RESTORATION INTEL • FIELD QUICK CARD

The First-48 Quick Card: Emergency Board-Up, Tarping & Structural Stabilization Spine

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MANDATORY SAFETY RULE & SCOPE LIMIT: Utility confirmation is the non-negotiable Step 0 before crew entry or envelope work. This card provides documentation and specification standards derived from the published field protocol. *It does not certify any structure as safe to enter or occupy.* Complex structural compromises (partial collapse, foundation movement, load-bearing masonry failure) require a licensed structural engineer before work.

1. NON-NEGOTIABLE STEP 0: UTILITY DISCONNECTION & VERIFICATION PROTOCOL

SAFETY GATE

Peril / Utility	Mandatory Verification Source	Action, Tolerance & Distance Rules	Required Scope Evidence
Fire Loss — Electric	Local electric utility or licensed electrician	Confirm disconnected at utility transformer or meter base before entry. Never assume off from damage.	Photo of disconnected/locked meter; utility confirmation log entry.
Fire Loss — Gas	Local natural gas utility	Confirm gas off at meter. Compromised lines leak without flame.	Utility log with employee name/time; locked gas valve photo.
Utility Phone Delay Rule	Field Tech Dispatch Request	If utilities cannot be confirmed by phone within **30 minutes**, contact utility to dispatch field tech for physical disconnect.	Document delay in file; written notification to owner & carrier.
Storm Loss — Electric	Lead Tech Assessment / Clearance	**Downed lines:** Maintain **30-foot minimum clearance** without utility clearance. Inspect weatherhead & meter base displacement.	30-ft perimeter standoff photo; weatherhead damage photo.
Water / Intrusion Loss	OSHA 29 CFR 1926.416 Qualified Person	Prohibits energizing circuits in structures with water intrusion until verified free of ground faults. GFCI for all tools.	Ground fault clearance sign-off; temp power panel photo.
Storm Loss — Natural Gas	Gas Utility Field Technician	Gas odor, meter damage, or foundation movement requires physical shutoff verification by utility before interior work.	Utility field tech dispatch record & physical lock tag.
Water Supply Piping	Lead Technician / Field Crew	Close main water supply valve immediately upon arrival to prevent ongoing or secondary flooding from compromised lines.	Photo of main valve tagged in fully closed position.

2. EMERGENCY BOARD-UP: SPECIFICATION MATRIX & INSTALLATION RULES

ENVELOPE SECURING

Material & Panel Sizing Standards — APPROVED SPECS

- **Residential Windows & Doors:** Standard is **7/16-inch OSB** or **¾-inch plywood**.
- **Commercial & Wide Spans:** **¾-inch plywood** or dimensional lumber framing (prevents deflection across spans).
- **Sizing Dimension Rule:** Pre-cut panels to opening dimensions **± 1 inch**. Must cover full opening without edge gaps. Gaps permit weather and forced entry.
- **Fastener Specification:** **1-5/8-inch screws** or **2-inch ring-shank nails**.
- **Fastener Spacing:** **8 inches on-center** around perimeter; **12 inches on-center** in the field.
- **Prohibited Fasteners:** **STAPLES ARE NOT ACCEPTABLE**. Staples lack withdrawal resistance for wind loading.

Substrate Mounting & Buck Installation — STRUCTURAL FASTENING

- **Intact Frame (Glass/Door Breach):** Fasten panel directly into existing structural window/door frame members.
- **Destroyed Frame Structure:** Install a perimeter buck of **2×4 lumber** first to establish a solid structural fastening substrate.
- **Masonry / Concrete Openings:** Fasten panels with **powder-actuated fasteners** or **masonry anchors**.
- **Prohibited Masonry Fastening:** **NO WOOD SCREWS IN MORTAR JOINTS** (provides inadequate pull-out holding).
- **Labor Billing standard:** Actual cost plus O&P (T&M). Xactimate BRD line items underprice complex frames; record crew hours on-site.

3. FIRE-LOSS BOARD-UP & ODOR CONTAINMENT PROTOCOLS

SPECIAL PERIL

Char-Depth Substrate Probe

Probe framing substrate with utility knife before panel loading.

- If char depth **exceeds 25%** of member thickness, substrate is compromised.
- If finger-pressure test indicates loss of integrity, install a **support brace column** or new 2×4 framing member.

Active Smoldering Coordination

Sealing a smoldering structure concentrates heat and triggers rekindles.

- Coordinate with **Fire Dept Incident Commander** before boarding.
- IC must confirm fire is *fully suppressed* and structure is safe to board.
- Document IC name & sign-off in job file.

Attached Odor Containment

Smoke odor permeates shared walls (townhouses, rowhouses, strip centers).

- Seal sill plates and panel perimeters with **foam backer rod** and **construction sealant**.
- Document as a separate billable line item — do not bury in generic board-up.

4. EMERGENCY ROOF TARPING: IBHS STANDARDS & INSTALLATION SEQUENCE

IBHS PROTOCOL

Material Grades & Sizing Calculation

- **Short-Duration (<90 Days):** Minimum **6-mil polyethylene** (IBHS standard).
- **Long-Duration (120–180 Days):** **UV-resistant woven polypropylene** (large storms, complex claims, material delays).
- **Summer / Occupied Structures:** Reflective silver tarps reduce interior attic heat load.
- **Sizing Perimeter Overlap:** Minimum **2-foot overlap** onto undamaged roofing on all four sides.
- **Ridge Extension Rule:** Minimum **4-foot extension over the ridge line** when damage approaches or touches ridge.
- **No Undersizing:** A tarp that fails from skimped overlap creates secondary water damage and contractor liability.

IBHS 6-Step Installation Sequence

1. **Clear Debris:** Remove loose shingles, nails, and branches to form a clean tarp bed.
2. **Position & Overlap:** Lay tarp with 4-ft ridge extension and 2-ft undamaged decking overlap.
3. **Fold Hem:** Fold tarp edges under **6 inches** to create a finished tear-resistant hem.
4. **Install Battens:** Fasten wood battens (1×4 or 2×4) on top at **12-inch intervals** running parallel to slope (ridge to eave) using **3-inch deck screws**.
5. **Cap Battens:** Fasten continuous cap battens along the ridge over the peak.
6. **Anti-Dam Check:** Ensure tarp edge does not bridge gutters (prevents pooling at eave).

• Battens are non-negotiable. Perimeter/corner fastening fails in wind >20 mph.

Steep-Slope Protocol (>6:12 Pitch)

OSHA MANDATE

- **OSHA 29 CFR 1926.502:** Mandatory fall protection — roof anchors, rope grabs, and full-body harnesses or safety nets.
- **Zero Friction Warning:** Wet 6-mil poly on a 9:12 roof has near-zero friction coefficient. Never step on unsupported tarp.
- **Claim Documentation:** Photograph anchor setup and log fall protection PPE for supplemental F9 labor justification.

Flat & Low-Slope Protocol (≤2:12 Pitch)

DRAINAGE CONTROL

- **Material Minimum:** Minimum **20-mil reinforced polyethylene** (never use standard 6-mil).
- **Cross-Slope Battens:** Install battens angled slightly cross-slope to form drainage channels.
- **24-Hour Rain Inspection:** Inspect and pump standing water within **24 hours** of rain.
- **Load Warning:** Standing ponding water adds thousands of lbs to compromised decks. Document structural capacity.

5. EMERGENCY STRUCTURAL SHORING & CONTENT TRIAGE

SHORING & CONTENTS

Temporary Shoring Specifications

- **Post Sizing by Span:** **4×4 posts** for spans up to 8 ft; **4×6 posts** for spans 8 to 12 ft.
- **Bearing Plates:** Continuous top head plate and bottom sole plate with double-screw positive bearing.
- **Wedging & Shims:** Shim tight to supported member using **16d duplex nails** (finish nails strictly prohibited — zero shear strength).
- **Racking Resistance:** Install diagonal knee bracing at **45-degree angles** to prevent lateral shift.
- **Engineering Gate:** Complex failure (foundation shift, masonry bowing, partial collapse) mandates a **licensed structural engineer**.

First 24–48 Hour Content Protection Decision

- **Owner / Adjuster Decision:** Formal pack-out decision made within first 24 to 48 hours.
- **Contractor Duty:** Identify exposed contents at risk, photograph and inventory in place, recommend off-site pack-out if weather seal is uncertain.
- **Secondary Damage Standard:** An open structure sitting 3 weeks awaiting claim approval sustains severe rain damage. The contractor's board-up/tarp must actually hold.
- **Chain of Custody:** If pack-out is authorized, item-by-item condition coding and signed custody transfer are required.

6. DISPUTE-PROOF CARRIER DOCUMENTATION: THE PRE / MID / POST PHOTO GATE

BILLING DEFENSE

Documentation Stage	Required Photographic & Field Data	Insurance Dispute Resolution Purpose
Pre-Board / Pre-Tarp	Wide elevation showing structure context; close-up of breach condition; tape measure showing width × height; char/substrate probe photo.	Establishes necessity of emergency mitigation under policyholder's duty to protect; defeats carrier claims that opening did not require boarding.
Mid-Installation	Substrate framing or 2×4 buck in place; tarp 4-ft ridge overlap & 2-ft side margins; fall protection anchors; foam backer rod in sill gaps.	Proves proper materials, buck framing, and IBHS installation compliance; justifies F9 supplement line items for non-standard framing.
Post-Installation	Completed board-up showing 8" perimeter & 12" field screw spacing; full roof view showing 12" batten grid and cap battens; gutter clearance.	Confirms completed work and scope dimensions match invoice; refutes desk-adjuster arbitrary deductions on square footage or labor hours.