

ROOFER (3 YEARS)

APPENDIX A

O*NET CODE 47-2181.00

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. General	500
1. Loading, unloading and hoisting materials and tools. Erecting of roof scaffolds and ladders.	
2. Learning safety procedures as they relate to the handling of tar, roof scaffolds, ladders, tools and hazardous waste materials.	
3. Measuring, cutting and fitting roofing materials.	
4. Proper clothing and personal protective equipment.	
B. Built Up Roofing (B.U.R.)	1000
1. Preparing surface of roof.	
2. Regulating the heat of bitumin roof surfaces.	
3. Applying layers of insulation on roof-deck.	
4. Spreading molten bitumen over insulation.	
5. Applying partially overlapping layers of roofing felt over insulated surface.	
6. Sealing seams using additional hot bitumen.	
7. Finishing top layer by glazing to smooth finish, or embedding gravel for rough finish.	
8. Operating kettles and tankers.	
9. Flashing with bitumins.	
C. Single-Ply Roofing	500
1. Applying liquid membrane	
2. Applying EPDM, PVC CPE, CSPE or HYPALON systems.	
3. Applying modified bitumen.	

4. Applying aggregates or ballasts over composition and single-ply membranes.

D. Slope Roofing **500**

1. Applying underlayment over entire roof.
2. Nailing shingles.
3. Application of slate, tile or terra cotta Photovoltaic shingles.
4. Installing flashing with roof cement.
5. Replacing broken or missing slated or shings.
6. Awareness of removing Asbestos Shingles Roofs.
7. Identifying hips, ridges, valley; sealing ridges.

E. Dampproofing and Waterproofing **400**

1. Applying roofing materials to structures such as shower pans, decks and promenades.
2. Spraying or painting waterproofing material; attaching waterproofing membrane.
3. Applying pipe-coating.
4. Applying hot waterproofing material.
5. Applying sheet waterproofing.
6. Applying single ply waterproofing and dampproofing materials.

F. Promenade Tile Work **140**

1. Identifying and handling types of tile.
2. Making out areas to be tiled.
3. Preparing surface for tiling.
4. Laying and fitting tile with proper spacing.
5. Cleaning tiles.
6. Underlaying procedures for tile roofs.

G. Repairing/ReRoofing **460**

1. Repairing roofing shingles; repairing broken slate or tile.
2. Repairing single-plys.
3. Repairing B.U.R.
4. Reroofing and/or recovering of existing buildings.
5. Proper set up of jobs.

H. Roof Removal and Cleaning	300
I. Assembly, Maintenance and Operation of Roofing Machinery and Equipment	200
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>

ROOFER (3 YEARS)
APPENDIX B
RELATED INSTRUCTION

Blueprint Reading and Freehand Sketching

1. Blueprint Reading
2. Mechanical Drawing
3. Roofing Layout

Mathematics

1. Fundamentals
2. Trade Mathematics
3. Estimating

Safety

1. Fundamentals (4 hours, 1st year)
2. Trade Safety (12 hours, 2nd year)
3. First Aid (6.5 hours minimum every 3 years)
4. Sexual Harassment Prevention Training – must comply with section 201-g of the Labor Law
5. OSHA 10-Hour Construction Course – if required for Public Work
6. Asbestos Safety:
 - a. If apprentice will do any handling of asbestos:
 - i. Successfully complete a course approved by the New York State Department of Health for “Asbestos Handler” and obtain, and keep current, an “Asbestos Handler (Worker)” certificate from the New York State Department of Labor.
 - b. If apprentice will no handling of asbestos:
 - i. Asbestos Awareness – minimum 4 hours (see attachment)

Industrial and Labor Relations (20 hours)

1. History and Background (6 hours, 1st year)
2. Current Laws and Practices (14 hours, 2nd year)

Trade Theory and Science Related to:

1. Care and Use of Tools and Equipment
2. Materials of the Trade
3. Fundamental Principles of Covering Various Type Roofs
4. Scaffolding
5. Roofing Fasteners
6. Flashing Methods
7. Roof Drainage

Other Related Courses as necessary (such as Specifications and Building Codes)

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.