Termites don’t chew evenly. They tunnel along the springwood, leave pockets of latewood, and turn a once solid joist into something that looks sound on the outside but crushes under a screwdriver. When the damage reaches floor framing, especially joists and sill plates, you are dealing with structure, not cosmetics. The good news is that wood framing is forgiving if you understand load paths, use proper shoring, and match the repair technique to the extent of loss. I have opened crawlspaces that smelled like wet cardboard and still turned them into crisp, strong structures that pass inspection and stay dry.

This guide focuses on termite floor joist repair at an advanced level, with practical methods I have used in homes from the 1920s to recent builds. Along the way we will touch on termite sill plate repair, termite beam repair, termite subfloor repair, and the finishing touches like termite drywall repair after termite treatment. If you are weighing local termite damage repair options or vetting termite repair services, the details here will help you ask sharper questions and spot quality workmanship.

What termites actually do to joists

Subterranean termites track moisture into wood and consume the softest early growth rings first. Damage tends to be:

- Longitudinal and hidden, often following the neutral axis of the joist.
- Worse near constant moisture, like over damp soil or around plumbing penetrations.
- Patchy under finishes, which can trick you into thinking a joist is intact.

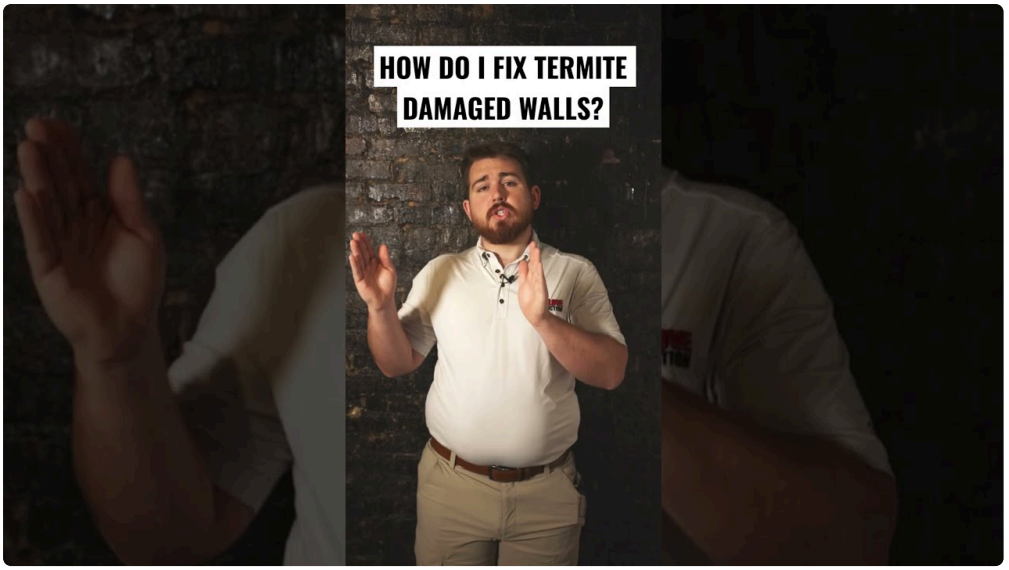
A quick field check is the awl test. Press an awl or screwdriver every few inches along the bottom third of the joist. If the tip sinks with little resistance, you are in compromised territory. Tap the joist with a hammer and listen. A hollow thunk suggests interior loss. Probe at supports, especially where joists meet the sill plate or sit in hangers. I have seen 90 percent loss at the last inch over a beam while the midspan looked fine.

The scope depends on the load and the span. A 2x10 at 16 inches on center spanning 14 feet in a living room carries a lot more than a 2x8 spanning 9 feet under a hallway. When more than a third of a joist’s depth is gone along a critical length, you stop thinking about patching and move to structural termite repair.

Confirm the pest is gone, then open up fully

No structural repair lasts if the colony is still active. Coordinate with a licensed pest control operator. Whether they use a soil termiticide, baiting, or localized foams, have them issue a clearance or at least a service note that treatment reached the affected zone. I schedule the structural work 3 to 7 days after treatment to avoid tearing into fresh chemical barriers, and I still apply borate to cut edges during the repair.

Open finishes more than you think. For termite wall repair near affected joists, pull baseboards and cut drywall 18 to 24 inches above the floor to expose studs and the top of the joists. In crawlspaces, remove insulation and vapor barriers along the work bay. You cannot execute precise termite wood repair through a mail slot.



