

WORK PROCESS SCHEDULE
HOME PERFORMANCE LABORER (HPL) RESIDENTIAL
O*NET-SOC CODE: 47-4099.03 RAPIDS CODE: 2004R

WORK EXPERIENCE AND RELATED TRAINING - PREFACE

The skills required of a HPL are diverse and many. They work on protecting buildings and their interiors from the elements, new housing construction, housing retro-fits and remodeling, and installing energy efficiency measures for homes. Home Performance Laborers also work in the fields of landscaping and environmental remediation.

HPLs perform many tasks on these projects, including, but not limited to: placing concrete foundations and floors; framing; cladding walls and roofs; applying interior finishes; performing demolition and deconstruction activities; conducting weatherization diagnostic testing and applying weatherization measures; planting, trimming and maintaining shrubbery and trees; installing irrigation systems; installing sod; installing and maintaining fencing; estimating, preparing, stocking and supplying materials; abating hazardous materials such as lead and asbestos; and conducting cleanup and remediation activities following damage by water, fire, or natural disaster.

To perform these tasks, HPLs use and operate a variety of tools and equipment, including chain saws, soil compactors, hand and electrical tools of all types, insulation dense pack equipment, blower doors, skid steers, drying apparatus, negative air machines, and more.

The HPL apprenticeship program provides a path to a job in the residential construction sector that pays a living wage and provides benefits. Those who graduate the program can take additional training to enhance and broaden their skills, and can use their training to help them move to supervisory positions or start their own company.

The HPL Apprenticeship Program Overview

LIUNA's HPL Apprenticeship Program consists of a minimum of 2,000 hours of OJL and a minimum of 200 hours of Related Instruction. The program is divided into two (2) parts: completion of 1,000 hours of OJL in core skills, and 80 hours of related training; and completion of 1,000 hours of OJL in one area of concentration and 120 hours of related training. Specific training in areas of concentration will depend on area need. Apprentices are encouraged to take additional training following graduation from the program to enhance and broaden their skills and increase their employability.

Core Work Skills for the HPL:

Apprentices will gain a minimum of 1,000 hours of experience in the core work skills to produce a strong foundation in the trade.

CORE WORK SKILLS

APPROXIMATE MINIMUM HOURS

Site preparation, layout, and security	200
Recognize, secure and maintain job site safety	150
Identify and work safely around environmental hazards	50
Operate and maintain hand and power tools	250
Operate and maintain equipment as required by the job	150
Identify, estimate, move, supply, stock, and store materials	200

Concentration Work Skills for the Home Performance Laborer

In addition to completion of 1,000 hours of OJL core work experience, an apprentice must complete a minimum of 1,000 hours of OJL in one of the following areas of concentration: Weatherization, Sustainable Building, Deconstruction/Retrofit, Landscaping, and Environmental Remediation.

Each area of concentration offers examples of work experience and knowledge needed to become a skilled, safe and productive HPL journeyworker. Apprentices will be placed in an area or areas of concentration depending upon industry need.

1. Weatherization

HPLs perform many activities in association with the weatherization of a residence, including, but not limited to, the following:

1. Installing air-sealing measures
2. Installing insulation of all types
3. Conducting and interpreting leakage tests for homes and ductwork
4. Interpreting infrared images for indications of heat loss
5. Replacing doors and windows
6. Repairing drywall

2. Sustainable Building

HPLs perform many activities in association with sustainable building of residences, including, but not limited to, the following:

1. Installing flooring systems and coverings
2. Framing walls and roofs
3. Installing wall and roof cladding
4. Installing doors and windows
5. Installing air-sealing measures
6. Installing insulation of all types
7. Installing interior finishes

3. Deconstruction/Retrofit

1. Deconstruction
2. Lead renovation, repair and painting (RRP)
3. Asbestos awareness
4. Mold awareness
5. Installing exterior doors and windows

6. Installing insulation, vapor barriers and drywall
7. Materials, plans, specifications and codes
8. Scaffold builder

4. Landscaping

HPLs perform many activities in association with landscaping, including, but not limited to, the following:

1. Installing lawns and plants
2. Maintaining, cutting, pruning lawns and plants
3. Installing irrigation systems
4. Installing retaining walls
5. Installing brick pavers
6. Installing and maintaining fencing of all types
7. Installing and maintaining playgrounds

