

Rusted Steel Lintel Repair: Why Steel Angles Corrode and What Texas Weather Does About It

by Travis Nech

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What Happens to the Steel Over Your Windows — Told Straight

by **Travis Nech**

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Chapter 1: The Steel Hiding Over Every Opening — and Why Rusted Steel Lintel Repair Starts With Understanding It

Every window, every door, and every garage opening in your brick home has a piece of steel hiding above it. In the trade we call it a lintel — usually a steel angle, an L-shaped piece of iron that carries the weight of the brick above the opening and spreads it onto the masonry at each side. You see a thin strip of it under the brick, maybe painted, maybe already showing orange. Most homeowners never think about it until the day they notice the rust. By then, the story has been running for years.

I've been doing this fifty years. I've cut out thousands of rusted lintels across Texas, and I can tell you the steel was losing the fight long before anybody saw it. Here's why: a steel lintel lives in the worst spot on the house. Brick is not waterproof — it's a sponge with good manners. Rain soaks into the brick, travels down through the wall, and lands on the steel. The mortar joints above the opening crack a little with age, and now water has a direct path. The paint on the steel — if it ever had real paint — chalks and flakes in the Texas sun. And then the chemistry starts, and chemistry doesn't

negotiate.

Rusted steel lintel repair is one of the most common jobs I get called for, and it's also one of the most misunderstood. Most folks think the problem is the rust. The rust is the symptom. The problem is water meeting steel, over and over, for decades, with nobody managing either one. This book is about the whole story: how steel rusts, why rust is so destructive to brick, what Texas weather specifically does to accelerate it, and — most important — what actually stops it. By the last chapter, you'll understand your lintels better than most of the contractors who'll bid on them.

Chapter 2: How Rust Actually Works — The Chemistry in Plain English

Rust needs three things: iron, oxygen, and water. Take away any one of them and rust stops. The steel in your lintel is mostly iron. Oxygen is in the air. Water arrives on schedule, every time it rains, every morning the sprinklers run, every humid night the dew settles on the brick. That's the whole recipe, and your lintels have been marinating in it since the house was built.

Here's what happens at the surface. Water and oxygen reach bare steel — through a scratch in the paint, a failed paint film, a spot the painter missed in 1987 — and the iron starts converting to iron oxide. That orange-brown crust is the steel literally becoming something else. And here's the part that matters for everything in this book: **iron oxide takes up far more space than the steel it replaced — roughly six to ten times the volume.** A sixteenth of an inch of steel lost to rust becomes close to half an inch of crust. The steel isn't just weakening. It's swelling. And that swelling is what destroys your brick, which is the subject of the next chapter.

A few things about the chemistry that explain what you'll see on your house. Rust doesn't form evenly — it forms where water sits longest. The bottom leg of the angle, the horizontal part you can see, stays wet longer than the vertical leg, so it rusts first. The ends of the lintel, buried in the masonry where air can't dry them out, rust from the inside of the wall where nobody can see it. Paint slows all of this down — paint is a barrier, and a good barrier buys years — but paint is not permanent. It chalks in UV, it cracks at edges, and the day it fails at one spot, the rust starts at that spot and spreads under the remaining paint like a blister. That's why you'll see paint bubbling over a lintel: the rust is already underneath, lifting it.

One more chemical fact, because it explains a mistake I see constantly: rust is porous. It holds water against the steel like a sponge. So once rust starts, it accelerates itself — the rusty spot stays wet longer than the clean steel around it, which makes more rust, which holds more water. It's a feedback loop. Catching it early isn't just cheaper, it's chemically easier — you're interrupting the loop before it feeds itself.

Chapter 3: Rust Jacking — When Swelling Steel Lifts Your Brick

Now the destructive part. That six-to-ten-times volume expansion has to go somewhere. The steel can't push down — the opening is below it. It can't push sideways much — it's buried in masonry at the ends. So it pushes up, into the brick courses above the opening. In the trade, we call it rust jacking: the rusting steel jacking the brickwork upward, course by course, cracking mortar joints horizontally as it goes.

