

Stair-Step Cracks in Brick: What They Mean and What to Do

The Most Common Crack Pattern in Texas — Read It Before
You Fix It

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Chapter 1: The Crack Everyone in Texas Has Seen

Walk through any neighborhood in Dallas–Fort Worth that's more than ten years old and you'll find them: cracks in the brick that zigzag up the wall like a staircase — a few inches across, a course or two up, then across again, then up again. Masons call them stair-step cracks. In fifty years of Texas brickwork, this is the single most common crack pattern I've seen, and it's the one that confuses homeowners the most — because sometimes it means nothing, and sometimes it means your foundation is moving.

Let's be clear about what a stair-step crack in a brick wall is. Brick walls are built in courses — horizontal rows of brick stacked on mortar joints. When one part of the foundation drops lower than the part next to it, the wall above gets pulled apart at its weakest point, which is the mortar joint. The crack follows the path of least resistance: across a horizontal joint, then up a vertical joint, then across again. Each little zig and zag is the crack choosing the softest mortar line at each step. The result is a diagonal staircase pattern

that can run a few feet or stretch across a whole wall.

Now here's the first thing you need to know, and it's the thing that keeps homeowners up at night: a stair-step crack doesn't automatically mean your house is falling down. It means part of your foundation has moved relative to another part — what engineers call differential settlement. Sometimes that movement happened twenty years ago, finished, and the crack is just the scar. Sometimes the movement is happening right now, this season, and the crack is getting wider. The crack pattern is the same either way. The difference between a scar and an emergency is whether the movement is still going on — and this book will teach you how to tell.

The second thing you need to know: in Texas, the ground under your house moves. That's not a defect — it's geology. Most of North and Central Texas sits on expansive clay soil that swells when it's wet and shrinks when it's dry. We get both extremes, sometimes in the same year: a wet spring followed by a brutal dry summer. The soil under one corner of your house can behave completely differently from the soil under another corner — different moisture, different compaction, a tree drinking from one side. When the ground moves unevenly, the foundation follows, and the brick —

rigid, unforgiving brick — shows you exactly where. Brick is the tattletale of the building world. Wood and siding can flex a little and hide movement. Brick can't. It cracks, and it puts the evidence right on the outside of your house for everyone to see.

So this book is your field guide to the most common crack in Texas brick. You'll learn why it forms, how to read what it's telling you, how to measure whether it's still moving, when it's just old settling you can live with, when it needs a foundation company, and — critically — the repair order that doesn't waste your money. Because there is a right order and a wrong order, and the wrong order costs people thousands.

Chapter 2: Why It Steps — How Differential Settlement Makes the Pattern

To understand the crack, you have to understand what's happening underneath the house. Let me walk you through it the way I explain it standing in a customer's driveway.

Your house sits on a foundation — in Texas, that's usually a slab-on-grade or a post-tension slab. The foundation sits on soil. In most of DFW, that soil is expansive clay. Clay is made of microscopic platelets that act like tiny sponges: they absorb water and swell, and they release water and shrink. A clay soil can change volume dramatically between wet and dry — enough to lift or drop a foundation by inches.

Now, the key word is *differential*. If the whole foundation moved up or down together, the brick wouldn't crack at all — the wall would just ride along. The problem is that soil moisture is never uniform. The south side of your house bakes in the sun and dries out faster. A big oak on the west side drinks hundreds of gallons a day from the soil. The flower bed on the east side gets watered every morning. A plumbing leak under the slab keeps one spot permanently

wet. So one section of soil swells while another shrinks, and the foundation bends — one part higher, one part lower.

Brick can't bend. The mortar joints are the weak link by design — they're supposed to give before the brick cracks. So when the foundation bends, the mortar joints in the wall above open up, and the crack takes the staircase path: across the horizontal bed joint where the bend is pulling the wall apart, then up the vertical head joint, then across again. Each step of the staircase is roughly one brick high and one brick wide, because that's the grid the crack is traveling on.

Where does the crack usually appear? At the weak points of the wall: above and below windows and doors, at the corners of the house, around the garage door opening — anywhere the wall has an interruption. A long unbroken wall can flex a tiny bit without cracking; a wall with a big hole in it (your garage door) concentrates the stress at the corners of the hole. That's why so many stair-step cracks run from the corner of a window or the top corner of a garage door diagonally toward the nearest corner of the house.

