

Guidelines for Approval of Alternate Materials, Design and Methods of Construction

Basis for Approval

For the Building Official and Fire Marshal or their designated agent to approve a request for modification or a request for alternate material or method of construction, he/she must determine that special individual reasons exist that make compliance with the strict letter of the Code impractical and that equivalency is provided. The resulting condition must be in conformance with the spirit and purpose of the Code provisions involved and that such modification does not lessen application to allow the above evaluation to be made.

Requirements for Submittals

The applicant design professional shall prepare a Written Report that describes the alternate proposal along with the applicable data listed below:

- State specific code provisions for which alternative is requested and why it is being submitted.
- Describe by code section those provisions for which alternative is desired.
- Compare the proposed alternative versus the code requirements in terms of structural strength, suitability, effectiveness, fire resistance, safety and health impacts affecting the building or user of the building.
- Demonstrate that proposed alternative is compatible with balance of code requirements.
- When applicable specify how authoritative consensus document(s) are used to substantiate information.
- Provide assumptions, references, and documentation of evaluation methods utilized. This includes intended use, input data, anticipated outputs, and limitations of computer models and other analytical tools or methods.
- Specify when and where special inspection and testing are required and the standards of acceptance for demonstrating compliance. Show how the proposed alternate, if accepted, will be identified on the job site.
- Where land use restrictions and building setbacks are required, deed restrictions may be an appropriate method to ensure continued compliance.
- State how and where alternate proposal is incorporated within construction plans and prepare plan amendments as necessary. The design professional has the responsibility to coordinate all construction documents and ensure compatibility between documents.
- The report and design documents shall be dated, signed and stamped by the design professional according to the plan submittal procedure.
- For alternate methods of design requests, the applicant shall set performance criteria in his design. Performance criteria shall be reviewed, amended and approved by the Building Official prior to start of design.

Alternative Design Review/Verification

The Building Official has the responsibility to review design submittals for compliance to the adopted codes and procedures. If the Building Official does not have the expertise on staff to make a thorough and competent review, the Building Official shall select a consultant that possesses the necessary qualifications to perform a third-party or peer review. Cost of peer review shall be paid by applicant to the Building Department prior to commencing the review.

- Verify that all applicable information and justifications listed above as requirements for submittals is received and verify that evaluation design methods used by designer are appropriate to the alternative proposed.
- Verify products are being used in accordance with their listing conditions are required by recognized listing agencies. If not available, require documentation and/or testing to demonstrate compliance with intent of code and intended use.
- Evaluate performance of material and possible flaws that could affect performance of material in its installed state.
- The reviewer shall document that the submittal has been reviewed and accepted as meeting the alternative materials, design and methods of construction provisions of the code. If the Building Official is not satisfied that the applicant has met the conditions, the request should be denied in writing with the applicable reason(s).

Inspection/Field Verification

The alternate proposal as approved in the construction documents must be verified by inspections and, where necessary, testing as follows:

- To verify that alternate materials, systems and fabricated products comply with accepted design criteria and the manufacturers and engineer's installation procedures, inspectors should check product labeling, certification, quality assurance processes, and testing, as applicable.
- When appropriate, an approved third party quality assurance inspection and testing service may be required for continuous and complex inspection and testing activities. This is intended to verify that construction complies with the code and the approved plans.