

## Allowable Measures Chart (Audit Event)

<b>Section 1 - ATTIC</b>					
ACTIVITY/MEASURE NAME		MEASURE TYPE CHOICES			NOTES
		Option 1	Option 2	Option 3	
1	Insulate all types of attics.	Insulation	None	None	
2	Insulate mobile home ceiling.	Insulation	None	None	Cellulose is not an allowed material for this Measure.
3	Attic hatch--insulation	Insulation	Air sealing	None	
4	Attic hatch--scuttle door	Insulation	Air sealing	IRM	IRM may only be used if the measure protects an installed insulation ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
5	Attic hatch--Weather-strip/ sweep scuttle door	Insulation	Air sealing	None	
6	Attic hatch--dam	Insulation	IRM	HSM	Fiberglass insulation is not allowed as a damming material except when the pitch or the proximity of the roof deck is such that the insulated attic hatch will not be able to be moved once it is in place. IRM may only be used if the measure protects an installed insulation ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
7	Attic hatch--latch, clasps, handles etc.	Insulation	Air sealing	None	
8	Attic hatch--trim, stop, frame	IRM	HSM	None	Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
9	Cut access to knee wall or peak attic.	IRM	HSM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). Health and safety can be used in order to access a space for a health and safety measure installation.
10	Install/replace vent chutes.	Insulation	HSM	IRM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). If soffit venting is installed, mechanically fasten baffles (i.e., soffit chutes) in each truss bay that terminate at least 6 inches above the final insulation level and provide a minimum of 1 inch clearance between insulation and roof deck material.
11	Dam around chimney or flue.	Insulation	HSM	None	Includes unused chimneys.
12	Dam around floored attic storage area.	Insulation	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

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13	Seal bypasses--includes holes in slants and ceiling (includes up to 160 sq ft drywall).	Air sealing	Insulation	IRM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
14	Seal bypasses in tight house (includes up to 160 sq ft drywall).	Air sealing	HSM	None	Include mobile home bellies. Provide written justification in WAPLink.
15	Repair/replace knob-and-tube wiring in attic.	IRM	HSM	None	Include as much of the cost in the IRM as possible while keeping the Cumulative SIR at 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cost the remainder, if any, to HSM. HSM may only be used if no money is available in IRM.
16	Vent soil stack to exterior.	HSM	None	None	
17	Vent/re-vent exhaust fans to exterior.	HSM	None	None	Metal exhaust duct must be sealed with UL 181 A-P tape.
18	Install house wrap over knee wall insulation.	Insulation	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
20	Box in recessed lights in order to insulate in the attic.	Insulation/ Baseload	Air sealing	IRM or HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). Replace non-IC rated recessed lights with LED retrofit kits. <u>Must label inside housing stating lamp was retrofitted and an incandescent light should not be installed due to a fire hazard.</u>

### Section 2 - ROOF

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Repair minor roof leak site-built homes.	IRM	None	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
2 Repair/replace flashing.	IRM	None	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
3 Repair/replace soffit/fascia.	IRM	None	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

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4	Coat or seam seal mobile home roof.	IRM	HSM	None	If using IRM, documentation of the ECM that it is protecting is required in WAPLink. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). If using an HSM, documentation of leak is required in client file.
5	Remove/replace vents for access to attic.	Insulation	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
6	Add roof vents for moisture control.	Insulation	IRM	HSM	Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
7	Remove turbine vents.	IRM	HSM	None	Replace ONLY with R-61s or similar vents. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
8	Patching a mobile home roof after insulation is installed.	Insulation	IRM	None	Include as much of the cost as possible in the insulation measure. Replace ONLY with R-61s or similar vents. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
9	Replace/install gutters/downspouts.	HSM	None	None	Allowed only with prior approval from Commerce, there is a \$2,000 limit per fund. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
10	Install Solar Photovoltaic System	ECM	None	None	Solar Photovoltaic systems from 1.8 kW to 5.0 kW may be considered as an ECM. Major components of the solar PV system include PV Panels, inverters/micro-inverts/racking, emergency disconnect, meters and necessary electrical components.
11	Replace/repair turbine vents.	<b>NOT ALLOWED</b>			
12	Install/replace deicer cables.	<b>NOT ALLOWED</b>			
13	Roof Replacement	<b>NOT ALLOWED*</b>		*Allowed if using WRF or WIRE Access Project funds	

