



## Work Order Bid (ID)

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### WORK ORDER INFORMATION

**Work Order Name:** WO/1001303/1

**Work Order Type:** Weatherization

**Audit Name:** 1000166

### CLIENT INFORMATION

**Client ID:** 1001303

**Alt. Client ID:** C1001312SA101

### AGENCY INFORMATION

**Agency:** Upper East Tennessee Human  
Development Agency

**Address:** 301 Louis Street  
Kingsport TN 37662

**Agency Phone:** 1-423-246-6180

**Agency Fax:**

**Email Address:** smeade@UETHDA.org

**Company Name & License Number:** \_\_\_\_\_

**Contractor's Signature:** \_\_\_\_\_

### COMMENT

1508 SQUARE FOOT RANCH BUILT ON A CRAWL SPACE IN 1940 WITH AN ASPHALT SHINGLE ROOF. ALL WORK TO BE DONE IN ACCORDANCE WITH THE TENNESSEE STANDARD WORK SPECIFICATIONS AS ADOPTED BY THE TENNESSEE HOUSING DEVELOPMENT AGENCY.

CONTRACTOR IS RESPONSIBLE TO VERIFY DIMENSIONS AND SCOPE OF WORK PRIOR TO BID.

SURVEY ON 8/20/2019 BY RON CARLISLE (423) 736-0678  
INITIAL BLOWER DOOR 4690@-50  
POST WORK TARGET OF 2262 @-50 MUST BE MET OR EXCEEDED  
Contractor required to observe both RRP rule and LSW practices.  
RRP Certified Firm/Renovator Required

Hawkins County

**Measure Seal Ducts**

**Components**

**Inspected**

**Comment** SHOP-VAC AND PREPARE THE DUCT-WORK AS PER THE TN SWS.  
 USE MASTIC OR APPROPRIATE MATERIAL TO SEAL THE DUCT-WORK AS PER  
 THE THDA SWS  
 THE OBJECTIVE IS TO REDUCE THE PRESSURE PAN READINGS TO LESS THAN  
 1 OR AS TIGHT AS POSSIBLE.  
 PRESSURE PAN READINGS:  
 RETURN 16.2  
 LIVING ROOM 10.4  
 KITCHEN 8.0  
 BEDROOM 22.9  
 BEDROOM 18.7  
 BATH ROOM 13.3  
 BEDROOM 10.1  
 HALL 18.6

#	Material/Labour	Description/Comment	Unit	Qty	Estimated		Actual			
					Unit Cost	Total	Qty	Unit Cost	Total	
1	Miscellaneous Supplies	Duct Sealing	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Other Detail</b>										
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Measure Sub Total</b>						<input type="text"/>	<b>Sub Total</b>			<input type="text"/>

**Field Notes:**

**Measure Infiltration Redctn**

**Components**

**Inspected**

**Comment** Initial Blower Door Reading: 4690@-50  
 Post Work Target of 2262 @-50 Must Be Met or Exceeded  
 Suggested Best Practice of Air Infiltration Reduction is to use two-part foam and appropriate materials to seal the penetrations and openings in the Sub-floor (accessible in the crawl space) and in the ceilings (accessible in the attic).  
 If applicable- rake back existing insulation and use two-part foam to seal the top plates of the walls. Use Rigid Foam Board and two-part foam to close and seal openings and penetrations of soffits, chases, and duct perimeters.

#	Material/Labour	Description/Comment	Unit	Qty	Estimated		Actual			
					Unit Cost	Total	Qty	Unit Cost	Total	
1	Miscellaneous Supplies	Infiltration Reduction	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Other Detail</b>										
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Measure Sub Total</b>						<input type="text"/>	<b>Sub Total</b>			<input type="text"/>

**Field Notes:**

**Measure DWH Pipe Insulation**

**Components**

**Inspected**

**Comment** INSULATE THE FIRST 6 FEET OF HOT AND COLD-WATER PIPE OUT OF THE WATER HEATER AS PER THE TN SWS

#	Material/Labour	Description/Comment	Unit	Qty	Estimated		Actual			
					Unit Cost	Total	Qty	Unit Cost	Total	
1	Insulation	DHW Pipe Insulation	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
2	Labor	DHW Pipe Insulation	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Other Detail</b>										
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Measure Sub Total</b>						<input type="text"/>	<b>Sub Total</b>			<input type="text"/>

