COMMERCIAL BUILDING ENVELOPE PROGRAM

PROGRAM GUIDE
# TABLE OF CONTENTS

INTRODUCTION ........................................................................................................................................................................... 1

PROJECT ELIGIBILITY CRITERIA .................................................................................................................................................. 2

PERFORMANCE REQUIREMENTS .................................................................................................................................................... 4

APPLICATION PROCESS FOR INSULATION UPGRADES .......................................................................................... 8

APPLICATION PROCESS FOR WINDOW AND DOOR UPGRADES ............................................................................. 11

APPLICATION FORM ............................................................................................................................................................. 14

HOW TO COMPLETE AN APPLICATION FORM ........................................................................................................ 15

SAMPLE APPLICATION FORM ....................................................................................................................................... 19

SAMPLE ROOF ASSEMBLY DESCRIPTION .......................................................................................................... 20

SAMPLE WALL ASSEMBLY DESCRIPTION .......................................................................................................... 21

SAMPLE INSULATION INVOICE .................................................................................................................................... 22

SAMPLE WINDOW INVOICE ........................................................................................................................................... 23

COMMERCIAL BUILDING ENVELOPE PROGRAM CHECKLIST ........................................................................... 24
INTRODUCTION

Manitoba Hydro’s Commercial Building Envelope Program is available to Manitoba Hydro General Service customers in commercial buildings, including multi-unit residential buildings, and institutional and agricultural sectors.

The Program offers financial incentives to upgrade to energy efficient measures in existing buildings. Incentives are available for renovation projects only and 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).

Important notice to all contractors, installers and suppliers: your company must be registered to work with Manitoba Hydro prior to commencing any commercial project. The Supplier Participation Agreement form must be completed and submitted to Manitoba Hydro, this is a onetime requirement unless otherwise requested. Submission of this completed form will officially register your company and allow you to submit energy efficiency applications to Manitoba Hydro.

For Commercial Building Envelope Program inquiries:

cbep@hydro.mb.ca

For general energy efficiency for business inquiries:

dna.energyefficiencyforbusiness@hydro.mb.ca
PROJECT ELIGIBILITY CRITERIA

1. Supplier participation

A supplier is any business supplying or installing the customer with the qualifying energy efficient product. This includes contractors, consultants, installers, vendors, and retailers. Participating suppliers must have an active Supplier Participation Agreement in good standing in place with Manitoba Hydro. To register, suppliers can contact Manitoba Hydro at 1-888-MBHYDRO or visit hydro.mb.ca/contractors/supplier_request.shtml

If several sub-trades are engaged to complete the installation, one supplier must be designated as the primary installer and only one application will be accepted. Sub-trades can be listed in the vendor section. Invoices and receipts must be supplied by the installer.

If you are a supplier or installer of polyurethane roofing foam and interested in submitting applications to this program, please note that you must participate in an industry or supplier sponsored quality assurance program and have – at minimum – one crew member certified under the sponsored program on-site during installation. Questions can be directed to cbep@hydro.mb.ca.

2. Customer eligibility

The applicant must be a Manitoba Hydro customer eligible for the General Service Rate and having signing authority for the property where the upgrade(s) will take place.

3. Project site eligibility

The project site will qualify if:

- It is a renovation project to an existing commercial or industrial building;
- The primary heat source is either natural gas or electricity;
- The proposed measures or upgrades meet the thermal performance requirements of the program;
- The work has not already started at the project site (prior to seeking program pre-approval).

4. Product and project verification

Manitoba Hydro reserves the right to verify that product installations meet the requirements of the Commercial Building Envelope Program through an independent, third party pre- and/or post-installation review. If your project has been selected for a
verification of the building assembly, please work with Manitoba Hydro to complete the following:

Participating suppliers will notify Manitoba Hydro at least three working days prior in situations where accessibility and visual inspection is only available at the time of installation. If the inspection fails:

- Manitoba Hydro will notify the customer and/or the participating supplier and provide the reason for failure upon completion of the review.
- The customer and/or participating supplier will have 30 days after the date of the failure notice to remedy any problems identified by Manitoba Hydro and pass an additional Manitoba Hydro independent review. Otherwise, the installation will no longer qualify for a Commercial Building Envelope Program Incentive.
PERFORMANCE REQUIREMENTS

1. Insulation level upgrades – roof and wall

The Commercial Building Envelope Program measures thermal performance using effective R-value. This measurement is different from the Residential Home Insulation Program which uses nominal R-value. Effective R-value refers to the assembly, including air films and materials, and takes into account thermal bridging of framing and structural elements.

