

Historic Brick Restoration in Texas: Old Mortar, Old Methods, Old Rules

Why Your 1920s Brick Needs Lime Mortar, a Light Hand, and
a Mason Who Knows the Difference

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Chapter 1: Historic Brick Restoration in Texas Starts With Respect for the Old Work

There's brick, and then there's old brick. The brick on a 1985 suburban home in Plano and the brick on a 1915 commercial building in downtown Hamilton are not the same material, not held together by the same mortar, and not repaired by the same rules. Treat them the same and you'll destroy the old one. I've watched it happen — good intentions, modern materials, ruined historic masonry. This book is about making sure that doesn't happen to your building.

Here's the core truth of historic brick restoration, and it's only one sentence: old brick is soft, old mortar is softer, and everything you do to an old wall has to honor that softness. Modern brick is hard, fired at high temperatures to tight tolerances. Modern mortar is hard, loaded with Portland cement. Put modern hard mortar on old soft brick and the brick loses — every time, within years. The faces pop off. The wall spalls. A "repair" becomes demolition in slow motion.

Texas has more historic brick than most people realize. The 1880s commercial blocks in county-seat towns. The Victorian

homes of Galveston. The German-settlement stone-and-brick of the Hill Country. The early-1900s bungalows of Fort Worth's Fairmount and Dallas's Munger Place. The handmade brick of East Texas, fired in local kilns from local clay. Pre-1930s masonry across this state was laid with lime mortar — soft, breathable, forgiving — and it's still standing because of those qualities, not in spite of them.

I've been doing this fifty years, and the old work is my favorite work. There's a right way to touch a hundred-year-old wall, and it's slower, gentler, and more thoughtful than modern masonry. This book is the whole method: what makes old brick different, why lime mortar is non-negotiable, how repointing is done by hand, what destroys historic masonry (so you can stop it), what it costs in 2026, and how to find a mason worthy of your old wall.

One note on terms: in the preservation world, the proper word for redoing mortar joints is repointing. I'll use it here. My other books use "tuckpointing" the way Texas contractors do. Same job, older word, older rules.

Chapter 2: What Makes Old Brick Different — Soft, Handmade, Irreplaceable

To restore old brick, you have to understand what it is. And it's genuinely different stuff from what's on the shelf at the masonry supply today.

Handmade and soft. Before roughly the 1930s, most brick was handmade or made on early machines and fired in kilns — often local kilns — at lower temperatures than modern brick. Lower firing temperatures mean softer brick: more porous, less uniform, with more variation in color and size. That softness isn't a defect. It's the character of the material, and the entire wall system — mortar, joint width, wall thickness — was designed around it.

Irregular. Old brick varies. Sizes drift by eighths of an inch. Colors shift from kiln to kiln, even within a single wall. Faces aren't perfectly flat. This is why old walls have wider, more generous mortar joints — the mason needed the play to make irregular units work. It's also why old brick can't be "matched" from a modern yard. When an old brick is lost, the replacement has to be salvaged or custom-made, or at

minimum carefully selected for size, color, and — critically — softness.

Irreplaceable. This is the part people miss. Modern brick is manufactured to modern specs — harder, denser, more uniform. You cannot buy 1910 brick new. Every original unit in your historic wall is irreplaceable, and every repair decision should start from that fact. A repair method that risks the brick to save the mortar has it backwards. The brick is the artifact. The mortar is the sacrificial element — designed to wear out and be replaced, protecting the brick for centuries.

The system. An old brick wall is a system: soft brick, soft lime mortar, thick walls (often two or three wythes), lime plaster inside, no cavity, no weep holes — the wall manages moisture by breathing, absorbing and releasing it through its whole mass. Every "modern improvement" applied to that system — hard mortar, waterproof sealers, Portland stucco, vapor barriers — interferes with how the wall breathes. The wall survived a century by breathing. Don't suffocate it.

When I walk up to a historic wall, the first thing I do is touch the brick and the mortar. Soft brick has a feel — slightly powdery, warm, forgiving. Hard modern brick feels like glass

by comparison. And I press the mortar with a key or a screwdriver. Old lime mortar gives. It powders slightly. That's healthy — that's a mortar doing its sacrificial job. The wall is telling me what it needs, and what it's telling me is: be gentle.

Chapter 3: Lime Mortar — The Soft Stuff

That Lets Old Walls Live

Lime mortar is the heart of historic masonry. Everything in this book comes back to it. So let's get it right.

