If termites had a mission statement, it would read, quietly remove capacity where nobody looks. They never eat a house the way a storm tears through it. They hollow the members that carry weight, inch by inch, until the load path falters and something finally sags, cracks, or separates. When I talk about termite framing repair, I start with that idea: this is a load path problem, not just a cosmetic wood problem.

I have opened floors that looked fine from the kitchen but felt like a trampoline by the fridge. A sharp probe slid two inches into what used to be a stout 2x10. In another home, a hallway crown crack traced the line of a termite-eaten stud bay, telegraphing a broken chain from roof to foundation. Repairing termite damage is as much about re-establishing that chain, from the top plate or rafters down to the soil, as it is about replacing gnawed wood. That is load path recovery.

What load path really means in a house

A house stands because gravity and lateral forces move along predictable routes. Roof loads move into rafters or trusses, then into top plates, studs, and headers, finally into rim boards, sills, and the foundation. Floors behave similarly. Lateral forces from wind or seismic events ride through sheathing, into studs, across diaphragms, and down holdowns or anchor bolts. In framing language, those flows rely on two things: section capacity in the wood, and the connectors that stitch the elements together.

Termites attack both. They reduce section capacity by eating the material you counted on for bending, shear, and compression. They also undermine connections by tunneling under toe nails and behind plates, turning solid embedment into dust. The result can look like minor frass on the surface, while the hidden mechanics are already compromised.

When we plan termite structural repair, we shift from a surface-driven mindset to a path-driven one. We ask, where does this weight want to go, and where has the chain broken?

How termites break the chain

Different termite species leave different signatures, but the structural story repeats:

- Subterranean termites love sill plates, mudsills, and the lower halves of studs and joists, especially where moisture lingers at grade or in a crawlspace. They build tubes that bypass light and air to attack bearing points.
- Drywood termites often infest attic framing, window headers, and trim, chewing galleries parallel to the grain. They can hollow a rafter so that only a thin shell remains.
- Dampwood termites tend to be localized to chronically wet zones: a leaking shower wall, a failed deck ledger flashing, or a porch beam with end-grain exposure.

I once measured a 3/8 inch floor drop over a span of 6 feet caused by a sill plate that had turned into pastry flakes. Nothing had collapsed. The house just slumped at the perimeter. Another time, a garage door header that looked blemish-free from the outside sounded hollow to a hammer and deflected 1/4 inch with a moderate push. The pattern is subtle until you know how to read it.

Diagnosis before demolition

Blind demo is expensive and often unnecessary. A good termite damage contractor will map the load path before opening walls, then open just enough to confirm assumptions. Here is how that typically unfolds.

You start with a moisture meter and a sharp awl or ice pick. Probe every suspect bearing point: ends of joists, tops and bottoms of studs, corners of headers, sill plates near anchor bolts, and the underside of subfloors near wet rooms. Use a good light to find mud tubes and kick-out holes. Listen for pitch changes with a small hammer tap. Light, papery sounds suggest galleries. When accessible, a thermal camera can help find hidden moisture that invites termites, but it does not diagnose structural loss by itself.

Next, trace the load. If a drywall crack radiates from the corner of a door, check the header and jack studs. If tile grout is shearing along a wall line, look at the rim, sill, and the first two joists. In attics, look for rafter heel bites and top plate damage where vents blow damp air.

I record a quick sketch: roof to ridge, ridge to rafters, rafters to top plate, down to studs, across headers or beams, to floor joists and the bearing line, then to the sill and foundation. Then I mark what is sound and what is suspect. That sketch becomes the repair plan.

Safety and temporary support

Once you confirm significant damage in a bearing element, you do not continue casually. Create temporary supports to unload the damaged member before you start removing or sistering anything. I have seen more cracks caused during repair than by termites themselves, simply because someone pried a damaged plate out from under a loaded wall.

This is where practical physics meets jobsite logistics. Adjustable steel posts, wedges, and a few LVL needles will save the day. On a slab, spread the load with 2x plates. In a crawlspace, respect soil bearing; use cribbing or pads. Lift in small increments, often over hours, to ease the structure back rather than snap it into place. An eighth of an inch at a time is a good rule for settled areas. If you are near brittle finishes like stone counters or glass tile, tape and monitor hairline cracks before lifting.