Roof and wall incentives

Incentives cover up to 100 per cent of the cost of insulation material.

<table>
<thead>
<tr>
<th>Measure category</th>
<th>Incentive ($)(^1)(^2)</th>
<th>Effective ending R-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof Surface</td>
<td>7.5 c/R/ft(^2)</td>
<td>R-25 (max. R-30)</td>
</tr>
<tr>
<td>Attic Cavity</td>
<td>3.0 c/R/ft(^2)</td>
<td>R-40 (max. R-50)</td>
</tr>
<tr>
<td>Wall Surface</td>
<td>7.5 c/R/ft(^2)</td>
<td>R-17 (max. R-20)</td>
</tr>
<tr>
<td>Wall Cavity</td>
<td>4.0 c/R/ft(^2)</td>
<td>R-17 (max. R-20)</td>
</tr>
</tbody>
</table>

\(^1\)Incentives are subject to change without notice.
\(^2\)Incentives are available for natural gas or electric heated properties only.
Assembly with flat roof construction

SURFACE INSULATION

WALLS TO REACH EFFECTIVE
R-17 TO R-20

ROOF TO REACH EFFECTIVE
R-25 TO R-30

CAVITY INSULATION

WALLS TO REACH EFFECTIVE
R-17 TO R-20
Assembly with pitched roof construction

ATTIC TO REACH EFFECTIVE
R-40 to R-50

CAVITY INSULATION

SURFACE INSULATION

WALLS TO REACH EFFECTIVE
R-17 to R-20
2. Window replacement

To qualify for the window incentive, the window can be punched / in-fill, sliding patio doors, garden doors.

Window incentives

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

<table>
<thead>
<tr>
<th>Measure category</th>
<th>Incentive ($)</th>
<th>U-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Window glazing and frame</td>
<td>$150 /m²/U</td>
<td>Less than 1.70</td>
</tr>
</tbody>
</table>

3. Door replacement

To qualify for the door incentive, the door must be single swinging, glazed entry doors (with up to 50 per cent glazing).

Door incentives

Incentives cover up to 100 per cent of the incremental cost of the glazing.

<table>
<thead>
<tr>
<th>Measure category</th>
<th>Incentive ($)</th>
<th>U-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door glazing</td>
<td>$125 /m²/U</td>
<td>Less than 1.60</td>
</tr>
</tbody>
</table>

¹Incentives are subject to change without notice.
²Incentives are available for natural gas or electric heated properties only.

Project site conditions

Facilities with an indoor set temperature of less than 10 C (50 F) will have their incentives adjusted according to a pro-rated fraction of full energy savings for buildings with an indoor set temperature of 21 C (70 F). Insulation projects:

- A minimum of 1,000 square feet of roof or wall insulation must be installed for each incentive application.
- Below grade (i.e. foundations) are not eligible for incentives.
APPLICATION PROCESS FOR INSULATION UPGRADES

1. Submitting an application for pre-approval

The customer is responsible for selecting a participating supplier, requesting and filling out an application form, and submitting the application for pre-approval. The customer will work with their supplier to submit the roof and/or wall assembly forms or any applicable quotes with the application. Paper and online application forms are available (see page 14 for details).

The application can be submitted via email, fax, or regular mail.

Email cbep@hydro.mb.ca

Fax 1-204-6157

Mail to Manitoba Hydro, Commercial Building Envelope Program, 360 Portage Avenue, Winnipeg, MB R3C 0G8

The customer must receive written approval from Manitoba Hydro before purchasing or installing any products, materials, or systems. Incentives will not be issued for projects that are started before written approval from Manitoba Hydro is granted.

Keep track of your application’s progress and outstanding requirements with the supplied Commercial Building Envelope Program checklist (see Page 24).

Note: all information requested on the application is required. Please ensure that the form is filled out in full. Incomplete applications will be returned to the customer.