### Allowable Measures Chart (Audit Event)

<b>Section 3 - WALLS</b>					
ACTIVITY/MEASURE NAME		MEASURE TYPE CHOICES			NOTES
		Option 1	Option 2	Option 3	
1	Insulate from exterior.	Insulation	None	None	
2	Insulate mobile home walls.	Insulation	None	None	Allowed only in stick-built addition to mobile home and pre-code mobile homes; or if the insulation in the walls do not meet the manufacturers data plate requirements.
3	Remove/replace/ repair reinstall damaged cladding.	Insulation	IRM	None	Allowed only to install insulation and if removal damages the current cladding. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. If the cladding is damaged during the installation of the insulation, the Installer is responsible for the cost of repairing the cladding. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
5	Patch stucco.	Insulation	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. HSM allowed only in cases where wall measures are cancelled. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
6	Use lead safe and asbestos safe work practices during exterior insulation installation.	Insulation	HSM	None	Include as much of the cost in wall insulation Measure as possible. Cost the remainder, if any, to HSM Measure type.
7	Seal/insulate a cantilever or bay window.	Insulation	None	None	
8	Insulate from the interior.	Insulation	None	None	
9	Use lead safe work practices during interior insulation installation.	Insulation	HSM	None	Include as much of the cost in wall insulation as possible. Cost the remainder, if any, to HSM measure type.
10	Patch/sand holes from interior blow.	Insulation	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
11	Patch interior holes (including test holes) in walls where there are holes or damaged materials (includes minor drywall).	Insulation	Air sealing	IRM	This measure is only allowed if there are gaps in the thermal or pressure boundary of the dwelling. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
12	Repair /replace knob-and-tube wiring.	IRM	HSM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). Cost the remainder, if any, to HSM. HSM may only be used if no money is available in IRM.

### Allowable Measures Chart (Audit Event)

13	Seal air leaks between attached garage and house.	Air sealing	HSM	None	Includes Weather strip and sweep of door between attached garage and house.
14	Build wall to create/move thermal boundary.	IRM	None	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
15	Seal top of interior open partition walls.	Air sealing	Insulation	HSM	Walls open to the attic--Health and Safety is only allowable for tight homes.
16	Minor Exterior Wall Sheathing	IRM	None	None	To allow the installation of insulation. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Section 4 - BASEMENT

	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		Option 1	Option 2	Option 3	
1	Seal air leakage.	Air sealing	None	None	
2	Insulate rim joists.	Insulation	Air sealing	None	
3	Remove Fiberglass insulation at the rim joist	Insulation	Air sealing	HSM	This is only allowed if there is mold behind the existing fiberglass insulation. Provide written justification in WAPLink.
4	Insulate walls and ceiling of a well room.	Insulation	None	None	
5	Insulate interior foundation walls	Insulation	None	None	
6	Seal/ repair ductwork (inside thermal boundary).	HSM	None	None	
7	Repair/air seal in-use wood chute.	Air sealing	None	None	
8	Close off unused wood chute.	Air sealing	None	None	
9	Install/replace/upgrade electric service panel.	IRM	HSM	None	Allowed only with prior approval from Commerce. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink. There is an \$2,000 limit per fund. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
10	Install/replace cover on a sump pump.	HSM	None	None	
11	Repair/replace sump pump.	HSM	None	None	Drain tile system installation is not allowed.

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12	Seal floor/foundation penetrations	HSM	None	None	
13	Insulate walls with wet spray cellulose.		NOT ALLOWED		Insulate walls with wet spray cellulose.

### Section 5 - CRAWLSPACE (INTERIOR)

	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		Option 1	Option 2	Option 3	
1	Insulate walls from the interior.	Insulation	None	None	
2	Install vapor barrier.	HSM	None	None	Ground moisture barrier will be fastened to ground in accordance with manufacturer's recommendations and extend a minimum of 6 inches up the foundation wall. Cost to gain access and/or remove debris from crawlspace to allow for installation of vapor barrier can be included in vapor barrier installation costs
3	Seal air leakage.	Air sealing	Insulation	None	All foam products must comply with the adopted MN Building Codes, the MN WAP Policy Manual, and the MN WAPLink User Guide.
4	Insulate walls with wet spray cellulose.		NOT ALLOWED		
5	Install or replace heat tape.		NOT ALLOWED		

### Section 6 - FOUNDATION (EXTERIOR)

	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		Option 1	Option 2	Option 3	
1	Insulate from exterior of the home	Insulation	None	None	
2	Seal air leakage.	Air sealing	None	None	
3	Raise/change exterior grade.	HSM	None	None	Must have prior approval from Commerce. HSM allowable when the actions must be taken to effectively perform weatherization work or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
4	Structural repair or manufactured home raising or leveling		NOT ALLOWED		

### Section 7 - FLOORS

	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		Option 1	Option 2	Option 3	
1	Insulate tuck-under garage ceiling.	Insulation	None	None	
2	Seal bypasses in tuck-under garage ceiling.	Air sealing	Insulation	HSM	Seal the floor and duct bypass, then include as much as possible in the tuck under ceiling air sealing and insulation measure. Cost the remainder, if any, to HSM.
3	Insulate porch floors and cantilevers.	Insulation	None	None	Allowed <b>ONLY</b> where floors form part of thermal boundary.

