

OCCUPATIONAL TOOL AND EQUIPMENT LIST

Ironworker (Generalist)



Government of Newfoundland Labrador
Department of Education and Early Childhood Development
Apprenticeship and Trades Certification Division

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Preface

This document is intended as a companion to the 2012 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

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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

SECTION A: TOOLS AND EQUIPMENT REQUIRED BY STUDENT

Item	Units for Individual Students	Required for Entry (E) Advanced (A) Both (B)	Comments
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 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

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 (Sleever 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

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
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	
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 $\frac{3}{4}$ "")	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	

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
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	
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	

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
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	Can be a possible rental

Measuring and Layout Equipment

Bevel Squares	2	8	B	
Builders Level	2	8	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	

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
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
Life Lines	1	15	B	
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

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
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 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				

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
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	
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				

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
Boom Trucks	1	15	B	Can 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	