



# TRAINING DESCRIPTIONS

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## H2H: Helmets to Hardhats. WIT: Women in the Trades

**Basic Building Science & Weatherization: (Fairbanks Only)** Training covers the basics of building science, including the theory of blower door use, general air sealing, attic weatherization, identification of specific home weatherization problems, and health and safety hazards on the job.

**Building Foundations & Formwork:** Training covers 3-days of the basics of building the concrete forms required for a strong foundation for any structure. This course includes training on the safe use of the hand and power tools needed for this type of work, common types of hardware used when building concrete forms, building concrete footing and concrete wall forms, and setting forms to elevation.

**Building Maintenance:** Training covers building maintenance and repair: Installing door hardware and finished trim, framing metal stud and wood walls with window and door openings, sheetrock, mud, tape and texture patch and repair, basic plumbing and electrical. Trades math with layout using 3-4-5 method. Introduction to cabinets and countertops, and flooring basics.

**Carpentry:** Training covers the basics of carpentry and trades math, including accurate reading and use of tape measure, and safe use of hand and power tools. Using skills learned in class, participants completed the following projects: measuring needed openings and sheetrock penetrations, cutting blocks with Skilsaw, build a foot stool, nail box, and a set of stairs. Construction site education, safety, and carpenter expectations also covered.

**Electrical Wiring:** Training covers basic electrical theory, electrical code, and tool safety. Hands-on training includes wiring of switches, GFCI receptacles, duplex receptacles, panels, 3-way and 4-way switches, and bending EMT conduit. Students apply the skills they learn by assembling and wiring a lamp with a light switch, outlets, and USB receptacles.

**First Aid/CPR/AED:** Combines adult CPR, AED, and first aid training in a program designed for the occupational first aid provider. This comprehensive program meets OSHA and other federal and state regulatory requirements for training people how to respond and care for medical emergencies at work.

**Forklift Safety:** Topics Covered: Pre-operation inspection and site safety, basic operation, using approved attachments, safely lifting and carrying a load, forklift physics (fulcrum, moment, load center, center of gravity, etc.), and hazard awareness. Participants practice on a powered industrial lift truck: CareLift Model ZB8044-44.

**Framing & Sheetrock:** Training covers the basics of carpentry and trades math. Accurate reading and use of a tape measure, 3-4-5 layout method and safe use of power tools. Hands-on covers layout and framing of walls which will be attached at partitions and squared. Material handling, storage, layout, cutting, application and installation of sheetrock, patch/repair of sheetrock. Participants also learn the difference between using metal and wood studs.

**Heavy & Light Duty Mechanics:** Training covers heavy/light duty mechanics. Modules included: Tools of the trade and use, lube oil and service, D/C electrical, hydraulic systems, and welding. Job site safety is also covered in the instruction.

**Heavy Duty Service Oiler:** Training covers: an introduction to apprenticeship, road construction, shop work, pit work, fuel points, lube points, oil points, inspection, and problem identification. Also covered will be specific duties of an oiler, responsibilities, punctuality and skill set, work ethic expectations, time management and attitude.

**Heavy Equipment Operating:** Training covers hands-on practice on heavy equipment including; Hydraulic Excavator, Dozer & Front-end Loader. Training Included: 1) How to conduct pre-operational 360\* walk-arounds 2) Control familiarization 3) Basic equipment functions 4) Basic operating practices techniques 5) Safety rules and practices.

**How to Read Building Plans:** Training covers residential print reading skills, abbreviations, plot plans, foundation plans, floor plans, exterior elevations, section views, details, framing plans, door & window schedules, finish schedules and specifications.

**Intro to North Slope Pipeline Construction: (Fairbanks Only)** Training includes an introduction to pipeline construction and the various types of work Construction Craft Laborers are responsible for. May include basic hoisting and rigging, scaffolding, insulation of pipe among other job duties performed working on the Trans Alaska Pipeline System or on North Slope oil fields.

**Intro to Plumbing:** Key training topics: Introduction to copper tubes: properties and applications, safety precautions for working with copper tubes and associated equipment, soldering techniques, brazing fundamentals, tube bending techniques, joint inspection and quality control and common applications and industry best practices.

**Intro to Welding:** Training highlights: Introduction to Shielded Metal Arc Welding (commonly known as stick welding), welding techniques, hands on practice, safety precautions, common applications and industry best practices.

**Intro to Welding Fabrication:** Training covers the techniques used in the maintenance and repair of heavy equipment. Participants will learn / practice the safe process of oxy-acetylene cutting and arc welding as well as the proper use of tools and jobsite safety.

**Introduction to Concrete:** Training provides foundational hands-on skills in the placement, curing, finishing and safe work practices in the concrete industry. Please wear work clothes and boots that you don't mind getting dirty in. Other required supplies will be provided. This is an introduction to working with concrete, which is a critical component of the construction industry.

