

**2015 WEATHERIZATION MEASURES UNIT PRICE CODES**  
(Please refer to notes following this section)

<b>CODE</b>	<b>ITEM</b>	<b>UNIT</b>	<b>MATERIAL</b>	<b>L,OH,P</b>	<b>TOTAL</b>
	<b>INFILTRATION</b>				
A-1	Door Weatherstrip, kit	each			
A-1a	Add for Lead Based Paint	each			
A-2	Foam Weatherstrip	In.ft.			
A-4	Door Sweep	each			
A-5	Retractable Closure	each			
A-6	Door Shoe	each			
A-7	Replace Threshold	each			
A-8	Install Bathroom Exhaust Fan Damper	each			
A-8a	Install Kitchen Exhaust Fan Damper	each			
A-9	Reduce Air Infiltration	100CFM50			
A-10	Air Infiltration	hour			
A-12	Install New Dryer Duct & Hood	each			
A-12a	Replace Existing Dryer Duct & Hood	each			
A-13	Extra Dryer Ducting (over 10'), metal	per ft.			
A-14	New Dryer Hood	each			
A-15a	Seal Per Boot/Duct Site Built and Mobile Home	each			
A-16	Seal Single-wide Mobile Home Boots and Ducts	each			
A-17	Seal Double-wide Mobile Home Boots and Ducts (includes crossover duct)	each			
A-18	Roof Top Chimney Damper	each			
A-19	Air seal with 2-part foam	per cf.			
A-20	Measure House Air Leakage Rate	house			
A-21	Measure House Under-Door Pressures	house			
A-22	Measure House Air Leakage Rate, Under-Door Pressures, Duct Leakage, and Zone Pressures	house			
A-23	Test Out of House with Combustion Appliance(s)	house			
	<b>DOORS</b>				
B-1	Replace Solid Core Door Blank (standard sizes)	each			
B-2	Replace Prehung Insulated Door	each			
B-2a	Add for Lead Based Paint	each			

B-3	Replace Mobile Home Door (foam core)	each			
B-5	Replace Striker Plate	each			
B-5a	Adjust Striker Plate	each			
B-6	Replace Entry Lock	each			
B-8	Undercut Interior Door, one	each			
B-8a	Add for Lead Based Paint	each			
B-9	Undercut Interior Door, each additional	each			
B-9a	Add for Lead Based Paint	each			
	<b>REGLAZE WINDOW</b>				
C-1	Double Strength Glass (minimum 8 sq. ft.)	sq.ft.			
C-2	Raw Insulating Glass (minimum 8 sq. ft.)	sq.ft.			
C-3	Plate Glass (minimum 8 sq. ft.)	sq.ft.			
C-4	Safety Glass, additional charge	sq.ft.			
	<b>INSULATION – ATTIC</b>				
E-1	Open Rakes R-11, cellulose, loose fill	sq.ft.			
E-2	Open Rakes R-19, cellulose, loose fill	sq.ft.			
E-3	Open Rakes R-30, cellulose, loose fill	sq.ft.			
E-3a	Open Rakes R-38, cellulose, loose fill	sq.ft.			
E-4a	Additional Insulation per R, cellulose, loose fill	R/sq.ft.			
E-5	Open Rakes R-11, fiberglass, loose fill	sq.ft.			
E-6	Open Rakes R-19, fiberglass, loose fill	sq.ft.			
E-7	Open Rakes R-30, fiberglass, loose fill	sq.ft.			
E-8a	Additional Insulation per R, fiberglass, loose fill	R/sq.ft.			
EE-9	Open Rakes R-11, fiberglass, batt	sq.ft.			
EE-10	Open Rakes R-19, fiberglass, batt	sq.ft.			
EE-11	Open Rakes R-30, fiberglass, batt	sq.ft.			
EE-12	Open Rakes R-38, fiberglass, batt	sq.ft.			
E-13	Attic w/Floor, additional charge	sq.ft.			
E-14	Slope 2" x 4" Cavity	sq.ft.			
E-15	Slope 2" x 6" Cavity	sq.ft.			
E-16	Slope 2" x 4" Cavity, dense pack	sq.ft.			
E-17	Slope 2" x 6" Cavity, dense pack	sq.ft.			