**Field Notes:**

**Measure Duct Insulation**

**Components**

**Inspected**

**Comment** INSULATE THE EXPOSED SUPPLY DUCT-WORK LOCATED IN THE BASEMENT

#	Material/Labour	Description/Comment	Unit	Estimated			Actual			
				Qty	Unit Cost	Total	Qty	Unit Cost	Total	
1	Insulation	Duct Insulation	SqFt	91	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
2	Labor	Duct Insulation	SqFt	91	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Other Detail</b>										
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Measure Sub Total</b>						<input type="text"/>	<b>Sub Total</b>			<input type="text"/>

**Field Notes:**

**Measure Floor Ins. R-19**

**Components F1**

**Inspected**

**Comment** INSTALL R-19 FIBERGLASS BATTS IN BETWEEN THE 2 X 8 FLOOR JOISTS @ 16 inches O.C. AS PER THE TN SWS.

#	Material/Labour	Description/Comment	Unit	Estimated			Actual			
				Qty	Unit Cost	Total	Qty	Unit Cost	Total	
1	Insulation	Floor Insulation - Fiberglass Batts - R-19	SqFt	192	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
2	Labor	Floor Insulation - Fiberglass Batts - R-19	SqFt	192	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Other Detail</b>										
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Measure Sub Total</b>						<input type="text"/>	<b>Sub Total</b>			<input type="text"/>

**Field Notes:**

**Measure DWH Replacement**

**Components**

**Inspected**

**Comment** REMOVE AND REPLACE THE 40 GALLON ELECTRIC WATER HEATER WITH A NEW 50 GALLON HEAT PUMP WATER HEATER. INSTALL AS PER THE TN SWS, WITH EXPANSION TANK AND PRESSURE RELIEF PIPE. INSTALL A CONDENSATION PUMP AND DRAIN LINE THAT TERMINATES IN A LOCATION DIRECTING WATER AWAY FROM THE HOUSE  
DO NOT ADD TANK INSULATION TO THE NEW WATER HEATER.

#	Material/Labour	Description/Comment	Unit	Qty	Estimated		Actual			
					Unit Cost	Total	Qty	Unit Cost	Total	
1	Hot Water Equipment	Any -	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Other Detail</b>										
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Measure Sub Total</b>						<input type="text"/>	<b>Sub Total</b>			<input type="text"/>

**Field Notes:**

**Measure** Attic Ins. R-30

**Components** A1

**Inspected**

**Comment** INCREASE THE EXISTING ATTIC INSULATION TO A CONSISTENT 14 INCH DEPTH WITH BLOWN CELLULOSE. FOLLOW THE TENNESSEE STANDARD WORK SPECIFICATIONS

All EXISTING electrical junction boxes will be flagged to be seen above the level of the insulation.

Open electrical junction boxes will have covers installed. Insulation dams and enclosures will be installed as required

Insulation will be adequately marked for depth a minimum of every 300 square feet of attic area.

INSTALL AN ENERGY LID OVER THE ATTIC ACCESS – W/S AND INSULATE

106 LINEAR FEET OF BAFFLES NEEDED BETWEEN 2 X 6 Rafters @16" O.C.  
8 /12 PITCH

#	Material/Labour	Description/Comment	Unit	Qty	Estimated		Actual		
					Unit Cost	Total	Qty	Unit Cost	Total
1	Insulation	Attic Insulation - Blown Fiberglass - R-30	SqFt	1508	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	Labor	Attic Insulation - Blown Fiberglass - R-30	SqFt	1508	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Other Detail**

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Measure Sub Total**  **Sub Total**

**Field Notes:**

**Measure Wall Insulation**

**Components** E1,E2,N1,S1,S2,S3,  
W1,W2

**Inspected**

**Comment** Contractor must use a dense pack blowing machine. Using fill tube, 100% of each cavity will be filled to a consistent density:  
Cellulose material will be installed to a minimum density of 3.5 pounds per cubic foot

IF INSTALLED FROM INSIDE-Install Chair Rail at the appropriate height to cover the plugs to be installed in the holes that are created to facilitate insulation installation.

#	Material/Labour	Description/Comment	Unit	Qty	Estimated		Actual		
					Unit Cost	Total	Qty	Unit Cost	Total
1	Insulation	Wall Insulation - Blown Cellulose - 2x4 Filled	SqFt	1383.03					
2	Labor	Wall Insulation - Blown Cellulose - 2x4 Filled	SqFt	1383.03					

**Other Detail**


**Measure Sub Total**  **Sub Total**

**Field Notes:**

**Measure CO Monitor is Needed**

**Components**

**Inspected**

**Comment** INSTALL A CO MONITOR IN THE BASEMENT AS PER THE TN SWS

#	Material/Labour	Description/Comment	Unit	Qty	Estimated		Actual		
					Unit Cost	Total	Qty	Unit Cost	Total
1	Health and Safety Items	CO monitor	Each	1					
2	Labor	Labor	Each	1					

