

Alternative Methods and Materials Proposals

Construction methods, materials and technologies are always evolving. Building codes however, are static in nature, as they are developed and adopted on cyclical basis that perpetuates "outdated" code provisions even upon their most recent adoption. To that end, the State Building Code provides for "alternative means and methods" to allow the code official an opportunity to review or examine modern conditions, materials or methods not specifically addressed or allowed by the code. To consider an alternative method or material is an option. An applicant always has the opportunity to request this; as such, the code official must consider it. This is supported by Minnesota statute 326B.101 where it states in part..... " the code shall provide for the use of modern methods, devices, materials, and techniques which will in part tend to lower construction costs." In the Minnesota State Building Code, Minnesota Rule 1300.0110, Subpart 13 states:

"The code is not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by the code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in the code in quality, strength, effectiveness, fire resistance, durability and safety. The details of any action granting approval of an alternate shall be recorded and entered into the files of the code enforcement agency."

The building code (and state statute) mandate that the code official consider an alternate design request, but it is up to the code official to determine if the proposal meets with the intent of the code. The code official may deny a proposal if they determine that it does not meet with the prerequisites of what is minimally expected by the code for an alternate design, method, material, or work offered.

Under an alternate design application, the code official should receive the following minimal information with the alternate request:

- ✓ An application for a request to use an alternate design or method of construction (see attached), or a letter from the applicant/design profession specifically requesting the code official consideration of the request.
- ✓ Identifies the exact project and site address where the alternate would be used.
- ✓ The request must clearly identify the design condition and building areas affected by the proposal.
- ✓ The request must detail the exact code sections the proposed alternate or modification would violate the code.
- ✓ The request must include exact information on what is being proposed in lieu of the specific code requirement(s).



- ✓ The request must include supporting information/documentation to substantiate that the
 alternate material, method or work offered is, for the purpose intended, at least equivalent
 of that prescribed in the code in terms of suitability, strength, effectiveness, fire-resistance,
 durability, safety and sanitation. This may include testing criteria, manufacturers data, history
 of a materials performance results, etc.
- ✓ If other elements or components are to be "built-in" or included with the alternate proposal, those items should also be identified. Examples include life safety elements that are installed in addition to what the code would otherwise minimally require, like alarms or sprinklers, or fire resistive construction, etc.
- ✓ If special or third party testing is proposed or required, the applicant should identify this and provide an outline that would include information such as who would do the inspections, what inspections would be performed, the times and intervals of inspections, performance expectations, final reporting, costs, etc.
- ✓ If regular or annual maintenance is required or expected, the applicant should identify the
 conditions. Operational and/or maintenance agreements or contracts should also be
 proposed and submitted along with the schedules.
- ✓ The applicant needs to sign and date the request and submit all data to the code official for their consideration.

The code official needs to review the application and supporting documentation and make the final determination on its acceptance. If deemed necessary, the code official may use third party consultants and/or testing agencies to assist in making a final determination. Whether accepted or not, the code official must provide a written document outlining his/her conclusion on the proposal. All documentation must then be filed in the municipal property files and maintained indefinitely.

It should be noted that because the building department is a regulatory agency, by virtue of its function, it is vulnerable and susceptible to legal attack at any time. The refusal to consider an alternate design proposal could, in itself, precipitate a legal action. Notwithstanding, the basis for accepting or denying an alternate design proposal should therefore be exercised under considerable thought, regardless of the outcome.

Checklist of items that must be addressed in a proposal for an "alternative material, design, or method of construction"

Requirements 1300.0110, Subp. 13. Alternative materials, design, and methods of construction and equipment.

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Appropriately prepared "Alternative"

In accordance with the above, a completed alternate must document how the design ... complies with the intent of the code, and [how] the material, method, or work offered is...at least the equivalent of that prescribed in the code in quality, strength, effectiveness, fire resistance, durability, and safety. This must be contained in the form of a written request that includes the following information:

- A. An overview statement that summarizes the request.
 - B. Name of project and site address or location.
 - C. Specifics about the building or structure including the: type of construction; occupancy classification; number of stories; floor area; and other code features relevant to the issue.
 - D. Citation and description of the specific code requirement and how it applies in this building.
 - E. The negative result(s) by literally complying with the code requirement. Elaborate on each and include details regarding costs, hardships, difficulty, and/or impracticality of literal code compliance.
 - F. Specifics of the alternate being proposed. Include technical details and plans if necessary.
 - G. How this alternate complies with the intent of the code.
 - H. How this alternate material, method, or work is at least the equivalent of that prescribed in the code in quality, strength, effectiveness, fire-resistance, durability, and safety.
 - I. Applicable test results, product listing, or alternate compliance standards.
 - J. Signature and date of the applicant. Applicant must be the architect or engineer of record if the alternate is a modification of an original licensed design. However, alternates may reference work prepared by consultants.