There's also a seasonal version of this story that Texas homeowners need to know about. During a long dry spell — and we've had some historic droughts — the soil around the

perimeter of the slab dries out and shrinks, pulling away from the exterior grade beams. The perimeter of the slab drops slightly relative to the interior, which stays at more consistent moisture. The result: stair-step cracks in the brick mortar, appearing during the drought. Then the rains come, the perimeter soil swells back up, the slab lifts, and the cracks close — sometimes so completely you'd swear they were never there. Home inspectors have watched this happen. It's real, and it means a crack you saw in August might be invisible in March. That doesn't mean it never happened, and it doesn't mean it won't be back — but it does mean you should measure cracks over time and through seasons before you decide what they mean. Which is exactly what Chapter 4 is about.

One more cause worth naming: it's not always the soil. Sometimes the foundation itself has an issue — a void under the slab from soil erosion, a poorly compacted fill pad under a newer home, a broken sewer line washing soil out from underneath. The crack pattern looks the same. The difference is that soil-moisture movement is often seasonal and manageable, while a void or a leak is progressive and needs to be found. If your stair-step crack appeared suddenly rather than gradually, or if it's growing fast, think about what

changed: new construction next door, a broken pipe, a drainage change. Sudden cracks have sudden causes.

Chapter 3: Reading Your Crack — Width, Direction, and What Each One Says

Not all stair-step cracks are equal. Before you do anything, read the crack itself. It has three things to tell you: how wide it is, which way it runs, and what's happening around it.

Width is the first and most important measurement. The industry uses rough thresholds, and they're worth knowing:

- **Hairline — less than 1/16 inch.** You can see it but you can't fit much into it. On its own, this is usually cosmetic — the wall moved a little, the mortar gave, end of story. Monitor it, but don't lose sleep.
- **1/16 to 1/8 inch.** Worth watching. This is the range where you start measuring and tracking, because it's big enough to matter if it's growing.
- **1/8 to 1/4 inch.** This is where professionals start paying serious attention. A crack in this range that's stable might just need repointing. A crack in this range that's growing needs evaluation.
- **Over 1/4 inch.** This is significant movement. You can fit a pencil into it. Cracks this wide — especially if

they're still opening — mean real differential settlement, and you need a professional assessment.

- **Over 1/2 inch.** Severe. The wall has moved substantially. This is structural-evaluation territory, no exceptions.

These widths aren't magic lines — a 3/16-inch crack that's been exactly the same for ten years is less concerning than a 1/16-inch crack that doubled in six months. Which is why width alone isn't the verdict. Width plus *change over time* is the verdict.

Direction tells you which way the foundation moved. A stair-step crack that runs diagonally upward from a window corner toward the house corner is telling you the foundation dropped on the far side — the low side is where the crack is widest. The crack is always widest at the point of maximum movement and tapers as it runs. So find the wide end of the crack: that's the side that's dropping. If you have two stair-step cracks forming a V or an inverted V, the foundation is dropping in the middle of the V (a V pointing down) or heaving up in the middle (an inverted V). Reading direction tells the foundation company where to look, and it tells you whether the movement matches a suspect — like the big tree

on the side where the crack is widest.

What's around the crack matters as much as the crack itself. Walk the whole house and look for the companion signs. Doors or windows that stick, or that used to close fine and now don't — that's the frame racking with the foundation. Diagonal cracks in interior drywall above doors and windows, especially cracks that run from the corner of a door frame toward the ceiling — same story inside. Gaps where trim or molding has pulled away from the wall. A visible slope in the floor — set a marble down and see if it rolls. Caulking that's split along the joint where the brick meets a window frame. Any one of these on its own might be nothing. A stair-step crack *plus* sticking doors *plus* interior drywall cracks is a pattern, and patterns mean the foundation is moving.

Cracks through the brick vs. cracks through the mortar.

Most stair-step cracks follow the mortar joints — that's the normal version, and it's actually good news, because it means the mortar did its job as the sacrificial element. If the crack is breaking *through the bricks themselves* — snapping brick units in half along the staircase path — that's a sign of more forceful, more sudden movement. Through-brick cracking

deserves a faster professional look than through-mortar cracking of the same width.

Chapter 4: The Pencil Test — How to Measure Whether Your Crack Is Active

This is the most useful chapter in the book, because it's the one that turns worry into knowledge. The question isn't really "how bad is my crack?" — it's "is my crack still moving?" A crack that's done moving is a repair job. A crack that's still moving is a foundation job. Here's how to tell the difference, with tools you already own.

