

Brick That Lasts

by Travis Nech

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BRICK THAT LASTS

A Texas Homeowner's Maintenance Guide to Spalling, Efflorescence, Chimneys, and Keeping Brick Walls Sound for Decades

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This book is educational. It reflects 50 years of hands-on field experience in brick, masonry, and foundation work across Texas. It is not a substitute for an on-site inspection of your home, and it does not create any professional engineering relationship. The author is not a licensed engineer. Where this book raises structural questions about your house, hire a licensed structural engineer to evaluate your specific situation before you act.

All examples in this book are hypothetical or composite teaching examples. They are labeled as such where they appear. They do not describe specific customers, specific jobs, or guarantees of any outcome on any particular home. Prices mentioned are general ballparks offered only to help you plan; prices vary by home, by market, and by the condition found on site. Get written bids for your own work.

Table of Contents

- Chapter 1: The Brick Home Is Not Maintenance-Free
- Chapter 2: Meet Your Wall
- Chapter 3: The Twice-a-Year Walk-Around
- Chapter 4: The White Haze — Efflorescence Explained
- Chapter 5: When Brick Faces Pop — Spalling, Freeze Damage, and Failing Brick
- Chapter 6: Mortar Joints Are the Sacrifice

- Chapter 7: The Chimney — The Most Exposed Brick on the House
 - Chapter 8: Cleaning Brick Without Ruining It
 - Chapter 9: Sealers, Coatings, and Paint — The Honest Truth
 - Chapter 10: Plants, Sprinklers, and Soil Against the Wall
 - Chapter 11: Small Repairs a Homeowner Can Do — and the Line You Do Not Cross
 - Chapter 12: Hiring a Mason and Planning the Work
 - Conclusion: A Wall That Outlives Us All
 - Resources & Next Steps
 - About the Author
-

Introduction: The Cheapest Brick Repair Is the One You Catch Early

Every expensive brick repair I have ever seen started as a cheap one. A mortar joint worn back a quarter inch. A weep hole buried under a fresh bed of mulch. A chimney crown cracked in one thin line. A sprinkler head turned a few degrees, soaking the same patch of wall every morning for five summers. None of those things look like an emergency. All of them, left alone, turn into one.

Brick has a reputation for being the maintenance-free siding, and that reputation is half true. A brick wall does not need painting every few years. It does not rot, it does not feed insects, and it shrugs off weather that chews through lesser materials. There are brick walls in Texas that have stood sound for a hundred years. But every one of those walls had somebody paying a little attention along the way — somebody who noticed the joint, the crack, the white haze, the leaning chimney cap, while the fix was still small.

That is what this book is for. It is not a book about disaster. It is a book about attention. I have spent 50 years in brick, masonry, and foundation work across Texas, and the honest truth I can hand a homeowner is this: most brick damage is water damage, most water damage is slow, and slow damage is catchable — if you know what you are looking at.

So this book teaches you to look. You will learn what your wall is actually made of, layer by layer. You will get a twice-a-year walk-around routine that takes less than an hour. You will learn to read the white salt haze called efflorescence, to recognize spalling before a brick face pops off in a freeze, and to understand why the mortar joint — not the brick — is designed to wear out first. We will climb, in our minds at least, to the chimney, the most exposed brick on your house. We will talk honestly about cleaning, sealers, and paint, three places where good intentions regularly ruin good brick. And

we will finish with the habits around your house — plants, sprinklers, soil — that quietly decide whether your walls thrive, plus a plain guide to hiring a mason and planning ten years of simple care.

You do not need to become a mason. You need to become the kind of owner a mason respects: one who catches things early, asks plain questions, and never lets a small, cheap problem sit long enough to become a big, expensive one.

Let us go look at your walls.

Brick That Lasts: A Texas Homeowner's Maintenance Guide to Spalling, Efflorescence, Chimneys, and Keeping Brick Walls Sound for Decades

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Chapter 1: The Brick Home Is Not Maintenance-Free

If you bought a brick home in Texas because somebody told you it was maintenance-free, you were told a half-truth. Brick is one of the most forgiving, long-lived materials ever put on a house. A well-built brick wall, looked after in a simple and steady way, can serve your family for a hundred years and still look handsome doing it. But maintenance-free has never meant the same thing as care-free, and that small difference is where most brick trouble begins.

Think of it this way. A good pickup truck will run a long time, but only if you change the oil and fix a small leak before it becomes a big one. Your brick walls work the same way. They ask for a little attention on a regular schedule, and for small problems to be handled while they are still small. Ignore them for twenty years, and the bill will be far larger than it needed to be.

That is the heart of this book. You do not need to become a mason to own a brick home well. You need to know what you are looking at, what normal looks like, what trouble looks like early, and when to pick up the phone. With 50 years of hands-on field experience behind these pages, the goal is simple: help you keep a sound wall sound, for decades.

What Brick Veneer Actually Is

Most brick homes built in Texas in the last sixty or seventy years are not solid brick houses. That surprises a lot of folks. In an older solid brick house, the brick itself holds up the roof. In a modern Texas home, the structure is almost always wood framing. The brick you see from the street is a veneer — a single layer of brick, usually about three and five-eighths inches thick, standing just outside the framed wall like a heavy, handsome raincoat.

That raincoat matters more than most people realize. It takes the beating from the sun, the wind-driven rain, and our Texas heat so your framing does not have to. It slows down temperature swings. It resists fire better than most siding. It does not rot, and termites have no interest in it. But it is not waterproof, and it was never designed to be. Brick and mortar both absorb water. That is normal. A well-built veneer wall expects a little water to get in, and it gives that water a planned way back out. When that planned way out gets blocked, painted over, buried under soil, or caulked shut by a well-meaning hand, the wall starts holding water it was meant to release. Trapped water is behind a great share of the failures you will learn about in this book — flaking brick faces, crumbling mortar, rusted supports, and stains that keep coming back.

Understanding that one idea — brick veneer is a rain screen, not a sealed box — will change how you look at your house. You will respect the little openings, gaps, and metal pieces that let it breathe and drain, and you will see why sealing every crack with caulk or coating the whole wall can do more harm than good.

Why Brick Lasts a Century When It Is Cared For

Brick itself is fired clay. The firing process makes it hard, stable, and resistant to the weather in a way that wood, fiber cement, and vinyl simply cannot match over the long haul. Drive through any older Texas town — Waxahachie, Granbury, Fort Worth, Hamilton, or any county seat with a courthouse square — and you will see brick buildings that have stood through droughts, floods, ice storms, and summers that would melt a lesser material into surrender. Many of them are still straight, still tight, still doing their job.

They survived for three reasons. First, the materials were sound. Second, the mortar joints — the gray lines between the bricks — were maintained. Mortar is the sacrificial part of the wall, meant to be a little softer than the brick, to take movement and weather, and to be renewed when it wears. Third, water was managed. Roofs, flashing, gutters, and drainage kept bulk water moving away from the wall instead of into it.

When a brick home fails early, it is rarely because the brick suddenly gave up. It is almost always because one of those three things was neglected. The mortar wore out and nobody renewed it, so water poured into joints that should have shed it. The gutters overflowed for years in the same corner. The flower beds were built up until soil covered the bottom of the wall. A crack was ignored until it told a bigger story. Early failure is usually a maintenance story, not a material story.

Why Brick Fails Early When It Is Ignored

Texas is hard on houses in quiet ways. Our soils in much of North and Central Texas expand when wet and shrink when dry, so your home moves a little with the seasons. Our sun bakes south and west walls day after day. Our storms can drive rain sideways. Our winters are mild until they are not, and a hard freeze on a saturated wall can pop the face right off a brick — a problem called spalling that you will meet in detail later.

None of that dooms your home. It just means your wall is working in a demanding climate, and it earns its long life. A joint that might last thirty-five years in a gentle climate might need attention sooner here, especially on the weather side of the house. A chimney crown that is cracked will let in more water every single rain. A lintel — the steel support over a window or garage opening — will rust and expand if the paint and flashing that protect it are allowed to fail, and expanding rust can lift and crack the brick above it.

The good news is that almost all of these problems announce themselves early, in plain sight, to a homeowner who walks around the house twice a year with open eyes. That walk is the subject of Chapter 3, and it may be the most valuable habit in this entire book.

The Mindset Shift: From Owner to Steward

Here is the shift this chapter asks of you. Stop thinking of yourself only as the owner of a brick home, and start thinking of yourself as its steward. Owners wait for something to break. Stewards watch, note, and act early. Owners budget for emergencies. Stewards budget a modest amount for upkeep and rarely face the emergency at all.

Stewardship does not mean worry, climbing ladders you should not climb, or taking on repairs beyond your skill. Plenty of brick work belongs in professional hands, and later chapters will be plain about where your work ends and a mason's work begins. Where a question is truly structural — whether a wall is carrying load safely, or whether movement threatens the structure — hire a licensed structural engineer for an independent assessment. A good mason will tell you the same thing.

Stewardship mostly means this: you keep water moving away from the house, you keep the sacrificial mortar in decent shape, you keep soil and sprinklers and vines off the wall where they do harm, and you keep a simple record of what you see. Four modest commitments. In return, the wall gives you what brick has given homeowners for centuries — quiet, solid, good-looking protection that does not demand your weekends.

Composite example: Picture two identical brick homes built on the same street in 1998. The first owner walks the house every spring and fall, repoints a few worn joints in year fifteen, keeps the gutters clean, and pulls the flower-bed soil back down below the bottom of the brick. The second owner does none of it because the house was sold to him as maintenance-free. By year twenty-five, the second home has open joints on the west wall, spalling bricks under a leaking chimney crown, and a rusted garage lintel cracking the brick above it. The first home needs almost nothing. Same brick. Same street. Same weather. The difference was never the material. The difference was attention.

What This Book Will and Will Not Do

This book will teach you to read your walls the way an experienced mason reads them — patiently, in order, looking for the cause behind the symptom. You will learn the parts of the wall in Chapter 2. You will learn a twice-a-year inspection routine in Chapter 3. Later chapters take up spalling, efflorescence, mortar repair, chimneys, lintels, cracks, cleaning, and the questions to ask before you hire help.

This book will not turn you into a mason in a weekend, and it will not ask you to attempt work that needs scaffolding, structural judgment, or years of trowel skill. Honest guidance has to include honest limits. Where a repair is a fair homeowner task, the book will say so and walk you through it. Where it is not, the book will say that too, and help you hire it done right the first time.

Your brick home was a major investment — for most Texas families, the largest they will ever make. It deserves better than neglect based on a sales phrase. Give it steady care, and

it will repay you by lasting. That work starts by knowing exactly what you are looking at. So let us meet your wall.

Chapter 2: Meet Your Wall

You cannot look after a wall you do not understand. A brick veneer wall is a system of simple parts, each doing one plain job. Learn the parts, learn the jobs, and the whole wall starts to make sense. When something goes wrong later — a stain, a crack, a flaking brick — you will be able to name the part involved, and naming the part is the first step toward fixing the cause instead of chasing the symptom.

Take this chapter to the yard if you like. Stand before a simple side wall with one window and find each part as you read. Ten minutes of that will teach you more than an hour of reading alone.