E-19	Insul. and Weatherstrip Attic Access	each			
E-20	Complete Access Opening	each			
E-20a	Add for Lead Based Paint	each			
E-20b	Rigid Dam Only	each			
E-21	Cut Attic to Attic Access Only	each			
E-22	Pull Down Stairwell Cover	each			
E-23	Mobile/manufactured Home Attic, fill cavity - exterior	sq.ft.			
E-24	Mobile/manufactured Home Attic, fill cavity - interior	sq.ft.			
E-25	Remove Blown-In Insulation	sq.ft.			
E-26	Remove Batt Insulation	sq.ft.			
	<b>VENTILATION - ATTIC</b>				
F-1	Ventilation	net free inch			
F-1a	Add for Lead Based Paint	net free inch			
	<b>INSULATION - STUD WALLS</b>				
G-1	R-11, batts (kneewalls)	sq. ft.			
G-2	R-19, batts (kneewalls)	sq. ft.			
G-3	R-11, 1 1/2" rigid board	sq. ft.			
G-4	R-15, 2" rigid board	sq. ft.			
	<b>INSULATION - EXTERIOR WALLS</b>				
HH-1	Dense Pack, Remove Shakes	sq. ft.			
HH-1a	Add for Lead Based Paint	sq. ft.			
HH-2	Dense Pack, Remove Lap Siding	sq. ft.			
HH-2a	Add for Lead Based Paint	sq. ft.			
HH-3	Dense Pack, Drill Siding	sq. ft.			
HH-3a	Add for Lead Based Paint	sq. ft.			
HH-4	Dense Pack, Inside Drill	sq. ft.			
HH-4a	Add for Lead Based Paint	sq. ft.			
HH-5	Deduct for Non-High Density Pack	sq. ft.			
HH-6	Paint Plugs to match	sq. ft.			
HH-6a	Deduct for Painting not needed	sq. ft.			
H-7	Ladder Time, over 12', add'l charge	sq. ft.			
	<b>INSULATION--FLOORS</b>				
J-1	Crawl Space R-11, batts	sq. ft.			
J-2	Crawl Space R-19, batts	sq. ft.			
J-3	Crawl Space R-25, batts	sq. ft.			
J-4	Crawl Space R-30, batts	sq. ft.			
J-5	Fill Cavity, Cantilever Floor or Garage Ceiling, loose fill cellulose (up to 2" x 12")	sq. ft.			
J-5a	Add for Lead Based Paint	sq.ft.			

J-5b	Paint Plugs after insulating Cantilevers, Garage Ceilings	sq.ft.			
JJ-5b	Fill Cavity, Cantilever Floor or Garage Ceiling, loose fill fiberglass (up to 2" x 12")	sq. ft.			
J-6	Protect Material w/Exterior Plywood, additional charge	sq. ft.			
J-7	Ground Cover	sq. ft.			
J-8	Irregular Joist, additional charge	sq. ft.			
J-9	New Crawl Space Access Opening	each			
J-9a	Add for Lead Based Paint	each			
J-10	Twining R-19, joists over 6"	sq. ft.			
J-11	Manufactured Home Underfloor Insulation, fill cavity, loose	sq. ft.			
J-12	Support Existing Underfloor Insulation	sq. ft.			
J-13	Low Crawl, under 18", Add'l Charge	sq. ft.			
J-14	Crawl Access (doghouse), up to 4' x 4' roofed, vented w/handles	each			
J-15	Remove Blown-In Insulation	sq. ft.			
J-16	Remove Batt Insulation	sq. ft.			
	<b>VENTILATION--CRAWL SPACE</b>				
K-1	Crawl Vent	net free inch			
K-1a	Add for Lead Based Paint	net free inch			
K-2	Concrete Wall--6"	net free inch			
K-3	Rescreen Existing Vent	net free inch			
K-4	Vent well	each			
	<b>INSULATION—PIPES</b>				
L-1	Water Pipes (minimum R-3)	In.ft.			
L-1a	Water heater Pipe	In.ft.			
L-2	Hydronic Pipes, R-11 fiberglass	In.ft.			
	<b>INSULATION—HVAC DUCTS</b>				
M-1	R-11, surface area	sq.ft.			
M-2	R-19, surface area	sq.ft.			
M-3	R-11, with Vinyl Facing, surface area	sq.ft.			
M-4	R-19, with Vinyl Facing, surface area	sq.ft.			
M-5	Replace Crossover Duct—10"-14" galvanized metal	In.ft.			
M-6	Replace Crossover Duct —10"-14" diameter flex duct	In.ft.			
	<b>PRIME WINDOW REPLACEMENT</b>				

