

Laborers'  
International  
Union of  
North America

**LIUNA!**

**Laborers' International  
Union of North America (LIUNA)**

**Weatherization Training Program**

## THE LIUNA ADVANTAGE

LIUNA can provide training utilizing the following delivery methods:

- Established Training Centers
- Mobile Training
- Instructor On-Site

LIUNA can provide a variety of training options to match worker knowledge, employer workforce needs, and jobsite conditions.

LIUNA curriculum is accredited through one of the largest third-party accrediting bodies.

LIUNA training programs can lead to defined career opportunities and growth.

## THE LIUNA EXPERIENCE

Over forty years of employer/labor partnerships in training, education and safety

Over thirty-five years of community partnerships and resident training

- Housing Authorities
- Community Based Organizations
- Homeless Shelters
- Correctional Facilities
- Minority Outreach Program/Brownfields

Over twenty-four years of government partnerships for training and safety

- Department of Energy
- Department of Defense
- Department of Education
- EPA
- OSHA
- NIEHS
- Federal Highway Administration
- Nuclear Regulatory Commission
- Job Corps

## THE LIUNA WEATHERIZATION TRAINING PROGRAM

- Weatherization Technician/Installer: 3-Day, 5-Day and 10-Day programs
- Weatherization Supervisor Training Program: 1-Week, 3-Week, and 5 Week programs
- Energy Auditor Program: 2-Day and 1-Week programs

*Certification Training Programs; course lengths dependent upon state requirements:*

- Asbestos Abatement Worker
- Asbestos Abatement Supervisor
- Lead Abatement Worker
- Lead Abatement Supervisor
- Mold and Biological Hazard Worker

The LIUNA Weatherization Training Program (LIUNA/WTP) offers several training options tailored to meet workers' needs regardless of skill level. Whether the individual is new to the industry; has some construction skills; or brings a wealth of experience, the LIUNA/WTP has the appropriate training response. LIUNA can immediately initiate the WTP across the United States utilizing its existing network of training providers.

## **Program Model**

The LIUNA/WTP provides primarily three areas of focus – Technician/Installer, Weatherization Supervisor and Energy Auditor.

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### **LIUNA WTP - Technician/Installer**

Weatherization technicians/installers comprise the majority of the workforce needed to make homes energy efficient. Workers in this category will receive 3, 5 or 10 days of training depending on background and experiences. These options are described below.

#### **3-Day Weatherization Technician/Installer**

Individuals that have demonstrated general construction and carpentry skills will receive the following training:

- Environmental Awareness - Mold, Feces, Lead and Asbestos
- Weatherization Skills - Air Sealing, Duct Sealing, Insulation, Base-Load Measures, Window and Door Installation

#### **5-Day Weatherization Technician/Installer**

Individuals that have demonstrated general construction skills will receive training in the following areas:

- Basic Carpentry
- Environmental Awareness - Mold, Feces, Lead and Asbestos
- OSHA 10-Hour Safety Training
- Window and Door Replacement
- Weatherization Skills - Air Sealing, Duct Sealing, Insulation, Base-Load Measures, Window and Door Installation

#### **\*10-Day Weatherization Technician/Installer Prep**

Individuals who are new to construction and the weatherization industry will receive training in the following areas:

- General Construction
- Tool Recognition and Use
- Basic Carpentry
- Window and Door Replacement
- Environmental Awareness - Mold, Feces, Lead and Asbestos
- OSHA 10-Hour Safety Training

*\*After the 10-Day prep training workers will take the 3-Day Weatherization Training.*

## **ADDITIONAL TRAINING AND CONTINUING EDUCATION FOR TECHNICIANS/INSTALLERS**

### **LIUNA Environmental Abatement Certification Training**

LIUNA is the industry leader for environmental remediation training. Under the Weatherization Training Program environmental certification training can be done before the start of weatherization work if hazards are predetermined, during the job if hazards are identified, or as a career growth opportunity for interested individuals.

The addition of LIUNA certified environmental abatement courses would create skilled workers who can safely remove hazards, protecting themselves, co-workers and the public. Certified workers are also more efficient and cost effective for the employer by removing the need for specialized sub-contractors and, reducing or eliminating work stoppages. For these reasons environmental certification abatement training should be considered prior to the start of weatherization projects. Depending upon state requirements each abatement class would constitute an additional 4 – 5 days of training.

