Termites rarely announce themselves in the attic with a sudden collapse. It is more of a quiet, long campaign, hidden inside rafters, webs of truss members, and the roof sheathing that takes the first sun every day. I have opened attics where the surface of a rafter looked perfectly fine, only to push a screwdriver through what was left of the core. I have also seen dramatic cases, like a sagging ridge line after years of concealed feeding. Whether the damage is a small colony's long weekend or a full season of chewing, the approach to termite attic wood repair lives or dies on two things: restoring the load path and choosing the right method for the specific component.

Attics are unforgiving. They carry the roof, and the roof carries wind, snow, and the simple weight of itself. Termite wood repair in the attic, especially termite structural repair, needs to be more than a cosmetic patch. You are rebuilding strength, stiffness, and continuity so the house behaves the way the engineer who drew it intended.

What "structural" really means up there

In the attic, wood parts are not interchangeable decorations. Rafters handle compressive and bending forces from the roof decking above. Trusses translate loads through a web of members into bearing at the walls. Sheathing stiffens the whole assembly, spreads point loads, and acts as a diaphragm during wind events. When termites hollow these out, the structure does not fail in a clean, textbook way. You may see:

- An uneven roof plane or a shallow dip between rafters.
- Hairline drywall cracks at the ceiling-wall joint below.
- A truss that has twisted slightly, telegraphing as a hard-to-close interior door.
- Nail pops in the ceiling or small leak stains that come and go with wind.

One subtle clue I look for is a rafter that sounds dull when tapped with a hammer, even when it looks okay. Another is frass in thin lines along a member, like spilled sand. If you catch these early, termite damage restoration is far simpler and far cheaper. When the damage extends through multiple members or includes bearing points like top plates or ridge boards, you are in termite beam repair or even ridge repair territory, which needs more https://hotelledecko.cz/index.php/right-sidebar/item/12-aktualita-2#comment1438984 planning and often a permit.

Stop the cause, then fix the damage

No repair holds if the colony keeps feeding. Termite repair services should start with treatment. I have seen beautiful sistered rafters compromised again because the moisture source and access path stayed in place. In an attic, that often means:

- Correcting a roof leak or condensation at the ridge or around vents.
- Sealing eave openings or gasket failures at plumbing and electrical penetrations.
- Improving attic ventilation to reduce chronic moisture that attracts certain termite species.
- Delivering targeted chemical treatment by a licensed pest pro, often a combination of localized foam and exterior perimeter applications, with follow-up inspections.

Only after the exterminator signs off on active infestation control should you open structural members for termite attic wood repair. Otherwise, you risk trapping live colonies behind new work.

Safety, staging, and temporary shoring

Attics are awkward workspaces, hot in summer, brittle in winter, and full of surprises. Lightweight trusses can carry a lot, but only when their geometry stays intact. Cut one web without shoring and you can set off a chain of sagging that is hard to reverse. Good termite structural repair in these spaces usually includes temporary shoring while you reinforce or replace. This can be as simple as a pair of adjustable steel posts with a 4x4 header under a compromised rafter, or as complex as a temporary ridge beam and interior scaffold to catch multiple trusses.

Before lifting a finger, I map the load path: where the load lands now, where I want it to land during the repair, and how I will transfer it back when the new member is in. On a recent project with termite damage to three adjacent rafters near a dormer, we installed a temporary shore on the kneewall, added a jack to the underside of the rafters, brought them back into plane by a fraction of an inch, then installed new LVL sisters with full bearing. We locked in the line before removing the jack. Without that sequencing, the new sisters would have followed the existing sag.

Rafters: when to sister, when to replace

Rafter repair is often the most approachable part of termite attic wood repair. The member is exposed, the load path is straightforward, and you can often gain full-length access after removing some roof sheathing. The decision between sistering and replacement comes down to the percent loss and the location of the damage.

If termites undermined only a midspan section, you might achieve full strength with a sister that runs at least two thirds of the span, bears firmly at both ends, and is fastened with a dense nailing or bolting schedule. The fasteners are not holding the roof up on their own, they are making the two members act as one.