5. Environmental Remediation

HPLs perform many activities for environmental remediation work, including, but not limited to:

1. Asbestos abatement
2. Lead abatement
3. Hazardous waste abatement
4. Mold remediation
5. Fire and water damage cleanup and restoration

CORE SKILLS OJL	1,000 HOURS
CONCETRATION OJL	1,000 HOURS
TOTAL HPL OJL	2,000 HOURS

RELATED INSTRUCTION OUTLINE
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The following schedule is an example of related instruction designed to complement the HPL OJL requirements. It is divided into two schedules: HPL Core, and HPL Areas of Concentration. Apprentices will complete 80 hours of related training in Core Skills and 80 hours or related training in one area of concentration for a total of 160 hours of related training.

CORE SKILLS Related Training	80 HOURS
CONCENTRATION Related Training	120 HOURS
TOTAL HPL Related Training	200 HOURS

HPL Core

A minimum of 80 hours of related instruction is required to satisfy the HPL Core requirements.

Recommended Classroom Instruction for Core Skills

**Recommended
Class Hours**

General Construction

80 hours

General Construction training is designed to prepare apprentices to enter the workforce and be safe and productive from the outset. Topics covered in this training include craft orientation; OSHA 10 hour outreach safety training; hand and power tool identification and use; construction math; material handling; scaffold user; and introduction to green residential construction.

Home Performance Laborer Areas of Concentration

A minimum of 120 hours of training for a concentration is required to satisfy HPL requirements. The JATC can select which training courses in a concentration area the apprentice should take, based on industry need.

Recommended Classroom Instruction for Concentration Skills

**Recommended
Class Hours**

WEATHERIZATION

80 hours

Weatherization Technician/Installer

Weatherization Technician/Installer training is designed to provide qualified individuals with the skills and knowledge necessary to be a safe, competent, and productive member of a weatherization crew. Participants are introduced to the basics of building science and the complex ways buildings and their systems interact with each other and the outside environment. Instruction includes the methods and materials needed to properly seal the building envelope, including replacing doors and windows; how to seal, repair, and insulate

leaky or damaged ductwork; the specifics of various types of insulation, their properties, and where and how they are best installed; and, how to interpret blower door tests and infrared images to assess the success or failure of a weatherization project.

16 hours

Lead Renovation, Repair and Painting (RRP)

Lead Renovator training prepares participants to perform renovation work using lead safe work practices. The course meets all Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) training requirements under 29 CFR Part 1926.1101 and 40 CFR Part 745.225 respectively.

Materials, Plans, Specifications, and Codes

8 hours

Materials, Plans, Specifications and Codes provides training to HPLs on basic plan reading, using construction drawings to develop material lists, and introduces the International Code Council, the International Building Code and the International Residential Code.

8 hours

Asbestos Awareness

Asbestos Awareness trains HPLs to recognize and identify components and areas of a structure, which may consist of asbestos containing materials. Participants receive instruction on the history of asbestos, health effects associated with exposure, and procedures to avoid disturbing asbestos containing materials.

8 hours

Mold Awareness

Mold Awareness instructs HPLs on the identification and health hazards, associated with the exposure to mold as well as other microbial contamination.

SUSTAINABLE BUILDING

20 hours

Flooring Systems

Flooring systems trains HPLs to install flooring systems per plans, specifications and codes. Participants will learn to identify the components of a flooring system, such as beams, girders, sills, floor joists, trusses and i-beams; their purposes and how to install them.

40 hours

Wall Framing

Wall Framing trains HPLs to layout and install wall frames and stairs in compliance with applicable codes. They will learn to identify the various components of a wall framing system; their purposes, and how to install them according to code. They will also learn to calculate the number and height of stair risers and treads, and how to construct box stairs in compliance with codes and specifications.

40 hours

Roof Framing

Roof Framing trains HPLs to layout and install roof systems in compliance with applicable codes and specifications. Participants learn to identify and install roof components properly, including, but not limited to beams, rafters, trusses, sheathing, vents, soffits, fascia, roof felt, and flashing.

Installing Exterior Doors and Windows

20 hours

Installing Exterior Doors and Windows trains HPLs to layout and install exterior doors and windows in compliance with applicable codes and specifications. Participants learn to identify door and wall components and their purpose, and learn how to install windows, doors, sliding glass doors, and garage doors.