What it is. Lime mortar is sand mixed with lime — traditionally lime putty or hydrated lime — and water. No Portland cement, or only a small amount. The classic ratio is roughly one part lime to two or three parts sand. It's been the world's masonry binder for thousands of years — the Romans used it, and their walls are still standing. Portland cement only arrived in the United States in the 1870s, and didn't dominate residential masonry until the 1930s. Every Texas brick building raised before about 1930 is almost certainly a lime-mortar building.

How it cures. This is the beautiful part. Lime mortar doesn't "set" like cement. It cures by carbonation — it absorbs carbon dioxide from the air, and the lime slowly turns back into limestone. The process takes weeks to months, not hours. The mortar stays workable longer, which is why old masons could lay all day with it. And the cure continues for years, the

mortar slowly gaining strength while staying softer than the brick — forever the sacrificial element.

Self-healing. Lime mortar does something Portland cement can't: it heals small cracks. Rainwater dissolves a tiny amount of free lime in the mortar and redeposits it in hairline cracks — autogenous healing, the trade calls it. Small cracks literally seal themselves. An old lime-mortar wall is quietly repairing itself every time it rains. That's not poetry. That's chemistry.

Breathable. Lime mortar is porous — vapor-permeable. Moisture moves through it freely, in and out. In an old solid wall with no cavity, this breathability is the entire moisture-management strategy. Water gets in (it always does), and the lime mortar lets it back out. Replace it with dense Portland mortar and you've dammed the wall's breathing passages — moisture gets trapped behind the hard joints and goes into the brick instead. Then the brick spalls. Then people blame the brick.

Flexible. Lime mortar gives. It absorbs the small movements every wall experiences — thermal expansion, minor settlement, vibration — without cracking. Portland mortar is rigid; when the wall moves, either the mortar cracks or the brick does. On a soft old wall, guess which one gives first.

The National Park Service — the authority on this in America, through its Preservation Briefs — is unambiguous: repointing mortar for historic masonry should match the original in strength, and should never be harder than the brick. For most pre-1930s brick, that means lime mortar. Not "lime-type." Not "masonry cement with some lime in it." Lime mortar.

Chapter 4: The Portland Cement Mistake — How Modern Mortar Destroys Old Brick

This chapter is the warning label. If you take one technical lesson from this book, make it this one.

Sometime in the mid-20th century, Portland cement took over American masonry. It's fast, it's strong, it's predictable, and every mason under sixty learned on it. When those masons got called to repoint old buildings, they brought what they knew: hard, gray, Portland-heavy mortar — Type N, Type S, or bagged masonry cement that's up to 65 percent Portland. It went into joints designed for lime. And then the damage started.

The mechanism. Hard Portland mortar against soft historic brick creates a brutal mismatch. The mortar is stronger than the brick — sometimes several times stronger. When the wall moves, the mortar doesn't give, so the brick takes the stress. When moisture enters the wall, the dense Portland joints won't pass it, so the water migrates into the more porous brick. In winter, that trapped water freezes and expands. The brick face — the hard-fired outer skin of the unit — pops off.

That's spalling. Once it starts, it accelerates: the exposed softer interior brick absorbs even more water, and the decay runs away.

What it looks like. I've seen hundred-year-old walls where the mortar joints are perfect — crisp, hard, gray — and the brick faces are falling off in sheets around them. The mortar outlived the brick it was supposed to protect. That's the Portland mistake, visible from the curb: beautiful joints, dying brick. The previous mason did neat work with the wrong material, and the wall is paying for it.

The timeline. It doesn't happen overnight. The first few years look fine — the repointing looks great, in fact. Then the spalling starts, slowly, then faster. By year ten or fifteen, the wall can be in worse shape than before the "repair." And here's the cruelty: the damage is largely irreversible. You can cut out the hard mortar — carefully, expensively, by hand — but you can't put the brick faces back on.

The partial-truth trap. "But we used Type N, that's the standard!" Type N is the standard for modern brick. Your 1915 handmade brick isn't modern brick. The standard that matters is the preservation standard: the new mortar must be no harder than the original, and softer than the brick. On

genuinely historic masonry, that usually means a lime mortar — possibly with a small Portland addition (the Park Service guidance allows up to about 20 percent Portland in the binder for workability, and many preservation masons use less or none). "Some Portland" is a measured choice by someone who tested the original mortar. "Bagged Type N" is a guess that risks the wall.

If your historic wall was repointed with hard mortar in the past — and many were — don't despair. The fix is to remove the hard mortar (by hand, carefully, which is Chapter 6) and repoint correctly with lime. It's slower and it costs more than the original mistake did. But the wall gets its breath back, and the decay stops. Old walls forgive, if you give them the chance.