2. Project requirements

Insulation projects must

Have products recognized by the Canadian Construction Materials Centre (CCMC) or equivalent as determined by Manitoba Hydro.

For roof surface projects using 3lb polyurethane spray foam, contractors must be a participant in an industry and supplier sponsored Quality Assurance Program (QAP). Each crew must have a minimum of one installer who is certified under an industry or supplier sponsored QAP. This confirmation of certification needs to be submitted to Manitoba Hydro 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 either damaged or in need to be replaced will be counted towards the starting effective R-value of the roof or wall assembly.

Regardless if there is currently no insulation, Manitoba Hydro still requires the description of all other components in the assembly to determine the starting effective R-value.

3. **Selection for site verification**

The customer should read the pre-approval letter carefully as their project may have been selected for a site verification. If selected, they should contact Manitoba Hydro to arrange for a representative to visit the building to verify the existing and/or upgraded assembly. The customer shall notify their contractor or installer of the site verification to ensure accommodations will be made for Manitoba Hydro’s representative to be on-site.

If the site verification requires changes, to qualify for the incentive, the customer must arrange to have these changes made and provide Manitoba Hydro with the updated assembly description or invoice noting the change.

If a customer does not arrange for site verification, a requirement of the program, this may result in the incentive being forfeited.

4. **Project authorization**

Manitoba Hydro will process completed applications within 10 business days. Customers will be notified of the status of the application by email (if provided on the application) or regular mail. If approved, Manitoba Hydro will provide the customer of the estimated calculated incentive amount and identify any special conditions, if applicable. The customer may then contact their contractor or installer to begin work.

The customer will have **12 months from the date of pre-approval to complete the upgrades**.

If there are any changes to the proposed building assemblies and/or window/door systems from what was originally pre-approved, the customer and/or supplier should notify Manitoba Hydro immediately to ensure eligibility of the adjusted proposed assemblies and/or window/door systems.

5. **Project completion and submission of final paperwork**

The customer will complete the [Completion Form and Questionnaire](#) after the approved assembly has been upgraded and is operational. They will submit their completed documents to Manitoba Hydro with the required final invoice.
Itemized invoices are required. Customers can request these from their supplier or have their supplier submit them directly to Manitoba Hydro.

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).

Payment of the incentive will be delayed if information is missing or if the invoice does not meet Manitoba Hydro’s requirements (see page 22 for sample).

Incentives are limited to 100 per cent of the insulation product cost plus Goods and Service Tax (GST) or the total incentive, whichever is less.
APPLICATION PROCESS FOR WINDOW AND DOOR UPGRADES

1. Submitting an application for pre-approval

The customer is responsible for selecting a participating supplier, requesting and filling out an application form, and submitting the application for pre-approval. The customer will work with their supplier to submit the window and/or door incentive summaries or any applicable quotes with the application. Paper and online application forms are available (see page 14 for details).

The application can be submitted via email, fax, or regular mail.

   Email cbep@hydro.mb.ca

   Fax 1-204-6157

   Mail to Manitoba Hydro, Commercial Building Envelope Program, 360 Portage Avenue, Winnipeg, MB R3C 0G8

The customer must receive written approval from Manitoba Hydro before purchasing or installing any products, materials, or systems. Incentives will not be issued for projects that are started before written approval from Manitoba Hydro is granted. Keep track of your application’s progress and outstanding requirements with the supplied Commercial Building Envelope Program checklist (see Page 24).

Note: all information requested on the application is required. Please ensure that the form is filled out in full. Incomplete applications will be returned to the customer.

2. Project requirements

Window and door projects must:

Have proof of energy performance (total U or U-factor). Three ways to provide proof include:

- ENERGY STAR® Canada (www.oee.nrcan.gc.ca/energystar):
  - Identify by model on the window and/or door incentive summary section of the application.
- National Fenestration Rating Council (NFRC) (www.nfrc.org):
  - Identify by CPD number on the window and/or door incentive summary section of the application.
• Window and door test report:
  o If the window or door system(s) chosen are not listed on the ENERGY STAR®
or NFRC websites, please attach the relevant CSA 440.2 window test report(s) and/or ANSI/DASMA 105 door test report to the application. Your supplier or manufacturer can provide you with a thermal test report that provides proof of whole window or door U or U-factor.

A minimum of 10 square meters of window area must be installed for each incentive application.

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 is less than 1.70.

3. Selection for site verification

The customer should read the pre-approval letter carefully as their project may have been selected for a site verification. If selected, they should contact Manitoba Hydro to arrange for a representative to visit the building to verify the upgraded system.

If the site verification requires changes, to qualify for the incentive, the customer must arrange to have these changes made and provide Manitoba Hydro with the updated quote noting the change.

The customer shall notify their contractor or installer of the site verification to ensure accommodations will be made for Manitoba Hydro’s representative to be on-site.

4. Project authorization

Manitoba Hydro will process completed applications within 10 business days. Customers will be notified of the status of the application by email (if provided) or regular mail. If approved, Manitoba Hydro will provide the customer of the estimated calculated incentive amount and identify any special conditions, if applicable. The customer may then contact their supplier to begin work.

The customer will have 12 months from the date of approval to complete the upgrades.

Note: if an approved system upgrade requires changes by the supplier. The customer and/or supplier should notify Manitoba Hydro immediately to ensure eligibility of the adjusted proposed system.
5. Project completion and submission of final paperwork

The customer will complete the Completion Form and Questionnaire after the approved system has been upgraded and is operational. They will submit their completed documents to Manitoba Hydro with the required final invoice.

Itemized invoices are required. Customers can request these from their supplier or have their supplier submit them directly to Manitoba Hydro.

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).

Payment of the incentive will be delayed if information is missing or if the invoice does not meet Manitoba Hydro’s requirements (see page 23 for sample).

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

There is one Commercial Building Envelope Program application form for roof, wall, window, and door projects. The customer may choose one or all project areas mentioned on this application form.

The first page comprises the program’s terms and conditions with the Customer Agreement on the reverse; these pages should be read by the customer each time they submit an application to the program. The second page is the Incentive Application page; this page will require the customer to input all requested information including the project site details and provide their 14-digit Manitoba Hydro account number. It is important that the customer fills out the primary space heat and indicates whether the building is air conditioned. The subsequent pages request the roof, wall, window, and door upgrade descriptions.

Paper application forms must be the most current version (located on the top left corner of the form: REV 18 07).

The application form is available print and online formats.

To request a paper application:

Call 1-204-360-3676 or toll-free 1-888-624-9376

Email cbep@hydro.mb.ca

Fax 1-204-360-6157

To complete an online application, please visit:

Website
www.hydro.mb.ca/your_business/building_envelope/how_to_take_part.shtml
HOW TO COMPLETE AN APPLICATION FORM

Please ensure all information is complete and accurate. You may choose to submit an application by mail, email, or through our online web service.

1. Fill in all information requested on the incentive application

• **Customer information**: legal business name required. A key contact and phone number is necessary in case Manitoba Hydro has questions about the assembly/system being installed.

• **Project site information**: enter the address of the building where the installation will take place, and include:
  i. building use description/function;
  ii. estimated project start and completion dates;
  iii. 14-digit Manitoba Hydro account number;
  iv. GST registration number;
  v. primary space heat fuel source;
  vi. air-conditioned selection;
  vii. category of incentive(s) being considered.

• **Installer information**: ensure that the supplier or installer is registered to participate in the program. Manitoba Hydro may contact them directly with specific enquiries about the product or installation.

• **Customer acknowledgement**: the customer with signing authority must sign and date the form to acknowledge that they agree with the program’s terms and conditions.

• **Cheque payment information**: please ensure the appropriate payee is indicated here as the incentive cheque will be made out to the name and mailing address as indicated in this section.

2. Complete the assembly description for insulation upgrades

If the project includes insulation upgrades, please ensure the following is entered:

• **Total area to be insulated**: input the total roof and/or wall area to be insulated and select the unit of measurement.

• **Upgrade type**: check the corresponding upgrade type for your assembly.

• **Description of existing roof/wall assembly**: describe your existing roof/wall assembly, starting with the exterior cladding and end with the interior finish.
Indicate the thickness and types of materials. Refer to the R-value per inch and building component tables to assist you with inputting the correct detail.

