

ORDINANCE NO.

AN ORDINANCE REPEALING AND REPLACING ARTICLE 8 OF CITY CODE CHAPTER 25-12 (TECHNICAL CODES) TO ADOPT THE 2024 INTERNATIONAL WILDLAND-URBAN INTERFACE CODE AND LOCAL AMENDMENTS; AND CREATING OFFENSES.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. City Code Chapter 25-12 (*Technical Codes*) is amended to repeal Article 8 (*Wildland-Urban Interface Code*) and replace it with a new Article 8 to read as follows:

ARTICLE 8. WILDLAND-URBAN INTERFACE CODE.

§ 25-12-181 INTERNATIONAL WILDLAND-URBAN INTERFACE CODE.

(A) The International Wildland-Urban Interface Code and Appendices A, B, C, and D, 2024 Edition, published by the International Code Council ("2024 International Wildland-Urban Interface Code") is adopted and incorporated by reference into this section with the deletions, amendments, and additions in Subsections (B), (C), (D), and (E) and Section 25-12-183 (*Local Amendments to the 2024 Wildland-Urban Interface Code*).

(B) The following provisions of the 2024 Wildland-Urban Interface Code are deleted. Unless specifically listed in this table, a subsection contained within a deleted section or subsection is not deleted:

101.1	106.10	106.12	505.9
106.9	106.11	Table 503.1	604.4.1

(C) The following provisions of the 2024 International Wildland-Urban Interface Code are amended. Unless specifically listed in this table, a subsection contained within an amended section or subsection is not amended.

101.2	106.3	401.1	403.7	504.4	505.10	Table 603.2
101.4	106.7	402.1	Sec.404 and subsections	504.7	505.10.3	603.2.1
101.5	106.8	402.1.1	501.1	504.7.1	505.11	603.2.2

102.4	107 heading	402.1.2	501.2	504.10	505.11.1	603.2.3
102.4.1	Sec.107 and subsections	402.2	502 Heading	504.10.3	506 heading	604 heading
103.1	Sec.108 and subsections	402.2.1	Sec.502 and subsections	504.11	506.1	604.4
103.2	Sec.109 and subsections	402.2.2	503.1	504.11.1	506.2	606.1
103.3	110 heading	403.1	503.2	505 heading	506.4	606.2
104 heading	Sec. 110 and subsections	403.2	503.2.3	505.3	506.5	607.1
Sec.104 and subsections	Sec.111 and subsections	403.2.1	503.2.4	505.4	507.1	C101.1
Sec.105 and subsections	Sec.112 and subsections	403.2.3	504 heading	505.7	602.1	Table C101.1
106.1	Sec.113 and subsections	403.2.4	504.1	505.7.1	603 heading	Appendix D
106.2	302.2	403.3	504.3	505.8	603.2	

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(D) The following provisions are added to the 2024 Wildland-Urban Interface Code.

102.4.3	505.2.1.1	506.4.2
202.1	505.2.2	506.4.3
302.4	505.2.2.1	506.4.4
302.4.1	505.2.2.2	506.4.5
403.8	505.2.2.3	506.4.6

403.9	505.2.2.4	506.5.1
503.2.5	505.3.1	506.5.2
504.2.1.1	505.3.2	506.5.3
504.2.2	505.3.3	506.6
504.2.2.1	505.3.4	506.6.1
504.2.2.2	505.3.5	506.7
504.2.2.3	505.7.2	506.8
504.2.2.4	505.11.2	506.8.1
504.3.1	506.2.1.1	506.8.2
504.3.2	506.2.2	603.2.4
504.3.3	506.2.2.1	
504.3.4	506.2.2.2	
504.3.5	506.2.2.3	
504.7.2	506.2.2.4	
504.11.2	506.4.1	

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(E) The following definitions are deleted from Section 202 (General Definitions) in the 2024 International Wildland-Urban Interface Code:

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IGNITION-RESISTANT CONSTRUCTION, CLASS 1

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IGNITION-RESISTANT CONSTRUCTION, CLASS 2

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IGNITION-RESISTANT CONSTRUCTION, CLASS 3

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(F) The city clerk shall file a copy of the 2024 International Wildland-Urban Interface Code with the official ordinances of the City.

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§ 25-12-182 CITATIONS TO THE INTERNATIONAL WILDLAND-URBAN INTERFACE CODE.

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37 In the City Code, "Wildland-Urban Interface Code" means the 2024 Wildland-
38 Urban Interface adopted by Section 25-12-181 (*International Wildland-Urban Interface*
39 *Code*) and as amended by Section 25-12-183 (*Local Amendments to the International*
40 *Wildland-Urban Interface Code*). In this article, "this code" means the Wildland-Urban
41 Interface Code.

42
43 **§ 25-12-183 LOCAL AMENDMENTS TO THE INTERNATIONAL WILDLAND-**
44 **URBAN INTERFACE CODE.**

45 The following provisions are local amendments to the 2024 International Wildland-
46 Urban-Interface Code. Each provision of this section is a substitute for the identically
47 numbered provision amended or deleted in Section 25-12-181(B) or (C) (*International*
48 *Wildland-Urban Interface Code*) or is an addition to the 2024 International Wildland-
49 Urban Interface Code.

50 **101.2 Scope.** The provisions of the code shall apply to the construction, alteration,
51 movement, repair, maintenance, and use of any building, structure, or premises within the
52 wildland-urban interface areas in this jurisdiction. Buildings or conditions in existence at
53 the time of the adoption of this code are allowed to have their use or occupancy continued,
54 if such condition, use, or occupancy was legal at the time of the adoption of this code,
55 provided that such continued use does not constitute a distinct danger or an extreme hazard
56 to life or property. Buildings or structures moved into or within the jurisdiction shall
57 comply with the provisions of this code for new buildings or structures.

58 **101.4 Retroactivity.** The provisions of this code apply to conditions that arise beginning
59 on and after the effective date of this code. If, in the opinion of the code official, the existing
60 conditions constitute a distinct danger or extreme hazard to life or property, the code
61 official may require compliance with provisions of this code to mitigate those existing
62 conditions.

63 **101.5 Additions or alterations.** Additions or alterations shall be permitted to be made to
64 any existing building or structure without requiring the unaltered portion of the existing
65 building or structure to comply with the requirements of this code, provided that the entire
66 addition or alteration to the existing structure conforms to that required for a new building
67 or structure. Additions or alterations shall not create an unsafe condition to the existing
68 structure or site as determined by the authority having jurisdiction (AHJ). Additions or
69 alterations for a Limited Access Residential Infill Project are required to complete a Fire
70 Hazard Severity Form in accordance with Appendix C and provide mitigation per Section
71 502.2 where the project receives a score of 15 or more for Part 1, 30 or more for Part 2, or
72 a combined score of 40 or above.

73 **102.4 Referenced codes and standards.** The codes and standards referenced in this code
74 shall be those that are listed in Chapter 7 (Referenced Standards) and Chapter 80
75 (Referenced Standards) of the Fire Code. Such codes and standards shall be considered as
76 part of the requirements of this code to the prescribed extent of each such reference and as
77 further regulated in Sections 102.4.1, 102.4.2, and 102.4.3.

78 **102.4.1 Conflicts.** Except as otherwise provided in City Code, the provisions of this code
79 prevail over a referenced code or standard that conflicts with this code.

80 **102.4.3 Fire Protection Criteria Manual.** Additional information on procedures and rules
81 for administration of this code are available in the Fire Protection Criteria Manual.

82 **103.1 Creation of agency.** The office of the Fire Marshal at the Austin Fire Department,
83 under the direction of the Fire Chief, is authorized to implement, administer, and enforce
84 the provisions of this code.

85 **103.2 Appointment.** The fire chief is appointed by the City Manager in accordance with
86 the policies and procedures of the City of Austin and in compliance with state law. The
87 fire chief serves as the fire code official. Within the Wildland-Urban Interface Code the
88 term “code official” means fire code official.

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90 **103.3 Deputies.** The fire chief appoints the fire marshal and assistant fire marshals,
91 inspectors, or other employees and delegates duties consistent with the policies and
92 procedures of the Austin Fire Department. Where the terms “code official”, “fire code
93 official”, “fire chief”, “chief”, “fire department”, or “fire marshal” are used in the Wildland-
94 Urban Interface Code, the provisions apply to assistant fire marshals, inspectors,
95 engineering professionals, and other fire department employees in the execution of their
96 assigned duties.