Chapter 5: Reading Your Old Mortar — What the Original Was

Before you repoint a historic wall, you need to know what was there originally. Not guess — know. The original mortar is your specification. Here's how to read it.

The thumbnail test. Find an original joint — sheltered, unrepaired, ideally somewhere the weather hasn't beaten it flat. Press it with your thumbnail. True lime mortar is soft enough to scratch, even crumble slightly. It feels chalky. Portland mortar won't give — your nail skates off. This isn't laboratory science, but after fifty years I can call it nine times out of ten by feel. Soft and chalky: lime. Hard and glassy: Portland (and probably a later repair, not original).

The color and texture. Old lime mortars are rarely the flat gray of modern bagged mix. They're warm — buff, tan, cream, sometimes almost white — because the color comes from the local sand, and Texas sands run warm. Look closely at the aggregate: you can see the individual sand grains in lime mortar. Coarse, sharp sand was the old standard. If the mortar is uniform battleship gray with invisible aggregate,

it's modern — a repair, not original.

The lab option. For important buildings — landmarks, museums, high-value restorations — mortar analysis is worth the money. A lab takes a sample of original mortar and tells you the binder type, the sand gradation, the ratio, sometimes even the sand source. In 2026, a basic mortar analysis runs roughly \$150 to \$325. What you get is a recipe: this is what was here, this is what goes back in. For a whole-building restoration, it's the cheapest certainty you'll buy.

Where to sample. The best original mortar hides where weather and repairs haven't reached: under a porch roof, behind a downspout that's been there forever, inside the wall at a window replacement, in the attic where the chimney passes through. Take your thumbnail and your eyes to the sheltered spots first. That's where the building kept its records.

What "matching" really means. Matching historic mortar isn't just color — though color matters enormously for appearance. It's strength first (softer than the brick, matching the original), then composition (lime-based if the original was), then sand (similar gradation and color — the sand IS the color), then joint profile (the shape the original mason

tooled). A match that nails the color but uses hard Portland is a failure wearing makeup. Strength first, always.

Write down what you find. Photograph the original joints next to a ruler before anyone touches them. That record is your spec sheet and your quality control — when the mason's test panel goes up, you compare it to the photo, not to memory.

Chapter 6: Repointing Old Brick the Right Way — Hand Tools, Depth, and Patience

Repointing historic masonry is slower than modern repointing, and every shortcut damages something irreplaceable. Here's the method.

Remove by hand. This is the first rule and the most violated. Old lime mortar is soft — it comes out with hand tools: plugging chisels, joint rakers, patience. Power grinders are the enemy of historic brick. A grinder in a 3/8-inch historic joint will chew the arrises — the crisp edges — right off the soft brick, widening the joint irreversibly and scarring every unit it touches. I've seen "restored" historic walls where every joint is a ragged half-inch canyon because somebody ran a grinder down it. That damage never heals. The preservation standard is clear: hand tools on historic masonry. If the mortar is so hard it "needs" a grinder, it's probably Portland from a bad earlier repair — and even then, the grinder blade should be narrower than half the joint width, used with extreme care, because the brick beside it is still soft and still irreplaceable.

Cut deep enough. The old mortar comes out to a depth of at least 2 to 2.5 times the joint width — for a 3/8-inch joint, that's roughly an inch deep — or until sound mortar is reached. Shallow repointing over deteriorated mortar is a skin over a wound; the new work bonds to dust and fails. But depth has a limit on old walls: don't cut so deep you destabilize the wythe. An inch is the working standard. More than that, and you're into engineering judgment.

Clean without damage. The joints get brushed and blown clean — no pressure washers blasted into open joints, which drives water deep into the wall and can damage soft brick faces. Some masons dampen the joint before pointing; old brick is thirsty and will suck the water out of fresh lime mortar too fast, weakening the bond. Damp, not soaked.

Point with lime. The new mortar — lime-based, matched per Chapter 5 — goes in in layers, compacted firmly, built up to the original joint profile. Lime mortar behaves differently from Portland: it stays workable longer, it needs protection from rapid drying (hot Texas sun and wind are the enemies of a lime cure — the work gets misted and sometimes tented), and it cures slowly. Don't let anyone tell you the wall is "done" the day the pointing finishes. Lime needs weeks.

Protect it from hard rain and hard sun while it carbonates.

Tool to the original profile. Old joints were usually tooled concave, flush, or slightly weathered — and the profile matters for both appearance and water shedding. Match it. Photograph the original profile before removal (Chapter 5's homework pays off here).