20 hours

Installing Insulation, Vapor Barriers, and Drywall

Installing Insulation, Vapor Barriers and Drywall trains HPLs in the skills needed to ensure the building envelope is properly sealed and insulated, in compliance with applicable codes and specifications. Participants learn to identify the materials needed for each task, their purpose and how to install them.

8 hours

Materials, Plans, Specifications, and Codes

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40 hours

Scaffold Builder – Tools and PPE

Scaffold Builder training is designed to address the needs of HPLs that are responsible for building scaffolding on the job site or are required to perform job tasks while using scaffolding and is designed to meet the training requirements of 29 CFR Part 1926.454.

DECONSTRUCTION/RETROFIT

40 hours

Deconstruction

Deconstruction training teaches apprentices to systematically disassemble a structure in a manner where the building's materials can be reused and recycled. Participants will learn the safety precautions needed to control deconstruction hazards. Additional topics include the overall planning of the deconstruction job, the equipment necessary to do the work, and the measures to be taken to perform the work safely.

16 hours

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LANDSCAPING

40 hours

Planting and Lawn Installation

Training presents the proper methods of installing a lawn and a wide array of turf grasses, groundcovers, and lawn treatments. The program offers detailed procedures for lawn installation including lawn repair methods such as reseeding, installing sod, and plugging a lawn. Lawn maintenance is also discussed, including mowing, watering, aerating, de-thatching, and prevention and control of weeds and diseases.

40 hours

Pruning

The training introduces the process of pruning everything from ornamental trees and bushes to common shrubs and discusses the timing and techniques that results in successful pruning for healthy growth. Pruning training also gives specific methods for pruning hundreds of species from the cold climates to the tropics and covers plant types from ornamental bushes, evergreens, ornamental vines, and edible fruit and nut trees to houseplants. Upon completion of the training, apprentices will know about pruning: why you need to prune, when to do it and what tools are required.

Installing an Irrigation System

40 hours

Training includes information on how to select, install, and maintain the right system(s) for the landscaping needs and discusses how to plan watering zones appropriate to the climate and landscape varieties. Through instructor facilitated and extensive hands-on training, the Home Performance Laborer becomes familiar with the processes needed to assemble and install a new drip, trickle, or sprinkler system for lawns, shrubs or gardens.

40 hours

Installing Retaining Walls and Brick Pavers

This training provides the apprentice with all the information needed to integrate popular hardscape design into the overall home landscape. Included are processes for building retaining walls, flagstone and tile patios, and brick, mortar, and concrete walks and patios.

ENVIRONMENTAL REMEDIATION

40 hours

Asbestos Abatement

Asbestos Abatement Worker training prepares HPLs to work safely and productively on asbestos abatement projects. The program is designed to exceed Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) training requirements under 29 CFR Part 1926.1101 and 40 CFR Part 763 respectively.

Apprentices receive extensive instruction and hands-on training on work area preparation, decontamination facility construction and use, abatement techniques, and cleanup procedures. Special emphasis is placed on following proper procedures and developing safe work habits.

40 hours

Lead Abatement

Lead Abatement Worker training prepares HPLs to work safely and productively on lead abatement projects. The course meets all Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) training requirements under 29 CFR Part 1926.62 and 40 CFR Part 745.225 respectively. The course is mandatory for all workers conducting lead-based paint activities in target housing and child occupied facilities.

16 hours

Lead Renovation, Repair and Painting (RRP)

Lead Renovator training prepares apprentices to perform renovation work using lead safe work practices. The course meets all Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) training requirements under 29 CFR Part 1926.1101 and 40 CFR Part 745.225 respectively.

16 hours

Microbial

Microbial Remediation training instructs HPLs on the health hazards, personal protective equipment requirements, and remediation processes and techniques associated with the removal of mold as well as other microbial contamination.

40 hours

Hazardous Waste

Hazardous Waste Worker training prepares HPLs to work safely and productively on hazardous waste remediation projects. The program meets all Occupational Safety and Health Administration (OSHA) training requirements under 29 CFR Part 1910.120 – Hazardous Waste Operations and Emergency Response.

40 hours

Water Damage /Fire Restoration

Training prepares apprentices to properly evaluate loss, test damaged materials, select optimum restoration alternatives, coordinate with insurance professionals, and restore property and contents to a pre-loss condition. Training will also increase the apprentice's ability to remove excess water efficiently, to promote efficient evaporation and to establish the dehumidification conditions necessary to stop on-going damage.