

———A PROGRAM OF IBHS—

# TECHNICAL STANDARD







# **2025 Wildfire Prepared Home Technical Standard**

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# 2025 Wildfire Prepared Home™ Technical Standard

## 1 PROGRAM OVERVIEW

## 1.1 Designations

The Wildfire Prepared Home™ program provides homeowners with science-based actions to help protect their properties from wildfire. Developed by the Insurance Institute for Business & Home Safety (IBHS) and based on research from IBHS's Suburban Wildfire Adaptation Roadmaps, this program follows a systems-based, two-tiered approach to reducing parcel-level wildfire risk.

A home earns a "designation" by meeting all wildfire mitigation requirements for its selected level in the Wildfire Prepared Home program. Applicants may use the <a href="How-To Prepare My Home Checklist">How-To Prepare My Home Checklist</a> to complete the wildfire mitigation work before applying. To apply, homeowners pay a nonrefundable application fee, submit eligibility photos for IBHS review, and verified documentation will be collected by a third-party evaluation company. Once all requirements are confirmed, IBHS issues a designation certificate for the home.

### 1.1.1 Designation Levels

Two designations are available. To earn a designation, a home shall meet all the requirements for the chosen designation level, as evaluated by an authorized third-party, and verified by IBHS. The Plus level builds upon the Base level requirements. See Figure 1.



Figure 1. Abbreviated List of Requirements

- Wildfire Prepared Home Base Applicants for this level must meet criteria such as creating the 0-5 Foot Noncombustible Zone, upgrading building features, and maintaining the defensible space surrounding the parcel to 30 feet. This is typically achieved when retrofitting existing homes.
- Wildfire Prepared Home Plus This level includes additional protective measures beyond the Base level for key building features of the home, and it is easiest to achieve with newly constructed homes or those undergoing exterior renovations.

## 1.1.2 Designation Level Goals

Wildfire Prepared Home is a designation program that reduces wildfire risks to homes through a system of mitigation actions at the parcel level, based on the latest science and research from the nonprofit Insurance Institute for Business & Home Safety (IBHS).

 Wildfire Prepared Home Base - Helps protect a home from embers by addressing vegetation and items on and around the home, breaking the pathway of connective fuels for fire to spread to the structure by embers. • **Wildfire Prepared Home Plus** - Adds extra protection by using specific building materials to help defend against radiant heat and direct flames.

# 1.1.3 Designation Process and Timelines: Initial, Annual Reviews, and Designation Renewal and Expiration

#### 1.1.3.1 Initial Designation

Homes earn a **Wildfire Prepared Home designation** by meeting all wildfire mitigation requirements for their selected level in the program. The designation is **valid for three years** and remains in **Active status** by completing an **Annual Review** each of the first **two years** following the initial designation, leading up to the **3-year designation expiration**.

Before applying, applicants can complete the required wildfire mitigation using the **How-To Prepare My Home Checklist**, based on the Technical Standard.

#### **How to Apply**

- Visit the website at <a href="https://wildfireprepared.org">https://wildfireprepared.org</a> and click "Apply Now."
- Pay the nonrefundable application fee.
- Take and submit eligibility photos for IBHS review.

Once eligibility photos are approved, a third-party evaluation company will conduct an in-person evaluation to collect documentation that will be verified. Once all requirements are confirmed, IBHS will issue a **Wildfire Prepared Home designation certificate** for the home.

#### 1.1.3.2 Annual Reviews

To remain in **Active designation status** and ensure continued maintenance compliance, homeowners must complete an **Annual Review** each of the first **two years** following their initial designation, leading up to the **3-year designation expiration**. This process verifies that your property remains mitigated to reduce wildfire risk.

#### On Time Annual Reviews

- When to Apply: To maintain Active status, designated properties must apply for the Annual Review during the 60-day period leading up to the Anniversary Date, as indicated on the most recent designation certificate. Submissions after the Anniversary Date will incur a late fee.
- **Application & Fee:** Applicants must submit an Annual Review application, pay the nonrefundable Annual Review fee in effect at the time of submission, and provide photo documentation demonstrating maintenance compliance.

#### • Paid Grace Period:

- Active: If the Annual Review has been paid for by the Anniversary Date, the property will remain in Active status for 60 days following the Anniversary Date (Active 60-day grace period) to allow time to complete the Annual Review process.
- o **Inactive:** If the Annual Review has been paid for by the Anniversary Date but is not completed and approved by IBHS within the Active 60-day grace period, the application will become Inactive. Inactive applications will be automatically closed 60 days before either the second Annual Review Anniversary or Expiration Date listed on the most recent designation certificate, whichever comes first.