Cure it like you mean it. Fresh lime mortar in a Texas August will dry out before it cures if you let it — the surface sets, the interior stays weak, and the joint fails early. The mason should be misting the work, working in the cooler hours, and keeping direct sun off fresh pointing. If your contractor's plan for a July lime repoint is "we'll just go fast," get a different contractor.

This is slow work. A mason might repoint a fraction of the area per day that a modern crew would. That's not inefficiency. That's the job. You're paying for the hands, the patience, and the hundred-year-old wall that survives the repair.

Chapter 7: Matching Old Mortar — Sand, Color, and Texture

Color matching on historic work is a craft, and it's where good restoration visibly separates from bad. Here's how it's done right.

The sand is the color. Modern masons think mortar color comes from the cement. On historic work, it comes from the sand. Texas's old mortars are warm because Texas sand is warm — buff, tan, pale red depending on the pit. The first step in matching is finding sand with the right color and gradation: sharp, well-graded, similar particle sizes to the original. A mason who shows up with one bag of white play sand and a box of pigment is not matching. He's painting.

Test panels. Non-negotiable. Before the wall gets touched, the mason mixes small batches, points a few test joints in an inconspicuous spot (or on a sample panel), and lets them cure. Here's the critical part: wet mortar and cured mortar are different colors. Lime mortar lightens significantly as it carbonates. A test panel judged wet will be wrong when dry. The panel needs days — ideally a couple of weeks — before

the final call. Any mason who mixes one batch and goes is guessing with your historic wall.

Pigments: last resort. Mineral pigments can tint mortar, but they're the least stable part of the mix — they can fade, leach, or change tone over the years while the sand-based color stays true. The preservation guidance is to match with sand selection first and reach for pigments only when the color is otherwise unachievable. A wall matched with the right sand still matches in twenty years. A wall matched with pigment might not.

Texture matters too. Old mortar has a texture — the sand grain shows, the tooling marks are visible, the surface isn't glass-smooth. A repoint that's the right color but troweled slick looks wrong on an old wall — too perfect, too modern. The mason's hand has to match the old mason's hand. Look at his test panel in raking light, the way you'll see the wall every evening. Color in flat noon light lies. Texture in raking light tells the truth.

Document the mix. When the match is right, write down the recipe: sand source, lime type and ratio, any Portland percentage, pigment (if any) by weight. That record goes with the building. In twenty years, when the next repointing

comes due, the next mason starts from knowledge, not archaeology. Buildings that keep their records get better repairs. It's that simple.

Chapter 8: The Don't List — Sandblasting, Sealers, Paint, and Power Tools

Some things should never touch historic brick. This is the list I give every owner of an old building, suitable for taping inside the electrical panel where every future contractor will see it.

Don't sandblast. Sandblasting — or any abrasive blasting — strips the hard-fired outer face off old brick, exposing the soft interior. The wall looks "clean" for about a year. Then the exposed soft brick absorbs water like a sponge, and the decay accelerates beyond anything the dirt ever caused. The National Park Service has condemned abrasive cleaning of historic masonry for decades. There is no historic brick that needs sandblasting. There are historic bricks that were destroyed by it.

Don't pressure-wash aggressively. A gentle rinse is fine. A 3,000-PSI fan tip six inches from a 1910 brick face is sandblasting with water. It drives water deep into the wall, erodes soft mortar, and can spall brick faces. If the wall needs cleaning, the preservation methods are gentle: low-pressure

water, soft brushes, appropriate chemical cleaners tested in an inconspicuous spot first. Cleaning historic masonry is conservation, not car washing.

Don't seal it with waterproof coatings. This is the big one I fight constantly. Somebody sells the owner a "masonry waterproofing sealer," it goes on the wall, and the wall can't breathe anymore. Remember Chapter 2: old walls manage moisture by breathing through the whole mass. A film-forming sealer — silicone, acrylic, any non-breathable coating — traps moisture inside. The water that used to evaporate harmlessly now freezes inside the brick, or migrates inward to the plaster. Spalling, interior damage, mold — all from a product sold as "protection." If a sealer is ever appropriate on historic masonry (rare), it must be breathable — vapor-permeable — and that's a specialist decision, not a hardware-aisle one.

Don't paint historic brick. Paint is a sealer with color. Same breathability problem, plus it's nearly irreversible — removing paint from historic brick without damaging it is one of the hardest jobs in preservation. The "painted brick" look that's trendy right now is a preservation tragedy on genuinely old walls. If your historic brick is already painted

(many are, from past decades), don't strip it aggressively — manage it gently and don't repaint with non-breathable coatings. Limewash is the traditional breathable coating, and it's the only thing that belongs on old brick if anything does.