**Ironwork & Welding:** Training covers vertical and horizontal stick welding, MIG welding, oxygen and acetylene cutting, hands-on tools and materials, hazard awareness, work site safety. Identify and use safe welding practices, identify joint design and fit-up, set up a welding machine, and identify electrode selection. Participants learn basic steel rebar wire tying and steel reinforcing practices, basic structural ironworking and rigging practices.

**Laborers Scaffold User:** Training covers correct procedures for erecting, disassembling, moving, operating, maintaining scaffold, proper use and handling of material on the scaffold, fall protection, falling object protection, and the associated safety wear.

**Maritime Deep Dive Into Sea-Going Jobs:** This training is a deep dive into careers on or near the water (maritime). It will highlight the different sectors you can work in, how much they pay, and what training or credentials are necessary for you to work in the industry. There will be a particular emphasis on the sea-going career opportunities called "mariners". This training will include as few lectures as possible, videos, panel discussions, and tours and is packed with hands-on activities... like survival gear races; building a personal survival kit; knot tying; hands-on exercises to show how electricity, hydraulics, and engines work; a tour of the Port of Alaska; a tour of a TOTE Maritime Alaska Ship; First Aid / CPR / AED.

**OSHA 10: (Former Students Only)** Provides entry level construction workers information about their rights and employer responsibilities and how to file a complaint. Emphasizes how to identify, abate, control, avoid and prevent job related hazards on a construction site. Covers a variety of construction safety and health hazards which a worker may come across on a job site.

**Plumbing, Pipefitting & Welding:** Training covers soldering and brazing, oxy acetylene torch set-up and cutting, pipe threading, pro-press fittings and methods of joining. Introduction to SMAW, welding-metallurgy, waste, drainage, vent fittings, soil pipe methods of joining and cutting, plumbing fixtures and roof drains. Plumbing and pipefitting tools, pipe beveling, Oakie Beveller and Tri-Tool. Hangers, supports, valves and use of ladders, hangers, supports, valves and use of ladders, and plumbing codes.

**Plumbing & HVAC: (Anchorage Only)** Training covers basic plumbing systems and codes. Hands-on will include: soldering of pipes, installation of pex fittings, threading pipe, and setting plumbing fixtures. This training will also cover basic HVAC to include how a basic refrigeration cycle works, boilers and boiler maintenance, and simple low voltage control systems for heating systems.

**Power Tools:** Training covers the ability to quickly and accurately use a tape measure and the general safety, size, types, marking and cutting of lumber. Safety, operation and proper use of a variety of power tools used in the construction industry including; Orbital sander, finish sander, compound miter saw, router, jig saw, kreg jig, drill, impact driver, and belt sander. Students will construct small projects and complete tasks using various power tools.

**Residential Wood Framing:** Training covers layout for wood framing using 16 & 24-inch O.C. layout, design placement and use of wall framing, door and window components. Conventional gable roof framing techniques are also covered for wood rafters, ceiling joist, lookouts, barge rafters and roof sheathing.

**Rigging, Piledriving & Welding:** Training covers the basics of the Piledriving trade including; safe hoisting & rigging techniques, universal hand signals, rigging mathematics, types of pile, welding & splicing, cast in place concrete, etc.

**Rough Terrain Forklift:** Topics covered include pre-operation inspection and site safety, basic operation, using approved attachments, safely lifting and carrying a load, forklift physics (fulcrum, moment, load center, center of gravity, etc.), hazard awareness. Participant practice on a rough terrain Class 7 lift truck.

**Sheet Metal & HVAC:** Training covers the basics of Sheet Metal Work. Learn to build 3-D objects from flat sheets of metal. Learn about HVAC systems and how to fabricate and install ductwork. Use your brain to calculate cut sizes, your hands to fabricate intricate sheet metal pieces and your brawn to install the piece where it belongs.

**Sheetrock & Taping:** Training covers materials, handling, storage, layout, cutting, application, and installation of sheetrock (drywall) along with proper application of joint compound, tape, and corner bead to provide finished appearance to sheetrock.

**Structural Welding:** This introduction to welding workshop starts with safety first. Using an oxy-acetylene torch, students learn how to cut, prep, and fit metal test coupons. Students will then practice and test their skills with structural welding in multiple positions using the Shielded Metal Arc (SMAW) and Flux-Cored Arc (FCAW) welding processes.

**Telecommunications Workshop:** Training covers exposure to basic principles in the telecommunications industry including outside plant line and splicing work, installation and repair, simple termination and testing of category cabling, network interface device installation techniques, and other hands-on techniques as it relates to modern telecommunications and light and fiber optics.

**WIT Truck Driver (Apprenticeship): (Anchorage Only)** Participants must already have their Instructional A, Commercial Learners Permit (CLP-IA). This one-week training will begin with basic operation and safe operating practices along with the hands-on introductory skills and fundamentals of driving a tractor-trailer in the professional trucking industry. Upon completion of this introductory program to be considered for entry into the Teamster Freight Transport or Construction Truck Driver Apprenticeship, participants are expected to complete a final exam successfully demonstrating an understanding of safe vehicle operation, basic skill progression, and fundamental backing skills.

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