If you take one thing from this book, take this: **horizontal cracking in the mortar above a window or door is rust jacking until proven otherwise.** Walls settle downward and crack in stair-steps. Steel rusts and pushes upward and cracks in horizontal lines. The direction of the crack tells you the direction of the force, and the force here is coming from below, from the swelling steel.

What rust jacking does to a wall, stage by stage: first the steel swells enough to stress the joints, and you get hairline horizontal cracks in the mortar directly above the lintel. Then the courses start to lift — you can sometimes see the brickwork stepping up slightly over the middle of the opening. The cracks widen. Water pours into the opened joints now, which feeds the rust faster, which jacks harder — the same feedback loop from the last chapter, now with brick damage compounding it. In advanced cases the brick faces start spalling from the stress, pieces of the wall get loose, and the displaced masonry has to be taken down and rebuilt as part of the repair.

Here's the part that surprises homeowners: by the time you see the lifted courses, the steel underneath is often far worse than it looks from outside. The visible swelling is the result of corrosion that's been running for years. I've opened walls where the lintel looked merely rusty from the street and found the angle swollen to nearly twice its original thickness, the bottom leg flaking apart in layers like pastry. Exfoliating rust — the layered, flaking kind — has tremendous lifting power. Trade literature documents cases where it cracked and damaged brick all around the lintel with force nobody expected from "just rust."

The practical takeaway: rust jacking is progressive and it doesn't reverse. Treating the surface of a jacking lintel is theater — the swelling is happening through the full thickness of the steel. Once the brick is lifting, the steel is done, and the honest fix is replacement. We'll get to exactly where that line is in Chapter 9.

Chapter 4: What Texas Weather Does to Steel — Our Four Accelerators

Steel rusts everywhere, but Texas gives it special advantages. In fifty years of cutting rusted angles out of Texas walls, I've learned our weather attacks lintels through four specific mechanisms. If you live here, all four are working on your house right now.

Accelerator one: rain that arrives all at once. Texas doesn't drizzle — it dumps. A spring thunderstorm can drop two inches in an hour, and brick soaks it up like it was designed to. That water travels down through the wall and sits on the lintel. Then the sun comes out, the surface dries, and the homeowner thinks the wall is dry. It isn't. The interior of the wall — where the lintel lives — stays damp for days after a big rain. Every one of those storms is a full wetting cycle for the steel, and North Texas gets dozens a year.

Accelerator two: humidity and dew. From roughly April through October, Texas nights are humid enough that dew forms on and in the brickwork regularly. Dew doesn't run off like rain — it soaks in slowly and stays. A lintel in Houston or East Texas can spend half the year in effectively damp conditions without a single rainstorm. Even in drier West Texas, the daily temperature swing condenses moisture inside the wall cavity. Rust doesn't need a flood. It needs damp, and Texas nights deliver damp on schedule.

Accelerator three: heat that kills paint. Paint is the lintel's first line of defense, and Texas sun is paint's worst enemy. Ultraviolet breaks down paint films — chalking, cracking, peeling — years faster here than in milder climates. A paint job that would last fifteen years in Ohio lasts seven or eight on a south-facing Texas lintel. Most Texas lintels were painted once, when the house was built, and never again. By year ten the paint is failing. By year fifteen the steel is exposed. By year twenty the rust is structural. Nobody did anything wrong — the sun just did what sun does, and nobody was watching.

Accelerator four: Gulf air and salt. If you're anywhere near the coast — Houston, Galveston, Corpus, the whole Gulf plain — the air itself carries salt, and salt is a corrosion accelerant.

Salt water is a better electrolyte than fresh water, which means the electrochemical rust reaction runs faster. Coastal lintels can show in fifteen years what an inland lintel shows in thirty. This isn't a small effect. It's the difference between a maintenance schedule and a replacement schedule, and if you own brick near the Gulf, your lintels are on the faster clock whether you know it or not.

Put the four together and you get the Texas lintel story: water arrives in bulk, damp lingers, paint dies young, and salt speeds the chemistry. That's why Texas has so much rusted steel lintel repair work. It's not bad luck and it's not bad steel. It's the climate doing exactly what the climate does, to steel that was never detailed to survive it.

Chapter 5: The Sprinkler Problem — The Damage You Can Stop Today

Of everything in this book, this is the chapter that saves the most lintels, because it's the one accelerator the homeowner controls completely.