	<b>U-factor 0.30 NFRC CLASS 30</b>				
	<b>OPENABLE</b>				
N-1	0-7.99 Square Feet	each			
N-2	8-15.99 Square Feet	sq.ft.			
N-3	16-23.99 Square Feet	sq.ft.			
N-4	24-50 Square Feet	sq.ft.			
N-6	Insulated Sliding Glass Door Replacement – 6'	each			
N-7	Add for Over/Under Size Door	each			
N-7a	Add for Lead Based Paint (per opening)	each			
	<b>PRIME WINDOW REPLACEMENT U-factor 0.30 NFRC CLASS 30</b>				
	<b>NON-OPENABLE</b>				
N-8	0-7.99 Square Feet	each			
N-9	8-15.99 Square Feet	sq.ft.			
N-10	16-23.99 Square Feet	sq.ft.			
N-11	24-50 Square Feet	sq.ft.			
	<b>OTHER WINDOW ITEMS</b>				
P-3	Replace Window Crank, awning	each			
	<b>HOT WATER HEATERS</b>				
Q-1	Water Heater Wrap	each			
Q-2	Water Heater, adjust thermostat only	each			
Q-3	Low Flow Shower Head	each			
Q-4	Install New Energy Tank (40 or 52 gallon), electric (Minimum tank rating: .93 for under 59 gal)	each			
Q-6	Install New Energy Tank (40 or 52 gallon), gas (Minimum tank rating: .93 for under 59 gal)	each			
Q-7	Expansion tank	each			
	<b>MECHANICAL VENTILATION EXHAUST FAN</b>				
S-1	Vent Bathroom Fan	each			
S-2	Install Bathroom Fan with Damper, Vent and Timer	each			
S-2a	Add for Lead Based Paint	each			
S-2b	Replace Existing Bathroom Fan and include Timer	each			
S-2c	Add for Whole House Fan	each			
S-3	Vent Kitchen Fan	each			
S-4	Install Kitchen Fan, Hood, Light, Damper and Vent	each			

S-4a	Add for Lead Based Paint	each			
S-4b	Replace Existing Kitchen Fan, Hood, and Light	each			
S-5a	Clean and Lube Fan	each			
S-6	Indoor Air Quality Vent, with damper	each			
S-6a	Add for Lead Based Paint	each			
S-7	Exhaust fan timer, 24 hour cycle	each			
S-7a	Add for Lead Based Paint	each			
S-7b	Smart Switch	each			
S-16	60 Minute Timer	each			
S-17	Dehumidifier, 25 pt./day	each			
S-18	Dehumidifier, 30 pt./day	each			
S-19	Dehumidifier, 40 pt./day	each			
S-20	Sump Pump- Replace existing	each			
S-21	Install Bathroom Fan with Light	each			
S-21a	Add for Lead Based Paint	each			
S-21b	Replace Existing Bathroom Fan with Light and include Timer	each			
S-21c	Add for Whole House Fan with compact fluorescent light	each			
S-23	Install Kitchen Exhaust Fan, Duct & Damper	each			
S-23a	Add for Lead Based Paint	each			
S-23b	Replace Existing Kitchen Fan	each			
S-24	Interior Hygrometer/Thermometer	each			
	<b>REPAIRS &amp; EXTRA WORK</b>				
T-1	Electrical Repairs	per hr			
T-2	Plumbing Repairs	per hr.			
T-3	Permits (See note)	each	-----	-----	No bid
T-4	Semi-skilled Labor	per hr.			
T-5	Carpentry	per hr.			
T-6	Roof Patch	per hr.			
T-8	Certificate Charge - knob and tube	each			
T-9	FS-25	sq.ft.			
T-10	Gutters/Downspouts	ln. ft.			
T-11	Elbows	each			
T-12	Splash Blocks	each			
	<b>MOBILE HOME REPAIRS</b>				
U-1	Cool Seal Roof	sq.ft.			
U-2	Skirting Repair	sq.ft.			

