

# Presidio Trust Fire Marshal's Office

Date: August 7, 2023

**Revision**:

1750 Lincoln Blvd. San Francisco, California 94129

Standard: ADM-001

Title: Alternative Methods and Materials

Approved By: Tomas Kaselionis

### **SCOPE**

This standard is intended to provide direction for submitting requests for use of an Alternate Material and Method of construction (AM&M). This standard shall meet the following code requirements:

- National Fire Protection Association, NFPA 1, Fire Code
- National Fire Protection Association, NFPA 101, the Standard for Life Safety Code
- <u>National Fire Protection Association, NFPA 5000 Building Construction and Safety Code U.S. Government Code,</u> <u>Code of Federal Regulations</u>

### 1. <u>REQUESTS</u>

- 1.1. AM&M requests shall be evaluated by the Presidio Trust Fire Marshal's Office (FMO) to ensure the proposed material, method of construction, design, use, or operation satisfactorily complies with the intent of the National Fire Protection Association (NFPA). Additionally, the alternatives that are being proposed will be evaluated to determine that they are equivalent to or exceed what is prescribed in NFPA codes in terms of quality, strength, effectiveness, fire resistance, durability, and/or safety.
- 1.2. It is important to keep in mind that <u>an AM&M is NOT a waiver</u>. It does not excuse a project from meeting the level of safety or performance required by the code, only to achieve it in a way that may not meet the method described in the code.

#### 2. <u>REQUIREMENTS</u>

- 2.1. <u>AM&M Request</u>: The applicant shall complete and submit the appropriate request form with those plans and other documentation necessary to evaluate the proposed AM&M. Use the "Alternate Materials, Design & Methods Request" form for commercial buildings, multifamily residential buildings, and residential developments.
- 2.2. <u>AM&M for Projects Other Than an Individual Single-Family Residence or Duplex</u>: The Project Manager/Applicant shall complete the top of the AM&M form.
  - 2.2.1. <u>Applicant Information</u>: Provide the Project Manager/Applicants name and the name and contact information for the person applying for AM&M. If the contact for technical questions is different than the applicant, provide the contact information for that person as well.
  - 2.2.2. <u>Project Information</u>: Provide the project name and address and indicate the occupancy classification, construction type, number of stories, and total floor area of the building(s) impacted by the AM&M.
  - 2.2.3. <u>Project Requirements & Proposals</u>: This section provides information related to the applicable code requirements and proposed alternatives.
    - 2.2.3.1. <u>Code Requirement</u>: List the code section(s) or requirement(s) that the project does not comply with or that you are proposing an alternative to. A single code section can include multiple requirements or methods of compliance, so be specific in terms of which part of the code section is being addressed by the alternative. Briefly describe the intent of the code section or requirement as it pertains to fire and life safety, emergency response, and/or firefighting as appropriate.

- 2.2.3.2. <u>Code Deficiency</u>: Indicate how the project does not comply with code and why compliance with the standard requirements is not possible, feasible, or desirable.
- 2.2.3.3. <u>Alternative Proposal</u>: Describe the alternatives that are being proposed to mitigate the deficiency or code requirement. This section should include only those features or measures that are provided to offset or mitigate the deficiency. Do not include any features that are otherwise already required by the code here.
- 2.2.3.4. <u>Justification</u>: In this section, you must justify how the project or design approach utilizing the proposed alternative material or method is as safe or effective as if the project were built in the manner detailed in the code. Describe how the proposed alternative offsets the standard requirement. Whenever possible, the alternative should directly offset the deficiency. For example, if project deficiencies would delay emergency response to a building fire, the alternative should provide early notification to the fire department, slow the rate of the fire's growth, contain the spread of fire to one part of building, or otherwise mitigate the negative effects of a delayed response.
  - 2.2.3.4.1. Justification may also include any other relevant information related to the project or proposal. For instance, if the proposed alternative further enhances the effectiveness of other features *already* required by code in some way, this information could be included as additional support.
- 2.2.3.5. <u>Signature</u>: The Project Manager/Applicant shall provide their signature, job title, company name, and date the form was signed in the last section of the form.

