



Construction Guidelines for Wildfire Hazard Areas

Low Hazard - No limitations, any material allowed by the Building Code.

Moderate Hazard

✓ **Roofing**

- Roof assembly - must have a Class B fire rating at minimum.
- Roof venting – any roof venting in the soffit shall be in the outer 1/3, with non-combustible vent covers and metal screening with openings less than 1/4".

✓ **Decking**

- Decks > 30" above finished grade shall use fire-resistive construction for beams, posts, joists, and decking (trim, fascia, guards and handrails are exempt). Materials shall be rated Class B or better (ASTM E-84 flame spread ratio of 26-70) and listed for exterior use.

✓ **Soffits/Eaves**

- Any soffit, eave, or roof-extension projecting over 48" from the structure shall be of fire resistive construction.

✓ **Siding**

- No limitations, any material allowed by the Building Code.

High Hazard

✓ **Roofing**

- Roof assembly - must have a Class A fire rating at minimum.
- Roof venting – any roof venting in the soffit shall be in the outer 1/3, with non-combustible vent covers and metal screening with openings less than 1/4".

✓ **Decking**

- Decks > 30" above finished grade shall use fire-resistive construction for beams, posts, joists, and decking (trim, fascia, guards and handrails are exempt). Materials shall be rated Class A or better (ASTM E-84 flame spread ratio of 0-25) and listed for exterior use.

✓ **Soffits/Eaves**

- Any soffit, eave, or roof-extension projecting from the structure shall be of fire resistive construction.

✓ **Siding**

- The exterior of the structure is to be of non-combustible or fire resistive material (excluding trim).

Definitions

Fire Rating (Roof) - The wildfire hazard rating for a specific property will dictate the required fire rating for roof coverings. Fire ratings for roof coverings are classified either **A, B, C** or **nonrated**. Required Standard - (ASTM) E-108.

Fire Resistive Deck Construction (Required Standard: ASTM E84 and listed for exterior use)

- **Class A Deck Construction (High Hazard Areas)**
 - Decks completely built with non-combustible materials.
 - Construct a waterproof deck and protect the underside with 5/8" type X gypsum board. Decking can be of any material allowed by code with this method.
 - Build deck using Type IV (Heavy Timber) construction (Chapter 6 of the 2009 IBC)
 - ✓ Joist and beams to be minimum 6"x 10"
 - ✓ Decking to be minimum 4"x in depth
 - ✓ Posts to be minimum 8"x 8"
 - Any structural members and decking materials having a flame spread of less than 25. Some accepted materials:
 - ✓ **Ipe**, aka: ironwood, Brazilian Redwood and Brazilian Walnut, Brazilian Koa
 - ✓ **Kayu Batu** hardwood decking
 - ✓ **FRX Exterior** fire-retardant treated wood
 - ✓ **Exterior FireX** by Hoover Mfg.
 - ✓ **Sensibuilt** Composite Decking by Fiberon
- **Class B Deck Construction (Moderate Hazard Areas)**
 - Any structural members and decking materials having a flame spread of 26-75. Some accepted materials:
 - ✓ **Redwood** or **Sitka Spruce** (minimum one inch nominal thickness)
 - ✓ **ChoiceDek®** or **MoistureShield®** FR composite decking
 - ✓ **EnDeck** FR composite decking
 - ✓ **EverGrain** or **Envision** FR composite decking
 - ✓ **XLM** by TimberTech FR composite decking
 - ✓ **Advantage Ipe®** decking by Advantage Lumber

Fire Resistive Soffit Construction - Any option listed above for decks can be used to protect soffits, eaves or roof-projections.

- Under Type IV (Heavy Timber) construction, open rafters can be 4"x 6" min. and sheathing can be 2"x T&G
- Posts supporting roof only, can be 6"x 6"

Fire Resistive Siding - some options include:

- Non-combustible material (ie. stone, brick, cement, etc.)
- 1 hour listed assembly (5/8" type X gypsum board under combustible siding)
- Cement Stucco (1/2" min. thickness)
- 6+" diameter logs

Building Inspection Process - *New Building Construction / Exterior Modification / Additions* – for all properties in unincorporated Eagle County

- ✓ **Initial Site Inspection (Wildfire 1)** – In areas of *moderate, high, and extreme wildfire hazard* you will need to have *defensible space* established around the new or existing structure. An initial site inspection by the Eagle County wildfire mitigation specialist will determine the parameters for the creation of *defensible space* on your property. This must be completed prior to footing or foundation inspections. You will need the following prior to this site-visit:
 - *Approved field set of site plans available.*
 - *Building corners marked with stakes outlining the approximate footprint of any new structures, drive-way, septic, etc.*
- ✓ **Second Site Inspection (Wildfire 2)** – A second visit to your construction site by the wildfire mitigation specialist may be required during the building process. This visit is to confirm that defensible space around the structure is in place prior to adding combustible material to the site. All vegetation marked for removal during the initial site visit must be gone in order to move on to the next step in the mitigation process.
- ✓ **Final wildfire inspection (Wildfire Final)** – Prior to issuance of Temporary Certificate of Occupancy (TCO) or Certificate of Occupancy (CO), you must be approved by the wildfire mitigation specialist during your final wildfire inspection. The following will be examined to ensure:
 - *That any new landscaping complies with requirements for defensible space (must have approved landscaping plans on site if not complete)*
 - *That construction meets requirements for site's hazard rating.*
 - *That information about the building, location of water for fire suppression, access, and defensible space boundaries are captured and entered into countywide database of wildland-interface properties with mitigation completed.*
 - *That no new factors contribute to the overall wildfire hazard of the site*

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