



Mercer Island Fire Marshal's Office
3030 78th Avenue SE
Mercer Island, WA 98040
(206) 275-7966

FIRE CODE ALTERNATE REQUEST

This document is intended to provide guidance on the approval process for a code alternate request.

The unique and challenging geography, water system, and design desires often make it difficult to meet the Fire Code requirements for a project on Mercer Island. The fire code allows applicants to propose alternate fire protection or design methods to be used to overcome these deficiencies.

2012 IFC - [A] 104.9 Alternative materials and methods.

The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been approved. The fire code official is authorized to approve an alternative material or method of construction where the fire code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

Draft Submittal and Review Process:

Before you propose an alternative to mitigate a fire service deficiency, you will be provided with a "Fire Plan Review" sheet with the specific deficiencies for your project. You will need to address each fire deficiency noted. Checked items marked on this review sheet are areas where the required code is not met. You will draft your request letter, stating the scope of work for the project, citing the deficiencies that were identified from the review sheet, proposing your specific items that you propose as alternative(s) to meeting the code, and finally a summary statement which states "We believe the proposed is equal to or better than the code requirement." Your proposal or "code alternate" will be reviewed to determine if your proposal meets this final summary statement.

Below is a list of items that will be considered as alternative fire protections.

- An "NFPA 13D - Standard" sprinkler system
- An upgrade to an "NFPA 13D – Plus" sprinkler system
- An upgrade to an "NFPA 13R – Plus" sprinkler system
- Installation of a "Household Fire Alarm System" per NFPA 72 Chapter 29
- Provide fire retardant coating treatment in the attic and crawl space
- Install 1-hr rated gypsum in all areas.
- Provide solid core or fire rated doors
- Any other items that you would like to propose

All fire code alternate proposals are required to be submitted for review to our Mercer Island Development Services Group. Either in person or submitted to our FTP site. Please contact the Mercer Island Fire Marshal's office for additional information.

FIRE CODE ALTERNATIVE REQUEST

Request written by: Marlo Brown Architects LLC

Applicant email: info@marlobrown.com

Application contact cell: (435) 577-1824

Date: 2/29/2024

Fire Plan Review found the following (3) deficiencies:

1. The fire flow at the residence does not meet requirements: Hydrant WA-HY-J3-11. i. 614 gpm at 96 psi.
2. Distance from hydrant to access is 316 feet (<250 feet).
3. Width: All access roads under 500 feet in length are required to be 20 feet in width. i. Width at the time of pre-application meeting is 13 feet.

Proposed fire code alternatives to overcome the above:

- + In consultation with the fire sprinkler company Moore Fire that installed the original 13D sprinkler system, we are suggesting the below.
- + Extend existing NFPA 13D heads to existing and new enclosed closets and bathrooms, spaces that were originally not required.
- + Add NFPA 72 Household Fire Alarm System if none exists currently (we don't think the current house has one).
- + Provide fire retardant coating treatment in the new attic. No new crawl proposed.
- + Install 1-hour rated gypsum in all new areas.
- + Provide solid core doors at all new interior doors.