- **Description of proposed roof/wall assembly**: describe your proposed assembly following the same process for the existing assembly.
- **Roof incentive estimate**: to calculate your estimated incentive, calculate your added R-value and multiply this with the roof area and incentive factor. This is an optional step but can help you establish an estimated incentive amount.

**Typical R-values of common insulation types**

Note: some insulation types have a range of values.

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
<th>Description</th>
<th>Details</th>
<th>R-value per inch</th>
<th>Total R-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Films</td>
<td>Exterior</td>
<td>Ceiling, walls</td>
<td></td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interior</td>
<td>Ceiling</td>
<td></td>
<td>0.62</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Walls</td>
<td></td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Air Cavities</td>
<td>Ceiling (heat flow up)</td>
<td>Empty cavity</td>
<td></td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Walls (heat flow horizontal)</td>
<td>Empty cavity</td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Cladding</td>
<td>Stucco</td>
<td></td>
<td></td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Metal, vinyl siding over sheathing</td>
<td>Hollow - backed</td>
<td></td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wood siding</td>
<td>Bevel - lapped</td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stone</td>
<td>Sandstone</td>
<td></td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Limestone, marble, granite</td>
<td></td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>Roofing</td>
<td>Asphalt roll roofing</td>
<td>2-ply SBS</td>
<td></td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Built-up roofing</td>
<td></td>
<td></td>
<td>0.34</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Metal deck</td>
<td></td>
<td></td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vapour barrier</td>
<td>2 layers, mopped</td>
<td></td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shingle</td>
<td>Asphalt</td>
<td></td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>Sheathing</td>
<td>Insulating fibreboard</td>
<td></td>
<td></td>
<td>2.31</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Softwood plywood</td>
<td></td>
<td></td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Glass fibre faced gypsum</td>
<td>1/2&quot;</td>
<td></td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oriented strand board (OSB)</td>
<td>Waferboard</td>
<td></td>
<td>1.59</td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td>Concrete (aggregate)</td>
<td>Sand, gravel, stone</td>
<td>2400 kg/m³</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Softwood</td>
<td></td>
<td></td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hardwood</td>
<td></td>
<td></td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>Concrete Blocks</td>
<td>Light weight unit</td>
<td>Cores filled</td>
<td>190 mm</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Normal weight unit</td>
<td>No core</td>
<td>190 mm</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 or 3 cores</td>
<td>No core</td>
<td>90 mm</td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cores filled</td>
<td>190 mm</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>Hollow clay bricks</td>
<td>Hollow clay brick - rectangular</td>
<td>3-core</td>
<td></td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No insulation in cores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sand</td>
<td>90 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior finish</td>
<td>Building board</td>
<td>Gypsum</td>
<td></td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plywood</td>
<td></td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gypsum plaster</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sand aggregate</td>
<td></td>
<td>0.20</td>
<td></td>
</tr>
</tbody>
</table>
3. Complete the assembly description for window and 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.
  i. The outside measurement (OSM) of the window frame is required in the window measurement process, not including the brick mould.
  ii. For combination windows, where two or more window assemblies are mulled 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).
  iii. 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**:
  i. The outside measurement (OSM) of the door, not including the brick mould is required.

![Outside measurement (OSM)](image)

**Combination window measurements**

![Combination window measurements](image)
# SAMPLE APPLICATION FORM

## Commercial Building Envelope Program

### Incentive Application

### Customer Information

- **Business name:** ABC Business Ltd.
- **Mailing address:** 123 This Street
- **Postal code:** R0B 3P4
- **Key contact name:** Mr. John Smith
  - **Phone no.:** 204-555-5555
  - **Email:** johsmith@nomail.com

### Project Site Information

- **Building use description/function:** Mid-rise office
- **City/town:** Winnipeg
- **Postal code:** R0B 3P4
- **GST registration no.:** 123456789AB0001
- **Manitoba Hydro account no.:** 77777776666666
- **Project start:** 2018 09 30
- **Project completion:** 2019 01 20

### Contractor/Installer Information

- **Business name:** DEF Contracting Co.
- **Mailing address:** 456 Some Street Winnipeg MB R0B 3H8
- **Postal code:** R0B 3H8
- **Key contact name:** Ms. Jane Doe
  - **Phone no.:** 204-555-5554
  - **Email:** janecontractor@nomail.com

### Customer Acknowledgement

I, the Customer, have read and understood the Agreement and the Program Eligibility Criteria printed on the cover page of this Application. I agree to the listed terms and conditions and warrant that I fully qualify and have complied with such terms and conditions.

