

# **Terms of Reference**

# $\label{lem:committee-Structural Engineering in Buildings} Professional Standard Subcommittee-Structural Engineering in Buildings$

(December 2, 2009)

#### **OBJECTIVES**

The subcommittee is directed by the Professional Standards Committee to revise the existing Guideline for Professional Engineers providing Structural Engineering Services in Buildings and to create a new professional standard that will prescribe the practitioner's responsibilities when providing these services. The subcommittee shall also review the Guideline for Professional Engineers providing Professional Services in Building Projects using Manufacturer-Designed Systems and Components to ensure that it is consistent with the standard and the other guideline. The subcommittee shall investigate the regulatory, legal and ethical issues that affect the identified activities in professional engineering practice.

#### BACKGROUND

The Guideline for Professional Engineers providing Structural Engineering Services in Buildings was published by PEO in 1995 and has not been revised since. The subcommittee will revise the guideline to deal with problems reported by practitioners and other parties. In particular, concerns have been raised by practitioners, building officials and contractors regarding the lack of coordination and improper division of responsibility between practitioners when two or more are providing structural designs for different aspects of the building. This subcommittee will consider methods for ensuring clarity of responsibilities in order to mitigate problems associated with this division of labour.

The subcommittee will also identify all activities found in the revised guideline that should be considered mandatory and prepare a professional standard policy statement.

### MANDATE (Specific Tasks)

The central task of this subcommittee is to revise the two guidelines to clarify the roles and responsibilities of various professional engineers designing structural systems and components for buildings.

Among the topics to be addressed are the following:

- identify examples of areas of structural engineering design in buildings where professional engineering work is carried out by different practitioners and classify the variations in their contractual relationships;
- identify difficulties associated with the division of structural engineering design for a single building between multiple practitioners providing services for different clients and suggest procedures for mitigating risks of non-coordination, incomplete design and responsibility gaps;
- define the term "structural integrity of the building" and relate this to the services provided by the various contributors to the overall structural design of building;
- d) identify limits of responsibility allowed to the various practitioners providing structural engineering services for the building structure and components;
- identify practitioner responsible for review of shop drawings, if any, and enumerate responsibilities for that review;

- f) consider the possibility of identifying a single practitioner as "structural engineer of record" responsible for coordinating design work done by the various practitioners;
- g) review PEO policies for sealing documents and identify the proper procedures to be followed by the practitioners in various structural engineering design roles.

## **MEMBERSHIP**

The subcommittee shall consist of a member of PSC who will act as chair and 6 to 8 professional engineers working for structural engineering consulting firms, steel and miscellaneous metals fabricators and suppliers of other manufactured building components.

#### **DELIVERABLES**

The Subcommittee will present the completed guideline and professional standard policy statement to the Professional Standards Committee no later than June 2011.

Meeting Schedule: At discretion of the Chair

Completion Date: June 2011