



BUILDING ENVELOPE PROGRAM

PROGRAM GUIDE

RENOVATE WITH ENERGY EFFICIENCY IN MIND.



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Efficiency Manitoba's Building Envelope Program offers financial incentives to owners of commercial buildings who complete energy-efficient upgrades in existing buildings, including multi-unit residential, industrial, and agricultural buildings.

Incentives available for renovation projects include:

- 1) insulation level upgrades (roof and wall);
- 2) window system upgrades (punched/in-fill);
- 3) door system upgrades;
- 4) curtain wall system upgrades (including storefront windows).

Contractors and consultants: your company must be registered in Efficiency Manitoba's supplier network before beginning any project within this program.

efficiencymb.ca/buildingenvelope



IS YOUR PROJECT ELIGIBLE?

APPLICANT ELIGIBILITY

The person applying for the program must be the building owner or designated representative who has signing authority for the property where the upgrade(s) will take place. They must be a Manitoba Hydro account holder eligible for the general service electricity rate and/or commercial service natural gas rates.

PROJECT SITE ELIGIBILITY

The project site will qualify if:

- the project is a renovation to an existing commercial building, including multi-unit residential, industrial, or agricultural buildings;
- the building's primary heat source is either natural gas or electricity;
- the proposed project work meets the thermal performance requirements of the program; and
- the work has not already started (prior to seeking program approval).

PROJECT ELIGIBILITY

For insulation projects, a minimum of 1,000 ft² of roof or wall insulation must be installed for each incentive application.

For window and door projects, a minimum of 10 m² of window or door area must be installed for each incentive application.

The qualifying energy-efficient products must be installed by a company registered with Efficiency Manitoba's supplier network. To register, contact Efficiency Manitoba at 1-204-944-8181 or visit efficiencymbnetwork.ca

If several sub-trades are engaged to complete the installation, only one trade (or the consultant or general contractor) needs to be registered, additional relevant sub-trades can be listed in the vendor section of the application.

Invoices and receipts must be supplied by the registered supplier.

Buildings with an indoor set temperature of less than 10°C (50°F) or partially heated buildings will have their incentive adjusted according to a prorated fraction of full energy savings for buildings with an indoor set temperature of 21°C (70°F).

HOW THE PROGRAM WORKS

SUBMITTING AN APPLICATION

As the applicant, you are responsible for selecting a registered contractor or consultant, filling out an application (available online or paper), and submitting the application for project approval. Work with your selected supplier to submit the roof and/or wall assembly forms, system descriptions, or any applicable quotes to support the application. To ensure the project scope qualifies for financial incentives, we offer free technical support during this process.

To apply online visit:

efficiencymb.ca/buildingenvelope

To request a paper application, contact Efficiency Manitoba.

Completed applications can be emailed or mailed.

Phone **1-204-944-8181**

Email **buildingenvelope@efficiencymb.ca**

Mail **Efficiency Manitoba,
Building Envelope Program
PO Box 247 Station Main, Winnipeg, MB
R3C 2G9**

You must receive written approval from Efficiency Manitoba before purchasing products or starting any work. Incentives will not be issued for projects that are started before written approval from Efficiency Manitoba is granted.

PROJECT APPROVAL

Efficiency Manitoba will process applications for project approval within 10 business days. You will be notified of the status of your application by email or mail. If approved, Efficiency Manitoba will provide you with the estimated calculated incentive amount and identify any special conditions. You can then contact your contractor or consultant to begin work.

PRODUCT & PROJECT VERIFICATION

Read the project approval letter carefully, as your project may have been selected for a site inspection. Site inspections are conducted by our program engineer and may be requested either before, during, or after the project is complete.

If you are selected for a site inspection and are ready to begin your project, please contact Efficiency Manitoba to schedule a date. We require contact three working days before work is scheduled to start so that we can arrange the visit.

If the inspection fails or requires changes, Efficiency Manitoba will notify the applicant and/or supplier with the reason for failure. We typically allow 30 days from the date of the failure notice to remedy any problems identified by Efficiency Manitoba. The project must also pass a second site-inspection.

If the applicant chooses not to remedy the problem, the application for financial incentives will be cancelled.

The applicant will have 12 months from the date of approval to complete the upgrades and submit the completion paperwork.

If there are any changes to the proposed building assemblies or incentive calculation sheets from what was originally approved, the applicant and/or supplier should notify Efficiency Manitoba immediately to ensure eligibility of the adjusted proposed assemblies.



PROJECT COMPLETION REQUIREMENTS

After the approved assembly has been upgraded and is operational, the applicant must complete the Completion Declaration and submit it to Efficiency Manitoba with the required final invoice.

Payment of the incentive will be delayed if information is missing or if the invoice does not meet Efficiency Manitoba's requirements.

Incentives are limited to 100% of the product cost plus Goods and Service Tax (GST) or the total incentive, whichever is less.

Applicants can request itemized invoices from their supplier or have their supplier submit them directly to Efficiency Manitoba.

The insulation invoice must include:

- insulation type and product name;
- layout sheets for sloped roof insulation;
- quantity purchased (square feet, number of bags, thickness, etc.);
- unit prices and total (separate from labour and taxes).

The window and/or door invoice must include:

- window and/or door manufacturer;
- window and/or door type(s) (awning, fixed, etc.);
- window and/or door model number(s);
- dimensions and quantity of each window and/or door type;
- unit prices and total (separate from labour and taxes).

PROJECT REQUIREMENTS

INSULATION PROJECTS

All insulation materials must be new and purchased in Canada and have thermal properties (verified R-value) provided in accordance with current recognized Canadian standards prepared by a certified third-party such as the Canadian Construction Materials Centre (CCMC), Intertek Code Compliance Research Reports (CCRRs), or R&D Services Product Listings. If reports are provided by other third-party agencies, they must be reviewed by EM to determine eligibility. All insulation materials, which include blowing agents, will be evaluated based on Long Term Thermal Resistance (LTTR). Properties provided in these reports will form the basis of calculations for incentives and rebates.

For roof surface projects using 3 lb. polyurethane spray foam, contractors must be a participant in an industry and supplier sponsored Quality Assurance Program (QAP). Each crew of qualified construction workers must have a minimum of one installer who is certified under an industry or supplier sponsored QAP. Confirmation of certification must be submitted to Efficiency Manitoba for review and acceptance. The proof of QAP certification will be kept on file and is subject to annual review.

Existing insulation in the assembly that is damaged or must be replaced will be counted towards the starting effective R-value of the roof or wall assembly.

If there is no existing insulation in the assembly, Efficiency Manitoba will require the description of all other components in the assembly to determine the starting effective R-value.

WINDOW, DOOR, CURTAIN WALL/STOREFRONT PROJECTS

All windows, glazed doors (swinging, sliding, rolling or folding), curtain wall/storefront systems must be new and have proof of energy performance (verified U-value) for standard test size(s). This must be provided by a certified third-party including ENERGY STAR® Canada certified products, National Fenestration Rating

Council (NFRC) Certified Products Directory Number (CPD#) (results are displayed in imperial units and will be converted to SI (metric) units), test report in accordance with CSA 440.2 or NFRC-100, or test report in accordance with ANSI/DASMA 105.

Renovation projects that involve a whole window replacement are eligible. An existing frame with new glass may qualify for an incentive only if the performance of the retrofit window has been modeled by an accredited, independent agency and the overall U-value of the window, including the existing frame, meet program requirements.