Signed by (Customer): [Signature]
Print name: John Smith
Print title: President
Date: 2018 08 25

### Cheque Payment Information

**Payer name:** ABC Business Ltd.

- **Cheque mailing address:** 123 This Street
- **Postal code:** R0B 3P4

**Estimated total incentive requested:** $ [Blank]

**Assignment:** (Do not sign if incentive is to be paid to Customer)
I, the Customer, do hereby irrevocably direct and authorize Manitoba Hydro to pay the Incentive to the Contractor/Installer or Vendor named in the box titled “CHEQUE PAYMENT INFORMATION”.

Signed by (Customer):
Date: [Blank]

**Note:** Manitoba Hydro reserves the right to apply the Incentive first to any outstanding account balances or loans of the Applicant and to pay the balance, if any, to the Vendor or installer to whom the Customer has assigned the Incentive.

### Manitoba Hydro Use Only

**Application verified by:** [Account Representive]
Date: [Blank]

**Payment authorized by:** [Marketing Programs Representative]
Date: [Blank]

**Approved by:** [Marketing Programs Manager]
Date: [Blank]

**Approved by:** [Group Manager Financial Services]
Date: [Blank]

### Disbursements

- **Net Amt:** 720610

**Tax code:** 16
### SAMPLE ROOF ASSEMBLY DESCRIPTION

#### Commercial Building Envelope Program
Roof Assembly Description Summary

**Instructions:** Complete this form to describe your **EXISTING** and **PROPOSED** roof assembly. If you have more than one roof section to describe, make copies of this page and fill in the information.

**Application no.**

**Sample**

---

**Total area to be insulated (check one):**
- [ ] 1st
- [ ] 2nd
- [ ] Surface
- [ ] Cavity

---

#### DESCRIPTION OF EXISTING ROOF ASSEMBLY

<table>
<thead>
<tr>
<th>Layer</th>
<th>Thickness (inches or mm)</th>
<th>Material</th>
<th>Examples of material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof surface</td>
<td>N/A</td>
<td>4-PLY BUR</td>
<td>BUR, sheet metal, EPDM</td>
</tr>
<tr>
<td>Sheathing</td>
<td>1/2&quot;</td>
<td>FIBREBOARD</td>
<td>OSB, fiberboard</td>
</tr>
<tr>
<td>Existing insulation</td>
<td>1 1/2&quot;</td>
<td>EPS TYPE 1</td>
<td>Polystyrene, EPS, cellulose</td>
</tr>
<tr>
<td>Structure</td>
<td>N/A</td>
<td>METAL DECK ON OWSJ</td>
<td>OWSJ, wood truss, steel frame</td>
</tr>
<tr>
<td>Interior finish</td>
<td>1/2&quot;</td>
<td>GYPSUM BOARD CEILING</td>
<td>None, gypsum board, wood</td>
</tr>
<tr>
<td>Other</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

#### DESCRIPTION OF PROPOSED ROOF ASSEMBLY

<table>
<thead>
<tr>
<th>Layer</th>
<th>Thickness (inches or mm)</th>
<th>Material</th>
<th>Examples of material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof surface</td>
<td>N/A</td>
<td>4-PLY BUR</td>
<td>BUR, sheet metal, EPDM</td>
</tr>
<tr>
<td>Sheathing</td>
<td>1/2&quot;</td>
<td>FIBREBOARD</td>
<td>OSB, fiberboard</td>
</tr>
<tr>
<td>Proposed Insulation</td>
<td>4&quot;</td>
<td>POLYISO</td>
<td>Polystyrene, EPS, cellulose</td>
</tr>
<tr>
<td>Structure</td>
<td>N/A</td>
<td>METAL DECK ON OWSJ</td>
<td>OWSJ, wood truss, steel frame</td>
</tr>
<tr>
<td>Interior finish</td>
<td>1/2&quot;</td>
<td>GYPSUM BOARD CEILING</td>
<td>None, gypsum board, wood</td>
</tr>
<tr>
<td>Other</td>
<td>1/2&quot;</td>
<td>GLASS FIBRE FACED GYPSUM BOARD</td>
<td></td>
</tr>
</tbody>
</table>

---

Complete this table to calculate an estimate of the incentive payable for the insulation upgrade. All assembly descriptions and R-values will be reviewed and recalculated by the Program engineer. The actual incentive will be recalculated upon completion of the installation. A Site Verification of products purchased and installed may be required for final incentive payment.

