

PY16 Version 16.1  
 AMC (Allowable Measures Chart) 1

<b>Section 1 ATTIC</b>					
	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
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.
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.
7	Attic hatch--latch, clasps, handles etc.	Insulation	Air sealing	None	
8	Attic hatch--trim, stop, frame	IRM	HSM	None	
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. 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.
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.
13	Seal bypasses--includes holes in slants and ceiling (includes up to 100 sqft sheet rocking).	Air sealing	Insulation	IRM	Include the cost of the blower door and pressure diagnostic tests in the Infiltration Reduction measure cost. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM.
14	Seal bypasses in tight house (includes up to 100 sqft sheet rocking).	Air sealing	HSM	None	Include the cost of the blower door and pressure diagnostic tests in the Infiltration Reduction measure cost. Provide written justification in the Health and Safety tab of the WA file.
15	Repair/replace knob-and-tube wiring in attic.	Insulation	IRM	HSM	Include as much of the cost in the attic insulation Measure as possible. Cost the remainder, if any, to IRM. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM Cost to HSM measure type only if no money is available in Insulation and IRM Measure Types.

16	Vent soil stack to exterior.	HSM	None	None	
17	Vent/revent exhaust fans to exterior.	HSM	None	None	
18	Install house wrap over kneewall insulation.	Insulation	IRM	None	IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM.
20	Box in recessed lights in order to insulate in the attic.	Insulation	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.
<b>Section 2 ROOF</b>					
		<b>MEASURE TYPE CHOICES</b>			
	<b>ACTIVITY/MEASURE NAME</b>	<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	<b>NOTES</b>
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.
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.
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.
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 WA. If using a 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.
6	Add roof vents for moisture control.	Insulation	IRM	HSM	
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 the Health and Safety tab of the WA file.
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. Only use IRM as a second choice when the cost of patching drops the SIR of insulating the roof below one (1.0). 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
9	Replace/install gutters/downspouts.	HSM	None	None	Allowed only with prior approval from Commerce. <b>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 Health and Safety tab of the WA file.</b>
10	Replace/repair turbine vents.	<b>NOT ALLOWED</b>			
11	Install/replace deicer cables.	<b>NOT ALLOWED</b>			

<b>Section 3 WALLS</b>					
	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
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 manufactureres 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.
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.
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.
11	Patch interior holes (including test holes) in walls where there are holes or damaged materials (includes minor sheet rocking).	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.
12	Repair /replace knob-and-tube wiring.	Insulation	IRM	HSM	Include as much of the cost in the wall insulation measure as possible. Cost the remainder, if any, to IRM. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM. Cost to the HSM Measure Type ONLY if no money is available in Insulation and IRM Measure Types.
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.
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.
<b>Section 4 BASEMENT</b>					
		<b>MEASURE TYPE CHOICES</b>			
		<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	<b>NOTES</b>
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. <b>Provide written justification in the Health and Safety tab of the WA file.</b>
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. <b>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 Health and Safety tab of the WA file.</b>
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.
12	Insulate walls with wet spray cellulose.	<b>NOT ALLOWED</b>			
<b>Section 5 CRAWLSPACE (INTERIOR)</b>					
		<b>MEASURE TYPE CHOICES</b>			

	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
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 intallation costs
3	Seal air leakage.	Air sealing	Insulation	None	All foam products must comply with the adopted MN Building Codes and the MN WAP Policy Manual.
4	Insulate walls with wet spray cellulose.	<b>NOT ALLOWED</b>			
5	Install or replace heat tape.	<b>NOT ALLOWED</b>			

### Section 6 FOUNDATION (EXTERIOR)

	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
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. <b>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 Health and Safety tab of the WA file.</b>
4	Structural repair or manufactured home raising or leveling	<b>NOT ALLOWED</b>			

### Section 7 FLOORS

	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
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, than 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.

