

# BUILDING BULLETIN 2016-01



---

## **Municipal Requirement for Residential Structural Engineering**

Some architectural designs for new residential homes have reached levels of complexity that they may require a professional structural design on all or part of the foundation and structural elements. These are homes like those that incorporate concentrated loads from beams and girder trusses through the building to pads or onto the foundation. This design and review requirement falls under *Part 4 of BCBC 2012*. This does not apply to simplified single family dwellings and duplexes with little complexity, uniform loads and designed fully in compliance with *Part 9 of BCBC 2012*.

### **Professional Requirements**

The Association of Professional Engineers and Geoscientist of BC (APEGBC) have issued “The Guidelines for Professional Structural Engineering Services for *Part 9 Buildings in British Columbia*” and “*APEGBC’s Quality Management Guideline*”. In it they established that Engineers who are providing Letters of Assurance for structural design of Part 9 buildings are required to consider the entire structure. APEGBC further recommends that a Structural Engineer of Record (SER) be engaged to make sure all engineer components are incorporated correctly within the building systems. It would then be the SER’s responsibility to also perform field reviews to confirm that the Part 4 components are constructed correctly.

### **District of Kitimat Requirements**

The Authority Having Jurisdiction (AHJ) will decide during the review of the building drawings and submittals what addition professional requirements will be, if any, for the application to be approved. Some of the concerns that may lead to additional engineering requirements are:

- 5 or more combined concentrated point loads of 7,500 lbs. (3400 kg) or more.
- Location of concentrated loads and proximity amongst each other
- Wall to floor space ratio for lateral resistance

If a building contains elements that fall outside *Part 9 of the BCBC* the AHJ will determine the level of Professional design based on a case by case assessment. The District of Kitimat cannot predetermine the extent of the Professional design required until building plans have been submitted. However, we will be conducting reviews of plans to ensure they comply with *Part 9 of the Building Code* and, in the event they have concern, some as noted above, it is likely some level of Professional Design will be required.

Structural Engineer’s will be required to submit a Schedule B for any professional design drawings, for individual pads a comfort letter may suffice depending on the AHJ’s review.

The District of Kitimat reserves the right to require a Structural Engineer of Record for any building if he determines that the complexity warrants this requirement.