Field checklist to keep the load path intact

- Is every bearing point from roof to foundation mapped and verified?
- Have you located and unloaded the most compromised members before removal or sistering?
- Are connectors specified for both gravity and lateral resistance, not just one or the other?
- Does each splice or sister reach adequate bearing, with fasteners installed to a tested schedule?
- Have you addressed the moisture or access condition that allowed the infestation?

The usual suspects: where we frequently repair

Termite wood repair tends to cluster in a few high-value zones. Each has different tactics and pitfalls.

Sill plate repair along the foundation

Sill plates, also called mudsills, are a favorite snack for subterranean termites, particularly where grading slopes inward or gutters dump near the foundation. When sill plates lose capacity, the wall may settle, studs lose toe-nail integrity, and anchor bolts are left in crumbly material that cannot resist uplift or shear.

For termite sill plate repair, I prefer to work in manageable sections, usually 4 to 8 feet at a time, with continuous temporary support under the wall line. If the old plate is untreated and moisture is a risk, the replacement is pressure-treated lumber, ideally with a capillary break such as a gasket or sill sealer. Where lateral demand is

nontrivial, add new holdowns or retrofit anchors to meet current code within reason. You will often need to shim to restore the original elevation, checking door operation and drywall seams as you go.

In older homes, anchor bolts are often too short or corroded. Epoxy-set rods can solve that, but the hole cleaning and bondline prep have to be perfect. I have rejected several rods that looked fine but pulled out under load because dust was left in the hole. Vacuum, brush, vacuum again, then inject epoxy from the bottom up.

Floor joist repair and the first bay at the perimeter

The first joist inboard of the sill takes a beating. If termites enter at grade, they march along that edge. Termite floor joist repair usually means full-length sistering with solid bearing at both ends, not a short patch. Where obstructions limit full-length sisters, use engineered repair details: overlapping sisters past the point of damage by at least 2 feet for light loads, often more for longer spans, with structural adhesive and a fastener pattern verified for shear flow. Hangers should be replaced if there is any sign of corrosion or loss of nail engagement. I have pulled 10d hanger nails out with two fingers where termites chewed around them.

When subfloor edges are compromised, replace the sheet back to the nearest joist on either side and add blocking so that every edge has full support. Termite subfloor repair also has to consider stiffness. A 23/32 inch subfloor may feel bouncy if termite galleries reached the inner plies. If you cannot replace, sometimes overlaying with glued and screwed 1/2 inch underlayment helps, but it is a compromise.

Beams, girders, and posts

Termite beam repair ranges from sectional replacement to creative reinforcement. If the beam is a built-up assembly, you may remove and replace individual plies. For solid sawn beams, load reduction by shoring is critical before any cut. Sistering with LVLs is a strong move when you can achieve end bearing at posts, and tie the new members through with bolts or SDS screws per an engineer’s schedule. For beams over living spaces where headroom matters, consider a flitch plate sandwiched between clean plies, bolted at a close spacing. It restores bending capacity without dramatically increasing depth.

Posts and columns decay at their ends, particularly where a concrete pier wicks moisture. If the lower 6 inches of a post is termite-eaten, do not patch it in place. Lift the beam slightly, cut the post square, and insert a new section with a metal base that provides a stand-off from concrete. It is also a good moment to add a post cap that transmits both gravity and uplift, especially in regions where wind uplift is part of the design.

Walls, studs, and headers

Termite wall repair often involves a row of studs with hollow centers near the baseboard. You can replace studs one at a time under a top-plate strongback, but if you find more than 30 to 40 percent of studs in a run are compromised, consider removing and reframing the entire section. For headers with localized damage, full-length replacement is the safest approach, but where finishes make that impractical, you can sometimes add a sister header, same depth, bolted through the cripple bays to share load. Do not forget the jack studs; if they are eaten, the best header will not help.

After termite treatment, drywall repair is the final stage. I advise homeowners not to button up until the structural path is demonstrably restored and moisture addressed. If the termite service drilled treatment holes, plan the drywall patch sequence after your framing repairs, so you are not patching twice. Use setting-type joint compound where humidity is high, and prime with a mold-resistant primer before paint.

Attic framing and roof loads

Termite attic wood repair poses unique challenges. Rafters and ceiling joists act in pairs, and damage at the ridge notch or birdsmouth can trigger roof sags. Sistering full-length rafters is ideal. If you cannot achieve full length, run at least past the next bearing point and tie the sister into the ridge with a real connection, not just nails into old wood. Replace purlins and struts if they show galleries; they often look unimportant until the first heavy rain puts load on the roof.

