HELP Project Equipment and Insulation Specifications Updates

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Introduction

Changes to the Home Energy Loan Program's (HELP) eligible retrofit specifications were made earlier this year to align with ENERGY STAR requirements and new building codes adopted in January 2024.

Equipment Specification Requirements

<u>The Home Energy Loan Program Bylaw, No. 9762 (HELP Bylaw)</u> came into effect in May 2021 and was amended in April 2023. The *HELP Bylaw* lists eligible energy efficiency and renewable energy projects in Schedule "A" and specifies that the following projects must be certified through Energy Star for the local climate region:

- High-efficiency furnaces, boilers, and central air conditioners;
- Window and exterior door replacements;
- Gas or tankless water heaters, gas storage water heaters or electric heat pump storage water heaters;
- heat recovery ventilation systems;
- air-source heat pumps;
- geothermal heat pumps; and
- solar water heaters.

Recent updates to the Energy Star requirements include:

- Jan 2022 air-source heat pumps and central air conditioners to use a different energy efficiency factor, SEER2 instead of SEER and HSPF2 instead of HSPF, as a standard.
- April 2023 ENERGY STAR implemented new requirements for all types of water heaters eliminating many gas storage water heaters that would have previously been accepted into the program.

Administration is now using these updated specifications to confirm eligibility for HELP loans. However, one water heater project may have been completed before realizing the ENERGY STAR changes. The Project Team has updated the <u>HELP Equipment Specifications</u> webpage and application documents to align with this change as per <u>the HELP Bylaw</u>.

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See Table 1 below which outlines the product, original specifications, and new Energy Star requirements.

Table 1 - Equipment Specification Changes

Product	Original Equipment Specifications	New Energy Star Requirements
High-efficiency central air conditioner	SEER ≥ 15	SEER2 ≥ 15.1/ ≥11.5 EER2
Gas Storage Water Heater (≤ 55 gallon)	Medium Draw EF ≥ 0.67 or UEF ≥ 0.64 High Draw UEF ≥ 0.68	Medium draw UEF ≥ 0.80; High Draw UEF ≥ 0.86
Gas Storage Water Heater (> 55 gallon)	Medium draw EF ≥ 0.77 or UEF ≥ 0.78 High Draw UEF ≥ 0.80	UEF ≥ 0.85
Electric heat pump storage water heater	≤ 55 gallon, EF or UEF ≥ 2.00; > 55 gallon, EF or UEF ≥ 2.20	UEF ≥ 2.20
Solar Water Heater	Gas backup SEF ≥ 1.2	Gas backup: SUEF ≥1.80; Electric backup: SUEF ≥3.00
Air source Heat pump split system	SEER ≥ 15, HSPF ≥ 10	SEER2 ≥15.2; HSPF2 ≥ 7.8
Air source Heat Pump Ducted	SEER ≥ 15, HSPF ≥ 10	SEER2 ≥ 15.2; HSPF2 ≥ 7.2

Insulation Changes

Exterior Wall R-Value Changes

When HELP specifications were originally created, the insulation values were chosen based on current building code in 2021. On January 1, 2024, Saskatchewan adopted the Tier 2 standard for energy efficiency outlined in the *National Building Code 2020* (*NBC 2020*). This new code requires a residential building to be built to a higher energy efficiency standard which is 10% more energy efficient than the previous building code.

Administration updated the minimum specifications for exterior wall insulation to R19.5 to be eligible for a HELP loan to be consistent with the *NBC 2020*; the change is outlined in Table 2.

Table 2 - Insulation Specification Changes

Insulation Location	Original minimum R-value required	Proposed minimum R-value required
Exterior Wall	R17.5	R19.5

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No changes are being made to basement insulation R-value requirements as increasing this may create additional costs and barriers for participants such as reframing to gain space for more insulation which could deter participants from insulating their basements. Attic insulation requirements are also not recommended because the HELP program has higher requirements than other energy efficiency programs.

Insulation Rebate Changes

Currently there is no minimum requirement of wall space to be insulated to receive HELP rebates for insulation.

A minimum percentage of 50% of wall space insulated is recommended in the administrative report to access HELP rebates for insulation. This is recommended to encourage impactful insulation projects and to align with other rebate programming such as Canada Greener Homes and SaskEnergy's Home Energy Efficiency Rebates.

Administration recommends implementing a minimum percentage of 50% of wall space insulated to access the new HELP rebates for exterior wall and basement insulation starting April 1, 2024.

Based on completed and in progress HELP projects, the new R-value requirement for exterior wall insulation and adding a 50% minimum for both basement and exterior wall space is already being met for most projects. Therefore, the insulation changes are not expected to be a barrier for participants going forward.

Considerations

A bylaw amendment is not required to update the R-value for the insulation specifications or to change rebate eligibility.

The new technical specifications were communicated to HELP participants starting February 2024, and are only mandatory for the 127 participants who had not yet submitted a funding request and project plan on this date. Any participant projects already in progress will not be affected by the implementation of these updated specifications.