### Allowable Measures Chart (Audit Event)

<b>Section 8 - DOORS</b>						
ACTIVITY/MEASURE NAME		MEASURE TYPE CHOICES			NOTES	
		Option 1	Option 2	Option 3		
1	Replace primary door in a manufactured home or single-family dwelling. (Includes cellar doors). Includes all elements of installing a door.		Doors/ Windows	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
2	Replace broken glass, in single family or mobile home primary door.		Air Sealing	None	None	Must accomplish air sealing. Primary door glazing over 25% should be modelled as a separate window.
3	Repair/adjust primary door/strike plate on primary door.		Air Sealing	None	None	This is only allowed when necessary to enable door to completely close and create air tight seal.
4	Repair/adjust/replace threshold/ jamb/ sill/lockset or another component on primary door.		Air Sealing	None	None	This is only allowed when necessary to enable door to completely close and create an airtight seal.
5	Install knobs/locksets on primary door.		Doors/ Windows	Air Sealing	None	This is only allowed when necessary to enable door to completely close and create airtight seal. Or part of an installation of a replacement door (slab or pre-hung).
6	Weather-strip/sweep on the existing primary door.		Air Sealing	HSM	None	Weather-stripping costs are also part of a replacement door. Door between the house and attached garage can be a health and safety measure.
7	Repair/replace screen or glass (storm door).		NOT ALLOWED			
8	Repair/replace/install storm door.		NOT ALLOWED			
9	Install/repair/replace interior door.		NOT ALLOWED			
10	Repair/replace/ install hardware for interior door.		NOT ALLOWED			

### Section 9 - WINDOWS

ACTIVITY/MEASURE NAME		MEASURE TYPE CHOICES			NOTES
		Option 1	Option 2	Option 3	
1	Install/replace an interior or exterior storm unit.	Doors/ Windows	None	None	SIR is achieved by modeling storm window installation for single pane windows without existing storms in WAPLink. An exterior storm door may not be worked on.
2	Install/replace an interior or exterior primary window.	Doors/ Windows	None	None	
3	Repair/replace a window sash.	Doors/ Windows	Air Sealing	IRM	Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
4	Replace broken glass on primary window.	Doors/ Windows	Air Sealing	None	Model in WAPLink - Windows tab: "Evaluate for Weatherize" option. Must accomplish air sealing. SIR required for ECM.
5	Repair/adjust primary window so it closes.	Doors/ Windows	Air Sealing	None	Model in WAPLink - Windows tab: "Evaluate for Weatherize" option. SIR required for ECM.

### Allowable Measures Chart (Audit Event)

6	Install weather-strip/sash lock/crank on primary window.	Doors/ Windows	Air Sealing	IRM	Model in WAPLink - Windows tab: "Evaluate for Weatherize" option. SIR required for ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
7	Repair exterior window trim to stop an existing water leak.	Doors/ Windows	Air Sealing	IRM	Model in WAPLink - Windows tab: "Evaluate for Weatherize" option. SIR required for ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
8	Repair/replace screen on any window.		NOT ALLOWED		
9	Install/Repair/replace window shading.		NOT ALLOWED		
10	Install/Repair/replace louvered/un-louvered window sunscreens.		NOT ALLOWED		
11	Install/Repair/replace window film.		NOT ALLOWED		
12	Install/Repair/replace awnings.		NOT ALLOWED		

### Section 10 - FURNACE OR BOILER REPLACEMENT (RELATED ACTIVITIES)

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Abate/encapsulate asbestos.	HSM	None	None	All asbestos abatement must be completed by a licensed AHERA contractor. Includes asbestos abatement and asbestos safe work practices on the heating plant, distribution system, and flue when actions MUST be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Commerce approval is required for any other asbestos abatement.
2 Install condensate pump/floor cord protector.	HVAC	IRM	HSM	Include the cost in the heating plant replacement if possible. Cost the remainder, if any, to the IRM Measure type. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Also, includes the use of floor cord protectors to eliminate tripping hazard posed by condensate lines installed with Weatherization funds that transect a walking area. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
3 Install/repair/ replace programmable thermostat.	HVAC	IRM	HSM	Install the thermostat as a separate ECM. If the separate measure does not achieve the SIR, then include the cost of the thermostat in the cost of the heating plant replacement. MN code requires the installation of a programmable thermostat with all furnace installations. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Allowable Measures Chart (Audit Event)

4	Install/repair/relocate/replace non-programmable thermostat.	HVAC	IRM	HSM	Include the thermostat cost in the heating plant replacement measure. If the measure does not achieve the SIR when included in the replacement, then it may be installed as a separate HSM. A Non-programmable thermostat is only allowed in non-furnace installations when the client refuses programmable thermostat. MN code requires the installation of a programmable thermostat with all furnace installations. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
5	Install/repair/ replace combustion air.	HVAC	HSM	None	
6	Build wall to create/move thermal boundary for a condensing furnace or boiler.	HVAC	IRM	HSM	Allowable to protect a condensing furnace in an unconditioned or intermediate space that would otherwise risk frozen condensate. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Section 11 - FURNACE REPLACEMENT