Walk around any Texas suburb and you'll see it: sprinkler heads spraying directly onto brick walls, every single morning, March through November. The homeowner set the system to water the foundation — good instinct in our clay soil — and the overspray hits the wall. Or the beds along the house get watered and the brick gets soaked as collateral. Day after day, year after year, the bottom two feet of the wall never fully dries. And what sits right at the bottom of the wall, collecting every drop that runs down? The lintels over the ground-floor windows and doors.

A sprinkler hitting a brick wall is worse than rain, and here's why: rain is intermittent, but sprinklers are relentless. Rain wets the wall and then the wall gets days to dry. A sprinkler wets the same spot every morning at 5 AM, resetting the drying clock daily. The steel above that spot never gets a dry cycle. In corrosion terms, you've taken a lintel that was designed for intermittent wetting and put it in a permanently damp environment. I've seen ten-year-old lintels under sprinkler spray that look worse than thirty-year-old lintels on the dry side of the same house. Same steel, same paint, same weather — the only difference is the sprinkler.

The fix costs nothing: redirect the heads. Adjust the arc so the water hits the soil and the plants, not the brick. If the beds need water and the wall is in the way, switch those heads to drip lines or soaker hose — water at the root zone, nothing airborne. Check it at 5 AM once, in person, because sprinkler

coverage looks different in daylight than it does when the system actually runs. I've had homeowners swear their sprinklers don't hit the wall, and then we watch the morning cycle together and the brick is getting pressure-washed daily.

While you're at it, look at where the water goes after it hits. Grade should fall away from the house so water doesn't pool at the base of the wall and wick up into the masonry. Gutters should carry roof water past the wall, not dump it at the corners where it splashes back onto the brick. Downspout splash blocks, six feet of fall in the first ten feet — the boring drainage stuff. None of it is about the lintel directly, and all of it is about the lintel, because every drop that soaks the wall eventually visits the steel.

Do this chapter today. It's free, it takes an hour, and it does more for lintel rust prevention than any product you can buy.

Chapter 6: Born to Rust — Why So Many Texas Lintels Never Stood a Chance

Here's the uncomfortable truth about a huge percentage of Texas lintels: they were installed in a way that made rust nearly inevitable. Not because the builder was cutting corners out of malice — though some were — but because the standard practice of the era simply didn't account for what water does to steel inside a brick wall.

The missing flashing. The single biggest birth defect in Texas lintel work is the absence of through-wall flashing above the lintel. Proper construction puts a flashing membrane above every opening — a waterproof layer that catches the water traveling down inside the wall and directs it out through weep holes, so it never touches the steel. The trade guidance is specific: weep holes spaced 24 inches on center per the Brick Industry Association, sitting directly on the flashing, with the flashing's outer edge extending past the brick face and its ends turned up to form dams so water can't run off the sides. That's the detail. Now here's the reality: on thousands of Texas homes built from the 1960s through the 1990s, that flashing was never installed. No membrane, no weeps. The water comes down the wall, lands directly on the bare steel, and sits there. As one veteran inspector put it, the lintel is for support, not for waterproofing — but without flashing, the lintel becomes the waterproofing, and steel makes a terrible gutter.

The shop-primer-only steel. Most residential lintels went in with nothing but the thin shop primer the steel yard applied — a coating meant to prevent rust during shipping and

storage, not to survive decades inside a wall. It was never a real paint system. Within a few years in a damp wall, it's gone.

The caulked-tight trap. And then, trying to be thorough, somebody caulks around the lintel — sealing the steel tightly to the brick. It looks tidy. It's a disaster. Moisture that gets into the wall through cracks and joints is now trapped around the steel with no way to dry out. I read about a Manhattan apartment building that suffered enormous damage to its brick exterior after a new building superintendent insisted on caulking every steel window lintel tight — the trapped moisture rusted the steel, the exfoliating rust expanded with tremendous lifting power, and it cracked and damaged brick all around the lintels. Same physics, Texas scale. If your lintels are caulked tight to the brick, that caulk isn't protecting the steel. It's marinating it.

