

Termites love quiet wood in dark, damp places. Floor systems, especially those over crawlspaces, offer a buffet. The damage often looks minor on the surface, but below the flooring you may find soft joist chords, crumbling sill plates, or a subfloor that gives when you walk across it. The good news is that most termite floor joist repair can be done from below, without tearing out finished floors. The work calls for careful sequencing, a steady jack, and respect for load paths. Done right, you save the hardwood upstairs and restore strength where it counts.

I have spent a lot of time in crawlspaces, headlamp flickering against webs, counting termite tubes and probing joists. The pattern is predictable. Termites enter where moisture lingers, usually along exterior foundation walls or under bathrooms, then hollow the softer springwood from the inside. The joist still looks whole, but a screwdriver sinks in like it is a loaf of bread. When clients call for termite damage repair, their fear is replacing floors. Most of the time, we can avoid that.

What termites really do to a floor system

Subterranean termites build shelter tubes, then consume cellulose along the path of least resistance. In joists, they often travel toward the center, leaving the outer shell and a camouflage of mud. Drywood termites behave differently, but in many regions, especially the Southeast and much of the West Coast, subterranean is the common culprit. Where there is water, there is risk. Bathrooms, kitchen sinks, laundry rooms, and low, humid crawlspaces are typical trouble spots.

In structural terms, two areas matter most. Joist ends near foundation walls, because they sit on sill plates or hang from ledgers and carry concentrated loads. And midspan zones, where bending stresses are highest. You may also find collateral damage in the subfloor, beams, and sill plates. Termite structural repair depends on restoring bearing at supports and stiffness at midspan. That is the backbone of every plan.

Before any repair, kill the insects. Termite repair services typically coordinate with a pest control company to do soil treatments, foams, or baits. If you reinforce wood without eliminating the colony, the termites simply move to the next piece of lumber.

Confirming scope without tearing up the house

A careful inspection from below answers most questions. I probe with an awl, tap with a hammer to hear the difference between solid and punky wood, and map the bad zones with chalk. If the subfloor above shows dark staining, I check it with a moisture meter and drill a small pilot to verify sound wood, then plug the hole with dowel and glue from below. In finished spaces, tiny pinholes can be filled, sanded, and touched up, which beats ripping out a plank floor.

Along exterior walls, pull back insulation if present, and study the sill plate, rim joist, and the first two joists. The worst damage often centers there. In basements, it is easier. In crawlspaces, a low profile can make a two hour job take all afternoon, but you still get it done without touching the upstairs floor.

If the floor is visibly sagged more than about half an inch, if cracks in tile follow a joist line, or if doors out of square cannot be planed into submission, bring in a structural engineer. Many municipalities want a letter for major termite wood repair, especially if primary beams or sills are involved. The engineer's drawing, even a simple sketch with notes, streamlines permit review and keeps you honest on load paths.

Safety and shoring come first

Never remove damaged wood that is still carrying load without first supporting the structure. I set temporary beams and screw jacks under the affected span. The setup varies, but a common approach is a 4x6 or LVL as a strongback under the joists, with screw jacks bearing on solid footings or doubled 2x12 cribbing on compacted soil. In a crawlspace, I often use short PSL offcuts because they resist cupping. Spread the load, then lift slowly.

As a rule of thumb, I lift no more than an eighth of an inch per day on older houses. Newer work can tolerate a bit more, but there is no prize for speed. Slow jacking protects plaster, tile, and any brittle finishes upstairs. The goal is to relieve the sag enough that new sisters clamp tight against the subfloor. Once the jacks hold the weight, the broken joist is a passenger, and you can work without surprises.

Coordinate pest treatment before you open galleries

Termite damage restoration fails when live insects remain in the wood. I schedule pest control first. Subterranean termites are typically handled with a trench and treat method at the foundation or with a professional bait system. For localized galleries, pest pros inject foams into the wood. After treatment, I like to follow with a borate solution on exposed framing in crawlspaces, especially on new sisters and blocking. Borates deter future feeding, and they are easy to apply to bare lumber.

If you are comparing termite repair near me options, choose a company that collaborates well with your carpenter or general contractor. The sequence matters, and you need documentation for warranties and, sometimes, for resale disclosures.