The Brick Itself

Start with the brick. Face brick is the finished brick meant to be seen. Common brick is plainer and was more typical of older work. Modular brick, standard in most modern homes, measures roughly two and a quarter inches tall, three and five-eighths inches deep, and just under eight inches long, with the joint making up the rest of each four-inch-by-eight-inch face pattern. Older homes may carry larger or smaller brick, including oversized styles and the thin, long Roman styles on certain mid-century houses.

Color tells you a little about the clay and firing, but not much about quality. Red, buff, brown, gray, and nearly white brick all serve well in Texas. What matters more is hardness. A well-fired brick rings sharp when you tap two together. An underfired, soft brick sounds dull and absorbs water like a sponge — those flake and spall first, especially where they stay wet. Not all brick is equal, and older, softer brick deserves gentler treatment, especially gentler cleaning, than hard modern brick.

One more point that saves real money: never let anyone talk you into replacing a whole wall because a fraction of the units are damaged. Individual damaged bricks can be cut out and replaced by a skilled mason. Wall-wide problems usually trace back to water or mortar, not to every brick failing at once.

The Mortar: The Working Joint

If brick is the wall's armor, mortar is its working joint — the part you will maintain most. Mortar is cement, lime, sand, and water, troweled into the joints. It beds each brick level, seals the joint against wind-driven rain, and flexes a little so the wall can move with temperature and season without cracking

the brick.

That last job explains the most misunderstood fact in all of brick care: mortar is supposed to be softer than the brick. It is the sacrificial layer. When movement or weather takes a toll, you want the toll paid in the mortar joint, because a joint can be ground out and repointed. You do not want it paid in the brick, because brick replacement is slower and costs more. This is why repointing an old, soft-mortar wall with a hard modern mix can damage the brick — the joint stops being the weak point, and the brick becomes it. Prices for professional repointing vary widely with access, height, and how much wall is involved, so treat any ballpark as rough only; as a general range, homeowners often see a few dollars to well over ten dollars per square foot, and prices vary by market and by job.

Mortar comes in standard types — M, S, N, O, and K — from hardest to softest. Most modern Texas veneer used a middle type, commonly N or S. Older work often used soft, high-lime mortar. You need one habit: before significant repointing, match the new mortar to the old in strength and, as closely as practical, in color and sand. A good mason will say this without being asked. If a bidder wants one mix on every house regardless of age, that is a warning sign.

You can learn a lot with a thumbnail and a pocketknife. Sound mortar resists a thumbnail and scratches only with real effort from a knife point. Worn mortar powders or digs out easily. Mortar you can rake out with a key, in long soft runs, is at the end of its service — it is letting water in and belongs on your repair list. Found early, repointing is routine upkeep. Left for years, open joints become the doorway for nearly every other wall problem.

Ties, the Air Gap, and the Wall Behind the Wall

Now for the parts you mostly cannot see, which are doing more than you might guess. Your brick veneer is not glued to your house. It is held to the framed wall by metal brick ties — corrugated or wire ties nailed to the framing and bedded in the mortar joints, spaced at regular intervals across the wall. The ties keep the veneer standing plumb against wind and time while still letting the brick and the wood frame move a little differently, as different materials always do.

Between brick and framing sits the air gap, usually about an inch. It is the wall's drainage and drying channel. Water that soaks through the brick — and some always does — reaches the gap, runs down, and exits at the bottom. Keep the gap working and the wood behind your brick stays dry for

decades.

At the bottom of the wall, and above windows and doors, you should find the exits: weep holes. In many Texas homes these are simply open vertical joints — a gap in the mortar between two bricks at the base of the wall, spaced a few feet apart — sometimes with a rope wick or a plastic insert. Weeps are not defects and they are not invitations for you to fill them. A weep that has been caulked shut, buried under a flower bed, or covered by a new patio slab is a drain that has been plugged, and a plugged drain means the wall now holds its water. When you do your walk-around in Chapter 3, checking that weeps are open and above soil level is one of your highest-value tasks.

Behind those openings sits flashing — thin metal or membrane built into the wall to catch water in the gap and direct it out through the weeps. You will see its edges at wall bases and over lintels. Most flashing cannot be inspected without opening the wall, so visible clues matter: staining below a window, rust at a lintel, or damp after wind-driven rain all hint that flashing above deserves professional attention.

Lintels, Sills, and the Chimney Parts

Over every window, door, and garage opening, something must carry the brick across the gap. In most Texas veneer, that is a steel lintel — a heavy angle iron resting on brick at each side. Steel is strong, but it rusts, and rusting steel expands to several times its original thickness. That expansion, called rust jacking, can lift and crack brick above an opening with surprising force. Keeping lintel paint sound and water off the steel is small maintenance that prevents a disruptive repair. Replacing a failed lintel is professional work, often in the low thousands of dollars for a wide garage opening — and prices vary considerably, so get itemized bids.

Window sills matter too. A sloped sill sheds water away. A flat or reverse-sloped sill holds water against the window and joints below it, and the damage pattern — worn joints and stained brick in a neat column under a window — is one you will soon recognize.

If your home has a masonry chimney, learn its top parts now, because the top is where chimneys fail. The crown is the concrete or mortar cap that sheds water off the flue area. The cap keeps rain out of the flue. Flashing seals where chimney meets roof. Cracked crowns and failed chimney flashing are among the most common water entries in a brick home, and they sit high where nobody looks. You will look — safely, from the ground with binoculars, as Chapter 3 explains.

Identifying Your Brick and Mortar by the Age of Your Home

You can make a fair first guess about your wall from when your home was built. Homes from before the 1940s may be solid masonry or early veneer, often with soft lime mortar and softer brick — treat them gently, and involve a mason experienced with older work before repointing. Homes from the 1950s through the 1970s are typically veneer over framing, with mid-strength mortar, steel lintels, and styles from standard reds to long Roman shapes; leave unfamiliar materials of that era alone and ask a professional if you are unsure what something is. Homes from the 1980s and 1990s — a huge share of Texas suburbs — are veneer with Type N or S mortar, corrugated ties, and open-joint weeps; their first big mortar renewal commonly comes due at twenty to thirty years, which many are in right now. Homes built since 2000 generally have better water-resistive barriers and more consistent flashing, though workmanship still varies street by street.

Use the age guess as a starting point, then confirm with eyes and hands: scratch the mortar, find the weeps and lintels, note brick size and style, and write it down. That short wall biography is exactly what a good mason will ask for.

Now you know the players: brick, mortar, ties, gap, weeps, flashing, lintels, sills, and crown. Together, checked twice a year, they will tell you the whole story of your house. It is time to take the walk.

Chapter 3: The Twice-a-Year Walk-Around

Everything in this book comes down to a habit, and the habit is this chapter: twice a year, in spring and in fall, you walk slowly around your house and you look at your walls on purpose. Not a glance on the way to the truck. Not a look only when something has already gone wrong. A real inspection, wall by wall, top to bottom, with a notebook in your hand and your phone in your pocket for photographs. An hour, twice a year. That hour is the cheapest insurance a brick homeowner can buy, and no policy will ever be sold that pays better.

Spring and fall are not arbitrary choices. A spring walk, after the hard freezes and the heavy rains, shows you what winter did — new spalls, fresh cracks, mortar that finally let go, a chimney crown split by ice. A fall walk, before winter arrives, catches the problems you still have time to fix in mild weather: open joints, failing caulk at penetrations, gutters that will overflow in the first cold rain, weeps buried by a summer of mulch. In Texas, pick your weeks with the weather

in mind. A calm, dry morning after at least a day or two without rain is ideal, because damp walls hide mortar color, exaggerate some stains, and conceal the dry dusty look of mortar that is wearing out.

What to Carry, and How to Keep the Log

Keep your kit simple so the habit stays easy. Carry a notebook dedicated to the house, a pencil, your phone for dated photographs, a pair of binoculars for the roofline and chimney, a pocketknife or an old key for testing mortar, a small flashlight for shaded corners and the gap at the base of the wall, and a garden glove for brushing soil or mulch away from weeps. That is all. Leave the ladder in the garage for this routine. Everything in the twice-a-year walk is designed to be done from the ground. Chimney crowns, roof flashing, and high gable walls can all be assessed surprisingly well with binoculars, and anything that truly needs a closer look up high is a fair reason to hire it out rather than a reason to climb.

Your log method matters more than your tools. Open the notebook to a fresh page for each wall — North, East, South, West — and walk them in the same order every time. For each wall, note the date, then record three things: what looks right, what has changed, and what needs action. Photograph the same way every time: one wide shot of the whole wall from the same spot, then close shots of anything noted, with a coin in one frame for scale. Change you might talk yourself out of in person becomes undeniable in two photographs side by side, six months apart — and a dated record is pure gold if you ever need to show a mason, or a licensed structural engineer on a structural question, how a crack has moved over time.

Here is a trick the old hands use for cracks: make a tell-tale. Draw a short pencil line across the crack at its widest point, note the date in your log, and photograph it. If the line is offset or the crack has run past your mark next season, the crack is active. If it sits unchanged walk after walk, you are likely looking at settled, historic movement. Either finding beats guessing.

The Routine, Wall by Wall

Begin each wall the same way: stand back at the property line or the far side of the yard and take the whole wall in at once, top to bottom. Look for the big picture first — a wall out of plumb, a bulge, a broad pattern of staining, brick that has shifted at a corner. Most Texas veneer walls will show you none of that, and seeing a straight, even wall is a result worth noting too. Then move in close and work the wall in horizontal bands.

Start at the top. With binoculars, study the roofline: roofing in good order where it meets the brick, flashing not curled or loose, and on a chimney, the crown — look for cracks, missing chunks, and a cap that sits straight — plus flashing at its base. Move down to gable brick and joints near the eaves, where wind-driven rain works hardest. Then scan the field of the wall in a slow sweep: look for spalling — faces that have popped, flaked, or crumbled; efflorescence, the white powdery salt bloom that signals water moving through the wall; dark damp patches days after rain; green algae in shaded runs; and rust streaks bleeding down from above, which often point to a lintel or flashing issue overhead.

Next, the openings. At every window and door, examine the lintel: peeling paint, orange rust, brick above cracked in a step pattern or lifted along a joint — all signs the steel needs attention soon. Check the sill: does it slope away, are its joints sound, is there a column of worn joints and staining beneath it? Check sealant where frame meets brick; cracked, shrunken caulk is a job you can often handle in an afternoon, and tubes and tools are inexpensive — though prices vary. At the garage, give the wide lintel extra time. It carries the most brick, and its failure shows first as a long horizontal crack or a sagging line of brick over the door.

Now drop to the base of the wall, the band most homeowners never examine and the one that decides whether drainage works. Find the weeps and confirm each is open — no caulk, mortar smear, soil, mulch, or new concrete covering it. Confirm ground, beds, and patios sit below the weep line and slope away. Also check where brick meets the slab: you want that junction clear, not buried. Buried brick stays wet, wicks water upward, invites termites into the framing behind it, and hides evidence you need to see. Pulling beds back down is unglamorous, fully within homeowner ability, and one of the highest-value fixes in this book.

