NuBilt Restoration & Construction

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Commercial Wildfire Property Protection Audit

A 3-priority action plan for commercial property owners, managers, and facilities directors. Work Priority 1 first — lowest cost, highest immediate protection — then Priority 2, then Priority 3.

How to use this audit

Organized into three priority tiers by urgency and fire-survivability impact. Complete all Priority 1 items before moving to Priority 2. Use the checkboxes to track completion and the italic "why it matters" note under each item to understand the code basis and reasoning. Priority 3 items are structural investments that deliver the deepest, most durable fire resistance.

Property Information

Property Name / Business: _____

Property Address: _____

City / County: _____

State / ZIP: _____

Owner Name: _____

Property Manager / Contact: _____

Phone / Email: _____

Building Type (office / retail / industrial / mixed-use): _____

Year Built / Sq Ft / # of Stories: _____

Audit Date / Completed By: _____

PRIORITY 1 — CRITICAL — ACT NOW

Zero-cost and low-cost actions that immediately reduce ember ignition risk, protect occupants, and prepare the building for rapid evacuation. Do these today. Complete ALL Priority 1 items before moving to Priority 2.

Commercial properties face ember ignition risks that differ fundamentally from residential — larger footprints, combustible loading-dock areas, multiple tenants, and complex mechanical systems all create additional vulnerabilities.

Zone 0–10 ft: Immediate Perimeter

- [ ] **Remove all combustible mulch, wood chips, and organic groundcover within 10 ft of every building; replace with gravel, decomposed granite, or concrete.**
  Embers travel up to a mile ahead of a fire front — combustible groundcover at the building base is the #1 commercial ignition pathway.
- [ ] **Clear all dead leaves, pine needles, paper waste, and debris from roof drains, gutters, scuppers, and downspouts.**
  Flat commercial roofs accumulate debris that ignites from ember shower and channels fire to the roof membrane and HVAC equipment.
- [ ] **Remove all cardboard, pallets, wood crates, and combustible inventory staged within 10 ft of any exterior wall, loading dock, or roll-up door.**
  Loading docks and staging areas are among the highest wildfire ignition-risk zones on commercial properties.
- [ ] **Relocate dumpsters, recycling bins, and compactors a minimum of 50 ft from all structures; use non-combustible enclosures.**
  Ember-driven dumpster fires are a documented cause of major commercial fire losses — 50 ft is the NFPA standard.
- [ ] **Clear dead or dry vegetation, weeds, and grass from the foundation perimeter, mechanical yard, and utility corridors.**
  Dry vegetation at the building base and around mechanical equipment creates direct ignition pathways to the structure.
- [ ] **Remove combustible materials stored against or beneath exterior stairways, fire escapes, canopies, and covered walkways.**
  These overhead structures trap embers and expose structural steel connections to direct flame impingement.

Vents, Openings & Ember Entry Points

- [ ] **Install or inspect 1/16" corrosion-resistant metal mesh on all louvers, intake vents, exhaust vents, and mechanical openings at or near grade.**
  Unscreened commercial vents are a primary ember-intrusion pathway into warehouse, storage, and occupied spaces.
- [ ] **Seal all gaps around conduit penetrations, pipe sleeves, electrical raceways, and duct penetrations through exterior walls.**
  Commercial buildings typically have dozens of unsealed wall penetrations — each is an ember entry point into wall cavities.
- [ ] **Ensure all dock doors, overhead doors, and roll-up doors can be fully closed and sealed before evacuation.**
  Open dock doors expose the entire warehouse interior to direct ember intrusion and wind-driven fire.
- [ ] **Verify all fire doors are operational, self-closing, and latching correctly throughout the building.**
  Propped or inoperative fire doors defeat compartmentalization and allow rapid fire spread between occupancies.

- [ ] **Close and seal all roof access hatches, skylight curbs, and smoke vents that are not automatically activated.**
  Open or improperly sealed roof penetrations allow direct ember and flame entry from above.

Evacuation & Life-Safety Protocols

- [ ] **Verify all emergency exit signage is illuminated, unobstructed, and clearly visible from every occupant location.**
  Smoke and power loss occur simultaneously during wildfire events — illuminated signage is life-critical.
- [ ] **Confirm all emergency lighting units have been tested within the past 30 days and batteries are functional.**
  NFPA 101 requires monthly functional testing — non-functional emergency lights create liability and endanger occupants.
- [ ] **Post and communicate the building evacuation plan to all tenants, employees, and on-site contractors.**
  Occupants who have never reviewed the plan are a liability during a rapid-onset event.
- [ ] **Register the property with county emergency management and sign up for Wireless Emergency Alerts and county notifications.**
  WUI-zone properties should be registered so agencies can coordinate suppression access and evacuation.
- [ ] **Document and photograph all contents, equipment, fixtures, and tenant improvements for insurance; store off-site or in cloud backup.**
  Commercial claims without pre-loss documentation are routinely contested.
- [ ] **Identify and communicate primary and alternate evacuation routes; post route maps at all exits.**
  Roads can be blocked within minutes — occupants must know the alternate route without relying on GPS.