The pencil mark method. Find the widest point of the crack. Draw a short pencil line across the crack — perpendicular to it — and date it. Then measure the width at that mark with a ruler or a crack gauge (a cheap plastic card with graduated lines, a few dollars at any hardware store). Write down the width and the date. Do it again in a month. And again the month after. And across a season change — measure in the dry of summer and again after the fall rains. If the width is the same every time, the crack is stable. If it's growing — even a little, even a 32nd of an inch — it's active.

The tape method. For a slightly more precise version, stick a piece of masking tape across the crack and mark both edges

of the crack on the tape with a fine pen. Date it. If the crack widens, the marks move apart. If it closes seasonally, the marks move together. This is the poor man's crack monitor, and it works.

The glass tell-tale. Old-school masons used to epoxy a thin strip of glass across a crack. If the crack moves, the glass breaks. You can do the same thing with a strip of rigid plastic or even a drywall compound patch — anything brittle that will show movement. It's crude but honest: an unbroken tell-tale after a full year of seasons is strong evidence the crack is done moving.

What the measurements mean. A crack that hasn't changed through a full wet-dry cycle — a Texas summer and the rainy season — is almost certainly stable. That's a scar, and you can repair it with confidence. A crack that's growing steadily is active, and cosmetic repair is a waste of money until the movement stops. A crack that opens in summer and closes in winter (or vice versa) is seasonal — the foundation is riding the soil moisture cycle. Seasonal cracks need the moisture managed (Chapter 9) and the crack repaired with a flexible approach, not rigid mortar that'll just crack again next August.

How long to monitor. I tell homeowners: give it at least three months, and ideally a full season change. I know that's not the answer anyone wants — you want to know *now* — but a crack measured once is a snapshot, and snapshots lie. The exception: if the crack is very wide (over 1/2 inch), growing visibly week to week, or accompanied by sudden new symptoms like a door that won't close or a new interior crack, don't wait three months. That's an active situation and it needs a professional now.

Document everything. Take photos of the crack with a ruler in the frame for scale, from the same angle, every time you measure. Date them. If you end up hiring a foundation company or a structural engineer, this log is gold — it turns "I think it's getting worse" into "it widened 3/32 of an inch between June and September." Professionals take you more seriously with data, and you'll make better decisions with it too.

One honest caveat: monitoring tells you whether the crack is moving, not *why*. A stable crack still deserves the "why" question — if the cause was a plumbing leak that's still leaking, the next crack is just a matter of time. But the pencil test is where every smart homeowner starts, because it tells

you which path you're on: repair the wall, or fix the foundation first.

Chapter 5: When It's Just Settling and When It's Foundation Movement

Every house settles. The question is whether your stair-step crack is normal settling that's finished, or foundation movement that's ongoing. Here's how to sort one from the other.

Normal settling happens in the first few years after construction. The soil under the foundation compresses under the weight of the house, the foundation finds its bearing, and everything locks in. Settling cracks are typically hairline, they appear early in the home's life, and — critically — they stop. A ten-year-old house with a hairline stair-step crack that hasn't changed since year three is showing you a settling scar. It's done. You can repoint it and forget it.

Foundation movement is different. It's ongoing, it's driven by soil moisture changes, erosion, or plumbing issues, and it doesn't stop on its own. The signs that you're dealing with movement rather than old settling:

- The crack is growing — your pencil-test measurements prove it.

- The crack appeared or worsened suddenly, years after construction.
- It's wider than 1/8 inch and you can't explain it by the home's age.
- Companion signs are present: sticking doors, interior drywall cracks, sloping floors, separated trim.
- It's seasonal — opens and closes with wet and dry periods.
- There's an obvious driver: a large tree near the crack, a drainage problem, a known plumbing leak, recent nearby construction.

The age test. A stair-step crack in a two-year-old house is more likely settling. The same crack appearing for the first time in a twenty-year-old house is more likely movement — something changed. Ask yourself: what's different? New pool next door? A tree that's grown enormous? A sprinkler system installed last year? A drought? The cause is usually findable if you look at what changed around the time the crack appeared.

The pattern test. One isolated hairline stair-step crack above a single window, stable for years — that's the wall relieving stress at a weak point, and it's about as normal as brick gets.