#### **Late Annual Reviews**

- When Is It Late? An Annual Review is considered late if submitted after the Anniversary Date listed on the most recent Wildfire Prepared Home designation certificate.
- **Application & Late Fee:** Applicants must submit an Annual Review application, pay the nonrefundable Annual Review fee, as well as an additional late fee in effect at the time of submission. They must also provide photo documentation demonstrating maintenance compliance.

#### • Grace Period:

- o If the Annual Review is paid for within the 60-day "Active" Grace Period following the Anniversary Date but is not completed and approved by IBHS within this timeframe, the application will automatically become Inactive.
- o If the Annual Review is paid for after the 60-day "Active" Grace Period following the Anniversary Date, the property will remain Inactive until the application is approved by IBHS. Inactive applications will be

automatically closed 60 days before either the second Annual Review or the Expiration Date listed on the most recent designation certificate, whichever comes first.

#### **Ongoing Maintenance Requirements for Annual Reviews**

Regular maintenance is required to ensure your home and defensible space continue to meet the designation standard to meaningfully reduce wildfire risk. Growing, fallen, or dead vegetation, as well as new structures, can increase ignition risk. Think of your Annual Review like a **Red Flag Warning** - take proactive maintenance measures to help protect your home. To stay compliant, complete <u>all of the following</u> annual maintenance steps:

- Keep gutters, downspouts, and the roof clear of debris.
- Ensure the **0-5 Foot Noncombustible Zone** is properly maintained.
- Ensure the **5-30 Foot Defensible Space** is properly maintained.
- Regularly maintain all decks and porches.
- Ensure any **new additions or changes** (e.g., fences, structures, decks, hot tubs, propane tanks) remain compliant.
- **Note:** For specific maintenance requirements, see the appropriate sections in this Technical Standard.

#### 1.1.3.3 Designation Renewal and Expiration

At the end of the 3-year designation period, a property's Wildfire Prepared Home designation will expire. To maintain an Active designation status, homeowners must complete the full designation process to verify continued compliance with the most current Technical Standard.

#### **Designation Renewal**

- When to Apply: To maintain an Active designation, homeowners must submit their application and complete the full process before the Expiration Date listed on the most recent designation certificate. Allow enough time to complete all required steps. If approved, the new certificate will align with the initial designation date and extend the designation for another 3 years.
- **How to Apply:** See Initial Designation requirements.

#### **Expired Designation**

- **Expired Status:** A Wildfire Prepared Home designation is considered Expired if the full re-designation process is not completed by the Expiration Date listed on the most recent designation certificate.
- **How to Apply:** Once expired, applicants must complete the full designation process as a new application, verifying compliance with the most current Technical Standard. The designation will remain Expired until IBHS approves the new application. See Initial Designation requirements.

# 1.1.4 Designation Eligibility

- **Applicant** The applicant shall be the homeowner who is responsible for paying a nonrefundable application fee and submitting eligibility photos.
- **Eligibility Photo Requirements** The applicant will provide clear and adequate documentation to IBHS to qualify for an evaluation, as required by the program. This includes photos of all sides of the home, capturing key building features and the 0-5 Foot Noncombustible Zone. To qualify, all requirements for the desired designation level shall be met, including the 0-5 Foot Noncombustible Zone around the home and any attachments (e.g., decks).
- Qualifying Dwelling Types The designation is available for a single-family detached home, a freestanding residential building occupied by one family, limited to three stories above grade. This also includes a detached single-family factory-built modular home on a permanent foundation that is designed, built, and sited to meet all local building code requirements.
- **Non-qualified Dwelling Types -** Manufactured homes, townhomes, multifamily housing, and nonresidential buildings are not eligible for a Wildfire Prepared Home designation.
- **Applicable Locations -** The home shall be in California or Oregon.
  - The designation has strict no-exception requirements. Protected trees may disqualify some homes, and homeowners may need to work with neighbors and Homeowners Associations (HOAs) to meet the 0-5 Foot Noncombustible Zone setback.
  - Designations cannot be granted for homes under active construction. All home components and defensible space requirements shall be complete to receive designation.

# 1.2 Red Flag Warning and Extended Absence Preparedness

To help protect your home during Red Flag Warning days and during extended absences, take the following maintenance steps:

- **0-5 Foot Noncombustible Zone -** Clear all accumulated vegetative debris and combustible items from this critical area.
- Roof and Gutters Ensure no vegetative debris, such as leaves or needles, is left on your roof or in gutters.
- **Combustible Items** Relocate combustible items indoors or at least 30 feet away from the home. Examples include small door mats, chair cushions, potted plants, trash and recycle bins, kids' toys, pet beds, pool accessories, decorations, and BBQ grills with a propane tank.
- **Parked Items** Move vehicles, motorcycles, trailers, boats, campers, RVs, ATVs, and similar vehicles at least 30 feet away from the home.

