

SUBJECT: Proposed Updates to Fenestration Energy Efficiency Regulations in B.C.

The Ministry of Energy and Mines (MEM) is proposing an amendment to fenestration standards in the Energy Efficiency Standards Regulation (EESR) to better align with the B.C. Building Code (BCBC). Additionally, several administrative updates are proposed to recognize recent editions of test methodologies and standards, as well as to simplify compliance verification. Unless noted otherwise, effective dates of the proposed changes will immediately follow passage of the regulatory amendment.

The B.C. EESR can be accessed via the link below:

http://www.bclaws.ca/civix/document/id/complete/statreg/14_2015/search/CIVIX_DOCUMENT_ROOT_SITE

Proposed changes are as follows:

- (1) **Effective January 1, 2018**, thermal performance criteria cited in Column 4 of Item 3, 4, 7, 8, and 10 (fenestration products for smaller buildings) will be changed from $U \leq 2.0 \text{ W/m}^2\text{K}$ to **$U \leq 1.80 \text{ W/m}^2\text{K}$** . This aligns with the least stringent requirements in the BCBC Part 9.36.
- (2) **Effective January 1, 2018**, thermal performance criteria cited in Column 4 of Item 5 (skylights) will be changed from $U \leq 3.10 \text{ W/m}^2\text{K}$ to **$U \leq 2.90 \text{ W/m}^2\text{K}$** . This aligns with the least stringent requirements in the BCBC Part 9.36.
- (3) Amend Column 2 of Items 5 (skylights) and 8 (hinged and bi-folding doors) to read: "... (for smaller **and larger** buildings)". This was an unintended drafting error from the previous amendment.
- (4) Add **ASHRAE 90.1 (2016), ASHRAE 189.1 (2014), and NECB (2015)** to the definition of "energy compliant building" in Part 3 Section 16. Fenestration products installed in buildings compliant with any of these standards will be exempt from the thermal performance values outlined in Column 4 of Section 27 as defined in Sections 17-20.
- (5) Update test methodologies referenced throughout Part 3 to latest published editions, specifically **CSA A440.2 (2014) and NFRC 100 (2014)**.
- (6) **Effective January 1, 2020, require a National Fenestration Rating Council (NFRC) Component Modeling Approach Software Tool (CMAST) certification report for regulated fenestration installed in large buildings under Section 27, Items 9 and 10.** Since 2009, the EESR has regulated the thermal performance of fenestration in large buildings (typically commercial buildings and multi-unit residential buildings). At present, there is no officially recognized approach for architects and glazing contractors to demonstrate that site-assembled

fenestration products regulated under Items 9 and 10 comply with thermal performance requirements. Requiring CMAST certification reports will provide a systematic validation of compliance for site-assembled fenestration. **Stakeholders are reminded that “energy compliant buildings” built to ASHRAE 90.1 (2010/2013), NECB (2011), or ASHRAE 189.1 (2009) are exempt from this requirement.** More information on CMAST is available here: <http://nfrfc.org/CMA/CMA-tools.aspx>

MEM staff are seeking formal comments from stakeholders on the above proposed changes. The comment period closes on November 4, 2016. Submissions can be directed via email to:

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