Multiple stair-step cracks on different walls, cracks that connect into long runs, cracks wide enough to see daylight through — that's the foundation talking, and it's saying more than one word.

When to get a professional opinion. Here's my rule after fifty years: if the crack is wider than 1/4 inch, if it's growing, if there are companion signs inside the house, or if you just can't shake the worry — get an assessment. And get the *right* assessment. A foundation repair company's free inspection is a sales call — sometimes an honest one, but a sales call. An independent structural engineer's assessment, which typically runs \$500 to \$1,500 in DFW, is a diagnosis with no stake in the repair. The engineer tells you what's moving, how much, and what it needs. Then you bid the repair with the engineer's report in hand, and every contractor is bidding the same scope. That \$500 to \$1,500 is the best money you'll spend in this whole process, because it's the difference between fixing the right thing and guessing.

I'll be straight with you about my own business here: I own a foundation repair company — Metro Foundation Repair — and I'd still tell you to get the engineer's report first on anything significant. An engineer who says "this is stable, just

repoint it" just saved you ten thousand dollars. An engineer who says "this corner needs piers" just saved you from a mason who would've patched the crack and watched it reopen. Either way, you win.

Chapter 6: The Repair Order That Doesn't Waste Your Money

This chapter exists because I've watched homeowners burn thousands of dollars doing the right repairs in the wrong order. With stair-step cracks, the order is everything. Here it is:

Step 1: Diagnose. Measure the crack (Chapter 4). Determine whether it's active or stable. If it's significant — wide, growing, or with companion signs — get the structural engineer's assessment. Know what you're dealing with before you spend a dollar on repairs.

Step 2: Fix the water and soil drivers. Before any structural work, address what's making the soil move: fix plumbing leaks under or near the slab, correct drainage so water runs away from the house, manage the trees (root barriers or selective removal — get an arborist's opinion before you cut down a heritage oak), and set up consistent perimeter watering if you're in a drought cycle. Some foundation movement is purely moisture-driven, and stabilizing the moisture can stabilize the foundation without a single pier.

This step is skipped more often than any other, and it's the cheapest step.

Step 3: Stabilize the foundation. If the engineer says the foundation needs mechanical stabilization — piers, underpinning, whatever the diagnosis calls for — this happens now. Not after the brick is fixed. Now. The foundation has to be done moving before the wall gets repaired, because any masonry repair done on a moving foundation is temporary by definition.

Step 4: Verify stability. After foundation work, the engineer (or the foundation company, with measurements) verifies the foundation is stable. Some movement monitoring after the repair is normal — you want to see the numbers hold through at least one season change before you close up the wall.

Step 5: Repair the masonry. Only now — with a stable foundation — do you fix the brick. Repoint the cracked joints, replace any broken brick units, match the mortar. This is the mason's chapter (Chapter 8), and it's last for a reason.

Step 6: Manage moisture going forward. The long-term habits that keep it from coming back (Chapter 9).

Now let me tell you about the wrong order, because it's the most common mistake in Texas brick repair: **repointing the crack before the foundation is stable**. It looks great for a while. Fresh mortar, clean joints, the staircase disappears. Then the soil dries out in August, the foundation moves again, and the new mortar cracks — right along the same staircase, sometimes within months. Now you've paid for the masonry work twice, and you're still paying for the foundation work. I've seen homeowners do this two or three times before someone tells them the order. New mortar applied to a moving foundation will crack again — sometimes within a single season — as the clay soil keeps cycling. The correct sequence isn't a suggestion; it's physics.

The other wrong order: **foundation work without the engineer's diagnosis**. A foundation company sells piers. If you call them first, you'll get a pier bid — which might be exactly right, or might be ten piers where four would do, or might be piers where the real problem was a \$400 plumbing leak. The engineer's \$500 to \$1,500 report is what keeps the foundation scope honest.

And one more: **cosmetic crack filling as a substitute for diagnosis**. Squeezing caulk or filler into a stair-step crack

without measuring it first destroys your ability to monitor it and hides the evidence the engineer needs. If you're going to fill it, measure and photograph it first. Better yet, monitor it first, then fill it.

The right order feels slow. Diagnose, manage water, stabilize, verify, repair masonry, maintain. But it's the only order where you pay once. Everything else is paying twice.