Sistering joists, the backbone of repair without floor removal

Most termite floor joist repair happens by adding new strength rather than removing and replacing the old joist through the finished floor. We do this with sistering, which is the practice of fastening a new member to the side of the damaged one. The approach depends on access and extent.

Where possible, I run the sister the full length of the original joist, bearing at both ends. Full-length sisters work like a new joist carrying the load, and the old one becomes a spacer. If utilities block a straight shot, I notch around small obstructions within code limits or relocate runs that are easy to move. When full length is impossible, I extend the sister at least two feet past the damaged region on both sides, more if the damage approaches midspan. For end damage, I prefer to catch true bearing on the sill plate or ledger, then run back four to six feet.

Fastening matters as much as lumber size. I typically use construction adhesive on the contact faces, then stagger structural screws or bolts at 12 to 16 inches on center, tighter in the highest moment zones. Nails work, but screws draw the members tight against the subfloor, which restores composite action. For deeper spans, engineered lumber makes a reliable sister. LVLs do not cup, they are straight, and they take fasteners well.

When headroom is scarce, steel can be a friend. I have used L-shaped steel angles lagged into the joist side to carry the bottom tension chord, especially in basements with mechanicals in the way. This is not a beginner detail, but a good fabricator and an engineer can size a fix that fits when a 2x10 will not slide in.

Repairing joist ends, sills, and ledgers without touching the floor above

Joist ends rot and get eaten first because they sit in damp pockets. If the last six inches are gone, but the rest of the joist is good, I often rebuild the pocket. One method is to install a new ledger or joist hanger on sound structure, then sister a new joist alongside, fully bearing in a new hanger. The old chewed end gets trimmed back to sound wood, then treated with borate and sealed. The sister does the real carrying.

If the sill plate has termite damage, the fix gets more involved. I have jacked walls off the sill by a quarter inch using a temporary beam, then cut out a sill section from the crawlspace, slid in pressure treated replacement, and set anchor bolts or straps per code. Termite sill plate repair is a place where an engineer's note helps. Often we also add a capillary break and flashing, then address drainage outside. Repairing a sill plate without correcting moisture invites a second round.

In balloon framed homes, joists sometimes tie into wall studs with let-in ledgers. If termites ate that ledger, I install new hangers on a sistered rim board that I add from inside the crawlspace. It is fussy work, but again, no floor removal.

Subfloor strengthening from below, and when a patch beats a tear-out

If the finish floor upstairs is tile or hardwood in good shape, I avoid removing it unless the subfloor is so far gone that fasteners have nothing to bite. Many times, a soft spot is localized under a toilet, sink, or tub. From below, I remove the damaged subfloor plank or a small rectangle of plywood by cutting along joist centers. Then I slide in a tight patch from below with glue on all faces and screws into sistered cleats that I added to the joist sides. The patch rises tight to the bottom of the existing subfloor. Once glued and screwed, the floor above feels solid again.

For plank subfloors, I have stitched splits with epoxy consolidants and threaded rod. It is a niche fix, but if you are trying to preserve 100-year-old longleaf pine that still has 80 percent integrity, these repairs keep character floors and add stiffness. Use slow-cure epoxy that soaks into the fibers, not quick putties that only bridge.

Beam and girder fixes that avoid upstairs demolition

Termites do not stop at joists. Girders and beams suffer too, especially where posts meet wood. Termite beam repair sometimes means adding a parallel girder with posts to pick up the load. I have slid a new LVL beam alongside a chewed 6x8, set new posts on proper footings, and transferred the load incrementally with jacks. Once the new beam takes the weight, you encapsulate the old one with borate and leave it in place as a spacer. The upstairs never knows the difference.

If the post base is gone, pour a new pier or set a pre-cast footing pad, then use a steel adjustable column with a proper cap. Avoid stacking random concrete blocks <https://aokiya-hotel.com/2021/09/12/%e6%97%a5%e5%b8%b0%e3%82%8a%e6%b8%a9%e6%b3%89%e3%82%af%e3%83%bc%e3%83%9d%e3%83%b3%e5%89%b2%11063> that can kick out. Structural termite repair should look clean and intentional when you crawl back in five years.