Ventilation fixes are essential in attics that hosted drywood termites. Seal obvious entry points, improve soffit and ridge vent balance, and keep insulation from choking airflow at the eaves. An attic that breathes is less attractive to future colonies.



Shear, holdowns, and the lateral story

Load path is not **experienced termite inspector Watsonville** just gravity. Many termite damage restoration jobs miss the lateral piece. When termites tunnel in sill plates behind exterior sheathing, they undercut the shear transfer from wall to foundation. That means you may restore vertical bearing perfectly but still have a weak link in a wind or quake.

For structural termite repair in shear walls, remove enough sheathing to see plate conditions and stud base connections. Replace plates, re-nail per a modern schedule if possible, and add holdowns or strap ties where walls terminate. Do not mix old and new fasteners casually; confirm that nails or screws meet the sheathing manufacturer’s specs. If old sheathing is riddled with galleries, replacement is better than blind renailing, which only looks productive.

Typical sequence for a sill and joist repair

- Treat and verify: confirm termites have been professionally treated and that active galleries are controlled.
- Shore and measure: install temporary supports, record elevations and door operations to guide lift-back.
- Remove in sections: demo damaged drywall or subfloor and remove decayed sill and the first joist bay where necessary.
- Install new structure: set pressure-treated sill with gasket and anchors, sister or replace joists with proper hangers and blocking.
- Reconnect the system: restore sheathing, install connectors for uplift and shear, then close finishes and monitor.

Materials, joinery, and what lasts

Not all wood is equal in a repair. I reach for dense, dry stock when possible. For sill plates, pressure-treated No. 2 or better is standard, but I avoid overly wet PT if the project needs tight tolerances that day, because it shrinks. For sisters and beams, LVLs provide predictable strength and straightness, though they need protection from future moisture.

Splicing deserves respect. A sister that stops short of bearing without a tested fastener schedule is half a repair. Aim for at least 24 inches of overlap beyond the last visible damage, and if loads are high or spans long, extend to the support. Use a structural adhesive to spread shear along the plane, then add a staggered screw pattern that matches the engineering demand. Avoid over-nailing near ends that might split the member. For screw types, I prefer purpose-made structural screws with tested values, not deck screws.

Epoxy consolidants and injectable fillers have a place in preserving historic trim or non-structural elements. For structural zones, I rarely rely on them as the sole solution. If you must, use them in concert with new wood that termite exterminator actually carries the load.

Metal connectors are your invisible insurance. Hangers, hurricane ties, strap ties, and post caps restore what termites removed: the ability to move forces safely around corners and across planes. Get the nails right. Hanger nails are not the same as common 16ds. Use the length and shank the manufacturer specifies.

Lifting, leveling, and how much is enough

Owners often want their floors perfectly level again. That is not always wise or necessary. When termite damage allowed a part of the house to settle over years, lifting it back all at once can crack finishes and stress utilities. I plan for partial lifts that restore function and alignment, followed by plane corrections in finish layers.

On a 2-inch settlement at the perimeter, I might lift 1/2 inch during framing repair, then feather the rest with underlayment or a flooring transition. If doors rub, I correct the frame square while the wall is temporarily unloaded. In bathrooms with rigid tile, I avoid aggressive lifting unless we are retiling.

Working in occupied homes, and what to expect

Termite repair services in an occupied house require choreography. Negative air and containment keep frass and dust away from living areas. Expect noise during shoring and removal, then quieter phases while carpenters fit sisters and plates. A modest sill replacement along a 12-foot wall with two sisters and subfloor patches might take two skilled carpenters a day or two once shoring is set. More complex termite beam repair with LVLs and multiple posts can stretch to a week, especially if we wait on epoxy anchors to cure or coordinate inspections.

If you are looking for termite repair near me or a termite damage contractor near me, ask candidates how they stage temporary supports, what their plan is to restore both gravity and lateral paths, and how they protect finished spaces. The answers will tell you if they see beyond the chewed wood.

