

2010 - Provincial Occupational Analysis (POA)

Work Experience Form *Power Electrician*

1-877-978-7233

www.manitoba.ca/tradecareers

Personal Information (please print)

Legal First Name	Middle Initial	Legal Last Name	Birth Date (yy/mm/dd)
Address		City/Town	Postal Code
Home or Cell Phone	Business Phone	E-mail address	Fax #

Eligibility Requirements

In order for Trades Qualifiers (TQ) to be approved to challenge the certification exam or for Designated Trainers (DT) to be approved to register apprentices, you must have worked both a minimum of 6 years within the last 10 and accumulated 9,600 hours, as well as acquired at least 70% scope of the trade.

Check the box you are applying for

□ Trades Qualifier (Experienced tradesperson being assessed to challenge the certification exam)
□ Designated Trainer (Experienced tradesperson being assessed to register apprentices)

* We encourage all Designated Trainers interested in receiving a Certificate of Qualification (trade ticket) to apply to challenge the exam through the Trades Qualification process. The application can be found at: http://www.gov.mb.ca/wdis/apprenticeship/generalinfo/forms.html.

Instructions

You are about to complete the Work Experience Form (WEF) which is based on the sub-tasks outlined in the Provincial Occupational Analysis (POA). The POA provides detailed information that will assist you when completing the WEF and is your best source for identifying any training gaps. To access the POA, go to the Trade Profile page at *http://www.gov.mb.ca/wdis/apprenticeship/discover/ mbtrades/index.html*. Follow the link to your trade, and click on the Provincial Occupational Analysis (POA).

Rate your experience for each sub-task based on the scale below. The number of questions in each section of the certification exam is identified next to each Block title. How you assess yourself is an important step to prepare for the certification exam.

Circle #0 if I have no experience doing this.

Circle #1 if I have a little experience doing this.

Circle #2 if I have some experience doing this with help.

Circle #3 if I have some experience doing this alone and unaided.

Circle #4 if I have frequently done this.

Circle #5 if I have extensive experience doing this.

Sign and date the completed Work Experience Form and return it to Apprenticeship Manitoba with either the Trades Qualification or Designated Trainer application form and related documents. Keep one copy of the Work Experience Form for your records.

Rev. 01/15

Manitoba

Brandon 128, 340-9th St. R7A 6C2 204-726-6365 Fax 204-726-6912

Thompson 118-3 Station Rd. R8N 0N3 204-677 -6346 Fax 204-677-6689 Winnipeg 100 -111 Lombard Ave. R3B 0T4 204-945-3337 Fax 204-948-2346

Block A Performing Basic Work Practices, Activities, and Procedures (38 Questions)

Task	Sub-Tasks	Rating
1. Participates in workplace health and safety practices.	1.01 Demonstrates basic safety awareness.	012345
	1.02 Uses safety gear and personal protective equipment.	012345
	1.03 Maintains a safe workplace environment.	012345
	1.04 Installs and maintains LP storage and handling facilities.	012345
	1.05 Follows Safety/Health Acts and regulations.	012345

Task	Sub-Tasks	Rating
2. Uses equipment, hand/power tools, instruments, and wiring methods.	2.01 Uses hand tools.	012345
	2.02 Uses power tools.	012345
	2.03 Uses powder-actuated tools.	012345
	2.04 Uses technical instruments, and testers.	012345
	2.05 Operates bucket-truck and other lift-trucks.	012345
	2.06 Follows approved wiring methods.	012345
	2.07 Solders.	012345

Task	Sub-Tasks	Rating
3. Reads/interprets prints and manuals.	3.01 Reads/interprets codes, company policies, company maintenance manuals, and manufacturer manuals.	012345
	3.02 Reads/interprets drawings (for example, electrical, hydraulic, and pneumatic, mechanical and civil, block diagrams, and PLC logic drawings).	012345
	3.03 Reads/interprets Canadian Electrical Code and the Manitoba Regulation.	012345

Task	Sub-Tasks	Rating
4. Communicates on the job.	4.01 Establishes and maintains effective communications with co-workers and others.	012345

4.02 Uses computers.	012345
4.03 Uses telephone and fax.	012345
4.04 Uses hand-signals and two-way radios.	012345
4.05 Uses diagrams, schedules, and charts to communicate.	012345
4.06 Completes documentation/reports.	012345

Task	Sub-Tasks	Rating
5. Trains personnel.	5.01 Conducts orientation.	012345
	5.02 Assesses capabilities.	012345
	5.03 Provides direction, guidance.	012345
	5.04 Supervises, monitors.	012345
	5.05 Evaluates performance.	012345

