RESTORATION INTEL • FIELD QUICK CARD

THE SCENE RELEASE QUICK CARD: FIRE-JOB OPENING SEQUENCE, HAZMAT HOLD & SCOPE SEPARATION

Current version — Nov 2, 2026
Update history: restorationintel.com/commercial-fire-smoke-restoration-scope-occupancy-recovery/

PHASE 1: THE SCENE RELEASE GATE — LEGAL CONTROL & AUTHORIZATION SEQUENCE

MANDATORY OPENING GATE

• LEGAL PROHIBITION: ZERO ENTRY PRIOR TO FORMAL FIRE MARSHAL RELEASE •

The fire scene remains under the exclusive legal control of the fire department or fire marshal until formally released in writing. No restoration crew, building owner, insurance adjuster, or tenant may enter an unreleased scene — this is a strict legal prohibition, not a professional courtesy. Release requires: **(1)** Origin & cause investigation complete; **(2)** Arson investigation complete (if warranted); and **(3)** Complete fire extinguishment confirmed with zero remaining hotspots. Release timelines range from hours (minor accidental fires) to weeks (complex losses, potential arson, fatalities, or regulatory reviews).

CONTROLLED ASSESSMENT TEAM PROTOCOL

FIRST ENTRY GATE

Upon official scene release, contractor entry is a **controlled assessment — not demolition**.

- **Mandatory Team:** Project Manager (PM), Lead IICRC FSRT-certified technician, and EPA/state-licensed asbestos inspector (for any pre-1986 building).
- **Evidence Preservation:** Comprehensive photography and video of all affected areas must precede any physical material disturbance.
- **Document File:** Fire marshal written release documentation must be photographed and filed — it permits legal entry and establishes the project timeline.

STRUCTURAL REVIEW & UTILITY GATES

LIFE SAFETY

Marshal release permits investigative access, but worker safety requires independent engineering clearance:

- **15–20 Min Burn-Time Trigger:** Fire burning >15–20 minutes before suppression in wood-frame or older steel structures warrants licensed structural engineer review.
- **PE Written Clearance:** Identifies temporary shoring and exclusion zones; serves as a vital liability shield before crew entry.
- **Multi-Feed Utility Confirmation:** Electric feeds, emergency generators, natural gas, and medical gas lines (healthcare) must be confirmed safe or isolated.

PHASE 2: PRE-1986 HAZMAT HOLD — FEDERAL NESHAP & LEAD MANDATES

FEDERAL COMPLIANCE

Regulatory Trigger	Statutory Authority & Timeline	Operational Mandate & Material Scope
Pre-1986 Asbestos Survey Mandate	EPA NESHAP 40 CFR Part 61 Subpart M *Mandatory Federal Law*	Mandatory survey by EPA/state-certified asbestos inspector before demolition starts. Written notification to EPA Regional Office required at least **10 working days** before demolition begins. Emergency demolition notice can be compressed with documentation, but is never waived.
1940–1986 Common ACM Census	High-Risk Disturbance Materials *Pre-Renovation Assessment*	• Sprayed fireproofing on structural steel (chrysotile, amosite, crocidolite) • Pre-1980 9×9 and 12×12 vinyl floor tile and black cutback mastic (near-universal ACM) • Pre-1978 drywall joint compound • Pipe insulation and fittings • Ceiling tile • Roofing
Pre-1978 Lead-Based Paint Rule	EPA RRP Rule 40 CFR Part 745 *Commercial Renovation*	Certified renovation contractors (RRP program) mandatory for any work disturbing **more than 6 square feet** of painted surface per room in pre-1978 commercial structures.

PHASE 3: MULTI-TENANT SCOPE SEPARATION — THE 4-WAY SPLIT

LIABILITY & BILLING

Loss Domain	Coverage / Responsibility	Governing Baseline & Scoping Criteria
1. Building Structure & Commons	Building Owner Policy	Core structural elements, exterior envelope, common hallways, lobbies, shared utility risers, and central mechanical systems.
2. Tenant Improvements & Betterments (I&B)	Tenant Policy (subject to lease)	Leasehold improvements installed by tenant that become part of the leasehold. Allocation governed strictly by specific lease casualty terms.
3. Business Personal Property (BPP)	Tenant Policy (always)	Tenant equipment, moveable inventory, computers, trade fixtures, and proprietary business records. Excluded from building owner scope.
4. Fire Suppression Collateral Damage	Owner vs. Tenant Policy Allocation	Water and smoke damage to tenant suites resulting from municipal or sprinkler firefighting operations; depends on policy language and lease casualty clauses.