## 2 BASE LEVEL DESIGNATION REQUIREMENTS

To achieve a **Wildfire Prepared Home Base** designation, a home shall meet all listed requirements for this level, including specific building features and maintaining 30 feet of defensible space or to the property line around the home. These requirements must be met and maintained to qualify and receive a designation certificate.

# 2.1 Building Feature Requirements for the Base Level

## 2.1.1 Roof Covering

- The **roof covering material** shall have a **Class A rating** when tested in accordance with ASTM E108 or UL 790. Class A rated roof covering types include, but are not limited to, fiberglass composition asphalt shingles, concrete and clay tiles, metal shingles or sheets, and slate.
- Roof cover maintenance shall also meet all the following:
  - o Kept clear of vegetative debris.
  - o Where provided, barrel tile or corrugated roof coverings shall include **noncombustible bird stops** at the eave ends to prevent the entry of embers and debris.
- **Note:** Given the potential service life uncertainties of both ignition-resistant treatments and applied ignition-resistant coatings, the use of wood shake, wood shingle, or any wood roof covering material regardless of test rating are not permitted.

### 2.1.2 Gutters and Downspouts

- Where gutters and downspouts are provided, shall include <u>all the following</u>:
  - o Gutters and downspouts shall be made of **noncombustible material** (e.g., metal).
  - o Gutters and downspouts shall be maintained clear of vegetative debris.

#### 2.1.3 Vents

**Ventilation openings**, including for enclosed attics, gable ends, ridge ends, under eaves and cornices, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, underfloor ventilation, foundations, and crawl spaces, or for any other opening intended to permit ventilation, shall meet <u>one of the following</u> requirement options:

- **Performance-based Option -** Corrosion-resistant vents installed, conforming with the following ASTM E2886 test requirements for **flame- and ember-resistance**:
  - No flaming ignition of the cotton material during the Ember Intrusion Test.
  - o No flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
  - o Temperature of the unexposed side of the vent does not exceed 662°F.
  - o **Note:** Joints around such vents shall be sealed with sealants in accordance with vent manufacturer installation instructions to avoid ember and flame intrusion through the joints.
- **Prescriptive Option** Vents shall be **covered with a noncombustible, corrosion-resistant mesh** with openings not to exceed 1/8-inch in diameter for ember-resistance.
  - Exceptions:
    - o Forced air vents (e.g., dryer and central vacuum) shall have a functional louver or flap in lieu of mesh.
    - o Plumbing vents are excluded from this requirement.

## 2.1.4 6-inch Vertical Noncombustible Wall Covering Clearance

All exterior walls shall have at least **6-inches of noncombustible material** (e.g., exposed concrete foundation, fibercement, brick or stone veneer, stucco, metal flashing) applied vertically on the **base of the wall** measured from the ground at grade and the nearest horizontal surface (e.g., decks and patios).

 Note: All combustible deck posts shall include the 6-inch Vertical Noncombustible Wall Covering Clearance requirement, see 2.1.5 and 2.1.6 below.

# 2.1.5 Attached Patios, Decks, and Overhead Structures (e.g., Covered Porches, Pergolas, Carports, and Gazebos)

Attached patios and decks, including stairs and overhead structures, are considered part of the building footprint as illustrated in Figure 2 and shall meet <u>all the following requirements</u>:

#### 2.1.5.1 Around the Structure -

The structure shall have its own **0-5 Foot Noncombustible Zone**, measured from the outermost posts (see 2.2.1 0-5 Foot Noncombustible Zone for requirements).

• Exception: Noncombustible patio walking surface and completely noncombustible (e.g., metal) pergola.

#### 2.1.5.2 Top of Walking Surfaces -

#### **Vegetation Maintenance**

- All walking surfaces shall be clear of vegetative debris, planter boxes, and climbing vines.
- Woody vegetation, including plants, shrubs, bushes, and trees, are not permitted.
  - o **Exception:** Up to 10 noncombustible potted plants (e.g., terra cotta or clay) are permitted, provided:
    - Each plant, including the noncombustible pot, shall not exceed 36 inches in height and width.
    - Potted plants can be relocated indoors or at least 30 feet from the home during Red Flag Warnings or extended absences.