Don't let anyone grind the joints. Covered in Chapter 6, repeated here because it's the most common damage I see: power grinders on historic joints. Hand tools. Always.

Don't "improve" the wall system. No vapor barriers slapped on the inside of a breathing wall. No Portland stucco over historic brick. No hard cement parging. Every modern "upgrade" that ignores how the old wall manages moisture makes the wall worse. The wall worked for a century. Your job is to maintain its logic, not override it.

Chapter 9: Water and Old Walls — How

Historic Brick Breathes

Everything about old brick comes back to water. The old builders understood this intimately — they just didn't write it in engineering textbooks. Here's the moisture logic of a historic wall.

The breathing wall. An old solid brick wall — two or three wythes, lime mortar, lime plaster inside, no cavity — handles water by absorption and evaporation. Rain hits the wall. The brick and mortar absorb some. Then, when the rain stops, the moisture migrates back out through the porous masonry and evaporates. The wall gets wet and dries, gets wet and dries, in equilibrium. This only works if every layer breathes: brick, mortar, plaster, and any coating. Break any link — hard mortar, sealer, non-breathable paint, vapor barrier — and the moisture finds the weakest remaining path, which is usually into the brick or into the interior.

What goes wrong. The failure patterns are all moisture stories. Spalling from trapped water freezing. Interior plaster bubbling and peeling — often misdiagnosed as a roofing leak

when it's actually the wall's breath being blocked. Efflorescence — white salt staining — which is water carrying soluble salts out of the masonry; a little is normal aging, a lot means too much water is moving through. Rising damp at the base — groundwater wicking up through the wall because the original damp-proof course (if any) has failed or grade got piled against the wall.

The Texas version. Our climate gives old walls a specific pattern: long hot dry spells that desiccate everything, then violent rain events that saturate the wall all at once. The breathing cycle still works — Texas old brick has handled this for a century — but it depends on the wall drying between storms. Anything that slows drying hurts: sealers, hard mortar, vegetation tight against the wall, grade piled above the original level, sprinklers wetting the wall daily. The fixes are mostly unglamorous: keep grade below the wall base, keep sprinklers off the brick, keep gutters working, keep vegetation back, and let the wall breathe.

Interior signs. If your historic building's interior plaster is bubbling, staining, or growing mold on exterior walls, the wall is telling you its moisture balance is off. Don't just repaint — investigate. The cause is usually exterior: failed

mortar letting bulk water in, a sealer or paint trapping it, grade or gutter problems. Fix the water, let the wall dry (it can take months — be patient), then repair the plaster with breathable lime plaster, not modern gypsum over a vapor barrier.

The golden rule. On a historic wall, every moisture decision asks one question: does this help the wall dry? Lime mortar: yes. Breathable limewash: yes. Working gutters: yes. Sealers, Portland, paint, vapor barriers: no. When in doubt, choose the option that lets water out.

Chapter 10: Structural Repairs on Old Brick

— Stitching, Not Demolishing

Old walls sometimes need more than repointing. Cracks, bulges, settlement — here's how structural repair works under preservation rules.

The preservation hierarchy. The governing principle — from the Secretary of the Interior's Standards, which guide all serious preservation work — is: repair rather than replace, and replace as little as possible. A cracked historic wall gets stitched and stabilized, not torn down. Original material is preserved wherever it can be. New work is distinguishable but compatible. This isn't sentimentality — it's the recognition that the original fabric is the historic value, and every lost brick diminishes it.

Crack stitching. Structural cracks in historic brick — from settlement, thermal movement, old trauma — are commonly repaired with helical stainless stitching bars set into the mortar joints across the crack, bonded with grout. The bars tie the masonry together across the fracture without removing brick. It's minimally invasive, it's reversible in

concept, and it works. The crack gets stabilized; the wall keeps its face.

Re-anchoring veneer on old buildings. Some historic Texas buildings have brick veneer over older structures, and the tie lessons from my veneer book apply — with preservation constraints. New stainless ties go through mortar joints, never through brick faces. The work is invisible when done right. Same structural logic, gentler execution.

Rebuilding in kind. When a section is too far gone — collapsed, shattered, structurally failed — it gets rebuilt with matching brick and lime mortar, to the original bond pattern and joint profile. "In kind" means the new work matches the old in material, design, and workmanship. Salvaged brick from the building itself is the gold standard for repairs — every demolition or alteration on a historic building should save its brick.