Finish with the mortar survey. Pick several joints at random, high and low, sunny side and shaded. Scratch with the key. Note where mortar is sound, where it is wearing, and where it is missing. Joints wear unevenly — the weather side and splash zone go first — so note which sections need repointing rather than just "mortar bad." Also note vines. A vine damages mortar steadily, rootlets working into joints and holding moisture against the wall. Cut vines at the base and let them die back rather than ripping live growth off, which can pull mortar and brick faces with it.

Reading What You Found, and Deciding What Happens Next

Turn your notes into three lists. First: things you will do

yourself this month — clearing weeps, pulling soil and mulch back, resealing a window frame, cleaning gutters or calling the gutter service, cutting vines. Second: things for a mason's bid — repointing a section, replacing spalled brick, lintel treatment or replacement, chimney crown repair. Get those bids in writing, itemized by wall and task, and expect wide variation; prices vary with height, access, and market, so two or three bids on anything beyond a small repair is simply good stewardship. Third: things to watch — a hairline crack with a tell-tale mark, a faint efflorescence patch to re-photograph next season, a joint that is wearing but not yet open.

Know the short list of findings that should move a call from "this season" to "this week." A crack that is actively widening, especially a stepped crack running through brick and mortar together. A bulge or lean in a wall. Brick fallen from a chimney or a chimney that visibly leans. A lintel so rusted that brick above a garage door is sagging. Water entering the house itself — stains on interior walls or ceilings that line up with an exterior defect. Hypothetical example: say your fall walk finds a stepped crack above the garage that has offset your pencil tell-tale by the width of a dime since spring, with fresh, light-colored mortar dust at its base. That is not a watch item anymore. That is a prompt call to a mason, and if the mason raises any doubt about structure, a prompt call to a licensed structural engineer as well. You do not need to panic. You do need to stop waiting.

A final word on foundation questions, because Texas homeowners hear a lot of noise on the subject. Seasonal hairline movement in brick and mortar is common in our soils and is, by itself, a monitoring matter for your log. If genuine foundation repair ever becomes necessary — confirmed by proper assessment, not by a sales visit — the method this book stands behind is pressed concrete piles, driven to refusal to support the structure. Anything beyond that statement belongs in a separate, careful conversation with qualified professionals looking at your specific house.

Do the walk this week, whichever season you are reading this in. Do not wait for the perfect Saturday in April. Your first walk sets the baseline that makes every later walk twice as valuable, and it will change how you see your home — from a place you hope is all right to a place you know about, wall by wall, joint by joint. That knowledge, kept up twice a year, is how brick lasts.

Chapter 4: The White Haze — Efflorescence Explained

If you have ever walked out on a spring morning, looked at your brick wall, and found a white, chalky haze that was not

there last fall, you are not alone. That white coating worries a lot of Texas homeowners. It can make a handsome red or brown wall look dusty and tired, and the first question most people ask is whether the brick itself is failing. Most of the time, it is not. What you are seeing is called efflorescence, and once you understand where it comes from, you will know when to relax, when to clean it, and when to take it seriously as a warning sign.

Efflorescence is salt. That is the plain truth of it. Brick, mortar, soil, and even the water that moves through them all contain mineral salts — calcium, sodium, potassium, and a few others. Those salts are invisible while they are dissolved in water inside the wall. When that water works its way to the surface of the brick and evaporates in the sun and wind, it leaves the salts behind. They crystallize on the face of the brick as a white or light gray powder, streak, or crust. Rub your hand across it and it will often feel dry and flaky, and some of it will brush right off. That dry, powdery feel is one of your best clues that you are looking at efflorescence and not paint failure, mold, or something growing on the wall.

For efflorescence to happen, three things have to come together at the same time. You need salts present in the materials, you need water moving through the wall, and you need a path for that water to reach the surface and dry. Take away any one of those three and the white haze stops. That is why the real fix is almost never about scrubbing the surface harder. The real fix is about finding and slowing the water.

So where does the water come from? Start at the top and work down, the same way water does. A chimney cap that is cracked or missing lets rain pour straight down inside the chimney chase. Flashing that has pulled loose around a roof line, a chimney, or a window can funnel water behind the brick instead of shedding it out. Gutters that overflow in a heavy Texas downpour dump a sheet of water down the face of a wall, soak after soak. Down low, sprinklers are a common culprit you might not suspect. A sprinkler head aimed a little too high, hitting the same stretch of brick every other morning all summer, will keep that wall damp and will feed a steady bloom of white right at the splash zone. Soil and mulch piled up against the brick, above the foundation line, hold moisture against the wall and give it a constant supply to wick upward. Even brand-new construction can bloom. New brick and new mortar are full of moisture from the building process itself, and as a new wall dries out in its first year, a first round of efflorescence is common and usually fades once the wall has dried and the salts near the surface are spent.

The salts have sources, too. Mortar ingredients carry them. Soil carries them, especially the heavy clay soils so many Texas homes sit on. Groundwater carries them up from below.

Fertilizer from beds against the house can add to the load. You cannot remove every salt from a masonry wall, and you do not need to. You control what you can control, and that is the water.

Now, when is this just cosmetic, and when is it a warning? A light, even haze that shows up after a wet season, brushes off dry, and gets lighter each time it returns is usually cosmetic. A new wall drying out falls in this group, too. Treat it as the wall exhaling. Clean it gently, watch it, and improve drainage where you can.

Pay closer attention when the pattern tells a different story. If the white is heavy, crusty, and keeps coming back thick in the exact same spot, month after month, that spot is telling you water is moving through there on a regular route. The efflorescence itself is not the disease — it is the symptom that marks the path. Look above and behind that spot for the entry point: a failed cap, open mortar joints, a crack, flashing that has given up. If the white staining comes with other changes — mortar that is crumbling, brick faces that are flaking, dampness or staining inside the house on the other side of that wall, a musty smell indoors — then you are no longer looking at a cleaning job. You are looking at a moisture problem that deserves a proper inspection. If you ever see cracking that is widening, walls that bow, or anything that makes you question whether a wall or chimney is stable, stop and hire a structural engineer to evaluate it. That call is money well spent, and no honest mason will talk you out of it.

Composite example: Picture a north-facing wall that blooms white every winter in one vertical streak below the roof line, while the rest of the house stays clean. That streak lines up almost perfectly under a gutter joint. In a case like that, the wall is often fine and the gutter joint is leaking in every rain, feeding the same column of brick over and over. Fix the joint, let the wall dry through a few weeks of good weather, brush the salts off dry, and the streak usually fades for good. The lesson in that picture is one you will use all through this book: chase the water first, and the wall will often take care of the rest.

When you do clean efflorescence, keep it simple and gentle. Start dry. A stiff natural-bristle or nylon brush, worked over the dry wall on a dry day, will remove most loose efflorescence without adding any new water to the problem. That matters, because washing a wall with a lot of water can dissolve the salts, carry them right back into the pores of the brick, and set you up for the same bloom again as soon as it dries. If dry brushing leaves a light residue and you want to go one step further, use plain water sparingly with your brush, rinse lightly, and let the wall dry fully. Work on a calm, dry stretch of weather when you can, so the wall is not

fighting rain while you are trying to dry it out. Test any approach in a small spot first and let it dry before you judge it.

Just as important is what not to do, and this is where good intentions cause real damage.

Do not acid wash your brick yourself. Acid cleaners sold for masonry are strong chemicals, and in untrained hands they can burn the color right out of brick faces, eat into mortar joints, streak a wall permanently, and create a safety hazard for you, your family, your pets, and your plantings. They can also make the salt problem worse by opening up the surface of the brick so it drinks in even more water afterward. If a situation ever truly calls for a chemical treatment, that is professional work, with the right product, the right dilution, the right protective gear, and a test patch — not a weekend project with a pump sprayer. You do not need it for ordinary efflorescence, and you should not reach for it.

Do not seal over efflorescence. This one is tempting, because a clear sealer promises to lock the white in and keep it from showing. What it actually does is trap moisture and salts behind a film. The water still comes, because the entry point is still open, but now it cannot dry freely to the surface. Pressure builds under that coating, salts crystallize beneath the surface instead of on it, and that is a recipe for the brick face itself to start popping off — the problem you will meet in the next chapter. Sealers have their place in very specific situations, chosen for a specific wall, but painting one over an active salt bloom to hide it will cost you more than the bloom ever would have. Fix the water, let the wall dry out fully, and only then have a conversation about whether any coating belongs there at all.

Do not pressure wash it aggressively, either. A hard blast can scar soft brick, blast mortar out of the joints, and drive water deep into a wall that was only damp at the surface. Gentle is not a weakness in masonry care. Gentle is how brick that has stood for fifty years gets to stand for fifty more.

Your takeaway for this chapter is short enough to tape inside a kitchen cabinet. White haze equals salts plus moving water. Brush it dry, find the water, fix the water, and let time and dry weather do most of the work. When the bloom is heavy, stubborn, and always in the same place, read it as a map. It is showing you exactly where your wall is getting wet — and a wall that stays wet will eventually ask for more than a brush. In the next chapter, we will look at what happens when water gets trapped inside the brick itself and the faces start to pop.

Chapter 5: When Brick Faces Pop — Spalling, Freeze Damage, and Failing Brick

There is a sound and a sight that will stop a homeowner cold. You are sweeping the patio or pulling weeds along the side of the house, and you find thin, curved pieces of brick face lying in the dirt — red on one side, rough and pale on the other. You look up, and there on the wall are shallow craters where the smooth face of the brick used to be. Pieces of your house are on the ground. That is spalling, and it is one of the most misunderstood kinds of brick damage in Texas. This chapter will show you what it is, what causes it, how to tell it from ordinary wear, and when the honest answer is replacement rather than a patch.

Spalling is the loss of the brick face itself. A healthy brick has a hard, fired outer skin. That skin is the brick's raincoat. It sheds most water and protects the softer interior of the brick behind it. When that skin cracks, delaminates, and pops away in flakes, chips, or shallow layers, the softer core is exposed. The exposed core drinks water far faster than the skin ever did, which speeds up the damage, which exposes more core. Left alone, a spalling brick does not stabilize. It retreats, crumb by crumb and flake by flake, until what is left cannot do its job in the wall.

Water trapped inside the brick is the engine behind almost every case of spalling you will see. Brick is not waterproof — no honest mason will tell you it is. Brick is a fired clay product full of tiny pores, and it is meant to absorb a little water and then dry out again. The system works when the wall can breathe: water gets in slowly, in small amounts, and gets out again through evaporation. Spalling starts when that balance breaks — when more water gets in than can get out, or when water that got in cannot escape before conditions turn against it.