Structural triage: when to shore, when to replace

You can live with some cosmetic sag. You cannot live with uncertain bearing at supports. If the joist is crushed or notched by termites within 12 inches of a beam, ledger, or sill, plan on either full-length sistering with solid bearing, or partial replacement with a new load path to something you trust.

A rule of thumb I use: if more than 25 percent of the joist depth is compromised over a continuous run exceeding 4 feet, or if the damage is within 1 foot of a bearing point, the repair must reestablish full structural capacity. That typically means a full-length sister or a replacement, not just a scab. For isolated pockets away from midspan, structural epoxy consolidation and a dutchman insert can be safe, but only when the remaining wood is mostly sound and you can document the capacity.

Temporary shoring that does not make the problem worse

Before you cut anything or drive jacks, shore the tributary load. I have seen DIY jacks punch through a subfloor because they concentrated load in a single spot. Think in lines, not points.

Use solid blocking on compacted soil or cribbing on a concrete pad. A simple and reliable setup is a 4x6 or 6x6 beam placed perpendicular to the joists, supported by two adjustable steel posts. Pad the tops with a thin layer of plywood to spread load and prevent crushing the joists. Bring the jacks snug, then add minor lift, not more than 1/8 inch per day if you are correcting sag. Lifting too fast cracks finishes and crushes weakened fibers further. Keep a stringline across multiple joists to read deflection as you lift. If plaster or older brittle finishes exist above, expect some cracking no matter how careful you are.

Materials and fasteners that earn their keep

I reach first for kiln-dried lumber that matches or exceeds the grade and species of the original. For longer spans or when headroom is tight, engineered lumber like LVL makes a leaner, stronger sister. Where clearances are tight, steel angles or channels deliver a lot of capacity in a thin profile.

Fasteners matter. I favor structural screws over nails when retrofitting because they draw members tight without constant hammer shock on fragile wood. A common kit:

- 1/2 inch through-bolts with washers for flitch plates and steel work.
- 3/8 inch lag screws or 1/4 to 5/16 inch structural screws for sistering, with 10 to 12 inch staggered spacing.

- Construction adhesive at the mating faces to limit squeaks and share load.
- Joist hangers with proper nails, not drywall screws, if you rebuild bearing connections.

In damp crawlspaces, use hot-dip galvanized or stainless hardware. Pressure-treated lumber goes where wood meets concrete or masonry. Cut ends of treated material need end-grain treatment. Those little details keep termite damage restoration from turning into repeat business.

Sistering, full replacement, and hybrid approaches

Sistering is the workhorse of termite floor joist repair. When damage is moderate and there is enough sound wood to clamp to, a full-length sister of equal or greater depth restores stiffness. The key is bearing. The sister should land on the same supports, not just float in space. When you cannot get full-length bearing, you can transfer load with hangers, steel angles into a beam, or by extending the sister to the next sound support and adding a header to bridge across.

On a 1928 bungalow with 2x8s at 16 inches on center spanning 12 feet, I once found five joists reduced to lace over a damp crawl. https://boinaspretas.com.br/digital-marketing-made-easy-let-our-team-handle/#comment-69682 We slid in two LVL sisters for each affected joist, glued and screwed at 12 inch centers, with new hangers at the ledger and a steel angle lagged into the center beam where bearing had crumbled. The floor came back to within 1/8 inch of level, and the home passed inspection with a neat sketch and hardware schedule.

Full replacement is sometimes simpler. If gas lines, HVAC ducts, or masonry piers block sistering, cut the damaged joist free and drop a new member in with proper bearing. Cut carefully around subfloor nails and add temporary planking above to prevent someone stepping through. When removing more than every other joist at once, expand shoring to capture the wider tributary area.

Hybrid methods work well when you have severe end damage but decent midspan wood. I use a steel flitch plate near the bad end, bolted through a new sister and the old joist, then land that assembly in a new hanger or on a ledge I create with a ledger strip screwed to a beam. This moves load off the chewed fibers without tearing out the whole line.

Epoxy consolidation and dutchman inserts, used carefully

There is a place for structural epoxy in termite wood repair, but it is not a cure-all. Epoxy can reconnect fibers and create a bearing surface when you have localized decay, say a palm-sized void near a plumbing notch. The sequence goes like this: remove all loose wood, drill a few 1/4 inch ports into sound fibers, saturate with a low-viscosity consolidant, then pack a high-build paste or pourable epoxy mixed with fillers. I like to inlay a dutchman of matching species into the wet paste for a mechanical bond. Clamp or support while it cures.