**Roof incentive estimate**

<table>
<thead>
<tr>
<th>PROPOSED UPGRADE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of roof upgrade</td>
<td>GWP ending R-values (R-25 to R-30)</td>
<td>R added (A – B)</td>
<td>Roof area (ft²)</td>
<td>Incentive factor* (a / b / c / d)</td>
<td>Incentive amount ($)</td>
<td></td>
</tr>
<tr>
<td><strong>e.g. Roof surface</strong></td>
<td>27.5</td>
<td>–</td>
<td>19</td>
<td>5,000</td>
<td>x 7.5p</td>
<td>7,125.00</td>
</tr>
<tr>
<td></td>
<td>–</td>
<td>–</td>
<td>x</td>
<td>d</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

* Please refer to Incentive tables on page 1 for Incentive factor.

**ESTIMATED TOTAL INCENTIVE REQUESTED ($)**

---

Page 2 of 5
SAMPLE WALL ASSEMBLY DESCRIPTION

Commercial Building Envelope Program
Wall Assembly Description Summary

Instructions: Complete this form to describe your EXISTING and PROPOSED wall assembly. If you have more than one wall section to describe, make copies of this page and fill in the information.
OR Attach detailed cross-section drawings of your wall sections.
OR Provide a letter from the Design Consultant indicating before-and-after building assembly descriptions and insulation levels.
Please attach photographs of the building assembly to the Application, if necessary.

<table>
<thead>
<tr>
<th>Total area to be insulated (check one)</th>
<th>Upgrade type (check one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DESCRIPTION OF EXISTING WALL ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layer</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Exterior finish</td>
</tr>
<tr>
<td>Sheathing</td>
</tr>
<tr>
<td>Existing insulation</td>
</tr>
<tr>
<td>Structure</td>
</tr>
<tr>
<td>Interior finish</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DESCRIPTION OF PROPOSED WALL ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layer</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Exterior finish</td>
</tr>
<tr>
<td>Sheathing</td>
</tr>
<tr>
<td>Proposed insulation</td>
</tr>
<tr>
<td>Structure</td>
</tr>
<tr>
<td>Interior finish</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Complete this table to calculate an estimate of the incentive payable for the insulation upgrade. All assembly descriptions and R-values will be reviewed and recalculated by the Program engineer. The actual incentive will be recalculated upon completion of the installation. A Site Verification of products purchased and installed may be required for final incentive payment.

Wall incentive estimate

<table>
<thead>
<tr>
<th>PROPOSED UPGRADE</th>
<th>Type of wall upgrade</th>
<th>DEEP ending R-value</th>
<th>Existing R-value</th>
<th>R added (A - B)</th>
<th>Wall area (ft²)</th>
<th>Incentive factor*</th>
<th>Incentive amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>e.g. Wall Surface</td>
<td>18.5</td>
<td>6</td>
<td>12.5</td>
<td>1,000</td>
<td>75</td>
<td>$ 938.00</td>
</tr>
</tbody>
</table>

* Please refer to incentive tables on page 1 for incentive factor.

ESTIMATED TOTAL INCENTIVE REQUESTED ($) $
# SAMPLE INSULATION INVOICE

## Requirements:

1. Supplier’s business name, address, and contact information
2. Invoice number
3. Invoice date
4. Business name and address
5. Scope of work to include: total square feet of insulation area, added R-value, project site location (if applicable)
6. Separate material and labour charges.
7. Proof of payment (e.g., PAID stamp)
8. Total project cost summary (including labour)