Freezing is the hardest turn of all. When water freezes, it expands. Inside the pores and tiny cracks of a saturated brick, that expansion has nowhere to go, so it pushes outward with real force. One freeze on a damp brick may do nothing you can see. Repeated freeze-and-thaw cycles on a wet brick act like a slow wedge, prying the face away from the body a fraction at a time until a flake lets go. Now, if you have lived in Texas long, you may be thinking that our winters are too mild for that kind of damage — and you are right that we do not see the deep, months-long freezes of the northern states. But Texas freeze damage is real, and our pattern can be sneaky about it. We get warm, wet stretches where walls soak up water for days, followed by a sudden hard freeze that

drops well below freezing overnight, followed by sunshine and a thaw the next afternoon. That soak-freeze-thaw swing, repeated a handful of times in a single winter and dozens of times across ten winters, is enough. The February freeze of 2021 taught a lot of Texas homeowners that lesson the hard way, as walls, chimneys, and caps that had been quietly holding water gave up their faces all at once. Chimney tops, parapet caps, freestanding walls, and any brick that sits horizontal and holds water — a windowsill, a wall cap, a step — are the most vulnerable, because they get the wettest and dry the slowest.

Water gets trapped for reasons you can often find and fix. Mortar that is too hard is a leading one, and you will read more about it in the next chapter. In short, when the mortar in a wall is harder and less permeable than the brick around it, moisture that should escape through the joints gets forced through the brick faces instead — and it takes the faces with it over time. Old, soft, handmade-style brick paired with a hard modern repair mortar is the classic mismatch. Bad sealers do the same thing from the other direction. A film-forming coating painted over brick can let liquid water in through tiny cracks and pinholes, then block the vapor that needs to get back out. The brick stays wet behind a pretty, shiny surface until a freeze or a salt buildup pops the face clean off, coating and all. Poor details matter, too: cracked chimney crowns that pond water, missing caps, mortar joints that have eroded into little shelves that hold water against the brick, and soil or paving built up against a wall all keep brick wetter, longer, than it was ever meant to be.

Hypothetical example: Imagine two matching brick planters built the same year. One is left alone. The other gets coated with a glossy waterproof sealer, because the owner wants it to look wet and rich. Five winters later, the uncoated planter looks weathered but sound, while the sealed one is shedding flakes by the handful. The coating trapped what the open brick could release. When you are tempted to seal a problem away, remember those planters.

Learning to tell spalling from ordinary surface wear will save you both worry and money. Ordinary wear is slow, even, and shallow. The texture of an old brick softens a little over decades. Edges round slightly. Color mellows. That is character, not failure, and it does not need repair. Spalling looks different. Look for flakes and layers separating parallel to the face, shallow craters with rough, crumbly interiors, and a pattern that concentrates where the brick stays wettest — near the ground, under a drip line, at the chimney top. Tap a suspect brick lightly with a knuckle or the handle of a screwdriver and compare it with a sound brick nearby. Sound brick answers with a firm, higher ring. A brick whose face is letting go often sounds duller or hollow, and the face may

shift or shed grit under light pressure. Check the ground and the beds below the wall, too. A scatter of fresh brick flakes after a freeze is fresh evidence, not old litter. Also look at the shape of what remains. A spalled brick loses its face in sheets and scales. A brick damaged by a lawn mower, a ladder, or a car bumper loses a chunk at a point of impact, and the rest of its face stays tight and sound. Impact damage is an accident. Spalling is a process — and processes keep going until you address the cause.

That brings us to the repair question, where honesty matters more than a low price. A spalled brick cannot be un-spalled. No coating, filler, or patch restores a fired face once it is gone. Patching compounds smeared over a crumbling brick may look tidy for a season, but they sit on a weak, wet surface, trap moisture, and when they let go — they will — they often pull more brick away with them. Patching over active spalling is buying the same repair twice. When a brick has lost its face and its core is crumbling, the honest repair is replacement: cut that brick out carefully, address the water or mortar problem that caused the failure, and set a matching new brick in mortar that suits the wall. When spalling is widespread across a chimney or wall section, the honest conversation may be about rebuilding that section. Prices vary widely with access, matching, and scope, so treat any ballpark as a starting point for a real inspection, not a promise.

Not every spalled brick is an emergency, and you should know how to judge urgency. A few spalled units in a garden wall or a mailbox is a plan-it repair. Spalling in a chimney deserves faster attention, because a chimney takes the worst weather, its interior flues matter for safe venting, and loose material up high can fall. If you see a chimney leaning, a wall bowing, wide or widening cracks running through brick and mortar alike, or brick units loose enough to move by hand, do not wait and do not climb up to investigate it yourself. Keep people clear of the fall zone and hire a structural engineer to assess stability, then bring in a mason to do the work that assessment calls for. Fifty years of hands-on field experience teaches you where your lane ends, and structural stability questions belong to an engineer. Saying so is not a weakness in a mason. It is how homeowners stay safe.

Your best defense against spalling is unglamorous and effective. Keep water off and moving: sound caps and crowns, gutters that do not overflow onto walls, sprinklers aimed at plants instead of brick, soil and mulch kept below the foundation top, and mortar joints kept in good shape. Choose breathable over waterproof whenever anyone proposes a coating, and be suspicious of any product that promises to seal a wall forever. Walk your house after the first hard freeze each year and again in spring, camera in hand, and compare.

Spalling caught at the first few flakes, with its water source fixed, is a modest repair. Spalling ignored for a decade becomes a rebuild. In the next chapter, we turn to the partner material that is supposed to protect your brick by wearing out first — the mortar joints — and why letting them do that job is one of the smartest things you can do for a wall.

Chapter 6: Mortar Joints Are the Sacrifice

Here is an idea that surprises most homeowners, and once you hear it, you will never look at your brick walls the same way again. The mortar joints between your bricks are supposed to wear out. Not in a year, not all at once, and not because anyone built your house badly — but slowly, over decades, by design. Mortar is the sacrifice in a brick wall. It is made to be the softer, more forgiving material, the part that takes the weather, absorbs the tiny movements of the building, lets moisture escape, and eventually erodes so that it can be renewed — all so that the brick, which is far harder to replace, survives. When you understand that bargain, a lot of expensive mistakes become easy to avoid.

Think of it the way you would think of brake pads on a truck. Brake pads wear down so your rotors do not. Replacing pads at the right time is normal maintenance, not a sign the truck was built wrong, and nobody brags about pads so hard they lasted forever while grinding the rotors to ruin. Mortar works the same way. Brick is the rotor — the valuable, lasting part you want to protect. Mortar is the pad — cheaper, renewable, and meant to be replaced a few times over the long life of a wall. A brick wall that is a hundred years old and still sound has almost certainly been repointed at least once or twice along the way. That is not a failure history. That is a maintenance history, and it is exactly why the wall is still there.

Why does the sacrifice need to be softer? Start with water. A brick wall is not a sealed box. Wind-driven rain will find its way into any masonry wall in small amounts, and moisture from inside the house moves outward, too. That moisture needs an easy way out. If the mortar joints are softer and more porous than the brick, they act like a wick and a vent — water prefers to travel through and evaporate from the joints, sparing the brick faces. Movement matters just as much. Houses shift a little with the seasons. Texas clay soils swell when wet and shrink when dry, foundations move a fraction, brick expands in the summer heat and contracts in a winter cold snap. A soft, forgiving joint absorbs those tiny movements by giving a little. A hard, rigid joint cannot give, so something else does — and that something is often the brick, cracking or shedding its face under stress it was never

meant to carry alone. Older brick makes this bargain even more important. Brick made generations ago, and plenty of the softer brick used in mid-century Texas homes, is noticeably softer than the hard-fired brick common today. Those walls were built with soft, lime-rich mortar that matched them, and they have lasted because the partnership was balanced.

You can read the condition of your joints with nothing more than your eyes, a fingertip, and a simple rule of thumb. Healthy joints are full, fairly flush with the brick, and firm. Run your finger along a few joints on each side of the house — sheltered areas under porches will usually look best, while the weather-beaten south and west walls and the tops of chimneys age fastest. You are feeling for erosion: how far the mortar surface has receded back from the face of the brick. A shallow softening, an eighth of an inch or so, on an older home is often just age showing, worth watching but rarely urgent. The rule of thumb most masons use is the quarter-inch mark. When joints have eroded about a quarter of an inch deep — roughly the thickness of a standard pencil laid in the joint — across a broad area of wall, repointing belongs on your near-term plan. At that depth, the joint has started to form a little ledge that catches and holds water against the brick instead of shedding it, and the remaining mortar is getting thin enough that wind-driven rain reaches deeper into the wall. Past that point, joints go from maintenance item to active problem: you will see mortar that crumbles to sand between your fingers, joints washed out a half inch or more, daylight gaps around window and door frames, and eventually loose brick. Depth is not the only signal. Cracking within the mortar, sections that sound hollow or fall out in chunks, and joints that stay dark and damp long after the rest of the wall has dried are all telling you the sacrifice is spent in that spot.

Composite example: Picture a 1960s ranch house where the front wall, shaded by a big oak and a covered porch, still shows full, firm joints, while the unshaded west wall has joints worn back a quarter inch or more and a few brick faces starting to flake near the bottom. Same house, same brick, same mortar, same age — very different exposure. That west wall is not failing because it was built worse. It has simply taken fifty more years of afternoon sun, driving rain, and sprinkler overspray than the front has, and its sacrifice is used up first. Repointing that one wall, matched correctly, can buy it decades more, while the sheltered front may not need the same work for years. Walls age by exposure, not just by birthday, so judge yours wall by wall.

Repointing — sometimes called tuckpointing — is the renewal work itself. The worn mortar is cut or ground out to a sound depth, usually at least twice as deep as the joint is wide, the

joint is cleaned and dampened, and new mortar is packed in, in layers, then tooled to a profile that sheds water and matches the original look. Done right, it is slow, dusty, unglamorous craft work, and some of the best money a brick homeowner can spend, because it restores the wall's ability to shed water and breathe while the brick stays untouched. Prices vary with height, access, and scope, so get the scope in writing and treat any ballpark as general until someone has measured your walls. Do not let repointing be sold as a thin smear over old joints. Mortar dabbed onto the surface without cutting out the failed material has nothing to hold onto, and will curl, crack, and fall out in sheets, sometimes within a year or two. If a quote sounds too fast and too cheap, that shortcut is usually why.

Now we come to the mistake that does the most quiet damage to older Texas homes, and it comes from a good instinct: the belief that stronger is always better. Modern bagged mortar mixes, especially the hardest types, are far stronger and far less forgiving than the soft mortars older walls were built with. They have their place — in new construction, with hard modern brick that was made to pair with them. But pack that hard modern mortar into the joints of an old, soft-brick wall, and you have reversed the sacrifice. Now the joint is the hardest thing in the wall. Moisture that should exit through the joints is forced out through the brick faces, carrying salts and setting up the spalling you read about in the last chapter. Movement that the joint should absorb gets transferred into the brick, and the brick cracks or pops instead. Worse, the hard joint often still looks fine while it is destroying its neighbors, so the damage can run for years before anyone connects it to that tidy repointing job. And when that hard mortar finally does need to come out, removing it without chewing up soft brick edges is painstaking work — if it can be done cleanly at all. The rule is simple enough to remember: new mortar should never be harder than the brick it serves, and on an older wall it should match the strength and character of the mortar that was there originally. If you are hiring the work, ask directly what mortar will be used and why it suits your brick. A mason who knows old walls will answer that question easily and will talk about your brick first. A mason who reaches for the strongest bag on the shelf for every job is telling you something, too.