Use epoxy away from midspan loads and avoid relying on it alone at end bearings under sustained compression. Wood and epoxy have different creep behavior under long-term load. In code-governed work, have an engineer bless any epoxy-reliant fix. I treat it as a fine patch on an otherwise structurally addressed member.

Connections to sill plates, beams, and ledgers

Termite sill plate repair often sits upstream of joist work. If the plate is crushed or honeycombed, your joist ends have nothing honest to sit on. Replace sill segments in manageable lengths, usually 4 to 8 feet, after jacking the rim just enough to slip new treated stock in. Anchor to the foundation with epoxy-set bolts or expansion anchors at the prescribed spacing, and use a capillary break like sill seal to reduce moisture wicking.

At beams, replace rotted bearing pockets with new hangers on a ledger board lagged or through-bolted to the beam, or add steel angles underneath as ledges. On masonry ledgers, consider powder-actuated pins only when allowed, otherwise drill and set sleeve anchors or use adhesive anchors with proper embedment.

Subfloor and wall interplay

Termite subfloor repair often reveals itself when you walk across and feel a soft spot. Probe from below. If the plywood or plank subfloor is compromised over a joist, patch from above after sistering. Cut back to the center of adjacent joists and fasten blocking to support clean seams. Use tongue-and-groove to match existing where feasible, glue to the joists, and screw tight to kill squeaks.

For termite wall repair, open enough drywall to see the bottom plates and the first 12 inches of studs. Termites sometimes track up behind baseboards to the studs. Replace chewed bottom plates with treated stock, slip it under studs after lifting them slightly with a wall jack or wedge, then add stud splices using half-lap or metal stud shoes where allowed. When the pest control team has treated, you can close the wall. Termite drywall repair after termite treatment is straightforward as long as framing is sound: rehang, tape, texture, and paint. Save a few scraps of old drywall to help you match texture.

Attics, beams, and framing beyond the floor

I have yet to meet a colony that respects room boundaries. In attics, termites follow moist ventilation paths, especially near bath fans that leak humid air. Termite attic wood repair mirrors floor work but with lighter loads. Sister rafters or ceiling joists, add gussets at splices, and correct ventilation so you are not inviting another feast. For termite beam repair, if you find widespread damage on a primary girder, you may need to add a parallel beam, post it down to a new or existing footing, and transfer loads incrementally. It is invasive, but safer than trusting a hollow beam.

Moisture management and future-proofing

Termites want moisture. Your structural fix will last longer if you make the home a desert to them. In crawlspaces, bring humidity below 60 percent. Add or fix a vapor barrier with sealed seams, improve grading so water moves away from the foundation, and correct gutter downspouts. In basements, dehumidify and insulate cold pipes to stop condensation that drips onto joists.

Treat new cuts with borate solution. Many pros spray or brush borate on all exposed framing as part of termite damage restoration. It is inexpensive insurance. Seal exterior cracks where utilities enter, maintain clearance between soil and siding, and keep firewood away from foundations. A small detail that pays huge dividends is a clean termite inspection gap where the foundation meets cladding so you can spot shelter tubes early.

Permits, codes, and documentation

Structural termite repair alters load paths. In most jurisdictions, replacing structural members or adding beams requires a permit. Even when the work seems minor, I like to document with sketches, span notes, and a hardware schedule. Building officials generally appreciate clarity. If you are changing joist spans, adding LVLs, or mixing steel with wood, a quick consult with a structural engineer keeps everyone safe and speeds approval. I have had inspectors sign off on robust sistering jobs on the spot when I laid out bolt patterns, hanger models, and bearing details.

Use published span tables for your region and species. A 2x10 SPF at 16 inches on center spanning a living space differs from a 2x10 Doug fir in capacity. Engineered lumber manufacturers publish specific fastening schedules for sistering to existing members. Follow them.

Cost ranges and timelines you can trust

Prices vary by region, access, and materials. A straightforward sistering of four to six joists in a standard crawlspace, including temporary shoring and minor subfloor patches, often runs in the range of 2,500 to 6,000 dollars. Add termite sill plate repair in a few segments and you might see 1,500 to 3,500 dollars more, depending on anchor work. Termite beam repair or adding a supplemental beam with posts and footings can push a project into the 5,000 to 12,000 dollar territory, sometimes higher when access is tight.