U-3	Rodent Barrier Repair	sq.ft.			
U-4	Floor Patch	sq.ft.			
U-5	Insulate & Weatherstrip WH Hatch, mobile home	each			
	<b>ACCESSORIES</b>				
V-1	Smoke Detector, battery operated	each			
V-2	Smoke Detector, replace hardwired	each			
V-3	Carbon Monoxide Detector, battery operated	each			
V-4	Carbon Monoxide Detector, electric plug in	each			
	<b>LIGHTING</b>				
W-1	Fluorescent Lamp, magnetic	each			
W-2	Fluorescent Lamp, electronic	each			
W-3	Fluorescent Lamp, circline	each			
W-4	Exterior Fluorescent with Fixture	each			

## **NOTES TO WEATHERIZATION MEASURE UNIT PRICES**

### **General Specifications**

Except in instances where local codes take precedence, all weatherization work is governed by the Washington Department of Commerce Weatherization (Wx) Manual. On April 1, 2015, the National Renewable Energy Laboratory Standard Work Specifications (SWS) and the Washington State Weatherization Field Guide replace the Wx Manual Specifications and Standards and the Multi-Family Supplement.

### **Infiltration**

A-1, A-4, A-5, Door Weatherstrip kit and A-4/A-5 Sweeps, use silicone or vinyl.

A-2, Foam Weatherstrip, and other individual items such as a lineal foot of, will only be called out when used as a prescriptive measure.

A-9, Reduce Air Infiltration, at 100CFM50 use all measures necessary to reduce air infiltration. No individual measures will be identified. All work done as A-9 requires the use of a door fan and pressure diagnostics accessories. Worksheet is required.

A-10, Air Sealing, hourly rate for measures.

A-12, Install Dryer Duct, use up to 10 feet of smooth metal ducting and a hood with a flapper damper, exiting outside of the footprint of the home and away from walking surfaces. Dryer duct runs should be installed so as to be as short as practical.

A-15a, A-16, and A-17, Seal Boots and Ducts, block duct ends, seal ducts, boots, crossovers, and plenums, as necessary with mastic to reach target pressure pan numbers. Ducts that extend more than 8 inches beyond the last register on a duct run

(at either end) will be filled with fiberglass insulation and capped with metal and sealed with mastic.

A-22, Measure House Air Leakage Rate, measure under-door pressures, duct leakage, and zonal pressures, i.e. house to attic, crawl and attached garage.

A-23, Test Out of House, Daily In-Progress Combustion Safety Test form is required.

### **Doors**

B-1, B-2, and B-3 are to install a new door and hardware. New hardware, including a new lockset, deadbolt, and peephole should be installed, unless the existing hardware must be reused to match existing hardware or locks. Prime or seal all newly installed wood.

B-8 and B-9, Undercut Interior Doors, undercut to pressure balance forced air heating systems. B-8 is the rate for the first door bottom cut off, which includes time to set up and tear down.

B-9 is the rate for each additional door undercutting. Seal door bottoms after cutting.

### **Reglaze Window**

The minimum size that will be called out to reglaze a window will be 8 square feet.

