



# New and Updated Seismic Provisions of the 2015 National Building Code (NBC) of Canada

21 July 2015, 8:00 a.m. – 12:00 p.m.

## Course Description

Significant updates were made to the seismic hazard model underlying the design ground motions for the 2015 National Building Code (NBC) of Canada, including the probabilistic treatment of Cascadia subduction interface earthquakes, inclusion of new faults, and new ground motion prediction equations. In addition, new foundation factors,  $F(T)$ , were introduced to replace  $F_a$  and  $F_v$ , as well as new simple and self-constrained provisions for low hazard zones, and new provisions for seismic isolation and supplemental energy dissipation. Other revisions affect flexible diaphragms, rocking footings, and buildings with gravity induced lateral demands (such as inclined columns).

This half-day seminar will focus on the changes described above to the seismic provisions (Earthquake Loads and Effects – 4.1.8 under Part 4) of the upcoming 2015 NBC of Canada. It will also provide an illustration of combined effects of the updates and new provisions.

## Who Should Attend

Structural and geotechnical engineers responsible for building design; seismic hazard and risk specialists, researchers in engineering and earth sciences who are interested in the new national seismic hazard model and the implications of the new seismic provisions in the NBC of Canada.

## Course Outline

- Updates to seismic hazard models
- The new foundation factors
- New provisions for buildings in low hazard zones
- Illustration of changes for buildings in high hazard zones
- New provisions for seismic isolation and supplemental energy dissipation
- Other seismic design changes
- Questions and discussion

## Course Fee

The course fee: \$230 plus tax.

The fee includes one refreshment break.

## Instructors

**Dr. John Adams** – *Geological Survey of Canada*

**Dr. Adams** has been employed by the Geological Survey of Canada for 34 years, and has been involved with all aspects of the earthquake program. He has been the lead seismologist in the development of the seismic hazard maps used in the latest editions of the NBC of Canada, including the maps intended for the 2015 Code. He also participates in various Canadian Standards Association committees dealing with earthquake provisions to critical structures such as nuclear power plants.

**Dr. Ron DeVall, P.Eng.** – *Read Jones Christoffersen, Ltd.*

**Dr. DeVall** is a Senior Structural Engineering Consultant with Read Jones Christoffersen Ltd. He was the previous Chair and is currently an ex-officio member of the Standing Committee on Earthquake Design (SCED) of the National Building Code of Canada. He has championed many of the updates to the NBC of Canada including the new provisions for buildings in low hazard zones.

**Andy Metten, P.Eng., Struct.Eng.** – *Bush, Bohlman & Partners LLP*

**Andy Metten** has been a member of the structural consulting community since 1982 and is a partner and practicing structural engineer with Bush, Bohlman & Partners LLP. He has 25 years of experience in structural design and serves as a member of the SCED.

**John Sherstobitoff, P.Eng.** – *Ausenco*

**John Sherstobitoff** has over 30 years of experience relating to the analysis and design of buildings and infrastructure. The past 23 years, he has focused on seismic upgrade projects, including the first use in Canada of viscous dampers in a seismic upgrade. He is the Chair of the SCED, and he championed getting new provisions for seismic isolation and supplemental energy dissipation into the 2015 code.