

2018



WASHINGTON STATE WILDLAND-URBAN INTERFACE CODE

BASED ON THE 2018 INTERNATIONAL WILDLAND-URBAN
INTERFACE CODE®





2018 Washington State Wildland-Urban Interface Code

Includes Washington State Amendments (Chapter 51-54A WAC)

Effective in Washington State July 1, 2020

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by

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PREFACE

Authority

The *International Wildland-Urban Interface Code*[®] (Chapter 51-54A WAC) is adopted by the Washington State Building Code Council pursuant to Chapters 19.27 and 70.92 RCW. These codes were first adopted by reference by the Washington State Legislature in 1974. In 1985, the Legislature delegated the responsibility of adoption and amendment of these codes to the State Building Code Council.

Code Precedence

The State Building Code Act, Chapter 19.27 RCW, establishes the following order of precedence among the documents adopted as parts of the State Building Code:

International Building Code, Standards and amendments—WAC 51-50;

International Residential Code, Standards and amendments—WAC 51-51;

International Mechanical Code, Standards and amendments—WAC 51-52;

International Fire Code, Standards and amendments—WAC 51-54A;

Portions of the *International Wildland-Urban Interface Code*; Standards and amendments—WAC 51-54A;

Uniform Plumbing Code, Standards and amendments—WAC 51-56.

Where there is a conflict between codes, an earlier-named code takes precedence over a later-named code. In the case of a conflict between the duct insulation requirements of the *International Mechanical Code* and the duct insulation requirements of the Energy Code, the Energy Code, or where applicable, a local jurisdiction's energy code, shall govern.

Where, in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

Organization and Numbering

These rules are written to allow compatible use with the *International Wildland-Urban Interface Code*. All sections which are amended, deleted, or added are referenced.

Enforcement

The State Building Code Act requires that each local jurisdiction enforce the State Building Code within its jurisdiction. Any jurisdiction can contract with another jurisdiction or an inspection agency to provide the mandated enforcement activities.

Amendments to the State Building Code

The State Building Code Council has adopted review procedures and approval criteria for local amendments. These procedures and criteria are found in Chapter 51-04 WAC. The Council has exempted from its review any amendments to the administrative provisions of the various codes.

Forms for proposing statewide amendments to the State Building Code are available from the State Building Code Council staff.

- A. **Amendments of Statewide Application:** On a yearly basis the State Building Code Council will consider proposals to amend the State Building Code. Unless directed by the State Legislature, federal mandates or court order, the Council will not enter formal rulemaking until 2018 as part of its consideration of adoption of the 2018 series of codes.

Proposals to amend the State Building Code shall be made on forms provided by the Building Code Council.

Code Change Proposal Submittal Deadline: March 1st of each year.

- B. **Local Amendments:** Any jurisdiction may amend the State Building Code provided the amendments do not reduce the minimum performance standards of the codes. There are areas where local amendments are limited or prohibited:

Residential provisions of the State Energy Code (WAC 51-11R and 51-11C), the Ventilation provisions of the *International Residential Code*® (WAC 51-51) or *International Mechanical Code*® (WAC 51-52); any provision of the *International Building Code*® (WAC 51-50) or *International Residential Code*® affecting accessibility; and standards specifically adopted in Chapters 19.27 and 19.27A cannot be amended by any local jurisdiction.

Residential Amendments: Amendments by local jurisdictions which affect the construction of single-family and multi-family residential buildings must be reviewed and approved by the State Building Code Council before such amendments can be enforced. The State Building Code Act provides the following definition:

Multi-family residential building: means common wall residential buildings that consist of four or fewer units, that do not exceed two stories in height, that are less than 5,000 square feet in area, and that have a 1-hour fire-resistive occupancy separation between units.

Application forms for Council review of local amendments are available from the State Building Code Council Staff.

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Effective Date

These rules were adopted by the State Building Code Council on July 26, 2019. These rules are effective throughout the state on July 1, 2020.