#### **Furniture**

- Shall be **noncombustible framed** (e.g., cast iron, aluminum, or metal), including but not limited to hanging chairs, rocking/lounge chairs, swinging benches, picnic benches, tables and chairs, and sectional furniture with ottomans.
  - o **Exception:** A small number of combustible items (e.g., chair cushions) that can be relocated indoors or 30 feet away on Red Flag Warning days or during extended absences are permitted.

#### **Combustible Items**

- Shall be **clear of combustible items** including, but not limited to, sheds, saunas, storage containers, combustible privacy dividers, artificial turf, large area rugs, plastic covers, hanging lamps, window-mounted AC units, drapes, shade screens, plastic rain barrels, wine barrels, wood planters, and retractable shade screens without a noncombustible housing or replaced with noncombustible alternatives.
  - Exceptions:
    - A limited number of items including, but not limited to, door mats, string lights, TVs, speakers, bird feeders, ceiling fans, pet doors and beds, trash/recycle bins, kids' toys, pool accessories, decorations, garden hoses, and BBQ grills with propane tank and covers are permitted.
    - All movable combustible items need to be relocated indoors or 30 feet away on Red Flag Warning days or during extended absences.

#### 2.1.5.3 Additional Structures -

#### Overhead Structures (e.g., covered porches, pergolas, carports, and gazebos)

- Roof Covering Shall meet one of the following requirements:
  - A solid roof covering material with a Class A rating when tested in accordance with ASTM E108 or UL 790, or
  - o Constructed of combustible slats (e.g., pergola) that cover no more than 15% of the total surface area.
- **Setback** A detached combustible overhead structure (e.g., pergola and gazebo) on an attached deck shall be at least **10 feet from all exterior walls** of the home. (see 2.2.3 Detached Accessory Dwelling Units and Accessory Structures for additional requirements).
  - o **Exception:** An overhead structure constructed entirely of noncombustible materials is permitted with no setback requirement.
- **Posts** Combustible posts shall have at least **6-inches of noncombustible wall covering material** (e.g., fiber-cement, metal flashing, masonry veneer, or stucco) applied vertically on the base of the posts measured from the ground at grade and the nearest horizontal surface (e.g., decks and patios).
- Other Shall be free of any vegetation, curtains, drapes, and shade screens.
  - o **Exception:** Shade screens that retract into noncombustible housing are permitted.

- Carports and Garages In addition to having at least 6-inches of vertical noncombustible wall covering
  material and the 0-5 Foot Noncombustible Zone under and around the structure, shall meet <u>all of the</u>
  following requirements:
  - o Shall not store combustible items.
  - o An open carport with exposed combustible interior wall covering (e.g., wood), shall be enclosed.

#### **Other Large Combustibles**

- Hot Tubs
  - o Where provided, shall be at least 10 feet from the home's exterior walls and other large combustibles, and not under a combustible overhead structure (e.g., covered porch, pergola, or gazebo).
  - o Where provided, **on a combustible surface** (e.g., wood or composite deck), shall have noncombustible material under the hot tub and extending to 2 feet around all sides of the hot tub.
  - Where provided, on a noncombustible surface or patio, shall have the 0-5 Foot Noncombustible Zone around the hot tub.
- Outdoor Kitchens, Bars, and Built-ins
  - o Where provided, shall be constructed entirely of **noncombustible materials**.
  - o If attached to the home, shall have 6-inches of noncombustible material applied vertically on the wall (e.g., backsplash) measured above any horizontal surface of the kitchen, bar, and built-in.

#### 2.1.5.4 Underneath an Elevated Deck -

- Vegetation and Groundcover Shall remove all vegetation and combustible groundcover (e.g., grass, weeds, plants, shrubs, bushes, trees, exposed weed cloth, wood and rubber mulch) to bare mineral soil.
  - o **Note:** Noncombustible hardscape materials (e.g., gravel, pavers, river rocks, decomposed granite, steppingstones, and concrete) are permitted.
- 6-inch Vertical Noncombustible Clearance Shall have at least 6-inches of noncombustible wall covering
  material (e.g., fiber-cement, metal flashing, masonry veneer, or stucco) applied vertically at the base of all
  posts, supporting walls, and stairs measured from the ground at grade.
- Lattice and Mesh Where provided, combustible lattice material (e.g., wood or plastic), shall be removed from at least the bottom 6-inches or replaced with noncombustible material (e.g., metal). Where noncombustible corrosion-resistant metal mesh is provided, the mesh shall be installed on the outside of the lattice.
- **No Storage -** Shall have **nothing stored underneath**.
  - o **Exception:** An open outdoor living area under the deck shall meet the same requirements (see "Top of walking surfaces" above).
- Additionally, decks with a walking surface of 4 feet or less above the ground, shall be enclosed with the following:
  - When measured from the walking surface to the ground, the underdeck area with this height or less shall be **enclosed with noncombustible, corrosion-resistant mesh**. The mesh openings shall not exceed 1/8-inch in diameter and shall fully enclose the outer edge of the deck from the walking surface to the ground. This enclosure is required to reduce debris accumulation and limit ember intrusion beneath the deck.

