# UBC REAP 3.0 INTERPRETATIONS

Updated September 4, 2018

# **PROCESS OVERVIEW**

- · Project teams can submit interpretation questions by email
- Interpretations that effect all projects will be published at: http://sustain.ubc.ca/campusinitiatives/greenbuildings/reap
- · Interpretations will be precedent setting
- · Interpretations will not contain any significant changes to REAP or to add any new requirements
- · Each interpretation will undergo departmental review prior to being issued

# **REAP INTERPRETATIONS**

## **Interpretation #1**

Clarification: BP and OP submittals

Please note that REAP submittals are required both prior to Building Permit as well as prior to Occupancy Permit as described in the REAP Reference Guide (page ix).

# **Interpretation #2**

#### Clarification: no points for partial compliance

In order to receive points for a credit the stated performance level must be reached, a prorated number of points will not be awarded for partial compliance. For example for credit WE 1.2, Eliminate Potable Water Use, 3 points are awarded if potable water use for site irrigation needs are eliminated, however no points will be awarded if a 75% reduction in potable water use is achieved.

#### **Interpretation #3**

#### MR2 Regional Materials

Do not include electrical components, mechanical components, plumbing items, appliances or equipment in the regional materials calculations.

#### **Interpretation #4**

#### ID 4.2 Energy Data Sharing

This Interpretation provides guidance for purpose-built rental buildings since this case is not covered in the REAP 3.0 Reference Guide. Further guidance is also provided for strata owned buildings.

To meet this credit for purpose-built rental apartment buildings, provide a letter from an authorized representative of building owner's property management company stating that utility energy consumption data (e.g., FortisBC, BC Hydro and/or Corix) will be provided to UBC Sustainability + Engineering upon request.

To meet this credit for strata owned buildings, provide a letter signed by the developer declaring that UBC Sustainability + Engineering can obtain utility energy consumption data upon request, with an explanation of the mechanism for data sharing (e.g., via a strata bylaw). Supporting documentation (e.g., copy of strata bylaw) must be provided at the Occupancy Permit phase.

# **Interpretation #5**

EUI Target for Mixed- EUI Target for Mixed-Use Buildings

Mixed use buildings (residential with commercial/retail) require a pro-rated EUI target. To obtain a prorated target for your development, apply to the UBC Sustainability and Engineering Green Building Manager.

## **Interpretation #6**

WE M5 ENERGY STAR Washers and Dishwashers

#### EA M7 ENERGY STAR Dishwashers and Refrigerators

A developer may apply for equivalent to ENERGY STAR status for appliances. To do so, submit documentation demonstrating that the appliance meets the current ENERGY STAR *key product criteria* for the appliance type in question. Key product criteria are available on the ENERGY STAR website.

# Note: Interpretations #7 and #8 are intended to be the first step towards aligning REAP with the BC Energy Step Code requirements

### **Interpretation #7**

EA Targets – Building Energy Efficiency

This Interpretation specifically provides an update on modelling guidelines and standards to be used for all EA Target credits.

Replace the UBC Energy Modelling Guidelines (2013) with the energy modelling requirements of Section 10.2.3.4.(1) (Energy Modelling) of the BC Building Code Regulation (<u>http://www.bclaws.ca/civix/document/id/mo/mo/2017\_m158</u>) to determine energy use intensity (EUI) for these credits. This section of the regulation references the City of Vancouver Energy Modelling Guidelines and applicable parts of Part 8 of the National Energy Code for Buildings (NECB).

# **Interpretation #8**

#### EA 4.1 Building Envelope Airtightness

This interpretation provides guidance on airtightness standards and protocols to use to meet this credit.

Replace CAN/CGSB-149.15-M86 with the testing protocols referenced in Section 10.2.3.5 Building Envelope Airtightness Testing of the BC Building Code Regulation (<u>http://www.bclaws.ca/civix/document/id/mo/mo/2017\_m158</u>) for this credit. This section of the regulation requires that the testing procedure must be conducted in accordance with either ASTM E 779, Standard Test Method for Determining Air Leakage Rate by Fan Pressurization, or USACE Version 3, Air Leakage Test Protocol for Building Envelopes.

# **Interpretation #9**

IEQ 1.1 Low VOC Paints and Coatings

Special purpose coatings, in addition to architectural coatings, must also meet a minimum GPS-2 VOC limit of 50 g/L. See the Master Painter's Institute's Green Performance Standard (<u>http://www.paintinfo.com/GPS/GPS-01\_GPS-2\_February2016.pdf</u>) for the list of low-emitting special purpose and architectural coatings.

In the case that there is no alternative, and a small quantity of a coating that exceeds the GPS-2 VOC limit is used, a budget system may be applied to meet the credit requirement. The VOC budget must be calculated to demonstrate that the overall average of VOC of all coating products based on litres of each applied meets the GPS-2 VOC limit of 50 g/L. Calculations are to be submitted at Occupancy Permit phase.

# **Interpretation #10**

#### EA Targets – Building Energy Efficiency

This Interpretation provides an update on modelling guidelines to be used for all EA Target credits.

Use Version 2 of the City of Vancouver Energy Modelling Guidelines (https://guidelines.vancouver.ca/E006.pdf) for this credit. Use an infiltration rate of 0.20 L/s/m<sup>2</sup> in the energy model, as per Section 2.4 of the City of Vancouver guidelines. If the project undertakes an airtightness test that meets the requirements of REAP credit EA 4.1, and the infiltration rate calculated from the airtightness test result is lower than 0.20 L/s/m<sup>2</sup> (using the conversion factor found in Section 2.4.1 of the City of Vancouver guidelines), the lower infiltration rate may be used in the energy model.

# **Interpretation #11**

#### EA 4.1 Building Envelope Airtightness

This interpretation provides guidance on airtightness standards and protocols to use to meet this credit.

When following the testing protocols referenced in Section 10.2.3.5 Building Envelope Airtightness Testing of the BC Building Code Regulation (http://www.bclaws.ca/civix/document/id/mo/mo/2017\_m158) for this credit (see REAP Interpretation #8), no airtightness target is required for this credit.