

BUILDING MAINTENANCE MECHANIC

APPENDIX A

O*NET CODE 49-9071.00

This training outline is the current standard for Work Processes and Related Instruction. Changes in technology, regulations, and safety/health issues may result in the need for additional on-the-job or classroom learning.

WORK PROCESSES

	Approximate Hours
A. Tools, Rigging and Material Handling	250
1. Safety, proper use, care and maintenance of trade-related tools, instruments, machinery, equipment.	
2. Safe use and care of ladders, scaffolds, aerial devices, lifts (if used on-the-job).	
3. Safely moving, loading, unloading materials/ heavy objects by manual methods and forklift.	
B. Cleaning and Maintaining Buildings	500
1. Following safe waste disposal and recycling procedures.	
2. Removing snow; safe operation of snowblowers.	
3. Vacuum cleaning.	
4. Sweeping stairs; removing hazardous debris.	
5. Cleaning rest rooms.	
6. Washing walls.	
7. Cleaning windows.	
8. Mopping and waxing floors.	
9. Preparing vacant areas, rooms or apartments for occupancy (at option of sponsor).	
C. Basic Electrical Maintenance	550
1. Following all safety procedures and policies.	
2. Correctly using electrical and electronic test equipment.	
3. Replacing light bulbs (incandescent, fluorescent, compact fluorescent lamp), using Personal Protective Equipment such as gloves and eye protection.	

4. Repairing and replacing defective electrical switches and outlets, including locking out of main switch.
5. Replacing fuses and circuit breakers.
6. Installing and testing smoke detectors and carbon monoxide detectors.
7. Testing, repairing and replacing boiler room controls.
8. Inspecting; performing preventive maintenance; troubleshooting.

D. Basic Carpentry Maintenance

530

1. Correctly using measuring devices.
2. Identifying names, and uses of lumber, fiberboard, composites, metal and other building materials.
3. Identifying names, and uses of fasteners, anchors and connectors including, but not limited to: nails, screws, bolts, brackets, adhesives.
4. Correctly performing calculations and making estimates.
5. Cutting, shaping, fitting or joining wood, metal or other construction material.
6. Repairing such items as: windows, doors, woodwork, trim, moldings, paneling, stairs, railings, shelves, cabinets, ceilings, floors, roofs, siding.
7. Repairing or installing hardware.
8. Building walls and partitions.
9. Building such items as: forms, crates, sheds and other outbuildings.
10. Demolition, including lead and asbestos safety.

E. Basic Plumbing Maintenance

530

1. Repairing various plumbing fixtures; including such tasks as unclogging drains, fixing leaky faucets, replacing washers, repairing flushometers.
2. Measuring, cutting and threading piping and tubing.
3. Basic soldering, brazing, welding.
4. Maintaining and performing simple repairs on heating and air-conditioning systems.
5. Inspection; preventive maintenance; troubleshooting.

F. Basic Painting/Plastering Maintenance **53**

1. Following safe waste disposal and recycling procedures.
2. Cleaning, pressure washing interior or exterior surfaces.
3. Repairing cracks, defects or damage on such surfaces as: plaster, drywall, wood, metal, etc.
4. Scraping, stripping, sanding surfaces.
5. Sealing and priming surfaces.
6. Painting interior and exterior surfaces.
7. Clear coating, varnishing, staining wood.

G. Basic Mechanical Installation and Maintenance **530**

1. Performing preventive maintenance on machines and mechanical equipment including such elements as: inspecting belts, checking fluid levels, replacing filters, lubricating, resetting controls, etc.
2. Dismantling devices to access and remove defective parts.
3. Installing parts and performing basic repairs on machines and mechanical equipment.
4. Positioning, aligning and/or leveling machines and related equipment (if applicable).

H. Basic Miscellaneous Maintenance **530**

1. Repairing or installing such items as: screening, glass, plexiglass, mirrors.
2. Repairing/minor installing of such items as: brick, block, stone, ceramic tile or other masonry material.
3. Measuring, cutting and installing floor coverings.
4. Measuring, cutting and installing insulation.
5. Supervising work of outside contractors, including basic familiarity with contract specifications.

I. Record-Keeping **50**

1. General record keeping using the computer if available.
2. Recording time and production.
3. Recording inventory of tools, stock parts, supplies and other related materials (if applicable).
4. Maintaining records and requisitions for parts or materials ordered, and outside contractor services (if applicable).

5. Maintaining repair manuals, schematic diagrams, catalogs and other related materials (if applicable).
6. Scheduling.

Approximate Total Hours 4000

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 Workplace Safety
2. 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 keep current, an “Asbestos Handler (Worker)” certification from the New York State Department of Labor.
 - b. If apprentice will do no handling of asbestos:
 - i. Asbestos Awareness – minimum 4 hours (see attachment)
3. Lead Safety
4. Proper Use of Personal Protective Equipment (PPE)
5. Right-to-Know/Material Safety Data Sheets (MSDS)
6. OSHA 10 Hour Construction Course
7. Sexual Harassment Prevention Training – must comply with Section 201-g of the Labor Law
8. First Aid – minimum 6.5 hours every 3 years
9. Fall Prevention
10. Ladder and Scaffold Safety
11. Forklift Safety (and certification as required by sponsor)
12. Proper Lifting Techniques
13. Safety in Working Around Machines
14. Welding Safety
15. Lock-out/Tag-out (LOTO)
16. Fire Extinguisher Training
17. Respirator Training including Fit Test (if applicable)

Blueprint Reading

1. Blueprint Reading

2. Mechanical Drawing
3. Reading Schematics, Specifications, Technical and Repair Manuals, Parts Catalogs

Mathematics

1. Fundamentals and Review of Basic Arithmetic
2. Applications to the Trade
3. Measurement
4. Cost Estimating

Trade Theory and Science

1. Use, Care and Maintenance of Hand and Power Tools, Machines, Equipment
2. Materials of the Trade
3. Fundamentals and Terminology of Building Cleaning
4. Fundamentals and Terminology of Electricity
5. Fundamentals and Terminology of Carpentry and Woodworking
6. Fundamentals and Terminology of Plumbing, Heating/Cooling
7. Fundamentals and Terminology of Mechanics
8. Fundamentals and Terminology of Masonry
9. Basic Electrical Repair
10. Basic Plumbing, Heating/ Cooling Repair
11. Basic Carpentry Building/Repairing
12. Types and Uses of Paints, Stains, Varnishes, Clear Coats
13. Basic Welding, Soldering and Brazing
14. Applicable Codes and Regulations
15. Introduction to Energy Conservation (at option of sponsor)

Other Workplace Skills

1. Communications Skills
2. Computer Fundamentals (if used on the job)
3. Fundamentals of Supervision

Other Related Courses as Necessary

A minimum of 144 hours of Related Instruction is 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.