Cost ranges without the smoke

Every house is different, but realistic bands help with planning. Local termite damage repair that replaces a few studs and a short sill segment can run in the low four figures, especially if access is simple. Termite floor joist repair with sisters across a room and new hangers often lands in the mid four figures. Major termite structural repair, such as rebuilding a long shear wall with new holdowns or replacing a main girder with LVLs, can enter five figures, particularly if drywall, siding, or finishes must be replaced and inspected.

Materials are not the main driver. Labor and logistics are. Crawlspace work at 18 inches of clearance takes twice as long as the same task in a basement. Add coordination with termite treatment schedules and city inspections, and a three-day repair can become a two-week project calendar.

Permits, engineering, and when you need both

Replacing like with like on non-structural trim may not need a permit. Restoring structural capacity often does. If you are touching headers, beams, shear walls, or the foundation interface, plan to involve your building department. For anything beyond straight member swaps, bring in a structural engineer. They will confirm spans, fastener schedules, and connector types to meet current loads, and they will sign off on odd conditions, like partial sisters or unconventional splices that fit tight spaces.

I keep a small library of span charts and connection guides, and I still defer to stamped details for edge cases. An engineer can also keep you from overspending, by showing when a simple sister does the job as well as a full member swap.

Moisture, grade, and the habits that prevent reinfestation

Termite damage repair does not last if the conditions that fed the colony remain. I walk the perimeter with the owner and look for earth to wood contact, mulch piled against siding, and downspouts that dump at the foundation. Correct the slope to shed water. Install splash blocks or leaders that carry water 6 to 10 feet away. In crawlspaces, a 6 mil vapor barrier is basic; in damp regions, consider a dehumidifier or full encapsulation. Vent terminations should never blow into a crawl or attic.

Inside, fix chronic leaks. A wax ring leak at a toilet can invite termites to the subfloor line for years. If you are planning termite drywall repair after termite treatment, cut back to find the plumbing stub and check for slow weeps. Paint cannot fix a moisture path.

Special cases worth respect

Historic houses invite a lighter touch. If a 120-year-old beam has localized termite damage but architectural restrictions limit replacement, you can sometimes box the beam with new plies or steel plates that hide within the original profile, preserving the look while restoring strength. In these cases, document the hidden work with photos and notes for the next caretaker.

Condo work changes the game. Termite framing repair inside a multi-unit building must respect fire separations and association rules. Coordinate early, and assume more inspections.

Deck ledgers deserve their own paragraph. If termites and moisture compromised a ledger, it is often safer to build a free-standing deck than to attempt a ledger repair buried under finishes. If you do repair, demand flawless flashing and positive drainage.

Telltales of a successful repair

A house that carries well is quiet. Doors swing true. Floors feel firm underfoot, not spongy or drumlike. If you place a marble on a repaired floor, it stays where you set it. In the crawl, you should see continuous bearing lines, connectors with all required fasteners, no shiny threads where nails missed, and bright wood that is dry to the touch. In walls, studs feel solid under a push, and headers do not visibly deflect with a hand load. In the attic, rafters sit squarely at the ridge and birdsmouth, with fresh ties where needed.

I also look for the absence of two things: fresh frass after treatment, and new moisture readings above ambient. If either appears, pause before you patch.

How to choose the right partner

Skip the generic search, if you can, but if you are typing termite damage repair near me or structural termite repair near me, filter for contractors who speak the language of load paths. Ask to see a past project where they performed termite beam repair or termite sill plate repair. A wood repair contractor termite damage near me who owns adjustable posts, cribbing, a moisture meter, and a diverse set of connectors is likely to do it right. They should work in rhythm with a licensed pest control operator, not instead of one.

Expect a scope of work that mentions temporary support, overlap lengths on sisters, connector schedules, and finish restoration. If you need termite attic wood repair or termite subfloor repair, the bid should address ventilation or waterproofing fixes. For termite wall repair inside living spaces, look for a plan that also includes drywall and paint, sequenced after treatment verification.

Bringing it all together

Load path recovery in termite framing repair is a mindset more than a method. It turns a wood replacement job into a structural restoration, with attention at every junction where weight or wind wants to travel. When you rebuild that chain carefully, a house heals in ways you can feel, not just see.

I have watched anxious owners breathe again when a stubborn door opens smoothly after a sill plate is replaced, or when a long-standing floor bounce disappears under a new sister and hanger set. Those small changes signal a deeper truth: the path is whole again. With the insects gone, the moisture controlled, and the connections re-knit, the structure can do its quiet work for decades.