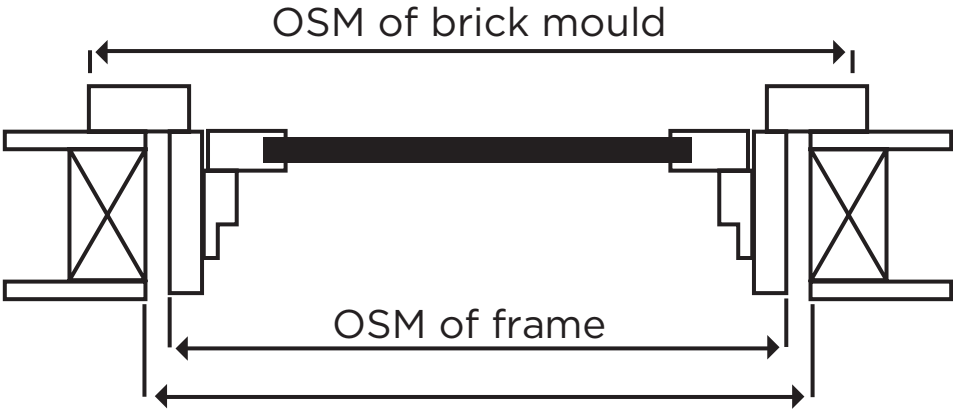
TYPICAL REQUIREMENTS FOR WINDOW & DOOR UPGRADES

If the project includes window and door replacement, please ensure the following is entered or provided on the quote:

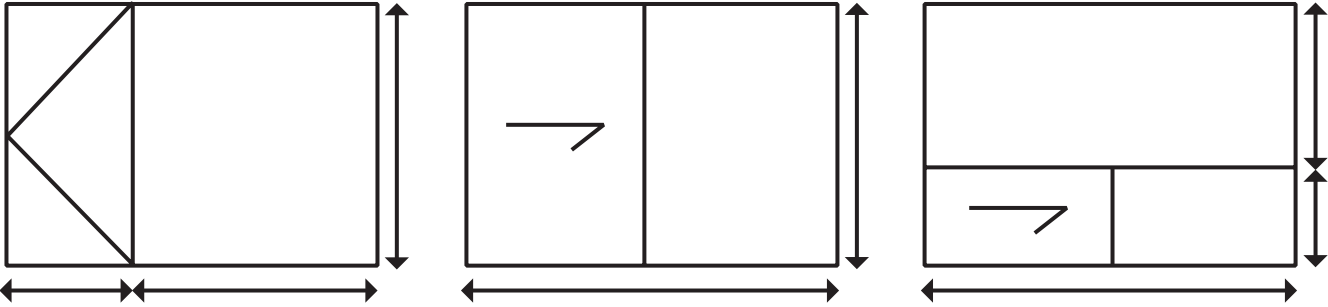
- Measuring punched windows: a punched window frame is glass within a defined opening that is surrounded by cladding. The outside measurement (OSM) of the window frame is required in the window measurement process, not including the brick mould.
- For combination windows, where two or more window assemblies are mullied together, an OSM of each individual window assembly is required. The U-value is attached to a given window assembly. The incentive is attached to the area and U-value of the individual window assemblies (whether independent or in combination). For example, a single horizontal slider is a complete window assembly, not a sliding sash and a fixed sash. A combination of fixed windows over a horizontal slider is considered two separate windows.
- Measuring doors: The OSM of the door, not including the brick mould is required.



OUTSIDE MEASUREMENT (OSM)



COMBINATION WINDOW MEASUREMENTS



TYPICAL R-VALUES OF COMMON INSULATION TYPES

Note: some insulation types have a range of values.

Insulation	Common types of insulation and properties	R-value per inch
Surface	Strawmit	2.30
	Glass fibre (semi-rigid)	4.00
	Polyisocyanurate	5.70
	Polystyrene (EPS) – Type 1	3.75
	Polystyrene (EPS) – Type 2	4.00
	Polystyrene (GPS) – Type 2 with graphite	4.70
	Polystyrene (XPS) – Type 4	5.00
	Low-density polyurethane foam (sprayed)	3.60
	Polyurethane (sprayed)	6.00
Cavity	Wood chips/shavings	2.15
	Glass fibre (blown)	2.65
	Glass fibre (batt or blanket)	3.45
	Cellulose – loose or blown	3.60
	Glass fibre (semi-rigid)	3.99
	Mineral fibre or rock/slag wool (batt)	3.75
	Polyurethane (sprayed)	6.00
	Low-density polyurethane foam (sprayed)	3.60