Project Name:	Date:



ALTERNATE DESIGN/METHOD/MATERIAL APPLICATION

ш	Project Title		County			
SITE	Project Site address		City, Zip			
OWNER	Owner		Contact Person			
	Owner Address		Phone No ()			
	City, State, Zip			Fax No ()		
CONTR.	Contractor		Contractor License No	Contact Person		
	Contractor Address			Phone No ()		
	City, State, Zip			Fax No ()		
DESIGN FIRM	Designer			Contact Person		
	Firm Address			Phone No ()		
Δ	City, State, Zip			Fax No ()		
APPLICANT	Alternative Provision Applicant Is:OwnerDesignerContractorOther; specify					
	Applicant's Printed Name			Applicant's Phone No ()		
	Applicant's Address			Applicant's Fax No ()		
Ā	City, State, Zip			Applicant's License No (If Applicable)		
	Permit Number:	Current Cod	e Edition:	Date:		
ALTERNATE	Description of Alternate Design/Method/Material:					
Pursuant to MSBC 1300.0110, Subpart 13, I hereby apply for authorization to deviate from the standard minimum requirements						
of the N	Ainnesota State Building Code by use o	of an alterna	te material, design, and	l/or method as d	escribed in this application. I	
acknowledge that information in this submittal is complete and accurate; that this is not a permit; that the work will be						
performed in accordance with the conditions of this authorization, the approved plans and specifications, and the Minnesota State Building Code; and, that I will cause the work to remain accessible and exposed for inspection purposes. I also						
acknowledge that this design alternative privilege may be revoked at any time upon evidence that the alternative construction						
condition has been violated in any way.						
Applicant Signature Date					Date	



ALTERNATE DESIGN/METHOD/MATERIAL APPLICATION

An alternative design, method or material must be shown to meet the intent of the code and be equivalent to the code in terms of quality, strength, durability, effectiveness, fire-resistance, safety and sanitation. If these are not, or cannot be evidenced, then the alternate design, method or material shall not be accepted. Acceptance of this provision is not intended to represent a "variance" to minimum standards required of the code. Clearly identify the specific code section(s) this alternative relates to: Identify the original intent of the code provisions identified above: ALTERNATE DESIGN/METHOD/MATERIAL Describe the elements of those provisions where an alternative is desired: Identify why this specific alternative is being proposed: Substantiate how the proposed alternate provides an equivalency in terms of quality, strength, effectiveness, fire resistance, durability and/or safety when compared to the specific requirement(s) of the code. (Attach additional information if necessary.) Please attach all information evidencing or demonstrating that the proposed alternate meets accepted standards, testing, certification, guidelines, or computability with conditions required by code. Engineering computations, modeling, references, assumptions, factors of safety and data input and anticipated output should also be documented. SYNOPSIS OF DESIGN If Special or Third Party Inspection is required, the applicant shall specify exactly where and when said inspections are required, and who will be performing each required inspection. If necessary, a Special Inspections Agreement must be completed and submitted with this application. Where building use functions or restrictions are required (e.g., yard limitations, maintenance schedules, special security measures, training, periodic inspections, etc.), said conditions shall be documented with a schedule identifying the intricacies and relationships of the proposal. Copies of proposed Deed restrictions shall also be submitted for review. The Building Department has the responsibility to review design submittal(s) for compliance with the current adopted codes and department procedures. If the Department does not have the technical expertise to make a thorough and competent review, a third party or other resource may be used. If so, costs associated with the review will be charged to the applicant. For Office Use Only **Building Official Approval: Assigned Alternate** Date: Number: Expiration of Approval: Conditions of Approval: