RESTORATION INTEL • FIELD PROTOCOL RI-21

Roof Breach First-Look Card: Pre-Inspection Hazard Sweep & 4-Part Documentation Sequence

Current version — Oct 31, 2026
Update history: https://restorationintel.com/roof-damage-assessment-emergency-tarping-protocol/

THE NON-NEGOTIABLE EVIDENCE MANDATE

Documentation before any mitigation work begins is the non-negotiable first step of every storm roof inspection. **"Before" photographs taken after mitigation work has started are not before photographs** — they are after photographs of a partially altered scene, and insurance carriers will reject causation. Tarps installed before comprehensive documentation permanently destroy the visual evidence needed to defend the storm scope.

PART 1: PRE-INSPECTION HAZARD SWEEP (SAFETY GATE BEFORE ROOF ACCESS)

1. Electrical Hazards — LIFE SAFETY

- **Downed Power Lines:** Never assume lines are dead because they are down — confirm de-energization directly with utility.
- **Service Entrance & Masthead:** Mast bent or compromised by tree impact does *not* de-energize the service. Conductors remain live until physical utility pole disconnect.
- **Clearance Gate:** Maintain 10-ft minimum clearance from any overhead conductor.

2. Structural Instability — FALL THROUGH

- **Tree Impact Compromise:** Rafter, truss, and ridge damage can render roof decking unsupported. Deck may be suspended only by tree debris.
- **Eave-Edge Tool Probe:** Probe deck from eave with tool before applying body weight.
- **Interior Ceiling Warning:** Internal collapsed ceilings directly beneath roof impact zones indicate total loss of overhead structural support.

3. Active Weather Gate — WEATHER HOLD

- **Strict Stand-Down:** Never access roof during active lightning, wind gusts > 25 mph, or freezing rain.
- **2-Hour Rule:** Storm assessments are not emergency room procedures. Waiting 2 hours for storm clearance is safer and produces carrier-defensible documentation.
- **Slip Hazards:** Wet moss, algae, and wet roof granules create severe traction loss.

4. Fall Protection (OSHA Mandate) — 29 CFR 1926.502

- **6-Foot Rule:** OSHA requires fall protection for any roof work at 6 feet or more above lower level.
- **Steep-Slope Requirement:** Personal fall arrest systems (PFAS) mandatory for pitches > 4:12 and for all ridge, hip, and eave edge work.
- **No Emergency Exemption:** Emergency storm urgency never suspends OSHA regulations. Fall injury liability dwarfs any carrier scope dispute.

PART 2: THE 4-PART PRE-WORK DOCUMENTATION SEQUENCE

Documentation Tier	Mandatory Photographic / Data Capture	Carrier Defense & Compliance Requirement
1. Exterior Ground-Level 4 ELEVATIONS	Photograph all 4 elevations (North, South, East, West) from ground level capturing full roofline, gutters, downspouts, and site context.	Establishes structural baseline, surrounding storm context (tree falls, collateral damage), and pre-mitigation state. **Native camera timestamps mandatory** (no editable overlays).
2. Drone Overhead Mosaic FAA PART 107	Complete overhead aerial mosaic and orthomosaic map of all roof facets before any boots or ladders touch the slope.	Provides comprehensive, objective, time-stamped evidence without inspector filtering bias. High-resolution orthomosaic captures whole-envelope hail spatter and wind shear patterns.
3. Roof Close-Ups with Scale MIN 2 SHOTS / ZONE	For every identified damage zone: **Shot A:** Context photo showing roof reference point; **Shot B:** Close-up with physical scale reference (ruler, coin, calibrated marker).	Prevents carrier inspectors from claiming hail bruises are fingernail scratches or blister defects. Without a physical scale, impact crater diameter cannot be substantiated.
4. Interior & Attic Infiltration ACTIVE LEAKS	**Interior:** Ceilings beneath damage zones (stains, bubbled paint, sagging drywall, mold). **Attic:** Underside decking stains, wet insulation, daylight through penetrations.	Directly ties roof envelope breach to interior physical loss. Proves active water intrusion path before emergency tarping is deployed, validating ALE and emergency line items.

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Roof Breach First-Look Card: Emergency Tarping Standards (IBHS) & Board-Up Protocol

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PROFESSIONAL STABILIZATION VS. NEGLIGENT STOP-GAPS

Inadequate tarping creates three simultaneous failures: **fails to protect against secondary loss**, **triggers carrier claim disputes over tarping charges**, and **creates contractor liability** when blow-offs cause interior water damage. Tarps secured only with weights or sandbags fail in 30-mph winds and violate professional standards.

PART 3: IBHS-RECOMMENDED EMERGENCY ROOF TARPING STANDARDS

Parameter	Field Specification & Standard	Engineering & Insurance Rationales
Material Selection	**Minimum standard:** 6-mil polyethylene (0.006 in) for short-term protection (≤ 30 days). **Extended exposure (> 30 days or high UV/wind):** Woven polyethylene with UV inhibitors rated 90–180 days. Heavy-duty reinforced poly with integrated webbing loops.	**Prohibited:** Never use 1–3 mil painter's or builder's film. It lacks puncture and UV resistance, tearing rapidly under wind buffeting and secondary rain.
Coverage & Overlap	Tarp must cover all damage areas with a **minimum 12-inch overlap** beyond identified breach boundary. If boundary is diffuse, extend to nearest structural boundary (ridge, hip, valley, rake).	Eliminates capillary water entry and blow-by around perimeter. The minor cost of 20 sq ft extra poly prevents multi-thousand-dollar interior secondary damage.
Ridge Line Extension	Tarp **must extend over ridge line by minimum 4 feet** and be positively fastened on downslope side. On hip roofs, wrap all hip lines in damage sector.	Stopping short of ridge peak leaves an open pocket for wind-driven rain to funnel underneath the tarp, creating immediate sheet leak paths.
Positive Mechanical Fastening	**Wood Battens:** 1×4 or 2×4 lumber fastened through tarp to structural roof deck using framing screws. **Spacing:** Max 12 inches along all edges; 24 inches across field. **Penetration:** Screws must penetrate deck minimum 1 inch.	Sandbags, tires, and loose boards are amateur stop-gaps that blow off at 30 mph. **Tile / Slate:** Secure mechanical strap anchors to ridge and eave to prevent puncturing intact tiles.
Post-Tarp Documentation	Capture photographic record of completed tarp: full elevation, ridge wrap, batten screw spacing at 12" on perimeter, and tie-offs.	Mandatory evidence to support emergency mitigation invoices under policy Additional Living Expense (ALE) / Emergency Repair provisions.

PART 4: EMERGENCY BOARD-UP STANDARDS (OPENINGS > 4 SQ FT)

Wall & Window Enclosure Standard — 3/4" CDX PLYWOOD

- **Material Standard:** Minimum 3/4-inch CDX plywood for all window, door, and wall envelope breaches exceeding 4 square feet.
- **Structural Fastening:** Secured with appropriate framing screws directly into sound framing members (studs/plates), not drywall.
- **Edge Water Infiltration:** Seal or protect plywood panel edges to prevent wind-driven rainwater migration behind the panel.
- **Pre-Cut Panels:** Size pre-cut panels to rough openings for rapid seal.

Glass Breakage & Pre-Work Cleanup — CONTAMINATION CONTROL

- **Glazing Impact:** Hail or wind debris breaking windows requires immediate pre-cleanup protocol prior to any interior remediation.
- **No Contents Manipulation:** Do NOT move furniture, rugs, or personal contents until preliminary glass cleanup is completed.
- **Cross-Contamination:** Shifting items embeds glass shards deeply into textiles, converting cleanable items into total losses.
- **Claim Line Item:** Photograph damaged opening before and after board-up to substantiate emergency carpentry and cleanup scope.

PART 5: FIELD PRE-WORK SIGN-OFF & TIMESTAMP VERIFICATION

Project Address:	_____	**Storm Event Date:**	_____
Contractor / Inspector:	_____	**FAA Part 107 Pilot ID:**	_____
Pre-Work Photos Taken:	[ ] 4 Elevations [ ] Drone [ ] Close-ups	**Interior Leak Logged:**	[ ] Ceilings [ ] Attic [ ] Moisture
Tarp Specification:	[ ] 6-Mil Poly [ ] Woven Poly (UV 90-180d)	**Fastening Method:**	[ ] 1x4 / 2x4 Battens @ 12" [ ] 1" Deck Pen.