TYPICAL R-VALUES OF BUILDING COMPONENTS

Component	Material	Description	Details	R-value per inch	Total R-value
Air Films	Exterior	Ceiling, walls			0.17
	Interior	Ceiling			0.62
		Walls			0.68
Air Cavities	Ceiling (heat flow up)	Empty cavity			0.90
	Walls (heat flow horizontal)	Empty cavity			1.00

Component	Material	Description	Details	R-value per inch	Total R-value	
Cladding	Stucco			0.13		
	Metal, vinyl siding over sheathing	Hollow – backed			0.60	
	Wood siding	Bevel – lapped			1.00	
	Stone	Sandstone			0.04	
		Limestone, marble, granite			0.06	
Roofing	Asphalt roll roofing	2-ply SBS			0.17	
	Built-up roofing				0.34	
	Metal deck				0.00	
	Vapour barrier	2 layers mopped			0.12	
	Shingle	Asphalt			0.45	
Sheathing	Insulating fibreboard			2.31		
	Softwood plywood			1.25		
	Glass fibre faced gypsum		1/2"		0.56	
	Oriented strand board (OSB)	Waferboard		1.59		
Structural	Concrete (aggregate)	Sand, gravel, stone	2400 kg/m ³	0.06		
	Softwood			1.10		
	Hardwood			0.90		
Concrete Blocks	Light weight unit	Cores filled	190 mm		5.00	
	Normal weight unit 2 or 3 cores	No core	190 mm		2.00	
		No core	190 mm		1.20	
		Cores filled	90 mm		2.00	
Hollow clay bricks	Hollow clay brick – rectangular	3-core No insulation in cores	90 mm		1.10	
Interior finish	Building board	Gypsum	13 mm (1/2")		0.45	
		Plywood		1.25		
	Plastering	Gypsum plaster Sand aggregate		0.20		

INCENTIVE OFFERS & PERFORMANCE REQUIREMENTS

ROOF & WALL INSULATION LEVEL UPGRADES

The Building Envelope Program measures thermal performance of insulation using effective R-value. This measurement is different from the Home Insulation Program for residential insulation upgrades, which uses nominal R-value. Effective R-value refers to the assembly, including air films and materials, and considers thermal bridging of framing and structural elements.

ROOF & WALL INCENTIVES

Incentives cover up to 100% of the cost of insulation material.

Measure category	Incentive (\$)¹	Effective ending R-value
Roof surface	7.5 ¢/R/ft²	R-25 (max. R-30)
Attic cavity	2.0 ¢/R/ft²	R-40 (max. R-50)
Wall surface	7.5 ¢/R/ft²	R-17 (max. R-20)
Wall cavity²	4.0 ¢/R/ft²	R-17 (max. R-20)

WINDOW & DOOR REPLACEMENT

To qualify for the window or door incentive, the window can be punched/in-fill, and doors must include glazing and can be sliding patio, garden, single-swinging, rolling, or folding style. Window and door performance are measured in U-value.

WINDOW INCENTIVES

Incentives cover up to 100% of the incremental cost of the window replacement.

Measure category	Incentive (\$)¹	U-value
Glazing & frame	\$150 /m²/U	Less than 1.6

DOOR INCENTIVES

Incentives cover up to 100% of the incremental cost of the glazing.

Measure category	Incentive (\$)¹	U-value
Glazing (for sliding doors)	\$200/m²/U	Less than 1.6
Glazing (for single swinging doors)	\$150/m²/U	Less than 1.6

CURTAIN WALL & STOREFRONT REPLACEMENT

Please contact us at buildingenvelope@efficiencymb.ca to learn more about current offers for curtain wall and storefront.

¹ Incentives are subject to change without notice.

² Wall cavities must be at or above grade.



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Available in accessible formats upon request.