### **Insulation - Attic**

Attic insulation in a site-built house includes any necessary baffling and rigid damming to contain materials, and the air sealing of all penetrations and bypasses.

Rigid damming is included in the cost when insulating an attic area greater than or equal to 400 square feet and there is enough clearance. The rigid dam is to be made from plywood or strand board and strong enough to support the weight of a person.

Attic insulation in a mobile/manufactured house includes sealing all penetrations, including but not limited to plumbing, ventilation, electrical, and marriage lines.

E-20, Complete Access Opening, use a rigid dam when there is enough clearance, and weatherstrip and insulate the hatch.

E-20b, Rigid Dam Only, when the area in the attic to be insulated is less than 400 square feet and when there is enough clearance.

E-22, Pull Down Stairwell Cover, sides should be made of rigid dam material and insulated with at least R-11, and the hatch weatherstripped and insulated to R-38.



## **Insulation - Exterior Walls**

Cavity fill wall insulation will be done through 2 inch holes. Wall cavities without fire blocking may be filled through one centrally located hole using a 1 inch tube insert, or two holes, drilled high and low without the tube insert. A tube insert is not required in walls with fire blocking. Drilling of holes in the finished siding is to be avoided whenever possible. Drilled holes on exposed plugs will be sealed to avoid bleeding into the plugs, and plugs will be spackled.

HH-1 through HH-4, includes painting nail heads and chipped spots caused by removing, reinstalling or replacing shakes or siding. HH-6a, deduct if painting is not needed.

HH-5, deduct if non-high density pack is not needed.

HH-6 is painting plugs to match.

## **Insulation - Floors**

Floor insulation in site-built homes requires filling the cavity with the appropriate batt for the depth of the joist cavity, after sealing all floor penetrations (e.g. plumbing, electrical, ventilation, ducts, and boots.)

Floor insulation in a mobile/manufactured house includes sealing all penetrations, including but not limited to plumbing, ventilation, electrical, and marriage lines. Floor insulation in either site-built or mobile/manufactured homes does not include wrapping exterior pipes.

J-8, Irregular Joist, to be any joist spacing other than 16" on center or 24" on center.

## **Insulation – Pipes**

Use foam for interior and foam or fiberglass for exterior.

## **Insulation - HVAC Ducts**

Insulation of ducts on site built homes includes sealing all joints with mastic. On double wide manufactured homes the crossover duct joints must be sealed with mastic.

## **Prime Window Replacement - Class 30 (NFRC)**

All window replacements include returning the interior and the exterior of the home to a finished state ready for paint or stain. All newly installed wood must be primed or sealed.

### **Hot Water Heaters**

Must be installed with rigid foam board under the tank and seismic strapping. Must be at least R-12 insulation.

### **Mechanical Ventilation - Exhaust Fan**

Fans shall be Panasonic WhisperGreen, WhisperComfort, or equivalent, substitutions subject to prior County approval. Newly installed bathroom and kitchen fans (S-2, S-4, S-21, and S-23) shall include electrical drop, wall switch and duct work. Fans with lights shall have electronic ballast CFL's.

S-7b, Smart Switch, is an alternative to a programmable timer.

S-2b and S-21b, Replace Existing Bathroom Fan and include a 60 minute timer.

S-2c and S-21c, Whole House Fan, is a continuous run fan with a motion sensor, adjustable CFM, and a toggle switch. An intermittent fan has a programmable timer.

S-17, S-18, and S19, Dehumidifiers, must be permanently installed, hard wired and must drain to the household waste system.

S-23, Kitchen Exhaust Fan, is ceiling or wall mounted.

S-24, Hygrometer/Thermometer, is a Grainger #3ZH92 or approved equivalent.

### **Repairs & Extra Work**

Items T-1 through T-6 is for time and materials. Time and materials charges by approved sub-contractors reimbursed at invoice plus 10%.

T-3, Permits. Please do not include in bid. Permit fees will be entered manually according to the jurisdiction of the permit.