Protecting finished floors during repair

Upstairs floors often crack because the framing below moves, not because the finish is fragile by nature. While doing joist repairs, I pad upstairs trouble spots with plywood and drop cloths when walking or moving furniture. Down below, lift slowly. In baths, I support tubs with temporary cribbing during a midspan sistering job. If the floor already has hairline grout cracks, a grout touch-up is part of the post-repair plan. A day of patience with the jacks saves a week of tile work.

Hardwood responds well to gentle correction. If you lift an area that sagged for years, expect minor squeaks as shims and nails resettle. I carry a few finish nails and colored putty to chase squeaks later. With good planning,

you avoid pulling a single board.

The small but important details in tight spaces

Crawlspaces are rarely friendly. Working four inches from your nose complicates everything. Here are the practical adjustments that keep work moving without floor removal:

1. Tools and materials that fit: I bring shorter sisters cut outside to rough length, then final trim at the opening. A right-angle drill and compact impact driver earn their keep. Structural screws beat bolts when there is no swing for a wrench.
2. Staging: Lay plywood paths on soil to keep things clean and stable for jacks and cribbing. Dust masks are not enough, a proper respirator helps in old crawlspaces.
3. Utilities: Coordinate with HVAC and plumbing. It is often cheaper to have a plumber reroute a copper line than to notch a sister, and safer for the long term.
4. Adhesives: Construction adhesive in cold spaces flows better when warmed. I keep tubes in the cab so they spread instead of clumping.
5. Lighting: Two headlamps plus a corded light. Shadows hide voids. A bright look at every mating surface pays dividends when you want the sister to bear tight to the subfloor.

That short list captures practical moves that make termite subfloor repair and joist work faster and cleaner without touching the finish floor.



Mistakes that turn a simple repair into a headache

1. Reinforcing before treatment: If termites are alive, they will return. Coordinate pest work first, document it, and keep the paperwork.
2. Ignoring water: If a leaking shower pan or improper grading caused the moisture, fix that too. Add vapor barriers or encapsulate crawlspaces. Otherwise, you have treated the symptom, not the cause.
3. Short sisters and sparse fasteners: A three-foot sister on a chewed seven-foot span is false comfort. Size the member and the fastener schedule to the load and span.
4. Lifting too fast: Crack one tile, and suddenly the flooring you sought to save is another project. Patience saves money.
5. Leaving soft subfloor under a toilet: Even with great joists, a spongy ring area will flex and fail again. Patch from below or do a careful top-side repair if access allows.

Keep those pitfalls in mind, and you avoid most call-backs.

Moisture control is part of structural repair

Termite damage restoration is not just wood and fasteners. It is also air and water. In crawlspaces, a continuous ground vapor barrier cuts humidity dramatically. Sealed and conditioned crawlspaces, when feasible, stabilize moisture year round. If you keep a vented crawlspace, ensure vents are clear and drainage moves water away from the foundation. Downspouts should discharge well beyond planting beds, and grade should fall a minimum of six inches in the first ten feet where possible.

Inside, run bathroom fans to the exterior, not into the attic or crawlspace. Fix slow plumbing leaks that dampen framing. Install pan sensors under water heaters above crawlspaces to catch trouble early. Termites seek moisture like bloodhounds. Deny it, and you lower risk.

The money talk, with honest ranges

Costs vary by region, access, and scope. A straightforward sistering job on two or three joists from a walk-in basement, no utilities in the way, might fall in the 1,200 to 2,500 dollar range including material and basic pest treatment coordination. If you add a sill plate section, plan on 1,500 to 3,500 per run, particularly if jacking walls and resetting anchors. A new parallel girder with posts on fresh footings can range from 2,500 to 6,000 or more depending on spans and loads.

Exotic constraints, like an 18 inch crawlspace under a kitchen with radiant lines snaked everywhere, push costs up fast. On the other hand, small localized termite wall repair or a single joist end rebuild can be under 1,000 when access is easy and finishes are untouched. Use these numbers as context, then get written estimates with line items.

DIY or hire a pro

Plenty of handy homeowners can handle a modest termite wood repair. If you are comfortable with jacks, understand basic load paths, and can work safely in a crawlspace, a one or two joist sister is doable. That said, there are times to search structural termite repair near me and bring in a specialist.