#### 3. SUBMITTAL AND REVIEW PROCESS

- 3.1. <u>Submittal Format, Timing, and Location</u>: Where the AM&M is included as part of the initial plan submittal, provide one hard copy of the form and any supporting documentation.
  - 3.1.1. Should evaluation of the AM&M proposal require time and resources beyond a reasonable time standard allotted for this activity, additional time, and materials (Permitting Office) fees may also be applied.
- 3.2. <u>Evaluation</u>: All AM&M requests are evaluated on a case-by-case basis in the context of the specific project being reviewed. Approval of the request is based upon several factors, including, but not limited to, the level of equivalency achieved, the effect of AM&M on fire and emergency response, and site conditions.
  - 3.2.1. Where the AM&M proposal affects project elements under the jurisdiction of another department, review or concurrence from that department may also be required. Similarly, where an AM&M is proposed to the Presidio Planning or Permitting Department and the alternative is within the scope of the Fire Marshal's authority (such as sprinklers or alarms), concurrence from the Fire Marshal's Office is required.
- 3.3. <u>Approved AM&M</u>: If the Presidio Trust FMO determines that the AM&M proposal provides an equivalent level of protection, considering all related factors pertaining to the project, the FMO will complete the approval section at the bottom of the request form. Such approval may be conditional upon implementation of additional requirements that were not part of the original AM&M proposal. If additional conditions are required, the Presidio Trust FMO will either:
  - Ask that the AM&M form be updated to include the additional items;
  - Indicate additional conditions or requirements in the "Comments" area of the form.
  - 3.3.1. The Presidio Trust FMO will provide an original hardcopy for pick-up at the Fire Marshal's Office if requested by the applicant. Approval is granted only for the specific project that is under review and the conditions for approval shall not be construed as applicable to any other project.
- 3.4. <u>Denied AM&M</u>: If the Presidio Trust FMO determines that the AM&M proposal does not provide an equivalent level of protection, the request will be denied, and a response will be issued to this effect.

- 3.4.1. Should the applicant submit a different AM&M request for this project or choose to revise and resubmit the previously denied request, additional AM&M fees may apply.
- 3.4.2. To facilitate the evaluation process, include any previously denied AM&M proposals when submitting a revised AM&M request.
- 3.5. <u>Other Plans</u>: Once the AM&M request is approved, the completed AM&M form shall be incorporated into the plan that the deficiency is related to, as well as all subsequent plans that are submitted to the Presidio Trust FMO and the Permitting Department that may be impacted by the approved alternative(s). In some cases, this may require revision and resubmittal of previously approved plans.
  - 3.5.1. Failure to incorporate AM&M into other plans may result in a return of those plans as incomplete and/or delay plan approval or interrupt progress during construction.
  - 3.5.2. It is the responsibility of the Project Manager/Applicant to provide copies of approved AM&M documentation for this purpose and to ensure that all affected parties are aware of the approved alternatives.

## 4. ENGINEERING EVALUATION

4.1. If the Presidio Trust FMO deems an engineering evaluation necessary, it shall be performed and reported by a firm or individual that has been approved by the Presidio Trust. The applicant is responsible for all costs associated with the preparation of the AM&M or associated analysis.

#### **DEFINITIONS**

Alternate Material and Method – (AM&M). Permitted use of alternate materials or methods of construction may not be specifically prescribed in the NFPA or other outlined codes. Modifications to code requirements are allowed only when there are significant difficulties encountered, making it impractical to carry out the prescriptive provisions of the application code. The proposed alternate materials, methods, or modifications may be permitted where the equivalent objectives prescribed by in NFPA codes can be achieved by establishing and maintaining effective fire and safety, structural integrity, strength, fire resistance, sanitation, and/or equipment suitability.

FMO – Fire Marshal's Office.