The buried ends. The ends of the lintel disappear into the masonry at each side of the opening — the bearing ends. Those ends sit in the dampest part of the wall, get no air circulation, and were usually never painted at all. They rust first and worst, hidden from every inspection. When I cut out a failed lintel, the middle often looks merely rusty while the buried ends are swollen and delaminated. The part you can't see is the part that fails first. Remember that the next time someone tells you the lintel "looks fine from the street."

None of this is the homeowner's fault. You bought a house, not a metallurgy project. But understanding the birth defects explains why the rust was never really optional — and why the replacement has to fix the detailing, not just the steel. New steel in the same flashing-less, weep-less, caulked-tight wall is just a slower repeat of the same movie.

Chapter 7: Reading the Rust — Staining, Scaling, and Swelling

Not all rust is equal. Learning to read the stage of corrosion on your lintels tells you whether you're buying maintenance or replacement, and it's a skill you can pick up in one walk around the house. Here's the progression, in order.

Stage one: staining. Orange-brown streaks running down the brick or mortar below the lintel. The steel is rusting enough to bleed, but the rust is still mostly surface. The brick courses above are level, the joints are intact. This is the earliest visible warning, and it's the cheapest moment in the whole story. Staining means water is reaching the steel regularly. Find the water — sprinklers, missing flashing, failed caulk above — and fix that first, then treat the steel.

Stage two: paint failure and surface rust. The paint is bubbling, flaking, or gone in patches. The exposed steel shows rough orange scale but the angle still has its shape — the legs are straight, the thickness looks right, nothing is lifting the brick. This is maintenance territory: clean it, treat it, recoat it. The steel has decades left if you protect it now.

Stage three: scaling and pitting. The rust is no longer a surface film — it's building up in layers, flaking off in scales, and the steel underneath is pitted where the rust has eaten in. The angle may still be straight and the brick may still be level, but the section is losing thickness. This is the judgment-call stage. A mason needs to look at how much sound steel is left. Light scaling with solid metal underneath can still be treated. Deep pitting through a significant portion of the thickness means the steel's strength is compromised.

Stage four: swelling and jacking. The steel has expanded visibly. The brick courses above the opening are lifting, horizontal cracks are opening in the mortar, and the angle itself may look swollen or delaminated — layers of rust exfoliating apart like flaky pastry. This is replacement territory, full stop. The swelling that lifted the brick happened through the full thickness of the steel. No surface treatment reverses it.

Stage five: perforation and section loss. The steel is rusted through in spots — you can see daylight through it, or the bottom leg is gone in sections. The brick above may be sagging now, not just lifting, because the steel has lost structural capacity. This is replacement, possibly urgent depending on the span and the load. On a garage opening, stage five is a structural problem, not a maintenance problem.

Walk your house and grade every lintel on this scale. Write it down — which opening, which stage, today's date. That one-page log becomes the most valuable document you own when it's time to call a mason, because it replaces his guesswork with your history. And photograph anything at stage two or above. Photos don't argue.

Chapter 8: Paint, Galvanize, or Stainless — The Three Ways Steel Gets Protected

When the time comes to protect steel — whether you're maintaining an existing lintel or specifying a new one — there are three levels of defense. They cost different money and they last different decades. Here's the honest breakdown.

Level one: paint. A proper paint system — rust removed to

sound metal, rust-converting treatment on what's left, a real metal primer, then a quality exterior topcoat — is a barrier. It keeps water and oxygen off the steel. It works, and it's the cheapest option. Its weakness is that it's only a barrier: the day it's breached at any point — a scratch, a chip, a crack at an edge — rust starts at that point and spreads underneath the surrounding paint. Paint also needs renewal. On a Texas south-facing lintel, figure on recoating every five to seven years. Skip two cycles and you're back to bare steel. Paint is maintenance, not a one-time fix. Treat it that way and it serves well. Treat it as permanent and it betrays you.

