

## PHYSICAL DEMANDS DESCRIPTION (PDD)

Date August 24, 2006		Analyst Jennifer Yorke B. Sc. (Hons Kin)							
Department ICI - General		Job Title Electrician		Company Urban Electric					
PHYSICAL DEMANDS		Not Component	*FREQUENCY				LOAD (object/tool)		COMMENTS
			Seldom	Minor	Required	Major	Maximum (Kg)	Usual (Kg)	
<b>STRENGTH</b>	Lifting			x		38	5	Lifting materials off the ground	
	Carrying		x			38	5	Carrying conduit from threader to installation point; wearing a tool belt	
	Pushing		x			2.5	2.5	Pushing unistrut into place; wire through conduit	
	Pulling		x					Wire pulling through conduit	
	Handling				x	38	5	Handling a small screwdriver, tools	
	Throwing		x			>1	>1	Tossing a fixture to a worker on the elevated lift (approx. 8' from ground)	
	Gripping	Power Grasp			x				Wire pulling, conduit installation
		Pinch Grasp		x					Gripping of small screwdriver
	Reaching	Above Shoulder			x				Installing unistrut and conduit
		Below Shoulder		x					Picking materials up off the floor of the lift
To the Side			x					Awkward conduit installation	
<b>POSTURES</b>	Shoulder	Abduction			x			Overhead work in an awkward position	
		Flexion				x		Overhead work	
	Hip	Abduction	x					Balancing in awkward positions	
	Wrist	Flexion/Extension		x					
		Radial/Ulnar Devn		x					Bolting fixture to unistrut
		Pronate/Supinate			x				Installing conduit
	Trunk	Flexion			x				Conduit installation, working in small spaces
		Extension	x						Overhead work; ladder work
		Side Bend	x						Overhead work in an awkward position
		Twist	x						Overhead work; ladder work
	Neck	Flexion		x					Threading conduit, conduit installation
		Extension			x				Overhead work
		Side Bend	x						Overhead work in an awkward position
Twist		x						Overhead work in an awkward position	
<b>MOBILITY</b>	Sitting		x					Work is mostly performed standing, crouching or kneeling	
	Standing				x				
	Walking			x				Walking on elevated lift platform, gathering materials	
	Climbing		x					Climbing one flight of stairs, climbing into elevated lift	
	Crawling		x					Installing conduit in tight spaces	
	Crouching		x					Cutting unistrut	
	Kneeling		x					Installation of conduit	
	Balancing		x					Balancing on moving elevated lift platform	
	Foot Action	One Foot	x						Climbing ladder into elevated lift platform
		Feet				x			Standing on elevated lift platform
	Fine Finger Movements			x				Tightening of control panel screws, insertion of wire into connection	
<b>*FREQUENCY</b>									
SELDOM = Not always performed during completion of job					REQUIRED = Frequent Repetition for 25%-50% of job				
MINOR = Performed less than 25% of job					MAJOR = Frequent Repetition for more than 50% of job				

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PHYSICAL DEMANDS		Not Component	*FREQUENCY				COMMENTS	
			Seldom	Minor	Required	Major		
SENSORY/PERCEPTUAL	Hearing	Conversations		x			Communicating with partner regarding task at hand	
		Other Sounds		x			Potential emergency calls and alarms	
	Vision	Far			x		Seeing past 5 feet; identifying a path for elevated lift	
		Near				x	Installation of conduit, conduit threading & bending	
		Colour			x		Reading blueprints	
		Depth			x		Determining the amount of offset needed in the conduit	
	Perception	Spatial – organization			x		Layout of conduit	
		Form - recognition			x		Distinguishing different sizes of conduit, selecting the correct screws	
	Feeling					x	Identifying different sizes of conduit; different connectors	
	Reading			x			Reading blueprints	
	Writing			x			Marking out the layout	
	Keying/Typing	x						
	Speech				x		Communicating during wire pulling, etc.	
WORK ENVIRONMENT	Outside Work				x			
	Hot			x			Average max. temp. (for the GTA) in July is 29C. Work continues during hot weather.	
	Cold			x			Work continues during the winter months – extreme cold limits ability to work	
	Humid			x			Usually the weather is humid during the summer months – work continues during humid weather	
	Dry					x	Outdoor work stops during heavy rain; work mostly in dry weather/environments	
	Dust					x	Construction site	
	Vapour Fumes			x			Elevated lift platform generator	
	Noise					x	Construction equipment	
	Vibration	Whole Body		x				Standing on the platform of the lift while its moving
		Upper Extremity			x			Using electric hand saw
	Contact Stress			x			Drills, conduit threader, Chicago bender	
	Striking with Hand/Fist	x					Striking is accomplished with hand tools (eg. Hammer)	
	Moving Objects				x		Workers moving materials, elevated lift platform	
	Hazardous Machines				x		Elevated lift platform	
	Electrical				x			
	Sharp Tools				x		Conduit threader, conduit reamer	
	Radiant/Thermal Energy			x			Preventative maintenance is performed when the steam plant is up and running	
	Slippery			x			Outdoor surfaces can become slippery when it rains	
	Congested Worksite					x	Machinery, building supplies, uneven terrain	
	Chemical Irritants	x						
CONDITIONS	Works Independent but in Group				x		Work is primarily done in groups of 2	
	Operate Equipment/Machinery				x		Drills, Chicago bender, Elevated lift platform, etc.	
	Machine Paced				x		Speed of conduit bender, threader, elevated lift platform	
	Production Quotas					x	Work must be done in a specific timeframe	
	Deadline Pressures				x		Must work to the contractor's predetermined schedule	
	Irregular/Extended Hours			x				
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**Prepared by:** Jennifer Yorke B. Sc. (Hons. Kin.)

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