

Invitation - IRCC Workshop Malmö Wednesday the 4th of June 2014

Verification, documentation and control of building regulations, in design phase, for (1) mechanical resistance and stability and (2) safety in case of fire.

Many building failures are caused by errors in the *design* phase. In recent years we have had a number of serious accidents where parts of buildings and in one case an entire building collapsed. We are therefore interested in how verification, documentation and control is handled by building authorities in other countries.

We therefore intend to hold a workshop on regulations of:

1. mechanical resistance and stability and
2. safety in case of fire.

Each IRCC member country is invited to give a short presentation (10 minutes + 5 minutes for questions) on the subject. We understand that the regulations can differ widely depending on what is built. To be able to compare between IRCC countries please describe in your presentation, in general terms, what applies to a five story apartment building in your country. We have listed some questions below as a “guide” to be used when you prepare your presentation. Feel free to bring up other issues if relevant to the subject.

Some guidance for the presentation:

- How is it verified that the requirements in the building codes are met?
- Who verifies that the requirements are met?
- What design documents in terms of drawings, calculations etc. shall be presented to the authorities or other control bodies?
- When shall the design documents be presented?
 - Before the construction start?
 - Continuously during the construction?
- What are the requirements regarding documentation of:
 - Controls by authorities, consultants and project managers?
 - Design calculations?
 - Building materials used?
- What qualification should structural designers and fire safety engineers have?
 - Certifications on a national or regional levels or are there no such requirements?
 - What minimum formal education shall they have?
- What other requirements do you have regarding verification, documentation and control during the design phase?

The workshop will end with a general discussion on the above issues. If the time is too short to fit all that you want to communicate into your presentation you may bring up these issues during the following discussion.

The workshop will start with two speeches. One will present a comparative study of 16 structural engineers' results related to the calculation of cumulative loads on foundations for a five story office building. The other will speak about a survey of different causes of structural failures.