Consider a pro when you see sagged beams, heavy utilities that complicate staging, or damage near bearing walls. Also, if permits or engineering letters are required, a termite damage contractor near me who does this work weekly will move faster. When you vet local termite damage repair firms, ask for photos of similar jobs, proof of pest control coordination, and references that mention working from below without floor removal. A good wood repair contractor termite damage near me will talk clearly about shoring, fastening, and moisture control, not just patching.

A quick case from the field

A 1950s bungalow with original **termite exterminator** oak floors had a soft spot near the hallway bath and a sag along the exterior wall by the dining room. The crawlspace was 22 inches at best. Subterranean termites had eaten the last eight inches of three joist ends and carved galleries through the first foot of the sill plate. The midspan sag was about three eighths of an inch over ten feet.

We coordinated termiticide trench treatment first, then set a 4x6 strongback and three screw jacks on 2x12 pads. Over four days, we lifted a total of three eighths, stopping when hairline grout lines in the bath stayed stable for two days. We trimmed the chewed joist ends back to solid, installed new hangers on a sistered rim board, and ran full-length LVL sisters to the next bearing point. The sill plate section, four feet long, was swapped under a temporary wall lift. We borate-treated all exposed wood, sealed the crawlspace soil with a ground vapor barrier, and improved the downspout discharge.

Upstairs, we did no floor removal. The homeowner spent a few hundred on grout touch-up and paint, but the oak floors stayed, solid underfoot. The entire project ran nine working days with two carpenters and a helper.

Interacting repairs in walls and attics

Termites sometimes nibble beyond the floor. In partition walls above crawlspaces, bottom plates may be hollow. Termite wall repair from below often means jacking a stud bay lightly, then sliding in a new plate or adding blocking. If we open drywall for access, it is usually a narrow band, which makes termite drywall repair after termite treatment straightforward. Taping and blending a strip is a day's work, not a renovation.

Attics see their share of damage, especially at eaves with past roof leaks. Termite attic wood repair typically involves sistering rafters or scabbing chords, again with borate treatments after pest control. While this article centers on floors, the principles carry across. Support the load, add new capacity, treat the wood, control moisture, and put the finish surfaces back with the lightest touch possible.

When a floor really must be opened

Honesty matters. If the subfloor under tile has turned to compost over a wide area, or a tub deck cutout overlaps multiple eaten joists, working from below may not be enough. I still start underneath, shoring and sistering what I can. Then, when we open the top, the structure below already carries the load. The tear-out is cleaner, faster, and smaller. Even in those cases, judicious planning preserves more finish floor than a wholesale demo.

Choosing materials that last

Pressure treated lumber has a place, especially at sills and joist ends near masonry. For interior sisters away from moisture, I prefer kiln-dried dimensional lumber or LVL. Fasteners should be structural, not drywall screws from the coffee can. Construction adhesive should be rated for subfloor or heavy duty framing, not a general-purpose tube that dries brittle.

For hangers and straps, corrosion resistance matters if moisture might persist. Use the hardware the hanger manufacturer specifies, not deck screws that do not fill the holes correctly. A joist hanger with the right nails does more for termite framing repair than an oversized member with poor connectors.

Aftercare and monitoring

A year after a major termite structural repair, I like to return for a quick walkthrough. Check that jacks or posts have not settled, that vapor barriers are intact, and that there is no new mud tubing. A simple moisture meter reading in a few known spots tells a story. Upstairs, keep an eye on doors that used to stick and now swing free. If they stay that way, the structure is stable.

If you had to cut drywall for access, schedule the finish work a week after framing to let minor movements settle. Termite damage restoration is part craft, part patience. Give it a little time, then do the pretty work.

Bringing it all together

Repairing termite floor joists from below is straightforward when you respect sequence. Treat the termites, shore and lift calmly, restore bearing and stiffness with well-fastened sisters or steel where needed, and control moisture so the problem does not return. Sill plates and beams can be fixed from crawlspaces with the right jacks and planning. Subfloors can often be patched from below to save tile and hardwood.

If the situation feels beyond your comfort, search local termite damage repair and talk with a contractor who can show similar projects. Ask about permits, engineering if required, and how they will protect upstairs finishes. If you hear a clear plan about load paths, hangers, and moisture, you are on the right track.

I have crawled out from many dark spaces with dust in my hair and a quiet satisfaction. The floor above no longer bounces. A house that felt tired regains its stride. That is the reward of smart termite wood repair done from below, and it beats replacing a beloved floor every time.