Immediate Exterior Prep Before Evacuation

- [ ] **Close and lock all exterior windows, doors, dock doors, and overhead doors before departing.**
  A well-sealed commercial envelope significantly reduces ember penetration and delays fire entry.
- [ ] **Shut off natural gas at the main shutoff valve and notify the gas utility.**
  Open gas lines during a wildfire are an explosion hazard for firefighters and escalate structural losses.
- [ ] **Shut down all non-essential HVAC systems to prevent smoke and ember infiltration through air intakes.**
  Running HVAC actively draws embers and smoke-laden air into the building — shutdown is standard AHJ protocol.
- [ ] **Activate the fire suppression system in manual hold/test mode if appropriate; confirm sprinkler control valves are open.**
  An active system with open valves gives the building its best chance of surviving.
- [ ] **Remove combustible awnings, banners, exterior signage, and shade structures if time allows.**
  Vinyl and fabric signage ignites easily and can transfer flame to the building envelope within minutes.

Priority 1 items completed: _____ / 23

Commercial fire damage? NuBilt responds 24/7.

NuBilt Restoration & Construction responds 24/7 across the Denver metro and Colorado Front Range. We handle smoke and soot cleanup, structural drying, board-up, content restoration, and full reconstruction — and we work directly with your insurance carrier. Call (303) 368-4688 or email info@nubilt.com.

PRIORITY 2 — IMPORTANT — WITHIN 90 DAYS

Defensible space, fire-system compliance, and insurance readiness. Build your commercial perimeter and confirm all life-safety systems are operational before fire season. Many items are required for insurance renewal in high-risk zones.

Zone 0–30 ft: Lean, Clean & Green

- [ ] **Remove all dead, dying, or drought-stressed trees, shrubs, and ornamental plantings within 30 ft of all structures.**
  Dead commercial landscape plantings adjacent to buildings are high-value fuel.
- [ ] **Reduce all grass and groundcover to 4 in. or less; maintain through fire season on a documented schedule.**
  Tall dry grass creates a continuous fuel path from the perimeter to the building.
- [ ] **Space landscape shrubs a minimum 3 ft apart; eliminate continuous planting beds against building walls.**
  Continuous beds against commercial facades are among the most common ember-ignition fuel sources.
- [ ] **Remove lower branches from trees within 30 ft of structures up to 6–10 ft above grade.**
  Ladder fuels let ground fire climb into the canopy and spread to the roofline or HVAC equipment.
- [ ] **Ensure tree canopies within 30 ft do not touch adjacent canopies or overhang the roofline.**
  Canopy-to-canopy travel can reach a rooftop faster than suppression teams can respond.
- [ ] **Remove ornamental grasses, bamboo, and highly flammable decorative plantings from the 0–30 ft zone.**
  Ornamental grasses at commercial entries are among the most flammable landscape species available.

Zone 30–100 ft: Fuel Reduction Zone

- [ ] **Space trees so canopies are at least 30 ft apart; remove trees that cannot be brought into compliance.**
  Continuous canopy coverage lets fire build intensity and speed before reaching the structure.
- [ ] **Remove all dead, diseased, beetle-killed, or structurally compromised trees immediately.**
  Dead standing trees fall on structures and generate large burning embers.
- [ ] **Eliminate ladder fuels — shrubs, brush piles, low branches, and understory vegetation.**
  WUI-adjacent commercial properties frequently border open space where ladder fuels are abundant.
- [ ] **Mow and maintain all grasses to 4 in. or lower throughout fire season.**
  Unmowed perimeter grasses are a common finding in post-fire loss investigations.
- [ ] **Remove all slash, wood-chip piles, and cut vegetation from the 100-ft perimeter — chip or haul offsite.**
  Slash piles create concentrated fuel that can burn for days and re-ignite in wind events.
- [ ] **Assess and clear adjacent open space, easements, or right-of-way for fuel accumulation.**
  Commercial properties often border public lands or vacant parcels with unmanaged fuel loads.

