



# Moraga-Orinda Fire District

## FIRE PREVENTION DIVISION

### FIRE PREVENTION DIVISION STANDARD

Subject:	Reference:	Approved by:
Single Family Construction Requirements	CFC 2022, MOFD Ordinance 23-01	Fire Marshal Jeff Isaacs

#### **SCOPE**

This standard describes the local application of California Fire Code, as amended by Moraga-Orinda Fire District Ordinance 23-01 for **single family home and ADU (R3) construction**. This standard is not a comprehensive list but is provided to assist with the design of single-family homes and ADUs.

#### **CONSTRUCTION PLANS**

Plans shall be submitted for the following single-family projects:

- ✓ New homes and ADUs.
- ✓ Additions to homes and ADUs.
- ✓ Solar photovoltaic power systems including energy storage systems (batteries).
- ✓ Landscaping additions/modifications.
- ✓ Detached accessory structures, garages and carports.

Plans AND an application shall be submitted to the MOFD electronically using the following link:

<https://www.mofd.org/business/submitting-plans>

New home construction usually has two plan submittal phases. Additions usually have one submittal phase.

- ✓ Design review (Planning) - Less detailed plans. The review is for fire apparatus access, fire sprinkler requirements, the location of fire hydrants, available fire flow from the fire hydrant and wildland urban interface requirements.
- ✓ Construction plans - Detailed plans that will be used for the construction. The review is for all applicable codes.

Deferred submittals- Fire sprinkler plans (if applicable) shall be submitted after the construction plans have been approved.

#### **FIRE SPRINKLERS REQUIRED (NFPA 13D)**

All new homes are required to have fire sprinklers installed. Additional eave sprinklers are required for new sprinkler systems in wildland urban interface fire areas.

Additions to existing homes or ADUs require fire sprinklers as follows:

- ✓ **SUBSTANTIAL ADDITION:** The addition of new gross floor area that exceeds fifty percent of the existing gross floor area or the addition of new gross floor area that results in the building having a gross floor area of 3,600 sq. ft. or greater.
- ✓ **SUBSTANTIAL ALTERATION:** Fifty percent or greater of the linear length of the wall of the building (exterior and interior) and fifty percent of the roof are removed, replaced, or added within a one-year period.

Fire sprinklers are required in ADUs as follows:

- ✓ New detached ADUs where the existing home has fire sprinklers.
- ✓ New detached ADUs that exceed 1200 sq. ft. (Government Code 65852.2, CFC definition of floor area).
- ✓ Attached ADUs where the percent of alteration or addition exceeds those listed above for an addition.
- ✓ In some cases fire sprinklers may be required if the ADU does not comply with MOFD Fire Code requirements such as fire apparatus access.
- ✓ See the California State Fire Marshal Information Bulletin 21-005 for more information: <https://osfm.fire.ca.gov/media/q1xg3mud/ib-accessory-dwelling-units-final.pdf>.

## **FIRE HYDRANTS**

A fire hydrant is required within **400 feet (600 feet if fire sprinklers are provided throughout the building)** of the exterior walls of the new construction/addition measured in an approved route around the outside of any structures. If an existing fire hydrant is not within the distances listed above a new fire hydrant must be installed before the start of construction.

## **FIRE FLOW**

Fire flow information (the flow required at a fire hydrant for fighting a fire) for a project is required by CFC 507.3 and CFC Appendix B105. **The fire flow information is required for plan approval.** This information is available from EBMUD. When requesting the information from EBMUD please request the flow available at the closest fire hydrant to the home. Here is the link for the test: <https://www.ebmud.com/customers/start-or-stop-service/fire-service-requests/>.

**Request this information early in the project design, as it may take several weeks to obtain the information.**

## **FIRE APPARATUS ACCESS**

See the separate Fire Prevention Division Standard that addresses fire apparatus access.

Fire apparatus access roads and fire hydrants shall be installed and serviceable **prior to the start of any combustible construction on a project or combustible storage on a site.** A Fire District inspection and approval is required prior to the start of combustible construction or combustible storage on a site.

## **FIRE HAZARD SEVERITY ZONES & WILDLAND URBAN INTERFACE FIRE AREAS**

New homes/ADUs and existing homes and ADUs with a substantial addition or a substantial alteration (see MOFD Fire Code definitions) located in any Fire Hazard Severity Zone in SRA or in a Wildland Urban Interface Fire Area in LRA shall be designed with **ignition resistant construction.** The plans must have details to show compliance with CRC R337 such as:

- ✓ Class A roof assembly R337.5 (provide a detail of the Class A roof assembly that is listed in accordance with ASTM E108 or UL 790).
- ✓ Venting R337.6 (including the make and model number of the CSFM listed vents or ASTM E2886 listed vents).
- ✓ Exterior walls, overhangs and eaves R337.7 (specify the specific materials used).
- ✓ Exterior doors, windows and skylights R337.8 (provide a detailed description to demonstrate compliance with the code).
- ✓ Decking/exterior stairway R337.9 (including the specific type of walking surface).

## **LANDSCAPING**

New landscaping must comply with MOFD Ordinance 23-03. See CFC 4906.4. Plans for new landscaping shall address the following:

- ✓ Development and maintenance requirements for the vegetation management zone adjacent to the structures.
- ✓ Delineation of a 30-foot and 100-foot fuel management zone.
- ✓ Identification of new vegetation.
- ✓ Identification of irrigated areas.
- ✓ A plant legend.

All landscaping for the lot (new and existing) shall comply with MOFD Ordinance 23-03. Here are the requirements: <https://www.mofd.org/home/showpublisheddocument?id=1673>.

Plants on the prohibited plant list cannot be planted:

<https://www.mofd.org/home/showpublisheddocument/308/637158198010170000>.

There must be a minimum 2 feet non-combustible zone around the exterior walls of the home including no mulch within 2 feet of the exterior walls.

There must be a minimum 6 feet vertical clearance between the tree canopy and the roof of the home.