97 **SECTION 104 Duties and Powers of the Fire Code Official**

98 The code official in this code has the powers of the fire code official in Section 104 of the
99 Fire Code. Where the term “this code” or “Fire Code” are used within the Fire Code, the
100 provisions apply to the Wildland-Urban Interface Code.

101 **SECTION 105 PERMITS**

102 **105.1 General.** Where not otherwise provided in the requirements of the Land
103 Development Code, the Building Code, the Fire Code, or the Residential Code, permits are
104 required in accordance with Sections 105.2 and 105.3.

105 **105.2 Permits required.** Unless otherwise exempted, buildings or structures regulated by
106 this code shall not be erected, constructed, altered, repaired, moved, removed, converted,
107 demolished, or changed in use or occupancy without an approved applicable city permit.

108 For buildings or structures erected for temporary uses, see Appendix A, Section A108.3,
109 of this code.

110 **105.2.1 Extreme hazard condition.** A permit shall not be issued to construct a structure
111 on a site designated as an extreme hazard as defined and set forth by the provisions of this
112 code.

113 **105.3 Work Exempt from Permit.** Except as required by the Building Code, Fire Code,
114 or Residential Code, or other adopted codes, a permit is not required for the following:

- 115 1. a one-story detached non-habitable accessory structure provided the use and
116 floor area meet the exceptions of those allowed by Section 501.1 of this code;
117 and
- 118 2. a fence that does not exceed seven feet (2133.6 mm) high where subject to
119 compliance with the Building Code and eight feet (2438 mm) high where
120 subject to compliance with the Residential Code.

121 A structure or fence constructed without a permit, as allowed by this provision, must
122 comply with this code. Exemption from the permit requirements of this code shall not be
123 deemed to grant authorization for any work to be done in any manner in violation of the
124 provisions of this code or any other laws or ordinances of this jurisdiction. The *code official*
125 is authorized to stipulate conditions for permits. Permits shall not be issued where public
126 safety would be at risk, as determined by the code official.

127 **105.4 Additional Permit Requirements.** For additional permitting requirements
128 including but not limited to application, approval, issuance, and time limitations, see
129 Section 105 of the Fire Code; Section 105 of the Building Code; and Section 105 of the
130 Residential Code.

131 **105.5 Time limits.** Article 13 (*Administration of Technical Code*) of this chapter
132 establishes permit application time limits and requirements applicable to permit expiration
133 and reactivation, including a review fee for expired permits. See also Section 105 of the
134 Fire Code.

135 **106.1 General.** Plans, engineering calculations, diagrams, and other data shall be
136 submitted in a digital format with each application for a permit. The construction
137 documents shall meet the requirements of the Fire Code and be prepared by a registered
138 design professional where required by the applicable Texas law or City rule or regulation.
139 Where special conditions exist, the code official is authorized to require additional
140 documents to be prepared by a registered design professional.

141 **106.2 Information on plans and specifications.** Plans and specifications shall be drawn
142 to scale in digital format and shall be of sufficient clarity to indicate the location, nature,

143 and extent of the work proposed. Plans shall show in detail that it will conform to the
144 provisions of this code and relevant laws, ordinances, rules, and regulations.

145 **106.3 Site Plan.** In addition to the requirements for plans in the Building Code, the Fire
146 Code, and the current Land Development Code, site plans shall include topography, width
147 and percent of grade of access roads, landscape and vegetation details, locations of
148 structures or building envelopes, existing or proposed overhead utilities, occupancy
149 classification of buildings, types of ignition-resistant construction of buildings, structures
150 and their appendages, and site water supply systems. The code official is authorized to
151 waive or modify the requirement for a site plan where the application for permit is for
152 alteration, repair, or where otherwise warranted.

153 **106.7 Vicinity plan.** When required by the code official and in addition to a site plan, a
154 vicinity plan shall be prepared and shall be submitted to the code official for review and
155 approval. The vicinity plan shall be prepared by a Texas licensed Engineer, a Texas
156 licensed Architect, a Texas licensed Landscape Architect, or by other sources when
157 approved by the AHJ.

158 **106.8 Additional construction document requirements.** For additional construction
159 document requirements including but not limited to retention of plans, examination of
160 documents, amended construction documents, previous approvals, and phased approval see
161 Section 106 of the Fire Code.

162 **SECTION 107 TEMPORARY STRUCTURES AND USES.** For temporary structures
163 and uses see Chapter 31 of the Fire Code.

164 **SECTION 108 FEES.** For fee requirements see Section 108 of the Fire Code.

165 **SECTION 109 INSPECTION AND ENFORCEMENT.** For inspection and
166 enforcement see Sections 109 and 113 of the Fire Code.

167 **SECTION 110 CERTIFICATE OF OCCUPANCY.** For certificate of occupancy
168 requirements see Chapter 25-1 Article 9 (*Certificates of Compliance and Occupancy*);
169 Section 111 of the Building Code; and Section R110 of the Residential Code.

170 **SECTION 111 SERVICE UTILITIES.** For service utilities see Section 111 of the Fire
171 Code.

172 **SECTION 112 MEANS OF APPEALS.** For appeals see Section 112 of the Fire Code.

173 **SECTION 113 STOP WORK ORDER.** For stop work orders see Section 114 of the Fire
174 Code.

175 **202.1 Supplemental and replacement definitions.** The following definitions in this
176 subsection apply throughout this code and supplement the definitions in Section 202
177 (*Definitions*) of the 2024 International Wildland-Urban Interface Code, as published.

178 **ACCESSORY STRUCTURE.** An accessory structure is a non-habitable structure that
179 does not contain any type of plumbing and that is used for such things as general storage
180 buildings, lawn and garden sheds, green houses, pump houses, and similar structures.

181 **BUILDING.** Any structure intended for supporting or sheltering any occupancy that
182 would not be considered an accessory structure.

183 **CODE OFFICIAL.** The fire chief or the fire chief's designee designated to interpret and
184 enforce the fire code and this code.

185 **DRIVEWAY.** A vehicular ingress and egress route that serves no more than three
186 buildings or structures on an individual lot, including accessory structures, and no more
187 than three dwelling units on an individual lot.

188 **DWELLING UNIT.** A single unit providing complete, independent living facilities for
189 one or more persons, including permanent provisions for living, sleeping, eating, cooking,
190 and sanitation.

191 **EXTREME HAZARD.** A condition that, in the opinion of the code official, makes a site
192 or structure located within wildland-urban interface areas unusually more dangerous due
193 to, but not limited to, restrictions in access, lack of adequate water supply, types of fuels,
194 topography or the lack of surrounding open space to conduct safe fire-fighting operations.
195 Properties that score a 40 or higher on the Fire Hazard Severity form in Appendix C of this
196 code also qualify as an Extreme Hazard.

197 **FIRE SEPARATION DISTANCE.** Fire Separation Distance between structures shall be
198 compliant with the definitions as provided in the Building Code and Residential Code. Fire
199 Separation Distance between a structure and the wildland shall be per Section 603.2 of this
200 code.

201 **FLAME SPREAD INDEX.** A comparative measure, expressed as a dimensionless
202 number, derived from visual measurements of the spread of flame versus time for a material
203 tested in accordance with ASTM E 84, UL 723, or ASTM E 2768.

204 **FUEL, HEAVY.** Vegetation consisting of round wood three to eight inches (76 to 203
205 mm) in diameter. See fuel models for Closed Juniper Woodland and Mixed Juniper
206 Hardwood Forest described in Appendix D.

207 **FUEL, LIGHT.** Vegetation consisting of herbaceous plants and round wood less than
208 one-fourth inch (6.4 mm) in diameter. See fuel models for Sparse Dry Climate Grass
209 described in Appendix D.

210 **FUEL, MEDIUM.** Vegetation consisting of round wood one-fourth to three inches (6.4
211 to 76 mm) in diameter. See fuel models for Aggrading Juniper Shrub described in
212 Appendix D.

213 **GREEN BELT.** A series of connected open spaces that may follow natural features such
214 as ravines, creeks or streams.

215 **IGNITION-RESISTANT (IR) CONSTRUCTION.** A construction method that uses
216 building materials that when used alone or when assembled as a unit will resist exterior
217 ignition and sustained combustion from direct flame impingement, radiant heat, or embers.
218 IR Construction shall also resist interior ignition of materials by reducing the radiant heat
219 transfer from direct flame in close proximity to the structure through windows or doors.
220 The extent of the required IR Construction shall be dependent on the proximity to the
221 wildland based on the *proximity zone* designation of the structure.

222 **LIMITED ACCESS COMMUNITY.** A residential area or subdivision that contains
223 more than 30 dwelling units and only has one main entrance or exit to a primary road
224 connecting the area or subdivision to the broader road network.

225 **LIMITED ACCESS RESIDENTIAL INFILL PROJECT.** The addition of one or more
226 new dwelling units in a Limited Access Community.

227 **PROXIMITY ZONE.** The designation given to a structure to determine the enhanced
228 ignition-resistant construction required to reduce the effects of a wildfire on the structure.
229 The proximity zone is based on the distance of the structure from the wildland per Section
230 302.4.

231 **TURNOUT.** A turnout is a section of road parallel to a driveway or access road where a
232 vehicle can pull to the side to allow other vehicles to pass.

233 **WILDLAND.** An area in which development is essentially nonexistent including but not
234 limited to grassland, pastures and farmland, shrub-covered and treed areas, easements,
235 unmitigated parkland, and other natural surfaces that are not regularly maintained.

236 **WILDLAND-URBAN INTERFACE (WUI) AREA.** An area designated by the City
237 Council, based on formulation and input from the Texas A&M Forest Service and modified
238 and implemented by Austin Fire Department Wildfire Division, where conditions affecting
239 the combustibility of both wildland and built fuels allow for the ignition and spread of fire
240 through the combined fuel complex.

241 **302.2 Mapping.** The wildland-urban interface (WUI) areas shall be recorded on maps
242 available for inspection by the public. Due to the complexity of the areas and limitations
243 in the mapping programs, some areas that are in the WUI may not show up as such in the
244 map. It shall be by the determination of this code and the code official to determine if the
245 property is in the Wildland-Urban Interface and the Proximity Zone designation as
246 provided in Section 302.4 of this code. Distance to the wildland shall be measured from
247 the structure to the actual wildland, regardless of the location of the property line.

248 **302.4 Proximity Zone designation.** Structures located in a designated wildland-urban
249 interface area shall be designated as either Proximity Zone A, Proximity Zone B, or
250 Proximity Zone C depending on the distance from the wildland and shall comply with the
251 applicable Sections 504 through 506 of this code and the requirements of the Building or
252 Residential Codes and the Fire Code as applicable.

253 Proximity Zone A structures are those that are 50 feet or closer to 40 acres of
254 wildland.

255 Proximity Zone B structures are those that are greater than 50 feet and up to 150 feet
256 from 40 acres of wildland.

257 Proximity Zone C structures are those that are greater than 150 feet up to 0.5 miles
258 from 40 acres of wildland and up to 1.5 miles from 750 acres of wildland.

259 **302.4.1 Proximity Zone Conflicts.** When a structure is located on a lot where there is a
260 conflict with the Proximity Zone designation, the most restrictive Proximity Zone shall be
261 used for the entire structure.

262 **401.1 Scope.** Wildland-urban interface areas shall be provided with emergency vehicle
263 access and water supply in accordance with this chapter and the Fire Code.

264 **402.1 Subdivisions.** All subdivisions, as described in the City Code Chapter 25-4
265 (*Subdivision*), that are wholly or partially located in a designated wildland-urban interface
266 area and platted after the adoption of this code shall comply with the Land Development
267 Code, Sections 402.1.1 and 402.1.2 of this code, and the Fire Code.

268 **402.1.1 Access.** New subdivisions and resubdivisions, as determined by this jurisdiction,
269 shall be provided with fire apparatus access roads and access requirements in accordance
270 with the Chapter 5 of the Fire Code, Section 403 of this code, and the currently adopted
271 Land Development Code. Where more than 30 dwelling units are served by a single fire
272 apparatus access road, including Limited Access Residential Infill Projects, a completed
273 Fire Hazard Severity form in accordance with Appendix C shall be submitted to the code
274 official and mitigation provided per Section 502.2 if the project receives a score of 15 or
275 more for Part 1, 30 or more for Part 2, or a combined score of 40 or above.

276 **402.1.2 Water supply.** New subdivisions as determined by this jurisdiction shall be
277 provided with a conforming water supply in accordance with Section 404 of this code and
278 Chapter 5 of the Fire Code.

279 **402.2 Individual structures.** Individual structures shall comply with Sections 402.2.1 and
280 402.2.2 of this code and the Fire Code.

281 **402.2.1 Access.** Individual structures hereafter constructed or relocated into or onto a site
282 located within a *wildland-urban interface area* shall be provided with fire apparatus access
283 in accordance with Chapter 5 of the Fire Code and required driveways in accordance with

284 Section 403.2 of this code. Any structures served by a single fire apparatus access road
285 serving more than 30 dwelling units, including Limited Access Residential Infill Projects,
286 shall submit a completed Fire Hazard Severity form in accordance with Appendix C to the
287 code official and mitigation shall be provided per Section 502.2 where the project receives
288 a score of 15 or more for Part 1, 30 or more for Part 2, or a combined score of 40 or above.
289 Marking of fire protection equipment and the site's address markers shall be provided in
290 accordance with Chapter 5 of the Fire Code and Sections 403.5 and 403.6 of this code.

291 **402.2.2 Water supply.** Individual structures hereafter constructed, remodeled, or
292 relocated into or onto a site located within a *wildland-urban interface area* shall be
293 provided with a conforming water supply in accordance with Chapter 5 of the Fire Code.
294 For residential one- and two-family dwellings in WUI areas where a conforming water
295 supply is not available an automatic sprinkler system in accordance with Section 602.1
296 shall be installed, regardless of the size of the structure.

297 **403.1 Restricted access.** Where emergency vehicle access is restricted because of secured
298 access roads or *driveways* or where immediate access is necessary for lifesaving or
299 firefighting purposes, the *code official* is authorized to require a key box to be installed in
300 an *approved* location. The key box shall be of a type *approved* by the *code official* and
301 shall contain keys to gain necessary access as required by the *code official*. Restricted
302 access shall allow occupant egress at all times.

303 **403.2 Driveways.** The requirements of this section shall apply exclusively to buildings
304 constructed to meet the Residential Code. Driveways shall be provided where any portion
305 of an exterior wall of the first story of a building is located more than 150 feet (45 720
306 mm) from a fire apparatus access road. An approved fire apparatus access road shall be
307 provided where required by the Fire Code.

308 Exception:

- 309 1. For a property located within Zone C, the dimension for a required driveway is
310 increased from 150 feet (45 720 mm) to 200 feet (60 960 mm).
- 311 2. An increase greater than 200 feet when an alternative is approved by the fire code
312 official.

313 **403.2.1 Dimensions.** Driveways shall provide a minimum unobstructed width of 12 feet
314 (3658 mm) and a minimum unobstructed height of 14 feet (4268 mm).

315 **403.2.3 Service limitations.** A driveway shall not serve more than three buildings or
316 structures on an individual lot, including accessory structures, and not more than three
317 dwelling units on an individual lot.

318 **Exception:** A driveway may serve more buildings or structures, if the driveway meets the
319 requirements for a fire apparatus access road (fire lane) as set forth in Section 503 of the
320 Fire Code. The exact number of buildings or structures that can be served will be
321 determined by the code official.

322 **403.2.4 Turnarounds.** Driveway turnarounds shall have inside turning radii of not less
323 than 25 feet (7620 mm) and outside turning radii of not less than 50 feet (15 240 mm).
324 Driveways that connect with a road or roads at more than one point shall be considered as
325 having a turnaround if all changes of direction meet the radii requirements for driveway
326 turnarounds.

327 **403.3 Fire apparatus access road.** When required, a fire apparatus access road must
328 comply with the Chapter 5 of the Fire Code.

329 **403.7 Grade.** The gradient for fire apparatus access roads and driveways shall be per
330 Section 503.2.7 of the Fire Code.

331 **403.8 Service limitations.** Multi-family residential projects having more than 30 dwelling
332 units shall be equipped throughout with two separate and approved fire apparatus access
333 roads.

334 **403.9 Remoteness.** Where two fire apparatus access roads are required, they shall be
335 placed a distance apart equal to not less than one half of the length of the maximum overall
336 diagonal dimension of the lot or area to be served, measured in a straight line between
337 accesses.

338 **SECTION 404 WATER SUPPLY.** For conforming water supply requirements see
339 Section 507 of the Fire Code and Appendix B of the Fire Code.

340 **501.1 Scope.** All buildings and structures located in a designated wildland-urban interface
341 area shall be constructed in accordance with the Building Code, the Residential Code, and
342 this code.

343 **Exceptions:**

- 344 1. Accessory structures not exceeding 100 square feet (9.29 m²) in floor area where
345 located more than 50 feet (15,420 mm) from the nearest adjacent structure.
- 346 2. Agricultural buildings located more than 50 feet (15,420 mm) from the nearest
347 adjacent structure.

348 **501.2 Objective.** Chapter 5 establishes minimum standards to locate, design, and construct
349 buildings, structures, or portions thereof. The purpose of the minimum standards is to
350 protect life and property, to resist damage from wildfires, and to reduce the spread of
351 building and structure fires to wildland fuels by providing a more ignition-resistant
352 structure. Minimum standards vary based on proximity to the wildland fuels. These

standards are intended to provide, above Fire Code requirements, increased protection from the various levels of hazards in wildland-urban interface areas.

SECTION 502 EXTREME HAZARD

502.1 General. A site located within a wildland-urban interface area shall be considered an extreme hazard if:

- (1) The site meets all of the following conditions.
 - (a) Site has fuels classified as medium or heavy as defined by this code;
 - (b) Does not have a conforming water supply;
 - (c) Does not have defensible space; and
 - (d) Does not have sufficient fire department access; or
- (2) the site receives a score of 15 or higher for Part 1, 30 or higher for Part 2, or a combined score of 40 or higher as set forth by fire hazard severity form in Appendix C.

A permit to construct or move a structure onto a site designated an extreme hazard shall not be issued unless mitigation to reduce the extreme hazard designation has occurred per Section 502.2 of this code.

Exception: The fire chief is authorized to classify fuel type based on the historic fuel type for the area.

502.1.1 Existing structures. Existing structures, accessory structures, agricultural buildings, and appendages (fences, decks, etc.) shall not be issued a permit for additions or to modify any existing structure on a site classified as an extreme hazard unless mitigation to reduce the extreme hazard designation has occurred per Section 502.2 of this code.

Exception: Interior only remodels where additional dwelling units are not created. Window or exterior door replacements shall not be considered interior only components in extreme hazard designated areas.

502.2 Extreme hazard severity reduction. Construction, modification, or relocation of a structure onto a site classified as an extreme hazard shall require mitigation of conditions described in Section 502.1 as determined by the code official so that the site is no longer considered an extreme hazard.

503.1 General. A building or structure constructed, modified, located in, relocated into a designated wildland-urban interface area shall comply with Chapter 5. Proximity Zone A, Proximity Zone B, or Proximity Zone C ignition-resistant construction shall be constructed in accordance with Sections 504, 505, and 506 respectively. Any material required to be

387 ignition-resistant shall comply with Section 503.2. When defensible space is required, it
388 shall comply with Section 603.

389 **503.2 Ignition-resistant building material.** Ignition-resistant building materials shall
390 comply with any one of the requirements in Section 503.2.1 through 503.2.5.

391 **503.2.3 Wood roof coverings.** No roof covering in the Wildland-Urban Interface areas,
392 regardless of the distance from the wildland, shall be allowed to be made from wood shake,
393 wood shingle, or similar combustible material, including fire-retardant-treated wood.

394 **503.2.4 Ignition-resistant building material.** Material shall be tested on the front and
395 back faces in accordance with the extended ASTM E84 or UL 723 test, for a total test
396 period of 30 minutes, or with the ASTM E2768 test. The materials shall bear identification
397 showing the fire test results. Panel products shall be tested with a ripped or cut longitudinal
398 gap of 1/8 inch (3.2 mm). The materials, when tested in accordance with the test procedures
399 set forth in ASTM E84 or UL 723 for a test period of 30 minutes, or with ASTM E2768,
400 shall comply with Sections 503.2.4.1 through 503.2.4.3.

401 **Exceptions:**

- 402 1. Materials composed of a combustible core and a noncombustible exterior
403 covering made from either aluminum at a minimum 0.019-inch (0.48 mm)
404 thickness or corrosion-resistant steel at a minimum 0.0149-inch (0.38 mm)
405 thickness shall not be required to be tested with a ripped or cut longitudinal gap.
- 406 2. Structures designated as Proximity Zone B or C shall be allowed to use materials
407 designated as a Class A rated material, designed for exterior use, when tested to
408 the ASTM E84 or UL 723 Standard 10-minute test.

409 **503.2.5 Other Approved Materials.** Other materials as approved by the fire code official.

410 **SECTION 504 PROXIMITY ZONE A IGNITION-RESISTANT CONSTRUCTION**

411 **504.1 General.** Proximity Zone A Ignition-resistant construction shall be in accordance
412 with Sections 504.2 through 504.11.

413 **504.2.1.1 Woven roof valleys.** Valley shingles that have been weaved or woven (closed
414 valley) to create a continuous layer of shingles over the valley may be flashed using 26
415 gage (0.019 inch) galvanized sheet metal running the full length of the valley and extending
416 at least 12 inches on both planes of the roof surface. Flashing shall be viewable from the
417 end of the valley at the roof eave for inspections.

418 **504.2.2 Materials and systems installed over a roof assembly.** Materials and systems
419 installed over a roof assembly shall comply with the requirements of Sections 504.2.2.1
420 through 504.2.2.3.

421 **504.2.2.1 Raised-deck systems.** Raised-deck systems as defined by the Building Code
422 installed above a roof assembly shall comply with Section 1511.9 and subsections of the
423 Building Code.

424 **Exception:** Structures constructed to meet the Residential Code shall comply with Access
425 and Egress requirements of the Residential Code.

426 **504.2.2.2 Skylight housing.** Skylight frame material shall be noncombustible.

427 **504.2.2.3 Walkway pad.** The use and application of walkway pad material shall not
428 compromise the ASTM E 108 or UL 790 rating of the roof. The material shall meet ASTM
429 E 108 or UL 790, or meet the requirements of section 503.2.

430 **504.2.2.4 Vegetative roofs and landscaped roofs.** Vegetative roofs and landscaped roofs,
431 regardless of the distance from the wildland, shall not be allowed within the Wildland-
432 Urban Interface.

433 **504.3 Protection of eaves.** Protection of eaves, soffits, fasciae, rafter tails, and exterior
434 ceilings shall comply with the requirements of Sections 504.3.1 through 504.3.5.

435 **504.3.1 Eaves.** Eaves shall be protected on the exposed underside of soffits by ignition-
436 resistant materials or by materials approved for not less than one-hour fire-resistance-
437 rated construction, two-inch (51 mm) nominal dimension lumber, 5/8 inch Type-X
438 Sheetrock, or one-inch (25 mm) nominal fire-retardant-treated lumber, or three-quarter
439 inch (19.1 mm) nominal fire-retardant-treated plywood, identified for exterior use and
440 meeting the requirements of Section 2303.2 of the Building Code.

441 **504.3.2 Fasciae.** Ignition-resistant fasciae are required and shall be constructed with one
442 of the following:

- 443 1. Three-quarter-inch (19.1 mm) solid ignition-resistant material complying with
444 Section 503.2.
- 445 2. One-hour fire-resistance-rated construction protected on the exterior by an
446 ignition-resistant building material complying with Section 503.2.
- 447 3. Two-inch (51 mm) nominal dimension lumber protected on the exterior by an
448 ignition-resistant building material complying with Section 503.2.

449 **504.3.3 Gaps between materials.** Gaps between exterior facing materials within the eaves
450 or between eave materials and the wall or and roof assembly caused by normal construction
451 techniques or any other unsealed roof opening providing access to the attic space shall be
452 provided with ember protection according to Section 506.5 of this code.

453 **504.3.4 Exposed rafter tails.** Exposed rafter tails are allowed when built of material
454 classified as heavy timber per the Building Code, provided that the exterior wall be rated
455 for at least one hour and extend from foundation to bottom of roof deck. The roof deck

456 shall be a noncombustible or ASTM E 84 Class A rated material per 503.2.4 and shall
457 extend a distance of not less than 48 inches on both the exterior and interior side of the
458 exterior wall.

459 **504.3.5 Exterior ceilings.** Exterior ceilings below covered patio roofs, porches, balconies,
460 decks, floors above, and all similar structures shall be built using ignition-resistant building
461 materials that comply with Section 503.2. Rated ceiling assemblies shall have an ignition-
462 resistant building material as the exterior finish.

463 **504.4 Gutters and downspouts.** Gutters and downspouts shall be constructed of
464 noncombustible materials. Gutters shall be provided with an approved means to prevent
465 the accumulation of leaves and debris in the gutter and be constructed of a non-corrosive
466 and non-combustible material.

467 **504.7 Appendages and structures.** For an unenclosed appendage or projection that is
468 attached to a building, or a detached unenclosed accessory structure, such as a deck,
469 balcony, carport, pergola, patio cover, awning, canopy, or similar structure, the entire
470 appendage, projection, or structure must be constructed using at least one-hour fire-
471 resistance-rated materials, heavy timber, or one of the following:

- 472 1. Approved non-combustible materials;
- 473 2. Fire-retardant-treated wood approved for exterior use that complies with
474 Section 2303.2 of the Building Code; or
- 475 3. Ignition-resistant building materials that comply with Section 503.2.

476 **Exceptions:**

- 477 1. Coated materials shall not be used as the walking surface of decks.
- 478 2. The underside of a deck, not subject to Subsection 504.7.1, consisting of the
479 columns, beams, bracing, and floor joists, shall be allowed to be built from any
480 approved material provided that the entire underside of the deck is completely
481 enclosed with a wall meeting the requirements of Section 504.5. Ventilation shall
482 be provided per Section 504.10. Storage or access points to allow storage under
483 the deck shall not be allowed.

484 Deck boards shall not have gaps larger the one-eighth inch between the boards or ember
485 protection shall be provided per Section 504.10 attached directly to the underside of the
486 deck boards. Guard rails, handrails, columns, and steps leading to grade shall comply with
487 these materials.

488 **504.7.1 Underfloor areas.** Where the structure is located and constructed so that the
489 structure or any portion thereof projects over a descending slope surface greater than 10
490 percent, the area below the structure shall be enclosed with exterior walls constructed in

491 accordance with Section 504.5. Ventilation shall be provided per Section 504.10. Storage
492 or access points to allow storage under the deck shall not be allowed.

493 **504.7.2 Fences.** Any portion of a fence within 10 feet (3038 mm) of a building or structure
494 shall be built using a material that complies with section 503.2 of this code. New and
495 replacement fences shall comply with this section. Separation distance between structures
496 shall be per the definition of the Building Code or the Residential Code.

497 **504.10 Vents.** Where provided in accordance with 504.10.3, ventilation, exhaust, or
498 outside air intake openings shall be in accordance with section 504.10.1 or Section 504.10.2
499 to resist building ignition from the intrusion of burning embers and flame through the
500 ventilation openings. Dryer vents and associated ductwork shall be noncombustible.

501 **Exceptions:**

- 502 1. An opening that is prohibited from being obstructed and must remain clear
503 because of another adopted code or Land Development Code requirement,
504 provided that any flame or ember that penetrates the opening cannot reach
505 combustible materials or surfaces.
- 506 2. A dryer vent shall not require ember protection in accordance with 504.10.1
507 or 504.10.2.

508 **504.10.3 Vent locations.** Protection shall be provided for ventilation openings for
509 exhaust, outside air intake, enclosed attics, gable ends, ridge ends, underfloor ventilation,
510 foundations and crawl spaces, either in a horizontal or vertical surface. Attic ventilation
511 openings shall not be located in soffits, in eave overhangs, between rafters at eaves or in
512 other overhang areas. Gable-end and dormer vents shall be located not less than 10 feet
513 (3048 mm) from lot lines. Underfloor ventilation openings shall be located as close to
514 grade as practical.

515 **504.11 Detached accessory structures.** Detached accessory structures located in the
516 wildland-urban interface, including those listed in Section 504.7, shall be required to
517 comply with this code.

518 **504.11.1 Underfloor areas.** The underfloor area below the detached accessory structure
519 shall comply with Section 504.6 or Section 504.7.1, as applicable.

520 **504.11.2 Boat Docks.** Boat dock walking surfaces shall be constructed of approved non-
521 combustible materials or ignition-resistant materials that comply with Section 503.2. Boat
522 dock roof assemblies shall comply with Section 504.2.

523 **SECTION 505 PROXIMITY ZONE B IGNITION-RESISTANT CONSTRUCTION**

524 **505.1 General.** Proximity Zone B Ignition-resistant construction shall be in accordance
525 with Sections 505.2 through 505.11.

526 **505.2.1.1 Woven roof valleys.** Valley shingles that have been weaved or woven (closed
527 valley) to create a continuous layer of shingles over the valley may be flashed using 26
528 gage (0.019 inch) galvanized sheet metal running the full length of the valley and extending
529 at least 12 inches on both planes of the roof surface. Flashing shall be viewable from the
530 end of the valley at the roof eave for inspections.

531 **505.2.2 Materials and systems installed over a roof assembly.** Materials and systems
532 installed over a roof assembly shall comply with the requirements of Sections 505.2.2.1
533 through 505.2.2.3.

534 **505.2.2.1 Raised-deck systems.** Raised-deck systems as defined by the Building Code
535 installed above a roof assembly shall comply with Section 1511.9 and subsections of the
536 Building Code.

537 **Exception:** Structures constructed to meet the Residential Code shall comply with Access
538 and Egress requirements of the Residential Code.

539 **505.2.2.2 Skylight housing.** Skylight frame material shall be noncombustible.

540 **505.2.2.3 Walkway pad.** The use and application of walkway pad material may not
541 compromise the ASTM E 108 or UL 790 rating of the roof. The material must meet ASTM
542 E 108 or UL 790, or meet the requirements of Section 503.2.

543 **505.2.2.4 Vegetative roofs and landscaped roofs.** Vegetative roofs and landscaped roofs,
544 regardless of the distance from the wildland, shall not be allowed within the Wildland-
545 Urban Interface.

546 **505.3 Protection of eaves.** Protection of eaves, soffits, fasciae, rafter tails, and exterior
547 ceilings shall comply with the requirements of Sections 505.3.1 through 505.3.5.

548 **505.3.1 Eaves.** Eaves shall be completely covered and enclosed by non-combustible
549 materials, by solid combustible materials at least three-quarters inch thick, or materials
550 complying with Section 504.3.

551 **505.3.2 Fasciae.** Ignition-resistant fasciae are required and shall be constructed with one
552 of the following:

- 553 1. Three-quarters-inch (19.1 mm) solid ignition-resistant material complying with
554 Section 503.2.
- 555 2. One-hour fire-resistance-rated construction protected on the exterior by an
556 ignition-resistant building material complying with Section 503.2.
- 557 3. Two-inch (51 mm) nominal dimension lumber protected on the exterior by an
558 ignition-resistant building material complying with Section 503.2.

559 **505.3.3 Gaps between materials.** Gaps between exterior facing materials within the eaves
560 or between eave materials and the wall or and roof assembly caused by normal construction
561 techniques or any other unsealed roof opening providing access to the attic space shall be
562 provided with ember protection according to Section 506.5 of this code.

563 **505.3.4 Exposed rafter tails.** Exposed rafter tails are allowed when built of material
564 classified as heavy timber per the Building Code, provided that the exterior wall be rated
565 for at least one hour and extend from foundation to bottom of roof deck. The roof deck
566 shall be a noncombustible or ASTM E 84 Class A rated material per 503.2.4 and shall
567 extend a distance of not less than 48 inches on both the exterior and interior side of the
568 exterior wall.

569 **505.3.5 Exterior ceilings.** Exterior ceilings below covered patio roofs, porches, balconies,
570 decks, floors above, and all similar structures shall be built using ignition-resistant building
571 materials that comply with Section 503.2. Rated ceiling assemblies shall have an ignition-
572 resistant building material as the exterior finish.

573 **505.4 Gutters and downspouts.** Gutters and downspouts shall be constructed of
574 noncombustible materials. Gutters shall be provided with an approved means to prevent
575 the accumulation of leaves and debris in the gutter and be constructed of a non-corrosive
576 and non-combustible material.