<b>Section 8 DOORS</b>					
	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
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.
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 other component on primary door.	Air Sealing	None	None	This is only allowed when necessary to enable door to completely close and create air tight 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 air tight seal. Or part of an instalation of a replacement door (slab or pre-hung).
6	Weather-strip/sweep on the existing primary door	Air Sealing	HSM	None	Weatherstripping costs are also part of a replacement door. Door between house and attached garage can be a health and safety measure.
7	repair/replace screen or glass (storm door).	<b>NOT ALLOWED</b>			
8	repair/replace/install storm door.	<b>NOT ALLOWED</b>			
9	Install/repair/replace interior door.	<b>NOT ALLOWED</b>			
10	repair/replace/ install hardware for interior door.	<b>NOT ALLOWED</b>			
<b>Section 9 WINDOWS</b>					
	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
1	Install/replace an interior or exterior storm unit.	Doors/ Windows	None	None	SIR is achived by modeling storm window installation for single pane windows without existing storms in the WA software. 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	
4	Replace broken glass on primary window.	Doors/ Windows	Air Sealing	None	Model within WA software - 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 within WA software - Windows tab: "Evaluate for Weatherize" option. SIR required for ECM.
6	Install weather-strip/sash lock/crank on primary window.	Doors/ Windows	Air Sealing	IRM	Model within WA software - Windows tab: "Evaluate for Weatherize" option. SIR required for ECM.
7	Repair exterior window trim to stop an existing water leak.	Doors/ Windows	Air Sealing	IRM	Model within WA software - Windows tab: "Evaluate for Weatherize" option. SIR required for ECM.
8	Repair/replace screen on any window.	<b>NOT ALLOWED</b>			
9	Install/Repair/replace window shading.	<b>NOT ALLOWED</b>			
10	Install/Repair/replace louvered/unlouvered window sunscreens.	<b>NOT ALLOWED</b>			
11	Install/Repair/replace window film.	<b>NOT ALLOWED</b>			
12	Install/Repair/replace awnings.	<b>NOT ALLOWED</b>			
<b>Section 10 FURNACE OR BOILER REPLACEMENT (RELATED ACTIVITIES)</b>					
		<b>MEASURE TYPE CHOICES</b>			
	<b>ACTIVITY/MEASURE NAME</b>	<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	<b>NOTES</b>
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.	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
3	Install/repair/ replace programmable thermostat.	HVAC	None	None	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.

4	Install/repair/relocate/replace non-programmable thermostat.	HVAC	None	None	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 when the client refuses programmable thermostat per WA 8.9 Manual.
5	<b>Install/repair/ replace combustion air.</b>	<b>HVAC</b>	<b>HSM</b>	<b>None</b>	
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.
<b>Section 11 FURNACE REPLACEMENT</b>					
		<b>MEASURE TYPE CHOICES</b>			
	<b>ACTIVITY/MEASURE NAME</b>	<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	<b>NOTES</b>
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. <b>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 Health and Safety tab of the WA file.</b>
2	Upgrade motor to ECM (Electronically Commutated Motor, Itimized 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	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.

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. <b>Provide written justification in the Health and Safety tab of the WA file.</b>
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.
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. 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 Health and Safety tab of the WA file.
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 the Health and Safety tab of the WA file.
<b>Section 12 BOILER REPLACEMENT/REPAIR</b>					
		<b>MEASURE TYPE CHOICES</b>			
	<b>ACTIVITY/MEASURE NAME</b>	<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	<b>NOTES</b>
1	Replace boiler.	HVAC	HSM	None	<b>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. 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 Health and Safety tab of the WA file.</b>

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.
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. <b>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 Health and Safety tab of the WA file.</b>
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
15	Install a low water cut off valve	HVAC	IRM	HSM	
16	Repair/replace/install baseboard convactor 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.

<b>Section 13 FURNACE REPAIR</b>					
	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
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 C. 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 the Health and Safety tab of the WA file.
2	Replace/repair/seal ductwork, supply and return plenums outside thermal boundary.	HVAC	Air Sealing	HSM	For seal ductwork, follow Commerce Duct Sealing Guidance, Policy Manual Appendix C. 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 the Health and Safety tab of the WA file.
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.
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.
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.
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.
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.
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 the Health and Safety tab of the WA file.
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.