A few smaller habits round out good joint care. Do not caulk over eroded joints as a substitute for repointing; caulk smeared across a failing joint traps water and hides the wear you need to see. Keep sprinklers, soil, and mulch from holding moisture against the lower joints, which erode fastest at the splash line. On your twice-a-year walk around the house, give the joints thirty seconds of real attention — fingertip in the joint, phone flashlight raking across the wall at an angle, because low side-light makes erosion easy to see.

Here is the thought to carry out of this chapter. Worn mortar is not your house failing you. It is your house asking for the maintenance it was designed to receive, in the one material designed to be renewed. Spend on the sacrifice at the quarter-inch mark, match it soft where soft belongs, and your brick — the part you cannot easily replace — will last for generations. Ignore the joints, or let them be filled with something harder than the wall itself, and the brick will pay the bill instead. Take care of the mortar, and the mortar takes care of everything else.

Chapter 7: The Chimney — The Most Exposed Brick on the House

If you want to know where your brick will fail first, look up. Your chimney takes more weather from more directions than any other brick on your house, with no roof overhang to protect it, no shade to slow it down, and heat running up the middle all winter long. A wall gets rained on from one side. A chimney gets rained on, baked, and frozen from all four sides, and wind-driven rain finds joints up there that would stay dry for a hundred years at ground level. That is why, after fifty years of hands-on work on Texas houses, the chimney is almost always the first place I look, and the first place that needs attention.

You do not need to climb on your roof to understand what is happening up there. You need to understand the parts, what each part should do, and what it looks like when each part stops doing its job. Once you know that, binoculars and a slow walk around your house twice a year will tell you most of what you need to know.

Start at the very top, with the crown. The crown is the concrete or mortar cap that covers the top of the chimney and sheds water off the brick below it. Think of it as a hat. A good crown slopes away from the flue on all sides, overhangs the brick slightly with a small drip edge underneath, and has no cracks running through it. Water that lands on a good crown runs off and falls clear. Water that lands on a bad crown goes straight down into the chimney.

Most crowns you will see on older Texas houses were built as a flat wash of mortar, sometimes only an inch thick, troweled level with the top of the brick. Mortar is not made to be a roof. It shrinks as it cures, it cracks with heat and cold, and once a hairline crack opens across that wash, every rain feeds water into the core of the chimney. From the ground, a failing crown wash often looks like dark staining just below the top course of brick, white mineral deposits running down the shoulders, or small pieces of mortar missing at the corners. Those are not cosmetic problems. They are the chimney

telling you its hat has holes in it.

Below a proper crown, many chimneys also have a cap. People use the words crown and cap interchangeably, and it helps to separate them in your mind. The crown is the solid top surface that seals the chimney structure. The cap is the cover that sits over the flue opening itself, usually metal, often with a mesh screen around the sides. The cap keeps rain from falling straight down your flue, keeps birds, squirrels, and raccoons from moving in, and keeps sparks from drifting out onto your roof on a dry, windy night. A missing, rusted, or crushed cap is an open door at the top of your house. If you look up with binoculars and see daylight where a cap should be, or see a cap tilted sideways, put it on your fix list soon, not someday.

Down inside is the flue, the passage that carries smoke and gases up and out. On most masonry chimneys it is lined with clay tile sections stacked one on another, or with another approved liner system. You cannot inspect the inside properly from the ground, and you should not try to judge it by shining a flashlight from the fireplace below. Pay attention to the signs it gives you. A strong smoky smell in the house on a humid day when no fire has burned in weeks, pieces of orange-brown clay tile in your firebox, or heavy dark staining bleeding through the outside brick can all point to a cracked or deteriorated liner. Those are stop-and-call-a-professional signs. A damaged liner is a fire and carbon monoxide concern, not a do-it-yourself project, and if a structural question arises about a leaning or separating chimney, that is a question for a licensed structural engineer you hire for that purpose, in addition to your mason and chimney professional.

Where the chimney passes through the roof, you will find flashing. Flashing is the metalwork that seals the joint between chimney and roof, and it is a common source of what homeowners call a chimney leak that is not really coming through the brick at all. Good flashing works in layers, woven into the shingles and let into the mortar joints, so water running down the roof and down the brick both get directed out and over, never in. Bad flashing is a single flat piece of metal caulked against the brick, and caulk always ages, shrinks, and lets go. When you get a ceiling stain near your fireplace after a wind-driven rain, do not let anyone sell you a rebuild before the flashing has been checked. From the ground, look for flashing pulled away from the brick, rust streaks, and heavy beads of roof tar around the base. Tar is a confession: it usually means someone patched a flashing problem from the outside, and the real fix is still waiting.

Now put the whole picture together, because chimneys crumble first from the combination. Rain enters through a cracked crown and soaks into brick and mortar already

worked by sun on one face and shade on the other. In a North Texas winter you can get a warm afternoon followed by a hard freeze that same night, and water trapped inside the brick expands as it freezes and pushes the face off in thin layers. That is spalling, seen on chimneys as brick faces popping off near the top, mortar turning to sand, and sharp corners slowly softening. Add heat cycles from fires below, which expand and contract the flue at a different rate than the cold outer brick, and the structure is gently pulled apart from inside and outside at the same time. Your walls down below do not live that hard. Your chimney does, every day.

So inspect it, twice a year, in spring and fall, and after any major hail or wind storm. Walk to a spot where you can see each face. Binoculars in the seven to ten power range are plenty. Work slowly from the top down. Crown first: is it cracked, flat, or missing pieces? Cap next: is it present, level, and intact? Then the brick: look for stepped cracks through the mortar joints, joints recessed deep enough to hold water, white efflorescence that keeps coming back in the same place, dark patches that stay dark days after other brick has dried, and spalled brick faces. Then check the flashing line. Write down what you see, take phone photos from the ground with your phone zoomed in, and date your notes. A chimney changes slowly, and your dated record is how you will know whether a crack is new, growing, or has looked the same for three years.

Hypothetical example: You notice in October that the mortar on the south face of your chimney, near the top, has recessed about half an inch and a few brick faces have small flakes missing. Your notes from the previous April show the same joints were only slightly recessed. That rate of change tells a professional a great deal, and it tells you this is not a watch-it-forever situation. It is a schedule-it situation, before winter freeze cycles take the water sitting in those open joints and turn a repointing job into a rebuilding job.

That difference, rebuilding versus repointing, is the decision most chimney work comes down to, and it is worth understanding before anyone gives you a price. Repointing means removing the deteriorated outer portion of the mortar joints and packing in fresh, compatible mortar. It is the right fix when the brick themselves are still sound, the chimney is still plumb and stable, and the damage is in the mortar, which is exactly where damage is supposed to happen first. Mortar is the sacrificial part of the wall. Rebuilding means taking the chimney down, usually from the roofline up, or down to wherever sound masonry begins, and laying it again with salvaged or matching brick and fresh mortar throughout, with a proper crown built at the top. Rebuilding is the right fix when brick are spalling through their depth, when the chimney leans or has separated, when cracks run through the

brick themselves rather than following the joints, or when water has been entering the core so long that the inside of the structure is soft. As a general ballpark, repointing a typical residential chimney in Texas might run from several hundred dollars to a couple of thousand, while a partial rebuild above the roofline commonly runs into the several-thousand-dollar range, and prices vary widely with height, access, brick matching, and roof steepness. Anyone who quotes you either one without looking closely at the crown, the flashing, and the condition of the brick themselves is guessing with your money.

Care for your chimney in this order: keep water out at the top, keep the flashing honest, keep the joints full, and keep the flue and cap serviced by a chimney professional regularly, especially if you burn wood. Do those things and a Texas chimney can serve for generations. Neglect the little hat at the top, and you will meet me, or someone like me, for the big job instead of the small one.

Chapter 8: Cleaning Brick Without Ruining It

Brick gets dirty. In Texas it gets red dust in a drought, green and black biological growth on the shaded north side, white mineral deposits where water moves through it, mud splashed up at the base, rust stains under metal fixtures, and sometimes paint that a previous owner applied and that you now have to live with or remove. Wanting your brick clean is reasonable. The danger is not the wanting. The danger is that the most common way people clean brick is also one of the fastest ways to destroy it, and the damage often does not show its full cost until a winter or two later.

You need to start with one fact about the material itself. A brick is hardest on its outer fired surface. That skin, formed in the kiln, is denser and more resistant to water than the softer interior of the brick beneath it. Mortar, meanwhile, is deliberately softer than brick, so that it can move slightly, sacrifice itself to weather, and be renewed without harming the brick. Any cleaning method that strips the fired skin off the brick or tears the surface off the mortar has not cleaned your wall. It has aged it by decades in an afternoon, opened it to water it could previously shed, and set up the spalling and joint failure covered in earlier chapters.

That is exactly what aggressive pressure washing does. You have probably seen the videos, and they are satisfying to watch: a wand passes over dirty brick and leaves a bright clean stripe behind. Look closer at what else is in that runoff. It is pink or gray, which means it carries brick dust and mortar sand. The wand is not just removing dirt. It is

removing wall. High pressure drives water deep into joints and into the brick itself, far deeper than rain ever reaches, and on older, softer brick and lime-rich mortar it can etch the surface, round off the sharp edges of the joints, blow mortar clean out of the joints in weak spots, and force water into the wall assembly where it will sit long after the surface looks dry. Then winter comes, that trapped water freezes, and faces begin to pop. I have been called to repoint and repair many walls whose problems, by the homeowner's own account, began the season after an enthusiastic cleaning.

This does not mean water has no place in cleaning brick. It means pressure, distance, and restraint are everything. For ordinary dirt and dust, a garden hose, a soft brush, clean water, and patience will do more good and no harm. For most homes, that gentle wash, working from the bottom up on dirty areas to avoid streaking and rinsing thoroughly from the top down, is all your brick will ever need. If a detergent is appropriate for a particular stain, it should be one made for masonry, mixed exactly as directed, kept wet for the time directed, agitated with a soft brush, and rinsed with low pressure and plenty of water. More chemical, more pressure, and more time are not more clean. They are more risk.

Before anyone cleans anything on your house, including you, follow the test-patch rule, and treat it as a rule with no exceptions. Pick an inconspicuous area, about a square foot or two, ideally one that includes both brick and mortar and the same stain or growth you want to remove elsewhere. Clean only that patch with the exact method, product, pressure, and technique proposed for the whole job. Then stop. Let it dry completely, which can take several days in humid weather, and look at it in different light. Look for color change in the brick, a gritty or sandy feel to the mortar, brightening that looks bleached rather than clean, and any new roughness on the brick face. Then, if you can, wait longer. Some damage, especially from harsh chemicals, declares itself slowly. A method that cannot pass a test patch has told you everything you need to know, for the price of one square foot instead of the whole elevation.

Biological growth deserves its own word, because it worries homeowners out of proportion to its danger, and the cure is often worse than the growth. Green algae on a shaded, damp north wall is mostly a moisture report. It grows where the wall stays wet. Black staining can be algae, mildew-type growth, or simple accumulation of dirt and pollution in a damp area. Killing the growth without addressing why that section stays damp, whether it is a leaking gutter, a sprinkler that hits the wall every morning, dense shrubs holding moisture against the brick, or a downspout discharging at the base, guarantees it will return. Clean gently with a masonry-appropriate cleaner, correct the moisture source,

trim back plantings so air and sun can reach the wall, and adjust sprinklers so they water your landscape and not your house. Avoid household bleach solutions applied carelessly around plantings and mortar, and never let anyone talk you into blasting growth off with high pressure. The growth is on the surface. Removing it should never require removing the surface with it.