# 2.1.6 Detached Decks and Overhead Structures (e.g., Covered Porches, Pergolas, Carports, and Gazebos)

Where provided, <u>detached</u> decks and overhead structures within 30 feet of the home shall meet the same requirements as attached decks (see 2.1.5 Attached Patios, Decks, and Overhead Structures).

# 2.2 Defensible Space Requirements for the Base Level

## 2.2.1 0-5 Foot Noncombustible Zone - Area within 5 Feet of the Home and

**Attachments** 

The first five feet surrounding the home and its attachments (e.g., decks, patios, overhead structures, stairs) is the **most critical area of defensible space.** This zone shall be established and maintained as noncombustible.

The 0-5 Foot Noncombustible Zone is measured horizontally from the **edge of the home's exterior walls** and, if present, the outermost posts of a deck or overhead structure, extending outward to 5 feet (see Figure 2). This noncombustible area also extends vertically to the sky.

The **0-5 Foot Noncombustible Zone** shall meet <u>all the following requirements</u>:

#### • Vegetation -

 Shall remove all vegetation (e.g., grass, artificial turf, weeds, flowers, succulents, cacti, plants, shrubs, bushes, and vegetative debris) within 5 feet to bare mineral soil.



Figure 2. The 0-5 Foot Noncombustible Zone

 Shall remove all trees, limbs, branches, and vines that are within and that overhang the 0-5 Foot Noncombustible Zone.

#### • Groundcover -

- o Shall **remove all combustible groundcover materials** (e.g., wood and rubber mulch and exposed weed cloth) within 5 feet to bare mineral soil.
  - **Note:** Noncombustible hardscape materials (e.g., gravel, pavers, river rocks, decomposed granite, steppingstones, and concrete) are permitted.

#### • Fencing and Retaining Walls -

o Shall **remove combustible fencing materials** (e.g., wood and vinyl), posts, gates, and retaining walls **within 5 feet** or replace with noncombustible material.

#### Parked Items -

o Shall not store vehicles, motorcycles, trailers, boats, campers, RVs, ATVs, and similar vehicles within 5 feet. Relocate them at least 30 feet away on Red Flag Warning days or during extended absences.

#### • Combustible Items -

- Removal Requirement: Shall remove all combustible items within 5 feet including, but not limited to, drapes, hot tubs, outdoor kitchens, bars, built-ins, firewood, furniture, hanging lamps, window-mounted AC units, large area rugs, combustible privacy dividers, plastic rain barrels, wine barrels, wood planters, playsets, saunas, sheds, storage containers, shade screens, and retractable shade screens without a noncombustible housing.
- o **Replacement Option:** Certain combustible items (e.g., furniture) may be replaced with noncombustible-framed alternatives.

#### Exceptions:

- A limited number of items including, but not limited to, door mats, string lights, TVs, speakers, bird
  feeders, pet doors and beds, trash/recycle bins, kids' toys, pool pumps and accessories, garden
  hoses, BBQ grills with propane tank and cover, HVAC units (e.g., compressor fans), plastic
  downspout extensions, retractable shade screens with noncombustible housing, solar panel battery
  enclosures, and irrigation valves are permitted.
- All movable combustible items need to be relocated indoors or at least 30 feet away on Red Flag Warning days or during extended absences.

#### Reference Sections for Other Items:

- o For large combustibles (e.g., hot tubs, outdoor kitchens, and built-ins), see section 2.1.5.3.
- o For pergolas, see section 2.1.5.3.

o For large structures (e.g., sheds, ADU units), see 2.2.3 for Base and 3.2.2 for Plus.