Task	Sub-Tasks	Rating
6. Uses mathematical and scientific methods fundamental to the power electrician's trade.	6.01 Performs mathematical operations required to solve technical problems.	012345
	6.02 Applies scientific principles to the solution of technical problems.	012345

Task	Sub-Tasks	Rating
7. Uses basic electrical, electronic, and digital devices and circuits.	7.01 Applies electrical concepts to job-related tasks.	012345
	7.02 Applies electronic concepts to job-related tasks.	012345
	7.03 Applies digital logic concepts to job-related tasks.	012345
	7.04 Analyzes three-phase systems.	012345

Block B Operating Power Distribution, Generation, and Transmission Systems (4 Questions)

Task	Sub-Tasks	Rating
8. Analyzes system requirements.	8.01 Calculates loading, ensures alternate feed, and coordinates with customers.	012345
	8.02 Performs switching.	012345

Block C Installing/Removing and Maintaining High-Voltage (750V-750kV) Systems (18 Questions)

Task	Sub-Tasks	Rating
9. Installs/removes and maintains high-voltage equipment.	9.01 Installs/removes and maintains transformers and reactors.	012345
	9.02 Installs/removes and maintains oil-circuit reclosers (OCRs).	012345
	9.03 Installs/removes and maintains breakers.	012345
	9.04 Installs/removes and maintains disconnects.	012345
	9.05 Installs/removes and maintains regulating equipment.	012345
	9.06 Installs/removes and maintains grounding, bonding, and temporary grounding systems.	012345
	9.07 Installs/removes and maintains bus-work.	012345
	9.08 Installs/removes and maintains lightning/surge arrestors.	012345
	9.09 Installs/removes and maintains high-voltage direct current (HVDC) equipment.	012345

Block D Installing/Removing and Maintaining Low-Voltage (<750V) Systems (4 Questions)

Task	Sub-Tasks	Rating
10. Installs/removes and maintains low-voltage equipment.	10.01 Installs/removes and maintains lighting equipment.	012345
	10.02 Installs/removes and maintains heating ventilation, and air-conditioning (HVAC) equipment.	012345
	10.03 Installs/removes and maintains equipment-cooling systems.	012345
	10.04 Installs/removes and maintains AC/DC distribution equipment.	012345

Block E Installing/Removing and Maintaining Rotating Machines (7 Questions)

Task	Sub-Tasks	Rating
11. Installs/removes and maintains rotating machines.	11.01 Installs/removes and maintains motors.	012345
	11.02 Installs/removes and maintains generators.	012345
	11.03 Installs/removes and maintains excitation equipment.	012345
	11.04 Installs/removes and maintains governor equipment.	012345

Block F Installing/Removing & Maintaining Control, Protection, & Monitoring Systems (23 Questions)

Task	Sub-Tasks	Rating
12. Installs/removes and maintains control, protection, and monitoring systems.	12.01 Installs/removes and maintains control systems.	012345
	12.02 Installs/removes and maintains microprocessor-based control and monitoring systems (PLCs).	012345
	12.03 Installs/removes and maintains battery banks/chargers and power supplies.	012345
	12.04 Installs/removes and maintains AC and DC motor-controls.	012345
	12.05 Installs/removes and maintains metering systems.	012345
	12.06 Installs/removes and maintains fire-detection/sup- pression equipment.	012345
	12.07 Installs/removes and maintains building-security systems.	012345
	12.08 Installs/removes and maintains instrumentation and devices.	012345
	12.09 Installs/removes and maintains relay and protection systems.	012345
	12.10 Installs/removes and maintains annunciation (monitoring) systems.	012345

Troubleshooting (5 Questions) Block G

Task	Sub-Tasks	Rating
13. Troubleshoots.	13.01 Recognizes and analyzes problem.	012345
	13.02 Selects tools, equipment, and personnel to address problem.	012345
	13.03 Resolves problem.	012345
	13.04 Verifies problem has been resolved.	012345

Block H Managing Projects (1 Questions)

Task	Sub-Tasks	Rating
14. Plans and organizes project requirements.	14.01 Participates in project requirements.	012345
	14.02 Estimates budget and cost-control.	012345
	14.03 Schedules activities.	012345
	14.04 Organizes materials and tools.	012345
	14.05 Coordinates labour and other trades' requirements.	012345

Name (please print)

Signature _____ Date: _____

Apprenticeship Manitoba 100 -111 Lombard Ave. Winnipeg, MB, R3B 0T4

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