When damage compromises the bearing at the top plate, birdsmouth, or ridge connection, it is usually safer to replace the rafter or install a full-length structural sister. In many homes built after the 1970s, rafters are 2x6 or 2x8. Adding a 1 3/4 inch LVL sister alongside a 2x6 can work well in tight spaces and gives you a straight, strong line. The LVL choice avoids knots and inconsistent grain that matter more after a member has been weakened. Use approved hangers, rafter ties, or structural screws rated for ledgers and truss repairs. Do not substitute drywall screws. They are brittle and snap.

I often prefer construction adhesive between the old and new member to reduce potential squeaks and add composite action. Adhesive does not replace proper fasteners, it just improves the behavior under load. Before you set the sister, treat the remaining original wood with a borate solution, dry it properly, and remove all crumbly, non-structural fibers. You want clean, sound wood under your reinforcement.

Trusses: treat them like engineered systems

Trusses are not big rafters. They are engineered assemblies that rely on the geometry and plate connections to work as a unit. Termite damage to a truss rarely affects just one stick in a vacuum. The compromise can change how forces move through the web, which means field fixes should be designed or at least reviewed by a licensed engineer or a truss repair specialist. I treat any truss with visible damage as a candidate for an engineered scab or gusset repair plan.

Common approaches include:

- Full-length sistering of a top chord or bottom chord with an engineered member and a specific screw or bolt pattern.

- Plywood or OSB gusset plates on both faces of a damaged web or joint, installed with glue and a prescribed nailing grid to restore shear transfer.
- Replacement of a short web segment with new lumber, using custom-fabricated steel mending plates where factory plates were compromised.
- A flitch approach, where a steel plate is sandwiched between new wood scabs on either side of a damaged chord, fastened with through-bolts and washers.

Field fixes are not guesswork. I have seen DIY gussets with five nails where sixty were required, and nothing looked wrong until the next wind storm. If you need structural termite repair near me and your trusses have damage, call a contractor who has relationships with engineers. Truss manufacturers often supply stamped repair drawings for a modest fee if you provide them measurements and photos. That is money well spent.

One more point about trusses: do not cut them to make space for storage or HVAC, then try to hide the crime under a patch. If you already have a cut truss that termites have also weakened, you are stacking risks. Get it designed and repaired properly.

Roof sheathing: thin panels with big jobs

Sheathing seems simple, a sheet of plywood or OSB under the shingles. Termites love its edges where ventilation channels bring humid air, and leaks wet the panel seams. Even small losses in thickness, especially in the field between rafters, reduce stiffness and create a springboard underfoot that damages shingles and underlayment. You can test suspect areas by walking the roof carefully and feeling for soft spots, or by probing from the attic with a pick.

If more than a small patch is compromised, it is often better to strip shingles in that area, remove whole panels back to rafters, and install new panels with proper nailing and H-clips where required. Match panel thickness, follow the required nail spacing at edges and in the field, and stagger seams. Pay attention to ventilation and underlayment details so you do not trap moisture that invited the termites in the first place.

The repair sequence matters. If you replace only one panel in a sea of tired, swollen sheathing, you create high and low spots that telegraph through shingles. On a rental property last year, we replaced sheathing across a three rafter bay where termites had hollowed the edges and the AC condensate line had dripped for a season. We synchronized Drywood termite exterminator that with a partial reroof. It cost more than a single patch, but it returned a flat plane and stopped the recurring shingle cracks that kept showing up each summer.

Connections and hardware: the unsung heroes

Termites sometimes leave the steel alone but destroy the wood behind it. I pull off hangers and straps when the wood they touch feels punky. Reinstalling hardware on compromised fibers is a false fix. Replace corroded or bent hangers and use the right nails or structural screws called out by the manufacturer. If you are extending a rafter or reinforcing a truss chord, the connector choice and the fastener schedule are as important as the wood. Look for rated hardware, not whatever is on sale in the bin.