# 2.2.2 5-30 Foot Defensible Space Zone - Area Surrounding the Home and Attachments

To slow fire spread and reduce flame intensity near the home, horizontal and vertical separation of vegetation, structures, and other connective fuels shall be created and maintained within 5 to 30 feet around the structure and its attachments or to the property line, whichever is closest. The 5-30 Foot Defensible Space Zone shall meet all the following requirements:

#### 2.2.2.1 Vegetation

#### • Tree Spacing -

- o Shall have tree limbs and branches pruned to a minimum height of **6 vertical feet above the ground** or one-third the height of the tree if less than 18 feet tall.
- o Shall regularly prune tree branches to provide at least **10 feet of horizontal spacing** between crowns of adjacent trees. **Privacy rows of trees are not permitted.**
- o Shall keep all branches a minimum of 10 feet away from chimney and stovepipe outlets.

#### Shrub Spacing -

- o Shrubs, bushes, and plants shall **not be placed under larger trees**.
- o Individual shrubs or shrubs clustered in small groupings or islands, shall have total foliage covering less than **10 feet in horizontal diameter** and shall be treated as a single shrub.
- o Individual shrubs, bushes, and plants or groupings shall have a minimum horizontal spacing between other trees, shrubs, bushes, and plants of **2 times the height of the tallest plant** (i.e., a 3-foot-tall shrub must have a 6-foot clearance surrounding it) with a maximum required horizontal spacing of 10 feet. Privacy hedges and rows of bushes are not permitted.

#### • Maintenance -

- o Shall cut down annual grasses to less than 4 inches in height.
  - **Exception:** Grass may be kept to less than 18 inches in height on slopes where necessary to stabilize the soil and prevent erosion.
- o Shall routinely **remove dead and dying vegetation** (e.g., grass, weeds, plants, shrubs, bushes, trees, logs, stumps, branches, leaves, and pine needles).
- Shall place **wood piles at least 30 feet away** from the home unless the wood is stored in an accessory structure (see 2.2.3 Accessory Dwelling Units and Accessory Structures for Base Level requirements or 3.2.2 for Plus Level requirements). Fire-retardant tarps are not permitted.

#### 2.2.2.2 Other items

- Liquid Propane Gas Storage Tanks and Fuel Tanks (e.g., diesel and kerosene) Where provided, shall meet one of the following requirements:
  - o Shall be at least 30 feet from the home, or
  - Shall be at least 10 feet from the home and have the following minimum clearance, and
    - **0-10 feet** Shall have 10 feet of noncombustible clearance to bare mineral soil under and around the tank, including removal of vegetation, groundcover, fencing, and all combustible items. Noncombustible hardscape materials (e.g., gravel, pavers, river rocks, decomposed granite, steppingstones, and concrete) are permitted.
      - o **Exception:** Healthy, mature trees are permitted if limbed up to maintain at least 6 feet of clearance above the tank.
    - **10-20 feet** Shall extend clearance an additional 10 feet around their exterior. The additional 10 feet of clearance includes cutting annual grasses down to less than four inches in height; removing plants, shrubs, bushes, and small trees; and removing dead plants, shrubs, bushes, trees, limbs, branches, logs, and stumps.
      - o **Exception:** Healthy, mature trees are permitted if limbed up to maintain at least 6 feet of clearance above the tank.

#### • Combustible Water Storage Tanks -

- o Where provided, shall be at least **5 feet from the home's exterior walls** and other large combustibles and not under a combustible overhead structure (e.g., covered porch, pergola, or gazebo).
  - Exception: Multiple water storage tanks within 5 feet of each other are permitted.
- Shall have the 0-5 Foot Noncombustible Zone (e.g., bare dirt, gravel, concrete) underneath and surrounding the tank.

# 2.2.3 Detached Accessory Dwelling Units and Accessory Structures (within the 5-30 Foot Defensible Space Zone)

- All Structures [e.g., Overhead Structures (e.g., Pergolas, Carports, Garages, Gazebos) Sheds, Greenhouses, Playsets, etc.] with a footprint greater than or equal to 15 square feet and within 30 feet of the home and attachments, where provided, shall meet all the following requirements:
  - o Structures shall be at least 10 feet from the home and attachments.
  - Structures shall meet the same wildfire resilience requirements for the home, such as roof covering, gutters and downspouts, vents, 6-inch vertical noncombustible wall covering clearance, decks, and the 0-5 Foot Noncombustible Zone surrounding them.
  - Space multiple structures at least 10 feet apart from each other. Each structure's 0-5 Foot
    Noncombustible Zone under and around the structure shall not overlap the 0-5 Foot Noncombustible
    Zone required for the home, decks, or other structures within 30 feet.
  - o Shall have **no more than 3 total** ADUs and accessory structures within 30 feet.
  - Additionally, open detached carports and garages, where provided:
    - Shall not store combustible items.
    - An open carport with exposed combustible interior wall covering (e.g., wood), shall be enclosed.
  - Note Ongoing Research: As of publication of this standard, IBHS continues active research into the spacing required between structures to reduce the likelihood of structure-to-structure fire spread, including the impact of structural openings, building materials, and connective fuels. The provisions of this section of the standard may be updated as this research matures.

