

Request for evaluation of a plumbing alternative solution

Information

Background

The Manitoba Plumbing Code (MPC) is an objective-based plumbing code. This means that compliance with the Code can be “achieved by complying with the acceptable solutions in Division B, or using alternative solutions that will achieve at least the minimum level of performance required by Division B in the areas defined by the objectives and functional statements attributed to the applicable acceptable solutions” (MPC Division A, Sentence 1.2.1.1.(1)).

A proposed alternative solution may be used for any proposed product, material, component, design, system, equipment or procedure that does not conform to the applicable Division B provisions. However, an alternative solution must provide at least the minimum performance level required by the applicable provisions in Division B. Alternative solutions are provided by professional engineers, not plumbing officials. The regulatory authority is responsible for evaluating the proposed alternative solution. Alternative solutions are not a method of escaping or waiving Code requirements, nor are they an inferior method of complying with the Code.

In order to determine the performance level required for a given provision in Division B, the objective and functional statements for that provision must be reviewed. Each Division B technical requirement is linked to at least one objective and one functional statement which define the areas of performance that an alternative solution must fill. The area of performance is defined by the functional statement-objective pair. The attribution pair describes what needs to be done (the function) and why (the objective).

Submission requirements

A Request for evaluation of a plumbing alternative solution form must be completed for each proposed alternative solution for a project. In addition to the project information required on this form, there is a list of submission requirements. A request for the evaluation of a plumbing alternative solution will only be considered if all of the items listed on the form are submitted. Relevant and complete documentation is essential to the evaluation of the proposed alternative solution. In addition, the owner or owner’s delegate must sign a declaration on the form which acknowledges that:

- He or she has knowledge of, and is in agreement with, the request for evaluation of the plumbing alternative solution, including the supporting documentation submitted with the request;
- The alternative solution being requested is intended to provide an alternative to the strict provisions of the requirements of the current enforced MPC, and/or standards and regulations thereunder; and
- It is the responsibility of the owner to provide and maintain safety in accordance with the alternative solution.

The declaration also alerts the owner that if the alternative solution is accepted:

- Failure to comply with the specifications of the alternative solution may make it difficult to obtain an occupancy permit if one is requested;
- Terms of the alternative solution shall not be subject to review or appeal;
- The granting of an alternative solution is case specific and is of no binding effect in respect of subsequent applications; and
- That a decision to refuse approval of an alternative solution is not subject to review or an appeal.

Alternative solutions must be prepared by a qualified engineer licensed to practice in the Province of Manitoba.

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Date: _____

Section A – Project information

project information	Project address (including Unit #)		Permit/folder number	
	Project description			
owner	Contact name		Company name (if applicable)	
	Landline number:	Mobile phone number:	Email address:	
engineer	Contact name		Company name (if applicable)	
	Landline number:	Mobile phone number:	Email address:	

Section B – Submission requirements

A request for evaluation of an alternative solution will only be considered if all of the items listed below are submitted with this application.	Submitted	Received <small>(office use only)</small>
Description of the proposed alternative solution	<input type="checkbox"/>	<input type="checkbox"/>
Detailed plumbing code analysis which includes:	<input type="checkbox"/>	<input type="checkbox"/>
A. Identification of applicable MPC Division B provisions	<input type="checkbox"/>	<input type="checkbox"/>
B. Identification of applicable objectives and functional statements	<input type="checkbox"/>	<input type="checkbox"/>
C. An evaluation of the performance level of applicable MPC Division B provisions	<input type="checkbox"/>	<input type="checkbox"/>
D. An evaluation of the performance level of the proposed alternative solution	<input type="checkbox"/>	<input type="checkbox"/>
E. Identification of any assumptions, limiting or restricting factors	<input type="checkbox"/>	<input type="checkbox"/>
F. Identification of testing procedures, engineering studies, building performance parameters, etc. to support the assessment for compliance	<input type="checkbox"/>	<input type="checkbox"/>
Other supporting documentation (see Section D for examples)	<input type="checkbox"/>	<input type="checkbox"/>
Commitment letter for field review (see Section D – required upon request)	<input type="checkbox"/>	<input type="checkbox"/>
Documentation of operational or maintenance requirements must be submitted to the Inspections Branch at the completion of construction.	<input type="checkbox"/>	<input type="checkbox"/>
Letter of certification from the engineer at the completion of construction		

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Section C – Declaration and signatures

If the alternative solution is accepted:

- Failure to comply with the specifications of the alternative solution is an offence under the Manitoba Building By-Law;
- Terms of the alternative solution shall not be subject to review or appeal;
- The granting of an alternative solution is case specific and is of no binding effect in respect of subsequent applications.

A decision to refuse approval of an alternative solution is not subject to review or an appeal.

Owner's declaration

- I am the owner of the above noted property or the Owner's Delegate for which this alternative proposal for plumbing is being submitted.
- I understand and agree with this proposal including the supporting documentation submitted with the request.
- I understand that the proposal being requested is intended to provide an alternative to the strict provisions of the requirements of the current enforced National Plumbing Code/Manitoba Amendments, and/or the Winnipeg Building By-Law No. 4555/87.
- I understand the implications this proposal may have on building maintenance.
- I understand the limitations this proposal may put on the building.
- I understand that it is my responsibility to provide and maintain safety in accordance with the alternative solution.