Level two: hot-dip galvanizing. This is the big step up, and it's what I specify on most replacements. The steel is dipped in molten zinc — around 450 degrees Celsius — and the zinc bonds to the steel metallurgically. It's not a coating sitting on top; it's fused into the surface. That gives you two kinds of protection. First, the zinc is a barrier, like paint but tougher. Second — and this is the part paint can't match — the zinc is sacrificial. Zinc is less noble than iron, which means when the coating is scratched or damaged, the surrounding zinc corrodes preferentially and the exposed steel stays protected. The zinc takes the hit so the steel doesn't have to. A scratch in paint is the start of rust. A scratch in galvanizing is a non-event. Galvanized steel in residential service lasts decades without attention — it's the closest thing to install-and-forget that exists at a sane price. It costs more than plain painted steel up front. It's cheaper than one premature replacement.

Level three: stainless steel. The premium option. Stainless resists corrosion so thoroughly that in residential service it's effectively permanent — the chromium in the alloy forms a self-healing oxide film that reforms if damaged. It costs significantly more than galvanized, and for most Texas homes it's more than the job needs. Where it makes sense: coastal exposure with direct salt spray, high-end construction where the owner never wants to think about the lintel again, or historic work where the replacement must outlast everything around it. For a standard DFW brick veneer home, galvanized is the sweet spot — stainless is the luxury.

One note on what not to do: don't paint over galvanizing casually, and don't assume any paint improves on a galvanized surface — the zinc is already doing the job, and the wrong paint can interfere with it. And never let anyone tell you that plain black steel with a quick spray of paint is "just as good" as galvanized. It's a third the protection at best, and the price difference on the steel is the smallest line item on the whole job. The steel is cheap. The labor to install it is not. Put the good steel in while you're paying for the labor.

Chapter 9: When Treatment Works and When It's Theater

This is the decision chapter. A rusted lintel presents two possible paths — treat the steel in place, or cut it out and replace it — and choosing wrong wastes money in both directions. Treat a dying lintel and you've bought a delay. Replace a sound lintel and you've bought surgery the patient didn't need. Here's how to tell.

Treatment is honest when: the steel is structurally sound. That means stages one and two from Chapter 7 — staining and surface rust, paint failing but the angle straight, full thickness intact, brick courses level, no horizontal cracking beyond hairlines. The fix is real work, not a spray can: wire-brush or grind to sound metal, apply a rust-converting treatment to what's left, prime with a proper metal primer, topcoat with quality exterior paint, and repoint the joints around the opening. Per the 2026 national cost data, surface rust treatment runs roughly \$200 to \$500 per lintel, and Angi's 2026 figures put window lintel repair at \$150 to \$400 with door lintels around \$400 — but as with everything in this trade, the range depends on access, height, and how much steel there is to treat. Done right, on sound steel, treatment buys decades. The steel was never the problem — the unprotected steel was.

Replacement is honest when: the steel has swollen (stage four), perforated (stage five), or lost significant section to pitting (late stage three). The test is simple and you can do it yourself: look at the brick courses directly above the opening. Level courses, intact joints — the steel is probably sound. Courses lifting or stepping up, horizontal cracks opening — the steel has jacked and it's done. A mason's version of the test is to pull a brick or two above the bearing and look at the actual steel, which takes ten minutes and replaces guessing with knowing. If a contractor insists on full replacement without looking at the steel, get a second opinion. If he proposes a \$200 wire-brush-and-paint on a lintel that's jacked the brick six courses up, get a second opinion faster.

The gray zone is late stage three — heavy scaling, real pitting, but the angle still straight and the brick still level. Here the honest answer is measurement, not opinion: how much sound steel thickness remains? That's the core judgment call in any rusted steel lintel repair — measure the steel, don't guess at it. A mason can gauge this. If the section loss is minor, treatment plus a shorter re-inspection interval is reasonable. If it's significant, replacement now is cheaper than replacement later plus the brick damage the delay will cause. When in doubt in the gray zone, I lean toward replacement on garage spans (the loads are unforgiving) and

toward treatment on small windows (the loads are modest and the downside of waiting is small).

One thing treatment can never do: fix the birth defects from Chapter 6. If the wall has no flashing and no weeps, treating the steel without addressing the water is painting a ship that's still taking on water. The treatment chapter and the water chapter have to be read together. Every honest rust job — treatment or replacement — includes a water plan. "What are you doing about the water?" is the question that separates the craftsman from the painter.

