

# SHEET METAL WORKER (SIGN HANGER & RIGGER)

## APPENDIX A

O\*NET CODE 47-4099.00

This training outline is a minimum standard for Work Processes and Related Instruction. Changes in technology and regulations may result in the need for additional on-the-job or classroom training.

### WORK PROCESSES

	<b>Approximate Hours</b>
<b>A. Fabricating Signs</b>	<b>2,000</b>
1. Studying blueprints, sketches, shop and architectural drawings, and specifications	
2. Measuring and laying out; using scale ruler, tape measure, drafting equipment, trammel points.	
3. Cutting metal, plastic, fiberglass, wood, other materials; using aviations, straight shears, power shears, bandsaw, jigsaw, table saw, reciprocating saw. Using computer-driven routing table operating punch machine.	
4. Bending metal; using foot press, hand brakes, box brake, power brake and handtools.	
5. Shaping metal; using various turning machines; hand shaping over pipes.	
6. Fastening sign parts; using pop rivets, soldering, welding, sheetmetal screws, nuts and bolts; operating drill press.	
7. Finishing signs using polishing, sanding equipment, grinding, filing, buffing.	
<b>B. Rigging</b>	<b>1,000</b>
1. Working safely on ladders, personnel lifts, and personnel platforms (bucket).	
2. Learning to make various knots with rope.	
3. Safely erecting and using pipe scaffold.	
4. Safely erecting and using rope or electric swing scaffold.	
5. Safely rigging and using boatswain chair.	
<b>C. Operating Booms and Cranes 1,000</b>	
1. Driving and properly positioning boom truck.	

2. Attaching signs, steel work, personnel platforms (bucket) and equipment to boom.
3. Hoisting signs, steel work, personnel platforms and equipment.
4. Operating cranes under direct supervision of a N.Y.S. certified crane operator.

**D. Erecting Signs** **2,000**

1. Erecting signs on:
  - a. steel structures
  - b. concrete
  - c. brick
  - d. wood
  - e. other

**E. Structures and Frames** **2,000**

1. Laying out structures and frames.
2. Assembling structures and frames.
3. Installing structures and frames
4. Sealing opening in roofs.

**F. Cutting and Burning/Welding** **2,000**

1. Using floor band saw for cutting; using jigsaw, table saw, reciprocating saw.
2. Using oxy-acetylene burning outfit.
3. Mig welding.
4. Tig welding.
5. Electric Stick (arc) welding.
6. Gas welding.
7. Brazing.

**Approximate Total Hours** **10,000**

*Apprenticeship work processes are applicable only to training curricula for apprentices in approved programs. Apprenticeship work processes have no impact on classification determinations under Article 8 or 9 of the Labor Law. For guidance regarding classification for purposes of Article 8 or 9 of the Labor Law, please refer to <https://dol.ny.gov/public-work-and-prevailing-wage>.*

# **SHEET METAL WORKER (SIGN HANGER & RIGGER)**

## **APPENDIX B**

### **RELATED INSTRUCTION**

#### **Safety**

1. Fundamentals
2. Trade Safety: Including shop safety; material handling; machinery safety and operation; lifting and carrying; personal protective clothing and devices; safety on the construction site; fall-protection; inspection of crane, cables, shackles and nylon slings; and all applicable OSHA and EPA regulations, standards, and rules.
3. OSHA 10-Hour Construction Course – if required for Public Work
4. Asbestos Awareness – minimum 4 hours (see attachment)
5. Drug and Alcohol Awareness
6. First Aid – minimum 6.5 hours every three years.
7. Sexual Harassment Prevention Training – must comply with section 201-g of the Labor Law

#### **Math**

1. Fundamentals of Mathematics.
2. Trade Math.
3. Layout.
4. Using Handbooks, Tables, Etc.

#### **Blueprints**

1. Fundamentals of Blueprint Reading and Drafting
2. Computer-Aided Drafting (CAD) – optional

#### **Trade Theory and Science**

1. Materials of the Trade.
2. Tools, Machines and equipment.
3. Rigging.
4. Sign Work-Shop.
5. Structures and Frames.
6. Field Installation.

7. Welding and Cutting.

**Crane Operator certificate of competence issued by N.Y.S. Department of Labor  
N.Y.S. Commercial Driver's License**

**Other Related Courses as Necessary**

A Minimum of 144 Hours of Related Instruction are Required for Each Apprentice for Each Year.

Appendix B topics are approved by New York State Education Department.

## ATTACHMENT TO APPENDIX B

### Asbestos Awareness

This course must be delivered by one of the following:

1. A provider currently approved by the New York State Department of Health to deliver asbestos safety training.
2. A person holding a current Asbestos Handler certificate from the New York State Department of Labor in the title of: Inspector, Supervisor, Project Monitor, Management Planner, or Project Designer.
3. Anyone otherwise approved by the New York State Education Department.

Minimum course contents must include the following:

1. Definition of asbestos
2. Types and physical characteristics
3. Uses and applications
4. Health effects:
  - a. Asbestos-related diseases
  - b. Risks to families
  - c. Cigarette smoking
  - d. Lack of safe exposure level
5. Employer-specific procedures to follow in case of potential exposure, including making a supervisor or building owner immediately aware of any suspected incidental asbestos disturbance so that proper containment and abatement procedures can be initiated promptly.

**Notwithstanding the above course requirement, employers are advised that they must also be in compliance with New York State Department of Labor Industrial Code Rule 56 at all times.**

**Employers are further advised, and must advise all apprentices, that completion of the above course requirement does not authorize any person to remove, encapsulate, enclose, repair, disturb, or abate in any manner, any friable or non-friable asbestos, asbestos containing material, presumed asbestos containing material, or suspect miscellaneous asbestos containing material.**