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Replace furnace.	HVAC	HSM	None	Health and Safety may only be used if there is a Health and Safety risk to the client and the SIR of the ECM is less than 1.0 (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
2 Upgrade motor to ECM (Electronically Commutated Motor, Itemized cost).	HVAC	None	None	Service Providers may only use the energy savings in the User Defined Measure on the Commerce website to determine cost effectiveness of this measure.
3 Add/replace/repair/seal ductwork, supply and return plenums.	HVAC	IRM	HSM	For seal ductwork, follow Commerce Duct Sealing Guidance, Policy Manual Appendix B. For add/replace/repair, include as much of the cost as possible in the furnace replacement HVAC Measure. Cost the remainder, if any, to the IRM Measure type. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Use the HSM Measure type only if the HVAC and IRM Measure types do not achieve the Measure or the Job SIR. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. MHEA evaluates MH duct leakage as general heat waste--in MHEA Duct sealing and insulation can be an air and infiltration measure. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Allowable Measures Chart (Audit Event)

4	Construct/replace/resize filter rack.	HVAC	IRM	HSM	Include as much of the cost as possible in the furnace replacement HVAC Measure. Cost the remainder, if any, to the IRM Measure type. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Health and Safety is acceptable when filter rack work is required to properly seal return plenum. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
5	Balance distribution (room-to-room pressure balancing).	HVAC	IRM	HSM	Include as much of the cost as possible in the furnace replacement HVAC Measure. Cost the remainder, if any, to the IRM Measure type. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
6	Clean A-coil.	HVAC	IRM	HSM	Include as much of the cost as possible in the furnace replacement HVAC Measure. Cost the remainder, if any, to the IRM Measure type. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
7	Repair/replace leaking A-coil or AC pan.	HVAC	IRM	HSM	Include as much of the cost as possible in the furnace replacement HVAC Measure. Cost the remainder, if any, to the IRM Measure type. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

**Allowable Measures Chart (Audit Event)**

<b>Section 12 - BOILER REPLACEMENT/REPAIR</b>					
ACTIVITY/MEASURE NAME		MEASURE TYPE CHOICES			NOTES
		Option 1	Option 2	Option 3	
1	Replace boiler.	HVAC	HSM	None	Health and Safety may only be used if there is a Health and Safety risk to the client and the SIR of the ECM is less than 1.0 (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
2	Repair/replace expansion tank.	HVAC	IRM	HSM	Include as much of the cost of the tank in the boiler replacement cost as possible. Cost the remainder to HSM measure type. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
3	Add/replace/repair boiler distribution system components with boiler replacement.	HVAC	IRM	HSM	Include as much of the cost of distribution improvements in the boiler replacement cost as possible. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
4	Repair/replace temperature or pressure gauges.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
5	Replace water inlet valve.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
6	Replace backflow prevention valve.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
7	Repair/replace recirculating pump.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Allowable Measures Chart (Audit Event)

8	Install/replace expansion tank shut-off.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
9	Replace expansion tank drain valve.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
10	Bleed radiators.	HVAC	IRM	HSM	Include as much of the cost of distribution improvements in the boiler replacement cost as possible. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
11	Replace bleeder valves.	HVAC	IRM	HSM	Include as much of the cost of distribution improvements in the boiler replacement cost as possible. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
12	Repair/replace zone valves.	HVAC	IRM	HSM	Include as much of the cost of distribution improvements in the boiler replacement cost as possible. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
13	Drain a new installation or re-fill an existing system.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
14	Add/replace anti-freeze.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
15	Install a low water cut off valve	HVAC	IRM	HSM	Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
16	Repair/replace/install baseboard convector covers.	HVAC	IRM	None	Include as much of the cost of distribution improvements in the boiler replacement cost as possible. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Allowable Measures Chart (Audit Event)

<b>Section 13 - FURNACE REPAIR</b>					
ACTIVITY/MEASURE NAME		MEASURE TYPE CHOICES			NOTES
		Option 1	Option 2	Option 3	
1	Add/replace/repair/seal ductwork, supply and return plenums inside thermal boundary.	HVAC	HSM	None	For seal ductwork, follow Commerce Duct Sealing Guidance, Policy Manual Appendix B. For add/ replace/ repair ductwork, HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
2	Replace/repair/seal ductwork, supply and return plenums outside thermal boundary.	HVAC	None	None	For seal ductwork, follow Commerce Duct Sealing Guidance, Policy Manual Appendix B. For add/ replace/ repair ductwork, HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification WAPLink. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
3	Balance distribution (room-to room pressure balancing).	HVAC	HSM	IRM	Include the cost of this in the HVAC Measure. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Health and Safety may be used to ensure that the home is properly heated. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
4	Construct/replace/resize filter rack without furnace replacement.	IRM	HSM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Health and safety is acceptable when filter rack work is required to properly seal return plenum. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
5	Install ECM (Electronically Commutated Motor) retrofit.	HVAC	None	None	
6	Repair/replace blower motor/fan/assembly.	HVAC	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
7	Repair/replace inducer fan/motor/assembly.	HVAC	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
8	Replace electric circuit/control boards.	HVAC	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Allowable Measures Chart (Audit Event)

9	Remove humidifier from furnace supply.	HVAC	HSM	None	HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
10	Add fresh air (PVC) to one pipe system.	HVAC	IRM	HSM	Required on furnace replacements. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Section 14 - FURNACE OR BOILER REPAIR

