

INSULATION & ASBESTOS WORKER

APPENDIX A

O*NET CODES 47-2131.00

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

	Approximate Hours
A. Use and Care of Tools and Equipment	500
1. Trowel, brushes, knives, scissors, saws, pliers, tape measure, stapling gun, caulking gun.	
2. Power saw, welding machine, compressor.	
B. Material Handling	500
1. Staging.	
2. Erecting and safe use of ladders.	
3. Assembling, dismantling, and safe use of scaffolding.	
4. Handling and hoisting insulating materials.	
C. Selection and Measuring of Insulation Material	2,000
1. Reading blueprints and specifications.	
2. Selection of appropriate type of insulating material including: fiberglass, foam, cellulose, rock wool, etc.	
3. Measurement, layout and cutting of material for both straight and curved surfaces.	
D. Application of Insulation Material	2,000
1. Use of glues and adhesives.	
2. Pin and tack welding.	
3. Wire mesh and corner bead.	
4. Spraying, wiring, taping, stapling, blowing-in loose-fill insulation.	
E. Covering, Sealing, Finishing	1,800
1. Uses of, and methods of applying, aluminum, sheetmetal, plastic, canvas, tape, sealants, asphalt mastic.	

2. Cementing or banding cover in place.
3. Screwing on sheetmetal covering.

F. Firestop Penetration Work	200
1. Selection and application of appropriate endothermic materials to all penetrations through fire-rated walls, floors, assemblies.	
G. Asbestos Abatement (optional)	250
H. Lead Abatement (optional) (If in keeping with prevailing area practices.)	250
I. Mold Remediation (optional) (If in keeping with prevailing area practices.)	250
J. Other Environmental Abatement (optional) (If in keeping with prevailing area practices.)	250
Approximate Total Hours	8,000

Work Process “G” may only be undertaken if the apprentice has a current “Asbestos Handler (Worker)” certificate from the New York State Department of Labor.

If any of the optional Work Processes are not selected, the apprentice shall devote those hours to further mastery of the other Work Processes.

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>

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APPENDIX B

RELATED INSTRUCTION

Safety and Health

1. General construction site safety
2. OSHA 10-Hour Construction Course – if required for Public Work
3. MSDS
4. Personal protective equipment
5. Safe and proper use of respirator(s)
6. Use of decontamination shower
7. Ladder safety
8. Scaffold safety
9. Asbestos Safety:
 - a. If apprentice will do any handling of asbestos:
 - i. Successfully complete a course approved by the New York State
 - ii. Department of Health for “Asbestos Handler” and obtain, and
 - iii. keep current, an “Asbestos Handler (Worker)” certificate from the
 - iv. New York State Department of Labor
 - b. If apprentice will do no handling of asbestos:
 - i. Asbestos Awareness – minimum 4 hours (see attachment)
10. Lead safety
11. Awareness (required)
12. Abatement (required if Work Process “H” is selected)
13. Mold remediation
14. Required if Work Process “I” is selected
15. General environmental remediation
16. Required if Work Process “J” is selected
17. All applicable OSHA and EPA regulations, standards, rules
18. First aid/CPR – minimum 6.5 hours every 3 years

Mathematics

1. Fundamentals
2. Trade math (including measurement, practical algebra, and geometric construction)
3. Estimating
4. Basic account keeping (time and materials)

Blueprints

1. Reading blueprints for the building trades
2. Reading specifications
3. Reading codes

Trade Theory and Science

1. Basic building construction
2. Principles of heat transfer
3. Use and care of hand and power tools
4. Use and care of machines and equipment
5. Insulation requirements and characteristics of materials used in:
 - a. Plumbing, heating and air conditioning systems
 - b. Industrial, process, and power plant systems
 - c. Refrigeration systems
6. Fundamental insulation skills:
 - a. Buildings
 - b. Piping, of all temperature ranges
 - c. Vats, tanks, and vessels (commercial)
 - d. Ducts and plenum chambers
 - e. Heating and air conditioning equipment
 - f. Underground equipment
 - g. Application of protective coatings and coverings
 - h. Loose-fill and foam
7. Shop fabrication:
 - a. Layout and patternmaking
 - b. Construction
8. Industrial insulation applications:
 - a. Industrial boilers and related piping and equipment

- b. Turbines and related piping and equipment
 - c. Industrial tanks, vessels, and towers
 - d. Industrial piping
 - e. Refrigeration systems
 - f. Cryogenics
 - g. Other
9. Firestop penetration work
10. Specialty areas:
- a. Nuclear power generating equipment (optional)
 - b. Marine systems and equipment (optional)
 - c. Sound attenuation (optional)
 - d. Spraying foam

Interpersonal Workplace Skills

- 1. Industrial and labor relations (20 hours):
 - a. History and background (6 hours, first year)
 - b. Current laws and practices (14 hours, second year)
- 2. Sexual Harassment Prevention Training – must comply with section 201-g of the Labor Law

Other Related Courses as Necessary

144 Hours of Related Instruction Are Required for Each Apprentice for Each Year.

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

Some of the material in this outline was taken, or adapted, from the *Occupational Outlook Handbook*, 2004-05 edition, published by the U.S. Department of Labor.

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.