577 **505.7 Appendages and structures.** For an unenclosed appendage, projection, or structure
578 that is attached to or located within 30 feet (9144 mm) of a building with habitable spaces,
579 such as a deck, balcony, carport, pergola, patio cover, awning, canopy, or similar structure,
580 the entire appendage, projection, or structure must be constructed using at least one-hour
581 fire-resistance-rated materials, heavy timber, or one of the following:

- 582 1. Approved non-combustible materials;
- 583 2. Fire-retardant-treated wood approved for exterior use that complies with Building
584 Code Section 2303.2; or
- 585 3. Ignition-resistant building materials that comply with Section 503.2 of this code.

586 **Exceptions:**

- 587 1. Coated materials shall not be used as the walking surface of decks.
- 588 2. The underside of a deck not subject to Section 505.7.1 consisting of the columns,
589 beams, bracing, and floor joists, shall be allowed to be built from any approved
590 material provided that the entire underside of the deck is completely enclosed with
591 a wall meeting the requirements of Section 505.5. Ventilation shall be provided
592 per Section 505.10. Storage or access points to allow storage under the deck shall
593 not be allowed.

594 Deck boards shall not have gaps larger than one-eighth inch between the boards or ember
595 protection shall be provided per Section 505.10 attached directly to the underside of the
596 deck boards. Guard rails, handrails, columns, and steps leading to grade shall comply with
597 these materials.

598 **505.7.1 Underfloor areas.** Where the structure is located and constructed so that the
599 structure or any portion thereof projects over a descending slope surface greater than 10
600 percent, the area below the structure shall be enclosed with exterior walls constructed in
601 accordance with Section 505.5. Ventilation shall be provided per Section 505.10. Storage
602 or access points to allow storage under the deck shall not be allowed.

603 **505.7.2 Fences.** Any portion of a fence within 10 feet (3048 mm) of a building or structure
604 shall be built using a material that complies with Section 503.2 of this code. New and
605 replacement fences shall comply with this section. Separation distance between structures
606 shall be per the definition of the Building Code or the Residential Code.

607 **505.8 Exterior glazing.** Skylights shall be tempered glass, multilayered glazed panels,
608 glass block, or have a fire protection rating of not less than 20 minutes.

609 **505.10 Vents.** Where provided in accordance with Section 505.10.3, ventilation, exhaust,
610 or outside air intake openings shall be in accordance with Section 505.10.1 or Section
611 505.10.2 to resist building ignition from the intrusion of burning embers and flame through
612 the ventilation openings. Dryer vents and associated ductwork shall be noncombustible.

613 **Exceptions:**

- 614 1. An opening that is prohibited from being obstructed and must remain clear
615 because of another adopted code or other Land Development Code requirements,
616 provided that any flame or ember that penetrates the opening cannot reach
617 combustible materials or surfaces.
- 618 2. A dryer vent shall not require ember protection in accordance with Sections
619 505.10.1 or 505.10.2.

620 **505.10.3 Vent locations.** Protection shall be provided for ventilation openings for
621 exhaust, outside air intake, enclosed attics, gable ends, ridge ends, underfloor ventilation,
622 foundations and crawl spaces, either in a horizontal or vertical surface. Attic ventilation
623 openings shall not be located in soffits, in eave overhangs, between rafters at eaves or in
624 other overhang areas. Gable-end and dormer vents shall be located not less than 10 feet
625 (3048 mm) from lot lines. Underfloor ventilation openings shall be located as close to
626 grade as practical.

627 **505.11 Detached accessory structures.** Detached accessory structures located in the
628 wildland-urban interface, including those listed in Section 505.7, shall be required to
629 comply with this code.

630 **505.11.1 Underfloor areas.** The underfloor area below the detached accessory structure
631 shall comply with Section 505.6 or Section 505.7.1, as applicable.

632 **505.11.2 Boat Docks.** Boat dock walking surfaces shall be constructed of approved non-
633 combustible materials or ignition-resistant materials that comply with Section 503.2. Boat
634 dock roof assemblies shall comply with Section 505.2.

635 **SECTION 506 PROXIMITY ZONE C IGNITION-RESISTANT CONSTRUCTION**

636 **506.1 General.** Proximity Zone C Ignition-resistant construction shall be in accordance
637 with Sections 506.2 through 506.11.

638 **506.2 Roof assembly.** Roofs shall have a roof assembly that complies with a Class A
639 rating when tested in accordance with ASTM E108 or UL 790. For roof assemblies where
640 the profile allows a space between the roof covering and roof deck, the space at the eave
641 ends shall be firestopped to preclude entry of flames or embers, or have one layer of 72-
642 pound (32.4 kg) mineral-surfaced, non-perforated cap sheet complying with ASTM D3909
643 installed over the combustible roof deck.

644 **Exceptions:**

- 645 1. Class A roof assemblies include those with coverings of brick, masonry or an
646 exposed concrete roof deck.
- 647 2. Class A acceptable roof assemblies shall also include ferrous or copper shingles
648 or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on
649 noncombustible decks or ferrous, copper or metal sheets installed without a roof
650 deck on noncombustible framing.
- 651 3. Class A roof assemblies include minimum 16 oz./sq. ft. (0.0416 kg/m²) copper
652 sheets installed over combustible roof decks.
- 653 4. One- and two-family residential structures with roof coverings on roofs sloped
654 greater than 2 units vertical in 12 units horizontal, such as shingles, tiles, or metal
655 sheets, tested and certified by ASTM E108 or UL 790 as a Class A roof covering
656 shall be allowed to be installed over a standard combustible roof deck with no less
657 than 30lb felt or equivalent underlayment.

658 **506.2.1.1 Woven roof valleys.** Valley shingles that have been weaved or woven (closed
659 valley) to create a continuous layer of shingles over the valley may be flashed using 26
660 gage (0.019 inch) galvanized sheet metal running the full length of the valley and extending
661 at least 12 inches on both planes of the roof surface. Flashing shall be viewable from the
662 end of the valley at the roof eave for inspections.

663 **506.2.2 Materials and systems installed over a roof assembly.** Materials and systems
664 installed over a roof assembly shall comply with the requirements of Sections 506.2.2.1
665 through 506.2.2.3.

666 **506.2.2.1 Raised-deck systems.** Raised-deck systems as defined by the Building Code
667 installed above a roof assembly shall comply with Section 1511.9 and subsections of the
668 Building Code.

669 **Exception:** Structures constructed to meet the Residential Code shall comply with Access
670 and Egress requirements of the Residential Code.

671 **506.2.2.2 Skylight housing.** Skylight frame material shall be noncombustible.

672 **506.2.2.3 Walkway pad.** The use and application of walkway pad material may not
673 compromise the ASTM E 108 or UL 790 rating of the roof. The material must meet ASTM
674 E 108 or UL 790 or meet the requirements of Section 503.2.

675 **506.2.2.4 Vegetative roofs and landscaped roofs.** Vegetative roofs and landscaped roofs,
676 regardless of the distance from the wildland, shall not be allowed within the Wildland-
677 Urban Interface.

678 **506.4 Protection of eaves.** Protection of eaves, soffits, fasciae, rafter tails, and exterior
679 ceilings shall comply with the requirements of Sections 506.4.1 through 506.4.6.

680 **506.4.1 Eaves.** Eaves shall be completely covered and enclosed by non-combustible
681 materials, by solid combustible materials at least three-quarter inch thick, or materials
682 complying with Section 504.3.

683 **506.4.2 Fasciae.** Ignition-resistant fasciae are required and shall be constructed with one
684 of the following:

- 685 1. Three-quarter inch (19.1 mm) solid ignition-resistant material complying with
686 Section 503.2.
- 687 2. One-hour fire-resistance-rated construction protected on the exterior by an
688 ignition-resistant building material complying with Section 503.2.
- 689 3. Two-inch (51 mm) nominal dimension lumber protected on the exterior by an
690 ignition-resistant building material complying with Section 503.2.

691 **506.4.3 Gaps between materials.** Gaps between exterior facing materials within the eaves
692 or between eave materials and the wall or and roof assembly caused by normal construction
693 techniques or any other unsealed roof opening providing access to the attic space shall be
694 provided with ember protection according to Section 506.5.