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Install/Repair/ replace condensate pump.	IRM	HSM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Also, includes the use of floor cord protector to eliminate tripping hazard posed by condensate lines transecting a walking area. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
2 Repair condensate line on furnace/boiler.	IRM	HSM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Also, includes the use of floor cord protector to eliminate tripping hazard posed by condensate lines transecting a walking area. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
3 Install/repair/ replace combustion air.	HSM	None	None	
4 Clean and tune heating plant.	HVAC	HSM	None	Use HSM measure type only if clean and tune has an SIR of less than one using the HVAC Measure type. Heating plant clean and tune must follow the SWS and the Clean and Tune forms found in Appendix B.
5 Repair fuel leak or venting of fuel tank.	HSM	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
6 Repair/replace fuel pump (oil).	IRM	None	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
7 Install/replace gas supply drip leg.	IRM	HSM	None	The heating plant must have an ECM completed in order to use General IRM Dollars. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
8 Repair/relocate/replace any type of thermostat.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Allowable Measures Chart (Audit Event)

9	Repair/replace gas valve.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
10	Abate/remove asbestos.	HSM	None	None	All asbestos abatement must be completed by a licensed AHERA contractor. Includes asbestos abatement and asbestos safe work practices on the heating plant, distribution system, and flue when actions MUST be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. All asbestos abatement must be completed by a licensed AHERA contractor. Commerce approval is required for any other asbestos abatement.
11	Remove or drain an unused fuel tank.	HVAC	HSM	None	Above ground fuel tank removal allowable with prior Commerce approval.
12	Install flame retention oil burner.	NOT ALLOWED			

### Section 15 - CHIMNEYS AND FLUES

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Clean out chimney/flue.	HSM	IRM	None	This is only allowed to remove blockages and/or improve draft and to repair solid fuel fired appliances per Solid Fuel Fired Appliance and Chimney Guidance. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
2 Install/replace chimney cap.	IRM	HSM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
3 Install/replace chimney liner.	HSM	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
4 Line or re-line chimney.	HSM	IRM	None	This is only allowed to remove blockages and/or improve draft and to repair solid fuel fired appliances per Solid Fuel Fired Appliance and Chimney Guidance. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Allowable Measures Chart (Audit Event)

5	Repair chimney.	HSM	IRM	None	This is only allowed to remove blockages and/or improve draft and to repair solid fuel fired appliances per Solid Fuel Fired Appliance and Chimney Guidance. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
6	Seal unused vent connector holes in chimney (interior) with heating plant replacement.	HVAC	Air Sealing	HSM	Include as much of the cost as possible in furnace replacement HVAC Measure. Cost the remainder, if any, to the Air Sealing measure type.
7	Seal unused chimney cleanout door (interior) with heating plant replacement.	HVAC	Air Sealing	HSM	Include as much of the cost as possible in furnace replacement HVAC Measure. Cost the remainder, if any, to the Air Sealing measure type.
8	Seal unused vent connector holes in chimney (interior) without heating plant replacement.	Air Sealing	HSM	none	
9	Seal unused chimney cleanout door (interior) without heating plant replacement.	Air Sealing	HSM	none	
10	Remove thermal or electric vent dampers.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
11	Install/Repair/replace any type of electric vent dampers.	HVAC	IRM	HSM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). When Installed with a new boiler system or in a maintenance activity.
12	Remove metal chimney to roof line.	HVAC or Air Sealing	HSM	IRM	Remove unused metal chimney to roof line.
13	Remove masonry chimney to roof line.	NOT ALLOWED			

### Section 16 - SOLID FUEL HEATING EQUIPMENT (HEATING PLANT OR SPACEHEATER)

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	

### Allowable Measures Chart (Audit Event)

1	Replace indoor unit.	HVAC	HSM	None	Health and Safety may only be used if there is a Health and Safety risk to the client. The heating plant must be the primary heating plant, and this may only be done with prior approval from Commerce. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
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2	Repair indoor unit.	HVAC	HSM	None	The heating plant must be the primary heating plant, and this may only be done with prior approval from Commerce. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
3	Repair/replace outdoor Boiler unit.		NOT ALLOWED		

### Section 17 - SPACE HEATER

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Repair/replace primary vented space heater.	HVAC	HSM	None	
2 Repair non primary vented space heater.	HSM	None	None	This may only be done with prior approval from Commerce.
3 Remove unvented space heater.	HSM	None	None	Removal of units not meeting ANZI 21.11.2 is required prior to beginning weatherization activities. See Weatherization Reference Guide, Saturn Resource Management 8.4.2 for further details.
4 Remove unused space heater.		NOT ALLOWED		

### Section 18 - ELECTRIC HEAT

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Install permanent, hardwired electric space heater to unheated room.	HSM	None	None	Health and Safety may only be used if there is a Health and Safety risk to the client. This may only be done with prior approval from Commerce. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
2 Install or replace a thermostat for a permanent, hardwired electric space heater of any type.	HSM	None	None	