Stains each have their own logic, and guessing wrong wastes money. Efflorescence, the white powdery deposit described earlier in this book, is mineral salt left behind as water moves through masonry and evaporates. Dry brushing and a gentle rinse will often remove the deposit itself, but it will return until you address the water path feeding it, so cleaning it is partly cosmetic and partly diagnostic. Rust stains usually trace to a specific metal source above the stain, a fixture, a flashing, or metal embedded near the surface, and they often need a cleaner made for that purpose and a test patch, because rust removers can lighten brick if misused. Dark smoke staining above a fireplace opening or on a chimney points to how the fireplace draws and deserves a conversation with a chimney professional alongside any cleaning. Mud and road splash at the base of a wall respond to the gentlest methods of all. When a stain resists identification, photograph it, note what is above it and what changed before it appeared, and show that record to a professional before you buy a product. The stain is a symptom. Treat the source and you may only have to clean once.

Paint is the hardest cleaning problem of all, and honesty requires saying so plainly. Removing paint from brick is slow, expensive, and never guaranteed to return the wall to its original appearance. Paint gets into the pores of brick and mortar, and getting it out without damaging the surface requires chemical paint removers made for masonry, applied, allowed to dwell, and removed with the softened paint, often in repeated applications, sometimes followed by very careful low-pressure rinsing by an experienced operator. Abrasive blasting and aggressive pressure methods can remove paint quickly, and remove the brick face just as quickly. If you are considering paint removal, insist on a test patch large enough to be honest, look at it dry and in full daylight, and understand the likely endpoint before work begins on the whole house. In many cases the realistic choice is between living with painted brick, repainting it properly as covered in the next chapter, or paying a specialist for careful removal with modest expectations. Anyone who promises you paint removal that will look like the brick was never painted, at a bargain price, on a tight schedule, is promising something the material itself rarely allows.

Composite example: A homeowner hires the lowest bidder to wash a 1960s brick home before listing it for sale. No test

patch is done. The operator works close with a narrow tip to cut through years of grime in one pass. The house photographs bright and clean that week. By the following winter, after the sale, mortar joints on the most heavily washed wall are recessed and sandy, and brick faces on the chimney are spalling. None of that was necessary to sell the house. A gentle wash would have presented it honestly and left the wall intact.

So what should professional cleaning look like when it is done right? It starts with questions and inspection, not with a wand already running. The professional protects plantings, windows, and fixtures, identifies brick type and mortar condition, identifies the specific stains, proposes a method, and does a test patch. Equipment is set to low pressure with a wide fan tip, the wand is kept at a consistent distance, and work proceeds in sections with thorough rinsing. Weak mortar is flagged, not blasted out and ignored. The result, once dry, is brick that looks like itself, only cleaner, with surface and joints intact. As a general ballpark, professional gentle washing of a typical single-story home in Texas might run from a few hundred dollars to around a thousand or more, while specialist stain or paint removal can run considerably higher, and prices vary with size, height, access, and the work required. Pay for judgment and restraint. On brick, those are the skills that matter, and force is not a substitute for either one.

Your rule from this chapter is simple enough to tape inside a cabinet door: softest method first, test patch always, pressure last and lowest. Follow it, and cleaning will be what it should be, a small act of maintenance that helps your brick last, not the event that starts its decline.

Chapter 9: Sealers, Coatings, and Paint — The Honest Truth

Few products are sold to brick homeowners with more confidence and less honesty than sealers and coatings. The pitch is appealing. Spray this on, the salesman says, and your brick will be waterproof, protected, sealed for years. Your wall will stop absorbing water, stop giving you efflorescence, stop aging. It sounds like a roof in a can. The trouble is your brick wall is not supposed to work like a roof, and treating it as though it should is how many sound walls became spalling, peeling, expensive problems.

To understand why, hold one simple picture in mind. Brick and mortar absorb some water. They always have. A well-built brick wall manages that water: much of it runs off the face, some is absorbed and then released again as the wall dries to the air, and in a veneer wall, any water that gets behind the

brick is directed down and out through the drainage space and weep holes. The system works by drying as much as by shedding. A wall that can get wet and then dry is a healthy wall. A wall that gets wet and cannot dry is a wall in trouble, because water will find its way in through hairline cracks, joints, sills, and intersections no coating can perfectly seal forever, and once it is in, it needs a way out.

Most film-forming sealers and waterproofing coatings interfere with exactly that way out. They form a skin on the surface that reduces the ability of the wall to release moisture vapor. Water enters from behind, from above, through a crack in the film itself, or as vapor from inside the house moving outward in winter. Then it is held in the brick and mortar, close behind the coating. In freezing weather that trapped water expands and pushes, and because the coating has bonded to the face of the brick, what pops off is not just coating. It is the face of the brick itself. That is spalling caused not by neglect but by a product that was supposed to prevent it. Even without a freeze, trapped moisture can blister and peel the coating, drive white efflorescence to collect beneath it, darken the brick unevenly, and keep mortar damp enough to deteriorate faster than it would have bare. I am not telling you this to frighten you away from ever treating a wall. After fifty years of hands-on field work, the pattern is consistent enough that my default answer to a sealer pitch on ordinary house brick is no, and the burden of proof belongs on the product, not on your bare wall that has done its job for decades.

There are honest exceptions, and you should know them so you can tell the difference. The first is breathable, penetrating water repellents, most often silane or siloxane based, which do not form a film. Instead they line the pores of the masonry and reduce liquid water absorption while still allowing moisture vapor to pass. Used after the wall has been properly repaired and repointed, with sound joints and working drainage, and applied exactly as directed on a compatible brick, such a product can reduce wind-driven rain absorption on an especially exposed wall, such as a chimney or a gable that takes severe weather. Even here, expectations must be modest. A penetrating repellent is not waterproofing, it does not bridge cracks, fix bad joints, or substitute for flashing or a crown, and it has a service life measured in years. It also changes how future repairs bond, so write down the exact product used and keep it with your house records.

The second exception is specific problem areas rather than whole walls: certain very porous masonry, certain chimneys already rebuilt correctly and still unusually exposed, and situations a qualified professional identifies after examining your actual wall. Notice the pattern in every legitimate use: the wall is repaired first, the product is breathable by design,

the reason is specific, and the person recommending it can explain how the wall will dry after it gets wet, because it will get wet.

Paint is a separate decision, and deserves separate honesty. Painting brick is nearly permanent. That sentence should be printed on every can sold for it. Once paint has entered the pores of brick and mortar, removing it fully without harming the surface is, as the previous chapter covered, slow, costly, and uncertain. So when you paint brick, you are not choosing a color for a season or even for a decade. You are choosing to maintain a painted surface for as long as you own the house, and to hand that obligation to the next owner. Painted brick must be repainted as the coating ages, and preparation, peeling areas, and moisture problems only grow more involved with each cycle.

Painting can also create the same moisture trap as a film-forming sealer, in a thicker form. A non-breathable paint system on a wall that absorbs water from behind or above will blister, peel, and hold moisture against the mortar. If you do choose to paint, or to maintain brick already painted, the product matters enormously. Coatings made for masonry that remain vapor-permeable, applied over properly prepared, dry, sound, fully repaired masonry, with all water entry points fixed first, give you the best chance of a durable result. Painting over deteriorated mortar to hide it, painting a wall actively taking on water, or painting in the hope that paint will act as waterproofing are three of the most expensive mistakes a brick homeowner can make. The paint will fail, the masonry underneath will be worse, and you will have lost the ability to watch the wall and see what it was trying to tell you.

Hypothetical example: An owner paints a previously bare brick home with a heavy exterior coating that was not made to allow masonry to dry. The house looks sharp for two seasons. In the third winter, sections on the north and east sides begin to blister. When the blistered paint comes away, it brings thin layers of brick face with it, and the mortar behind the painted surface is soft and damp. The owner now faces paint removal questions, masonry repair, and repainting questions all at once, on a wall that originally needed only repointing in a few areas. Nothing about that outcome required bad intentions. It required only a coating decision made without asking how the wall would dry.

Limewash is sometimes raised as an alternative, and it is worth a fair mention. Traditional limewash is vapor-permeable, bonds differently than film-forming paint, and ages by gradually wearing rather than peeling in sheets. It gives a soft, mottled appearance that suits some houses and not others, needs renewal over time, and is not a way to hide defects. If it appeals to you, look at real examples on real

brick in person and in daylight, and talk to someone experienced in applying it to masonry.

So when anyone urges a sealer, a coating, or paint on your brick, slow the conversation down and ask questions. The answers, and especially any refusal to answer, will tell you what you are being sold. Ask what problem, specifically, this product solves on your wall, and ask to be shown that problem. Ask whether the product forms a film or penetrates, and ask for the manufacturer's published information on vapor permeability, in writing. Ask how your wall will dry after wind-driven rain gets behind the coating, as it eventually will. Ask what preparation and masonry repairs must be done first, and notice if the answer is none, because that is almost never true. Ask how long it lasts, what renewal involves, what it does to future repointing and cleaning, and whether it can be removed, and at what cost, if it fails. Ask for addresses of brick jobs done with the same product at least five years ago that you can drive by and look at dry, in person. And ask what happens, and who pays, if the brick begins to spall behind the coating.

As a general ballpark, whole-house sealer or coating applications in Texas are often quoted from a couple of thousand dollars upward, and painting a brick home commonly runs into the several-thousand-dollar range and higher for two-story work, and prices vary with size, preparation, access, and product. The larger cost is rarely the application. It is the repair bill if the system traps moisture, and the near certainty of ongoing recoating once you have started. A bare, well-pointed wall, by contrast, asks very little: sound joints, honest flashing, good drainage, and a wash now and then. That economy over decades is a large part of why brick has the reputation it does.

My honest closing advice is this. Spend your money first on the unglamorous work that lets a brick wall do what it was built to do: a sound chimney crown, intact flashing, full mortar joints, open weep holes, and gutters and sprinklers that keep excess water off the wall. Be skeptical of any product promising your wall will never get wet. Admire instead the wall that gets wet, dries, and is still standing sound a hundred years later. If, after repairs are done, a specific breathable treatment still makes sense for a specific exposure, choose it carefully, document it, and go in with modest expectations. Your brick does not need to be sealed against Texas weather. It needs to be maintained for it, and that quieter, cheaper, proven path is how brick lasts.

Chapter 10: Plants, Sprinklers, and Soil Against the Wall

Most brick walls do not fail because the brick was bad. They fail slowly, from the outside in, because of what sits right up against them every single day. You can have good brick, good mortar, and a house that was built right, and still watch that wall wear out twenty years early if the yard is working against it. The good news is that this is the easiest kind of damage to stop. You do not need special tools. You do not need to hire anyone to fix most of it. You just need to walk your own walls with fresh eyes and change a few habits that look harmless.