What not to do. Don't "stabilize" a historic wall by slathering it in Portland stucco — that's burial, not repair. Don't replace historic brick with modern brick "because it's stronger" — stronger is the problem, per Chapter 4. Don't rebuild with hard mortar. And don't let anyone talk you into demolishing a repairable historic wall because "it's cheaper to rebuild." It

might be cheaper. It's also the destruction of the thing that made the building worth owning.

Engineers and preservation. Structural work on a historic building wants two kinds of expertise: a structural engineer who understands old masonry (not all do — some only speak concrete and steel), and a preservation mason who does this specific work. The engineer diagnoses and specifies; the mason executes with old methods. Interview both for historic experience specifically. "I've been a mason thirty years" isn't the same as "I've repointed lime-mortar buildings for thirty years."

Chapter 11: Texas Historic Brick — What We Have Here

Texas's historic masonry has its own character, shaped by our clay, our kilns, our builders, and our weather. Here's the field guide.

Handmade local brick. Much of pre-1920s Texas brick was made locally — small kilns firing local clay. East Texas, with its iron-rich red clays, produced the deep red brick you see on courthouses and commercial blocks across the region. Central Texas clays run buff to tan. These bricks are soft, varied, and completely unmatchable from a modern yard — when you need replacements, you're hunting salvage yards, demolition recoveries, and specialty suppliers. Start that hunt early; it takes time.

The German Hill Country. Fredericksburg, New Braunfels, and the surrounding settlements built in limestone and brick with German masonry traditions — thick walls, lime mortar, careful craftsmanship. The limestone gets the attention, but the brick chimneys, infill, and later commercial buildings follow the same old rules. If you own in the Hill Country,

your mason needs to know lime — the stone tradition there kept lime knowledge alive longer than in the cities.

Galveston. The island's Victorian building stock — some of the finest historic masonry in Texas — sits in salt air with hurricane exposure. Salt is brutal on old masonry: it crystallizes in the pores, and the crystallization pressure spalls brick and mortar alike. Galveston restoration is a specialty — salt management, breathable everything, and constant maintenance. If you own historic brick on the island, budget for ongoing care, not one-time fixes. The sea never stops.

San Antonio and South Texas. Deep Spanish and Mexican masonry traditions — some of the oldest European masonry in the state. Thick walls, lime everything, often with stucco or plaster finishes that are part of the historic fabric. The preservation approach here respects the finish as much as the brick — don't strip historic stucco to "expose the brick" if the stucco is original. That's destroying historic fabric for a look.

DFW's early suburbs. Fairmount in Fort Worth, Munger Place and Swiss Avenue in Dallas, the Heights in Houston — early-1900s brick bungalows and four-squares, mostly lime-

mortar, now a century old and hitting their second or third repointing cycle. The tragedy I see most here: well-meaning owners hiring modern masons who repoint with hard mortar, or flippers who paint the brick for the listing photos. If you're buying in a historic district, read Chapter 12 before you close.

What Texas weather does to old brick. Our pattern — brutal sun, violent rain, occasional hard freeze — is actually kinder to old brick than the freeze-thaw grind of the northern states, as long as the wall breathes. The killer here is the human factor: sealers sold for our sun, sprinklers run daily, hard mortar from modern crews. Texas old brick dies from "improvements," not weather.

Chapter 12: Historic Districts, Landmarks, and the Rules That Come With Them

If your old building sits in a historic district or carries a landmark designation, there are rules — and they're actually your friend.

What designation means. Local historic districts (administered by the city), state landmarks, and National Register listing each carry different weight. The National Register itself doesn't restrict what a private owner does — it's primarily an honor and a gateway to tax credits. Local districts are where the rules live: most Texas cities with historic districts require a certificate of appropriateness for exterior work, reviewed by a landmarks commission. Repointing with the wrong mortar can be denied. Demolition is heavily restricted.

Why the rules help you. I know — nobody loves a commission telling them what to do with their building. But the design guidelines in most districts encode exactly what this book teaches: lime mortar, matching materials, no sandblasting, no painting unpainted brick. The commission is

a backstop against the bad contractor. When your mason says "let's just use Type S, it's stronger," the guidelines say no — and they're right.

Tax credits. This is the part owners miss. Certified historic rehabilitations — commercial buildings, and in some programs residential — can qualify for federal and Texas historic tax credits worth a significant percentage of qualified rehabilitation costs. We're talking real money: the federal credit alone has historically been 20 percent of qualified costs for income-producing certified historic structures, with Texas adding its own program on top. The catch: the work has to meet the Secretary of the Interior's Standards — which is this book's method anyway — and it has to be certified before, during, and after. If you're planning major work on a qualifying historic building, talk to the Texas Historical Commission BEFORE you start. Credits planned after the work is done are credits lost.