Roof Systems & Above-Grade Equipment

- [ ] **Inspect the full roof for deteriorated membrane, open seams, punctures, blistering, or exposed substrate; repair all deficiencies.**
  A commercial total loss can begin at a single unsealed seam.
- [ ] **Clear all rooftop HVAC units, RTUs, condensers, and exhaust fans of debris, bird nesting, and vegetation.**
  Debris around rooftop equipment creates ignition points next to vulnerable penetrations.
- [ ] **Inspect roof-to-wall terminations, parapet caps, counterflashing, and curb flashings for gaps or failed sealant.**
  Parapet and curb flashing failures are documented ember entry points.
- [ ] **Verify all rooftop equipment curbs, pipe penetrations, and duct penetrations are flashed, sealed, and firestopped.**
  Each unsealed penetration is a direct pathway from the fire environment into the interior.
- [ ] **Install or confirm metal gutter guards on all gutters and scuppers where open-style gutters are present.**
  Metal guards eliminate seasonal cleaning costs and reduce fire risk simultaneously.
- [ ] **Trim trees overhanging the roofline; keep a minimum 10 ft clearance between any branch and the roof surface.**
  Branch contact provides a bridge for fire to travel from the landscape to the structure.

Fire Suppression & Detection Systems

- [ ] **Verify the sprinkler system has been inspected and tested within the past 12 months per NFPA 25.**
  A system that fails during a wildfire is both a life-safety failure and a coverage dispute.
- [ ] **Confirm all sprinkler control valves are open and tamper-indicating devices are functional.**
  A single closed valve can render an entire zone inoperative — a common loss-investigation finding.
- [ ] **Test all fire-alarm initiating devices, notification appliances, and monitoring connections annually per NFPA 72.**
  Alarm failures eliminate the early warning that allows safe evacuation.
- [ ] **Confirm the monitoring station has current contact info for building management and AHJ notification.**
  Outdated monitoring contacts delay fire-department response.
- [ ] **Inspect and test all portable fire extinguishers — confirm correct type, charge, and accessibility per area.**
  Extinguishers staged at exterior access points enable initial attack on small ignitions.
- [ ] **Evaluate wildfire-specific suppression enhancements (exterior deluge, ember-resistant enclosures) for your exposure.**
  High-value properties in extreme WUI exposure may benefit from supplemental suppression.

Insurance, Compliance & Financial Preparedness

- [ ] **Review the commercial property policy: confirm replacement-cost coverage equals current construction cost per sq ft in your market.**
  Post-wildfire commercial rebuild costs are up 35–60% in Colorado since 2020 — un-updated policies are almost always underinsured.
- [ ] **Confirm business-interruption (BI) coverage covers 18–36 months of operating expenses and lost revenue.**
  WUI-county rebuilds take 24–48 months — inadequate BI is the leading cause of permanent closure after a fire.

- [ ] **Verify the policy includes ordinance-or-law coverage for code-upgrade costs during rebuilding.**
  The gap to a code-compliant rebuild can be 15–25% of project cost.
- [ ] **Document building systems, tenant improvements, installed equipment, and contents with photos and a written inventory; store off-site.**
  Properties with pre-loss inventories settle faster and at higher values.
- [ ] **Identify and document tenant-lease obligations related to damage, business interruption, and rebuild timelines.**
  Leases often contain force-majeure, relocation, and damage-threshold clauses affecting post-loss liability.
- [ ] **Contact NuBilt to pre-register the property for priority commercial response — (303) 368-4688.**
  Pre-registered properties receive priority assignment and faster TPA coordination.

Priority 2 items completed: _____ / 30

Colorado high-risk commercial counties

Boulder, Jefferson, Larimer, Grand, El Paso, and Douglas counties have the highest historical commercial wildfire impact. Properties there should treat Priority 2 with Priority 1 urgency and engage the local AHJ (Authority Having Jurisdiction) to confirm required compliance timelines.

PRIORITY 3 — LONG-TERM — STRUCTURAL HARDENING

Permanent, code-compliant upgrades that make the building fundamentally more fire-resistant. Higher investment; typically lowers premiums, improves IFC compliance, and reduces total insured exposure. NuBilt specializes in fire-resilient commercial construction — call to scope any of these.

Roofing: Fire-Resistive Assemblies

- [ ] **Replace any non-Class-A roofing with a UL-listed Class A system: Class A TPO/PVC membrane, metal standing seam, or built-up with mineral cap sheet.**
  The roof is the largest exposed horizontal surface — a Class A assembly gives the highest resistance to embers and sustained flame.
- [ ] **Install intumescent or mineral-fiber firestopping at all roof-to-wall intersections, parapet connections, and assembly terminations.**
  Fire-rated terminations stop flame from spreading from roof to wall assembly — a pathway to total loss.
- [ ] **Replace wood roof blocking, nailers, and combustible cant strips with non-combustible alternatives (steel, concrete, mineral board).**
  Embedded wood ignites from sustained ember exposure and is a documented roof-assembly fire pathway.
- [ ] **Upgrade roof edge metal, coping, and fascia to heavy-gauge steel or aluminum where combustible wood is present.**
  Metal replacement eliminates ember accumulation at combustible roof edges entirely.