## 3 PLUS LEVEL DESIGNATION REQUIREMENTS

To achieve a **Wildfire Prepared Home Plus** designation, a home shall first meet all the requirements of the **Base** level, except where the **Plus** level designation requirements are more restrictive. In addition, the home shall include additional building features and shall meet <u>all of the following</u> **Plus** requirements:

# 3.1 Building Features Requirements for the Plus Level

### 3.1.1 Gutters and Downspouts

Where provided, in addition to having noncombustible material for gutters and downspouts as required for the Base level, gutters shall also be **covered with a noncombustible material** to prevent the accumulation of vegetative debris.

#### 3.1.2 Eaves and Soffits

In addition to the vent opening requirement for eaves and soffits listed for the Base level requirements, eaves shall be **enclosed or protected on the exposed underside** using <u>one of the following</u> required options:

- Noncombustible materials
- Materials approved for not less than 1-hour fire-resistance-rating
- 2-inch nominal dimension lumber

#### 3.1.3 Vents

In addition to having a functional louver or flap for forced air vents (e.g., dryer and central vacuum) as required for the Base level requirements, they shall also be **made of noncombustible material** (e.g., metal).

### 3.1.4 Exterior Wall Covering

- In addition to having the bottom 6-inches of exterior walls made of noncombustible material as required for the Base level, all exterior wall covering shall be made of a noncombustible material (e.g., metal, fibercement, masonry veneer, stucco, brick, concrete).
- Where provided, all shutters (e.g., decorative and operable) shall be made of noncombustible material.
- **Note:** Combustible and ignition-resistant wall cover material (e.g., wood shake, wood shingle, or any other wood siding material including ignition-resistant treatments and coatings) by construction or assembly are not permitted.

## 3.1.5 Exterior Glass (Windows, Skylights, and Glazed Openings within Doors)

All exterior windows, skylights, and glazed openings within doors shall comply with <u>one of the following</u> requirements:

- Multipaned glass with at least two tempered panes.
- Glass with a minimum of 20-minutes fire-resistance rating when tested in accordance with NFPA 257.
- Glass blocks (windows only).
- Operable skylights shall be protected by a noncombustible mesh screen where mesh openings shall not exceed 1/8-inch in diameter.

#### 3.1.6 Exterior Doors

All exterior doors shall comply with one of the following requirements:

- Exterior doors shall be approved **noncombustible construction**, or solid-core wood not less than 1-3/4 inches thick (44 mm). The exterior doors shall be constructed with noncombustible threshold. Windows within doors and glazed doors shall be in accordance with this standard's exterior glass requirements (see 3.1.5 Exterior Glass).
- Exterior door assembly shall have a fire-resistance rating of not less than 20-minutes when tested according to NFPA 252.
- Doors made of combustible material (e.g. non-solid core wood doors) are permissible provided a noncombustible exterior storm door is installed as the outermost door.

#### 3.1.7 Decks and Stairs

In addition to the Base level requirements, decks shall meet one of the following required options:

- **Option 1: New Construction -** All deck components, including posts, joists, railings, stairs, and walking surfaces, shall be constructed with noncombustible materials.
- Option 2: Retrofit -
  - Deck Walking Surfaces shall be constructed with a solid, noncombustible material (e.g., metal or lightweight concrete) with no gaps.
  - o **Deck Railings** within 5 feet of the home shall be constructed with noncombustible material, including where they attach to the home.
  - o **Deck posts** shall have a minimum of 6-inches of noncombustible material (e.g., metal flashing or fibercement board) applied vertically to the base.
  - o **Stairs Attached to a Deck** shall meet one the following requirements:
    - Stairs Less than 4 Feet Wide and Open Underneath:
      - o A minimum of **6-inches** of noncombustible material (e.g., metal flashing or fiber-cement) shall be applied vertically at the exterior base, measured from the ground at grade.
      - Stair treads shall be a **solid (no gaps)** and made of noncombustible material (e.g., metal or lightweight concrete).
      - o **Exception:** If stairs are constructed with closed risers, they shall also be **solid (no gaps)** and made of noncombustible material.

#### • Stairs Wider Than 4 Feet:

- The area underneath shall be enclosed with **noncombustible**, **corrosion-resistant mesh** with openings not to exceed ¹/₀-inch in diameter.
- o A minimum of **6-inches** of noncombustible material (e.g., metal flashing or fiber-cement) shall be applied vertically at the exterior base, measured from the ground at grade.
- Stairs shall have closed risers. Stair treads and risers shall be a solid, and made of noncombustible material (e.g., metal or light-weight concrete) with no gaps.