Start with vines. A wall covered in ivy looks settled and pretty in a photograph, and a lot of homeowners leave it alone for exactly that reason. What you cannot see in the photograph is what the vine is doing to the mortar. Climbing plants hold themselves up with tiny roots and tendrils that work their way into any soft spot they can find. A sound mortar joint gives them very little to grab. A joint that is already a little weathered gives them a doorway. Once those little roots get in, they grow, they thicken, and they pry. They also hold moisture against the wall long after rain has passed. A bare wall dries in the sun and wind. A wall under a thick mat of leaves stays damp in the shade, day after day.

That constant damp is the real problem. Brick can get wet and dry out again a thousand times and be fine. Brick that never quite dries is where you start to see the face of the brick soften and flake, and where mortar turns sandy and washes out faster than it should. In winter, even a mild Texas winter, that trapped moisture can freeze on a cold night and push a little harder. Over a few seasons, a pretty vine can leave you with joints that need repointing and a handful of brick faces that need attention, all in the exact shape of where the vine grew.

If you have ivy or a heavy climbing vine on brick now, do not just rip it off in one hard pull. When the roots have worked into the joints, yanking the vine can pull loose mortar and even pieces of brick face right along with it. A gentler way is to cut the vine at the base, let it die back and dry out for a few weeks, and then ease it off by hand when it lets go more easily. Clear what is left with a stiff brush. Then look closely at the joints underneath. If the mortar is sound, you are done. If you find soft, crumbly, or missing mortar where the vine was living, make a note of it. That is repointing work, and it is best handled sooner while the area is still small.

Not every plant near a wall is a problem. A shrub with a little air space behind it is fine. The rule is simple: nothing touches the wall. Keep shrubs trimmed back so you can see daylight between the leaves and the brick. That gap lets the wall dry and lets you spot a failing joint before it hides under growth.

Sprinklers do more quiet damage than almost anything else in

a Texas yard, and they do it on a schedule. If a sprinkler head is set so it sprays the house every time the system runs, that section of wall may be getting soaked three or four times a week, all summer long, whether it rained or not. You would never take a hose and spray one spot on your wall for twenty minutes, three days a week, all season. A misaimed sprinkler does exactly that for you, without you ever seeing it, because most systems run early in the morning while the house is still asleep.

Walk your system while it is running at least once in the spring and once in the middle of summer. Stand where you can see each side of the house. Watch for heads that arc onto the brick, heads that have tilted in soft soil and now spray low and hard at the wall, and heads that pool water at the base. A head that soaks brick daily keeps that brick and mortar wet far more often than nature ever would. Over time you will often see a dark, tired-looking patch in the spray pattern, sometimes with a white crust of minerals left behind as the water dries, and mortar that wears faster inside that patch than anywhere else on the wall.

The fixes are simple and cheap. Most sprinkler heads adjust with a small screwdriver or a key made for the brand. You can narrow the arc, shorten the throw, or turn the spray away from the house so it waters the lawn and beds, not the wall. A tilted head can usually be straightened by hand and firmed up with soil packed around it. A head that sits too low can be raised a little so it clears the grass and sprays out instead of down. If a head is broken or you are not comfortable adjusting it, an irrigation repair visit is modest work compared to repointing a wall. Prices vary by area and by how many heads need attention, but fixing spray is always the bargain next to fixing brick.

While you watch, notice where water pools. Water sitting against the base of a wall after every run tells you the grade is wrong. You want soil to fall away from the house, even gently, so water moves out toward the yard instead of sitting against your brick.

That brings us to soil and mulch, and to one of the most common mistakes I see. At the base of most brick walls, down low where the wall meets the foundation, there are small openings in the mortar joints called weep holes. They are not a flaw and they are not damage. They are there on purpose. Brick veneer is built with a small air space behind it, and those little openings let any moisture that gets behind the brick drain out and let air move so the space can dry. They are usually in the first course or two above the foundation, spaced along the wall.

Homeowners cover them up all the time without knowing it. A

fresh load of mulch gets spread thick in the beds. Soil gets added to raise a bed. A flower bed gets edged and built up year after year. Before long the mulch or soil is piled several inches up the brick, and the weep holes are buried behind it. When that happens, the moisture that should drain out has nowhere to go. It sits behind the wall. It also means the bottom few inches of brick and mortar now stay in contact with damp soil and mulch, which holds water like a sponge after every rain and every watering.

Walk the base of your walls and look for those weep holes. If you cannot find them, or you find them packed with mulch, soil, or old mortar droppings, clear them gently. Pull the mulch and soil back down so the bottom of the wall and the weep holes sit clear and open, with the soil line below them. Keep it that way. A good habit is to check every time you re-mulch, because mulch work is exactly when they get buried again. Tell anyone who helps with your yard the same thing: mulch goes in the bed, not up the wall, and those little holes at the bottom stay open.

The same thinking applies to planters and raised beds built right against the house. Anything that traps soil and water against brick shortens the life of that wall section. If you want a raised bed along the front, leave a small gap between the bed and the wall, and keep its soil below the weep holes.

A few other habits show up again and again. Do not stack firewood against a brick wall. It holds moisture, blocks drying, and gives insects a quiet home against your house. Keep it on a rack, away from the wall. Do not let a downspout pour out at the base of a wall. Add an extension that carries the water out into the yard. Watch large trees and shrubs planted very close: a canopy that shades a wall all day slows drying, so prune for air and light, and think hard before planting a large tree in a tight space beside brick.

Composite example: Picture a north-facing wall that never quite gets sun, with a sprinkler head that kisses it every other morning, ivy across one corner, and mulch piled high enough to cover the weep holes. None of those things alone would ruin that wall in a year. Together, over five or six years, that wall stays wet, its mortar softens, its brick faces begin to flake, and what could have been a morning of yard fixes becomes a real repair bill. Every part of that story is preventable, and most of it you can fix yourself in an afternoon.

Make it a twice-a-year walk, in spring and fall. Look at what is touching, spraying, and piled against the wall. Cut it back, turn it away, and pull it down. Those three moves will add more years to your brick than almost any product you could buy.

Chapter 11: Small Repairs a Homeowner Can Do — and the Line You Do Not Cross

There is honest work you can do on your own brick, and work that looks small and is not. Knowing the difference saves you money twice: you will not pay someone for a ten-minute job you can handle safely, and you will not turn a small repair into a bigger one by trying a mason's job with the wrong tools and material. This chapter draws that line as clearly as I can.

Start with what you can do, and do with confidence. The first job is the one from the last chapter: keeping weep holes clear. Those small openings at the base of the wall need to stay open. You can clear them with your fingers, a small screwdriver used gently, or a stiff piece of wire, taking care not to force anything deep into the wall or chip the edges of the brick. If one is packed with mulch or soil from the outside, dig it out lightly until it is open. If you find weep holes that were never left open or that are blocked with mortar from the inside, leave those alone and mention them to a mason on his next visit. Clearing what you can reach from the surface is safe. Forcing a hole through a wall is not your job.

The second job you can do is keeping water out at small penetrations. Where a pipe, a cable, a faucet, or a vent passes through the brick, there is a small gap around it that is usually sealed with caulk or sealant. Over the years that seal shrinks, cracks, and pulls away, and then every rain can send a little water in around the pipe. You can renew that seal yourself. Clean out the loose, failed material with a utility knife and a brush, wipe the area dry, and apply a good exterior sealant made for masonry and the material of the pipe or trim it touches. Smooth it with a wet fingertip or a small tool, keep it neat, and do not smear it across the face of the brick. A tidy, narrow bead is what you want. Check these spots once a year. Faucets especially take a beating from hoses being pulled and from freezing weather.

A third job in your hands is simple cleaning and watching. Wash light dirt and algae off with a garden hose, a soft brush, and plain water, or a mild cleaner tested first in a hidden spot. Do not blast brick with a high-pressure washer held close. It can cut soft mortar out of the joints, force water deep behind the brick, and scar the face of older brick in a single pass. If a wall needs deep cleaning, discuss it with a mason who knows how to do it gently. Also keep a simple record: note the date you walked the walls, what you saw, and take phone photos of any crack or worn joint from the same spot each time. A crack you can compare across six months tells you far more than one you are trying to remember.

You can also handle the yard fixes from the last chapter: trimming plants off the brick, adjusting sprinkler heads, pulling mulch below the weep holes, and adding downspout extensions. They prevent more damage than any small repair you will ever make.

Now for the line, and I want to be plain about it. Replacing a single damaged brick is not a do-it-yourself job, even though it looks like it should be. I say that knowing it is the repair homeowners most often want to try. The brick you see is tied into a wall system. Getting the old one out without cracking its neighbors takes the right saw or chisel work and a feel for how much force the wall will forgive. The new brick has to match in size, which on an older house is not always the standard size on a store shelf. The mortar has to match in strength as well as color. Mortar that is too hard for the brick around it can cause the brick faces to fail later, because the wall needs the joint to be the part that gives a little with age and weather. And the new brick has to be set, tooled, and cleaned so water sheds off it instead of catching on it. Done poorly, a one-brick replacement stands out forever, leaks, or loosens within a few seasons. Done by a mason, it is a small, clean job. Let it be his.

Repointing is also past the line for most homeowners, and for a similar reason. Repointing means grinding or chiseling out the failed mortar to the right depth, without widening the joint or chipping the brick edges, then packing in new mortar of the right mix in layers, tooling it to match the profile of the joints around it, and protecting it while it cures. The grinding alone can damage a wall in minutes if the tool wanders. Bagged mixes off a shelf are often harder than what an older wall needs. I have seen well-meant patch jobs where a homeowner troweled a hard patching material over the face of the joints instead of into them. It looked better for a month, sealed moisture in behind it, and then fell off in sheets, leaving the original problem worse. If only a joint or two in a tiny, low, non-structural spot needs a touch, a mason can tell you honestly whether it is worth a visit. For any area you can measure in feet rather than inches, call him first.

Structural questions are past the line by a wide margin, and here I need you to hear me clearly. I am not a licensed engineer, and no honest mason should pretend to be one. My authority, and the authority behind this book, is fifty years of hands-on field experience with brick and mortar, not a license. If you see a crack that steps through brick and mortar in a stair pattern, a wall that leans or bulges, a lintel over a window or garage that is sagging or badly rusted, brick that has separated at a corner, or cracks that keep growing after they have been repaired, those are signs to bring in a structural engineer for an evaluation, in addition to a mason. The engineer answers the question of why the wall moved and

whether the structure needs more than masonry repair. The mason then repairs the brick correctly once that question is answered. Skipping the first step can mean paying to repair the same crack twice.

Safety is part of the line, too. Do not work off a ladder with power tools and no free hand. Do not grind mortar without eye protection, hearing protection, and a good dust mask or respirator, because masonry dust is hard on lungs and eyes. Do not experiment with strong masonry cleaners, including any acid-based cleaner. They can burn skin, damage brick, and kill plants. Do not climb onto a chimney or work at the top of a tall wall from a roof edge. Chimney crowns, flashing, and caps should be handled by someone who works at height safely every week, not by a homeowner on a Saturday with a borrowed ladder.