Chapter 10: Lintel Rust Prevention — The Maintenance That Actually Works

Everything in this book points to one conclusion: rust is a water problem wearing a steel disguise, and prevention is water management plus coating maintenance. Here's the program — the actual schedule I give homeowners who want to never buy a lintel replacement.

Kill the sprinklers first. Chapter 5. Redirect every head that hits brick. This single step removes the worst corrosion accelerator on most Texas homes. Free. Do it this weekend.

Manage the roof water. Clean gutters overflow and dump water down walls. Downspouts that discharge at the foundation splash back onto the brick. Grade that slopes toward the house ponds water at the base of the wall. None of this is lintel work, and all of it determines how wet your lintels stay. The masonry trade's old rule is the three D's — deflect, drain, dry out — and it applies to every drop near your walls.

Recoat on schedule. Every five to seven years, wire-brush the exposed steel on your ground-floor lintels, spot-treat any rust with converter, and repaint with a quality exterior metal paint. It's a Saturday morning job. It resets the corrosion clock to zero. The paint manufacturers won't tell you this plainly, but the recoat interval is the warranty — paint that never gets renewed is paint that eventually fails, and in Texas the sun sets that interval at five to seven years whether you like it or not. Put it on the calendar the way you'd put an oil change. Second-story lintels get done when the ladder or the painter is there for something else — bundle the high work.

Inspect twice a year. Spring and fall, fifteen minutes, the Chapter 7 grading walk. You're looking for change — new staining, paint starting to bubble, a hairline crack that wasn't there in spring. Photograph anything suspicious and compare

next season. The whole point of the schedule is catching stage one while it's still a \$200 conversation instead of catching stage four when it's a replacement.

Caulk smart, not tight. Sealant around window and door frames keeps bulk water out of the wall — that's good and you should maintain it. But never caulk the lintel itself tight to the brick (Chapter 6's trap). The steel needs to breathe and drain, not be sealed into a moisture sandwich. If a handyman offers to "seal up" your lintels, he's offering to accelerate the rust. Politely decline.

When you replace, upgrade the detailing. If a lintel does reach replacement, the new installation should include what the original lacked: through-wall flashing above the opening with weep holes on it, corrosion-protected steel (galvanized at minimum), and no caulk trapping moisture against the metal. The replacement chapter of the story is where the birth defects get corrected. A replacement that repeats the original detailing is a future replacement — make sure the bid addresses water, not just steel.

That's the whole prevention program. No magic products, no miracle coatings. Water management, paint on schedule, eyes twice a year. The chemistry is relentless but it's also predictable, and predictable can be beaten. And the cheapest rusted steel lintel repair ever sold is the one you never need — because you kept the water off and the paint on.

Chapter 11: What the Rust Is Doing to the Rest of Your Wall

A rusting lintel doesn't suffer alone. The damage spreads outward through the wall system in ways that surprise homeowners, because the visible rust is only the center of a larger moisture problem. Here's the collateral damage to look for.

The opened joints become water highways. Once rust jacking cracks the mortar above the opening, every rainstorm pours water directly into the wall through those cracks. That water doesn't just feed the rust — it saturates the brick, migrates sideways into surrounding masonry, and in brick veneer construction it reaches the wall cavity, the sheathing, and the framing. I've opened walls for lintel replacement and found rotted sheathing two feet to the side of the opening, all from water that entered through jacked joints above a window. The lintel repair fixed the steel. The sheathing repair was the expensive surprise. Catch the jacking early and you prevent both.

Efflorescence — the white staining. That white powdery

staining on brick below or around a rusting lintel is efflorescence: mineral salts carried out of the mortar and brick by moving water. A little is cosmetic. Persistent efflorescence that keeps coming back after rain means water is moving through the wall in volume, and the rusting lintel is usually the reason the water has a path. It's the wall's way of telling you the moisture problem is active, not historical.

Spalling brick. When brick stays saturated and Texas gets one of our hard freezes, the water in the brick expands and pops the faces off — spalling. The brick around a jacking lintel is the wettest brick on the wall, so it's the first to spall. Spalled brick around an opening usually gets blamed on "bad brick." Sometimes it is bad brick. But when it clusters around a rusted lintel, it's the moisture story, and replacing the spalled units without fixing the lintel and the water is rearranging deck chairs.