Hurricane ties at eaves, rafter ties that resist outward thrust, and blocking that keeps sheathing edges supported all contribute to the system. If termites have run along the top plate or the birdsmouth cuts, assume that some of these connections need attention too.

Moisture, ventilation, and why termites chose your attic

Termites need moisture to survive. They tend to follow predictable paths: leak stains around plumbing vents, condensation at uninsulated bath fans, valleys where leaf litter builds up, and soffits with bird or rodent openings that let humid air swirl up into the rafter bays. Fixing these conditions reduces the chance of reinfestation and makes your repair last.

I like to see a balanced ventilation strategy with continuous soffit intake and a ridge vent, or gable vents that actually move air. Insulate ductwork, connect bath fans to the exterior with sealed ducts, and keep insulation baffles in place at the eaves so air flows freely. If you have had repeated termite visits, consider a borate spray treatment on exposed framing members in the attic after repairs. It is not a magic shield, but it turns the buffet into a bitter meal for future colonies.

A quick triage checklist for homeowners

- Confirm active infestation has been treated by a licensed pest professional.
- Photograph all visible damage and note locations relative to the exterior, ridge, and eaves.
- Avoid walking on soft sheathing or compromised truss areas without boards to spread your weight.
- If the roofline sags or ceiling cracks appear quickly, call a structural contractor, not just a handyman.
- Gather attic access info, past roof repair records, and any prior termite reports before you call for bids.

Choosing repair methods that fit the damage

Most termite attic wood repair falls into a few reliable categories. Here is how I think about the options when scoping work:

- Sistering rafters or chords: Works when the original member still has enough material to fasten to, and the ends can bear on sound supports. Best for midspan damage and moderate loss.
- Engineered gussets and scabs: Preferred for truss web repairs or chord nicks, designed with specific fastener schedules to restore load transfer through joints.
- Full member replacement: Necessary when bearing points are destroyed or the cross-section loss exceeds reasonable reinforcement. Often used with temporary shoring.
- Partial sheathing replacement: Effective when localized damage exists, but be ready to expand the area if high and low spots or water stains suggest a broader problem.
- Flitch plates or LVL upgrades: Good when access limits member size or when you want a stronger, straighter line alongside questionable original lumber.

The specific choice depends on the percent of cross-section lost, location within the span, presence of joints nearby, and whether the damage coincides with a bearing location or connection. For example, I will not sign off on a simple sister if a rafter's birdsmouth at the plate is eaten away. That needs bearing restored, possibly with a new seat cut and a full-length member that reaches from plate to ridge.

Permits, inspections, and the role of an engineer

Termite structural repair affects the integrity of your home, so many jurisdictions require a permit. When trusses are involved or when you are changing member sizes, expect an inspector to ask for stamped drawings or repair letters. This is not bureaucratic padding. It documents that your fix returns the structure to its intended capacity. As a contractor, I build the time for permitting and engineering into the schedule. Homeowners who try to skip this part often get delayed later when an appraiser or buyer's inspector flags undocumented structural repairs during a sale.

Costs and timelines, honestly framed

People search for termite damage repair near me hoping to see a single number. Reality sprawls more. Small rafter sistering jobs, one or two members with good access, can fall in the few hundreds to a couple of thousand dollars, especially if you can work from the attic without roof removal. Truss repairs with engineered gussets and a site visit from an engineer can run from the low thousands into the mid range, depending on how many joints are involved.

Sheathing replacement during a partial reroof tends to scale with area. A three rafter bay, say 4 feet by 12 feet, including underlayment and shingles, might cost several thousand once labor, disposal, and safety gear are counted. Add to that pest treatment if not already done. Timelines range from a day for a small sistering project to a week or more for coordinated truss and sheathing work with inspections.

When damage continues into walls or floors, such as termite wall repair, termite sill plate repair, or termite floor joist repair, the scope expands. The same principles apply: shore, restore bearing, repair or replace members, and fix moisture routes. Termite subfloor repair sometimes piggybacks on wall or joist work, and if contents or finishes were removed during treatment you may need termite drywall repair after termite treatment to close everything up cleanly.

