

OCCUPATIONAL
TOOL AND EQUIPMENT LIST

Ironworker (Generalist)



Government of Newfoundland Labrador
Department of Education
Institutional & Industrial Education Division

September 2009

Preface

This document is intended as a companion to the 2009 Plan of Training for the **Ironworker (Generalist)** occupation. It identifies the necessary tools and equipment required by apprentices and training institutions for the completion of apprenticeships.

Acknowledgements

Advisory committees, industry representatives, instructors and apprenticeship staff provided valuable input to the development of this document. Without their dedication to quality apprenticeship training, this document could not have been produced.

We offer you a sincere thank you.

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Note:

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

Tools and Equipment List Ironworker (Generalist)

SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT			
Item	Units for Individual Students	Required for Entry (E) Advanced (A) Both (B)	Comments
Hand Tools			
Adjustable Wrench	1	B	Item is listed for both Student and Institution
Bolt Bag	1	B	Item is listed for both Student and Institution
Chipping Hammer	1	B	Item is listed for both Student and Institution
Flashlight	1	B	Item is listed for both Student and Institution
Hammer (4lb)	1	B	Item is listed for both Student and Institution
Knives	1	B	Item is listed for both Student and Institution
Pliers	1 set	B	Item is listed for both Student and Institution
Rod Bag	1	B	Item is listed for both Student and Institution
Side/Diagonal Cutters	1	B	Item is listed for both Student and Institution
Tool Belt	1	B	
Measuring and Layout Equipment			
Measuring Tape	1	B	Item is listed for both Student and Institution
Personal Protective Equipment (PPE)			
Chin Straps (Hat)	1	B	Item is listed for both Student and Institution
Coveralls (Fire Retardant)	1	B	
Ear Plugs	1	B	Item is listed for both Student and Institution
Face Shield	1	B	Item is listed for both Student

SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT

Item	Units for Individual Students	Required for Entry (E) Advanced (A) Both (B)	Comments
			and Institution
Gloves	1	B	Item is listed for both Student and Institution
Goggles	1	B	Item is listed for both Student and Institution
Hard Hat	1	B	Item is listed for both Student and Institution
Insulated Gloves	1	B	Item is listed for both Student and Institution
Rubber Gloves	1	B	Item is listed for both Student and Institution
Safety Belt	1	B	Item is listed for both Student and Institution
Safety Glasses	1	B	Item is listed for both Student and Institution
Safety Vest	1	B	Item is listed for both Student and Institution
Steel Toe Boots	1	B	
Welding Gloves	1	B	Item is listed for both Student and Institution
Welding Helmet	1	B	Item is listed for both Student and Institution
Welding Jacket	1	B	Item is listed for both Student and Institution
Welding Shield	1	B	Item is listed for both Student and Institution

