

# WEATHERIZATION

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## WEATHERIZATION | WHAT WE DO

## MECHANICAL MEASURES

- Clean, tune, repair, or replace heating and/or cooling systems.
- Install duct and heating pipe insulation.
- Repair leaks in heating/cooling ducts.
- Install programmable thermostats.
- Repair/replace water heaters.
- Install water heater tank insulation.
- Insulate water heating pipes.



### **BUILDING SHELL MEASURES**

- Install insulation where needed.
- Perform air sealing.
- Repair/replace windows/doors.
- · Install window film, awnings and solar screens.
- Repair minor roof and wall leaks prior to attic or wall insulation.

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#### **HEALTH & SAFETY MEASURES**

- Perform heating system safety testing.
- Perform combustion appliance safety testing.
- Repair/replace vent systems to ensure combustion gas draft safely outside.
- Install mechanical ventilation to ensure adequate indoor air quality.
- · Install smoke and carbon monoxide alarms when needed.
- Evaluate mold/moisture hazards.
- Perform incidental safety repairs when needed.





#### **ELECTRIC & WATER MEASURES**

- Install efficient light sources.
- Install low-flow showerheads.
- Replace inefficient refrigerators with energy-efficient models.



#### **CLIENT EDUCATION ACTIVITIES**

- Educate on potential household hazards such as carbon monoxide, mold & moisture, fire, indoor air pollutants, lead paint and radon.
- Demonstrate the key functions of any new mechanical equipment or appliances.
- Discuss the benefits of using energy-efficient products.

## Typical Process for Weatherization Project





- Diagnostic testing
- Thorough Inspection of Home
- Client Interview
- Energy Modeling





## Build Work Scope

- Layout Scope of Work
- Review with Client
- Finalize Scope of Work
- All Safety Requirements Met





- Perform all Tasks
- Client Education
- Safety Testing



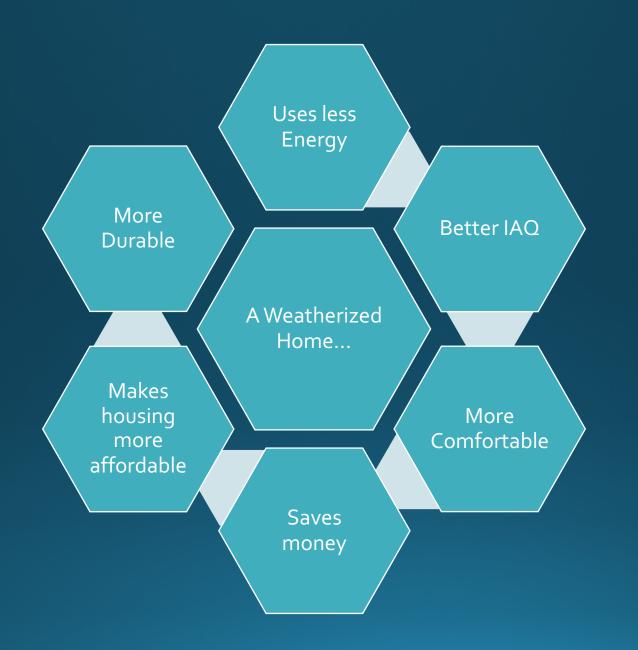


- Measures completed
- Work Completed to Industry Standards
- Diagnostic Testing
- Work Completed to clients standards

# Weatherization Assistance Program (WAP)



- -DOE program for reducing energy costs for low-income households by making the homes more energy efficient-
  - Supports 8500+ jobs; Workers enjoy good rates and benefits
  - Provides Weatherization services to approx. 35,000 homes per year
  - Average cost per unit is \$4695
  - Average annual energy cost savings of \$283
  - For every dollar invested in Weatherization
    - \$1.72 is generated in energy benefits
    - \$2.78 is generated in non energy benefits
  - This work has huge impacts on the quality of life for many low-income and elderly households



## Weatherization and the Environment

- Lower Carbon Emissions/Energy Usage
  - Weatherization can reduce energy usage upward of 30%
- Fuel switching from NG/Oil to cleaner electric power
- Low-flow water fixtures reduce water usage
- Help protect from extreme weather
  - Learning to live with climate change is a reality
- Improved indoor air quality
  - Reduced impact from pollution
  - Reduced moisture in the home
  - Wildfire season

# Weatherization Helps People

- Provides jobs
- Provides and maintains quality affordable housing
- Makes housing affordable
- Improved health
- Reduces heating and cooling costs
- Improves durability of the home
- Reduces carbon footprint

# Utility Rebates

### PSE

Air sealing - \$0.10 per sq ft

Attic Insulation - \$0.50 per sq ft

Wall Insulation - \$0.75 per sq ft

Floor Insulation - \$0.25 per sq ft

Duct Sealing – up to \$300

Duct Sealing and Insulation – up to \$400

Bundle 3 rebates - \$250

Bundle 4 rebates - \$400

Additional rebates available for appliances, windows and more

PSE | Get Rebates to Lower Your PSE Bills

### SEATTLE CITY LIGHT

Clothes Washer - \$50

Water heater - \$500

Windows - \$50 per unit

Insulation – Maximum of 50% of cost

<u>Seattle City Light - Residential</u> <u>Energy Efficiency Rebate Program</u> <u>from Seattle City of (rebates.energy)</u>

#### PUD

Insulation – up to \$1 per sq ft

Duct sealing - \$5 per linear ft, up to \$450

Windows , single –pane - \$100 per window

Windows, double-pane - \$50 per window

<u>Weatherization Rebates - Snohomish</u> <u>County PUD (snopud.com)</u>

# Links to more information

- Weatherization-and-its-Impact-on-Occupant Health\_Final\_5\_23\_2017\_online.pdf (greenandhealthyhomes.org)
- The Weatherization Assistance Program Fact Sheet (energy.gov)
- <u>Understanding Our Emissions Environment | seattle.gov</u>
- Why Utility Companies Provide Rebates | Washington Energy Services