Chapter 7: What Foundation Repair Costs in Texas in 2026

Let's talk numbers. I'm going to give you the 2026 ranges the way the industry reports them, with the Texas context you need to read them right. Every number here depends on severity, access, soil conditions, and how many linear feet of foundation are involved — treat them as ranges, not quotes.

The engineer's assessment: \$500 to \$1,500. In DFW, expect the middle of that range for a typical residential evaluation with a written report. Some engineers charge toward the lower end for a straightforward assessment; complex cases with elevation surveys run higher. This is Step 1 money, and it's non-negotiable on anything significant.

Minor crack repair (stable, cosmetic): \$500 to \$1,500. For a stair-step crack that's been proven stable — your pencil test shows no movement through a season — the masonry repair alone (cleaning out the joints and repointing, sometimes with elastomeric sealant or micro-epoxy injection for hairline movement) lands in this range. This is the best-case scenario, and it's the reward for monitoring first: proof of stability

turns a foundation scare into a masonry maintenance job.

Moderate settlement (localized piers): \$3,000 to \$12,000.

When a section of foundation needs underpinning — helical piers or push piers under the dropping section — costs scale with the number of piers. Piers typically run \$1,500 to \$2,500 per pier location, so a corner that needs four to six piers lands in the middle of this range. This is the most common real foundation repair for stair-step cracks in Texas: one zone of the house, one set of piers, problem solved.

Major structural work: \$8,000 to \$25,000+. When the settlement is extensive — multiple zones, significant elevation differences — the full scope adds up: engineer (\$500–\$1,500), foundation repair (\$5,000–\$20,000 depending on pier count and method), then masonry restoration (\$4,000+) after stabilization. A representative DFW scenario: \$750 for the engineer, \$10,000 for the slab work, \$4,000 for the brick restoration, plus permits — roughly \$15,000 all in. That's the reality for significant stair-step cracking tied to soil movement, and it's why the engineer's diagnosis matters so much: it determines whether you're in the \$1,500 lane or the \$15,000 lane.

Severe cases: \$15,000 to \$45,000+. Deep settlement, major

rotation, or full-perimeter underpinning. These are the cases where the crack was ignored for years while the movement compounded. The cost of waiting is real — a crack that's 3/8 inch wide today can be an inch wide in two years if the movement continues, and at that point you're not repairing, you're rebuilding.

What moves the number. Pier count is the biggest driver — every additional pier is \$1,500 to \$2,500. Depth to stable soil matters: the deeper the piers have to go to find bearing, the more it costs. Access matters: tight lots, pools, decks, and landscaping in the work zone add labor. And the masonry restoration afterward is its own scope — don't let a foundation bid and a masonry bid get confused with each other. Get them itemized separately so you can see what each trade costs.

The Texas surcharge you should know about. DFW masonry and foundation costs have been running hot — local contractor data shows increases of 15 to 30 percent over the past several years, driven by labor shortages and sustained demand from exactly these soil-movement issues. Get multiple bids. And remember the rule from the last chapter: the engineer's report first, then bids against the same scope.

Three contractors bidding the engineer's scope will give you a real price. Three contractors guessing will give you three different jobs.

If you're weighing whether to get that professional evaluation, start with a [brick crack evaluation](<https://championbrickrepair.com>) — a mason's eyes on the crack pattern itself — and step up to the engineer when the pattern says foundation. And when the verdict is foundation work, that's [foundation repair for brick homes](<https://metrofoundationrepair.com>) territory: the stabilization has to come before the brickwork, always.

Chapter 8: Fixing the Brick After the Foundation Is Stable

The foundation is stable. The engineer has signed off. The movement is done. Now — and only now — it's the mason's turn. Here's what proper stair-step crack repair looks like.

Repointing the cracked joints. The standard repair is to grind or cut out the cracked mortar joints along the staircase — to proper depth, at least half an inch to an inch, down to sound mortar — and pack in new mortar matched to the existing in strength, color, and texture. The new mortar must not be harder than the brick or the old mortar; the joint is supposed to remain the flexible, sacrificial element. On a Texas brick veneer home, that's usually a standard Type N mortar. The joints get tooled to match the original profile so the repair disappears into the wall.

Replacing broken bricks. If the crack snapped brick units — not just mortar — those bricks come out and get replaced with matching units. This is slower, more expensive work than repointing, because each brick has to be cut out without damaging its neighbors, and the replacement has to match in

size, color, and texture. On older homes, finding matching brick can be a project in itself — salvage yards and the manufacturer's old stock are the usual sources. A good mason will tell you upfront whether he can match your brick or whether the repair will be visible.