Coordinating trades so the fix sticks

The best outcomes pair a pest professional, a wood repair contractor with structural experience, and, when needed, an engineer. Communication keeps surprises down. I like the exterminator to mark active galleries, the roofer to share any soft spots or leak history, and the repair crew to photograph every stage so the homeowner has a record. If you search for termite repair near me or local termite damage repair, look for companies that talk about load paths, shoring, and fastener schedules, not just "we replace bad wood."

For homeowners in older neighborhoods where mud tubes up the foundation are common, it may make sense to phase work. Treat first, then tackle critical roof structure, then move down to beams, plates, and any cosmetic repairs. This staged approach keeps the home safe while staying within a budget.

Edge cases I have seen, and what worked

- Hidden ridge rot with truss involvement: A 1980s home had a ridge vent that wicked water back into the ridge board and adjacent top chords. Termites followed the moisture. We installed temporary interior shoring

under three trusses, sistered the top chords per an engineer's detail with LVL, replaced 16 feet of ridge board, and reworked the ridge vent with baffles. The roofline straightened by nearly half an inch once the shore took load and the new members went in.

- Attic furnace condensate mishap: A slow drip saturated two bays of OSB sheathing over a season. Termites found the wet edge. We coordinated with HVAC to reroute and insulate the drain, then replaced four panels of sheathing and adjusted the nailing schedule to match the manufacturer's specs. The homeowner had been dealing with shingle blisters in that exact area every summer. Those stopped once the plane stiffened.
- DIY cut truss made worse by termites: A previous owner had clipped a web to run a storage platform. Termites later hollowed the cut zone. An engineer provided a repair with double 3/4 inch plywood gussets on both faces of the joint, glue-laminated and nailed in a dense grid, plus a steel strap. We added sister scabs on the top chord where it had small pockets of loss. The inspector signed off with photos and a letter on file.

Materials and techniques that help in attics

Borate treatments are useful as a preventive step on exposed, dry interior framing. They do not turn mush into structure, but they discourage future feeding. For adhesive, I prefer a high quality polyurethane construction adhesive. For fasteners, structural screws with known shear values save time compared to through bolts in tight spaces, but bolts still have a place when you need clamping force for flitch plates.

When replacing sheathing, I match the thickness, use exterior glue plywood or rated OSB, and always maintain panel gaps at edges for expansion. On rafters, I try to select sisters that are straight to begin with, since they will likely define the roof plane after the repair. On truss work, I use full face gussets, not small patches, and I predrill if the fastener schedule is dense to avoid splitting.

When to call and what to ask

If your attic repair touches trusses, bearing points, or more than a small section of sheathing, get a professional. When you interview a wood repair contractor for termite damage, ask how they will shore, how far any sisters will run, what fastener schedules they use, and whether an engineer will review truss repairs. Contractors who do this well can explain their plan without hedging.

Homeowners often search for a termite damage contractor near me or wood repair contractor termite damage near me and end up with pros who mostly do surface carpentry. You want someone comfortable under a roof with a jack post and a laser level, not just a saw and a caulk gun. Local knowledge matters too. In humid regions, ventilation fixes pay dividends. In arid climates with rare but intense rains, tight flashing and controlled penetrations are key.

Final thoughts that respect the stakes

Termite damage repair is not a race to replace the most wood. It is a careful restoration of how the house carries itself. In attics, that means keeping rafters straight and strong, treating trusses as the engineered systems they are, and never underestimating the role of sheathing in stiffness and weather resilience. The best termite damage restoration blends pest control, moisture management, and disciplined carpentry. Do those well, and the roof will tell you by staying quiet, flat, and strong when the next storm rolls over.

If you are staring at a soft spot in the attic and wondering where to start, treat the colony, shore what carries weight, and bring in help that speaks the language of loads and connections. Repair termite damage to house components the way they were meant to work, and you will not have to revisit the same problem in a few years.