Hypothetical example: Imagine you notice one spalled brick beside your front door, its face flaking off, and a few soft joints around it. You watch a video, buy a brick that looks close, and spend a Saturday chiseling the old one out. The neighbors crack. The new brick sits a little proud. The ready-mix mortar dries much lighter and much harder than the joints around it. By the next winter the two bricks above it show fresh flaking, because the hard patch changed how that little section handles moisture and movement. What would have been a modest mason visit is now a small panel to redo correctly. Nothing about that story requires carelessness. It only requires a job that looked smaller than it was.

It helps to understand how small neglect becomes a big invoice, because that is what should guide your timing. A failed caulk joint at a faucet costs very little to renew. Left open for years, it lets water behind the brick, rusts what it touches, and rots trim and framing you cannot see. A few feet of soft mortar costs a modest amount to repoint while the area is small. Left alone, water gets deeper, more joints fail, brick faces begin to spall, and now you are paying to replace brick as well as mortar. A buried weep hole costs nothing to clear. Left buried, it helps keep a wall damp from behind in a way no surface repair can cure. In masonry, the price almost always follows the size of the area and the depth of the damage, and both grow with time. Early, small, and correct beats late, large, and layered every time.

Keep a short list if it helps. Yours: clear weep holes, renew small seals, wash gently, trim, adjust sprinklers, pull mulch down, watch and photograph. His: replacing brick, repointing beyond a tiny touch, chimney work at height, lintel work, anything that cracks, leans, bulges, or keeps coming back. When you are not sure which side of the line a job falls on, that uncertainty is itself the answer. Call a mason and ask him to look. A good one will tell you if it is a job you can do

yourself.

Chapter 12: Hiring a Mason and Planning the Work

Sooner or later, most brick homes need a mason. Mortar is a wearing surface, meant to be renewed. Brick gets damaged. Chimneys take weather on every side. Hiring that work well rewards a homeowner who knows what to ask, how to read what he is handed, and how to plan beyond the single repair in front of him. This last chapter pulls the book together: choosing the person, understanding the bid, matching the color, what payment normally looks like, and spreading your care of the walls across the next ten years.

Start with vetting, and start local. A contractor who works in your area and can point to jobs nearby that you can drive past is a safer bet than a name with no address and no history you can check. Ask how long he has been doing masonry repair specifically. Repair is its own trade. A crew that builds new walls all week may be fine builders and still be less practiced at the careful grinding, matching, and blending repair demands. Ask who will actually do the work, and whether the person who bid the job will be on site.

Ask for proof of insurance, and ask to see it. Ask for references from repair jobs, and if you call one, ask three things: did they show up when they said, did the repair blend in after a few weeks, and would you hire them again. Look at photos of finished repairs the same way: in good work, your eye should not jump straight to the new section. Joints should match the width and profile of the old ones, new brick should sit close in color and size to their neighbors, and the wall should be clean, without mortar smeared across brick faces. Perfect invisibility is not a fair test on an older home, but honest blending is, and a good mason is proud to show it.

Be cautious with anyone who wants to solve every problem with a coating, a sealer, or a thick patch over the joints, without explaining why the joint or brick failed. Be cautious, too, with a bid far below every other bid that comes with pressure to sign today. Correct repair takes time, the right mortar, and care around your landscaping. A price that cannot pay for that time usually means the time will not be spent. The highest bid is not automatically the best, either. Listen for a man who looks closely, explains what he found in plain language, tells you what he would not do as well as what he would, and will say when a question needs a structural engineer. That last point matters. I am not a licensed engineer, and a mason who pretends field experience is the same as a license is not being straight with you. Fifty years of hands-on work teaches a great deal about brick and mortar. It

does not make him an engineer.

When bids come in, read them line by line, and do not be shy about asking what each line means. A clear repointing bid should name the areas to be repointed, in plain locations you can find on your house: the west wall of the garage, the chimney above the roofline, the first two feet around the front door. It should give an amount of work you can picture, whether that is linear feet of joints, a square footage of wall, or a named number of brick to be replaced. It should say how the old mortar will be removed, to what depth, and what mortar will go back in, including how the color will be matched. It should say what is protected and cleaned up: plants covered, windows masked, mortar droppings and dust cleaned, the site left tidy. It should say what is not included, just as clearly. Flashing work, chimney cap replacement, and structural repairs are often separate, and it is far better to read that in the bid than to learn it mid-job.

If a bid is just a single number on a card, you do not have a bid. You have a price with no promise attached. Ask for the written version. Two bids with the same total can mean very different work: one may repoint only the joints that have fully failed, the other the whole elevation. One may include replacing spalled brick in the area, the other may charge for each one as an extra. Neither is automatically wrong, but you need to know which you are buying. Ask what happens if they find more damage once the old mortar comes out. A fair answer names how extras are priced and promises nothing extra is done without your approval first.

Mortar color matching deserves its own word, because it is where good repairs are won and lost in how they look. Fresh mortar almost never dries to the color it shows wet, and it should be matched to the aged mortar on your wall, not to a color chip alone. A careful mason will look at the sand in your existing joints, because sand does much of the work in the final color, and will often mix a small test batch and let it cure so you can both see it dry. This is the work MortarMagic was made for in our own shop practice: a measured approach to dialing in mortar color so a repair blends instead of announcing itself. The Mortar Bucket, the simple mixing and handling setup we use to keep batches consistent from first joint to last, matters for the same reason. Ask your mason how he keeps his mix consistent. His answer will tell you a lot.

Talk about money plainly, before work begins, and get the agreement in writing. As general guidance only, because every company and job is different and prices vary: it is normal for a contractor to ask for a deposit before starting, commonly around a third of the total, with the balance due when the work is complete and you have walked it together. A very small job may be billed in full on completion. A larger job

may split into a deposit, a progress payment at a named halfway point, and a final payment at completion. Pause at a demand for most or all of the money up front, in cash, with no written agreement, or a final payment demanded before you have seen the finished work in daylight. Pay by a method you have a record of, and keep the bid, agreement, and receipts together in one folder.

Finally, close the book with a plan you can actually keep. Brick asks little of you: a little attention, on a schedule, before small things grow. Here is a ten-year plan simple enough to tape inside a kitchen cabinet.

Every spring and fall, walk the walls. Clear the weep holes. Check seals around faucets, pipes, and vents. Trim plants off the brick. Watch the sprinklers run once and fix any head that sprays the house. Pull mulch below the weep holes. Photograph any crack or worn area from the same spots as last time, and date your notes. This walk takes less than an hour, twice a year, and it is the highest-value work in this book.

Once a year, look higher. From the ground, with binoculars if you have them, check the chimney: crown, joints, flashing, and cap. Check lintels over windows and the garage door for rust, sag, or cracked brick above them. Note any joints that have gone soft or recessed. Make a list, even if it is for a mason visit a year away.

At three to five years, expect to renew seals, because caulk at penetrations ages out before mortar does. At about five years, have a mason walk the house with you once, even if you think nothing is wrong. A professional eye catches the soft section behind a shrub or the early lintel rust a homeowner walk can miss, and a small repointing area caught at year five costs a fraction of the same area at year nine.

Across years seven to ten, budget honestly for mortar. Depending on exposure, the sun-and-sprinkler side of a Texas house may be ready for repointing while the sheltered side has years left. That is normal. Mortar is meant to be the part that wears, so the brick does not have to. Keep every bid and invoice in your folder, with before-and-after photos. That record helps when you sell, and it makes the next mason's job easier because he can see what was done and when.

Hypothetical example: A homeowner follows this plan loosely for a decade. She spends two Saturday mornings a year walking and clearing, renews a few seals in year four, pays for one small chimney repointing in year six that she saw coming two years earlier, and budgets for one wall's repointing in year nine. Her neighbor, with the same house and the same brick, spends nothing and notices nothing until a real estate

inspector writes up the walls in year ten, all at once, on a deadline. The brick was the same. The plan was the difference.

That is the whole secret, if there is one. Brick that lasts is rarely lucky brick. It is brick that was watched, kept dry where it should be dry, drained where it should drain, and repaired small and correctly while repairs were still small. Do the walk this weekend. Your house will repay the hour in decades of quiet, solid walls.

Conclusion: A Wall That Outlives Us All

A brick wall is a promise made in slow materials. The brick itself was fired in a kiln and will outlast everyone who reads this page. The mortar was mixed to be the humble part — the part that gives a little, wears a little, and gets renewed so the brick never has to. The wall does not ask much. It asks that water be shown the way out, that its joints be renewed when their turn comes, and that somebody walk past it twice a year with open eyes.

That somebody is you.

If you take only three habits from this book, take these. First, walk your walls every spring and every fall, notebook or phone in hand, and write down what changed. Change is the signal; a wall that looks the same year after year is a healthy wall. Second, guard the water. Keep weep holes open, keep soil and mulch below them, keep sprinklers off the brick, keep gutters honest, and keep the chimney crown and cap sound. Water is behind nearly every failure in these chapters, and water is the one enemy you can almost always beat with attention instead of money. Third, respect the order of things: soft mortar protects hard brick, small repairs prevent large ones, and honest diagnosis comes before any repair at all. When a question turns structural, bring in a licensed structural engineer. When a repair turns skilled, bring in a mason whose work you have seen and whose references you have called.

Composite example: Picture two neighbors with the same builder, the same brick, and houses built the same year. One spends an hour twice a year walking, noting, clearing weep holes, and pointing a mason to a worn stretch of joints every decade or so. The other never looks, until a freeze pops a dozen brick faces and a section of wall needs rebuilding. Twenty years in, the first house has spent a little, steadily, on care. The second has spent a great deal, all at once, on rescue. Same brick. Same weather. The difference was never

the wall. It was the attention.

Your brick home was built to stand strong for a very long time — longer than the mortgage, longer than the roof, longer than most of us will be here to admire it. Give it the small, steady care it asks for, and it will keep that promise. That is what it means for brick to last.

Resources & Next Steps

Travis Nech has spent 50 years in brick, masonry, and foundation work across Texas. He owns and operates Champion Brick Repair, Metro Foundation Repair, LintelLOCK, MortarMagic, and WhiteStone Construction.

- **Champion Brick Repair** — brick & masonry repair, Dallas-Fort Worth — championbrickrepair.com — (817) 900-6324
- **Metro Foundation Repair** — pressed concrete pile foundation repair — metrofoundationrepair.com — (817) 523-1540
- **LintelLOCK** — the field-developed lintel replacement system — lintlerepair.com — (469) 730-0650
- **MortarMagic** — mortar color matching & the Mortar Bucket — mortarmagic.netlify.app
- **WhiteStone Construction** — stone, ranch & property work, Hamilton TX country — (254) 723-5040

If your walk-around turned up worn joints, spalling brick, a tired chimney, or a wall you are simply not sure about, start with Champion Brick Repair at championbrickrepair.com or (817) 900-6324. An honest look early is the cheapest repair there is.

About the Author

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Travis writes the books he wishes every homeowner would read before the first repair truck rolls: plain English, field-proven, and honest about what a homeowner can do, what a mason should do, and what nobody should ever sell you.