Building Permit Fees

The activities of the State Building Code Council are supported by permit fees collected by each city and county. Section 19.27.085 of the State Building Code Act requires that a fee of \$6.50 be imposed on each residential building permit and \$25.00 for each commercial building permit issued by each city and county. In addition, a fee of \$2.00 per unit shall be imposed for each dwelling unit after the first unit, on each building containing more than one residential unit. For the purpose of this fee, WAC 51-05-200 defines building permits as any permit to construct, enlarge, alter, repair, move, improve, remove, convert or demolish any building or structure regulated by the Building Code. Exempt from the fee are plumbing, electrical, and mechanical permits, permits issued to install a mobile/manufactured home, commercial coach or factory-built structure, or permits issued pursuant to the *International Fire Code*®.

Each city and county shall remit monies collected to the state treasury quarterly. No remittance is required until a minimum of \$50.00 has accumulated.

These permit fees are the amounts current in January 2020. Such fees may be changed by the State Legislature.

Opinions

Only at the request of a local enforcement official, the State Building Code Council may issue interpretations/opinions of those provisions of the State Building Code created by the Council, or provisions of the model codes amended by the Council. Final interpretation authority for any specific permit resides with the local enforcement official.

Introduction

The *International Wildland-Urban Interface Code*[®] (IWUIC[®]) establishes minimum requirements for land use and the built environment in designated wildland-urban interface areas using prescriptive and performance-related provisions. It is founded on data collected from tests and fire incidents, technical reports and mitigation strategies from around the world. This 2018 edition is fully compatible with all of the *International Codes*[®] (I-Codes[®]) published by the International Code Council[®] (ICC[®]), including the *International Building Code*[®], *International Energy Conservation Code*[®], *International Existing Building Code*[®], *International Fire Code*[®], *International Fuel Gas Code*[®], *International Green Construction Code*[®], *International Mechanical Code*[®], *International Plumbing Code*[®], *International Private Sewage Disposal Code*[®], *International Property Maintenance Code*[®], *International Residential Code*[®], *International Swimming Pool and Spa Code*[®], *International Zoning Code*[®] and *International Code Council Performance Code*[®].

The I-Codes, including this *International Wildland-Urban Interface Code*, are used in a variety of ways in both the public and private sectors. Most industry professionals are familiar with the I-Codes as the basis of laws and regulations in communities across the U.S. and in other countries. However, the impact of the codes extends well beyond the regulatory arena, as they are used in a variety of nonregulatory settings, including:

- Voluntary compliance programs such as those promoting sustainability, energy efficiency and disaster resistance.
- The insurance industry, to estimate and manage risk, and as a tool in underwriting and rate decisions.
- Certification and credentialing of individuals involved in the fields of building design, construction and safety.
- Certification of building and construction-related products.
- U.S. federal agencies, to guide construction in an array of government-owned properties.
- Facilities management.
- “Best practices” benchmarks for designers and builders, including those who are engaged in projects in jurisdictions that do not have a formal regulatory system or a governmental enforcement mechanism.
- College, university and professional school textbooks and curricula.
- Reference works related to building design and construction.

In addition to the codes themselves, the code development process brings together building professionals on a regular basis. It provides an international forum for discussion and deliberation about building design, construction methods, safety, performance requirements, technological advances and innovative products.

Development

This 2018 edition presents the code as originally issued, with changes reflected in the 2003 through 2015 editions and further changes approved by the ICC Code Development Process through 2017. A new edition such as this is promulgated every 3 years.

This code is founded on principles intended to mitigate the hazard from fires through the development of provisions that adequately protect public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of construction; and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of construction.

Maintenance

The *International Wildland-Urban Interface Code* is kept up to date through the review of proposed changes submitted by code enforcement officials, industry representatives, design professionals and other interested parties. Proposed changes are carefully considered through an open code development process in which all interested and affected parties may participate.

The ICC Code Development Process reflects principles of openness, transparency, balance, due process and consensus, the principles embodied in OMB Circular A-119, which governs the federal government's use of private-sector standards. The ICC process is open to anyone; there is no cost to participate, and people can participate without travel cost through the ICC's cloud-based app, *cdp-Access*[®]. A broad cross-section of interests are represented in the ICC Code Development Process. The codes, which are updated regularly, include safeguards that allow for emergency action when required for health and safety reasons.

In order to ensure that organizations with a direct and material interest in the codes have a voice in the process, the ICC has developed partnerships with key industry segments that support the ICC's important public safety mission. Some code development committee members were nominated by the following industry partners and approved by the ICC Board:

- American Institute of Architects (AIA)
- International Association of Fire Chiefs (IAFC)
- National Association of Home Builders (NAHB)
- National Association of State Fire Marshals (NASFM)

The code development committees evaluate and make recommendations regarding proposed changes to the codes. Their recommendations are then subject to public comment and council-wide votes. The ICC's governmental members—public safety officials who have no financial or business interest in the outcome—cast the final votes on proposed changes.

The contents of this work are subject to change through the code development cycles and by any governmental entity that enacts the code into law. For more information regarding the code development process, contact the Codes and Standards Development Department of the International Code Council.

While the I-Code development procedure is thorough and comprehensive, the ICC, its members and those participating in the development of the codes disclaim any liability resulting from the publication or use of the I-Codes, or from compliance or noncompliance with their provisions. The ICC does not have the power or authority to police or enforce compliance with the contents of this code.

Code Development Committee Responsibilities (Letter Designations in Front of Section Numbers)

In each code development cycle, proposed changes to the code are considered at the Committee Action Hearing by the International Fire Code Development Committee, whose action constitutes a recommendation to the voting membership for final action on the proposed change. Proposed changes to a code section that has a number beginning with a letter in brackets are considered by a different code development committee. For example, proposed changes to code sections or defini-

tions that have [BG] in front of them (e.g., Section 202 [BG] DWELLING), are considered by the IBC—General Code Development Committee at the Committee Action Hearing.

The content of sections in this code that begin with a letter designation is maintained by another code development committee in accordance with the following:

- [A] = Administrative Code Development Committee;
- [BF] = IBC—Fire Safety Code Development Committee;
- [BG] = IBC—General Code Development Committee;
- [F] = International Fire Code Development Committee; and
- [Z] = International Zoning Code Development Committee.

For the development of the 2021 edition of the I-Codes, there will be two groups of code development committees and they will meet in separate years. Note that these are tentative groupings.

Group A Codes (Heard in 2018, Code Change Proposals Deadline: January 8, 2018)	Group B Codes (Heard in 2019, Code Change Proposals Deadline: January 7, 2019)
International Building Code – Egress (Chapters 10, 11, Appendix E) – Fire Safety (Chapters 7, 8, 9, 14, 26) – General (Chapters 2–6, 12, 27–33, Appendices A, B, C, D, K, N)	Administrative Provisions (Chapter 1 of all codes except IECC, IRC and IgCC, administrative updates to currently referenced standards, and designated definitions)
International Fire Code	International Building Code – Structural (Chapters 15–25, Appendices F, G, H, I, J, L, M)
International Fuel Gas Code	International Existing Building Code
International Mechanical Code	International Energy Conservation Code—Commercial
International Plumbing Code	International Energy Conservation Code—Residential – IECC—Residential – IRC—Energy (Chapter 11)
International Property Maintenance Code	International Green Construction Code (Chapter 1)
International Private Sewage Disposal Code	International Residential Code – IRC—Building (Chapters 1–10, Appendices E, F, H, J, K, L, M, O, Q, R, S, T)
International Residential Code – IRC—Mechanical (Chapters 12–23) – IRC—Plumbing (Chapters 25–33, Appendices G, I, N, P)	
International Swimming Pool and Spa Code	
International Wildland-Urban Interface Code	
International Zoning Code	
Note: Proposed changes to the ICC <i>Performance Code</i> ™ will be heard by the code development committee noted in brackets [] in the text of the ICC <i>Performance Code</i> ™.	

Code change proposals submitted for code sections that have a letter designation in front of them will be heard by the respective committee responsible for such code sections. Because different committees hold code development hearings in different years, it is possible that some proposals for this code will be heard by committees in both the 2018 (Group A) and the 2019 (Group B) code development cycles.

For instance, every section of Chapter 1 of this code is designated as the responsibility of the Administrative Code Development Committee, and that committee is part of the Group B portion of the hearings. This committee will hold its code development hearings in 2019 to consider all code change proposals for Chapter 1 of this code and proposals for Chapter 1 of all I-Codes except the

International Energy Conservation Code, International Residential Code and International Green Construction Code. Therefore, any proposals received for Chapter 1 of this code will be assigned to the Administrative Code Development Committee for consideration in 2019.

It is very important that anyone submitting code change proposals understand which code development committee is responsible for the section of the code that is the subject of the code change proposal. For further information on the code development committee responsibilities, please visit the ICC website at www.iccsafe.org/scoping.

Marginal Markings

Solid vertical lines in the margins within the body of the code indicate a technical change from the requirements of the 2015 edition. Deletion indicators in the form of an arrow (➡) are provided in the margin where an entire section, paragraph, exception or table has been deleted or an item in a list of items or a table has been deleted.

A double vertical line in the margins within the body of the code indicates a *Washington Administrative Code* amendment. An open carat (>) is provided in the margin to indicate a deleted paragraph or item from the 2018 *International Wildland-Urban Interface Code* in accordance with the *Washington Administrative Code* (WAC). The reader is advised that *Washington Administrative Code* (WAC) amendments may also contain changes in the base code. State amendments supersede changes made to the base code.

A single asterisk [*] placed in the margin indicates that text or a table has been relocated within the code. A double asterisk [**] placed in the margin indicates that the text or table immediately following it has been relocated there from elsewhere in the code. The following table indicates such relocations in the 2018 edition of the *International Wildland-Urban Interface Code*.

2018 LOCATION	2015 LOCATION
None	None

Coordination of the International Codes

The coordination of technical provisions is one of the strengths of the ICC family of model codes. The codes can be used as a complete set of complementary documents, which will provide users with full integration and coordination of technical provisions. Individual codes can also be used in subsets or as stand-alone documents. To make sure that each individual code is as complete as possible, some technical provisions that are relevant to more than one subject area are duplicated in some of the model codes. This allows users maximum flexibility in their application of the I-Codes.

Italicized Terms

Selected terms set forth in Chapter 2, Definitions, are italicized where they appear in code text. Such terms are not italicized where the definition set forth in Chapter 2 does not impart the intended meaning in the use of the term. The terms selected have definitions that the user should read carefully to facilitate better understanding of the code.

Adoption

The International Code Council maintains a copyright in all of its codes and standards. Maintaining copyright allows ICC to fund its mission through sales of books, in both print and electronic formats. The ICC welcomes adoption of its codes by jurisdictions that recognize and acknowledge the ICC's copyright in the code, and further acknowledge the substantial shared value of the public/private partnership for code development between jurisdictions and the ICC.

The ICC also recognizes the need for jurisdictions to make laws available to the public. All I-Codes and I-Standards, along with the laws of many jurisdictions, are available for free in a nondownloadable form on the ICC's website. Jurisdictions should contact the ICC at adoptions@iccsafe.org to

learn how to adopt and distribute laws based on the *International Wildland-Urban Interface Code* in a manner that provides necessary access, while maintaining the ICC's copyright.