695 **506.4.4 Exposed rafter tails.** Exposed rafter tails are allowed when built of ignition-
696 resistant material complying with Section 503.2 or material classified as heavy timber per
697 the Building Code.

698 **506.4.5 Exterior ceilings.** Exterior ceilings below covered patio roofs, porches, balconies,
699 decks, floors above, and all similar structures shall be built using ignition-resistant building
700 materials that comply with Section 503.2. Rated ceiling assemblies shall have an ignition-
701 resistant building material as the exterior finish.

702 **506.4.6 Gutters and downspouts.** Gutters and downspouts shall be constructed of
703 noncombustible materials. Gutters shall be provided with an approved means to prevent
704 the accumulation of leaves and debris in the gutter and be constructed of a non-corrosive
705 and non-combustible material.

706 **506.5 Vents.** Where provided in accordance with Section 506.5.3, ventilation, exhaust, or
707 outside air intake openings shall be in accordance with Section 506.5.1 or Section 506.5.2
708 to resist building ignition from the intrusion of burning embers and flame through the
709 ventilation openings. Dryer vents and associated ductwork shall be noncombustible.

710 **Exceptions:**

- 711 1. An opening that is prohibited from being obstructed and must remain clear
712 because of another adopted code or other Land Development Code requirements,
713 provided that any flame or ember that penetrates the opening cannot reach
714 combustible materials or surfaces.
- 715 2. A dryer vent shall not require ember protection in accordance with Section 506.5.1
716 or Section 506.5.2.

717 **506.5.1 Performance requirements.** Ventilation openings shall be fully covered with
718 listed vents, tested in accordance with ASTM E2886, to demonstrate compliance with all
719 the following requirements:

- 720 1. There shall be no flaming ignition of the cotton material during the Ember
721 Intrusion Test.
- 722 2. There shall be no flaming ignition during the Integrity Test portion of the Flame
723 Intrusion Test.
- 724 3. The maximum temperature of the unexposed side of the vent shall not exceed
725 662°F (350°C).

726 **506.5.2 Prescriptive requirements.** Where provided, attic ventilation openings,
727 foundation or underfloor vents, or other ventilation openings in vertical or horizontal
728 surfaces and vents through roofs shall not exceed 144 square inches (0.0929 m²) each.
729 Such vents shall be covered with noncombustible corrosion-resistant mesh with openings

730 not to exceed one-eighth inch (3.2 mm) or shall be designed and approved to prevent flame
731 or ember penetration into the structure.

732 **506.5.3 Vent locations.** Protection shall be provided for ventilation openings for
733 exhaust, outside air intake, enclosed attics, gable ends, ridge ends, under eaves and
734 cornices, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are
735 applied directly to the underside of roof rafters, underfloor ventilation, foundations and
736 crawl spaces, plenum, or any other opening intended to permit a flow of air between the
737 outside and inside of the structure, either in a horizontal or vertical surface. Gable-end
738 and dormer vents shall be located not less than 10 feet (3048 mm) from lot lines.
739 Underfloor ventilation openings shall be located as close to grade as practical.

740 **506.6 Appendages and structures.** For an unenclosed appendage, projection, or structure
741 that is attached to or located within 10 feet (3048 mm) of a building with habitable spaces
742 and projections, such as a deck, balcony, carport, pergola, patio cover, awning, canopy, or
743 similar structure, the entire appendage or structure must be constructed using at least one-
744 hour fire-resistance-rated materials, heavy timber, or one of the following:

- 745 1. Approved non-combustible materials;
- 746 2. Fire-retardant-treated wood approved for exterior use that complies with Section
747 2303.2 of the Building Code; or
- 748 3. Ignition-resistant building materials that comply with Section 503.2 of this code.

749 **Exceptions:**

- 750 1. Coated materials shall not be used as the walking surface of decks.
- 751 2. The underside of a deck consisting of the columns, beams, bracing, and floor
752 joists, shall be allowed to be built from any approved material provided that the
753 entire underside of the deck is completely enclosed with a wall meeting the
754 requirements of Section 504.5. Ventilation shall be provided per Section 506.5.
755 Storage or access points to allow storage under the deck shall not be allowed.

756 Deck boards shall not have gaps larger the one-eighth inch between the boards or ember
757 protection shall be provided per Section 506.5 attached directly to the underside of the deck
758 boards. Guard rails, handrails, columns, and steps leading to grade shall comply with these
759 materials.

760 **506.6.1 Fences.** Any portion of a fence within 10 feet (3038 mm) of a building or structure
761 shall be built using a material that complies with Section 503.2 of this code. New and
762 replacement fences shall comply with this section. Separation distance between structures
763 shall be per the definition of the Building Code or the Residential Code.

764 **Exception:** For residential fences associated with structures constructed in compliance
765 with the Residential Code, the dimension may be reduced from 10 feet (3038 mm) to 5 feet
766 (1524 mm).

767 **506.7 Exterior glazing.** Skylights shall be tempered glass, multilayered glazed panels,
768 glass block, or have a fire protection rating of not less than 20 minutes.

769 **506.8 Detached accessory structures.** Detached accessory structures located in the
770 wildland-urban interface, including those listed in Section 506.6, shall be required to
771 comply with this code.

772 **506.8.1 Underfloor areas.** The underfloor area below the detached accessory structure
773 shall comply with Section 506.3 or Section 506.6, as applicable.

774 **506.8.2 Boat Docks.** Boat dock walking surfaces shall be constructed of approved non-
775 combustible materials or ignition-resistant materials that comply with Section 503.2. Boat
776 dock roof assemblies shall comply with Section 506.2.

777 **507.1 General.** The roof covering on buildings or structures in existence prior to the
778 adoption of this code that are replaced or have 50 percent or more replaced shall be entirely
779 replaced with a roof covering required for new construction as required per Section 504.2.

780 **602.1 General.** In areas of the wildland-urban interface where there is a non-conforming
781 water supply per Section 404 of this code, Section 507 of the Fire Code, or Appendix B of
782 the Fire Code, an approved automatic sprinkler system may be installed in all habitable
783 occupancies constructed to meet the Residential Code, excluding townhouses, regardless
784 of the size of the fire-flow calculation area of the structure in lieu of providing a conforming
785 water supply. The installation of the automatic sprinkler systems shall be in accordance
786 with nationally recognized standards appropriate for the building being constructed.

787 **603 Defensible space and Ember Ignition Zone**

788 **603.2 Fuel modification.** When required, buildings or structures within the wildland-
789 urban interface shall comply with the fuel modification distances contained in Table 603.2.
790 For all purposes the fuel modification distance shall be not less than 30 feet (9144 mm) or
791 to the lot line, whichever is less. Distances specified in Table 603.2 shall be measured on
792 a horizontal plane from the perimeter or projection of the building or structure as shown in
793 Figure 603.2. Distances specified in Table 603.2 are allowed to be increased by the code
794 official because of a site-specific analysis based on local conditions and the fire protection
795 plan.

796 **Exception:** An Ember Ignition Zone per Section 603.2.1 of this code is required in
797 all areas of the Wildland-Urban Interface.

798 **Table 603.2**

799

Required Defensible Space

Proximity Zone	Fuel Modification Distance (feet) ^a
Proximity Zone C	30 ^b
Proximity Zone B	50 ^b
Proximity Zone A	100 ^b

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For SI: 1 foot = 304.8mm.

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a. Distances are allowed to be increased due to site-specific analysis based on local conditions and the Fire Protection Plan.

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b. Or to the property line, whichever is less.

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603.2.1 Ember Ignition Zone (EIZ). An area of five feet measured from the edge of the roof overhang that extends around the entire perimeter of the structure including covered decks and patios. Uncovered decks shall be measured from the side of the deck on all exposed sides. All buildings or structures located within the Wildland-Urban Interface shall be required to comply with Ember Ignition Zone (EIZ) requirements. The EIZ shall be landscaped using gravel, pavers, or other non-combustible materials. The EIZ shall be maintained free of all combustible materials at all times. The EIZ shall be maintained clear of all weeds, grass, plants, shrubs, trees, branches, and vegetative debris (leaves, needles, cones, bark, etc.). Combustible materials such as lawn furniture, door mats, combustible planter boxes, small storage cabinets, and/or similar materials shall not be located in the EIZ.