Timewise, a two-person crew can shore and sister a handful of joists in two to three days, not counting drying time for any epoxy consolidation. Full replacements with utility rerouting may stretch to a week. Factor in coordination with the termite treatment schedule so you are not opening fresh chemical barriers prematurely.

DIY or hire, and how to find the right help

If you are comfortable shoring, reading spans, and working in tight spaces, a manageable termite floor joist repair is within reach for an experienced DIYer. The tipping points to hire out are heavy jacking, major sill replacements, steel work, or when utilities and masonry are involved. That is where seasoned termite repair services bring speed and fewer surprises.

When you search for termite repair near me or termite damage repair near me, look for contractors who photograph their shoring, show hardware close-ups, and describe load paths in plain language. Ask about their plan for moisture control and whether they apply borates to new cuts. Local termite damage repair pros who know your soil conditions and building stock can spot patterns faster than a generalist. If you need a structural termite repair near me search because the damage is severe, ask for an engineer’s letter included in the bid. For owners who prefer a single point of accountability, a wood repair contractor termite damage near me query often turns up carpenters who work hand in glove with pest control companies.

Work sequencing that avoids backtracking

- Verify treatment and isolate the work area, then open finishes to expose full extents of damage.
- Install shoring, correct slowly for sag if needed, and stabilize utilities.
- Execute structural repairs starting with primary supports and sill plates, then joists, then subfloor patches.
- Apply borate to new cuts, address moisture control, reinstall insulation or vapor barrier, and close walls or ceilings.
- Document materials, fasteners, and any engineering notes for your records and the next owner.

Picking the right technique for common scenarios

- Long, midspan loss with decent ends: full-length sistering with adhesive and structural screws.
- Severe end crush at sill or beam: hybrid sister with steel angle support or new hanger and ledger, or partial replacement to the next support.
- Punctual damage away from bearing: epoxy consolidation with a dutchman, paired with a short scab to spread load.

- Tight headroom or heavy loads: LVL or steel channel sistering, minimized depth for maximum stiffness.
- Multiple adjacent joists compromised: add a supplemental beam below with posts and footings, then shorten joist spans with new hangers.

Edge cases and judgment calls

Sometimes a joist looks terrible but still has a strong compression flange. Other times, one inch at the end is so bad it undermines the whole room. Trust measurements. If a joist deflects more than L over 360 under normal load, occupants will feel bounce. Sistering improves both strength and stiffness, but to kill bounce you may need to stiffen several joists, not just the worst one.

Historic homes deserve special care. Old growth lumber can be stronger than its modern nominal equivalent. If you replace a 2x9 true dimension with a modern 2x8, you lose both depth and strength, even if the span table says you are close. In those cases, LVLs or custom milling can match the original performance.

Utilities complicate everything. A plumber’s notch at midspan already weakens a joist. When termites add their own notches, the math gets ugly. Plan sister locations to clear pipes, or temporarily reroute a line. I often design a two-piece sister, scarfed and bolted across the obstruction, then reinforced with a steel plate to keep continuity.

Crawlspace access changes feasibility. A stairwell cutout or a low foundation wall can make it harder to bring in long sisters. When we cannot slide in a full-length member, we stage the sister in two sections with a bolted splice over a support and an angle or hanger to provide bearing while we fasten.

Inspectors focus on connections and bearings. If your work looks neat, with tight bearing ends, correct nails in hangers, washers under bolt heads, and labels visible on LVLs, the rest usually follows. Sloppy work at supports invites extra scrutiny.

Bringing it all together

Termite damage repair is part detective work, part carpentry, and part moisture management. You stabilize the structure, restore lost capacity, and make the environment hostile to another infestation. Solid termite framing repair starts with honest shoring. Smart sistering or replacement reestablishes load paths. Clean connections to sill plates, beams, and ledgers close the loop. Subfloor and wall repairs turn structure back into a finished home.

If you are repairing termite damage to a house you plan to keep, invest in the details that last: stainless or hot-dip hardware where it is damp, borate on fresh cuts, and careful documentation. If you are choosing a termite damage contractor near me, judge them by how they talk about load paths and moisture, not just how fast they can close the walls. Quality termite damage restoration does not shout. It feels solid underfoot and stays quiet for decades.