

2024 International Wildland Urban Interface Code Update

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Intent

- Adopt the 2024 International Wildland Urban Interface Code to create a more fire adapted community while reducing risk of urban conflagration
- Draft amendments based on local wildfire risk and heat transfer science
 1. Embers
 2. Radiant Heat
 3. Direct Flame
- Simplify Construction Requirements
- Align with City of Flagstaff Zoning Code and Forest Management Plan
- Align with Insurance Institute for Business and Home Safety's Wildfire Prepared Home Plus and Wildfire Prepared Home Neighborhood Standards

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Significant Updates

- **Section 5 Construction Regulations:**
 - Deconflict three construction standards to just one standard
 - Eliminate uncertainty with fire hazard severity and defensible space calculations
 - Move from ignition resistant to non-combustible construction

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2024 IWUIC Significant Changes & Cost Impacts (Condensed Summary)

2024 IWUIC changes focus on transitioning from ignition-resistant construction toward noncombustible construction materials. Cost impacts below are estimated based on a typical 1,800 square foot single-family residence.

Key Change	Impact / Cost
Exterior Walls	Transition to noncombustible siding. Estimated material increase: < \$40 for 1,800 sq ft home.
Eaves / Soffits	Transition to noncombustible soffit materials. Estimated increase: < \$1,680 depending on material selection.
Covered Gutters	New gutter cover requirements. Estimated increase: ~\$500.
0-5 Foot Noncombustible Zone	Transition from mulch/wood fencing to gravel/metal fencing. Estimated increase: ~\$2,500.
Windows	No major change. Requires minimum 20-minute fire-resistance-rated glazing per NFPA 257.
Roof Assemblies	No major change. Requires Class A roof assembly.
Doors	No major change. Requires noncombustible or solid-core wood doors.
Gutters	No major change. Requires noncombustible metal gutters.
Vents	No Major Change: 1/8" screening required.
Decks	Transition to noncombustible deck materials may increase costs depending on design.

WHEN COSTS ARE TRIGGERED (IWUIC)
<ul style="list-style-type: none"> • Material Selection → Noncombustible siding, soffits, and fencing increase cost • Site Design → Larger defensible space areas increase landscape and fencing costs • Roof & Deck Design → Specialty noncombustible systems increase cost • Home Configuration → Larger homes with complex roof/eave systems increase costs • Voluntary Wildfire Hardening → Enhanced wildfire mitigation systems increase upfront cost

Total Project Impact: Research indicates upgrading to noncombustible materials typically increases total construction costs by approximately 1–2% for a typical 1,800 sq ft residence.

Long-Term Value: Noncombustible materials generally last longer, require less maintenance, may reduce insurance premiums, and improve wildfire survivability.

Avoided Costs: Research indicates every \$1 invested in wildfire-resistant construction may save approximately \$210 in avoided future wildfire losses.

IBHS Wildfire Prepared Home: Voluntary wildfire mitigation certification programs are now available to Arizona residents.

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2024 International Fire Code

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Major Code Impacts: 2018–2024 IFC

- Lithium-ion battery and ESS requirements
 - This is one of the biggest themes of the 2024 IFC
- Additive Manufacturing (3D Printing)
- Emergency Responder Communication Systems (ERRCS/ERCES)
- Upholstered Furniture & Mattress Storage
- Hazardous Materials / Control Areas Coordination
- Electric Vehicle Infrastructure Coordination
- Enhanced Hazardous Materials Provisions
- Carbon Monoxide Detection

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