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
Hand Tools				
Adjustable Wrench	3	5	B	Item is listed for both Student and Institution
Aligning Bar (Sleeve Bar)	1	15	B	
Allen Key Set	1 set	15 per set	B	
Bar clamps (6", 8" and 12")	2 of each	8 per each	B	
Beam Clamps	1	15	B	
Bolt Bag	3	5	B	Item is listed for both Student and Institution
Bolt Cutters	1 set	15 per set	B	
Centre Punch	6	3	B	
Chalk Line	2	8	B	
Chipping Hammer	3	5	B	Item is listed for both Student and Institution
Cold Chisel	2	8	B	
Combination Square	2	8	B	
Combination Wrench Set	1 set	15 per set	B	
Drill Bits (Asst Sizes)	1 set	15 per set	B	
Files (Asst Sizes)	1 set	15 per set	B	
Flashlight	3	5	B	Item is listed for both Student and Institution
Hack saw	6	3	B	
Hammers (sledge)	2	8	B	
Hammers (4 lb)	3	5	B	Item is listed for both Student and Institution
Knives	3	5	B	Item is listed for both Student and Institution
Knocker (slam wrench)	1	15	B	
Needle Nose Pliers	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
Nut Drivers	1 set	15 per set	B	
Pins (drift, and bull)	1 of each	15 per each	B	
Pipe Cutters	1 set	15 per set	B	
Pipe Wrench	1	15	B	
Pliers	3 sets	5 per set	B	Item is listed for both Student and Institution
Pry Bar	2 sets	8 per set	B	
Punch	1 set	15 per set	B	
Reamers (asst. sizes but require ¾")	1 set	15 per set	B	
Reel Wire Holder	1	15	B	
Rod Bag	3	5	B	Item is listed for both Student and Institution
Scrapers	6	3	B	
Screwdrivers: Robertson, Phillips, Flat Blades	2 of each	8 for each	B	
Side/Diagonal Cutters	3	5	B	Item is listed for both Student and Institution
Socket Set	1 set	15 per set	B	
Spud Wrench	1	15	B	
Tap Set	1 set	15 per set	B	
Die Set	1 set	15 per set	B	
Tin Snips	2 sets	8 per set	B	
Tool Bucket	6	3	B	
Wire Brush	10	2	B	
Power Tools and Equipment				
Air Chisel	1	15	B	
Band Saw/Electrical Saw	1	15	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
Chop Saw	1	15	B	
Circular Saw	1	15	B	
Compressor	1	15	B	Can be a possible rental
Disk	12	2	B	
Gas Cut-off Saw	1	15	B	
Generator	1	15	B	
Grinder (bench)	2	8	B	
Grinder (portable)	6	3	B	
Hammer Drill	1	15	B	
Hydraulic Jacks	1	15	B	
Bottle Jacks	1	15	B	
Impact Gun (Electric)	1	15	B	
Impact Gun (Air)	1	15	B	
Mag Drill	1	15	B	
Peening Tool	1	15	B	
Pencil Grinder	1	15	B	
Porta Band Saw	1	15	B	
Powder Actuated Tool	1	15	B	
Power Drill	1	15	B	
Reciprocating Saw	1	15	B	
Riveting Gun	1	15	B	
Tension Control Gun	1	15	B	\$400 - \$500 minimum value - Can be a possible rental
Measuring and Layout Equipment				
Bevel Squares	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
Builders Level	2	8	B	
Measuring Chain	1	15	B	
Measuring Tape	3	5	B	Item is listed for both Student and Institution
Optical Levels	1	15	B	
Piano Wire	1 roll	15 per roll	B	
Plumb Bob	6	3	B	
Rod Level	1	15	B	
Scale/Slide Rule	1	15	B	
Squares (Framing, Combination)	1	15	B	
Straight Edges	1	15	B	
Torpedo Level	1	15	B	
Transit	1	15	B	
Tripod	1	15	B	
Safety Equipment				
Air Movers (Fans)	6	3	B	
Anchor Points	7	2	B	
Cables/Life Lines	7	2	B	
Chin Straps (Hat)	3	5	B	Item is listed for both Student and Institution
Eye Wash Facilities	1	15	B	
Fire Blankets			B	as per fire inspection regulations
Fire Extinguishers			B	as per fire inspection regulations
Guard Rails			B	where necessary
Life Lines	1	15	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
Portable Lighting	1	15	B	Can be a possible rental
Ropes (Fiber)	1 coil	15	B	
Ropes (Wire)	6 wire	3	B	
Stanchion Posts	1	15	B	
Warning Tape	1 roll	15 per roll	B	
Welding Flash Screens (Stationary/Portable)	15	1	B	where less than 15 a rotation is required
Personal Protective Equipment (PPE)				
Chin Straps (Hat)	3	5	B	
Coveralls (Fire Retardant)	1	15	B	
Ear Plugs	3	5	B	Item is listed for both Student and Institution
Face Shield	3	5	B	Item is listed for both Student and Institution
Fall Arresters	1	15	B	
Full Body Harness	15	1	B	
Gloves	3	5	B	Item is listed for both Student and Institution
Goggles	3	5	B	Item is listed for both Student and Institution
Hard Hat	3	5	B	Item is listed for both Student and Institution
Insulated Gloves	3	5	B	Item is listed for both Student and Institution
Retractable Lanyard	1	15	B	
Rope Grabs	1 set	15 per set	B	
Rubber Gloves	3	5	B	Item is listed for both Student and Institution
Safety Belt	3	5	B	Item is listed for both Student and Institution
Safety Glasses	3	5	B	Item is listed for both

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
				Student and Institution
Safety Vest	3	5	B	Item is listed for both Student and Institution
Welding Apron	1	15	B	
Welding Gloves	3	5	B	Item is listed for both Student and Institution
Welding Helmet	3	5	B	Item is listed for both Student and Institution
Welding Jacket	3	5	B	Item is listed for both Student and Institution
Welding Shield	3	5	B	Item is listed for both Student and Institution
Scaffolding and Access Equipment				
Aerial Work Platforms	1	15	B	Can be a possible rental
Aluminum Framed Platform with Planks	1	15	B	Can be a possible rental
Extension Ladder	1	15	B	
Sawhorses	2	8	B	
Stepladders	1	15	B	
Tube and Clamps	1	15	B	
Overhead Crane	1	15	B	Minimum 5 ton
Specialty Tools and Equipment (Welding and Cutting Tools)				
Arc Air (Gouger)	1	15	B	
Arc Welding Machine	7	Rotation schedule needed for class of 15	B	
Cutting Tools (oxygen, acetylene, propane (propane is optional))	1 set	15 per set	B	
Cutting Tool Torches	3 sets	6	B	
Cutting Tool Gauges	3 sets	6	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
Cutting Tool Hoses	3 sets	6	B	
MIG welder	1	15	B	
Plasma Cutter	1	15	B	
Stud Welding Equipment	1	15	B	
Stud Welding Gun	1	15	B	
Tiger Torch	1	15	B	
Handling Equipment				
Boom Trucks	1	15	B	An be a possible rental
Chain Falls	1	15	B	
Come-Along	1	15	B	
Pallet Jack	1	15	B	
Rigging Equipment				
Cable Clamps	12	2	B	
Dunnage (wood)			B	As needed
Equalizer Beam (part of boom truck)	1	15	A	
Fiber Rope	1 coil	15	B	
Hooks	1 set	15	B	
Shackles	1 set	15	B	
Softeners (Cardboard etc.)			B	As needed
Spreaders	1	15	B	
Synthetic Slings	1	15	B	
Turnbuckles	1	15	B	
Wire Rope	1 coil	15	B	
Wire Rope Slings	1	15	B	

Note: If identifying sets, please include specific information.