
<b>Neck Rotation</b>				X		Completing equipment and safety inspection, checking surroundings on site and blind spots of the hoist, communicating with crew.

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
<b>Static Work:</b>						
<b>Sitting</b>					X	While operating the hoist.
<b>Static Standing</b>		X				During site preparation, tailgate talk, breaks.
<b>Balancing</b>			X			On site during site preparation, tailgate talk, entering and exiting cab of the hoist.



Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
<b>Ambulation:</b>						
<b>Walking: Level Surfaces</b>			X			Dependent on site - during equipment and safety inspection, tailgate talk, breaks, communicating with crew.
<b>Walking: Uneven Surfaces</b>			X			Dependent on site - during equipment and safety inspection, tailgate talk, breaks, communicating with crew.
<b>Walking: Slopes</b>		X				Dependent on site - during equipment and safety inspection, tailgate talk, breaks, communicating with crew.
<b>Jumping</b>	X					Not required.
<b>Running</b>	X					Not required.

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
<b>Climbing:</b>						
<b>Stairs</b>		X				Throughout site to access various levels.
<b>Ladder</b>		X				Throughout site to access higher levels (as needed).
<b>Other</b>			X			Entering and exiting the hoist.

Physical Demands Analysis  
Job Title: Hoist Operator  
Date Prepared: July 11, 2021  
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 read "J. Ellingson".

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**Joanna Ellingson, BKin**  
**Kinesiologist**



**SITE SPECIFIC JOB DEMAND ADDITIONS:**

Job Demand	Frequency					Details/Measurements
	N/R	R	O	F	C	
<b>Site Specific Job Demand:</b>						
Vibration					X	Operating the hoist: from controls.
Wrist Flexion/Extension					X	Operating controls on the hoist.

### Validation Agreement

<b>Job Title:</b>	Hoist Operator
<b>Data Collection Date:</b>	June 17, 2021

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.

<b>Completed by:</b>	Joanna Ellingson, BKin	Lifemark Clinician Name and Credentials
<b>Approved by:</b>		Management Representative
<b>Approved by:</b>		Worker Representative
<b>Approved by:</b>		Labour Provider Representative