

## **SHEET METAL WORKER TITLE DEFINITION**

### **I. DEFINITIONS**

#### **SHEET METAL WORKER**

This is journey level sheet metal work. Employees perform sheet metal work at the journeyman level of skill under general supervision. Positions fabricate, assemble, install, and repair sheet metal products and equipment such as ducts, control boxes, drainpipes, and furnace casings. Work may involve any of the following: setting up and operating fabricating machines to cut, bend, and straighten sheet metal; shaping metal over anvils, blocks, or forms using hammer; operating soldering and welding equipment to join sheet metal parts; inspecting, assembling and smoothing seams and joints of burred surfaces. Sheet metal work is performed at the journey level of skill, normally on a full time basis; however, other related duties may also be assigned as necessary. Positions in this title may also direct and instruct apprentices, helpers and other assistants.

Positions are responsible for performing any combination of the following duties:

- Determine project requirements, including scope, assembly sequence, and required methods and materials, according to blueprints, drawings, and written or verbal instructions.
- Drill and punch holes in metal, for screws, bolts and rivets.
- Fasten seams and joints together with welds, bolts, cement, rivets, solder, caulks, metal drive clips, and bonds in order to assemble components into products or to repair sheet metal items.
- Finish parts, using hacksaws, and hand, rotary, or squaring shears.
- Inspect individual parts, assemblies, and installations for conformance to specifications and building codes, using measuring instruments such as tape measures and rulers.
- Install assemblies, such as flashing, pipes, tubes, heating and air conditioning ducts, exhaust ducts, furnace casings, rain gutters, and down spouts, in supportive frameworks.
- Lay out, measure, and mark dimensions and reference lines on materials, such as roofing panels, according to drawings or templates, using calculators, scribes, dividers, squares, and rulers.
- Select gauges and types of sheet metal or non-metallic materials, according to product specifications.
- Shape metal material over anvils, blocks, or other forms, using hand tools.
- Trim, file, grind, deburr, buff, and smooth surfaces, seams, and joints of assembled parts, using hand tools and portable pneumatic power tools.
- Select materials and design and develop patterns.
- Lay out materials in accordance with blue prints, patterns, plans or measurements.
- Center punch materials to be cut and formed.
- Cut material and sheets with hand snips, square shears or other cutting tools and machines.
- Form material on stakes, brakes and other forming equipment and machines including computer operated brakes, shears, plasma machine, and other cutting machines.

- Weld and assemble such items as hangers, brackets or reinforcements and fit them into units for erection. Install hangers, assemble brackets and supports for duct work, fans and equipment.
- Punch or drill holes for rivets, bolts and screws.
- Erect scaffolding and hoisting equipment.
- Erect and fasten material specified.
- Weld and grind or file seams, joints and rough surfaces to a smooth finish.
- Weld, cut and finish stainless steel from drawings and install end product.
- Service and maintain VAV (Variable Air Volume), mixing boxes and dampers that regulate building and exhaust air.
- Air balance buildings and areas according to blueprints and specifications.
- Direct and instruct apprentices, helpers and other assistants in the trade.
- Keep records and make reports.

## **II. QUALIFICATIONS**

Graduation from high school or attainment of age 18 and completion of an apprenticeship approved by the Department of Workforce Development as a sheet metal worker. Formal recognition of status by the appropriate international or local trade organization or some type of similar formal validation of journey status may also be accepted. Persons having informal training and experience equivalent to the formal apprenticeship and journey status may also be accepted upon submission of documented proof of such training and experience. Such evidence may include letters or statements from past customers/clients and/or employers.

## **III. RELATED TITLES**

Facilities Repair Worker, Facilities Mechanic