What about the crack that was just settling? Same repair, less drama. A stable hairline stair-step crack gets repointed like any other failed joint. The only difference is confidence: because you monitored it and proved it stable, you know the repair will last.

Sealants and flexible repair. For cracks that are seasonal — opening and closing with the moisture cycle — rigid mortar alone may crack again next cycle. In these cases, after the joints are cleaned out, a flexible elastomeric sealant or a micro-epoxy injection can bridge the joint and move with it. This isn't as pretty as a tooled mortar joint, and it's not the right call for every crack, but for a proven seasonal mover it's more honest than mortar that'll fail on schedule. Discuss it with your mason — the right choice depends on the crack's behavior, which is why your monitoring log matters.

What a good masonry repair bid includes. The linear feet of joint being cut out. The depth of cut. The mortar type and

how it's being matched. How broken bricks are being handled and whether replacements are included. Protection of windows, landscaping, and adjacent surfaces. Cleanup. And a warranty in writing. If the bid just says "fix crack in brick — \$800," it's not a bid, it's a guess. Make him specify.

Timing. Don't repoint in the dead of a drought if the crack is seasonal — wait for the cycle to stabilize, or use the flexible approach. Mortar needs moderate temperatures to cure properly; Texas summer afternoons are brutal on fresh mortar (it dries too fast and weakens), so good masons work mornings or tent the wall. These are the details that separate a repair that lasts decades from one that lasts two years.

Cost of the masonry work alone. For a typical stair-step crack repair on a stable foundation — cutting out and repointing the affected joints, maybe replacing a handful of bricks — expect \$500 to \$1,500 for a localized repair. Larger runs, multiple cracks, or extensive brick replacement run higher, scaling with the linear footage involved. DFW repointing rates run roughly \$12 to \$30 per linear foot depending on access and condition. Get it itemized by the foot so you can compare bids honestly.

Chapter 9: Keeping It From Coming Back — Water, Soil, and Trees

The foundation is stable, the brick is repaired, and you'd like to never think about this again. These are the habits that make that possible. In Texas, foundation maintenance is moisture maintenance — the soil is the foundation's environment, and you're its keeper.

Consistent perimeter watering. This is the big one, and it surprises people. In a Texas summer or drought, the soil around your foundation dries out, shrinks, and pulls away from the slab — that's the dry-phase movement that opens stair-step cracks. The fix is boring: keep the soil moisture consistent around the perimeter. Soaker hoses laid 12 to 18 inches from the foundation, run on a timer during dry spells, keep the soil from shrinking away. You're not trying to soak the ground — you're trying to prevent the extreme dry that causes the shrinkage. Think of it as evening out the cycle, not flooding the yard.

Drainage that moves water away. The flip side: when it rains, water should run away from the house, not toward it

and not pool against it. Grade should slope away from the foundation. Gutters should be clean and downspouts should discharge well away from the house. Pooling water against the foundation saturates the soil, which swells — the wet-phase movement. You want consistency: not too dry, not too wet. The soil should be like a wrung-out sponge, not a desert and not a swamp.

Trees. A mature tree can drink hundreds of gallons of water a day from the soil, and its roots don't respect property lines or foundation lines. If you have a large tree near the corner where the crack appeared, the tree is a suspect — not a convicted criminal, but a suspect. Options, in order of escalation: install a root barrier between the tree and the house, increase watering on the tree side to compensate for what the roots take, or remove the tree. Get an arborist involved before you cut anything — some trees are protected, all of them are expensive to remove, and a root barrier plus supplemental watering solves most tree-driven movement without losing the shade.

Plumbing. A slow leak under the slab — a drain line, a water supply line — keeps one zone of soil permanently wet while the rest cycles normally. That's differential moisture, which is

differential movement, which is stair-step cracks. If your water bill creeps up without explanation, or one area of the house keeps moving while the rest is stable, get the plumbing checked. A plumber's leak detection costs a fraction of a foundation repair.

Watch the weep holes and the veneer. Your brick veneer has weep holes at its base to drain the cavity behind the brick. Keep them clear — blocked weep holes trap water in the wall, and trapped water plus a repaired crack is an invitation for the crack to reopen. Walk the perimeter once a year: weep holes clear, grade sloping away, no new cracks, caulking intact around windows and doors.