The process. For district work: check your city's preservation office first, before hiring. Bring them the scope. They'll tell you what's approvable. Then hire the mason. Doing it in the other order — hiring, then discovering the commission won't approve the method — wastes everybody's time and your

money.

Undesignated old buildings. No district, no landmark, no commission — just you and a 1910 wall. The rules don't apply, but the physics does. Everything in this book still governs, because the brick doesn't care about designation. Restore it right because it's right, and because the next buyer — and the wall itself — will know the difference.

Chapter 13: What It Costs in 2026 —

Restoration Pricing

Historic restoration costs more than modern masonry work. Here's why, and what the ranges look like.

Why it costs more. Three reasons. First, labor: hand-tool mortar removal is several times slower than grinding, and lime pointing is fussier than Portland. A restoration mason might cover a fraction of the daily area of a modern crew. Second, expertise: there are fewer masons who truly know lime work, and scarcity prices itself. Third, materials and process: matched sand, lime, test panels, cure protection, sometimes lab analysis — every step adds cost that modern repointing skips.

The ranges. Standard modern repointing in 2026 runs roughly \$5 to \$25 per square foot depending on conditions. Historic lime-mortar repointing — hand removal, matched lime mortar, proper cure — typically runs \$15 to \$30 per square foot, with complex or high-access work going higher. The premium over modern work is roughly 50 to 100 percent, and it's all labor and care. A small historic wall — a garden

wall, a chimney — might be a few thousand dollars. A whole-building restoration on a two-story historic commercial block is a five-figure project, phased over weeks.

What moves the number. Height and access (scaffolding on a historic building costs the same as anywhere — \$200 to \$600-plus per setup, and historic buildings are often tall). The mortar condition — if a previous bad Portland repoint has to be carefully removed by hand first, that's essentially paying for the job twice, once to undo and once to do. Brick replacement — salvaged matching brick is hunted, not ordered, and priced accordingly. Lab analysis (\$150 to \$325) if specified. And the cure-protection work in Texas heat — misting, tenting, scheduling — which a good bid includes and a bad bid omits.

The "cheap restoration" warning. A bid for historic repointing that prices like modern repointing is telling you the bidder plans modern methods: grinder, bagged mortar, no test panels. On a historic wall, that's not a bargain — it's the Portland mistake with a discount sticker. The bid should say "lime mortar," describe hand removal, mention test panels, and address curing. If those words aren't in the bid, the bidder isn't doing restoration.

Phasing. Big historic projects are often phased — one elevation per year, for example. This is legitimate and common: it spreads cost, lets each phase cure properly, and lets you evaluate the mason's work before committing the whole building. A mason who proposes phasing is thinking like a preservationist.

The cost of doing it wrong. Keep this number in mind when the restoration bid stings: undoing a bad Portland repoint — hand-removing hard mortar from soft brick without destroying it — can cost as much as the original correct job would have. Plus the spalled brick, which can't be unbought. The expensive bid for the right work is cheaper than the cheap bid for the wrong work, every single time.

Chapter 14: Finding a Restoration Mason — Not Just a Bricklayer

The single most important decision in your restoration is who does it. Here's how to find the right hands.

The lime question. Ask it first, exactly like this: "What mortar will you use on my 1920s brick, and why?" The right answer mentions lime — lime mortar, or a lime-rich mix matched to the original — and explains the softness principle without prompting. The wrong answers: "Type N, that's standard," "masonry cement," or any version of "mortar is mortar." This one question filters out 80 percent of the wrong contractors.

The removal question. "How will you remove the old mortar?" The right answer: by hand — chisels, rakes, patience. If he says "grinder," ask how he protects the brick. If he doesn't have a good answer — if he looks at you like you're fussy — he's not your mason. On historic brick, the removal method IS the preservation.

The portfolio. Ask to see historic work — not new construction, not modern repointing, but old buildings. Drive

by them. Look at the joints in raking light. Do they match? Are the brick faces intact? A restoration mason is proud of this work and will have addresses. A modern mason with no historic portfolio is learning on your building.

The test panel. Will he do one? The right mason insists on it — he wants the match right as much as you do. Discuss the cure time for the panel. If he wants to judge color the same day, he doesn't understand lime.

References and reputation. Talk to past historic clients. Ask specifically: did the mortar match after curing? Did any brick get damaged? Would you hire him again for your grandmother's house? Preservation communities are small — local historic societies, landmarks commissions, and preservation nonprofits know who the good masons are. Ask them. The Texas Historical Commission's network and local preservation groups are better referral sources than any review site for this specialty.