To facilitate adoption, several sections of this code contain blanks for fill-in information that needs to be supplied by the adopting jurisdiction as part of the adoption legislation. For this code, please see:

Section 101.1. Insert: [NAME OF JURISDICTION]

Section 103.1. Insert: [NAME OF DEPARTMENT]

Section 110.4.7. Insert: [OFFENSE, DOLLAR AMOUNT, NUMBER OF DAYS]

Section 114.4. Insert: [DOLLAR AMOUNT] in two places

EFFECTIVE USE OF THE INTERNATIONAL WILDLAND-URBAN INTERFACE CODE

Population growth and the expanding urban development into traditionally nonurban areas have increasingly brought humans into contact with wildfires. Between 1985 and 1994, wildfires destroyed more than 9,000 homes in the United States. Generally, these homes were located in areas “where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels,” also known as the wildland-urban interface.

The *International Wildland-Urban Interface Code* (IWUIC) is a model code that is intended to be adopted and used supplemental to the adopted building and fire codes of a jurisdiction. The unrestricted use of property in wildland-urban interface areas is a potential threat to life and property from fire and resulting erosion. The IWUIC has as its objective the establishment of minimum special regulations for the safeguarding of life and property from the intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to prevent structure fires from spreading to wildland fuels, even in the absence of fire department intervention.

Safeguards to prevent the occurrence of fires and to provide adequate fire protection facilities to control the spread of fire in wildland-urban interface areas are provided in a tiered manner commensurate with the relative level of hazard present.

Arrangement and Format of the 2018 IWUIC

Before applying the requirements of the IWUIC, it is beneficial to understand its arrangement and format. The IWUIC, like other codes published by ICC, is arranged and organized to follow logical steps that generally occur during a plan review or inspection. The IWUIC is divided as follows:

Chapters	Subjects
1–2	Administration and Definitions
3–4	Wildland-Urban Interface Area Designation and Requirements
5	Building Construction Regulations
6	Fire Protection Requirements
7	Referenced Standards
Appendices A–H	Adoptable and Informational Appendices

The following is a chapter-by-chapter synopsis of the scope and intent of the provisions of the *International Wildland-Urban Interface Code*:

Chapter 1 Scope and Administration. This chapter contains provisions for the application, enforcement and administration of subsequent requirements of the code. In addition to establishing the scope of the code, Chapter 1 identifies which buildings and structures come under its purview. Chapter 1 is largely concerned with maintaining “due process of law” in enforcing the regulations contained in the body of the code. Only through careful observation of the administrative provisions can the code official reasonably expect to demonstrate that “equal protection under the law” has been provided.

Chapter 2 Definitions. All terms that are defined in the code are listed alphabetically in Chapter 2. While a defined term may be used in one chapter or another, the meaning provided in Chapter 2 is applicable throughout the code.

Where understanding of a term’s definition is especially key to or necessary for understanding of a particular code provision, the term is shown in *italics*. This is true only for those terms that have a meaning that is unique to the code. In other words, the generally understood meaning of a term or phrase might not be sufficient or consistent with the meaning prescribed by the code; therefore, it is essential that the code-defined meaning be known.

Guidance regarding tense, gender and plurality of defined terms as well as guidance regarding terms not defined in this code are also provided.

Chapter 3 Wildland-Urban Interface Areas. Chapter 3 provides for the fundamental aspect of applying the code—the legal declaration and establishment of wildland-urban interface areas within the adopting jurisdiction by the local legislative body. The provisions cover area analysis and declaration based on findings of fact (located in Appendix E), mapping of the area, legal recordation of the maps with the local keeper of records and the periodic review and reevaluation of the declared areas on a regular basis. If needed, revisions can be directed by the legislative body of the jurisdiction.

Chapter 4 Wildland-Urban Interface Area Requirements. The requirements of Chapter 4 apply to all occupancies in the wildland-urban interface and pertain to all of the following:

1. Fire service access to the property that is to be protected, including fire apparatus access roads and off-road driveways.
2. Premises identification.
3. Key boxes to provide ready access to properties secured by gated roadways or other impediments to rapid fire service access.
4. Fire protection water supplies, including adequate water sources, pumper apparatus drafting sites, fire hydrant systems and system reliability.
5. Fire department access to equipment such as fire suppression equipment and fire hydrants.
6. Fire protection plans.

