

APPENDIX A

HOME PERFORMANCE LABORER (RESIDENTIAL)

(Time-Based)

D.O.T. CODE 869.463-580

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The following lists of core and concentration areas represent skills and knowledge required by a Home Performance Laborer (HPL) in the energy efficiency and residential construction industry. The skills required of an HPL are diverse and many. HPLs work on protecting a building and its interior from the elements, new housing construction, and perform services improving the energy efficiency and performance of the home. Home Performance Laborers also perform environmental remediation.

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

| | <u>Approximate Hours</u> |
|--|--------------------------|
| <u>CORE SKILLS</u> (to be completed by all HPL apprentices) | 400 |
| A. Industry Orientation | 10 |
| 1. Understanding chain-of-command | |
| 2. Following contractor-specific safety plan | |
| 3. Communicating challenges/observations to appropriate person | |
| B. Utilizing Construction Math and Basic Construction Concepts | 20 |
| 1. Measuring objects and distances | |
| 2. Calculating quantities of materials | |
| 3. Calculating volumes of materials | |
| 4. Calculating weights of materials | |
| 5. Understanding site and structure layout | |
| 6. Checking structures for plumb and level | |
| 7. Calculating area | |
| 8. Converting whole numbers and fractions to decimal form | |
| 9. Calculating slope ratios | |
| C. Installing Safety Systems and Working Safely | 340 |
| 1. Using general safe work practices | |
| 2. Working safely from heights | |
| 3. Working safely around machinery/equipment | |
| 4. Safely operating machinery/equipment | |
| 5. Practicing safe rigging and signaling | |
| 6. Maintaining all tools and equipment in safe working order | |

7. Safely using power, pneumatic, powder actuated, and hand tools
8. Safely using oxy/fuel cutting and burning equipment
9. Working safely around environmental hazards
10. Working safely in trenches
11. Working safely in confined spaces
12. Reading and following Material Safety Data Sheets (MSDS)
13. Reading and following labels on chemicals
14. Reading and following all warning signs on job
15. Installing warning signs as required by the job
16. Identifying correct Personal Protective Equipment (PPE) to use when assigned tasks
17. Using and maintaining proper PPE correctly
18. Using and maintaining fire prevention equipment (such as water, extinguishers, dropcloths, shields) as required
19. Following all electrical safety protocols
20. Using ladders safely and correctly
21. Using safe work practices when handling materials
22. Installing and maintaining guardrails/cables/barricades as instructed
23. Covering/marking/maintaining floor openings
24. Covering/marking/maintaining roof openings
25. Performing fall protection duties as instructed (monitor)
26. Installing/maintaining fall protection netting as per site safety plan
27. Reporting scaffold safety issues to proper individuals(s)
28. Keeping scaffold free of slip/trip hazards
29. Observing/respecting/maintaining all fall protection devices inherent to scaffold

D. Green Work Practices

30

1. Preparing recycle/reuse/trash storage areas
2. Following company plan for use of materials
3. Planning work to minimize waste of materials
4. Maintaining tools in good condition to minimize energy consumption
5. Turning off equipment not in use to minimize energy consumption
6. Installing/maintaining erosion control devices
7. Using spill clean kits as needed
8. Working in a manner promoting good Indoor Environmental Quality (IEQ)
9. Communicating green concerns/ideas to proper individual(s)

HOME PERFORMANCE LABORER CONCENTRATIONS

There are three concentration areas for Home Performance Laborers in New York State: 1. Weatherization; 2. Sustainable Building; 3. Green Remediation. To complete the Home Performance Laborer apprenticeship, an apprentice must satisfy the On-the-Job Training Hours and Related Instruction in two of the three concentrations.

Concentration

Approximate Hours

Weatherization

800

A. Weatherization Technician/Installer

740

1. Communicating appropriately with homeowner or representative
2. Preparing home for pressure or combustion testing
3. Estimating materials needed
4. Applying caulk sealant
5. Installing spray foam sealer
6. Installing weather stripping around doors and windows
7. Understanding and applying all electrical safety protocols specific to knob and tube wiring
8. Installing batt insulation
9. Safely operating insulation blowing machine
10. Installing blown-in insulation
11. Installing dense pack insulation
12. Installing vapor barriers
13. Sealing, repairing and insulating ductwork
14. Removing/repairing/replacing windows
15. Removing/repairing/replacing doors
16. Installing vents through roof or wall
17. Repairing drywall, siding, roofing, etc. as required
18. Cleaning and maintaining all equipment

B. Lead Renovation, Repair and Painting (RRP)

40

1. Following safety procedures for working around/disturbing lead
2. Installing any required barriers
3. Using proper PPE at all times
4. Conducting all EPA-specified tasks for lead renovation work
5. Performing any required decontamination activities.
6. Dismantling barriers and clean area as required by specific task(s)

C. Asbestos Awareness

10

1. Obeying regulations concerning work around asbestos
2. Contacting appropriate person when unanticipated asbestos is encountered

D. Mold Awareness

10

1. Obeying regulations or company policy (-ies) concerning working around mold
2. Contacting appropriate person when unanticipated mold is encountered