Building Envelope: Walls, Windows & Doors

- [ ] **Replace combustible cladding on fire-exposure elevations with metal panel, fiber cement, brick, CMU, or stucco.**
  Metal panel and fiber cement are Class A rated and provide decades of maintenance-free fire resistance.
- [ ] **Upgrade single-pane or thermally inefficient glazing on exposed elevations to multi-pane tempered or wired glass in metal frames.**
  Single-pane storefront glass fails within minutes of radiant heat — once glazing fails, intrusion is immediate.
- [ ] **Install fire-rated overhead doors, coiling steel curtains, or exterior shutters on dock and loading-bay openings on exposed elevations.**
  Fire-rated closures can reduce dock-area losses by 60–80% in a wildfire scenario.
- [ ] **Replace hollow-metal frames and non-rated exterior doors on exposed elevations with rated assemblies per IBC Table 716.1.**
  Non-rated assemblies on exposed elevations are a code-compliance gap and a critical vulnerability.
- [ ] **Seal and weatherstrip exterior door assemblies, window frames, and curtainwall on exposed elevations with intumescent gaskets.**
  Intumescent seals expand under heat, blocking smoke, embers, and flame at perimeter gaps.

Structural Fire-Resistance Upgrades

- [ ] **Evaluate exposed structural steel on exposed elevations for intumescent coating or spray-applied fire-resistive material (SFRM).**
  Unprotected steel loses ~50% of load capacity at 1,000°F — reached within 5–10 minutes of sustained wildfire.

- ☐ **Retrofit fire-rated separation between tenant spaces and occupancy types that currently lack code-compliant separation.**
  Rated compartmentalization protects tenants and limits total loss in mixed-occupancy buildings.
- ☐ **Install firestopping at all through-penetrations in rated walls and floor assemblies; address existing unsealed penetrations.**
  Every unsealed penetration defeats the fire-resistance rating of the entire assembly.
- ☐ **Assess and upgrade exterior soffits, canopy undersides, and covered-walkway ceilings to non-combustible or fire-rated construction.**
  Combustible soffits ignite from ember accumulation and radiant heat.

Suppression & Site Infrastructure

- ☐ **Expand sprinkler coverage to storage mezzanines, concealed spaces, attics, and exterior canopies.**
  Partial coverage lets fire escape protected zones through unprotected areas.
- ☐ **Upgrade sprinkler-head density in high-piled storage, hazmat rooms, and electrical rooms to current NFPA 13 criteria.**
  Older density criteria may not achieve adequate suppression in current configurations.
- ☐ **Install a dedicated fire-department connection (FDC) and isolation-valve arrangement independent of the municipal system.**
  Wildfires frequently disrupt municipal water — a dedicated FDC gives firefighters a resource when public water fails.
- ☐ **Replace combustible wood fencing and screening connected to structures with masonry, steel, aluminum, or concrete.**
  Wood fencing acts as a fire wick, conveying ground fire directly to the building wall.
- ☐ **Establish and document an annual wildfire preparedness maintenance plan (vegetation, inspections, debris logs).**
  Carriers and AHJs increasingly require documented programs — a written plan reduces premiums and shows due diligence.
- ☐ **Contact NuBilt for a fire-resilient commercial construction consultation on any Priority 3 project — (303) 368-4688.**
  Early consultation ensures upgrades are scoped correctly, code-compliant, and bid competitively.

Priority 3 items completed: _____ / 22

Audit Scorecard

Your complete commercial wildfire protection summary.

Priority Level	Total Items	Completed	Target
Priority 1 — Critical (Act Now)	23	_____	100%
Priority 2 — Important (Within 90 Days)	30	_____	100%
Priority 3 — Long-Term (Structural)	22	_____	80%+
TOTAL AUDIT SCORE	75	_____	P1+P2: 100%

Reading your score

0–36 (0–49%): HIGH RISK — begin Priority 1 immediately. 37–51 (50–69%): MODERATE — P1 done, accelerate P2. 52–66 (70–89%): REDUCED — begin P3. 67–75 (90–100%): WELL PREPARED — all tiers complete; re-audit annually.

Audit Notes & Top Action Priorities

Commercial fire damage? NuBilt will be there — 24/7.

Large-Loss Commercial Response · Fire-Resilient Rebuilding · Serving Colorado since 1994

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