



Building Services Informational Guide: *Alternative Solutions*

Purpose:

The purpose of this document is to explain the City of Barrie's requirements and procedure relating to the submission of an alternative solution.

What is an alternative solution?

Article 1.2.1.1. Part 1, Division A of the Ontario Building Code states that compliance with Division B shall be achieved by complying with the applicable *acceptable solutions* in Division B, **or** by using *alternative solutions* that will achieve the level of performance required by the applicable *acceptable solutions* in respect of the *objectives* and *functional statements* attributed to the applicable *acceptable solutions* in Supplementary Standard SA-1.

Clause 1.1 – (6)a of the *Building Code Act* states that it is the role of the Chief Building Official to establish operational policies for the enforcement of the Building Code within the applicable jurisdiction. This policy is hereby established for evaluating *alternate solutions* and the Chief Building Official may designate officials who are to conduct such evaluations.

How to apply for an alternative solution:

Division C, Part 2, Section 2.1 "*Alternative Solutions*" indicates that the person proposing the use of an *alternative solution* provide documentation to the Chief Building Official that:

- a) Identifies *applicable objectives*, *functional statements* and *acceptable solutions*, and
- b) Establishes on the basis of past performance, tests described in Article 2.1.1.2. or other evaluation that the proposed *alternative solution* will achieve the level of performance required under Article 1.2.1.1. of Division A.

In order to assess compliance of the *alternative solutions*, the submission requirements outlined below must be provided in entirety for review.

Applications for alternative solutions shall be submitted in person to: The City of Barrie's Chief Building Official, Building Department, 70 Collier Street, P.O. BOX 400, Barrie ON, L4M 4T5

Submission Requirements:

Applications must include the following for each proposed *alternative solution*:

- Completed 'Application for Approval of an Alternative Solution'
- Fees payment
- One copy of an Alternative Solution Report complete with all Supporting Documentation
- Any additional reference documentation



Alternative Solution Reports:

Alternative solution reports must be prepared, signed, and dated by a qualified designer, engineer or architect licensed to practice in Ontario, and who is experienced in the preparation of *alternative solutions*.

The report shall include a high level Building Code analysis of the project to provide context for the *alternative solutions*. Alternative solutions reports shall limit detailed Code review and analysis to only those aspects of Code compliance that have a direct bearing on the alternative solutions being proposed. A single submission may contain multiple alternative solutions but each alternative solution must be documented separately. For each proposed *alternative solution* provide:

- Summary of Proposal
 - A description of the proposed *alternative solution*
- Compliance Baseline
 - Specification of a Code compliant solution using *acceptable solutions* (should an *alternative solution* not be accepted, this is the compliant solution that must be implemented)
- Applicable Provisions (*acceptable solutions*) and Building Code Analysis
- All applicable Objective and Functional Statements
- Demonstration of the analytical methods and rationales used to establish that the proposed *alternative solution* will achieve at least the level of performance required by the *acceptable solution*
- An explanation of all assumptions, limiting or restricting factors, and application of testing procedures, test data, engineering studies, modeling, and building performance parameters that support the Code compliance assessment cross referenced to any supporting material
- Specification of any special maintenance or operational requirements, which are necessary for the alternative solution to achieve compliance with the Code after the building is constructed
- Supporting Materials
 - Reduced floor plans, sections, and / or details highlighting and identifying the locations and scope of the proposed alternative solution (sufficient drawings must be provided for the report to be read without reference to the permit drawings)

Fees:

An application fee must be paid at the time of submission for an *alternative solution* as follows: \$650.25 for a 'Single Family Dwelling' review and \$2,718.05 for an 'All Other Occupancies' review, as outlined in the City of Barrie Fee's By-Law Schedule K.

Many projects have more than one *alternative solution* submitted in a single report. Each *alternative solution* submitted will be reviewed and responded to on an individual basis and fees will be levied for each *alternative solution* referenced in the report.

Disclaimer:

Acceptance of an *alternative solution* is permit and site specific and is not considered to establish a precedent for acceptance of similar *alternative solutions* on other projects. Application of *alternative solution* concepts to another site will require a separate review at that time.

Questions:

Please contact Building Services at 705-739-4220 or email ServiceBarrie@barrie.ca.