

# OCCUPATIONAL TOOLS AND EQUIPMENT LIST

## **Construction and Industrial Electrician**



Government of Newfoundland Labrador  
Department of Jobs, Immigration and Growth  
Apprenticeship and Trades Certification Division

March 2013

## **Preface**

This document is intended as a companion to the March 2013 Plans of Training for the **Construction and Industrial Electrician** occupations. It identifies the necessary tools and equipment required by apprentices and training institutions for the completion of apprenticeship.

## **Acknowledgements**

The Department of Jobs, Immigration and Growth and the Apprenticeship & Trades Certification Division wishes to acknowledge the contributions of the following industry and instructional representatives who participated in the development of this document.

James O'Neil  
Gary Fiander  
Shane Lewis  
Terry Higdon  
James Hedges

Raymond W. Mills  
Keith Rose  
Joann Greeley  
Trent Chaytor  
Daniel Moody

Without their dedication to quality apprenticeship training, this document could not have been produced.

A sincere thank you is offered to everyone involved.

## **Contact Information**

Department of Jobs, Immigration and Growth  
Apprenticeship and Trades Certification Division  
Tel: 709-729-2729 / 1-877-771-3737  
Email: [app@gov.nl.ca](mailto:app@gov.nl.ca)  
Web: [www.gov.nl.ca/atcd](http://www.gov.nl.ca/atcd)

**Note:**

The numbers suggested in the following Tools and Equipment List represents the required minimum. Please verify this list with your selected training institution.

## Tools and Equipment List

### CONSTRUCTION AND INDUSTRIAL ELECTRICIAN

SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT			
Item	Units for Individual Students	Required for Entry (E) Advanced (A) Both (B)	Comments
<b>Protective Clothing and Devices</b>			
Safety Boots	1	B	
Gloves	1	B	
Goggles/Safety Glasses	1	B	
Hard Hat	1	B	CSA Approved - Side Impact
<b>Hand Tools</b>			
Adjustable Wrenches - 6" and 8"	1 of each	B	
Combination Wire Stripper	1	B	
Electrician's Knife	1	B	
Flashlight	1	B	
Gyproc Saw	1	B	
Hack Saw	1	B	
Hammers – Claw and Ball Peen	1	B	
Level – Torpedo (Magnetic)	1	B	
Measuring Tape	1	B	
Multimeter CAT-III	1	B	
Pliers: Diagonal Side-Cutting Lineman's Side-Cutting Needle Nose	1 of each	B	

### SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT

Item	Units for Individual Students	Required for Entry (E) Advanced (A) Both (B)	Comments
Pump (slip joint) 8" or 9" pliers			
Portable Tool Box/Bag/Pouch	1	B	
Screwdrivers: Robertson #1, #2 and #3, Phillips #1 and #2, Standard (3 sizes)	1 of each	B	
Stud Finder	1	B	

Note: If identifying sets, please include specific information.

### SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION

Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
<b>Protective Clothing and Devices</b>				
Arc Flash Equipment	1 set	15	B	For demonstration
First Aid Kit #2	2	8	B	
Fire Extinguishers	2	8	B	
Gloves	3	5	B	
Goggles/Safety Glasses	15	1	B	
Hard Hat	15	1	B	CSA Approved - Side Impact
Hearing Protection	2 boxes of 100 per box	15	B	
High Voltage Gloves	1	15	B	For demonstration
Safety Harness	2	8	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION				
Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Shields	5	3	B	
Hand Tools				
Adjustable Pipe Wrench	2	8	B	
Allen Key Set (Metric and Imperial)	2 sets of each	15 per set	B	
Bolt Cutter	1	15	B	
Center Punch Set	2 sets	15 per set	B	
Chalk Line	2	8	B	
Cold Chisel Set	2 sets	8 per set	B	
Combination Wrenches - (Metric, Imperial)	2 sets	8 per set	B	
Combination Wire Stripper	3	5	B	
Crimper – Hand and Hydraulic	1 of each	15 each	B	
Crowbar	1	15	B	
Drift Punch Set	2 sets	8 per set	B	
Files - Flat, Round, Triangle	2 sets	8 per set	B	
Fuse Puller	2	8	B	
Hammer – Claw and Ball Peen	3 each	5 each	B	
Hand Conduit Benders - E.M.T. ( $\frac{1}{2}$ " – $1\frac{1}{4}$ " ), Rigid ( $\frac{1}{2}$ " to 1"), Rigid PVC , Heat Gun/Blanket	6 of each up to 1" and 1 each of larger sizes		B	
Hand-held Ratchet Wire Cutter	1	15	B	
Hole Saw	1 set	15 per set	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION				
Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Knockout Punch Set - Hand and Hydraulic	1 of each (up to 2")	15 each	B	
MI Cable Potting Tool	1	15	B	
MI Cable Stripper	1	15	B	
Multimeter CAT-III	3	5	B	
Multiple Lock-Out Devices (Scissors and breaker-lock)	1 of each	15 each	B	
Nut Driver Set (Imperial and Metric)- Hollow Shaft	1 set of each	15 per set	B	
Pipe Cutters (½" to 2")	1 set	15 per set	B	
Pipe Stand	1	15	B	
Pipe Threaders (½" to 2")	1 set	15 per set	B	
Pliers - Diagonal Side-Cutting Lineman's Side-Cutting Needle Nose Pump (slip joint) 8" or 9" pliers	2 of each	8 per each	B	
Pry Bar	1	15	B	
Reamers	1 set	15 per set	B	
Rubber Mallet	1	15	B	
Safety Padlocks	5	3	B	
Screwdrivers: Robertson #1, #2 and #3, Phillips #1 and #2, Standard (3 sizes)	2 of each	8 per each	B	
Screw Extractor Set	1 set	15 per set	B	
Socket Set (3/8" and ½" drive)	1 set of each	15 per set	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION				
Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Stud Finder	3	5	B	
Tap and Die Sets (Metric and Imperial)	1 set of each	15 per set	B	
Tin Snips	1 set	15 per set	B	
Torque Wrench	1	15	B	
Wood Chisel	2 sets	8 per set	B	
Power Tools				
Chop Saw	1	15	B	
Circular Saw	1	15	B	
Fish Tape – Metal/Fiberglass	1	15	B	
Grinder – Bench	1	15	B	
Hydraulic / Electric Conduit Bender	1	15	B	
Jig Saw	1	15	B	
Percussion Drill – Hammer (Electric)	1	15	B	
Power Drill (Corded and/or Rechargeable)	3 (2 x 3/8", 1 x 1/2")		B	
Power Pipe Cutter and Threaders	1	15	B	Optional
Reciprocating Saw	1	15	B	
Vacuum (Shop Vac)	1	15	B	
Measuring Equipment				
Ammeter CAT-III (Clip on)	2	8	B	
Polarity Tester (Receptacle plug-in type with ground fault tester)	2	8	B	



SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION				
Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Megohmmeter CAT-III	2	8	B	
Micrometer	1	15	B	
Multimeter CAT-III	2	8	B	
Oscilloscope	1	15	A	
Phase Rotation Meter	1	15	A	
Tachometer	1	15	B	
Thermometer (Infrared and Electronic)	1	15	B	
Voltage Tester Probe	2	8	B	
Miscellaneous				
Arc Fault Breakers	8	2	B	
Block and Tackle	1	15	B	
Come-Along	1	15	B	
Drill Bits for Steel and Concrete	2 sets of each	8 per each set	B	
Drill Bits (Wood) – Spade and Auger	2 sets of each	8 per each set	B	
Drill Press	1	15	B	
Flashlight	3	5	B	
Fiberglass Ladder - Extension	1	15	B	
Fiberglass Ladder - Step	8	2	B	
GFCI Breakers	8	2	B	
Grounded Extension Cord	3	5	B	
Heat Gun	2	8	B	

SECTION B: TOOLS AND EQUIPMENT REQUIRED BY TRAINING INSTITUTION				
Item	Units per 15 Students	Maximum Students per Unit	Required for Entry (E) Advanced (A) Both (B)	Comments
Nylon Slings	2	8	B	For demonstration only
Powder-Actuated Tools	1	15	B	
Rope – 100 ft	1 roll	15	B	For Rigging course Objectives
Scaffolding (braces, decks, toe boards, railings, wheels, levellers)	1 assembly	15 per assembly	B	2 sections
Shackles (1" to 3")	1 set	15 per set	B	For Rigging course Objectives
Sledgehammer	1	15	B	
Soldering Apparatus/Equipment - Electric and Non-Electric	1 kit of each	15 per kit	B	
Thermal Mould and Apparatus – Tee, Ground Rod	1 each	15 of each	B	

Note: If identifying sets, please include specific information.