<b>Section 14 FURNACE OR BOILER REPAIR</b>					
	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
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.
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.
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.
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.
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.
7	Install/replace gas supply drip leg.	IRM	HSM	None	The heating plant must have a ECM completed in order to use General IRM Dollars.
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.
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.
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.	<b>NOT ALLOWED</b>			
12	Install flame retention oil burner.	<b>NOT ALLOWED</b>			
<b>Section 15 CHIMNEYS AND FLUES</b>					
	ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
		PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	

1	Clean out chimney/flue.	HSM	IRM	None	This is only allowed to remove blockages and/or improve draft. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM.
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.
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.
4	Line or re-line chimney.	HSM	IRM	None	This is only allowed to remove blockages and/or improve draft. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM.
5	Repair chimney (exterior).	HSM	IRM	None	This is only allowed to remove blockages and/or improve draft. IRM may only be used if the measure protects an installed ECM or ensures the effectiveness of an installed ECM.
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.
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. When Installed with a new boiler system or in a maintenance activity. SWS 5.3104.3
12	Remove metal chimney to roof line	<b>NOT ALLOWED</b>			
13	Remove masonry chimney to roof line.	<b>NOT ALLOWED</b>			
<b>Section 16 SOLID FUEL HEATING EQUIPMENT (HEATING PLANT OR SPACEHEATER)</b>					
<b>ACTIVITY/MEASURE NAME</b>		<b>MEASURE TYPE CHOICES</b>			<b>NOTES</b>
		<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	

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. <b>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 Health and Safety tab of the WA file.</b>
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. <b>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 Health and Safety tab of the WA file.</b>
3	Repair/replace outdoor Boiler unit.	NOT ALLOWED			
<b>Section 17 SPACE HEATER</b>					
		MEASURE TYPE CHOICES			
	<b>ACTIVITY/MEASURE NAME</b>	<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	<b>NOTES</b>
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 <b>is required</b> prior to beginning weatherization activities. See MN Weatherization Field Guide-SWS Edition 8.4.2 for further details.
4	Remove unused space heater.	NOT ALLOWED			
<b>Section 18 ELECTRIC HEAT</b>					
		MEASURE TYPE CHOICES			
	<b>ACTIVITY/MEASURE NAME</b>	<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	<b>NOTES</b>
1	Install <del>permanent, hardwired free-standing</del> electric <del>baseboard</del> 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. <b>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 Health and Safety tab of the WA file.</b>

2	Install or replace a thermostat for a permanent, hardwired electric space heater of any type	HSM	None	None	
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 the Health and Safety tab of the WA file.
4	Install/repair/replace heat pump.	NOT ALLOWED			
5	Repair/Replace/install non-permanent, non-hardwired free-standing electric space heater.	NOT ALLOWED			
<b>Section 19 AIR CONDITIONING</b>					
		<b>MEASURE TYPE CHOICES</b>			
	<b>ACTIVITY/MEASURE NAME</b>	<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	<b>NOTES</b>
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 the Health and Safety tab of the WA file.
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 the Health and Safety tab of the WA file.
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. 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 the Health and Safety tab of the WA file.

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. <b>Provide written justification in the Health and Safety tab of the WA file.</b>
<b>Section 20 WATER HEATER</b>					
	<b>ACTIVITY/MEASURE NAME</b>	<b>MEASURE TYPE CHOICES</b>			<b>NOTES</b>
		<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	
1	Replace any water heater for energy conservation reasons	Baseload	None	None	
2	Replace any water heater that is non-repairable or where the tank has a leak.	Baseload	HSM	None	Complete a WA audit run for the analysis of replacement by SIR. <b>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 Water Heating tab of the WA file.</b>
3	Replace a poorly drafting oil or gas water heater or a water heater that failed the <b>spillage</b> test.	HSM	None	None	A <b>water heater that fails the spillage test</b> 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	
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	<b>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 Health and Safety tab of the WA file.</b>
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.
14	repair or replace element access panels	HSM	None	None	
15	repair electric circuit to Water Heater	HSM	None	None	
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.
17	Replace element in electric water.	<b>NOT ALLOWED</b>			
18	repair electric water heater element.	<b>NOT ALLOWED</b>			

