

September 13, 2022

Attention: Permitting departments of Authorities Having Jurisdiction in BC

Re: Requirements for Independent Review of Structural Designs

Engineers and Geoscientists BC is writing to Authorities Having Jurisdiction ("AHJs") to clarify the requirements for documented independent review of structural designs, and to increase awareness of steps AHJs can take to verify these requirements have been met.

Before issuing a structural design for construction or implementation (including submissions for permitting), engineers are required to undertake an independent review (formerly known as a "concept review") of their design. An independent review is a documented evaluation of the structural design concept, details, and documentation that is performed by an appropriately qualified and experienced professional who was not involved in preparing the design. They are required for most structural designs in BC, with some exceptions (see "Exceptions", page 2).

Independent reviews of structural designs have been a requirement in BC since 1992. They are an important part of the design process and help to ensure that a professional has met their obligation to complete their work in a manner that minimizes risk to the public and the environment. Engineers and Geoscientists BC Bylaw 7.3.5 Standard for Independent Review(s) of Structural Designs mandates that:

(1) All Structural Designs require documented independent review(s) prior to Documents being issued for construction or implementation.

Engineers and Geoscientists BC's <u>Bylaws</u> also require the engineer or the independent reviewer to provide a copy of the independent review to the relevant AHJ upon that AHJ's request. Engineers and Geoscientists BC recommends that where appropriate, AHJs **require engineers to provide copies of independent reviews** to ensure these important safety checks have been done.

Please visit Engineers and Geoscientists BC's website for full versions of the relevant <u>Guidelines</u> as well as a <u>webinar</u> on Documented Independent Review of Structural Design (56 minutes). The <u>Guide to the Letters of Assurance in the BC Building Code 2018 and Vancouver Building By-Law 2019</u> was revised earlier this year and may also be a helpful resource to AHJs when accepting submissions.

If you have any questions regarding these requirements, please contact our practice advice team at practiceadvisor@egbc.ca

Regards,

David Pavan, R.Ph. Chief Regulatory Officer and Registrar

Exceptions

Engineers and Geoscientists BC may identify classes of structures that do not require documented independent review(s) of structural designs. At the time of this letter the only structures not requiring an independent review are described in paragraph 3.4.2.1 of the <u>Guide to the Standard for Documented Independent Review of Structural Designs:</u>

3.4.2.1 Many conventional, wood-frame, one- and two-family dwellings fall entirely within the prescriptive requirements of Part 9 of the BC Building Code, the Vancouver Building By-law, or the National Building Code of Canada and do not require a structural design to Part 4. Where the structural design of a one- or two-family dwelling is based on Part 9, and includes a design for lateral resistance, which conforms to the prescriptive requirements in the latest edition of the Canadian Wood Council (CWC) Engineering Guide for Wood Frame Construction, an Independent Review of the design is not required. However, where the CWC lateral resistance evaluation indicates that a structural design conforming to Part 4 is required, an Independent Review is required.

Engineers and Geoscientists BC's guidance for the independent review of retaining walls can be found in the Professional Practice Guidelines - Retaining Wall Design at section 4.1.7:

The Association recommends that as best practice, any Retaining Wall over 3.0 m high or those deemed to be high risk, be included in this requirement to have documented independent reviews conducted by a qualified professional, whether that is a structural and/or geotechnical Engineering Professional, as best suits the type of wall.