

BRICKLAYER & MASON

APPENDIX A

O*NET 47-2021.00

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. Tools and Equipment	150
Care and safe use of tools and equipment including:	
1. trowels	
2. brick hammer	
3. plumb rule	
4. scaffolding	
5. cutting saws	
6. welding equipment	
B. Laying Masonry	3,000
1. Laying out work from plans, blueprints, or specifications	
2. Mixing mortar	
3. Building corner leads, or using corner poles (masonry guides)	
4. Stretching line to guide courses of masonry units	
5. Spreading bed of mortar	
6. Laying various types of masonry units	
7. Aligning courses vertically and horizontally	
8. Removing excess mortar	
9. Cutting and sawing masonry units	
10. Installing door and window lintels	
11. Repairing masonry units; replacing missing units	

C. Laying Out and Constructing Bonds (optional)	1,000
1. Common bond (American)	
2. Flemish bond	
3. English bond	
4. Garden wall bonds	
D. Working with Joints (optional)	400
Working with various types of joints, such as:	
1. flush (cut off)	
2. struck	
3. weatherstruck	
4. slicker	
5. concave	
6. beaded	
E. Laying Stone	450 – 550
1. Laying out work from plans, blueprints, or specifications	
2. Mixing mortar	
3. Spreading bed of mortar	
4. Laying first stone	
5. Laying additional courses of mortar and stone	
6. Aligning stones vertically and horizontally	
7. Anchoring stones to a wall by welding or bolting	
8. Constructing trim, sills, arches and coping (optional)	
F. Pointing, Cleaning, and Caulking	150
1. Pointing brick and stone, cutting and raking joints	
2. Cleaning stone, brick, and structural tile (water, acid, sandblast)	
3. Caulking stone, brick, and glass block	
G. Installing Building Units	525
1. Cutting and setting structural tile	
2. Cutting, setting, and pointing of special masonry units	
3. Blockarching	
4. Mixing mortar, cement, and patent mortar; spreading mortar; bonding and tying	

5. Building footings and foundations
6. Plain exterior brickwork (straight wall work; backing up brickwork)
7. Building arches, coins, columns, piers and corners
8. Planning and building chimneys, fire places, flues; and floors and stairs
9. Installing building masonry panels
10. Laying paving brick

H. Fireproofing

225

1. Building party walls (partition tile, gypsum blocks, glazed tile)
2. Standardized firebrick
3. Specialties

Approximate Total Hours 4,500 – 6000*

*Depending upon whether some or all optional components are completed.

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

1. Occupational safety
2. Material labels and data sheets
3. Eye, lung and ear protections
4. Drugs and Alcohol
5. Handling heavy materials
6. OSHA 10-Hour Construction Course – if required for Public Work
7. Asbestos Awareness – minimum 4 hours (see attachment)
8. First Aid – minimum 6.5 hours every 3 years
9. Industrial and Labor Relations
10. Sexual Harassment Prevention Training – must comply with Section 201-g of the Labor Law

Math

1. Basic math and measurement
2. Construction geometry
3. Estimating materials

Blueprints

1. Blueprint reading
2. Sketching

Physical Science

Trade Theory and Practice

1. Tools and equipment: use and care
2. Scaffolds
3. Materials characteristics
4. Layout (from drawings)
5. Mixing mortars
6. Spreading mortar
7. Laying bricks to line

8. Cutting brick
9. Corner layout and erection
10. Laying walls and corners
11. Expansion joints
12. Erecting a circular corner
13. Laying out story poles and batter boards
14. Applying masonry insulation materials
15. Pointing masonry
16. Cleaning masonry
17. Caulking masonry
18. Cleaning, sealing and finishing
19. Laying stone
20. Laying flemish and dutch bond
21. Arch construction
22. Blockarching
23. Firebox construction
24. Laying pilasters
25. Brick piers
26. Building masonry chimneys
27. Building footings and foundations
28. Building coins and columns
29. Laying paving brick
30. Welding
31. Fireproofing
32. Cutting, setting and pointing special masonry units
33. Cutting and setting rubblework
34. Erecting masonry panels

Other related courses as necessary

A total of 540 hours of related instruction is required for each apprentice.

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.