#### LIUNA Abatement Courses for Weatherization Work

- Asbestos Abatement Worker
- Asbestos Abatement Supervisor
- Lead Abatement Worker
- Lead Abatement Supervisor
- Mold and Biological Hazard Worker

## **LIUNA WTP – Supervisor Training Program**

The Supervisor Training Program will target individuals with identified traits and experiences needed to be a successful supervisor of a weatherization crew. Requirements include:

- Competencies of a LIUNA Weatherization Technician/Installer
- Ability to inspect and monitor the jobsite for carbon monoxide, carbon dioxide, dust, and other airborne contaminants
- Conduct and/or interpret diagnostic testing utilizing a number of tools
- Conduct and/or interpret combustion appliance safety and efficiency tests for all fossil fuel burning appliances

### ***5-Day Weatherization Supervisor Test Out***

Competent Weatherization Technicians/Installers with prior supervisory experience can “test out” of the 3-Week Weatherization Supervisor Training. Competencies will be evaluated by written and performance assessments.

Individuals who fail to pass the exam will be required to complete the 3-Week Supervisor training requirement.

### ***3-Week Weatherization Supervisor***

Individuals with proven supervisory capabilities who need to develop the weatherization specific skills will receive training in the following areas:

- Inspection and Monitoring
- Conducting/Interpreting Diagnostic Testing
- Combustion Appliance Safety

### ***5-Week Weatherization Supervisor Program***

Individuals with leadership capabilities who require supervisory and weatherization training will receive the following training:

- Safety and Health
- Recordkeeping
- Combustion Appliance Safety
- Communication
- Inspection and Monitoring
- Conducting/Interpreting Diagnostic Testing

## **LIUNA WTP – Energy Auditor Training Program**

The Energy Auditor Program will enable individuals to determine the energy efficiency needs of a structure, and to then decide the best procedure and materials to use to increase that efficiency.

Competencies include:

- Possess Weatherization Technician/Installer and Supervisor skills
- Select and interpret diagnostic assessments
- Select the best weatherization materials according to assessment results
- Calculate the correct amount of materials needed
- Record detailed work plan for the supervisors and technicians to follow

### ***2-Day Energy Auditor Test out***

Competent Weatherization Technicians/Installers and Supervisors can “test out” of the required 1-Week Energy Auditor Training. Competencies will be evaluated by written and performance assessments including the use of hands-on and text based scenarios.

Individuals who fail to pass the exam will be required to complete the 1-Week Energy Auditor requirement.

### ***1-Week Energy Auditor Training Program***

Individuals with weatherization supervisory and technician/installer skills will receive training in the following areas:

- Use and select diagnostic equipment
- Interpret diagnostic results
- Identify measures for improving energy efficiency
- Select the best weatherization materials according to assessment results
- Calculate and order materials
- Develop written job plan for weatherization workers and supervisors

## **CREDENTIALING FOR WEATHERIZATION WORKERS**

LIUNA believes that the knowledge and skills of weatherization workers play a critical role in the success of any weatherization program. For that reason, LIUNA strongly supports the development of a credentialed workforce, whose entry-to-practice and experienced level benchmark skills can help employers, homeowners, government organizations and other key stakeholders deliver high-quality appropriate weatherization measures that are cost-effective and provide long-term savings.

Where credentialing of LIUNA’s workforce is concerned, consideration must be given to the role and impact of those workers on key areas that relate to the health and safety and craftsmanship of weatherization projects. Those should be of primary concern to employers, homeowners, funding agencies and the community include:

- **Community Impact:** LIUNA believes that poorly weatherized homes have an overall negative impact on the community. Unskilled labor creates conditions that can cause significant health and safety issues for residents, lead to decreased property values and put greater strain on local government resources. From leaking roofs and windows, flooded yards, bowing walls and elevated mold growth, the requirement for credentialed weatherization/retrofit workers will help control these issues as well as provide energy savings in the home.
- **Fiscal Impact:** The cost associated with inadequate, poorly installed weatherization measures must be considered. An error made due to an unskilled or poorly trained weatherization technician or energy auditor represents a tangible cost to both the contractor and the homeowner. For every dollar spent on the direct costs of correcting worker related problems, much more is spent to cover hidden costs. The need to hire new, or to retrain existing workers and increased insurance rates are examples that drive up weatherization/retrofit costs for homeowners. With the use of credentialed, skilled LIUNA craftsmen, workers do it right the first time.
- **Industry Impact:** When substandard weatherization services are rendered by unqualified employers and workers it has the potential to negatively impact the public’s perception of the value of energy efficiency measures. Homeowners become distrustful and more reluctant to pursue home weatherization projects. While weatherization contractors can work to competitively differentiate their services, supporting worker credentialing to ensure a high-quality workforce should be the unified industry goal.

Given the above considerations, LIUNA WTP has adopted the following worker credentialing requirements:

## **Credentialing Technician/Installer:**

The following core skills are required for credentialing as a LIUNA Weatherization Installer/Technician.

- Safety Skills – including but not limited to:
  - OSHA 10-hour Program
  - Back Injury Prevention
  - Hazard Communication
  - Hearing Safety
- Basic Construction/Carpentry Skills – including but not limited to:
  - Construction Math
  - Tool and Material Identification
  - Hand and Power Tools
  - Measuring, Level and Plumb
  - Basic Layout Techniques
- Basic Building Science
  - Interior Heat and Air Flow
- Identifying and Sealing Leaks
  - Different Caulk Types (emphasis on “green” materials)
  - Weather-stripping
  - Foams and Other Sealers
- Environmental Hazard Awareness
  - Asbestos
  - Lead
  - Mold
  - Biological
- Seal, insulate, and modify ductwork (emphasis on “green” materials)
- Removal and replacement of doors and windows (importance of recycling)
- Removal and reinstallation/finishing of drywall (importance of recycling)
- Install insulation (emphasis on “green” materials)
  - Rigid
  - Spray Foam
  - Batt
  - Blown-in
  - Dense Pack



## **Credentialing Weatherization Supervisor: Technician/Installer**

The following core skills are required for credentialing as a LIUNA Weatherization Supervisor:

- Installer/Technician Credential
- Project Management Training
- Inspection and Monitoring (CO, CO2, dust)
- Diagnostic Testing
  - Door blower
  - Duct blaster
  - Infrared cameras
- Combustion Appliance Safety and Efficiency Check
- Lead Renovator Training

## **Credentialing Weatherization Energy Auditor: Supervisor**

The following core skills are required for credentialing as a LIUNA Weatherization Energy Auditor:

- Installer/Technician Credential
- Supervisory Credential
- Measurement Selection
  - Use diagnostic tools to accurately assess the structure
  - Select the materials to weatherize the structure based on codes, environmental impact, and industry best practices
- Work Scope Development
  - Measures needed to adequately address the energy inefficiencies of the house

## **LIUNA CAREER OPPORTUNITIES THROUGH LIFE-LONG LEARNING**

The LIUNA Weatherization Training Program opens the door to jobs in a growing segment of the construction industry and provides supervisory advancement opportunities. LIUNA advocates life-long learning and encourages participants to take advantage of its wide variety of education and training programs.

Weatherization workers can expand their skills in residential and light commercial construction. From renovations, rehabilitation to the construction of new single family homes and multi-family complexes, LIUNA has the training designed to increase value to workers and employers.

Weatherization workers may also decide to enter LIUNA's Construction Craft Laborer Apprenticeship Program and progress on a construction career path outside of residential and light commercial construction. Opportunities to work in highways and roads, bridges, dams, tunnels, pipeline, building, landscaping, demolition and deconstruction; hazardous waste, asbestos, lead, mold, nuclear, and disaster response; and green construction including solar and wind farms, installation of pervious surfaces, and irrigation are just a few of the many possibilities available to LIUNA members.

Individuals who choose to take advantage of all this training will find themselves poised to take advantage of the upswing in the home-building industry; gain the "green" construction skills of a growing industry; be a part of improving America's infrastructure; and help in the recovery of our nation's economy.

**LiUNA!**

*Feel the Power*