### Allowable Measures Chart (Audit Event)

3	Repair/replace baseboard convector covers.	HSM	None	None	HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
4	Install/repair/replace heat pump.	<b>NOT ALLOWED</b>		Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide	
5	Repair/Replace/install non-permanent, non-hardwired electric space heater.	<b>NOT ALLOWED</b>			

4  
Allowable Measures Chart (Audit Event)

**Section 19 - AIR CONDITIONING**

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Clean A-coil on central air conditioning system.	IRM	HSM	None	This is only allowed when it is necessary to improve the airflow through the distribution system. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
2 Repair/replace leaking A-coil on central air conditioning system.	IRM	HSM	None	Replacement is only allowed for non-repairable leaks. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
3 Repair/replace condensate pan and/or hose on central air conditioning system.	IRM	HSM	None	This is only allowed when it is needed to protect heat exchanger or other furnace components from water damage and includes the use of floor cord protector to eliminate tripping hazard posed by condensate lines transecting a walking area. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
4 Other Repair/maintenance services to window air conditioners or central air conditioning systems.	HSM	None	None	This is only allowed when air conditioning is medically necessary and when client can document the need for air conditioning with a doctor's letter. Provide written justification in WAPLink.
5 Air Conditioning repair or replacement	HVAC	HSM	IRM	Include air conditioning systems in the energy model. Repair or replace as an ECM, HSM if medically necessary or is leaking, or an IRM when needed to protect the heating plant components from water damage or to ensure proper performance of the heating system.

### Allowable Measures Chart (Audit Event)

<b>Section - 20 WATER HEATER</b>					
ACTIVITY/MEASURE NAME		MEASURE TYPE CHOICES			NOTES
		Option 1	Option 2	Option 3	
1	Replace any water heater for energy conservation reasons	Baseload	None	None	Mobile home water heater installations must include drain pan installation per manufacturer's instructions. Evaluation of a heat pump water heater is allowable. Switching a fossil fuel water heater to a heat pump water requires adherence to fuel switching policy and the WAPLink User's Guide.
2	Replace any water heater that is non-repairable or where the tank has a leak.	Baseload	HSM	None	Complete a WAPLink audit run for the analysis of replacement by SIR. HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. HSM replacements shall be like-for-like in type, capacity, and functionality. Provide written justification in the Water Heating tab of WAPLink.
3	Replace a poorly drafting oil or gas water heater or a water heater that failed the spillage test.	HSM	None	None	A water heater that fails the spillage test may be replaced if the draft cannot be improved by other less costly measures. This includes the minor electrical work needed to operate new DWH.
4	Install pipe wrap on hot/cold pipes.	Baseload	None	None	All power vented and electric water heaters will be assessed for pipe insulation. If pipe wrap exists but is not up to SWS standards, the auditor can model as not existing as long as the first five feet of the hot water pipe is not completely covered. Natural draft units are optional.
5	Insulate tank.	Baseload	None	None	
6	Repair/replace water heater venting.	HSM	None	None	
7	Install chimney liner to improve draft.	HSM	None	None	
8	Repair oil or gas water heater.	HSM	None	None	
9	Clean/tune oil or gas water heater.	HSM	None	None	
10	Repair fuel leak.	HSM	None	None	
11	Install/replace gas shut off valve.	HSM	None	None	
12	Repair/replace/install TPR and/or drip leg.	HSM	None	None	HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
13	Repair/replace mobile home access door.	IRM	None	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
14	Repair or replace element access panels.	HSM	None	None	
15	Repair electric circuit to Water Heater.	HSM	None	None	

### Allowable Measures Chart (Audit Event)

16	Repair/replace mobile home combustion compartment floor.	IRM	HSM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
17	Replace element in electric water heater.		NOT ALLOWED		
18	Repair electric water heater element.		NOT ALLOWED		

### Section - 21 EXHAUST FANS

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Install/repair/clean/replace.	HSM	None	None	HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.

2	Insulate exhaust vent in attic or other unheated space.	HSM	None	None	Metal exhaust duct must be sealed with UL 181 A-P tape.
3	Replace flexible exhaust venting with smooth metal ductwork. Include sealing seams	HSM	None	None	Metal exhaust duct must be sealed with UL 181 A-P tape.
4	Vent an existing fan to exterior.	HSM	None	None	Metal exhaust duct must be sealed with UL 181 A-P tape.

### Section 22 - PLUMBING

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Repair minor plumbing leaks.	IRM	HSM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). HSM can be used to protect other installed HSMs such as crawlspace poly. There is a \$2,000 limit per fund.
2 Install faucet aerators.	Baseload	None	None	
3 Install low-flow shower heads.	Baseload	None	None	
4 Insulate exposed pipes in attic, floor, belly or unheated crawl space.	NOT ALLOWED			The pipes must be brought inside the thermal boundary in a crawlspace or attic and in a mobile home the belly must be properly insulated to avoid the pipes freezing. Pipe will be protected from wind.
5 Repair all other plumbing problems.	NOT ALLOWED			
6 Repair or cover septic tanks.	NOT ALLOWED			

### Section 23 - REFRIGERATOR REPLACEMENT

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	

### Allowable Measures Chart (Audit Event)

1	Replace the existing primary refrigerator.	Baseload	None	None	Includes the disposal cost of the old refrigerator and its refrigerant. All replacement refrigerators must be Energy*Star qualified appliances, equivalent, or better. Minnesota allows the replacement of energy inefficient refrigerators of the same style and features. All refrigerators should be metered, if possible. If not, notes in WA as to why it was not metered must be entered.
2	Dispose of refrigerant as part of refrigerator replacement.	IRM	HSM	None	Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).