The contract. Scope in writing: mortar spec (type, ratio, sand source), removal method (hand tools), test panel requirement, cure protection plan, phasing if any, warranty. A restoration mason who won't put the mortar spec in writing is a contradiction. Get the recipe on paper.

Red flags. "We do it all — new construction, restoration, whatever." "Lime mortar? Sure, we can add some lime to the mix." No test panel. No historic addresses to drive by. Price dramatically below the other bidders. Pressure to decide fast. Any one of these is a walk-away.

If you're in North Texas and your old wall needs hands that understand it, that's [historic brick restoration](<https://championbrickrepair.com>) — it's the work I love most. My [free brick repair books](<https://metro-foundation-repair.web.app/free-books/>) cover the modern-brick side of the trade, so you can see exactly where the old rules diverge from the new ones. And for the deepest technical guidance in American preservation — the documents the whole field works from — read the [National Park Service Preservation Briefs](<https://www.nps.gov>), starting with Brief 2 on repointing. They're free, they're authoritative, and they'll make you the most informed client your mason ever met.

Chapter 15: Questions Homeowners Ask Me

How do I know if my mortar is lime or Portland? The thumbnail test from Chapter 5: lime is soft enough to scratch with your nail and feels chalky; Portland is hard and glassy. Age is a strong hint — pre-1930s is almost certainly lime originally. And if a previous repoint looks suspiciously neat and gray on an old wall, that's probably Portland from a later repair, not original.

Can I repoint historic brick myself? Small areas — a garden wall, a few square feet — yes, if you learn the method: hand removal, lime mortar, proper depth, cure protection. It's slow but it's not mysterious. Whole walls, structural areas, chimneys, anything high — hire it out. And never DIY the mortar spec: get the original identified (thumbnail test at minimum, lab analysis for important work) before you mix anything.

My historic wall was already repointed with hard mortar.

Is it too late? No — but don't wait. The hard mortar comes out by hand (slow, careful, more expensive than the original job), the wall gets repointed in lime, and the decay stops.

What you can't recover is brick faces already spalled — those units are damaged permanently. Every year of delay costs irreplaceable brick.

Will lime mortar hold up in Texas weather? It held up for the hundred years before Portland arrived. Lime mortar on Texas historic buildings has survived everything this climate does — the heat, the storms, the freezes — because it was designed for masonry that moves and breathes. The question isn't whether lime survives Texas. It's whether Texas's modern contractors will let it.

Should I seal my historic brick "for protection"? No. See Chapter 8. Sealers trap moisture, and trapped moisture destroys old brick. The wall protected itself for a century by breathing. Don't "protect" it to death.

What about the interior plaster? Old lime plaster is part of the system — breathable, flexible, repairable. Patch it with lime plaster, not modern gypsum and definitely not over a vapor barrier. If the plaster is failing, look for the moisture cause first (Chapter 9) — plaster is often the messenger, not the problem.

Is my building "historic enough" for all this? If it's pre-

1930s brick with lime mortar, the physics applies whether it's a landmark or a farmhouse. The methods in this book aren't about designation — they're about the material. Old brick is old brick. Treat it right.

How long does lime repointing last? Decades — 30 to 50 years or more — because lime mortar ages gracefully: it wears slowly, it self-heals small cracks, and when it eventually needs renewal, it comes out cleanly without damaging the brick. That's the design. The mortar is supposed to be the part you replace. Let it do its job.

A Final Word Before You Call

A hundred years ago, a mason laid your wall with soft brick, lime mortar, and the knowledge that the mortar would outlast him but not forever — that future hands would renew it, gently, in kind. You're those future hands now. Or you're hiring them.

The rules are old because the wall is old: softer than the brick, lime not Portland, hand tools not grinders, match the sand, protect the cure, let it breathe. Nothing on the don't list. Everything on the gentle list. It's slower and it costs more than the modern way, and it's the only way that doesn't

destroy what you're trying to save.

Your old wall made it a century. Give it the next one.

About the Author

Travis Nech has spent 50 years in Texas brick, masonry, and foundation work. He owns [Champion Brick Repair](<https://championbrickrepair.com>) — (817) 900-6324 — [Metro Foundation Repair](<https://metrofoundationrepair.com>) — (817) 670-4474 — and the [LintelLOCK](<https://lintlerepair.com>) lintel system — (469) 730-0650. All his books are free at [Travis Nech's Free Book Library](<https://metro-foundation-repair.web.app/free-books/>).