Signature of registered owner on the status or certificate of title or authorized delegate

Date

If owner delegate, print name

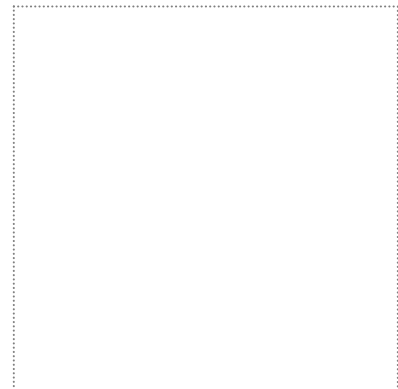
Position/title

Company name

Email

Engineer's declaration

I certify that I have read and agree to abide by the conditions above, and that all information contained within this application is correct.



Signature of engineer

Date

Engineer's seal

Section D – General Information

This section assists in the completion of this application form. Read thoroughly.

Section A – Project information

Section A of the form provides general information on the specific project being applied for. This is required for the request for evaluation of an alternative solution to be reviewed by the City of Winnipeg Commercial Mechanical/Plumbing Inspections Branch.

- **Work description** – Provide a brief description of the scope of work, including the type of building to be constructed or altered and the building name.
- **Engineer** – Alternative solutions are only accepted from engineers licensed to practice in the province of Manitoba. All submitted alternative solutions shall be signed and sealed by an engineer licensed to practice in the province of Manitoba. An engineer or contractor may apply for an alternative solution; however, the required documentation must be prepared by an engineer. Where the design of a plumbing system includes proposed alternative solutions that involve more than one person taking responsibility for different aspects of the design, the applicant for the permit shall identify a single person to coordinate the preparation of the design, Code analysis and documentation referred to herein as per NPC Division C, Sentence 2.3.1.1(6).

Section B – Submission requirements

Section B of the form provides the applicant and design team with information regarding the minimum amount of supporting information required with the request for evaluation of a plumbing alternative solution. The Commercial Mechanical /Plumbing Inspections Branch reserves the right to request further information during review in support of any proposed alternative solution.

- **Description of the proposed alternative solution:** Documentation must be provided to demonstrate that the proposed alternative solution complies with the NPC/Manitoba Amendments as stated in Division C, Article 2.3.1.1.
- **Detailed plumbing code analysis:** This code analysis must outline the analytical methods and rationales used to determine that a proposed alternative solution will achieve at least the level of performance required by MPC Division A, Clause 1.2.1.1(1)(b). All information in the code analysis shall be in sufficient detail to convey the design intent and to support the validity, accuracy, relevance and precision of the code analysis as per MPC Division C, Sentence 2.3.1.1(5). The detailed code analysis must include the following:
 - a. **Identification of applicable MPC Division B provisions:** Reference the requirements in Division B of the MPC that would typically apply, and that the proposed alternative solution is attempting to satisfy by an alternate method.
 - b. **Identification of applicable objectives and functional statements:** Identify the objectives and functional statements associated with these Plumbing Code requirements.
 - c. **An evaluation of the performance level of applicable MPC Division B provisions:** Address the performance level that the MPC is attempting to achieve with the referenced requirements in Division B.
 - d. **An evaluation of the performance level of the proposed alternative solution:** Evaluate how the proposed alternative solution will meet the performance level expected for the referenced requirements.
 - e. **Identification of any assumptions, limiting or restricting factors:** Identify the assumptions, limiting or restricting factors involved in the evaluation of the proposed alternative solution.
 - f. **Identification of testing procedures,** engineering studies, building performance parameters, etc. to support the assessment for compliance.

- **Documentation of operational or maintenance requirements must be submitted to the Inspections Branch at the completion of construction**

Information concerning any special maintenance or operational requirements, including any building component commissioning requirements, that are necessary for the alternative solution to achieve compliance with the Code after the building is constructed must be provided (MPC Division C, Clause 2.3.1.1.(2)(b)). The building must be maintained in compliance with the codes under which it was built, which includes any alternative solutions used.
- **Other supporting documentation**

This includes other information or items that may be helpful in the review of the proposed alternative solution, including:

 - A list of submitted documents.
 - A reason for the proposed alternative solution.
 - A list of applicable sections of referenced standards.
- **Commitment letter for field review**

A commitment letter for field review from the engineer submitting the alternative solution may be requested at the discretion of the City of Winnipeg Commercial Mechanical/ Plumbing Inspections Branch to ensure that the construction complies with the engineer's design. The commitment letter, if required, must state that the engineer will provide, or have a suitably qualified person reporting to him or her provide periodic site reviews of the project at appropriate stages of construction and that the engineer will provide a letter of certification at the completion of the project.
- **Letter of certification**

A letter of certification must be submitted to the Commercial Mechanical/Plumbing Inspections Branch at the completion of construction. The content in the certification letter must follow the City of Winnipeg approved [wording for letters of certification](#).