### Section 24 - MOBILE HOME MISCELLANEOUS

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Repair mobile home belly.	Air Sealing	Insulation	IRM	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM.
2 Insulate mobile home belly.	Insulation	None	None	Cellulose is not an allowed material for this application.
3 Insulate floor of stick built mobile home addition.	Insulation	None	None	

4	Install poly underneath a mobile home.	NOT ALLOWED	
5	Install/repair skirting on mobile home or addition to mobile home.	NOT ALLOWED	

### Section 25 - STAIRS/RAILINGS

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Make minor repairs to stairs.	IRM	HSM	None	Minor repairs are only allowed so weatherization installers can access the area needed to safely complete authorized weatherization measures. Photo and other documentation of the existing condition of the stairs are required to justify the repair. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund).
2 Stairs, all other repairs/replacements to treads, risers, stringers, railings.	NOT ALLOWED			

### Section 26 - MISCELLANEOUS ACTIVITIES

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 Install/repair/replace/insulate dryer vent.	HSM	None	None	
2 Clean/tune/repair gas range.	HSM	None	None	Allowed <b>ONLY</b> to reduce CO to acceptable levels.

### Allowable Measures Chart (Audit Event)

3	Install/Repair Heat Recovery Ventilator or Energy Recovery Ventilators.	HSM	None	None	Install only with prior approval from Commerce.
4	Clean and Balance flow rate for Heat Recovery Ventilator or Energy Recovery Ventilators.	HSM	None	None	If needed to meet ASRHAE continuous ventilation rate requirement.
5	Installing LED bulbs.	Baseload	None	None	All bulbs attached to the dwelling, both interior and exterior including attached garages, shall be evaluated. Bulbs in detached structures are not evaluated. Bulbs must be installed at the dwelling. They may not be given to the client to install. Permanently remove bulbs from job site and properly dispose of them.
6	Install lighting retrofit fixtures.	Baseload	None	None	For Multi Family Buildings
7	Installing LED bulbs or LED retrofit recessed cans.	Baseload	None	None	Bulbs must be installed at the dwelling. They may not be given to the client to install.
8	Install smoke and CO alarms.	HSM	None	None	Repairing existing hard-wired smoke and CO alarms is allowed. Replacing smoke and CO alarms that have not passed their expiration date is not allowed. In such cases battery replacement with Lithium batteries is allowed. Installing hard wired smoke and CO alarms where they did not previously exist is not allowed.

9	Repair minor structural defects.	IRM	None	None	Allowed with prior approval from Commerce. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. Provide written justification in the WAPLink.
10	Make minor electrical repairs.	IRM	HSM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM, including LED retrofit for dense packing kitchen soffits. Cumulative SIR must be 1.0 or greater (or .75 or greater for jobs for which EAPWX is the only Commerce WAP fund). HSM allowable when the actions must be taken to effectively perform weatherization work, or the actions are necessary as a result of weatherization work. There is an \$2,000 limit per fund. Provide written justification in WAPLink.
11	Minor exterior grading	HSM	None	None	Allowed with prior approval from Commerce. HSM allowable when the actions must be taken to effectively perform weatherization work or the actions are necessary as a result of weatherization work. Provide written justification in WAPLink.
12	Radiant Barrier Removal	HSM	None	None	In cases where a radiant barrier installed in an attic is causing condensation or will cause condensation if left in place after weatherization work is completed, the radiant barrier must be removed prior to completing weatherization work.

### Allowable Measures Chart (Audit Event)

13	Pest Removal	HSM	None	None	Pest removal is allowed only where infestation would prevent weatherization. Screening of windows and points of access and incorporating pest exclusion into air sealing practices to prevent intrusion is allowed.
14	Permit	HVAC	HSM	Insulation	If the measure is SIR based, the associated permit cost must fit into the corresponding measure SIR. With a Deemed Savings replacement or a Health and Safety replacement or repair, the associated permits will follow the parent category. Permits should be listed as Material in WAPLink.
15	Diagnostics	HSM	Air Sealing	None	All BPI 1200 required diagnostic testing (LEL, combustion analysis, fuel distribution system analysis, ambient CO, and CAZ), and fan flow tests for ASHRAE compliance are allowable H&S costs. Blower door readings, including zonal diagnostics should follow the category of their corresponding measure. All diagnostics do not need to be all paid under one measure, example, CAZ testing can be a separate HSM while the BD/ZP is under infiltration reduction. In short, diagnostic testing will follow the parent category or in what relationship the test is required.
16	Abate mold in dwelling.	<b>NOT ALLOWED WITH DOE FUNDS</b>			Follow the guidance found in the MN WAPLink User Guide.