Chapter 5 Special Building Construction Regulations. The regulations in Chapter 5 establish minimum standards for the location, design and construction of buildings and structures based on fire hazard severity in the wildland-urban interface.

The construction provisions of Chapter 5 are intended to supplement the requirements of the *International Building Code* and address mitigation of the unique hazards posed to buildings by wildfire and to reduce the hazards of building fires spreading to wildland fuels. This is accomplished by requiring ignition-resistant construction materials based on the hazard severity of the building site. Construction features regulated include underfloor areas; roof coverings; eaves and soffits; gutters and downspouts; exterior walls, doors and windows; ventilation openings and accessory structures.

Chapter 6 Fire Protection Requirements. Chapter 6 establishes minimum fire protection requirements to mitigate the hazards to life and property from fire in the wildland-urban interface. The chapter includes both design-oriented and prescriptive mitigation strategies to reduce the hazards of fire originating within a structure spreading to wildland and fire originating in wildland spreading to structures.

Especially targeted for a systems-approach to fire protection are those new buildings that are deemed to be particularly hazardous under Chapter 5; these buildings are required to be sprinklered. Other hazard mitigation strategies include establishing around structures defensible space zones wherein combustible vegetation and trees are regulated and kept away from buildings and trees are located 10 feet crown-to-crown away from each other. Additional hazards that are dealt with in Chapter 6 include spark arresters on chimneys, regulated storage of combustible materials, firewood and LP-gas.

Chapter 7 Referenced Standards. The code contains several references to standards that are used to regulate materials and methods of construction. Chapter 7 contains a comprehensive list of all standards that are referenced in the code. The standards are part of the code to the extent of the reference to the standard. Compliance with the referenced standard is necessary for compliance with this code. By providing specifically adopted standards, the construction and installation requirements necessary for compliance with the code can be readily determined. The basis for code compliance is, therefore, established and available on an equal basis to the code official, contractor, designer and owner.

Chapter 7 is organized in a manner that makes it easy to locate specific standards. It lists all of the referenced standards, alphabetically, by acronym of the promulgating agency of the standard. Each agency's standards are then listed in either alphabetical or numeric order based upon the standard identification. The list also contains the title of the standard; the edition (date) of the standard referenced; any addenda included as part of the ICC adoption; and the section or sections of this code that reference the standard.

Appendix A General Requirements. Appendix A, while not part of the code, can become part of the code when specifically included in the adopting ordinance. Its purpose is to provide fire-protection measures supplemental to those found in Chapter 6 to reduce the threat of wildfire in a wildland-urban interface area and improve the capability for controlling such fires. This appendix includes detailed requirements for vegetation control; the code official's authority to close wildland-interface areas in times of high fire danger; control of fires, fireworks usage and other sources of ignition; storage of hazardous materials and combustibles; bans on the dumping of waste materials and ashes and coals in wildland-urban interface areas; protection of pumps and water supplies; and limits on temporary uses within the wildland-urban interface area.

Appendix B Vegetation Management Plan. Appendix B, while not part of the code, can become part of the code when specifically included in the adopting ordinance. Its purpose is to provide criteria for submitting vegetation management plans, specifying their content and establishing a criterion for considering vegetation management as being a fuel modification.

Appendix C Fire Hazard Severity Form. Appendix C, while not part of the code, can become part of the code (replacing Table 502.1) when specifically included in the adopting ordinance. Its purpose is to provide an alternative methodology to using Table 502.1 for analyzing the fire hazard severity of building sites using a pre-assigned value/scoring system for each feature that impacts the hazard level of a building site. Included in the evaluation are site access, types and management of vegetation, percentage of defensible space on the site, site topography, class of roofing and other construction materials used on the building (existing or to be constructed on the site), fire protection water supply, and whether utilities are installed above or below ground.

