

PAINTER AND DECORATOR (STRUCTURAL STEEL AND BRIDGES)

APPENDIX A

O*NET 47-2141.00

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. Health and Safety	1,500
1. Using personal protective equipment	
a. Fall protection	
i. safety belts	
ii. full body harnesses	
iii. double lanyard systems	
iv. deceleration device	
v. static lines and safety cables	
vi. safety nets	
vii. hard hats	
2. Respiratory protection	
a. Proper care and maintenance use of:	
i. negative air	
ii. positive air	
iii. supplied air	
iv. air purifying systems	
v. half-face	
vi. full-face	
3. Fit tests	
a. qualitative	
b. quantitative	
4. Fit checks	
a. positive	
b. negative	

5. Filters
 - a. HEPA filters
 - b. charcoal filters
 - c. combination filters
6. Hearing protection
7. Eye protection
8. Protective clothing
9. Maintenance of traffic
10. Lane closures
11. Signs, cones, arrow boards, attenuator trucks
12. Movement of traffic through work area
13. Following proper flagging procedures
14. Precautions in working with chemicals
15. Identifying environmental chemicals likely to be encountered in the trade
16. Following OSHA and EPA regulations, standards, rules
17. Demonstrating knowledge of, and working in accordance with, HAZCOM training
18. Right-to-Know standards
19. Reading and following MSDS
20. Following hygiene procedures
21. Following drug and alcohol policies

B. Lead Abatement

1,500

1. Establishing a lead work area
2. Wording and placement of signs
3. Establishing a perimeter
4. Developing a safety plan
5. Designating clean areas
6. Establishing emergency response plan
7. Obtaining and processing samples
8. background soil samples
9. water samples
10. ambient air monitoring

11. Containment
 - a. Familiarization with, and use of, different classes of containment
12. Negative air
13. Dust collection systems
14. Engineering controls
15. Buildup/tear down
16. Removal of lead-based paint
17. Sand blasting
18. Water blasting
19. Recyclable grit
20. Power tool systems
21. Hand tools cleaning techniques
22. Removal of spent media
23. Venturi system vacuums
24. HEPA systems
25. Storage and handling
26. Bagging and sealing
27. Properly securing hazardous waste
28. Drums
29. Roll-off containers
30. Proper labeling
31. Removal from site
32. Decontamination
33. Tools and equipment
34. Personnel decon trailers wash stations
35. Observing proper hygiene procedures

C. Scaffolding, Rigging, Boom/Lift

500

1. Selecting and using different types of scaffolds
2. Horizontal two point suspension
3. Drop scaffolds
4. Platforms
5. Mechanical cable suspend systems sky-climber and spider
6. Rope block and fall systems

7. Single point suspension
8. Rolling scaffolds
9. Equipment
10. Identifying, selecting, and using different types and sizes of cable
11. Identifying, selecting, and using different types and sizes of rope
12. Using wire rope slings, hooks, grippers, clips, etc.
13. Using come alongs, torque wrenches, levers, etc.
14. Knots
15. Identifying, selecting, and using different types of knots
16. Mastering major knots used by bridge painters
17. Proper use and location of knots
18. Boom/Lift Operation
19. Observing all safety precautions
20. Proper use
21. Emergency operation

D. Hand Tools and Equipment 250

1. Safe use and maintenance of hand tools such as:
 - a. Brushes, rollers, manhelpers
 - b. Chipping hammers, wire brushes, scrapers
 - c. Proper care and cleaning of tools
 - d. Following safety practices in the use and cleaning of hand tools

E. Power Tools and Equipment 250

1. Safe use and maintenance of power tools such as: scalers, needle guns, air chisels, grinders, mixers, etc.
2. Safe use and maintenance of equipment such as: sandblast hoppers, compressors, generators, dust collectors, vacuum machines, hoses, air monitors, decon units, steel shot recovery units, spray machine, etc.

F. Painting of Structural Steel 2,000

1. Understanding scope of work; reading blueprints and work orders
2. Selecting and using paints:

3. Epoxies and urethanes
4. Industrial enamels
5. High solids mastic-type polymers
6. Zinc primers
7. Mixing of various types of paint
8. Proper and safe use of solvents
9. Application of paints and coatings
10. Spray painting
11. Techniques
12. Proper maintenance of spray machine, guns, hoses
13. Accessories
14. Troubleshooting/repair
15. Metalizing/thermal spraying
16. Demonstrating knowledge of the fundamentals of the process:
 - a. combustion
 - b. electrical
 - i. Metalizing equipment
 - ii. Observing all safety precautions
 - c. Surface preparation
 - d. Clean up and disposal

Approximate Total Hours 6,000

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>.

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APPENDIX B

RELATED INSTRUCTION

1st YEAR

1. Orientation
2. Explain program to apprentices
3. Describe what is expected of an apprentice
 - a. How to look and act
 - b. What are your duties
 - c. Questions
4. Industrial and labor relations
 - a. History and background
5. Materials of the trade
6. Tools of the trade
7. Basic mechanics of the trade

Safety and Health

1. Safety fundamentals
2. OSHA 10-Hour Construction Course – if required for Public Work
3. Trade safety
 - a. Rigging
 - b. Lead safety
 - c. Identification, handling, and disposal of other hazardous chemicals and materials
 - d. All applicable OSHA and EPA regulations, standards, rules
4. 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 do no handling of asbestos:

- i. Asbestos Awareness – minimum 4 hours (see attachment)
- 5. Lead abatement
 - a. Hygiene
- 6. Drug and alcohol policies
- 7. First aid (minimum 6.5 hours every 3 years)
- 8. Sexual Harassment Prevention Training – must comply with section 201-g of the Labor Law

Environmental

- 1. EPA Title X certification class (lead abatement) (32 hours)

Knots

- 1. Identifying, selecting, and using different types of knots
- 2. Major knots for bridge painters
- 3. Proper use and location of knots

Other Related Courses as Necessary

2nd YEAR

Mathematics

1. Fundamentals of trade math
2. Air flow/velocity measurements (containment)

Industrial and Labor Relations

1. Current laws and practices

Blueprints and Work Orders

1. Fundamentals of reading blueprints
2. Fundamentals of reading work orders

Lead Abatement

1. Establishing a lead work area
2. Containment
3. Removal of lead-based paint
4. Removal of spent media
5. Storage and handling
6. Decontamination

Painting of Structural Steel

1. Understanding scope of work; reading blueprints and work orders
2. Selecting and using paints
3. Mixing paint
4. Solvents
5. Application of paints and coatings
6. Spray painting
7. Metalizing/thermal spraying
8. Clean up
9. Maintenance of traffic

Other Related Courses as Necessary

3rd YEAR

Spraying

Rigging and Scaffolding

1. Identifying different types of scaffolds
2. Identifying different types of platforms
3. Equipment
4. Knots

Boom/Lift Operation

1. Safety
2. Proper use
3. Emergency operation

Sandblasting

1. Grades of blasting
 - a. Commercial
 - b. Near white metal
 - c. White metal
2. Types of blasting material
3. Proper use of equipment
4. Techniques
5. Sandblasting/recycling unit

Other Related Courses as Necessary

A minimum of 144 hours of Related Instruction is required for each apprentice for each year, for a total of at least 432 hours.

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.