17	Repairs needed to correct damages caused by installers OR Service Provider staff during weatherization activity.	<b>NOT ALLOWED</b>	If damage is caused by contractor, it is contractor's responsibility to make IRMs/replacements. If damage is caused by Service Provider installer or other staff, it is SP's responsibility to make IRMs/replacements paid by non-WAP funds or insurance.
18	Install/repair/replace evaporative coolers.	<b>NOT ALLOWED</b>	
19	Leave materials for client to install.	<b>NOT ALLOWED</b>	
20	Test for or mitigate radon.	<b>NOT ALLOWED</b>	
21	Installing materials that a client has purchased.	<b>NOT ALLOWED</b>	
22	Paying incentives for any weatherization work	<b>NOT ALLOWED</b>	

### Section 27 - EAPWX Measure Expansion - Audit Event

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	Option 1	Option 2	Option 3	
1 EXP Mold and Moisture Remediation	HSM	None	None	All mold and moisture remediation measures found in the allowable measures chart are allowable as EXP mold and moisture remediation measures. Additionally, cleaning/painting of building assemblies that have become moldy due to moisture intrusion is allowed. Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide.
2 EXP LED Bulb Replacement	Baseloads	None	None	Replacement bulbs must be ENERGY STAR® qualified, equivalent, or better and UL approved. (SWS 7.0103.1)

### Allowable Measures Chart (Audit Event)

3	EXP Heating System Replacement Deemed Savings	HVAC	None	None	Follow the guidance found in the MN WAP Policy Manual Addendum.
4	EXP Water Heater Replacement Deemed Savings	Baseloads	None	None	Follow the guidance found in the EAPWX Measure Expansion Policy Manual Addendum.
5	EXP Cold-Climate Air Source Heat Pump Deemed Savings	HVAC	None	None	Follow the guidance found in the EAPWX Measure Expansion Policy Manual Addendum.
6	EXP Cookstove Repair	HSM	None	None	Follow the guidance found in the EAPWX Measure Expansion Policy Manual Addendum.
7	EXP Cookstove Replacement	HSM	None	None	Follow the guidance found in the EAPWX Measure Expansion Policy Manual Addendum.
8	EXP Air Conditioner Repair	HVAC	HSM	None	Follow the guidance found in the EAPWX Measure Expansion Policy Manual Addendum.
9	EXP Air Conditioner Replacement	HVAC	HSM	None	Follow the guidance found in the EAPWX Measure Expansion Policy Manual Addendum.
10	EXP Health AIR -- Vermiculite	HSM	None	None	Follow the guidance found in the Healthy AIR Policy Manual Addendum.

### Section 28 - General Heat Waste Measures (GHW) - Audit Event

ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES - Total GHW cost cannot exceed \$250 per audit event
	Option 1	Option 2	Option 3	
1 GHW Furnace/ Air Conditioner Filter Replacement	Air Sealing	None	None	Follow the guidance found in the MN WAP Policy Manual 4.2.4
2 GHW Door Weatherstripping	Air Sealing	None	None	Follow the guidance found in the MN WAP Policy Manual 4.2.4.
3 GHW Door Sweep	Air Sealing	None	None	Follow the guidance found in the MN WAP Policy Manual 4.2.4.
4 GHW Attic Hatch Weatherstripping	Air Sealing	None	None	Follow the guidance found in the MN WAP Policy Manual 4.2.4.
5 GHW Attic Hatch Sweep	Air Sealing	None	None	Follow the guidance found in the MN WAP Policy Manual 4.2.4.
6 GHW Air Sealing	Air Sealing	None	None	Follow the guidance found in the MN WAP Policy Manual 4.2.4

**Allowable Measures Chart (Audit Event)**

<b>Section 29 - Weatherization Readiness Funds (WRF)</b>					
ACTIVITY/MEASURE NAME		MEASURE TYPE CHOICES			
		Option 1	Option 2	Option 3	
1	Mold and Moisture <ul style="list-style-type: none"> <li>• Grading/landscaping repairs for seepage control</li> <li>• Gutters/downspout repair, replacement, or addition</li> <li>• Sump pump repair, replacement, or addition</li> <li>• Black mold removal</li> </ul>	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
2	Mobile home skirting repair or replacement	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
3	Interior and exterior wall repairs	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
4	Ceiling and floor repairs	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
5	Plumbing and sewer repairs	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
6	Electrical repairs or upgrades such as knob and tube replacements and panel upgrades	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
7	Inaccessible crawl spaces	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
8	Remediation of excessive clutter or hoarding	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
9	Chimney liner repair or replacement	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
10	Integrated Pest Management (bugs and vermin remediation and blocking)	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
11	Radon mitigation (requires prior approval from Commerce)	Readiness	None	None	Follow the guidance found in the MN WAP Policy Manual and MN WAPLink User Guide
12	Measures Not Listed	Readiness	None	None	Measures not listed will be considered on case-by-case basis and must receive prior approval by Commerce