# 3.2 Defensible Space Requirements for the Plus Level

#### 3.2.1 Parallel Fences within 5 to 30 feet

Back-to-back (parallel) combustible fencing (meaning separate fences that are combustible and closer than 5 feet apart) are not permitted.

- **Exception:** If one or both **back-to-back (parallel) fences** are constructed with noncombustible materials (e.g., concrete or metal).
- **Note:** Meeting this requirement may necessitate coordination with neighbors or an HOA to eliminate at least one of the combustible parallel fences.

## 3.2.2 Detached Accessory Dwelling Units and Accessory Structures

- All Detached Accessory Dwelling Units (ADUs) and Accessory Structures [e.g., Overhead Structures
  (e.g., Pergolas, Carports, Garages, Gazebos) Sheds, Greenhouses, Playsets, Etc.] with a footprint
  greater than or equal to 15 square feet shall be located a minimum of 30 feet away from the home and
  attachments.
- **Note:** As of publication of this standard, IBHS continues active research into the spacing required between structures to reduce the likelihood of wind-driven building-to-building fire spread, including the impact of structural openings, building materials, and connective fuels. The provisions of this section of the standard may be updated as this research matures.

## 4 APPENDIX A. TECHNICAL RESOURCES

Wildfire Prepared Home offers tools to assist homeowners, applicants, and other stakeholders achieve designations. Find them at <u>wildfireprepared.org</u>.

# 4.1 Applicant: How-To Prepare My Home Checklist

To meet the wildfire mitigation requirements for a designation, use the <u>How-To Prepare My Home Checklist</u> to ensure all the necessary steps for your chosen level are complete before applying.

# 4.2 IBHS Portal, Contact Information, and Status Updates

After creating an account, log in at wildfireprepared.org/portal to ask questions and check your application status.

### 4.3 Definitions

- **Combustible** Materials that can ignite and burn.
- **Fire-Resistance-Rated Construction** The use of materials and systems in the design and construction of a building or structure to safeguard against the spread of fire within a building or structure and the spread of fire to or from buildings or structures to the wildland-urban interface area. Where this standard requires 1-hour fire-resistance-rated construction, the fire-resistance rating of building elements, components or assemblies shall be determined in accordance with the test procedures set forth in ASTME119 or UL 263.
  - o **Exceptions:** The fire-resistance rating of building elements, components, or assemblies based on:
    - The prescriptive designs prescribed in Section 721 of the International Building Code.
    - The calculation procedures in accordance with Section 722 of the International Building Code.
- **Noncombustible** Made from material of which no part will ignite and burn when subjected to fire. Any material passing ASTM E136 shall be considered noncombustible.
- **Red Flag Warning** A Red Flag Warning is determined by local offices of the National Weather Service (NWS) and is specific to those local areas. A Red Flag Warning means warm temperatures, very low humidities, and strong winds are expected to combine to produce an increased risk of fire danger.
- **Roof covering -** The material applied to the roof deck to provide weather resistance, achieve fire classification, or enhance appearance.
- **Wall covering** An exterior wall material applied to provide a weather-resistant barrier, insulation, or aesthetic appeal.
- **Performance-based Option** A standard specifying desired outcomes by requiring compliance with a certain standard(s), without prescribing specific methods or materials.
- **Prescriptive Option-** A standard that specifies exact methods or materials to achieve compliance, rather than focusing on desired outcomes.

# 4.4 List of Referenced Standards

#### 4.4.1 ASTM

- E84 Standard Test Methods for Surface Burning Characteristics of Building Materials
- E108 Standard Test Methods for Fire Tests of Roof Coverings
- E136 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C
- E2768 Standard Test Method for Extended Duration Surface Burning Characteristics of Building Materials (30 min Tunnel Test)
- E2886 Standard Test Method for Evaluating the Ability of Exterior Vents to Resist the Entry of Embers and Direct Flame Impingement

#### 4.4.2 NFPA

- 252 Standard Methods of Fire Tests of Door Assemblies
- 257 Standard on Fire Test for Windows and Glass Block Assemblies

#### 4.4.3 UL

- 723 Standard for Test for Surface Burning Characteristics of Building Materials
- 790 Standard Test Methods for Fire Tests of Roof Coverings

#### 4.4.4 ISO

17065 - Requirements for Bodies Certifying Products, Processes and Services