**Other Detail**


**Measure Sub Total**  **Sub Total**

**Field Notes:**

**Measure** *Fix Improper Venting (Clothes Dryer)*

**Components**

**Inspected**

**Comment** VENT THE CLOTHES DRYER AS PER THE TN SWS- INSULATE IN THE VENT PIPE IN UNCONDITIONED SPACES

#	Material/Labour	Description/Comment	Unit	Estimated			Actual		
				Qty	Unit Cost	Total	Qty	Unit Cost	Total
1	Health and Safety Items	Equipment	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	Labor	Labor	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Other Detail**

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Measure Sub Total**  **Sub Total**

**Field Notes:**

**Measure** *Install Bathroom Exhaust Fan*

**Components**

**Inspected**

**Comment** INSTALL A NEW TWO SPEED ASHRAE COMPLIANT FAN. SET TO 40 CFM CONTINUOUS. VENT TO THE OUTSIDE WITH A TRIM KIT AS PER THE TN SWS. \*\*\*\*\*INSTALL A 6' VENT PIPE TO ENSURE PROPER VENTILATION\*\*\*\*\*

#	Material/Labour	Description/Comment	Unit	Estimated			Actual		
				Qty	Unit Cost	Total	Qty	Unit Cost	Total
1	Health and Safety Items	Bathroom exhaust fan	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	Labor	Labor	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Other Detail**

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Measure Sub Total**  **Sub Total**

**Field Notes:**



**Measure Practice Lead Safe Weatherization (Walls)**

**Components**

**Inspected**

**Comment** PRACTICE LEAD SAFE WEATHERIZATION- SUBMIT PICTURES TO THE AGENCY WITH CONTRACTOR INVOICE

#	Material/Labour	Description/Comment	Unit	Qty	Estimated		Actual		
					Unit Cost	Total	Qty	Unit Cost	Total
1	Health and Safety Items	Practice Lead Safety	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	Labor	Labor	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Other Detail</b>									
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Measure Sub Total</b>						<input type="text"/>	<b>Sub Total</b>		<input type="text"/>

**Field Notes:**

**Measure** REPLACE NATURAL GAS FURNACE/AC

**Components**

**Inspected**

**Comment** REPLACE THE EXISTING NATURAL GAS FURNACE WITH A NEW 90% + EFFICIENT CONDENSING NATURAL GAS ENERGY STAR, 70 Kbtu FURNACE/ 30 Kbtu CENTRAL AIR CONDITIONER. RETRO-FIT TO EXISTING DUCT-WORK. INSTALL FRESH AIR INTAKE FROM OUTSIDE. REPLACE GAS LINES AS NEEDED.

SUPPLY HOME OWNER WITH 12 RETURN FILTERS

Mechanical permits will be required for all HVAC work, as per local code. All AIR CONDITIONERS installed to be 15 SEER. All cooling equipment, ENERGY STAR labeled and shall be sized according to the latest editions of ACCA Manuals J and S. Specification of any type of heating unit shall be taken to include all connections, wiring, ducting, safety switches, thermostats, pad if existing does not fit new unit and all other work to provide a complete, Tight, efficient, balanced and operational system. All wiring shall be on separate circuits, wired from panel box or disconnects to HVAC unit by contractor. If installing a split system that does not have existing line set the cost should be included in bid to provide new line set. If leaving the existing line set the line is to be flushed and pressurized to insure no leakage. Include condensate pump, if situation requires. If installing a package unit, it is to include a four-sided shroud. All work to meet current code for city or county work is being performed. Must provide all warranty information with invoice. If unit warranty needs registered with factory contractor is to do this for client.

#	Material/Labour	Description/Comment	Unit	Estimated			Actual			
				Qty	Unit Cost	Total	Qty	Unit Cost	Total	
1	Unspecified	Misc Material	Each	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Other Detail</b>										
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<b>Measure Sub Total</b>						<input type="text"/>	<b>Sub Total</b>			<input type="text"/>

**Field Notes:**

**Measure** Smoke Detector is Needed

**Components**

**Inspected**

**Comment** INSTALL SMOKE DETECTORS IN ALL BEDROOMS AND IN THE BASEMENT

**Estimated**

**Actual**

#	Material/Labour	Description/Comment	Unit	Qty	Estimated		Actual		
					Unit Cost	Total	Qty	Unit Cost	Total
1	Health and Safety Items	Smoke detector	Each	4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	Labor	Labor	Each	4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Other Detail**

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Measure Sub Total**

**Sub Total**

**Field Notes:**

**Work Ordere Grand Total:**

**Grand Total:**