Interior signs. Water that enters through jacked joints doesn't always stay in the wall. Watch for peeling paint or staining on interior walls below windows, damp carpet at the base of an exterior wall, or a musty smell near an opening after rain. By the time it's inside, the exterior problem is advanced. Mention any interior moisture to your mason when he comes for the lintel — it changes the scope from "replace the steel" to "replace the steel and remediate what the water did," and you want that on the table before the bid, not discovered mid-job.

The lesson of this chapter: a rusted lintel is a wall-system problem, not a steel problem. Price the job accordingly, scope the repair accordingly, and fix the water — always fix the water.

Chapter 12: Coastal Texas — The Fast Clock

Most of this book assumes inland Texas — DFW, Austin, San Antonio, the places where rain and humidity do the work. If your brick home is near the Gulf, everything in this book still applies, but the timeline compresses. Houston, Galveston, Corpus Christi, Beaumont, the whole coastal plain: your lintels are on the fast clock.

The reason is salt. Airborne salt from the Gulf settles on everything, and salt water is a far better electrolyte than fresh water — the electrochemical reaction that converts steel to rust runs faster in its presence. It's not a subtle effect. In fifty years of trade experience, coastal lintels routinely show in fifteen years the corrosion that takes thirty inland. The paint fails sooner (salt is hard on coatings too), the rust starts sooner, and the jacking arrives a decade early.

If you own brick near the coast, three adjustments to the program. First, shorten the recoat interval — every three to four years instead of five to seven, because the salt eats paint. Second, rinse matters: an occasional fresh-water rinse of the wall washes salt deposits off before they work into the masonry. It sounds fussy. It's cheaper than steel. Third, when replacement comes — and on the coast it comes sooner — specify galvanized as the minimum and seriously consider stainless. The upcharge for stainless hurts once. The second replacement hurts more.

One more coastal note: hurricane-driven rain doesn't just wet the wall, it pressures water into every crack and joint. After any major storm, walk your lintels. Storms find the weak detailing — the unflashed opening, the failed caulk — and exploit it in hours. A post-storm lintel check is fifteen minutes that catches what the storm started.

Inland readers: don't skim this chapter thinking it doesn't apply. The salt effect scales with distance — it's strongest at the beach and fades as you go inland, but Houston's humidity alone is accelerator enough. Know your zone and set your clock accordingly.

Chapter 13: The LintelLOCK Answer — A System, Not a Steel Swap

You've read twelve chapters about why lintels rust. Here's what the fix looks like when it's done as a system instead of a part swap — because everything in this book points to the same conclusion: the steel was never the whole problem, so the steel can't be the whole answer.

A LintelLOCK replacement addresses all five elements of the corrosion story:

1. Corrosion-protected steel from day one. Galvanized as the standard — the zinc barrier plus the sacrificial protection that paint can't match — primed and painted before installation, including the bearing ends that disappear into the masonry and never see daylight again. The steel goes in protected, not hoping to be protected later.

2. The water gets managed. Through-wall flashing above the opening, weep holes on the flashing at the proper spacing, end dams so water can't run off the sides. The detail the original builders skipped is the detail that decides whether the new steel lasts twenty years or fifty. Water killed the last lintel. The system doesn't give it a second chance at this one.

3. No moisture traps. The installation is detailed so water drains and air circulates — no caulk sealing the steel tight to the brick, no buried ends sitting in perpetual damp without protection. Everything the old installation did wrong, the new one does right.

4. Proper sizing and bearings. Corrosion isn't the only killer — undersized steel and inadequate bearings fail too, and a rust-weakened angle on short bearings is the worst of both. The replacement steel is sized for the actual span and load, with adequate bearing on sound masonry at each end.

5. The wall goes back invisible. Matched brick, matched joints, no patch you can spot from the street. The corrosion story ends with the wall looking like it never happened.

That's the system. Any contractor can sell you a steel angle. The five elements together are what make a rusted steel lintel repair permanent instead of a slower repeat. When you're comparing bids — for [lintel replacement in Dallas](<https://lintlerepair.com>) or anywhere in Texas — ask each bidder how his job addresses water, not just steel. The one who talks about flashing and weeps before you ask is the one who read the same book you just did.