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SMOKE DISTRIBUTION, STRUCTURAL S700/STEEL RULES & RE-OCCUPANCY PATHWAY

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PHASE 4: SMOKE DISTRIBUTION ZONES & BURN PATTERN ANALYSIS

SCOPE RECONSTRUCTION

FOUR SMOKE DISTRIBUTION ZONES:

- **Zone 1 (Char/Direct Fire):** Obvious fire origin, combustion charring, and severe structural compromise.
- **Zone 2 (Visible Soot):** Driven by stack effect; frequently extends **2–3 floors above fire origin** in multi-story structures.
- **Zone 3 (Detectable Smoke Odor):** Pervades plumbing chases, electrical conduits, stairwells, and elevator shafts across all floors.
- **Zone 4 (HVAC & Mechanicals):** All ductwork, AHUs, and plenums that processed building air during and post-fire.

BURN PATTERN DEFENSE DOCUMENTATION:

- **V-Pattern Mapping:** Establishes fire travel direction and origin geometry.
- **Low Burn Indicators:** Distinguishes downward flame spread vs. fuel drops.
- **Smoke Staining Gradients:** Proves damage corresponds to the actual fire event rather than pre-existing conditions (counters carrier scope denials).

STRUCTURAL FIRE DAMAGE ASSESSMENT: S700 & STEEL TEMPERATURE RULES

SCOPING REFERENCE ONLY

Material / Assembly	Standard / Scoping Threshold	Engineering & Scoping Determination
Wood & Engineered Timber	ANSI/IICRC S700 Standard *10% Cross-Section Rule*	If char depth exceeds **10% of the member's structural cross-section**, structural member must be replaced rather than restored. Applies to dimensional lumber and engineered wood assemblies.
Structural Steel Members	Licensed Structural Engineer Inspection *Visual, Heat Color & Field Hardness*	Visual inspection for deflection and camber distortion. Heat discoloration color indicators: • **Straw Color = 430°F** exposure • **Blue Color = 550°F** exposure *Note: No color change does NOT guarantee no strength loss.*
Critical Steel Threshold	Microstructural Transformation *Yield Strength Degradation*	Steel that reached temperatures **above 1,100°F** may have suffered microstructural changes reducing load capacity, even if the member is not visibly deformed. Requires engineer certification.

PHASE 5: NADCA ACR 2021 HVAC DECONTAMINATION SEQUENCE

ODOR PREVENTION

Critical Timing: HVAC decon must occur *after* demolition and smoke cleaning, but *before* any finish installation (before new flooring, ceiling tiles, paint, or millwork) to prevent immediate re-contamination upon system restart.

Component	NADCA ACR Post-Fire Protocol	Specialty Sector Adders
Ductwork & AHUs	HEPA vacuum and white-cloth verification of accessible ducts; AHU supply/return/outdoor sections cleaned and disinfected; drain pans treated; filters replaced; fan coils cleaned; video inspection for inaccessible sections.	• **Data Centers:** Precision temp/RH control; OEM-certified cleaning (IBM, Dell) to maintain warranties. • **Healthcare:** Mandatory ICRA containment in patient areas. • **Food Service/Mfg:** FDA/USDA post-fire sanitation clearance before resumption.
Contractor Credential	Must be executed by NADCA Certified Air Systems Cleaning Specialists (ASCS) — outside standard restoration crew scope.	

PHASE 6: OCCUPANCY RECOVERY SEQUENCING (5 STEPS TO CERTIFICATE OF OCCUPANCY)

REGULATORY CLOSURE

1	2	3	4	5
Structural Repairs Inspected & Approved	**Suppression Tested by Fire Marshal**	**Electrical Permitted Work Approved**	**HVAC Mechanical Inspection Passed**	**State Elevator Re-Inspection Signed**

Certificate of Occupancy (CO) & BI Alignment: Business Interruption period of restoration aligns with the official CO date when the property is legally occupiable. Post-CO tenant proprietary fit-outs are not typically covered under building owner BI.

• HARD SAFETY & ENGINEERING BOUNDARY •

This Quick Card is a procedural scope-development and compliance reference. It does not authorize site entry prior to official fire marshal release, nor does it substitute for licensed structural engineering determinations or certified asbestos inspections. Structural safety assessments remain the sole responsibility of licensed professional engineers.