## SAMPLE INSULATION INVOICE

```
ABC CONTRACTING COMPANY
456 Anywhere Avenue Winnipeg, MB R1A 2A2
1-204-555-5556
abc@nonmail.com

BILL TO:
Mrs. Jane Doe
123 Business Street
Winnipeg, MB R1A 3C3

INVOICE DATE
May 1 2018

INVOICE #
123456

DUE DATE
June 1 2018

<table>
<thead>
<tr>
<th>DESCRIPTION OF WORK</th>
<th>QUANTITY</th>
<th>RATE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPPLY AND INSTALL XYZ FIBRE INSULATION TO ATTIC</td>
<td>43</td>
<td>$12.50/BAG</td>
<td>$537.50</td>
</tr>
<tr>
<td>ADD R-39 TO REACH A TOTAL R-VALUE OF 50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL SQ FT = 860</td>
<td>6</td>
<td>$80/HOUR</td>
<td>$480.00</td>
</tr>
<tr>
<td>WORK PERFORMED AT 123 BUSINESS STREET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XYZFIBRE INSULATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LABOUR CHARGES</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| SUBTOTAL                                         |          |           | $1,017.50 |
| GST (5%)                                         |          |           | $50.88    |
| PST (8%)                                         |          |           | $43.00    |
| BALANCE DUE                                      |          |           | $1,111.38 |
```

PAID
SAMPLE WINDOW INVOICE

ABC CONTRACTING COMPANY
456 Anywhere Avenue, Winnipeg, MB R1A 2A2
1-204-555-5556 | abc@nomail.com | www.abc.ca

SOLD/SHIP TO:
Winnipeg Company
123 Business Street
Winnipeg, MB R1A 3C3

ORDER DATE | INVOICE # | INVOICE DATE
May 1 2018 | 123456 | June 1 2018

DESCRIPTION OF WORK | QUANTITY | UNIT PRICE | TOTAL
SUPPLY AND INSTALL 5 ABC WINDOWS – WHITE
10 1/8" X 61 3/8" TG LITE
2 ARGON GAS
EnergyStar # CAS-LSG-ARG-CL-ARG-HSG
U-12 ER-28
PRODUCT CHARGES
LABOUR CHARGES
5 | $602.3/WINDOW | $3,011.50
$240.00

SUBTOTAL | $3,251.50
GST (5%) | $162.57
PST (8%) | $260.12
BALANCE DUE | $3,674.19

Requirements:

1. Supplier’s business name, address, and contact information
2. Invoice number
3. Invoice date
4. Business name and address
5. Scope of work to include: total square metres of glazing and frame, and technical specifications
6. Separate material and labour charges.
7. Proof of payment (e.g., PAID stamp)
8. Total project cost summary (including labour)
CUSTOMER APPLICATION CHECKLIST

COMMERCIAL BUILDING ENVELOPE PROGRAM

Customer application checklist

Please use the following checklist to keep track of the submission requirements for your Commercial Building Envelope Program (CBEP) application. Please reference this application number when inquiring about your CBEP application.

<table>
<thead>
<tr>
<th>Application number</th>
<th>BE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitoba Hydro account rep.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATE</th>
<th>✓</th>
<th>STEPS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CBEP application completed and submitted to Manitoba Hydro for project pre-approval.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CBEP application pre-approved by Manitoba Hydro.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notify your contractor or supplier regarding your project pre-approval so that work may begin in a timely manner.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Site verification (if required) meeting date arranged with Manitoba Hydro as per instructions on the pre-approval letter.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Site verification (if required) completed by Manitoba Hydro.</td>
</tr>
<tr>
<td>After project completion:</td>
<td></td>
<td>Completion documentation submitted to Manitoba Hydro for final review and incentive payment:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Completion Declaration &amp; Questionnaire forms filled out:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Window and/or door invoicing: The paid invoices must show window and/or door types, make and model numbers, sizes, quantities, unit costs, and total cost (including taxes) separate from labour.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Insulation material invoicing: The paid invoices must show insulation types, sizes, quantities, unit cost, and total cost (including taxes).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post-inspection (if required) arranged and completed by Manitoba Hydro.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CBEP incentives paid to customer.</td>
</tr>
</tbody>
</table>

Contact us:
Phone: 204-360-3676 (Winnipeg) or 1-888-624-9376
Email: cbep@hydro.mb.ca
Visit: hydro.mb.ca/psfb

June 2016