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Exceptions:

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1. Protected and Heritage trees are allowed to remain within the EIZ of existing buildings and structures. Pruning or removal of Protected and Heritage trees within the EIZ shall comply with all requirements of the Land Development Code and the Environmental Criteria Manual. EIZ requirements are not a means by which Protected or Heritage trees may be approved for removal.

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2. For structures of Type I & II construction, the EIZ shall only be required in front of and 10 feet to each side of required egress points of the structure and fire systems access doors.

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3. Artificial turf shall not be used in the EIZ. Any use within defensible space shall have a Class A Rating per ASTM E108.

- 827 4. Protective mulch for critical root zone (CRZ) is allowable during construction
828 in the EIZ per Environmental Criteria Manual (ECM). Any protective mulch
829 used shall be removed at the completion of construction.
- 830 5. Properties within Proximity Zone C shall be allowed green, moist, and closely
831 mowed lawn grass in lieu of hardscape in the EIZ. Dormant grass shall be
832 seeded with perennial Rye grass to maintain the fire resistance during the lawn
833 grass dormant periods.

834 **603.2.2 Responsible party.** Persons owning, leasing, controlling, operating, or
835 maintaining buildings or structures requiring defensible spaces are responsible for
836 modifying or removing and maintaining nonfire-resistive vegetation on the property
837 owned, leased, or controlled by said person.

838 **603.2.3 Trees.** Trees that comply with Section 604.4 are allowed within a defensible space.

839 **603.2.4 Ground cover.** Deadwood, woody vegetation, and litter shall be regularly
840 removed from and maintained around trees. Where vegetative fuels or cultivated ground
841 cover, such as green grass, ivy, succulents or similar plants are used as ground cover, they
842 are allowed to be within the designated defensible space, provided that they do not form a
843 means of transmitting fire from the natural growth to any structure or tree canopy.

844 **604 Maintenance of Defensible space and Ember Ignition Zone**

845 **604.4 Trees.** A person must maintain a tree within a defensible space to prevent fire from
846 entering or spreading through canopies as set forth in City Code requirements. Pruning or
847 removal of Protected and Heritage trees shall comply with all requirements of the Land
848 Development Code and the Environmental Criteria Manual Section 3 (*Tree and Natural*
849 *Area Preservation*). Defensible space requirements are not a means by which Protected or
850 Heritage trees may be approved for removal. Overhead electric line clearance requirements
851 set forth in the Utilities Criteria Manual Section 1 (*Austin Energy Design Criteria*) apply
852 to a tree within a defensible space. Allowable tree pruning should focus on removal of
853 limbs located under the eaves of structures, and limbs less than six feet (1829 mm) above
854 the ground surface.

855 **606.1 General.** The storage of liquefied petroleum gas (LP-gas) and the installation and
856 maintenance of pertinent equipment shall be in accordance with the Fire Code and NFPA
857 58.

858 **606.2 Location of containers or tanks.** LP-gas containers or tanks shall be located within
859 the defensible space in accordance with the Fire Code and NFPA 58.

860 **607.1 General.** Firewood and combustible material shall not be stored in unenclosed
861 spaces beneath buildings or structures, or on decks, or under eaves, canopies, or other
862 projections or overhangs. Where required by the code official, storage of firewood and

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combustible materials shall be located not less than 20 feet (6096 mm) from structures and separated from the crown of trees by a horizontal distance of not less than 15 feet (4572 mm).

C101.1 Fire hazard severity form. Where required, Table C101.1 shall be used as an alternative for analyzing the fire hazard severity of building sites.

TABLE C101.1 FIRE HAZARD SEVERITY FORM

2024 INTERNATIONAL WILDLAND-URBAN INTERFACE CODE®	
TABLE C101.1—FIRE HAZARD SEVERITY FORM	
PART 1	
A. Subdivision Design Points	
1. Ingress/Egress	
Two or more primary roads	1__
One road, 30 or less dwelling units (two-way)	3__
One road, more than 30 dwelling units (two-way)	5__
One road (one way direction)	10__
2. Width of Primary Road	
25 feet (7620 mm) or more	1__
Less than 25 feet (7620 mm) to 20 feet (6096 mm)	3__
Less than 20 feet (6096 mm)	5__
3. Accessibility	
Road grade 5% or less	1__
Road grade more than 5%	3__
4. Secondary Road Terminus	
Loop roads, cul-de-sacs with an outside turning radius of 50 feet (15 240 mm) or greater	1__
Cul-de-sac turnaround	2__

Dead-end roads 150 feet (45 720 mm) or less in length	3__
Dead-end roads greater than 150 feet (45 720 mm) in length	5__
5. Site Specific Access (fire lanes, driveways)	
Fire lane provided	1__
Fire lane not required per Fire Code 503.1 and Driveway not required per WUIC 403.2	1__
12 foot (3658 mm) or greater Driveway provided	3__
Less than 12-foot (3658 mm) Driveway provided	5__
6. Street Visible Signage	
Present	1__
Not present	3__
B. Proximity to existing structures (includes adjacent properties)	
Greater than 10 feet (3048 mm) from nearest structure	1__
10 feet (3048 mm) to 5 feet (1524 mm) from nearest structure	5__
Less than 5 feet (1524 mm) from nearest structure	10__
C. Fire Protection—Water Source	
Hydrant less than 500 feet or 600 feet for Group R-3 and U occupancies With fire sprinklers provided, sufficient fire flow per Appendix B	1__
Hydrant less than 500 feet or 600 feet for Group R-3 and U occupancies With no fire sprinklers provided, sufficient fire flow per Appendix B	2__
Hydrant farther than 500 feet or 600 feet for Group R-3 and U occupancies With fire sprinklers provided, sufficient fire flow per Appendix B	2__
Hydrant farther than 500 feet or 600 feet for Group R-3 and U occupancies	5__

With no fire sprinklers provided, sufficient fire flow per Appendix B	
Hydrant farther than 1,000 feet with fire sprinklers provided, sufficient fire flow per Appendix B	7 ___
Hydrant farther than 1,000 feet with no fire sprinklers provided, sufficient fire flow per Appendix B	10 ___
Fire flow less than required per Fire Code Appendix B	10 ___
Part 1 Total	
PART 2	
D. Vegetation (IWUIC Definitions)	
1. Fuel Types	
Light	1 ___
Medium	5 ___
Heavy	10 ___
2. Defensible Space	
Meets requirements of Table 603.2 and EIZ (603.2.1)	1 ___
Does not meet requirements of Table 603.2 but meets 603.2.1	10 ___
Does not meet requirements of Table 603.2 or EIZ 603.2.1	20 ___
E. Topography	
8% or less	1 ___
More than 8%, but less than 20%	4 ___
20% or more, but less than 30%	7 ___
30% or more	10 ___
F. Roofing Material	
Class A Fire Rated	1 ___
Class B Fire Rated	5 ___
Class C Fire Rated	10 ___
Nonrated / Unknown	20 ___

G. Existing Building Construction Materials	
Noncombustible siding/appendages	1__
Noncombustible siding/combustible appendages	5__
Combustible siding and appendages	10__
H. Utilities (gas and/or electric)	
All underground utilities	1__
One underground, one above ground	3__
All above ground	5__
<i>Part 2 Total</i>	
<u>Total for Subdivision</u>	
Moderate Hazard 20–39	
Extreme Hazard 40+	

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APPENDIX D. FUEL MODELS

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As set forth in Section 3.2.1 of the Austin-Travis County Community Wildfire Protection Plan, fuel loads and fire behavior within the region are indicated by the following vegetation:

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1. Sparse, dry-climate grass, or grassland, is dominated by generally short grasses that may be sparse or discontinuous (Scott and Burgan 2005). Pastures are also considered grasslands.

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2. Aggrading juniper shrub fuel type is dominated by live oak-juniper and juniper savanna. It is present throughout the county. It includes both Ashe juniper (*Juniperus ashei*), predominantly in western Travis County, and eastern redcedar (*Juniperus virginiana*), predominately in eastern Travis County. Juniper scorch and mortality values by size class are nearly identical between these two *Juniperus* species (Engle and Stritzke 1995).

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3. Closed juniper woodland has sufficient canopy closure to limit growth of tall grass (18 inches or more tall) to less than 50 percent of the ground cover. Juniper, including Ashe juniper and/or eastern redcedar, and deciduous trees are the dominant vegetation types.

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