Appendix D Fire Danger Rating System. Appendix D is an excerpt from the National Fire Danger Rating System (NFDRS), 1978, United States Department of Agriculture Forest Service, General Technical Report INT-39, and is for information purposes and is not intended for adoption. The fuel models that are included are only general descriptions because they represent all wildfire fuels from Florida to Alaska and from the East Coast to California.

The National Fire Danger Rating System (NFDRS) is a set of computer programs and algorithms that allow land management agencies to estimate today's or tomorrow's fire danger for a given rating area. NFDRS characterizes fire danger by evaluating the approximate upper limit of fire behavior in a fire danger rating area during a 24-hour period based on fuels, topography and weather, or what is commonly called the fire triangle. Fire danger ratings are guides for initiating presuppression activities and selecting the appropriate level of initial response to a reported wildfire in lieu of detailed, site- and time-specific information.

Predicting the potential behavior and effects of wildland fire are essential tasks in fire management. Surface fire behavior and fire effects models and prediction systems are driven in part by fuelbed inputs such as load, bulk density, fuel particle size, heat content and moisture content. To facilitate use in models and systems, fuelbed inputs have been formulated into fuel models. A fuel model is a set of fuelbed inputs needed by a particular fire behavior or fire effects model. Different kinds of fuel models are used in fire spread models in a variety of fire behavior modeling systems. The fuel models in this appendix correlate with the light, medium and heavy fuel definitions found in Chapter 2 of the code.

Appendix E Findings of Fact. Appendix E is an informational appendix that intends to provide a methodology for presenting the findings of fact that are required by Chapter 3 of the code when a jurisdiction defines and establishes a wildland-urban interface area that will be the subject of regulation by the IWUIC. The development of written "findings of fact" that justifies designation of wildland-interface areas by local jurisdictions requires that a certain amount of research and analysis be conducted to support a written finding that is both credible and professional. In the context of adopting a supplemental document such as the wildland-urban interface declaration, the writing of these findings is essential in creating the maps and overlap needed to use their specific options.

The purpose of this appendix is to provide an overview of how local officials could approach this process. There are three essential phenomena cited in some adoption statutes that vary from community to community: climate, topography and geography. Although it can be agreed that there are other findings that could draw distinction in local effects, these three features are also consistent with standard code text that offers opportunity to be more restrictive than local codes. The process demands a high level of professionalism to protect the jurisdiction's credibility in adopting more restrictive requirements. A superficial effort in preparing the findings of fact could jeopardize the proposed or adopted code restriction. Jurisdictions should devote a sufficient amount of time to draft the findings of fact to ensure that the facts are accurate, comprehensive and verifiable.

Appendix F Characteristics of Fire-Resistive Vegetation. Appendix F is an informational appendix provided for the convenience of the code user. It is simply a compilation of the eight characteristics of fire-resistive vegetation that can be used effectively within wildland-urban interface areas to reduce the likelihood of fire spread through vegetation.

Appendix G Self-Defense Mechanism. The *International Wildland-Urban Interface Code* establishes a set of minimum standards to reduce the loss of property from wildfire. The purpose of these standards is to prevent wildfire spreading from vegetation to a building. Frequently, proposals are made by property or landowners of buildings located in the wildland-urban interface to consider other options and alternatives instead of meeting these minimum standards. Appendix G is an information appendix that provides discussion of some elements of the proposed self-defense mechanisms and their role in enhancing the protection of exposed structures in the wildland-urban interface. To accept alternative self-defense mechanisms, the code official must carefully examine whether these devices will be in place at the time of an event and whether they will assist or actually complicate the defense of the structure by fire suppression forces if they are available.

Appendix H International Wildland-Urban Interface Code Flowchart. Appendix H is an information appendix that is based on the "Decision Tree" concept and is intended to provide the code official with a graphical, flowchart representation of how the IWUIC is to be applied in an orderly manner.

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