Sustainable Building

800

A. Materials, Plans, Specifications and Codes

50

1. Referring to plan drawings for layout locations
2. Locating materials and specifications in plans

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|--|------------|
| 3. Using drawings or plans to obtain work details | |
| 4. Using drawings or plans to calculate needed material(s) | |
| 5. Creating simple handwritten drawings as needed | |
| B. Sustainable Construction | 650 |
| 1. Preparing site for concrete via grading and compaction | |
| 2. Building or assembling concrete forms for footings, slabs, and walls | |
| 3. Installing steel reinforcement | |
| 4. Pouring, placing, and vibrating concrete for proper consolidation | |
| 5. Finishing concrete to design specifications | |
| 6. Stripping and cleaning concrete formwork | |
| 7. Performing all layout operations | |
| 8. Installing flooring and stair systems | |
| 9. Framing walls and roofs | |
| 10. Installing exterior finishing (siding, roofing) | |
| 11. Installing exterior doors and windows | |
| 12. Installing insulation and vapor barriers | |
| 13. Installing drywall | |
| C. Trench Protection | 40 |
| 1. Ensuring slope and bench trenches meet OSHA and/or state regulations | |
| 2. Installing trench protection equipment as required | |
| 3. Installing/using trench access/egress as required | |
| 4. De-watering trenches as required | |
| D. Scaffold Erection | 60 |
| 1. Building frame, tube and coupler, system, baker or pump jack scaffold | |
| 2. Maintaining erected scaffold | |
| 3. Dismantling and storing scaffold | |
| 4. Assembling and rigging suspended scaffold per local regulations | |
| 5. Safely using supported scaffolds | |
| 6. Safely using and operating suspended scaffolds | |
| 7. Safely using and operating mast climbing scaffold | |
| Green Remediation | 800 |
| A. Asbestos, Lead, and Hazardous Waste Abatement | 200 |
| 1. Preparing abatement site per applicable code(s) | |
| 2. Conducting abatement activities per applicable code(s) | |
| 3. Conducting decontamination procedures per applicable code(s) | |
| 4. Installing and maintaining negative air machines per applicable code(s) | |
| 5. Conducting barrier dismantling and cleanup activities per applicable code(s) | |
| B. Lead Renovation, Repair and Painting (RRP) | 350 |
| 1. Conducting all renovation activities using EPA-established lead-safe techniques | |
| 2. Conducting all cleanups using EPA-established techniques | |

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|---|-----|
| C. Microbial Remediation | 150 |
| <ol style="list-style-type: none"> 1. Preparing work area per local regulations 2. Conducting remediation activities per local guidelines 3. Installing and maintaining negative air machines per local guidelines 4. Conducting decontamination procedures per local guidelines 5. Conducting barrier dismantling and cleanup activities per local guidelines 6. Conducting final cleanup per local guidelines | |

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|--|-----|
| D. Water/Fire/Soot Damage Restoration | 100 |
| <ol style="list-style-type: none"> 1. Assessing damage due to fire, water, and/or soot 2. Using proper PPE 3. Testing water-damaged materials for degree of moisture 4. Removing and replacing irreparable materials 5. Conducting activities to mitigate fire, water, and soot damage 6. Calculating blower coverage and drying time based on moisture content 7. Operating vacuums, pumps, dehumidifiers and other equipment as required 8. Restoring area and contents to original condition. | |

| | |
|--------------------------|-------|
| TOTAL HOURS | 2,000 |
| (Over a two-year period) | |

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 <http://www.labor.state.ny.us/workerprotection/publicwork/PDFs/Article8FAQS.pdf>.

APPENDIX B

HOME PERFORMANCE LABORER (RESIDENTIAL)

RELATED INSTRUCTION

Related Instruction Topics for All Home Performance Laborer Apprentices

Safety

OSHA 10 Hour Construction (OSHA 30 Hour Construction may be substituted)

Fall protection

Confined space awareness (may be permit-required confined space)

Personal Protective Equipment (PPE)

First Aid/CPR – minimum 6.5 hours every 3 years

Hazard Communication/Right-to-Know

Scaffold User

Asbestos Safety

If apprentice will do no handling of asbestos:

Asbestos Awareness – minimum 4 hours (see attachment)

If apprentice will do any handling of asbestos:

Asbestos Abatement - 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

Trade Theory

Craft Orientation

Construction Math

Basic arithmetic

Applying basic mathematical formulas

Basic geometry

Measurement

Introduction to Green Construction

Definition of “green” in relation to construction work

Green rating systems overview

Alternative energy sources overview

Conserving resources

Recycling and reusing materials

Sexual Harassment Prevention Training (minimum 3 hours)

Weatherization Technician Installer (**must be completed if Weatherization Concentration is selected**)

Building Science

Communications with property owners

Sealing the envelope
Installing insulation
Insulating and repairing ductwork
Installing weatherstripping
Removing and replacing doors and windows
Installing vents
Repairing drywall
Preparing for blower door testing
Preparing for ductwork testing
Preparing for combustion safety testing
Renovation, Repair and Painting- Lead-Safe Work Practices course accredited or authorized by Environmental Protection Agency (EPA)

Sustainable Building (must be completed if Sustainable Building Concentration is selected)

Basic building plan reading
Flooring systems
Wall and roof framing
Exterior finishing-walls and roofs
Installing exterior doors and windows
Installing insulation and vapor barriers
Installing drywall
Concrete formwork and placement
Trench protection
Scaffold builder

Green Remediation (must be completed if Green Remediation Concentration is selected)

Asbestos abatement- 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
Lead abatement-complete course from EPA-accredited provider. Obtain and maintain EPA certification.
Renovation, Repair and Painting- Lead-Safe Work Practices course accredited or authorized by EPA
Microbial remediation
HAZWOPER 40-hour training
Restoration techniques

Other Related Courses as Necessary

A minimum of 144 Hours of Related Instruction is required for each apprentice for each of the two years.

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:
 - Asbestos-related diseases
 - Risks to families
 - Cigarette smoking
 - 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.