Chapter 14: Questions Homeowners Ask Me

How long does a steel lintel last in Texas? It depends on the detailing more than the steel. A plain painted angle with no flashing in a sprinkler-soaked wall: fifteen to twenty-five years to serious trouble. The same angle with good flashing, weeps, and paint maintained on schedule: forty-plus. Galvanized with proper water management: several decades without attention. The range is wide because the installation quality is wide. There's no expiration date stamped on the steel — there's a water-management grade, and that's what sets the clock.

Can I just paint over the rust? Painting over active corrosion without cleaning and treating it first is makeup on a wound. The rust continues underneath, and the new paint fails faster than the old did because it's sitting on a loose, porous surface. Proper treatment means removing rust to sound metal, converting what remains, then priming and painting. On sound steel that's legitimate maintenance. On swollen or perforated steel it's delay, not repair — Chapter 9 is the line.

Will my homeowner's insurance cover a rusted lintel? Corrosion is wear and tear — not covered. Sudden damage is different: a vehicle hits the wall, a storm tears the opening,

and the resulting lintel work can be part of that claim. But "my 1985 angle iron rusted" is maintenance, and insurance doesn't do maintenance. Budget it like maintenance.

Do I need to replace all my lintels at once? Not necessarily, but assess them all at once. Same age, same steel, same weather — if one is at stage four, the others are probably at stage two or three. The assessment is cheap (your Chapter 7 walk is free; a mason's assessment of all openings is one service call). Then prioritize: replace what's failing, treat what's treatable, and put the rest on the maintenance schedule. Bundling multiple replacements into one project also saves real money on mobilization and setup.

The home inspector flagged "corroded lintel." How worried should I be? It depends on the stage. Surface rust with level brick: a maintenance item, budget a few hundred for proper treatment. Swollen steel with lifted courses: a real repair — replacement pricing applies. Sagging span or perforated steel: significant, and on a garage opening it's structural. Use the Chapter 7 stages to read the inspector's finding, and get a mason's eyes on anything at stage three or above before you close. For sellers: fixing a flagged lintel before listing is almost always cheaper than the credit the buyer will demand.

Does sealing the brick prevent lintel rust? Sealers have their place, but they're not a substitute for the fundamentals. A breathable sealer on the brick reduces water absorption — fine as part of a water-management strategy. But sealing over a wall with no flashing doesn't keep water off the steel inside the wall; it just changes how the water moves. And non-breathable sealers on brick veneer trap moisture and make everything worse. Flashing, weeps, and drainage first. Sealer as a supplement, maybe. Never as the plan.

How do I know the new lintel won't just rust again? You don't — not from the steel alone. You know it from the detailing: galvanized or better steel, through-wall flashing with weeps, no moisture traps, paint maintained. Ask the contractor to show you each element in the bid. The [Brick Industry Association Technical Notes on lintels](<https://www.gobrick.com>) document the proper detailing better than anyone — it's the industry's own standard, and any bid that meets it is a bid you can trust. The steel is the smallest part of the answer. The system is the answer.

A Final Word Before You Walk Your Walls

You now know more about lintel corrosion than most people

who sell lintel work. You know the chemistry, the four Texas accelerators, the birth defects that doomed so many installations, the five stages of rust, the three levels of protection, and the maintenance program that beats all of it.

Here's the whole book in one paragraph: keep water off the steel, keep paint on the steel, and look at the steel twice a year. That's it. The chemistry is relentless but it's predictable, and predictable can be managed. The lintels that fail are almost always the ones nobody watched — the paint died unnoticed, the sprinkler soaked the wall for a decade, the flashing was never there. Attention is the cheapest corrosion protection ever invented, and it's free.

Walk your house this weekend. Grade every lintel. Fix the sprinklers. Put the recoat on the calendar. And if you want to keep learning, my [free lintel repair guides](<https://metro-foundation-repair.web.app/free-books/>) cover the rest of the story — cracks, sagging spans, costs, and the full replacement process.

The rust never sleeps. But now you're watching.

About the Author

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