

## Sample High School Intern Positions – Construction and Sustainability

### Carpentry Intern

#### Responsibilities:

- Assist journeyman carpenter with a variety of carpentry related tasks (sanding, painting and patching, installation, demolition).
- Help install foundations, walls, floors, ceilings, and roofs using materials such as wood, steel, metal, concrete, plastics and composites of multiple materials.
- Measure, cut and shape wood, metal, plastics and fiberglass.
- Report concerns and questions to journeyman carpenter.
- Hold plumb bobs, sighting rods, or other equipment to aid in establishing reference points and lines.
- Keep a clean work area.
- Assist journeyman in gathering tools and materials.
- Assist in the layout of work.
- Select tools, equipment and/or materials from storage and help transport to worksite.
- Erect scaffolding and ladders for assembling structures above ground levels.

#### Qualifications/Requirements:

- Must know how to use different types of carpentry tools.
- Can read basic blueprints.
- Has basic math skills: addition, subtraction, multiplication, and division of whole numbers, fractions and decimals.
- Knowledge of the occupational hazards and safety precautions of the construction trade.
- Manual dexterity.
- Physical ability: able to lift and carry items weighting up to 50 pounds.
- Position requires extensive walking, bending, kneeling and climbing on ladders.
- Able to follow detailed instructions.
- Eagerness and willingness to learn and receive instruction/direction.

### Construction Helper/Parts Runner

#### Responsibilities:

- Assist journeymen, foremen and construction workers on site and maintain a safe worksite.
- Load and unload materials to be used in construction.
- Distribute tools and materials to workers around the jobsite.
- Take tool request and make runs to shop.
- Assist in the building and taking down of scaffolding.
- Maintain the cleanliness of the shop and worksite.
- Keep all floor-mounted power tools wiped down (drill press, grinders, parts washer).
- Keep ground free of tire hazards such as nails and welding rods.
- Manage and organize tools and construction site materials.
- Assist with basic construction activities when needed.
- Handle hazardous materials and spills in yard immediately.
- Practice workplace safety rules.

### **Qualifications/Requirements:**

- Experience with basic hand and power tools.
- Familiarity with blueprints and measuring tape.
- Great listening and communication skills.
- Strong organizational skills.
- Must have reliable transportation and be punctual.
- Ability to pass a drug test.
- Physical requirements: ability to work in high-heat environments; good hand/eye coordination and manual dexterity; and lift and carry up to 70 pounds.

## **Welder Helper**

### **Responsibilities:**

- Help set up equipment and furnish hand tools, materials and supplies to the mechanics.
- Prepare the materials needed by the welders.
- Cut and clamp pieces in position.
- Lift, move and hold work pieces to a table, or into position as directed.
- Use clamps, pry bars, hammer or wedges during welding process.
- Put together stainless steel parts per documentation.
- Assist in welding and finishing activities, including welding along vertical or overhead lines as needed.
- Calculate distances and accurate measurements.
- Maintain a clean, organized workspace.
- Practice workplace safety rules.

### **Qualifications/Requirements:**

- Basic hand and power tool training or experience: drill motors, cutoff saws, grinders, belt sanders.
- Knowledge of how to read blueprints and use a measuring tape.
- Basic knowledge of MIG and TIG welding processes, preferred.
- Good knowledge of mechanical and electrical equipment
- Experience with sheet metal preferred
- Great listening and communication skills
- A teachable attitude, and willingness to follow the instructions of project lead
- Able to pass a color vision assessment to ensure ability to perform the essential functions of the job by adequately discerning different colors.
- Physical requirements: ability to work in high-heat environments; good hand/eye coordination and manual dexterity; and lift and carry up to 70 pounds.

## **HVAC Installation Helper**

### **Responsibilities:**

- Perform basic technical tasks related to assisting in HVAC installation.
- Help set up equipment and furnish hand tools, materials and supplies to the mechanics.
- Work alongside sales, customer service and dispatch to keep track of ongoing projects.

- Maintain a clean, organized job site and a well-inventoried truck.
- Help diagnose HVAC system problems.
- Calculate distances and accurate measurements.
- Stay up-to-date on knowledge of multiple brands of residential HVAC equipment.
- Practice workplace safety rules.
- Communicate technical information about installation to nontechnical clients in a clear manner.
- Troubleshoot installation problems if needed.

#### **Qualifications/Requirements:**

- Basic knowledge of low-voltage wiring.
- Basic technical and duct work fabrication skills preferred.
- Good knowledge of mechanical and electrical equipment.
- Willingness to be trained in the installation of HVAC units.
- Great customer service, listening and communication skills.
- Self-motivated, reliable and able to work independently.
- A teachable attitude and willingness to follow the instructions of project lead.
- Physical requirements: ability to stand, kneel, or crouch for long periods; ability to work in high-heat environments; good hand/eye coordination and manual dexterity; ability to climb ladders; and lift and carry up to 70 pounds.

### Plumber's Helper

#### **Responsibilities:**

- Assist lead plumber in installing, inspecting and maintaining plumbing for new construction, water and sanitary units, as well as heating and sprinkler systems.
- Measure, cut, thread and assemble new pipe, placing the assembled pipe in hangers or other supports.
- Cut or drill holes in walls or floors to accommodate the passage of pipes.
- Cut pipe and lift up to fitters.
- Use hand tools to fit or assist in fitting valves, couplings or assemblies to tanks, pumps or systems.
- Mount brackets and hangers on walls and ceilings to hold pipes, and set sleeves or inserts to provide support for pipes.
- Excavate and grade ditches.
- Disassemble and remove damaged or worn pipe.

#### **Qualifications/Requirements:**

- Experience with basic hand and power tools.
- Knowledge of residential and commercial plumbing.
- Ability to read blueprints.
- Great listening and communication skills.
- Strong organizational skills.
- Must be a team player.

- Physical requirements: ability to work in high-heat environments; good hand/eye coordination and manual dexterity; and lift and carry up to 70 pounds.
- Familiarity with OSHA 10 certification preferred.

Adapted from material created by the NYC Labor Market Information Service, CUNY Graduate Center.