The annual walk-around. Once a year — pick a month, make it a habit — walk your house with the eyes this book gave you. Look at the old crack locations: are the repairs holding? Look for new stair-step patterns, especially above windows and at corners. Check that doors still close cleanly. Look at the soil line: is the ground pulling away from the foundation (too dry) or ponding against it (too wet)? Fifteen minutes, once a year, catches the next problem while it's still a \$500 problem instead of a \$15,000 one.

Here's the truth after fifty years: most stair-step cracks in

Texas are the house and the soil negotiating. The soil moves, the brick reports it, and a homeowner who reads the report early spends a little instead of a lot. Measure your cracks. Fix the water. Stabilize before you repoint. And keep the soil moisture boring — boring soil is a happy foundation.

Every book in this library is free, and they connect: if your stair-step crack came with white staining, read the efflorescence book. If you've got other crack shapes — vertical, horizontal, hairline — the crack-reading guide covers those. They're all at the [free brick repair books] (<https://metro-foundation-repair.web.app/free-books/>) library. Share them with a neighbor. That's what they're for.

Chapter 10: Reading a Foundation Bid — Piers, Prices, and Red Flags

So the engineer says you need piers. Now the foundation companies come out, and the bids land in your inbox, and they don't look anything alike. This chapter is your translator.

How foundation work is priced. In Texas, residential foundation repair is priced primarily by the pier — each pier location runs roughly \$1,500 to \$2,500 depending on the pier type (pressed concrete, steel push, or helical), the depth to stable soil, and the company. A bid for six piers at \$2,000 each is a \$12,000 job. That's why two houses the same size get wildly different bids: it's not the house size, it's how many linear feet of foundation are dropping and how deep the stable soil is. When you compare bids, compare the pier count and the per-pier price, not just the bottom line. A \$9,000 bid for four piers and a \$12,000 bid for eight piers are two different scopes — the cheaper bid isn't cheaper, it's smaller.

What a complete bid includes. Pier count and type. Depth expectations (to refusal or to a specified bearing stratum —

ask what "done" means for each pier). The lift plan: is the company stabilizing only, or attempting to lift the foundation back toward level, and how much lift is realistic? (Honest companies will tell you full recovery isn't always possible or advisable — lifting too aggressively cracks interior finishes.) Interior and exterior protection: how they protect the slab, the plumbing, the landscaping. The tunneling vs. exterior excavation plan, if applicable. Cleanup and restoration of the work areas. Permits, where the city requires them. And the warranty — in writing, transferable to the next owner, with the terms spelled out: what it covers, what voids it, and who honors it if the company is sold.

The engineer's report is your bid document. Every company should be bidding the same scope: the engineer's recommended pier locations and method. If a company's bid doubles the engineer's pier count "to be safe," that's not safety — that's scope creep. If a company dismisses the engineer's report and proposes a completely different plan, make them explain why in writing, and consider running it past the engineer. The report you paid \$500 to \$1,500 for is the referee. Use it.

Red flags. The free inspection that finds \$25,000 of urgent

work on a house with one hairline crack. The bid that's half everyone else's — it's missing piers, depth, or warranty. High-pressure tactics: "this price is only good today," "we have a crew in your neighborhood this week." Any company that won't put the pier count, pier type, and warranty in writing. Any company that bad-mouths the engineer's report instead of addressing it. And the biggest one: a foundation company that offers to "throw in" the brick repair at a discount if you sign today. The brick repair happens after stabilization, by a mason, on a stable foundation — anyone bundling it into the pier bid is selling you the wrong order from Chapter 6.

The questions to ask. How many piers, what type, and why that type for my soil? How deep do you expect to go, and what happens if you don't hit bearing? Stabilization only, or lift — and how much lift? What's the warranty, exactly, in writing? Who pulls the permit? What happens to my plumbing, my driveway, my landscaping? And: can I talk to three of your customers from two or more years ago? The last question is the one that sorts companies fastest. A company with happy two-year-old customers has piers that held. Everything else is talk.

After the work. Get the final elevation survey showing

where the foundation sits now. Keep it with the engineer's original report — together they're the before-and-after documentation that protects your resale value. Monitor for a season before the mason repairs the brick (Chapter 6's order). And keep up the moisture maintenance from Chapter 9, because the piers fixed the symptom zone — the soil still cycles, and consistent moisture is what keeps the rest of the foundation from becoming the next project.

About the Author

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