



MITIGATION OF EVENT-RELATED NOISE FOR RESIDENTIAL BUILDINGS POLICY - NORTHEAST FALSE CREEK AND ADJACENT IMPACTED AREAS

Adopted by City Council on November 18, 2010

1 Application and Intent

These policies are to be used in conjunction with the official development plans and CD-1's in cases where a rezoning or development application is proposing residential development in locations where the dwellings could be impacted by event noise from BC Place, Rogers Arena and the Civic Plaza.

2 Establishing Performance Targets – Acoustic and Thermal Comfort Studies

When applicants are preparing rezoning applications which incorporate housing in locations that could be impacted by event noise, they will be required to prepare Acoustic and Thermal Comfort Studies to establish performance targets and provide assurances that dwellings will be liveable and that there is compatibility between the nearby event venue(s) and the proposed housing.

The following methodology for the Acoustic and Thermal Comfort Studies shall be undertaken by professionals with expertise in acoustics and mechanical engineering:

- (a) Identify the sources of event noise that the building design needs to respond to;
- (b) Document one or more recent or past nearby outdoor event noise measurements, with microphone located above the roof of the event venue in question, that will be used to determine the event noise exposure of the new development;
- (c) Describe methodology used to adjust noise measurement level to façade exposure levels and to perform analysis;
- (d) Describe the assumptions made;
- (e) Evaluate whether it is possible to achieve an interior equivalent event noise level (Leq) of 40 dBC to 50 dBC during the loudest 15 minutes of a typical event involving music;
- (f) Provide recommendations for building orientation, construction materials and other noise isolation design strategies necessary to meet the performance targets; and

- (g) Show that comfortable interior temperature levels can be maintained without opening windows. Describe calculation methodology and assumptions.

This information is incorporated into the rezoning application. The study may lead to an adjustment of the maximum noise level permitted in the interior of dwelling units as identified above. In these cases, Council shall consider whether the level of noise projected for the interior of apartments will be liveable.

As part of the preparation of development permit applications, an Acoustic and Thermal Comfort Study will be prepared if one was not prepared as part of a rezoning.

3 Development Permit Applications

Further design development shall rely on the conclusions and performance targets of the Acoustic and Thermal Comfort Study. In some cases it may be necessary to undertake further studies to ensure the proposed building design can achieve the performance targets.