<b>Section 21 EXHAUST FANS</b>				
ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
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 the Health and Safety tab of the WA file.
2 Insulate exhaust vent in attic or other unheated space.	HSM	None	None	
3 Replace flexible exhaust venting with smooth metal ductwork. Include sealing seams	HSM	None	None	
4 Vent an existing fan to exterior.	HSM	None	None	
<b>Section 22 PLUMBING</b>				
ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	
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. HSM can be used to protect other installed HSMs such as crawlspace poly.
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.	<b>NOT ALLOWED</b>			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.	<b>NOT ALLOWED</b>			
6 repair or cover septic tanks.	<b>NOT ALLOWED</b>			
<b>Section 23 REFRIGERATOR REPLACEMENT</b>				
ACTIVITY/MEASURE NAME	MEASURE TYPE CHOICES			NOTES
	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	

1	Replace the existing primary refrigerator.	Baseload	None	None	Includes the disposal cost of the old refrigerator and its refrigerant. <b>All replacement refrigerators must be Energy*Star model. Minnesota allows the replacement of energy inefficient refrigerators of the same style and features.</b>
2	Dispose of refrigerant as part of refrigerator replacement.	IRM	HSM	None	
<b>Section 24 MOBILE HOME MISCELLANEOUS</b>					
		<b>MEASURE TYPE CHOICES</b>			
	<b>ACTIVITY/MEASURE NAME</b>	<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	<b>NOTES</b>
1	Repair mobile home belly.	Air Sealing	Insulation	IRM	Use the MHEA Floor Repair Tool in Appendix C. 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.	<b>NOT ALLOWED</b>			
5	Install/repair skirting on mobile home or addition to mobile home.	<b>NOT ALLOWED</b>			
<b>Section 25 STAIRS/RAILINGS</b>					
		<b>MEASURE TYPE CHOICES</b>			
	<b>ACTIVITY/MEASURE NAME</b>	<b>PREFERRED (1st choice)</b>	<b>ACCEPTABLE (2nd choice)</b>	<b>LEAST DESIRABLE (3rd choice)</b>	<b>NOTES</b>
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.
2	Stairs, all other repairs/replacements to treads, risers, stringers, railings.	<b>NOT ALLOWED</b>			
<b>Section 26 MISCELLANEOUS ACTIVITIES</b>					
		<b>MEASURE TYPE CHOICES</b>			

	ACTIVITY/MEASURE NAME	PREFERRED (1st choice)	ACCEPTABLE (2nd choice)	LEAST DESIRABLE (3rd choice)	NOTES
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
3	Install/repair Heat Recovery Ventilator or Energy Recovery Ventilators.	HSM	None	None	Install only with prior approval from Commerce.
4	Installing CFL/LED bulbs	Baseload	None	None	Bulbs must be installed at the dwelling. They may not be given to the client to install.
5	Install lighting retrofit fixtures	Baseload	None	None	For Multi Family Buildings
6	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.
7	Install smoke and CO alarms	HSM	None	None	Repairing existing hard wired smoke and CO alarms is allowed. Installing hard wired smoke and CO alarms where they did not previously exist is not allowed. Battery operated units are acceptable.
8	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. <b>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 Health and Safety tab of the WA file.</b>
9	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. <b>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 Health and Safety tab of the WA file.</b>
10	Minor exterior grading	HSM	None	None	Allowed with prior approval from Commerce. <b>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 Health and Safety tab of the WA file.</b>
11	Abate mold in dwelling.	<b>NOT ALLOWED</b>			
12	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.
13	Install/repair/replace evaporative coolers.	<b>NOT ALLOWED</b>			
14	Leave materials for client to install.	<b>NOT ALLOWED</b>			
15	Test for or mitigate radon.	<b>NOT ALLOWED</b>			

16	Installing materials that a client has purchased.	<b>NOT ALLOWED</b>	
17	Paying incentives for any weatherization work	<b>NOT ALLOWED</b>	